



**U.S. DEPARTMENT OF  
ENERGY**

**FY 2010 Congressional  
Budget Request**

**Power Marketing Administrations**

**Southeastern Power Administration  
Southwestern Power Administration  
Western Area Power Administration  
Bonneville Power Administration**





**U.S. DEPARTMENT OF  
ENERGY**

**FY 2010 Congressional  
Budget Request**

**Power Marketing Administrations**

**Southeastern Power Administration  
Southwestern Power Administration  
Western Area Power Administration  
Bonneville Power Administration**



**Southeastern Power Administration**



**Southwestern Power Administration**



**Western Area Power Administration**

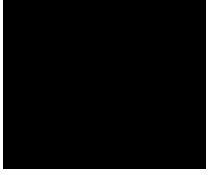


**Bonneville Power Administration**

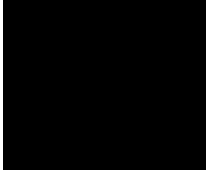




**Southeastern Power Administration**



**Southwestern Power Administration**



**Western Area Power Administration**



**Bonneville Power Administration**

**Volume 6**

**Table of Contents**

|   | Page |
|---|------|
| Appropriation Account Summary.....      | 3    |
| Power Marketing Administrations         |      |
| Southeastern Power Administration ..... | 7    |
| Southwestern Power Administration ..... | 35   |
| Western Area Power Administration.....  | 73   |
| Bonneville Power Administration .....   | 141  |
| General Provisions .....                | 233  |

The Department of Energy’s Congressional Budget justification is available on the Office of Chief Financial Officer, Office of Budget homepage at <http://www.cfo.doe.gov/crorg/cf30.htm>.

For the latest details on the Department of Energy’s implementation of the Recovery Act, please visit: <http://www.energy.gov/recovery>





U.S. DEPARTMENT OF ENERGY  
 FY 2010 Internal Statistical Table by Appropriation  
 (dollars in thousands - OMB Scoring)

| FY 2008<br>Current<br>Approp. | FY 2009<br>Current<br>Approp. | FY 2009<br>Current<br>Recovery | FY 2010<br>Congressional<br>Request | FY 2010 vs. FY 2009 |   |
|-------------------------------|-------------------------------|--------------------------------|-------------------------------------|---------------------|---|
|                               |                               |                                |                                     | \$                  | % |

**Discretionary Summary By Appropriation**

Energy And Water Development, And Related Agencies

Appropriation Summary:

Energy Programs

|  |           |           |            |           |          |       |
|--|-----------|-----------|------------|-----------|----------|-------|
| Energy efficiency and renewable energy.....      | 1,704,112 | 2,178,540 | 16,800,000 | 2,318,602 | +140,062 | 6.4%  |
| Electricity delivery and energy reliability..... | 136,170   | 137,000   | 4,500,000  | 208,008   | +71,008  | 51.8% |
| Nuclear energy.....                              | 960,903   | 792,000   | ----       | 761,274   | -30,726  | -3.9% |
| Legacy management.....                           | 33,872    | ----      | ----       | ----      | -----    | 0.0%  |

Fossil energy programs

|   |                |                  |                  |                |                 |               |
|---|----------------|------------------|------------------|----------------|-----------------|---------------|
| Clean coal technology.....                  | -58,000        | ----             | ----             | ----           | -----           | 0.0%          |
| Fossil energy research and development..... | 727,181        | 876,320          | 3,400,000        | 617,565        | -258,755        | -29.5%        |
| Naval petroleum and oil shale reserves..... | 20,272         | 19,099           | ----             | 23,627         | +4,528          | 23.7%         |
| Strategic petroleum reserve.....            | 186,757        | 205,000          | ----             | 229,073        | +24,073         | 11.7%         |
| Northeast home heating oil reserve.....     | 12,335         | 9,800            | ----             | 11,300         | +1,500          | 15.3%         |
| <b>Total, Fossil energy programs.....</b>   | <b>888,545</b> | <b>1,110,219</b> | <b>3,400,000</b> | <b>881,565</b> | <b>-228,654</b> | <b>-20.6%</b> |

|  |                  |                   |                   |                   |                   |               |
|--|------------------|-------------------|-------------------|-------------------|-------------------|---------------|
| Uranium enrichment D&D fund.....                     | 622,162          | 535,503           | 390,000           | 559,377           | +23,874           | 4.5%          |
| Energy information administration.....               | 95,460           | 110,595           | ----              | 133,058           | +22,463           | 20.3%         |
| Non-Defense environmental cleanup.....               | 182,263          | 261,819           | 483,000           | 237,517           | -24,302           | -9.3%         |
| Science.....   | 4,082,883        | 4,772,636         | 1,600,000         | 4,941,682         | +169,046          | 3.5%          |
| Energy transformation acceleration fund.....         | ----             | ----              | 400,000           | 10,000            | +10,000           | N/A           |
| Nuclear waste disposal.....                          | 187,269          | 145,390           | ----              | 98,400            | -46,990           | -32.3%        |
| Departmental administration.....                     | 148,415          | 155,326           | ----              | 182,331           | +27,005           | 17.4%         |
| Inspector general.....                               | 46,057           | 51,927            | 15,000            | 51,445            | -482              | -0.9%         |
| Advanced technology vehicles manufacturing loan..... | ----             | 7,510,000         | 10,000            | 20,000            | -7,490,000        | -99.7%        |
| Innovative technology loan guarantee program.....    | 4,459            | ----              | ----              | ----              | -----             | 0.0%          |
| Section 1705 temporary loan guarantee program.....   | ----             | ----              | 5,990,000         | ----              | -----             | 0.0%          |
| <b>Total, Energy Programs.....</b>                   | <b>9,092,570</b> | <b>17,760,955</b> | <b>33,588,000</b> | <b>10,403,259</b> | <b>-7,357,696</b> | <b>-41.4%</b> |

Atomic Energy Defense Activities

National nuclear security administration:

|   |                  |                  |             |                  |                 |             |
|---|------------------|------------------|-------------|------------------|-----------------|-------------|
| Weapons activities.....                                     | 6,302,366        | 6,380,000        | ----        | 6,384,431        | +4,431          | 0.1%        |
| Defense nuclear nonproliferation.....                       | 1,334,922        | 1,482,350        | ----        | 2,136,709        | +654,359        | 44.1%       |
| Naval reactors.....   | 774,686          | 828,054          | ----        | 1,003,133        | +175,079        | 21.1%       |
| Office of the administrator.....                            | 402,137          | 439,190          | ----        | 420,754          | -18,436         | -4.2%       |
| <b>Total, National nuclear security administration.....</b> | <b>8,814,111</b> | <b>9,129,594</b> | <b>----</b> | <b>9,945,027</b> | <b>+815,433</b> | <b>8.9%</b> |

Environmental and other defense activities:

|   |                   |                   |                  |                   |                 |               |
|---|-------------------|-------------------|------------------|-------------------|-----------------|---------------|
| Defense environmental cleanup.....                              | 5,411,231         | 5,657,250         | 5,127,000        | 5,495,831         | -161,419        | -2.9%         |
| Other defense activities  |                   |                   |                  |                   |                 |               |
| Health, safety and security.....                                | 425,461           | 446,471           | ----             | 449,882           | +3,411          | 0.8%          |
| Legacy Management.....  | 154,961           | 185,981           | ----             | 189,802           | +3,821          | 2.1%          |
| Nuclear energy.....   | 75,261            | 565,819           | ----             | 83,358            | -482,461        | -85.3%        |
| Defense related administrative support.....                     | 98,104            | 108,190           | ----             | 122,982           | +14,792         | 13.7%         |
| Office of hearings and appeals.....                             | 4,565             | 6,603             | ----             | 6,444             | -159            | -2.4%         |
| Congressionally directed projects.....                          | ----              | 999               | ----             | ----              | -999            | -100.0%       |
| <b>Subtotal, Other defense activities.....</b>                  | <b>758,352</b>    | <b>1,314,063</b>  | <b>----</b>      | <b>852,468</b>    | <b>-461,595</b> | <b>-35.1%</b> |
| Adjustments.....  | -8,893            | ----              | ----             | ----              | -----           | 0.0%          |
| <b>Total, Other defense activities.....</b>                     | <b>749,459</b>    | <b>1,314,063</b>  | <b>----</b>      | <b>852,468</b>    | <b>-461,595</b> | <b>-35.1%</b> |
| Defense nuclear waste disposal.....                             | 199,171           | 143,000           | ----             | 98,400            | -44,600         | -31.2%        |
| <b>Total, Environmental &amp; other defense activities.....</b> | <b>6,359,861</b>  | <b>7,114,313</b>  | <b>5,127,000</b> | <b>6,446,699</b>  | <b>-667,614</b> | <b>-9.4%</b>  |
| <b>Total, Atomic Energy Defense Activities.....</b>             | <b>15,173,972</b> | <b>16,243,907</b> | <b>5,127,000</b> | <b>16,391,726</b> | <b>+147,819</b> | <b>0.9%</b>   |

Power marketing administrations:

|  |                |                |               |                |                |              |
|--|----------------|----------------|---------------|----------------|----------------|--------------|
| Southeastern power administration.....             | 6,404          | 7,420          | ----          | 7,638          | +218           | 2.9%         |
| Southwestern power administration.....             | 30,165         | 28,414         | ----          | 44,944         | +16,530        | 58.2%        |
| Western area power administration.....             | 228,907        | 218,346        | 10,000        | 256,711        | +38,365        | 17.6%        |
| Falcon & Amistad operating & maintenance fund..... | 2,477          | 2,959          | ----          | 2,568          | -391           | -13.2%       |
| Colorado River Basins.....                         | -23,000        | -23,000        | ----          | -23,000        | -----          | 0.0%         |
| <b>Total, Power marketing administrations.....</b> | <b>244,953</b> | <b>234,139</b> | <b>10,000</b> | <b>288,861</b> | <b>+54,722</b> | <b>23.4%</b> |

|   |      |      |      |      |       |      |
|---|------|------|------|------|-------|------|
| Federal energy regulatory commission..... | ---- | ---- | ---- | ---- | ----- | 0.0% |
|---|------|------|------|------|-------|------|

Subtotal, Energy And Water Development and Related

|   |                   |                   |                   |                   |                   |               |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|---------------|
| Agencies.....   | 24,511,495        | 34,239,001        | 38,725,000        | 27,083,846        | -7,155,155        | -20.9%        |
| Uranium enrichment D&D fund discretionary payments..... | -458,787          | -463,000          | ----              | -663,000          | -200,000          | -43.2%        |
| Excess fees and recoveries, FERC.....                   | -20,370           | -27,682           | ----              | -26,864           | +818              | 3.0%          |
| <b>Total, Discretionary Funding.....</b>                | <b>24,032,338</b> | <b>33,748,319</b> | <b>38,725,000</b> | <b>26,393,982</b> | <b>-7,354,337</b> | <b>-21.8%</b> |



U.S. DEPARTMENT OF ENERGY  
 FY 2010 Internal Statistical Table by Appropriation  
 (dollars in thousands - OMB Scoring)

Power Marketing Administrations - Implementation of Reclassification of Receipts

|   | FY 2008<br>Current<br>Approp. | FY 2009<br>Current<br>Approp. | FY 2009<br>Current<br>Recovery | FY 2010<br>Congressional<br>Request | FY 2010<br>vs.<br>FY 2009 |
|---|-------------------------------|-------------------------------|--------------------------------|-------------------------------------|---------------------------|
| <b>Power Marketing Administrations</b>                              |                               |                               |                                |                                     |                           |
| Southeastern Power Administration                                   |                               |                               |                                |                                     |                           |
| Purchase power and wheeling.....                                    | 62,215                        | 63,522                        | ----                           | 85,228                              | +21,706                   |
| Program direction .....   | 6,404                         | 7,420                         | ----                           | 7,638                               | +218                      |
| Total, Program direction.....                                       | 6,404                         | 7,420                         | ----                           | 7,638                               | +218                      |
| Subtotal, Southeastern Power Administration.....                    | 68,619                        | 70,942                        | ----                           | 92,866                              | +21,924                   |
| Less alternative financing (for PPW).....                           | -13,802                       | -14,002                       | ----                           | -14,422                             | -420                      |
| Offsetting collections (for PPW).....                               | -48,413                       | -49,520                       | ----                           | -70,806                             | -21,286                   |
| Offsetting collections (PD).....                                    | ----                          | ----                          | ----                           | -7,638                              | -7,638                    |
| Total, Southeastern Power Administration.....                       | 6,404                         | 7,420                         | ----                           | ----                                | -7,420                    |
| Reclassification of Mandatory Receipts to Discretionary Collections |                               |                               |                                | 7,638                               |                           |
| Southwestern Power Administration                                   |                               |                               |                                |                                     |                           |
| Operation and maintenance.....                                      | 11,892                        | 12,865                        | ----                           | 12,775                              | -90                       |
| Purchase power and wheeling.....                                    | 45,000                        | 46,000                        | ----                           | 48,000                              | +2,000                    |
| Program direction .....   | 22,054                        | 24,330                        | ----                           | 28,153                              | +3,823                    |
| Total, Program direction.....                                       | 22,054                        | 24,330                        | ----                           | 28,153                              | +3,823                    |
| Construction.....   | 4,269                         | 5,991                         | ----                           | 6,016                               | +25                       |
| Subtotal, Southwestern Power Administration.....                    | 83,215                        | 89,186                        | ----                           | 94,944                              | +5,758                    |
| Less alternative financing (for program direction).....             | -877                          | -2,200                        | ----                           | ----                                | +2,200                    |
| Less alternative financing (for O&M).....                           | -6,304                        | -9,381                        | ----                           | ----                                | +9,381                    |
| Less alternative financing (for PPW).....                           | -10,000                       | -11,000                       | ----                           | -10,000                             | +1,000                    |
| Less alternative financing (Const).....                             | -869                          | -3,191                        | ----                           | -2,000                              | +1,191                    |
| Offsetting collections.....   | -35,000                       | -35,000                       | ----                           | ----                                | +35,000                   |
| Offsetting collections (for program direction).....                 | ----                          | ----                          | ----                           | -26,247                             | -26,247                   |
| Offsetting collections (for O&M).....                               | ----                          | ----                          | ----                           | -5,621                              | -5,621                    |
| Offsetting collections (for PPW).....                               | ----                          | ----                          | ----                           | -38,000                             | -38,000                   |
| Total, Southwestern Power Administration.....                       | 30,165                        | 28,414                        | ----                           | 13,076                              | -15,338                   |
| Reclassification of Mandatory Receipts to Discretionary Collections |                               |                               |                                | 31,868                              |                           |
| Western Area Power Administration                                   |                               |                               |                                |                                     |                           |
| Construction and rehabilitation.....                                | 62,419                        | 74,544                        | ----                           | 104,971                             | +30,427                   |
| Operation and maintenance .....                                     | 52,873                        | 52,365                        | ----                           | 57,159                              | +4,794                    |
| Total, Operation and maintenance.....                               | 52,873                        | 52,365                        | ----                           | 57,159                              | +4,794                    |
| Purchase power and wheeling.....                                    | 475,254                       | 600,960                       | ----                           | 548,847                             | -52,113                   |
| Utah mitigation and conservation.....                               | 7,114                         | 7,342                         | ----                           | 7,584                               | +242                      |
| Program direction.....  | 156,128                       | 166,423                       | ----                           | 180,756                             | +14,333                   |
| Subtotal, Western Area Power Administration.....                    | 753,788                       | 901,634                       | ----                           | 899,317                             | -2,317                    |
| Less alternative financing (for O & M).....                         | -5,000                        | -15,499                       | ----                           | -400                                | +15,099                   |
| Less alternative financing (for Construction).....                  | -30,690                       | -47,663                       | ----                           | -83,760                             | -36,097                   |
| Less alternative financing (for Program Direction).....             | -10,000                       | -15,800                       | ----                           | -5,720                              | +10,080                   |
| Less alternative financing (for PPW).....                           | -166,552                      | -197,842                      | ----                           | -199,040                            | -1,198                    |
| Offsetting collections (for program direction).....                 | ----                          | ----                          | ----                           | -110,492                            | -110,492                  |
| Offsetting collections (for O&M).....                               | ----                          | ----                          | ----                           | -37,038                             | -37,038                   |
| Offsetting collections (P.L. 108-447/109-103).....                  | -308,702                      | -403,118                      | ----                           | -349,807                            | +53,311                   |
| Offsetting collections (P.L. 98-381).....                           | -3,937                        | -3,366                        | ----                           | -3,879                              | -513                      |
| Total, Western Area Power Administration.....                       | 228,907                       | 218,346                       | ----                           | 109,181                             | -109,165                  |
| Reclassification of Mandatory Receipts to Discretionary Collections |                               |                               |                                | 147,530                             |                           |
| Western Area Power Administration, Recovery Act                     |                               |                               |                                |                                     |                           |
| Operation and maintenance.....                                      | ----                          | ----                          | 10,000                         | ----                                | ----                      |

U.S. DEPARTMENT OF ENERGY  
 FY 2010 Internal Statistical Table by Appropriation  
 (dollars in thousands - OMB Scoring)

Power Marketing Administrations - Implementation of Reclassification of Receipts

|   | FY 2008<br>Current<br>Approp. | FY 2009<br>Current<br>Approp. | FY 2009<br>Current<br>Recovery | FY 2010<br>Congressional<br>Request | FY 2010<br>vs.<br>FY 2009 |
|---|-------------------------------|-------------------------------|--------------------------------|-------------------------------------|---------------------------|
| <b>Power Marketing Administrations</b>                              |                               |                               |                                |                                     |                           |
| Falcon and Amistad Operating and Maintenance Fund                   |                               |                               |                                |                                     |                           |
| Operation and maintenance.....                                      | 2,477                         | 2,959                         | ----                           | 2,568                               | -391                      |
| Offsetting collections.....   | ----                          | ----                          | ----                           | -2,348                              | -2,348                    |
| Total, Falcon and Amistad Fund.....                                 | 2,477                         | 2,959                         | ----                           | 220                                 | -2,739                    |
| Reclassification of Mandatory Receipts to Discretionary Collections |                               |                               |                                | 2,348                               |                           |
| Colorado River Basins Power Marketing Fund                          |                               |                               |                                |                                     |                           |
| Spending authority from offsetting collections                      |                               |                               |                                |                                     |                           |
| Equipment, contracts and other related expenses.....                | 190,444                       | 195,137                       | ----                           | 212,766                             | +17,629                   |
| Utah mitigation and conservation fund.....                          | ----                          | ----                          | ----                           | ----                                | ----                      |
| Program direction.....  | 41,701                        | 45,147                        | ----                           | 48,957                              | +3,810                    |
| Total, Spending authority from offsetting<br>collections.....       | 232,145                       | 240,284                       | ----                           | 261,723                             | +21,439                   |
| Offsetting collections.....   | -255,145                      | -263,284                      | ----                           | -284,723                            | -21,439                   |
| Total, Colorado River Basins.....                                   | <b>-23,000</b>                | <b>-23,000</b>                | ----                           | <b>-23,000</b>                      | ----                      |
| <b>Total, Power Marketing Administrations.....</b>                  | <b>244,953</b>                | <b>234,139</b>                | <b>10,000</b>                  | <b>99,477</b>                       | <b>-134,662</b>           |

# **Southeastern Power Administration**

# **Southeastern Power Administration**

## **Southeastern Power Administration**

### **Proposed Appropriation Language**

For necessary expenses of operation and maintenance of power transmission facilities and of marketing electric power and energy, including transmission wheeling and ancillary services, pursuant to section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the southeastern power area, \$[7,420,000] 7,638,000 to remain available until expended: Provided, that, notwithstanding 31 U.S.C. 3302 and 16 U.S.C. 825s, up to \$7,638,000 collected by the Southeastern Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended for the sole purpose of funding the annual expenses of the Southeastern Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2010 appropriation estimated at not more than \$0: Provided further, That, notwithstanding 31 U.S.C. 3302, up to \$[49,520,000] 70,806,000 collected by the Southeastern Power Administration pursuant to the Flood Control Act of 1944 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures: Provided further, That notwithstanding the provisions of 31 U.S.C. 3302 and 16 U.S.C. 825s, all funds collected by the Southeastern Power Administration that are applicable to the repayment of the annual expenses of this account in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses).

### **Explanation of Change**

The 2010 Budget allows for the reclassification as discretionary offsetting collections of power receipts that are currently classified as mandatory for Southeastern in the amount of annual expenses for 2010 and for subsequent years. Reclassification of these receipts would be achieved through this legislation with a 2010 impact of \$7,638,000. This impact is reflected as a change in a mandatory program in the associated receipt account.





## Southeastern Power Administration

### Overview

#### Appropriation Summary by Program

(dollars in thousands)

|   | FY 2008<br>Appropriation | FY 2009 Original<br>Appropriation | FY 2010 Request |
|---|--------------------------|-----------------------------------|-----------------|
| Southeastern Power Administration                                   |                          |                                   |                 |
| Program Direction (PD)  | 6,404                    | 7,420                             | 7,638           |
| Purchase Power and Wheeling (PPW)                                   | 62,215                   | 63,522                            | 85,228          |
| Subtotal, Southeastern Program Level                                | 68,619                   | 70,942                            | 92,866          |
| Offsetting Collections, Annual Expenses                             | --                       | --                                | -7,638          |
| Offsetting Collections, PPW   | -48,413                  | -49,520                           | -70,806         |
| Alternative financing, PPW  | -13,802                  | -14,002                           | -14,422         |
| Total, Southeastern Power Administration                            | 6,404                    | 7,420                             | 0               |
| Reclassification of Mandatory Receipts to Discretionary Collections |                          |                                   | 7,638           |

### Preface

As the Nation moves forward to strengthen its national and economic security, the Department of Energy (DOE or the Department) leads a critical effort promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy. Southeastern Power Administration (Southeastern or SEPA) supports this effort by marketing and delivering hydroelectric power in the southeast. Southeastern's FY 2010 budget supports DOE's Strategic Theme 1, Energy Security by implementing Goal 1.3, Energy Infrastructure. Southeastern implements Goal 1.3 by promoting energy efficiency improvements and renewable resources among its customers, and scheduling power deliveries in compliance with standards established by the Federal Energy Regulatory Commission's (FERC) Electric Reliability Organization (ERO).

Within the Southeastern appropriation, there is one program, Operation and Maintenance, which includes two subprograms: Program Direction and Purchase Power and Wheeling. Program Direction supports day-to-day agency operation and Purchase Power and Wheeling supports acquisition of contractually-required transmission services and power purchases.

### Mission

The mission of Southeastern is to market and deliver Federal hydroelectric power at the lowest possible cost to public bodies and cooperatives in the southeastern United States in a professional, innovative, customer-oriented manner, while continuing to meet the challenges of an ever-changing electric utility environment through continuous improvements.

## Benefits

Southeastern supports the Department's Energy Security Goal by promoting energy efficiency and renewable energy and managing the dispatch and distribution of Federal hydroelectric power resources in the southeastern United States in a safe, affordable, and environmentally sound manner, while meeting national utility performance standards and balancing the diverse interests of other water resource users. This budget submission ensures effective management of Federal hydroelectric power resources and provides for: a diverse supply of generating resources that enhance regional power system reliability; power revenues that repay taxpayers' investment in the Federal power system; and regional economic benefits from delivery of Federal power primarily to rural electric cooperatives, municipal utilities, and other public entities. Southeastern has implemented rates that repay emergency power purchases within the fiscal year that they are incurred and is on track to repay the Federal investment in hydroelectric resources within required time periods.

This budget submission enables Southeastern to support the Energy Security Goal by promoting strategies that enhance energy efficiency and renewable energy technologies. Effective management of hydroelectric resources, combined with promotion of energy efficiency and renewable technologies, contributes to the long-term solution of economic and environmental challenges associated with electricity demand.

## Strategic Themes, Goals and the Secretary's Initiatives

A new Strategic Plan has not yet been established and approved by the Secretary of Energy. The Secretary has established major priorities and initiatives.

The following chart aligns the current Strategic Plan with the Secretary's priorities:

| Strategic Theme    | Strategic Goal Title     | Secretary's Priorities | GPRA Unit Program Number | GPRA Unit Program Title           | Office |
|--------------------|--------------------------|------------------------|--------------------------|-----------------------------------|--------|
| 1. Energy Security | 3. Energy Infrastructure | Economic Prosperity    | 23                       | Southeastern Power Administration | SEPA   |

## Significant Policy or Program Shift

The President's FY 2010 budget proposes the permanent reclassification of receipts from mandatory to discretionary to offset the annual expenses of the Western, Southwestern and Southeastern Power Marketing Administrations (PMAs) to allow for better operations and maintenance planning and execution, leading to a more reliable power system. Reclassification of these receipts would be achieved through legislation with a 2010 impact for all of the PMAs of \$189.384 million. All of Southeastern's annual expenditures are repaid within one year. Southeastern's de minimis capital expenditures are also repaid within one year and for budget purposes deemed annual expenses.

## Southeastern Power Administration

### Funding by Site by Program

(dollars in thousands)

| FY 2008<br>Appropriation | FY 2009<br>Original<br>Appropriation | FY 2010<br>Request |
|--------------------------|--------------------------------------|--------------------|
| 68,619                   | 70,942                               | 92,866             |

Total, Southeastern Power Administration

### Major Changes or Shifts by Site

#### Purchase Power and Wheeling

- Additional Dam Safety issues have been discovered at several projects in the Cumberland System. It is likely that the interim operating plan, which fundamentally alters the operation of the Cumberland System, will continue through 2014.

### Site Description

#### Southeastern Power Administration

Southeastern is one of four Power Marketing Administrations within the Department of Energy. Southeastern was created in 1950 to market power and energy produced at Corps hydroelectric power projects. Southeastern markets power at wholesale rates to 293 publicly owned utilities, 199 rural electric cooperatives, and one investor-owned utility in the 11 States of Florida, Georgia, South Carolina, North Carolina, Tennessee, Alabama, Mississippi, Virginia, West Virginia, Kentucky, and Illinois. Southeastern is located in Elberton, Georgia, and has no field offices.

## Southeastern Power Administration

### Funding Profile by Subprogram

|  | FY 2008<br>Current<br>Appropriation | FY 2009<br>Appropriation | FY 2010<br>Request |
|--|-------------------------------------|--------------------------|--------------------|
| Southeastern Power Administration        |                                     |                          |                    |
| Program Direction (PD)                   | 6,404                               | 7,420                    | 7,638              |
| Purchase Power and Wheeling (PPW)        | 62,215                              | 63,522                   | 85,228             |
| Subtotal, Southeastern Program Level     | 68,619                              | 70,942                   | 92,866             |
| Offsetting collections, Annual Expenses  | --                                  | --                       | -7,638             |
| Offsetting collections, PPW              | -48,413                             | -49,520                  | -70,806            |
| Alternative financing, PPW               | -13,802                             | -14,002                  | -14,422            |
| Total, Southeastern Power Administration | 6,404                               | 7,420                    | 0                  |

**Public Law Authorizations:**

Public Law 78-534, Flood Control Act of 1944  
 Public Law 95-91, DOE Organization Act of 1977, Section 302  
 Public Law 101-1-1, Title III, Continuing Fund (amended 1989)  
 Public Law 102-486, Energy Policy Act of 1992

### Mission

Southeastern’s power marketing and wheeling activities fulfill the requirements of Section 5 of the Flood Control Act of 1944 and reflect Southeastern’s goals and objectives to market and deliver cost-based power in a safe and reliable manner, and repay the Federal investment with interest, while providing environmental and economic benefits to the region. Southeastern focuses on its PART repayment goal, which assures timely repayment of the Federal hydropower investment.

### Benefits

Southeastern’s appropriation supports the Energy Strategic Goal of the Department’s mission by providing delivery of reliable, affordable, and environmentally sound energy. Southeastern, in conjunction with the Corps, participates in this effort by managing the power delivery from multiple-purpose hydropower projects through effective marketing, and delivery of clean, safe, reliable, cost-based electric power. This Federal program provides reliable energy to the Nation, which can “cold-start” other power generation sources during energy emergencies.

Southeastern’s program provides numerous benefits to the Nation. The significant benefits are:

- Operating a reliable Federal power system in the most effective, cost-efficient, and environmentally sound manner, while meeting national utility performance standards and balancing the diverse interests of other water resource users.
- Repaying taxpayers’ investments in the Federal power system.
- Providing reliable delivery of power to customers.
- Providing low-cost power and increased competition in the region.
- Promoting regional economic growth.

## **Climate Change Technology Program Benefits**

Southeastern contributes program benefits in support of Climate Change activities by reducing carbon emissions through generation of hydroelectric power, which has zero carbon emissions. Southeastern's stream-flow generation of 3,715 GWH in FY 2008 offset fossil fuel resources and reduced overall CO2 emissions by 2.89 million metric tons. Southeastern supports the Climate Change and Technology Program by promoting residential, commercial, and industrial energy efficiency, as well as development of wind, solar, and biomass technologies when they are economically feasible. Southeastern works closely with DOE's Energy Efficiency and Renewable Energy programs to ensure that municipal and cooperative utilities in the southeast benefit from Federal services and technologies.

## **Contribution to the Secretary's Priorities**

Southeastern contributes to the Secretary's Priority 3, Economic Prosperity, by delivering over 3,000 Mega-watts of carbon free hydroelectric capacity to municipal and cooperative customers in its marketing area. Southeastern is actively engaged with its customers to improve existing hydroelectric project efficiency through operations and rehabilitation in order to extend their economic life and generate power more efficiently. Project rehabilitation improves the generating infrastructure and promotes economic prosperity by putting skilled labor to work. Project by project rehabilitation will continue to offset fossil generation and reduce emissions into the foreseeable future. Southeastern's Energy Efficiency and Renewable Energy Program helps reduce end use energy demand by providing training opportunities to its customers to assist with their energy auditing, weatherization, ventilation, controls and lighting technology activities. Southeastern also provides educational opportunities to help its customers deploy renewable energy technologies as they develop renewable energy portfolios. All of Southeastern's efforts help enhance the green workforce by putting people to work directly through project rehabilitation or by providing energy efficiency and renewable energy education opportunities.

## **Contribution to GPRA Unit Program Goal 1.3.23.00, Energy Infrastructure**

Southeastern contributes to the Energy Infrastructure Goal by performing its power marketing mission through two subprogram activities: Program Direction and Purchase Power and Wheeling. Southeastern contributes to Strategic Theme 1, Energy Security, by marketing and delivering all available hydroelectric power from U. S. Army Corps of Engineers (Corps) dams, while balancing power needs with the diverse interests of other water resource users; and markets and delivers federal power in a cost-efficient manner to assure reliability of the power system and maximize the use of Federal assets to repay the investment (principal and interest).

## **Means and Strategies**

Southeastern will use various means and strategies to achieve its GPRA Unit Program goals. However, various external factors may impact the ability to achieve these goals. The program also performs collaborative activities to help meet its goals.

Southeastern will implement the following means:

- Operate the Federal power system effectively and efficiently by providing training and certification to update workforce skills and by updating power system operation technologies to maintain required industry standard compliance.
- Assure power rates are adequate to repay the Federal investment by conducting annual power repayment studies.

- Conduct business process reviews to maximize efficiency and eliminate redundancy.
- Provide economic benefits to the region by marketing and delivering all available hydropower.

Southeastern will implement the following strategies:

- Market and deliver power using appropriations, net billing, bill crediting, and offsetting collections.
- Maintain a diverse and knowledgeable workforce by providing employee training, leadership development, retention programs, and recruitment activities.
- Market all available hydropower by working with the Corps, other Federal entities, States, cooperative and municipal utilities to meet the expectations of our customers, while balancing the interest of other water users.
- Maintain the security of the Federal power system, facilities, and information technology (IT) systems.
- Address industry restructuring changes, when needed, by reclassifying positions as opportunities arise.
- Maximize the capabilities of business systems to improve processes and provide greater efficiency.
- Promote adoption of energy efficiency and renewable energy among Federal power customers.

These strategies will result in a well-maintained Federal power system that is in compliance with ERO operating regulations and an expert workforce to operate the system in the most effective and cost-efficient manner possible.

The following external factors could affect Southeastern's ability to achieve its program goals:

- Achieving and maintaining system reliability can be affected by weather, natural disasters, changes in the North American Electric Reliability Corporation (NERC) operating standards, new load patterns, deregulation of the electricity market, changing electric industry organizational structures, and additions to other transmission systems interconnected to the Federal system.
- Achieving full repayment of the Federal power investment and enhancing economic growth to the region can be affected by weather, power markets, natural disasters, and other external costs and revenue factors.
- Statutory or administrative reallocation of water storage from hydropower to water supply.

In carrying out its mission to market and deliver hydroelectric power, Southeastern performs the following collaborative activities:

- Southeastern coordinates operational activities with NERC, other regional electric reliability councils, the Corps, customers and other stakeholders to provide the most efficient use of Federal assets.

## **Validation and Verification**

To validate and verify program performance, Southeastern conducts internal and external reviews and audits as directed by the Program Assessment Rating Tool. Southeastern's programmatic activities are subject to continuing review by internal and external entities such as Congress, the Government Accountability Office (GAO), the Department of Energy, the Department of Energy's Inspector General, FERC, the U.S. Environmental Protection Agency, the Office of Personnel Management, Southeastern, and National and Regional Reliability Corporations. Southeastern's annual financial audit is conducted and prepared by an independent accounting firm.

Southeastern also complies with Cyber Security requirements, as directed by the Department of Energy and NERC. Southeastern is audited by DOE and NERC, as well as internal audits and reviews by the

other Power Marketing Administrations and independent auditors every three years for recertification. Compliance with the NERC standards is filed each year through regional reliability organizations. The Department of Energy also requires Southeastern to follow the National Institute of Standards (NIST) and the Federal Information Processing Standards (FIPS).

## Annual Performance Results and Targets<sup>a</sup>

| FY 2005 Results   | FY 2006 Results   | FY 2007 Results  | FY 2008 Targets  | FY 2009 Targets   | FY 2010 Targets   |
|---|---|--|--|---|---|
| Strategic Goal 1.3, Energy Infrastructure   |   |  |  |   |   |
| GPR Unit Program Goal 1.3.23.00: Southeastern Power Administration, Operation and Maintenance   |   |  |  |   |   |
| <u>Attained average monthly NERC compliance ratings of 100 or higher for Control Performance Standard (CPS) 1 and a rating of 90 or above for CPS2. Goal Met. (ER9-2)</u> | <u>Meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances. Goal Met (ER4-51)</u> | <u>Meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances. Goal Met (GG 1.3.23)</u> | <u>Meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances. Goal Met (GG 1.3.23)</u> | <u>Meet North American Electric Reliability Council (NERC) Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments. (GG 1.3.23)</u> | System Reliability Performance: Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.(GG 1.3.23) |
| CPS1:208<br>CPS2: 100   | CPS1:201<br>CPS2: 100   | CPS1: 186<br>CPS2: 100   | CPS1: 207<br>CPS2: 100   | CPS1:<br>CPS2:  | CPS1:<br>CPS2:  |
| Meet planned annual repayment of principal on Federal power investment. Goal met (ER9-1)<br><br>Actual \$51 million   | Assure Annual Required Repayment of the Federal Investment. FY 06 required repayment is \$1.0 million. Goal Met (ER4-51)<br>Actual \$4.4 million  | Assure Annual Required Repayment of the Federal Investment. FY 07 required repayment is \$1.0 million. Goal Met.<br>Actual \$2.1 million (GG 1.3.23)   | Assure Annual Required Repayment of the Federal Investment. FY 08 required repayment is \$22.2 Goal Met.<br>Actual \$22.2 million. (GG 1.3.23)   | Repayment of Federal Power Investment Performance: Repay the Federal Investment within the required repayment period. (GG 1.3.23)   | Repayment of Investment Performance: Ensure timely repayment of Federal Investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI). (GG 1.3.23)  |

<sup>a</sup> Annual effectiveness and efficiency performance targets will not be reported in the Department's Annual Performance Report (APR)



## Annual Performance Results and Targets, continued

| FY 2005 Results   | FY 2006 Results  | FY 2007 Results  | FY 2008 Targets      | FY 2009 Targets | FY 2010 Targets   |
|---|--|--|----------------------|-----------------|---|
| GPRA Unit Program Goal 1.3.23.00: Southeastern Power Administration, Operation and Maintenance  |  |  |                      |                 |   |
| Meet required repayment of Federal power investment within the required repayment period. Goal met. (ER9-2)   | Provide \$635 million in economic benefits to the region from the sale of hydroelectric power. | Provide \$635 million in economic benefits to the region from the sale of hydroelectric power. | Measure Discontinued |                 | <u>Efficiency Performance:</u><br><u>Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power. (GG 1.3.23)</u> |
| Actual: \$51.6 million  | Goal not met (ER4-51) . Actual benefits were \$453 million.                                    | Goal not met (ER4-51) . Actual benefits were \$453 million.                                    |                      |                 |   |
| Achieve a recordable accident frequency rate for recordable injuries per 200,000 hours worked of not greater than 3.3, or the latest published Bureau of Labor Statistics' industry rate, whichever is lower. Goal met. (ER9-2) | Measure Discontinued   |  |                      |                 |   |

Actual: Zero Accidents

### Annual Outyear Performance Targets

| FY 2011 Targets   | FY 2012 Targets   | FY 2013 Targets   | FY 2014 Targets   |
|---|---|---|---|
| GPRA Unit Program Goal 1.3.23.00: Southeastern Power Administration, Operation and Maintenance  |   |   |   |
| System Reliability Performance: Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.(GG 1.3.23) | System Reliability Performance: Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.(GG 1.3.23) | System Reliability Performance: Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.(GG 1.3.23) | System Reliability Performance: Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.(GG 1.3.23) |
| CPS1: TBD   | CPS1: TBD   | CPS1: TBD   | CPS1: TBD   |
| CPS2: TBD   | CPS2: TBD   | CPS2: TBD   | CPS2: TBD   |

## Annual Outyear Performance Targets, continued

| FY 2011 Targets   | FY 2012 Targets   | FY 2013 Targets   | FY 2014 Targets   |
|---|---|---|---|
| GPRA Unit Program Goal 1.3.23.00: Southeastern Power Administration, Operation and Maintenance  |   |   |   |
| <p>Repayment of Investment<br/>Performance: Ensure timely repayment of Federal Investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI). (GG 1.3.23)</p> | <p>Repayment of Investment<br/>Performance: Ensure timely repayment of Federal Investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI). (GG 1.3.23)</p> | <p>Repayment of Investment<br/>Performance: Ensure timely repayment of Federal Investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI). (GG 1.3.23)</p> | <p>Repayment of Investment<br/>Performance: Ensure timely repayment of Federal Investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI). (GG 1.3.23)</p> |
| <p><u>Efficiency Performance:</u><br/><u>Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power. (GG 1.3.23)</u></p>                   | <p><u>Efficiency Performance:</u><br/><u>Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power. (GG 1.3.23)</u></p>                   | <p><u>Efficiency Performance:</u><br/><u>Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power. (GG 1.3.23)</u></p>                   | <p><u>Efficiency Performance:</u><br/><u>Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power. (GG 1.3.23)</u></p>                   |

## Purchase Power and Wheeling

### Funding Schedule by Activity

(dollars in thousands)

|   | FY 2008 | FY 2009 | FY 2010 |
|---|---------|---------|---------|
| Purchase Power and Wheeling                         |         |         |         |
| Purchase Power                                      | 26,370  | 28,349  | 49,000  |
| Wheeling  | 35,845  | 35,173  | 36,228  |
| Subtotal, Purchase Power and Wheeling               | 62,215  | 63,522  | 85,228  |
| Alternative Financing                               |         |         |         |
| Net Billing   | -13,802 | -14,002 | -14,422 |
| Subtotal, Purchase Power and Wheeling               | 48,413  | 49,520  | 70,806  |
| Offsetting Collections Realized                     | -48,413 | -49,520 | -70,806 |
| Total, Purchase Power and Wheeling Budget Authority | 0       | 0       | 0       |

### Description

The mission of Purchase Power and Wheeling is to provide funding for acquisition of transmission services, ancillary services for the system, and pumping energy for the Richard B. Russell and Carters Pumped Storage units and support of the Jim Woodruff Project. Purchase power and transmission expenses are based on contracts Southeastern maintains with area transmission providers that agree to deliver specified amounts of Federal power from the hydropower projects to Federal power customers. Southeastern has access to a continuing fund for emergency power purchases. Following recommendations made in the PART review, Southeastern implemented a plan to repay Purchase Power and Wheeling expenditures made through the Continuing Fund within one year.

The FY 2010 request uses customer receipts and net billing to pay for purchase power and wheeling expenses. Southeastern's Federal appropriation allows customers to fund purchase power and wheeling expenses in FY 2010 and subsequent years at no cost to the Federal Treasury. Some customers, acting independently or in partnerships, acquire replacement power and transmission services directly from suppliers. Southeastern will continue to assist its customers by arranging funding for these activities through alternative financing instruments, as needed.

### Benefits

The Purchase Power and Wheeling (PPW) subprogram supports Southeastern's mission to market and deliver reliable, cost-based hydroelectric power and related services. Southeastern's PART Goal to maintain acceptable power system operation for control area performance, as measured using NERC CPS 1 & 2, provides assurance that projects within Southeastern's control area operate as reliable and efficient grid resources. PPW enables Southeastern to wheel Federal power to preference customers, purchase replacement power, and acquire pumping energy to maximize the efficiency and benefits of Southeastern's hydropower resources. Power and services are marketed at rates designed to provide recovery of expenses and Federal investment, as established by law. The recovery of the Federal investment, or repayment, is a key performance goal for Southeastern. The Department of Energy's Strategic Plan reinforces the importance of domestic, renewable hydroelectric energy by emphasizing its

ongoing significant contribution to the Nation’s past and future energy supply and Southeastern’s role as a power resource by supplying hydroelectric power to its customers.

### Detailed Justification

|   | (dollars in thousands) |               |               |
|---|------------------------|---------------|---------------|
|   | FY 2008                | FY 2009       | FY 2010       |
| <b>Purchase Power</b>   | <b>26,370</b>          | <b>28,349</b> | <b>49,000</b> |
| ▪ Pumping: Russell Project<br>Purchase off-peak energy to pump water into the Richard B. Russell Project for on peak generation             | 13,500                 | 15,228        | 16,900        |
| ▪ Pumping: Carters Project<br>Purchase off-peak energy to pump water into the Carters Project for on peak generation                        | 11,970                 | 12,221        | 31,100        |
| ▪ Support Jim Woodruff Project<br>Purchase of energy during periods of adverse water conditions including floods (loss of head) and drought | 900                    | 900           | 1,000         |
| <b>Wheeling</b>   | <b>35,845</b>          | <b>35,173</b> | <b>36,228</b> |
| ▪ Wheeling service charges<br>Wheeling service charges for delivery of power over non-Federal systems                                       | 31,081                 | 30,469        | 31,524        |
| ▪ Ancillary Services<br>Payment for ancillary services  | 4,764                  | 4,704         | 4,704         |
| <b>Total, Purchased Power and Wheeling</b>  | <b>62,215</b>          | <b>63,522</b> | <b>85,228</b> |

### Explanation of Funding Changes

#### Purchase Power and Wheeling

Expected pumping energy costs are the result of increased fuel and fuel transportation expenses incurred by utilities that provide pumping energy. Transmission cost increases also added to higher PPW expenses.

#### Total, Purchase Power and Wheeling

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

+21,706

+21,706

**Program Direction**  
**Funding Profile by Category**

(dollars in thousands/whole FTEs)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Southeastern Power Administration        |         |         |         |
| Salaries and Benefits                    | 4,599   | 4,976   | 5,199   |
| Travel                                   | 346     | 467     | 476     |
| Support Services                         | 41      | 60      | 61      |
| Other Related Expenses                   | 1,418   | 1,917   | 1,902   |
| Subtotal, Program Direction              | 6,404   | 7,420   | 7,638   |
| Offsetting Collections, Annual Expenses  | --      | --      | -7,638  |
| Total Program Direction Budget Authority | 6,404   | 7,420   | 0       |
| Total, Full Time Equivalents             | 44      | 44      | 44      |

**Mission**

Program direction makes available the Federal staffing resources and associated funding necessary to provide overall direction and execution of Southeastern's program. All of Southeastern's annual expenditures are repaid within one year. Southeastern's de minimis capital expenditures are also repaid within one year, and for budget purposes, deemed annual expenses. Southeastern coordinates and cooperates with its partners to operate projects in a manner that enhances the value and reliability of hydropower. Priority is given to integrating environmental concerns and determinations into program actions. Emerging energy efficiency and renewable energy technologies are integrated with marketing strategies and programs.

**Detailed Justification**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

|                              |              |              |              |
|------------------------------|--------------|--------------|--------------|
| <b>Salaries and Benefits</b> | <b>4,599</b> | <b>4,976</b> | <b>5,199</b> |
|------------------------------|--------------|--------------|--------------|

Funding supports salaries and benefits for 44 Federal employees who market Federal hydropower, promote energy efficiency and renewable energy, and provide administrative support. The salary estimate is derived from the current year budgeted salaries, plus cost-of-living adjustments, promotions, within-grade increases, DOE-cascading performance awards, retirement payouts for unused leave (annual retirements of five FTEs are anticipated over the planning horizon), and overtime. Benefits are calculated as a percentage of prior year actual. The funding provides for negotiation, preparation, execution, and administration of all contracts for the disposition of electric power, and ensures continuity of electric service to customers. Funding also covers operators who coordinate and schedule pumping energy among providers of pumping energy and the projects and account for all transactions relative to pumping operations of the Carters and Richard B. Russell Projects. Personnel perform Balancing Authority services for Hartwell, Russell, and Thurmond Projects. Southeastern coordinates power operations of projects with all parties, making determinations of capacity and energy availability weekly. Efficiency Performance is measured by two Efficiency Performance Indicators that provide

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Balancing Area compliance ratings. Funding provides for accounts receivable and payable functions for approximately 300 contracts that benefit more than 500 preference customers. Southeastern executes budget, accounting, and financial management activities, prepares repayment analyses of each system to determine rates, and organizes rate forums, as needed. Repayment performance is measured by comparing required to actual repayment of principal on power investment. In support of the Energy Policy Act of 2005 and the Department's Strategic Goal 1.3, Southeastern vigorously promotes energy efficiency and development of renewable energy among its customers. Funding also covers continuing engineering studies, review of project operations, and evaluation of impacts of proposed or actual changes to project operations. Funding also supports IM and Homeland Security initiatives.

**Travel** **346** **467** **476**

Travel supports transportation and per diem expenses incurred for participation in and development of regional transmission organizations; training expenses for power operator certification; relocation expenses for new FTEs; contract negotiations; preference customer meetings; rate forums; hearings and meetings; Congressional hearings; site visits of existing and new projects; promotion of energy efficiency and renewable energy via Competitive Resource Strategy workshops and meetings; operations meetings with industry self-regulating groups. Self-regulating groups include: SERC Reliability Corporation (SERC), Virginia Carolina Electric Reliability Group (VACAR), Florida Reliability Coordinating Council (FRCC); NERC; the ERO; hydropower task force and project rehabilitation meetings with the Corps, Customer, and SEPA Working Group (C<sup>2</sup>SWG); National Environmental Policy Act (NEPA) activities; training; Power Marketing Policy Forums; national and state customer meetings with the National Rural Electric Cooperative Association (NRECA), the American Public Power Association (APPA); Southeastern Federal Power Customers O&M Subcommittee meetings; Interagency Task Force on Finance; Technical Advisory Group meetings; FERC pre-filings and hearings; PJM RTO; and headquarters responsibilities.

**Support Services** **41** **60** **61**

The Energy Efficiency and Renewable Energy Program supports preference customer efforts to address energy efficiency issues, and promote development of renewable resources in support of the Department's Strategic Plan Goal 1.3 and the Energy Policy Act of 2005. Develop specifications for training programs, prepare program plans, conduct training, and review and evaluate contractors.

**Other Related Expenses** **1,418** **1,917** **1,902**

Provide administrative support for the office, rent, communications, maintenance, contract services (library services, support for DOE Power Marketing Liaison Office, independent audit of the Southeastern Federal Power Program financial statements), E-GOV, supplies, materials, and equipment and support for cyber and physical security initiatives associated with Homeland Security<sup>a</sup>. Support installation of electronic hardware and software for the operations center and

<sup>a</sup> Southeastern is required to meet the Common Identification Standard for Federal Employees and Contractors, as required by HSPD-12, FIPS Publication 201, Personal Identification Verification for Federal Employees and Contractors, NIST 800-73, Integrated Circuit Card for Personal Identity and Verification for Federal Employees and Contractors, NIST 800-76, Biometric Data Specification for Personal Identity Verification and all other DOE requirements.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

provide maintenance to integrate real-time data from the control area and provide the data to other transmission operators in the Regional Transmission Organization (RTO), and NERC. This equipment supports additional NERC compliance requirements and system reliability. This system is a resource-intensive application that requires maintenance of interconnected fiber optic communication lines for the Supervisory Control and Data Acquisition (SCADA) system. Also reflects expenses associated with infrastructure support: telecommunications equipment; accounting system maintenance; building and computer security equipment; computer hardware and software; and office equipment and financial management system (Oracle). This funding allows the agency to fulfill its obligations under Strategic Theme 1, Energy Security and Goal 1.3, Energy Infrastructure.

|                                 |              |              |              |
|---------------------------------|--------------|--------------|--------------|
| <b>Total, Program Direction</b> | <b>6,404</b> | <b>7,420</b> | <b>7,638</b> |
|---------------------------------|--------------|--------------|--------------|

## Explanation of Funding Changes

|                                      |
|--------------------------------------|
| FY 2010<br>vs.<br>FY 2009<br>(\$000) |
|--------------------------------------|

**Salaries and Benefits**

Fiscal Year 2010 salaries are derived from budgeted FY 2009 salaries and benefits, plus cost-of-living adjustments, promotions, within-grade increases, DOE-cascading performance awards, retirement payouts for unused leave, and overtime. +223

**Travel**

Derived from PCS expenses and increased travel and training for Operators, IT and security purposes. +9

**Support Services**

Increase in funding for co-sponsored energy efficiency and renewable energy support programs for municipal and cooperative utilities +1

**Other Related Expenses**

- Rent increase due to inflation +9
- Audit increase due to incurring additional expense associated with generating agency +6
- Communications expenses associated with upgraded Operations (ops) center communication with projects +17
- Maintenance expenses increased due to IT and ops center maintenance agreements +7
- Supplies and materials expense decrease due to major software acquisition in FY 2008 +2
- Contract services expenses increased due to Oracle financial system upgrade +23
- Equipment expenses decrease -80
- Working Capital Fund increased to reflect headquarters operating expenses +1

Subtotal, Other Related Expenses -15

**Total Funding Change, Program Direction +218**



### Support Services by Category

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Management and Professional Support Services   |         |         |         |
| Co-sponsored energy efficiency services and renewable energy acquisition support for municipal and cooperative utilities | 41      | 60      | 61      |
| Total, Management and Professional Support Services  | 41      | 60      | 61      |

### Other Related Expenses by Category

(dollars in thousands)

|                                  | FY 2008 | FY 2009 | FY 2010 |
|----------------------------------|---------|---------|---------|
| Other Related Expenses           |         |         |         |
| Rent to GSA                      | 347     | 355     | 364     |
| Rent to Others                   | 9       | 9       | 9       |
| Audit of Financial Statements    | 163     | 250     | 256     |
| Communications, Utilities, Misc. | 262     | 306     | 323     |
| Printing and Reproduction        | 4       | 4       | 4       |
| Tuition                          | 30      | 16      | 16      |
| Maintenance Agreements           | 102     | 127     | 134     |
| Supplies and Materials           | 129     | 114     | 116     |
| Contract Services                | 241     | 416     | 439     |
| Equipment                        | 100     | 288     | 208     |
| Working Capital Fund             | 31      | 32      | 33      |
| Total, Other Related Expenses    | 1,418   | 1,917   | 1,902   |

# Service Area Map



## Revenue and Receipts

(in thousands)

|   | FY 2008   | FY 2009   | FY 2010   | FY 2011   | FY 2012   | FY 2013   | FY 2014   |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Southeastern Power Administration                     |           |           |           |           |           |           |           |
| Gross Revenues  | 232,418   | 236,064   | 240,720   | 241,666   | 243,692   | 261,944   | 263,040   |
| Net Billing (Credited as an Offsetting Receipt)       | -13,802   | -14,002   | -14,422   | -14,855   | -15,301   | -15,760   | -16,232   |
| Total Cash Receipts                                   | 218,616   | 222,062   | 226,298   | 226,811   | 228,391   | 246,184   | 246,808   |
| Continuing Fund                                       | -63,099   |           |           |           |           |           |           |
| Use of Offsetting Collections to fund PPW             | -48,413   | -49,520   | -70,806   | -72,930   | -75,118   | -77,371   | -79,693   |
| Use of Offsetting Collections to fund Annual Expenses | 0         | 0         | -7,638    | -7,920    | -8,214    | -8,519    | -8,837    |
| Total Receipts, net use of Offsetting Collections     | 107,104   | 172,542   | 147,854   | 145,961   | 145,059   | 160,294   | 158,278   |
| Cumberland Rehabilitation                             | 0         | -20,000   | -20,000   | -20,000   | -20,000   | -20,000   | -20,000   |
| GA-AL-SC Rehabilitation                               | -13,461   | -15,000   | -15,000   | -15,000   | -15,000   | -15,000   | -15,000   |
| Kerr-Philpott Rehabilitation                          | 0         | -600      | -600      | -600      | -600      | -600      | -600      |
| Jim Woodruff  | 0         | 0         | -1,000    | -1,000    | -1,000    | -1,000    | -1,000    |
| Total Proprietary Receipts                            | 93,643    | 136,942   | 111,254   | 109,361   | 108,459   | 123,694   | 121,678   |
| Percent of Sales to Preference Customers              |           |           |           |           |           |           |           |
|   | 99%       | 99%       | 99%       | 99%       | 99%       | 99%       | 99%       |
| Energy Sales and Power Marketed (megawatt-hours)      |           |           |           |           |           |           |           |
|   | 7,886,000 | 7,886,000 | 7,886,000 | 7,886,000 | 7,886,000 | 7,886,000 | 7,886,000 |

## System Statistics

|  | FY 2008<br>Actual | FY 2009<br>Estimate | FY 2010<br>Estimate |
|--|-------------------|---------------------|---------------------|
| <u>Generating Capacity:</u>                              |                   |                     |                     |
| Nameplate Capacity (KW)                                  | 3,392,375         | 3,392,375           | 3,392,375           |
| Peak Capacity (KW) <sup>a</sup>                          | 3,710,000         | 3,710,000           | 3,710,000           |
| <u>Generating Stations</u>                               |                   |                     |                     |
| Generating Projects (Number)                             | 22                | 22                  | 22                  |
| <u>Available Energy</u>                                  |                   |                     |                     |
| Energy from Stream-flow (MWH)                            | 3,714,869         | 7,459,272           | 7,459,272           |
| Energy generated from Pumping (MWH)                      | 708,048           | 427,128             | 427,128             |
| Energy Purchased for Replacement (MWH)                   | 384,019           | 75,000              | 75,000              |
| Total, Energy available for marketing <sup>b</sup> (MWH) | 4,806,936         | 7,961,400           | 7,961,400           |

<sup>a</sup> Southeastern markets capacity based on nameplate plus an overload factor. NERC requires that Southeastern keep a portion of the capacity in reserve for emergency purposes and to cover losses.

<sup>b</sup> Gross amount. Transmission losses are deducted from this amount to estimate the amount of energy marketed.

**Power Marketed, Wheeled, or Exchanged by Project**

| Project   | State | Plants | Installed Capacity (KW) | FY 2008 Estimated Power (GWH) | FY 2009 Estimated Power (GWH) | FY 2010 Estimated Power (GWH) |
|---|-------|--------|-------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b><u>Kerr-Philpott System</u></b>                  |       |        |                         | 223 *                         | 463 *                         | 463 *                         |
| John H. Kerr  | VA-NC | 1      | 204,000                 |                               |                               |                               |
| Philpott  | VA    | 1      | 14,000                  |                               |                               |                               |
| <b><u>Georgia-Alabama-South Carolina System</u></b> |       |        |                         | 2,378 *                       | 4,059 *                       | 4,059 *                       |
| Allatoona   | GA    | 1      | 74,000                  |                               |                               |                               |
| Buford  | GA    | 1      | 86,000                  |                               |                               |                               |
| Carters   | GA    | 1      | 500,000                 |                               |                               |                               |
| J. Strom Thurmond                                   | GA-SC | 1      | 280,000                 |                               |                               |                               |
| Walter F. George                                    | GA-AL | 1      | 130,000                 |                               |                               |                               |
| Hartwell  | GA-SC | 1      | 344,000                 |                               |                               |                               |
| R. F. Henry   | AL    | 1      | 68,000                  |                               |                               |                               |
| Millers Ferry                                       | AL    | 1      | 75,000                  |                               |                               |                               |
| West Point  | GA-AL | 1      | 73,375                  |                               |                               |                               |
| Richard B. Russell                                  | GA-SC | 1      | 600,000                 |                               |                               |                               |
| <b><u>Jim Woodruff Project</u></b>                  |       |        |                         | 181                           | 237                           | 237                           |
| <b><u>Cumberland System</u></b>                     |       |        |                         | 1,649 *                       | 3,127 *                       | 3,127 *                       |
| Barkley   | KY    | 1      | 130,000                 |                               |                               |                               |
| Center Hill   | TN    | 1      | 135,000                 |                               |                               |                               |
| Cheatham  | TN    | 1      | 36,000                  |                               |                               |                               |
| Cordell Hull  | TN    | 1      | 100,000                 |                               |                               |                               |
| Dale Hollow   | TN    | 1      | 54,000                  |                               |                               |                               |
| Old Hickory   | TN    | 1      | 100,000                 |                               |                               |                               |
| J. Percy Priest                                     | TN    | 1      | 28,000                  |                               |                               |                               |
| Wolf Creek  | TN    | 1      | 270,000                 |                               |                               |                               |
| Laurel  | TN    | 1      | 61,000                  |                               |                               |                               |
| <b>Total Power Marketed</b>                         |       | 22     | 3,392,375               | 4,431                         | 7,886                         | 7,886                         |

## **Pending Litigation**

There is no pending litigation to report at this time.

## Alternative Financing

2008

|                      | Transmission | Purchase Power | Offsetting Collections | Net Billing | Appropriated Funds |
|----------------------|--------------|----------------|------------------------|-------------|--------------------|
| Jim Woodruff System  | 0            | 900            | -700                   | -200        | 0                  |
| Kerr-Philpott System | 4,913        | 0              | -4,913                 | 0           | 0                  |
| GA-AL-SC System      | 21,175       | 25,470         | -42,630                | -4,015      | 0                  |
| Cumberland System    | 9,757        | 0              | -170                   | -9,587      | 0                  |
|                      | 35,845       | 26,370         | -48,413                | -13,802     | 0                  |

2009

|                      | Transmission | Purchase Power | Offsetting Collections | Net Billing | Appropriated Funds |
|----------------------|--------------|----------------|------------------------|-------------|--------------------|
| Jim Woodruff System  | 0            | 900            | -700                   | -200        | 0                  |
| Kerr-Philpott System | 4,704        | 0              | -4,704                 |             | 0                  |
| GA-AL-SC System      | 20,402       | 27,449         | -43,941                | -3,910      | 0                  |
| Cumberland System    | 9,762        | 0              | -175                   | -9,587      | 0                  |
|                      | 34,868       | 28,349         | -49,520                | -13,697     | 0                  |

2010

|                      | Transmission | Purchase Power | Offsetting Collections | Net Billing | Appropriated Funds |
|----------------------|--------------|----------------|------------------------|-------------|--------------------|
| Jim Woodruff System  | 0            | 1000           | -800                   | -200        | 0                  |
| Kerr-Philpott System | 4,704        | 0              | -4,704                 |             | 0                  |
| GA-AL-SC System      | 21,757       | 48,000         | -65,302                | -4,455      | 0                  |
| Cumberland System    | 9,767        | 0              | 0                      | -9,767      | 0                  |
|                      | 36,228       | 49,000         | -70,806                | -14,422     | 0                  |





# **Southwestern Power Administration**

# **Southwestern Power Administration**

**Southwestern Power Administration**  
**Proposed Appropriation Language**

For necessary expenses of operation and maintenance of power transmission facilities and of marketing electric power and energy, for construction and acquisition of transmission lines, substations and appurtenant facilities, and for administrative expenses, including official reception and representation expenses in an amount not to exceed \$1,500 in carrying out section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the southwestern power area, [\$28,414,000] \$44,944,000, to remain available until expended: Provided, That notwithstanding the provisions of 31 U.S.C. 3302 and 16 U.S.C. 825s, up to \$31,868,000 collected by the Southwestern Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended, for the sole purpose of funding the annual expenses of the Southwestern Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2010 appropriation estimated at not more than \$13,076,000: Provided further, That, notwithstanding 31 U.S.C. 3302, up to [\$35,000,000] \$38,000,000 collected by the Southwestern Power Administration pursuant to the Flood Control Act of 1944 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures: Provided further, That notwithstanding the provisions of 31 U.S.C. 3302 and 16 U.S.C. 825s, all funds collected by the Southwestern Power Administration that are applicable to the repayment of the annual expenses of this account in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses).

(Energy and Water Development Appropriations Act, 2009)

**Explanation of Change**

The 2010 Budget allows for the reclassification as discretionary offsetting collections of power receipts that are currently classified as mandatory for Southwestern in the amount of annual expenses for 2010 and for subsequent years. Reclassification of these receipts would be achieved through this legislation with a 2010 impact of \$31,868,000. This impact is reflected as a change in a mandatory program in the associated receipt account.



**Southwestern Power Administration**  
**Overview**  
**Appropriation Summary by Program**

|  | FY 2008<br>Appropriation | FY 2009<br>Original<br>Appropriation | FY 2010<br>Request |
|--|--------------------------|--------------------------------------|--------------------|
| Southwestern Power Administration                                      |                          |                                      |                    |
| Operation and Maintenance  | 83,215                   | 89,186                               | 94,944             |
| Subtotal, Southwestern Power Administration                            | 83,215                   | 89,186                               | 94,944             |
| Offsetting Collections, Annual Expenses                                | --                       | --                                   | -31,868            |
| Offsetting Collections, Purchase Power and Wheeling (PPW) <sup>a</sup> | -35,000                  | -35,000                              | -38,000            |
| Alternative Financing  | -18,050                  | -25,772                              | -12,000            |
| Total, Southwestern Power Administration                               | 30,165                   | 28,414                               | 13,076             |
| Reclassification of Mandatory Receipts to Discretionary Collections    |                          |                                      | 31,868             |

**Preface**

The Department of Energy (DOE) is leading the Nation forward to strengthen its national energy and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy. Southwestern Power Administration (Southwestern) exists to meet its public responsibilities, consistent with the Flood Control Act of 1944, to market and reliably deliver Federal power, recover power costs, and repay the Federal investment consistent with sound business principles, giving preference to public bodies and cooperatives while encouraging the most widespread use of power, and implementing public policy.

Within the Southwestern appropriation, there is one program: Operation and Maintenance (four subprograms: Operations and Maintenance, Construction, Purchase Power and Wheeling, and Program Direction).

**Mission**

The mission of Southwestern is to market and reliably deliver Federal hydroelectric power with preference to public bodies and cooperatives. This is accomplished by maximizing the use of Federal assets to repay the Federal investment and participating with other water resource users in an effort to balance their diverse interests with power needs within broad parameters set by the U. S. Army Corps of Engineers (Corps), and implementing public policy.

---

<sup>a</sup> Southwestern’s budget request for the Purchase Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices and limited availability of energy banks. This request will cover all requirements except under the most severe hydrological conditions.

**Benefits**

Southwestern’s appropriation supports DOE’s Energy Strategic Theme 1 by enabling the delivery of reliable, affordable, and environmentally sound energy, and operating a reliable transmission system which is an integral part of the Nation’s transmission grid. Southwestern, in conjunction with the Corps, participates in this effort by managing the multipurpose operation of the Federal hydropower system. This enables effective marketing, generation, and delivery of clean, reliable, cost-based electric power.

Southwestern’s program provides the Nation numerous benefits, which include:

- Operating a reliable Federal power system in an effective, cost efficient, and environmentally sound manner while meeting National utility performance standards and balancing the diverse interests of other water resource users.
- Producing power at the lowest cost-based rates possible, consistent with sound business practices.
- Repaying the American taxpayers’ investments in the Federal power system.
- Delivering reliable power to its customers.
- Providing economic benefits to the region.
- Providing regional power restoration assistance to other non-hydropower generation sources during power grid emergencies.
- Repaying the costs of operation of the Federal hydropower system with revenues from power customers.
- Supporting North American Electric Reliability Corporation (NERC) requirements.
- Supporting Federal Energy Regulatory Commission (FERC) requirements consistent with Federal statute.

**Strategic Themes, Goals, and the Secretary’s Initiatives**

A new Strategic Plan has not yet been established and approved by the Secretary of Energy. The Secretary has established major priorities and initiatives.

The following chart aligns the current Strategic Plan with the Secretary’s priorities:

| Strategic Theme    | Strategic Goal Title     | Secretary's Priorities | GPRA Unit Program Number | GPRA Unit Program Title           | Office |
|--------------------|--------------------------|------------------------|--------------------------|-----------------------------------|--------|
| 1. Energy Security | 3. Energy Infrastructure | Economic Prosperity    | 24                       | Southwestern Power Administration | SWPA   |

## **Significant Policy or Program Shifts**

The President's FY 2010 budget proposes the permanent reclassification of receipts from mandatory to discretionary to offset the annual expenses of the Western, Southwestern and Southeastern Power Marketing Administrations (PMAs) to allow for better operations and maintenance planning and execution, leading to a more reliable power system. Reclassification of these receipts would be achieved through legislation with a 2010 impact for all of the PMAs of \$189.384 million.

## Southwestern Power Administration

### Funding by Site by Program

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Southwestern Power Administration        | 83,215  | 89,186  | 94,944  |
| Total, Southwestern Power Administration | 83,215  | 89,186  | 94,944  |

### Site Description

An Agency of the Department of Energy, Southwestern Power Administration (Southwestern) was created in 1943 to market and deliver power and energy produced at U.S. Army Corps of Engineers (Corps) hydroelectric power projects. Southwestern markets and delivers power at wholesale rates to 78 municipal utilities, 22 rural electric cooperatives, and 3 government entities in the 6 states of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas. In order to integrate the operation of the Federal hydroelectric generating plants and to transmit power from 24 multi-purpose Corps dams to customers, Southwestern operates and maintains 1,380 miles of high-voltage transmission line, 25<sup>a</sup> substations/switchyards, and 51 microwave and very high frequency radio sites. Southwestern operates from its Headquarters in Tulsa, Oklahoma; a Dispatch Center in Springfield, Missouri; and maintenance facilities in Jonesboro, Arkansas; Gore, Oklahoma; and Springfield, Missouri.

---

<sup>a</sup> This number increased due to the transfer of a switchyard from the Corps to Southwestern.



## Operation and Maintenance

### Funding Profile by Subprogram

(dollars in thousands)

|  | FY 2008 <sup>a</sup><br>Appropriation | FY 2009<br>Appropriation | FY 2010<br>Request |
|--|---------------------------------------|--------------------------|--------------------|
| Operation and Maintenance                      |                                       |                          |                    |
| Program Direction (PD)                         | 22,054                                | 24,330                   | 27,153             |
| Operations and Maintenance (O&M)               | 11,892                                | 12,865                   | 13,775             |
| Construction (CN)                              | 4,269                                 | 5,991                    | 6,016              |
| Purchase Power and Wheeling (PPW) <sup>b</sup> | 45,000                                | 46,000                   | 48,000             |
| Subtotal, Operation and Maintenance            | 83,215                                | 89,186                   | 94,944             |
| Offsetting Collections, PPW                    | -35,000                               | -35,000                  | -38,000            |
| Offsetting Collections, PD                     | --                                    | --                       | -26,247            |
| Offsetting Collections, O&M                    | --                                    | --                       | -5,621             |
| Alternative Financing, PD                      | -877                                  | -2,200                   | --                 |
| Alternative Financing, O&M                     | -6,304                                | -9,381                   | --                 |
| Alternative Financing, CN                      | -869                                  | -3,191                   | -2,000             |
| Alternative Financing, PPW                     | -10,000                               | -11,000                  | -10,000            |
| Total, Operation and Maintenance               | 30,165                                | 28,414                   | 13,076             |

#### Public Law Authorizations:

Public Law No. 78-534, Section 5, Flood Control Act of 1944  
 Public Law No. 95-91, Section 302, DOE Organization Act of 1977  
 Public Law No. 100-71, Supplemental Appropriations Act, 1987  
 Public Law No. 101-101, Title III, Continuing Fund (amended 1989)  
 Public Law No. 102-486, Section 721, Energy Policy Act of 1992  
 Public Law No. 108-137, Appropriations Act, FY 2004

#### Mission

The mission of the Operation and Maintenance program is to market and reliably deliver Federal hydroelectric power with preference to public bodies and cooperatives. This is accomplished by maximizing the use of Federal assets to repay the Federal investment and participating with other water resource users in an effort to balance their diverse interests with power needs within broad parameters set by the U.S. Army Corps of Engineers (Corps), and implementing public policy.

<sup>a</sup> Southwestern Power Administration's FY 2008 Appropriation reflected a 0.91% rescission in accordance with Public Law No. 110-161, Consolidated Appropriations Act, 2008, in the amount of \$277,022 (Operations and Maintenance \$86,204; Construction \$30,947; and Program Direction \$159,871).

<sup>b</sup> Southwestern's budget request for the Purchase Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices and limited availability of energy banks. This request will cover all requirements except under the most severe hydrological conditions.

## **Benefits**

Southwestern's appropriation supports DOE's Energy Strategic Theme 1 by enabling the delivery of reliable, affordable, and environmentally sound energy, and operating a reliable transmission system which is an integral part of the Nation's transmission grid. Southwestern, in conjunction with the Corps, participates in this effort by managing the multipurpose operation of the Federal hydropower system. This enables effective marketing, generation, and delivery of clean, reliable, cost-based electric power.

Southwestern's program provides the Nation numerous benefits, which include:

- Operating a reliable Federal power system in an effective, cost efficient, and environmentally sound manner while meeting National utility performance standards and balancing the diverse interests of other water resource users.
- Producing power at the lowest cost-based rates possible, consistent with sound business practices.
- Repaying the American taxpayers' investments in the Federal power system.
- Delivering reliable power to its customers.
- Providing economic benefits to the region.
- Providing regional power restoration assistance to other non-hydropower generation sources during power grid emergencies.
- Repaying the costs of operation of the Federal hydropower system with revenues from power customers.
- Supporting North American Electric Reliability Corporation requirements.
- Supporting Federal Energy Regulatory Commission requirements consistent with Federal statute.

## **Climate Change Technology Program Benefits**

Southwestern contributes program benefits in support of Climate Change activities by reducing greenhouse gas emissions and fossil fuel usage. Annually, Southwestern produces, on average, 5,570 gigawatt-hours of clean, renewable hydroelectric energy. That energy production reduces emissions of carbon dioxide by 4.6 million tons per year, sulfur dioxide by 13,900 tons per year, and nitrogen oxides by 11,100 tons per year. Additionally, Southwestern's annual energy production replaces that which could be produced by burning 9.2 million barrels of fuel oil, or 2.7 million tons of coal, or 56.5 billion cubic feet of natural gas.

## **Contribution to the Secretary's Priorities and GPRA Unit Program Goals**

### PRIORITY 3: Economic Prosperity

Create millions of green jobs and increase competitiveness

1. Reduce energy demand
  - Vehicles: Support improved mileage performance of internal combustion engines and develop needed batteries for vehicle electrification
  - Building efficiency: Weatherization, ventilation, controls, lighting

2. Deploy cost-effective low-carbon clean energy technologies at scale
  - Support low-emission portfolios in power
  - Low carbon fuel standards in transport
  - Improve existing facilities through operations or upgrades
3. Promote the development of an efficient, “smart” electricity transmission and distribution network
  - Smart meters/Smart grid
  - Advanced storage/transmission
4. Enable responsible domestic production of oil and natural gas
  - New pipelines
  - New clean sources
5. Create a green workforce

### **Contribution to the Secretary’s Priorities**

Southwestern contributes to the Secretary’s priority 3.2, Economic Prosperity; Deploy cost-effective low-carbon clean energy technologies at scale by marketing and delivering renewable Federal hydropower at wholesale rates to its customers. The use of renewable hydropower reduces greenhouse gas emissions and fossil fuel usage. Through partnerships with Southwestern, its customers, and the Corps; repairs, modifications, and upgrades have been made to the Federal Power System to improve efficiency and production of clean renewable energy and to remove impediments to the integrated transmission grid.

### **Contribution to GPRA Unit Program Goal 1.3.24.00 Energy Infrastructure**

Southwestern contributes to DOE’s Strategic Goal through four subprograms (Program Direction, Operations and Maintenance, Construction, and Purchase Power and Wheeling) supported by appropriations, appropriations offset by receipts, Federal power receipts, and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances). Through the marketing and delivery of renewable hydroelectric power from the Corps dams, Southwestern makes a meaningful contribution toward a Nation powered by clean, safe, reliable, affordable, and secure energy. In order to accomplish this, Southwestern works with other water resource users to balance their diverse interests with power needs within broad parameters set by the Corps. Southwestern operates and maintains the Federal power system, which is an integral part of the Nation’s electrical grid, in an effective and cost efficient manner to assure reliability and maximize the use of Federal assets to repay the investment (principal and interest) as well as operation and maintenance costs while supporting the President’s initiatives.

### **Means and Strategies**

Southwestern will use various means and strategies to achieve its GPRA Unit Program goal. However, various external factors may impact the ability to achieve this goal. Southwestern also collaborates with others to meet its goal.

Southwestern will implement the following means:

- Achieve and maintain financial integrity.
- Maintain power system reliability.
- Operate the Federal power system effectively and efficiently.
- Provide power at the lowest possible cost.

Southwestern will implement the following strategies:

- Market all available hydropower generated at the Corps multipurpose projects and work with the Corps, states, cooperatives, and municipalities to meet statutory requirements while balancing the interests of other water users.
- Assure power rates are sufficient to repay all annual operating costs and the Federal investment with interest by conducting annual power repayment studies and submitting rate adjustments to DOE and FERC for approval.
- Meet Southwestern's limited 1200-hour peaking power contractual obligations with necessary purchased power and wheeling through the use of Federal power receipts; alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances); and the Continuing Fund as necessary in years of below-average hydropower generation.
- Utilize the following funding mechanisms: appropriations; appropriations offset by receipts; use of Federal power receipts; and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances).
- Maintain a diverse and knowledgeable workforce through employee training, skills gap analyses, leadership development, retention programs, and aggressive recruitment activities.
- Meet NERC requirements by documenting Southwestern's compliance with the latest NERC standards and performing certification and annual emergency operations training for power system dispatchers.
- Maintain the security of the Federal power system, facilities, and information technology (IT) systems.
- Address changes in the electric utility industry, technology, and workload by moving administrative and indirect positions to direct ("front line") positions as opportunities arise.
- Maximize the capabilities of business systems to improve processes and provide greater efficiency.

These strategies will result in a well-maintained, reliable Federal power system, and an exemplary workforce to operate and maintain the system in the most effective and cost efficient manner possible.

The following external factors could impact Southwestern's ability to achieve its program goal:

- Southwestern's program goal could be impacted by weather, natural disasters, transmission line constraints, new load patterns, deregulation of the electricity market, changing electric industry organizational structures, equipment failure, Congressional requirements, power markets, revenue factors, additions to other utilities' transmission systems interconnected with the Federal system, and other unforeseen requirements.

Successful collaboration of the Federal hydropower partners is necessary for Southwestern to achieve its program goal. Southwestern coordinates its operational activities with the Corps, customers, competing resources interests, the Southwest Power Pool Regional Transmission Organization

(SPP/RTO), and Congress to provide the most efficient and effective use of Federal assets and to ensure NERC and regional reliability council standards are met.

### **Validation and Verification**

Southwestern routinely conducts various internal reviews, studies, and audits to validate and verify program performance. Southwestern's program also is subject to continuing review by external entities such as Congress, the Government Accountability Office (GAO), the DOE's Inspector General, FERC, the U.S. Environmental Protection Agency, the Office of Personnel Management, the Office of Management and Budget (OMB), DOE, NERC, SPP/RTO, independent financial auditors, and Southwestern's Federal power customers.

Achievement of Southwestern's objectives is evaluated in the context of mission responsibilities and the continued impacts of external factors. Each objective has performance targets that are reported quarterly to DOE. Southwestern establishes a corrective plan of action to improve any performance below established quarterly standards.

| FY 2005 Results | FY 2006 Results | FY 2007 Results | FY 2008 Results | FY 2009 Targets | FY 2010 Targets |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|

Strategic Goal 1.3, Energy Infrastructure  
 GPRA Unit Program Goal 1.3.24.00: Southwestern Power Administration, Operation and Maintenance

|  |  |   |  |  |  |
|--|--|---|--|--|--|
| <p><u>Meet industry averages (CPS1: 162.0 and CPS2: 96.7) and at a minimum, meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances. GREEN</u><br/>           Actual:<br/>           CPS 1: 186.74<br/>           CPS 2: 99.40</p> | <p><u>Meet industry averages (CPS1: 161.8 and CPS2: 97.2) and at a minimum, meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances. GREEN</u><br/>           Actual:<br/>           CPS 1: 180.23<br/>           CPS 2: 99.18</p> | <p><u>Meet industry averages and at a minimum, meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90. CPS1: minute by minute measures a generating system's ability to match supply to changing demand requirements and support desired system frequency (about 60 cycles per second); CPS2: measures systems ability to limit the magnitude of generation and demand imbalances. GREEN</u><br/>           Actual:<br/>           CPS 1: 199.26<br/>           CPS 2: 99.61</p> | <p><u>Meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments. GREEN</u><br/>           Actual:<br/>           CPS 1: 199.49<br/>           CPS 2: 99.82</p> | <p><u>Meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.</u></p> | <p><u>Meet NERC Control Performance Standards (CPS) of CPS1&gt;100 and CPS2&gt;90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.</u></p> |
| <p><u>Provide power at the lowest possible cost by keeping average operation and maintenance cost per kilowatt-hour below the National average for hydropower.<sup>a</sup> GREEN</u><br/>           Actual:<br/>           Southwestern: \$0.0109<br/>           National industry average: \$0.0126<br/>           Therefore, Southwestern is less than the National industry average.</p>  | <p><u>Provide power at the lowest possible cost by keeping average operation and maintenance cost per kilowatt-hour below the National average for hydropower. GREEN</u><br/>           Actual:<br/>           Southwestern: \$0.0116<br/>           National industry average: \$0.0136<br/>           Therefore, Southwestern is less than the National industry average.</p>  | <p><u>Provide power at the lowest possible cost by keeping average operation and maintenance cost per kilowatt-hour below the National average for hydropower. GREEN</u><br/>           Actual:<br/>           Southwestern: \$0.0126<br/>           National industry average: \$0.0137<br/>           Therefore, Southwestern is less than the National industry average.</p>   | <p><u>Provide power at the lowest possible cost by keeping average operation and maintenance cost per kilowatt-hour below the National average for hydropower. GREEN</u><br/>           Actual:<br/>           Southwestern: \$0.0130<br/>           National industry average: \$0.0153<br/>           Therefore, Southwestern is less than the National industry average.</p>  | <p><u>Provide power at the lowest possible cost by keeping average operation and maintenance cost per kilowatt-hour below the National average for hydropower.</u></p>   | <p><u>Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the National median for public power.</u></p>   |

<sup>a</sup> National average for hydropower O&M cost per kilowatt-hour is derived from a sampling of hydropower utilities' annual reports, the Federal Energy Regulatory Commission's Form 1, and the Energy Information Administration's Form 412.

| FY 2005 Results  | FY 2006 Results   | FY 2007 Results  | FY 2008 Results   | FY 2009 Targets   | FY 2010 Targets   |
|--|---|--|---|---|---|
| Provide \$457 million in economic benefits to the region from the sale of hydroelectric power (under average water conditions). GREEN<br>Actual: \$488 million   | Provide \$462 million in economic benefits to the region from the sale of hydroelectric power (under average water conditions). YELLOW<br>Actual: \$322 million | Provide \$468 million in economic benefits to the region from the sale of hydroelectric power (under average water conditions). GREEN<br>Actual: \$471.6 million | Provide \$474 million in economic benefits to the region from the sale of hydroelectric power (under average water conditions). GREEN<br>Actual: \$537.8 million                      | N/A   | N/A   |
| Repay the Federal investment within the required repayment period. GREEN<br>Target: \$1,121,315<br>Actual: \$27,206,471  | Repay the Federal investment within the required repayment period. GREEN<br>Target: \$699,855<br>Actual: \$20,435,196   | Repay the Federal investment within the required repayment period. GREEN<br>Target: \$586,991<br>Actual: \$28,018,029  | Repay the Federal investment within the required repayment period. GREEN<br>Actual: Southwestern achieved 100%, or \$990,334, of annual required repayment of the Federal Investment. | Repay the Federal investment within the required repayment period.<br>Target: \$2,263,733 | Ensure timely repayment of Federal investment in accordance with DOE Order RA 6120.2 by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI). |
| Provide reliable service to customers annually under normal operations, by not allowing system voltage to fall below 95% of nominal (e.g. 161kV) for more than 30 minutes during any preventable condition. GREEN<br>Actual: Southwestern did not incur any violations where system voltage fell below 95% if nominal for more than 30 minutes of preventable condition. | Operate the transmission system so there are no more than 3 preventable outages annually. GREEN<br>Actual: Southwestern incurred one preventable outage.        | Operate the transmission system so there are no more than 3 preventable outages annually. GREEN<br>Actual: Southwestern incurred no preventable outages.         | Operate the transmission system so there are no more than 3 preventable outages annually. GREEN<br>Actual: Southwestern incurred no preventable customer outages.                     | Operate the transmission system so there are no more than 3 preventable outages annually. | Effectively operate the transmission system to limit the number of accountable outages to no more than 3 annually.  |

## Operations and Maintenance

### Funding Schedule by Activity

(dollars in thousands)

|                                      | FY 2008 <sup>a</sup> | FY 2009 | FY 2010 |
|--------------------------------------|----------------------|---------|---------|
| Operations and Maintenance (O&M)     |                      |         |         |
| Power Marketing                      | 1,028                | 1,773   | 1,748   |
| Operations                           | 4,321                | 3,575   | 4,080   |
| Maintenance                          | 6,118                | 6,194   | 6,680   |
| Capitalized Movable Equipment        | 425                  | 1,323   | 1,267   |
| Subtotal, Operations and Maintenance | 11,892               | 12,865  | 13,775  |
| Alternative Financing                | -6,304               | -9,381  | --      |
| Offsetting Collections               | --                   | --      | -5,621  |
| Total, Operations and Maintenance    | 5,588                | 3,484   | 8,154   |

### Description

The mission of the Operations and Maintenance subprogram is the cornerstone of Southwestern Power Administration's (Southwestern) total program. This subprogram assures continued reliability of the Federal power system by replacing aging infrastructure and removing constraints that would impede power flows, thus meeting the expectations of the 2005 Energy Policy Act (EPACT), National Energy Policy (NEP), and the Department of Energy's (DOE) Strategic Plan. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

### Benefits

The activities of the Operations and Maintenance subprogram are critical components in maintaining the reliability of the Federal power system, which are part of the Nation's interconnected generation and transmission system. Through the use of renewable hydroelectric energy, Southwestern makes a meaningful contribution of clean, safe, reliable, affordable, and secure energy to our Nation. EPACT, NEP, and DOE's Strategic Plan reinforce the importance of renewable hydroelectric energy by emphasizing its ongoing significant contribution to the Nation's past, current, and future energy supply and identifies Southwestern's important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. All emphasize the need to repair, maintain, and improve the transmission and generation facilities to enhance reliability of the energy infrastructure.

---

<sup>a</sup> Southwestern Power Administration's FY 2008 Appropriation reflected a 0.91% rescission in accordance with Public Law No. 110-161, Consolidated Appropriations Act, 2008, in the amount of \$277,022 (Operations and Maintenance \$86,204; Construction \$30,947; and Program Direction \$159,871).



Consistent with EPACT, Southwestern complies with the North American Electric Reliability Corporation (NERC) standards and participates with the Southwest Power Pool/Regional Transmission Organization (RTO), which reinforces Southwestern’s role as part of the Nation’s interconnected electric grid. In participation with the SPP/RTO, Southwestern works on regional initiatives to develop renewables in our region. During power grid emergencies, Southwestern also has the capability to provide reliable off-site power to help restore other power generation sources. As the demand for the transmission of power increases, the investment in maintaining and improving the Nation’s energy infrastructure is critical to the fulfillment of energy security to present and future generations.

Southwestern will use appropriations; appropriations offset by receipts; and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances), with customers and others who provide services or funds to assure a dependable and reliable Federal power system. Southwestern’s authority to use net billing and bill crediting is inherent in the authority provided by the Flood Control Act of 1944, and has been affirmed by the Comptroller General.<sup>a</sup> All funding will be utilized to perform reliability-centered maintenance and upgrades which ensure Southwestern’s transmission system is operated in the most reliable and cost effective manner.

Southwestern’s planned Operations and Maintenance projects are subject to change based on unanticipated equipment failure, customer needs, and weather conditions. The realities of maintaining a complex interconnected power system means unforeseen priority projects will arise periodically, causing a reprioritization of planned projects. All projects share the commonality of maintaining, repairing, and improving the aging and deteriorating infrastructure to ensure the reliability of the Federal power system.

### **Detailed Justification**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

#### **Power Marketing**

**1,028      1,773      1,748**

The Power Marketing activity funds technical and economic studies to support Southwestern’s transmission planning, water resources, communications, and maintenance activities. Technical and economic studies provide data to analyze and evaluate the impacts of proposed operational changes and decision-making based on cost/benefit analyses. Funding is also required for Southwestern’s participation in the RTO and to provide regional power restoration assistance to other non-hydropower generation sources during power grid emergencies. The National Electric Transmission Congestion Study identified constraints in the Nation’s interconnected electrical grid which could impede power flows. Studies to identify any constraints on Southwestern’s system will continue to be conducted. These studies show how the marketing and delivery of power is operationally impacted. The funding level for this activity is derived from Southwestern’s engineering plan, negotiated architect/engineering contracts, and the number of studies required per year.

---

<sup>a</sup> Honorable Secretary of the Interior B-125127 (February 14, 1956) available at WL 3064 (Comp. Gen.)

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Operations**

**4,321    3,575    4,080**

The Operations activity funds communication activities associated with the dispatch and delivery of power; environmental, safety, and health activities; and other transmission activity costs such as physical security, cyber security, and day-to-day power dispatch functions.

▪ **Communications**

**2,884    2,349    2,942**

This subactivity funds telemetering improvements, technical support to protect cyber infrastructure, SCADA/EMS maintenance agreements, an e-tagging system that electronically schedules power for customers, load forecasting, digital test equipment, fee for spectrum, and supplies and materials. The telemetering improvements include replacement of obsolete power and energy accounting equipment and modification of existing remote terminal units that improve the reliability of the power system, specifically in the areas of monitoring and control. Funding is required for upgrades that enable Southwestern to meet the goals of the EPACT, NEP, and DOE's Strategic Plan by replacing deteriorating infrastructure while assuring reliability and continuing to actively participate in the RTO. The funding level for communications maintenance is derived from maintenance history, the age of equipment, expected life span, annual diagnostic maintenance testing, and historical pricing information. The increase in funding for this subactivity reflects additional telemetering upgrades and energy accounting equipment.

▪ **Environmental, Safety, and Health**

**1,176    995    835**

This subactivity funds environmental activities including waste disposal/clean-up of oil and polychlorinated biphenyl contaminants from old circuit breakers and transformers; environmental assessments for threatened and endangered species; property transfers; wetland assessments; environmental library access; Toxic Substance Control Act and Resource Conservation Recovery Act compliance; contractor services; and requirements of the Environmental Protection Program as identified in DOE Order 450.1. The Safety and Health Program activities require funding for Occupational Safety and Health Administration compliance, substation grounding and drainage, aviation safety, industrial hygiene, medical examinations, medical officer, wellness program, safety equipment, and first aid supplies. The decrease in funding reflects completion of the Spill Prevention, Control, and Countermeasure plans and completion of environmental reviews.

▪ **Other Transmission**

**261    231    303**

This subactivity funds physical security, field utility costs for substations and microwave sites, and the day-to-day expenses of the dispatch center. Southwestern completed vulnerability and risk assessments and its graded approach in applying risk mitigation strategies to determine security improvements of its critical assets; these improvements have been implemented. The increase in funding for this subactivity reflects additional physical security requirements.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Maintenance** **6,118**    **6,194**    **6,680**

The Maintenance activity funds routine repair, maintenance, and improvement of Southwestern's 25<sup>a</sup> substations and 1,380 miles of high-voltage transmission lines, and assures power is reliably and safely delivered to customers. Southwestern's initial facilities, which were built approximately 60 years ago, are constantly evaluated through the maintenance management information system (MMIS). The funding level for this activity is derived from the MMIS (age, risk of failure, life cycle of equipment) and field crew evaluation. Internal and external factors include obsolescence of technology and lack of replacement parts. These variables are used in determining the level of funding required for a fiscal year. This budget request reflects Southwestern's assessment of the funding required to assure continued reliability of the Federal power system by replacing aging equipment and removing constraints that impede power flows, thus meeting the expectations of the EPACT, NEP and DOE's Strategic Plan.

▪ **Substation Maintenance** **4,663**    **4,838**    **5,271**

This subactivity funds two transformers, power circuit breakers, disconnect switches, protective relays and related equipment, computer aided drafting and design, revenue meters, vehicle maintenance, fuel, and other equipment to reliably perform general maintenance projects while maintaining the Federal power system as required by Southwestern's participation in a regional electric reliability council. The funding level for this subactivity is derived from MMIS data, which provides the age and condition of the existing equipment, facilitating projection of maintenance intervals. The increase in funding for this subactivity reflects Southwestern's plan to replace two transformers in order to maintain reliability of the power system while accommodating increased loads on the Federal power facilities resulting from interconnection and open access requests from other utilities.

▪ **Transmission Line Maintenance** **1,455**    **1,356**    **1,409**

This subactivity funds the purchase and maintenance of wood and steel structures, crossarms and braces, right-of-way (ROW) clearing, herbicide application, aerial patrol of the transmission system to identify maintenance needs, routine vehicle repair and maintenance, tractor-trailers, heavy equipment, and fuel. The quantity of steel or wood poles and crossarms and high-voltage insulators is derived from MMIS data. Emphasis continues to be placed on ROW clearing since NERC identified improper/insufficient ROW clearing as a major factor in potential blackouts. The funding level is appropriate for the number of structures and components to be replaced and the miles of ROW to be cleared as set forth by Southwestern's maintenance plans in meeting the goals of the EPACT and NEP to maintain a reliable transmission system. The increase in funding reflects additional ROW clearing requirements.

---

<sup>a</sup> This number increased due to the transfer of a switchyard from the Corps to Southwestern.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Capitalized Movable Equipment**

**425      1,323      1,267**

The Capitalized Movable Equipment activity funds the replacement of vehicles, tractor-trailers, and heavy equipment used for maintenance and repair of the transmission system and facilities. The replacement criteria Southwestern utilizes for specialized equipment needed to maintain 1,380 miles of transmission line is derived from the General Services Administration (GSA) and DOE guidelines based on operation duration and age. These vehicles exceed their useful lives and require high levels of maintenance. The vehicle cost estimates are derived from GSA pricing schedules. The decrease in funding for this activity reflects a reduction in the number and/or type of vehicles being purchased.

---

**Total, Operations and Maintenance**

**11,892      12,865      13,775**

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

|  |                   |
|--|-------------------|
| <b>Power Marketing</b>   | -25               |
| <b>Operations</b>  |                   |
| ▪ Increase reflects upgrades to telemetering and energy accounting equipment.          | +505              |
| <b>Maintenance</b>   |                   |
| ▪ Increase reflects the purchase of an additional transformer.                         | +486              |
| <b>Capitalized Movable Equipment</b>   |                   |
| ▪ Decrease reflects a reduction in the number and/or type of vehicles being purchased. | -56               |
| <b>Total Funding Change, Operations and Maintenance</b>                                | <hr/> <b>+910</b> |

## Construction

### Funding Schedule by Activity

(dollars in thousands)

|                        | FY 2008 <sup>a</sup> | FY 2009 | FY 2010 |
|------------------------|----------------------|---------|---------|
| Construction           |                      |         |         |
| Transmission System    | 4,269                | 5,991   | 6,016   |
| Subtotal, Construction | 4,269                | 5,991   | 6,016   |
| Alternative Financing  | -869                 | -3,191  | -2,000  |
| Total, Construction    | 3,400                | 2,800   | 4,016   |

### Description

The mission of the Construction subprogram is to assure continued reliability of the Federal power system by providing for additions, modifications, replacements, and interconnections to the transmission, substation, and communication facilities, thus meeting the expectations of the 2005 Energy Policy Act (EPACT), National Energy Policy (NEP), and the Department of Energy's (DOE) Strategic Plan. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern Power Administration's (Southwestern) program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

### Benefits

The activities of the Construction subprogram enable Southwestern to market and deliver Federal hydropower in the most reliable, safe, efficient, and cost effective manner to meet the operational criteria required as a participant in the National electrical grid while avoiding transmission infrastructure deterioration. EPACT, NEP, and DOE's Strategic Plan reinforce the importance of renewable hydroelectric energy by emphasizing its ongoing significant contribution to the Nation's past, present, and future energy supply and Southwestern's important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. Southwestern's participation in the Southwest Power Pool/Regional Transmission Organization (RTO), reinforces Southwestern's role as an integral part of the Nation's interconnected generation and transmission system. In participation with the SPP/RTO, Southwestern works on regional initiatives to develop renewables in our region. As the demand for the transmission of power increases, the investment in improving the Nation's energy infrastructure, by providing improvements, replacements, and interconnections, is critical in assuring reliable delivery of power, fulfilling energy security for the present as well as for future generations.

---

<sup>a</sup> Southwestern Power Administration's FY 2008 Appropriation reflected a 0.91% rescission in accordance with Public Law No. 110-161, Consolidated Appropriations Act, 2008, in the amount of \$277,022 (Operations and Maintenance \$86,204; Construction \$30,947; and Program Direction \$159,871).

Southwestern will continue to use appropriations and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances), with customers and others who provide services or funds to assure a dependable and reliable Federal power system. Southwestern's authority to use net billing and bill crediting is inherent in the authority provided by the Flood Control Act of 1944, and has been affirmed by the Comptroller General.<sup>a</sup> All funding will be utilized to perform reliability-centered upgrades and additions which ensure Southwestern's transmission system is operated in the most reliable and cost effective manner.

Southwestern's planned Construction projects are subject to change based on unanticipated equipment failure, customer needs, and weather conditions. The realities of maintaining a complex interconnected power system means unforeseen priority projects will arise periodically, causing a reprioritization of planned projects. All projects share the commonality of replacing aging and deteriorating infrastructure necessary to maintain the reliability of the Federal power system.

### Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Transmission System** **4,269**      **5,991**      **6,016**

This activity funds all construction projects that require expansion of or additions to existing facilities. System reliability is assured by replacing aging and deteriorating equipment, thereby removing constraints that limit power flows. The projects reflect Southwestern's efforts to reduce the risk of extended service outages, avoid more costly replacements in the future, and support the increased transmission system usage. The funding level for this activity is derived from internal and external management decisions and maintenance crew observations regarding system age, risk of equipment failure, life cycles, obsolescence of technology, unavailable replacement parts, budget constraints, cost, and demand for more capacity. These variables are assessed and incorporated into Southwestern's ten-year construction plan.

▪ **Substation Upgrades** **0**      **2,200**      **0**

This subactivity funds a high priority upgrade of the station bus and associated equipment at the Bull Shoals Dam switchyard that has been identified by the Southwest Power Pool RTO as necessary to relieve a transmission constraint. The Bulls Shoals upgrade will be completed in FY 2009 and no other projects have been identified for FY 2010.

▪ **Communication Equipment** **2,969**      **3,791**      **5,840**

This subactivity funds all communication equipment and microwave radio and tower replacements that are planned to provide improved system reliability and reduce future maintenance and equipment costs. This subactivity also provides funding for microwave radios and microwave tower additions, replacements, and modifications that will allow Southwestern to complete an important communication ring within its network that will increase the reliability of communications with the generating plants and substations in the Oklahoma region. The communication system provides for

<sup>a</sup> Honorable Secretary of the Interior B-125127 (February 14, 1956) available at WL 3064 (Comp. Gen.)

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

the transfer of voice and data traffic to allow monitoring and control of power system generation and transmission assets. The increase in funding for FY 2010 reflects the number of planned microwave radio and tower replacements.

In December 2004, the Congress passed and the President signed the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), creating the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from existing spectrum bands to accommodate commercial use by facilitating reimbursement to affected agencies of relocation costs. In FY 2007, Southwestern received \$8.1 million in spectrum relocation funds, as approved by the Office of Management and Budget, and as reported to the Congress by the Department of Commerce in December 2005. After receipt of initial funding, Southwestern was able to perform a more in depth analysis and, in so doing, determined a more accurate estimate. The new estimate revealed that additional funding of \$17.7 million would be required to complete the relocation of the spectrum bands in Southwestern's area to accommodate commercial use. These funds are mandatory and will remain available until expended, and agencies will return to the SRF any amounts received in excess of actual relocation costs. Frequency spectrum activities were funded from spectrum auction proceeds; thus, no funding is provided in this subactivity.

|   |              |              |              |
|---|--------------|--------------|--------------|
| <ul style="list-style-type: none"> <li>▪ <b>Transmission Upgrades</b></li> </ul>  | <b>1,300</b> | <b>0</b>     | <b>176</b>   |
| <p>This subactivity funds transmission system upgrades. Funding will be utilized to replace approximately 125 miles of severely corroded and worn shield wire on the transmission line to protect the current-carrying conductors from damage due to lightning strikes.</p> |              |              |              |
| <b>Total, Construction</b>  | <b>4,269</b> | <b>5,991</b> | <b>6,016</b> |

#### Explanation of Funding Changes

|   |                                   |
|---|-----------------------------------|
|   | FY 2010 vs.<br>FY 2009<br>(\$000) |
| <b>Transmission System</b>                | +25                               |
| <b>Total Funding Change, Construction</b> | +25                               |



## Purchase Power and Wheeling

### Funding Schedule by Activity

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Purchase Power and Wheeling (PPW) <sup>a</sup>   |         |         |         |
| System Support   | 41,500  | 42,500  | 44,500  |
| Other Contractual Services   | 3,500   | 3,500   | 3,500   |
| Total, PPW   | 45,000  | 46,000  | 48,000  |
| Use of Alternative Financing – Reimbursable Authority<br>(customer advances), Net Billing, Bill Crediting: |         |         |         |
| Purchase Power   | -3,425  | -4,425  | -3,425  |
| Power Losses   | -3,300  | -3,300  | -3,300  |
| Wheeling   | -3,275  | -3,275  | -3,275  |
| Total, Alternative Financing   | -10,000 | -11,000 | -10,000 |
| Subtotal, PPW  | 35,000  | 35,000  | 38,000  |
| Offsetting Collections   | -35,000 | -35,000 | -38,000 |
| Total, Purchase Power and Wheeling   | 0       | 0       | 0       |

### Description

The mission of the Purchase Power and Wheeling (PPW) subprogram is to provide for the purchase of energy to meet limited peaking power contractual obligations and the delivery of Federal power. Such purchases are blended with the available Federal hydroelectric power and energy to provide a more beneficial and reliable product while assuring repayment of the Federal investment plus interest, thus meeting the expectations of the 2005 Energy Policy Act (EPACT), National Energy Policy (NEP), and the Department of Energy's (DOE) Strategic Plan. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern Power Administration's (Southwestern) program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

### Benefits

The activities of the PPW subprogram provide for the purchase of energy to meet limited peaking power contractual obligations to assure the marketability of the Federal resource and repayment of the Federal investment. Southwestern's power sales contracts provide for only 1200 hours of peaking power per year, representing a portion of its customers' firm load requirements. The customers provide their own

<sup>a</sup> Southwestern's budget request for the Purchase Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices, limited availability of energy banks, and all but the most severe hydrological conditions.

resources and/or purchases for the remainder of their firm loads. This subprogram also provides for wheeling services that deliver Federal power to optimize the operation of the hydroelectric facilities marketed by Southwestern. EPACK, NEP, and DOE’s Strategic Plan reinforce the importance of domestic, renewable hydroelectric energy by emphasizing its ongoing significant contribution to the Nation’s past, present, and future energy supply and identifies Southwestern’s important role meeting electricity demand by supplying cost-based hydroelectric power to its customers. This subprogram enhances the reliability of the electrical transmission grid.

The reduced level of energy banking available from other electric utilities requires Southwestern to use alternative financing to fund power deliveries. Southwestern will continue to use Federal power receipts and alternative financing methods, including net billing, bill crediting, and/or reimbursable authority (customer advances), to fund this subprogram. When hydro generation is significantly below normal due to severe drought conditions, Southwestern will utilize the Continuing Fund for emergency PPW expenses.

**Detailed Justification**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**System Support**

**41,500      42,500      44,500**

This activity funds purchased power requirements that fulfill all 1200-hour contractual peaking power obligations with customers. In addition, energy purchases must be provided for replacement of transmission line losses associated with the delivery of non-Federal power over the Federal transmission system as required under Federal Energy Regulatory Commission (FERC) Order 888. Southwestern will continue to deliver limited peaking power and provide for power losses through power purchases. Southwestern will continue to use Federal power receipts and alternative financing methods, including net billing, bill crediting, and/or reimbursable authority (customer advances), to meet purchased power requirements.

System support requirements are affected by weather, volatile market prices, and limited availability of energy banks. For the past 20 years, Southwestern’s purchased power requirements have been based on average water conditions, which were established in an effort to reduce unused appropriations during numerous good water years. Beginning in FY 2001, Southwestern received authority from Congress to use offsetting collections to fund power purchases, again based on average water conditions. However, during the FY 2005 and FY 2006 drought, funding problems developed resulting from the limited amount of offsetting collections authorized to fund PPW. Inadequate funding for PPW required constant requests to access the Continuing Fund in order to ensure sufficient funding was available to fulfill Southwestern’s 1200-hour peaking power contractual obligations. Southwestern requested, and Congress approved, an increase in authority to use Federal power receipts (offsetting collections) in FY 2008. The use of this increased authority will be dependent upon the hydrological conditions of that fiscal year which, under average conditions, will be approximately half of the authority requested. Since the rates charged to its customers are based on costs, Southwestern has a built-in incentive to minimize its expenditures for purchased power. This additional authority will ensure greater flexibility in times of below average generation and volatile market prices, and will decrease dependence on the Continuing Fund under all but the most severe hydrological conditions. The increase in funding reflects projected market escalation.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Other Contractual Services** **3,500**      **3,500**      **3,500**

This activity funds other contractual services that provide for wheeling associated with the purchase of transmission service to meet limited peaking power obligations and for the integration of projects for the delivery of Federal power. The funding level for this activity is derived from contractual wheeling requirements. Southwestern will continue to use Federal power receipts and alternative financing methods, including net billing, bill crediting, and/or reimbursable authority (customer advances), to meet wheeling requirements. The FY 2010 funding request reflects the projected cost for wheeling services based on contractual pricing and delivery terms.

**Total, Purchase Power and Wheeling** **45,000**      **46,000**      **48,000**

**Explanation of Funding Changes**

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

**System Support**

- Increase in system support reflects anticipated needs based on projected increase in market prices. +2,000

**Total Funding Change, Purchase Power and Wheeling** **+2,000**

## Program Direction

### Funding Profile by Category

(dollars in thousands/whole FTEs)

|                             | FY 2008 <sup>a</sup> | FY 2009 | FY 2010 |
|-----------------------------|----------------------|---------|---------|
| Program Direction (PD)      |                      |         |         |
| Salaries and Benefits       | 18,140               | 19,659  | 21,288  |
| Travel                      | 700                  | 847     | 938     |
| Support Services            | 1,469                | 1,718   | 2,212   |
| Other Related Expenses      | 1,745                | 2,106   | 2,715   |
| Subtotal, Program Direction | 22,054               | 24,330  | 27,153  |
| Alternative Financing, PD   | -877                 | -2,200  | --      |
| Offsetting Collections, PD  | --                   | --      | -26,247 |
| Total, Program Direction    | 21,177               | 22,130  | 906     |
| Fulltime Equivalents        | 166                  | 179     | 184     |

### Mission

The mission of the Program Direction subprogram is to assure continued reliability of the Federal power system by utilizing Federal staffing resources and associated funds required to provide overall direction and execution of Southwestern Power Administration's (Southwestern) Operation and Maintenance Program. This subprogram supports the 2005 Energy Policy Act (EPACT), the National Energy Policy (NEP), and the Department of Energy's (DOE) Strategic Plan by providing delivery of reliable, affordable, and environmentally sound energy to the Nation. This subprogram fulfills the requirements of Section 5 of the Flood Control Act of 1944 and reflects Southwestern's program goal to provide the benefits of Federal power to its customers by selling and reliably delivering renewable energy from Federal multipurpose hydroelectric dams at the lowest cost-based rates possible that produce revenues sufficient to repay all power costs to the American taxpayers.

The Departmental Strategic Plan emphasized that DOE's Strategic Goals will be accomplished not only through the efforts of the major program offices in DOE, but also with additional effort from offices which support the programs in carrying out the mission. The Program Direction subprogram provides compensation and all related expenses for 184 Federal personnel who market, deliver, operate, maintain, and administer Southwestern's high-voltage interconnected power system and associated facilities. Southwestern will use appropriations; appropriations offset by receipts; and alternative financing arrangements, including net billing, bill crediting, and/or reimbursable authority (customer advances), with customers and others who provide services or funds to assure a dependable and reliable Federal

---

<sup>a</sup> Southwestern Power Administration's FY 2008 Appropriation reflects a 0.91% rescission in accordance with Public Law No. 110-161, Consolidated Appropriations Act, 2008, in the amount of \$277,022 (Operations and Maintenance \$86,204; Construction \$30,947; and Program Direction \$159,871).

power system. Southwestern’s authority to use net billing and bill crediting is inherent in the authority provided by the Flood Control Act of 1944, and has been affirmed by the Comptroller General.<sup>a</sup>

Southwestern performs critical functions in meeting the challenges of operating and maintaining the Federal power system to assure reliability, while meeting the growing demand for power and avoiding deterioration of the infrastructure. The functions include participation with entities to develop renewables in our region, managing information technology, ensuring sound legal advice and fiscal stewardship, developing and implementing uniform program policy and procedures, maintaining and supporting our workforce, safeguarding our facilities, and providing Congressional and public liaison.

Southwestern is committed to performing its mission while supporting the President’s initiatives to reduce greenhouse gas emissions, reduce oil consumption, and provide economic benefits.

Southwestern’s Program Direction subprogram further supports the Human Capital initiative, which is linked with careful planning and administration of the budget, through its Human Capital Management (HCM) Workforce Plan. This linkage is manifested in planning to assure that funds are available and allocated properly to support the initiative’s elements. HCM Workforce Plan requirements include: reducing the number of organizational layers, addressing succession planning, reducing the time to make decisions, redirecting positions to the front lines, improving operational processes, and addressing other key workforce challenges.

By the end of FY 2010, approximately 23 percent of Southwestern’s staff will be eligible for retirement. However, Southwestern will retain a strong staff of professionals dedicated to the pursuit of excellence by continuing to invest in its current employees, emphasizing strong development programs, completing skills gap analyses, and pursuing aggressive recruitment and retention efforts as identified in its HCM Workforce Plan.

### Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

#### Salaries and Benefits

**18,140      19,659      21,288**

This activity funds salaries and benefits for 184 skilled Federal employees who market and deliver Federal hydropower by operating and maintaining Southwestern’s high-voltage interconnected power system with its associated facilities and providing support for these functions. The funding level for salaries is derived from the current year budgeted salaries plus cost-of-living adjustments, promotions, and within-grade increases. The funding level for benefits is derived from a percentage of budgeted salaries. Annual benefit costs continue to increase faster than salaries due to rising health insurance premiums and the higher cost of an increasing number of FERS employees relative to CSRS employees.

---

<sup>a</sup> Honorable Secretary of the Interior B-125127 (February 14, 1956) available at WL 3064 (Comp. Gen.)

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

The FY 2010 level supports 184 Federal employees: 55 percent of the employees are General Schedule (GS) and subject to the Administration's proposed cost-of-living adjustment; salaries of the remaining 45 percent (craft workers and power system dispatchers) are determined through union negotiations and wage surveys. This activity also includes overtime, awards, relocation, workers' compensation, recruitment bonuses, retention pay, and advanced in-hire rates. The increase in funding is due to cost-of-living adjustments and significantly rising benefit costs.

**Travel** **700**      **847**      **938**

This activity funds all related travel and per diem expenses incurred in the operation and maintenance of Southwestern's geographically dispersed power system. The funding level for this activity is primarily derived from the daily requirement of the field maintenance personnel to maintain 1,380 miles of transmission line, 25<sup>a</sup> substations, 51 microwave/radio sites, communication equipment, and the Supervisory Control and Data Acquisition network.

This activity includes travel related to participation with the Southwest Power Pool/Regional Transmission Organization to establish procedures for providing regional power restoration assistance to other non-hydropower generation sources during power grid emergencies. Travel for E-Government-related initiatives and performance of general and administrative functions is also included. The increase in funding for this activity is due to rising per diem, transportation rates, and significantly increased fuel costs for mission-related travel to maintain the integrity and reliability of the integrated electrical grid.

**Support Services** **1,469**      **1,718**      **2,212**

This activity funds contracted management support services including information technology, E-Government, and administrative/records management support. The funding level for this activity is derived from the most recent negotiated contract for support services essential to achieve Southwestern's mission. The increase in funding for this activity reflects the terms of the negotiated contract.

**Other Related Expenses** **1,745**      **2,106**      **2,715**

This activity funds DOE's working capital distribution, rental space, printing and reproduction, training tuition, maintenance of office equipment, supplies and materials, employee parking, janitorial services, Equal Employment Opportunity investigations, Power Marketing Liaison Office (PMLO) services, financial audit, Defense Contract Audit Agency (DCAA) and A-123 requirements. Intermittent specialized services, not included in ongoing support service contracts, are also included. Rental space costs assume the GSA inflation factor. Other costs are based on the historical usage and actual cost of similar items. The increase in funding for this activity is primarily due to additional training, rental space, office equipment, financial audit, and working capital expenses.

**Total, Program Direction** **22,054**      **24,330**      **27,153**

<sup>a</sup> This number increased due to the transfer of a switchyard from the Corps to Southwestern.

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Salaries and Benefits

- Increase in salaries and benefits reflects wage survey-based, union-negotiated, and Administratively Determined pay adjustments, and the Administration's proposed cost-of-living adjustment for GS employees. Payroll benefits are increasing at a rate in excess of salaries due to the increased number of FERS employees and the matching of the TSP funds and increased health insurance premiums. +1,629

### Travel

- Increase reflects rising per diem rates and significantly increased fuel costs for mission-related travel to maintain the transmission system. +91

### Support Services

- Increase reflects funding for support services per the negotiated contract. +494

### Other Related Expenses

- Increase in funding for this activity is primarily due the terms of negotiated contract for rental space, the financial audit, and the Working Capital Fund increase related to funding the DCAA. +609

---

**Total Funding Change, Program Direction** +2,823

### Support Services by Category

(dollars in thousands)

|   | FY 2008 | FY 2009 | FY 2010 |
|---|---------|---------|---------|
| Management Support  |         |         |         |
| Reports and Analysis Management and General Administrative Services | 1,469   | 1,718   | 2,212   |
| Total, Management Support   | 1,469   | 1,718   | 2,212   |
| Total, Support Services   | 1,469   | 1,718   | 2,212   |

### Other Related Expenses by Category

(dollars in thousands)

|                                | FY 2008 | FY 2009 | FY 2010 |
|--------------------------------|---------|---------|---------|
| Other Related Expenses         |         |         |         |
| Training                       | 97      | 178     | 190     |
| Printing and Reproduction      | 39      | 49      | 49      |
| Rent to Others                 | 633     | 691     | 705     |
| Employee Parking               | 84      | 83      | 84      |
| Financial Audit                | 280     | 294     | 364     |
| Power Marketing Liaison Office | 140     | 140     | 140     |
| Supplies and Materials         | 168     | 177     | 200     |
| Working Capital Fund           | 0       | 88      | 160     |
| Equipment                      | 51      | 98      | 100     |
| Other                          | 253     | 308     | 723     |
| Total, Other Related Expenses  | 1,745   | 2,106   | 2,715   |



## Revenues and Receipts

(dollars in thousands)

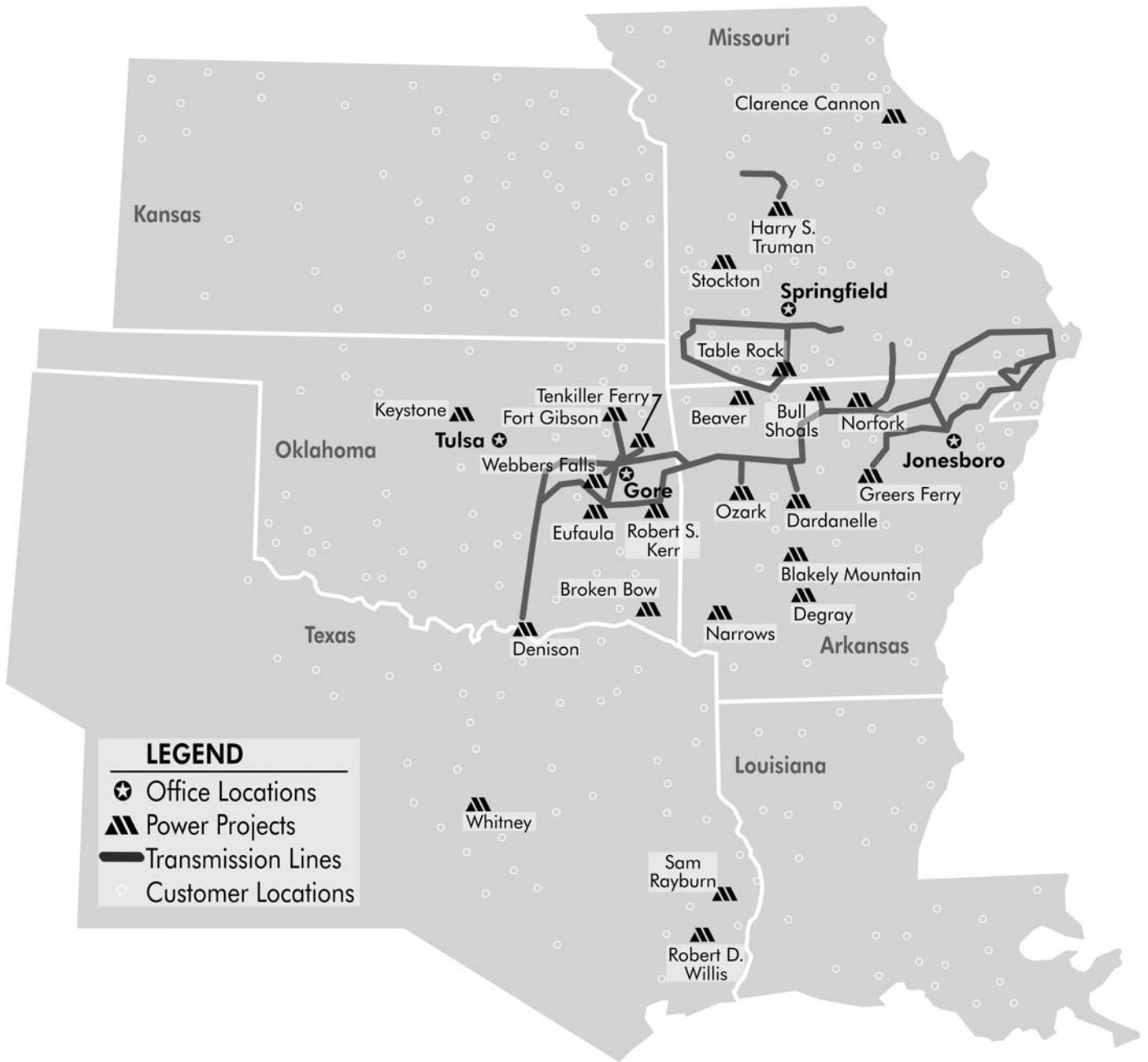
|  | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 |
|--|---------|---------|---------|---------|---------|---------|---------|
| Gross Revenues   |         |         |         |         |         |         |         |
| Sale and Transmission of Electric Energy                           | 186,630 | 184,100 | 186,300 | 187,500 | 188,600 | 189,600 | 189,600 |
| Total, Gross Revenues  | 186,630 | 184,100 | 186,300 | 187,500 | 188,600 | 189,600 | 189,600 |
| Alternative Financing Credited as an Offsetting Receipt            | -55,100 | -61,800 | -64,100 | -65,800 | -67,000 | -68,200 | -68,500 |
| Offsetting Collections, Annual Expenses                            |         |         | -31,868 | -32,874 | -34,182 | -35,458 | -36,301 |
| Offsetting Collections Realized, Purchase Power and Wheeling (PPW) | -35,000 | -35,000 | -38,000 | -39,000 | -40,000 | -41,000 | -42,000 |
| Total Proprietary Receipts   | 96,530  | 87,300  | 52,332  | 49,826  | 47,418  | 44,942  | 42,799  |
| Percent of Sales to Preference Customers                           | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  |
| Energy Sales and Power Marketed (billion kilowatt hours)           | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     |

## System Statistics

|  | FY 2008<br>Actual | FY 2009<br>Estimate | FY 2010<br>Estimate | FY 2011<br>Estimate | FY 2012<br>Estimate | FY 2013<br>Estimate | FY 2014<br>Estimate |
|--|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Generating Capacity (kilowatts)</b>           |                   |                     |                     |                     |                     |                     |                     |
| Installed Capacity                               | 2,173,800         | 2,173,800           | 2,173,800           | 2,173,800           | 2,173,800           | 2,173,800           | 2,173,800           |
| Peak Capacity                                    | 2,052,538         | 2,052,500           | 2,052,500           | 2,052,500           | 2,052,500           | 2,052,500           | 2,052,500           |
| <b>Generating Stations</b>                       |                   |                     |                     |                     |                     |                     |                     |
| Generating Projects<br>(Number)                  | 24                | 24                  | 24                  | 24                  | 24                  | 24                  | 24                  |
| Substations/Switchyards<br>(Number) <sup>a</sup> | 24                | 25                  | 25                  | 25                  | 25                  | 25                  | 25                  |
| Substations/Switchyards<br>(kVA Capacity)        | 1,026,900         | 1,026,900           | 1,026,900           | 1,026,900           | 1,026,900           | 1,026,900           | 1,026,900           |
| <b>Available Energy (Megawatt-hours)</b>         |                   |                     |                     |                     |                     |                     |                     |
| Energy Generated                                 | 7,401,850         | 5,454,300           | 5,444,100           | 5,415,000           | 5,412,700           | 5,412,700           | 5,412,700           |
| Energy Received                                  | 82,819            | 184,900             | 188,100             | 209,000             | 209,700             | 209,700             | 209,700             |
| <b>Total, Energy Available for<br/>Marketing</b> | <b>7,484,669</b>  | <b>5,639,200</b>    | <b>5,632,200</b>    | <b>5,624,000</b>    | <b>5,622,400</b>    | <b>5,622,400</b>    | <b>5,622,400</b>    |
| <b>Transmission Lines (Circuit-Miles)</b>        |                   |                     |                     |                     |                     |                     |                     |
| 161-KV   | 1,117             | 1,117               | 1,117               | 1,117               | 1,117               | 1,117               | 1,117               |
| 138-KV   | 164               | 164                 | 164                 | 164                 | 164                 | 164                 | 164                 |
| 69-KV  | 99                | 99                  | 99                  | 99                  | 99                  | 99                  | 99                  |
| <b>Total, Transmission Lines</b>                 | <b>1,380</b>      | <b>1,380</b>        | <b>1,380</b>        | <b>1,380</b>        | <b>1,380</b>        | <b>1,380</b>        | <b>1,380</b>        |

<sup>a</sup> This number increased due to the transfer of a switchyard from the Corps to Southwestern.

# System Map



## Power Marketed, Wheeled, or Exchanged By Project

|                          | State            | Number of Plants | Installed Capacity (kW) | FY 2008 Actual Energy (GWh) | FY 2009 Estimated Energy (GWh) | FY 2010 Estimated Energy (GWh) | FY 2011 Estimated Energy (GWh) | FY 2012 Estimated Energy (GWh) | FY 2013 Estimated Energy (GWh) | FY 2014 Estimated Energy (GWh) |
|--------------------------|------------------|------------------|-------------------------|-----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Power Marketed           |                  |                  |                         |                             |                                |                                |                                |                                |                                |                                |
| Interconnected System    |                  |                  |                         |                             |                                |                                |                                |                                |                                |                                |
|                          | Missouri         | 4                | 463,200                 | 2,563                       | 1,860                          | 1,858                          | 1,855                          | 1,854                          | 1,854                          | 1,854                          |
|                          | Arkansas         | 9                | 1,037,100               | 1,397                       | 1,014                          | 1,013                          | 1,011                          | 1,011                          | 1,011                          | 1,011                          |
|                          | Oklahoma         | 7                | 514,100                 | 1,510                       | 1,096                          | 1,094                          | 1,093                          | 1,092                          | 1,092                          | 1,092                          |
|                          | Texas            | 2                | 100,000                 | 692                         | 502                            | 502                            | 501                            | 501                            | 501                            | 501                            |
|                          | Louisiana        | 0                | 0                       | 502                         | 364                            | 364                            | 363                            | 363                            | 363                            | 363                            |
|                          | Kansas           | 0                | 0                       | 577                         | 419                            | 419                            | 417                            | 417                            | 417                            | 417                            |
| Subtotals                |                  | 22               | 2,114,400               | 7,241                       | 5,255                          | 5,250                          | 5,240                          | 5,238                          | 5,238                          | 5,238                          |
| Isolated:                |                  |                  |                         |                             |                                |                                |                                |                                |                                |                                |
| Robert D. Willis Project |                  |                  |                         |                             |                                |                                |                                |                                |                                |                                |
| Sam Rayburn Project      |                  |                  |                         |                             |                                |                                |                                |                                |                                |                                |
|                          | 50% to Texas     | 2                | 59,400                  | 47                          | 76                             | 76                             | 76                             | 76                             | 76                             | 76                             |
|                          | 50% to Louisiana | 0                | 0                       | 47                          | 76                             | 76                             | 76                             | 76                             | 76                             | 76                             |
| Subtotals                |                  | 2                | 59,400                  | 94                          | 152                            | 152                            | 152                            | 152                            | 152                            | 152                            |
| Total, Power Marketed    |                  | 24               | 2,173,800               | 7,335                       | 5,407                          | 5,402                          | 5,392                          | 5,390                          | 5,390                          | 5,390                          |
| Power Wheeled/Exchanged  |                  |                  |                         |                             |                                |                                |                                |                                |                                |                                |
|                          | Wheeled (MW)     |                  |                         | 1,092                       | 1,251                          | 1,273                          | 1,294                          | 1,305                          | 1,305                          | 1,305                          |
|                          | Exchanged (GWh)  |                  |                         | 25                          | 0                              | 0                              | 0                              | 0                              | 0                              | 0                              |

**Pending Litigation**  
**March 19, 2009**

Southwestern Power Administration (Southwestern) has no pending court litigation, as of March 19, 2009.

Southwestern has one case pending before the Equal Employment Opportunity Commission.

Southwestern presently has the following administrative litigation pending before the Federal Energy Regulatory Commission (FERC):

NJ07-09, On September 26, 2007, Southwestern filed revisions to its non-jurisdictional OATT incorporating the Large Generator Interconnection Procedures and Small Generator Interconnection Agreements into our tariff. On December 6, 2007, Southwestern filed an Attachment O-The Transmission Planning Process, for its OATT tariff. On April 25, 2008, FERC approved the Large Generator Interconnection and Small Generator Interconnection agreements.

NJ08-03, On December 6, 2007, Southwestern filed a Transmission Planning Process Attachment O of tariff. FERC conditionally approved the filing on September 18, 2008, while identifying compliance issues to be resolved. SWPA filed revisions on December 16, 2008. The Oklahoma Municipal Power Authority (OMPA) protested and intervened on January 6, 2009. SWPA answered the protest on January 21, 2009. On March 6, 2009, AECI intervened out of time. On March 13, 2009, Jonesboro City Water & Light intervened.

Southwestern is an intervener in the following actions pending before FERC:

P-459-128, Union Electric Ameren (UA). UA requested a license for a major project for the Osage project existing dam. Southwestern filed a Motion to Intervene on April 27, 2004. License issued March 30, 2007. Southwestern continues to monitor licensing issues associated with the project.

RR08-1, North American Electric Reliability Council and North American Electric Reliability Corporation (NERC). NERC filed a request for certification as the Electric Reliability Organization. On March 14, 2008, Southwestern filed a Motion to Intervene Out-of-Time to protect status interests as an owner of transmission facilities, substation facilities, and other facilities. FERC granted a rehearing on mandatory reliability standards on April 23, 2008. NERC filed a compliance filing on May 16, 2008. On August 14, 2008, NERC filed a compliance filing in response to paragraph 18 of the February 21, 2008, Order. FERC accepted NERC's filing on paragraph 18 on November 24, 2008.

P-12470, Broken Bow. Southwestern intervened with comments on January 26, 2007. Southwestern Power submitted comments on April 17, 2008.

OA08-05-, Southwest Power Pool Compliance Filing Revising Order 890. Southwestern intervened on October 23, 2007, SPP filed submission of compliance filing revising tariff. On May 16, 2008, the commission accepted SPP's compliance filing except for Attachment C that was revised on June 16, 2008. On August 11, 2008, SPP submitted revisions to its Open Access Transmission Tariff in compliance with Commission Order 890 to be effective August 11, 2008.

OA08-61, Southwest Power Pool, Inc. Southwestern filed a Motion to Intervene on January 3, 2008. On July 11, 2008, FERC accepted SPP's filing as modified subject to a compliance filing during within 90 days. On August 7, 2008, SPP filed a motion for extension until February 6, 2009. On March 16, 2009, SPP filed an answer that SPP's planning process complies with the nine planning principles articulated in Order No. 890 and accept Attachment O to the SPP tariff, as revised.

ER08-340, Southwest Power Pool, Inc. Southwestern filed a Motion to Intervene on January 3, 2008. FERC accepted SPP's finding on April 21, 2008, but ordered them to submit a modification that was submitted on May 21, 2008.

Southwestern has three tort claims pending.

Southwestern has three EEO claims pending.

Southwestern management believes the possibility of incurring financially material liability in any of these matters is remote.

# **Western Area Power Administration**

# **Western Area Power Administration**



## **Construction, Rehabilitation, Operation and Maintenance**

### **Western Area Power Administration**

#### **Proposed Appropriation Language**

For carrying out the functions authorized by title III, section 302(a)(1)(E) of the Act of August 4, 1977 (42 U.S.C. 7152), and other related activities including conservation and renewable resources programs as authorized, including official reception and representation expenses in an amount not to exceed \$1,500; [\$218,346,000] \$256,711,000, to remain available until expended, of which [\$208,642,000] \$245,216,000 shall be derived from the Department of the Interior Reclamation Fund: *Provided, That notwithstanding the provisions of 31 U.S.C. 3302, 16 U.S.C. 825s, and 43 U.S.C. 392a, up to \$147,530,000 collected by the Western Area Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended, for the sole purpose of funding the annual expenses of the Western Area Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2010 appropriation estimated at not more than \$109,181,000, of which \$97,686,000 is derived from the Reclamation Fund: Provided further, [Provided,] That of the amount herein appropriated, [\$7,342,000] \$7,584,000 is for deposit into the Utah Reclamation Mitigation and Conservation Account pursuant to title IV of the Reclamation Projects Authorization and Adjustment Act of 1992: Provided further, That notwithstanding the provision of 31 U.S.C. 3302, up to [\$403,118,000] \$349,807,000 collected by the Western Area Power Administration pursuant to the Flood Control Act of 1944 and the Reclamation Project Act of 1939 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures: Provided further, That of the amount herein appropriated, up to \$18,612,000 is provided on a nonreimbursable basis for environmental remediation at the Basic Substation site in Henderson, Nevada: Provided further, That notwithstanding the provisions of 31 U.S.C. 3302, 16 U.S.C. 825s, and 43 U.S.C. 392a, funds collected by the Western Area Power Administration from the sale of power and related services that are applicable to the repayment of the annual expenses of this account in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses). (Energy and Water Development and Related Agencies Appropriations Act, 2009.)*

#### **Explanation of Change**

The FY 2010 Budget allows for the reclassification as discretionary offsetting collections of power receipts that are currently classified as mandatory for Western in the amount of annual expenses for FY 2010 and for subsequent years. Reclassification of these receipts would be achieved through this legislation with a FY 2010 impact of \$147,530,000. This impact is reflected as a change in a mandatory program in the associated receipt account. The language also includes a nonreimbursable provision for

critical environmental remediation requirements at the Basic Substation site, an original World War II magnesium supply facility located in Henderson Nevada.

## Falcon and Amistad Operating and Maintenance Fund

### Proposed Appropriation Language

For operation, maintenance, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams, [\$2,959,000] \$2,568,000, to remain available until expended, and to be derived from the Falcon and Amistad Operating and Maintenance Fund of the Western Area Power Administration, as provided in section[ 423 of the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995] 2 of the Act of June 18, 1954, as amended: *Provided, That notwithstanding the provisions of that Act and of 31 U.S.C. 3302, up to \$2,348,000 collected by the Western Area Power Administration from the sale of power and related services from the Falcon and Amistad Dams shall be credited to this account as discretionary offsetting collections, to remain available until expended for the sole purpose of funding the annual expenses of the hydroelectric facilities of these Dams and associated Western Area Power Administration activities: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2010 appropriation estimated at not more than \$220,000: Provided further, That notwithstanding the provisions of section 2 of the Act of June 18, 1954, as amended, and 31 U.S.C. 3302, all funds collected by the Western Area Power Administration from the sale of power and related services from the Falcon and Amistad Dams that are applicable to the repayment of the annual expenses of the hydroelectric facilities of these Dams and associated Western Area Power Administration activities in this and subsequent fiscal years shall be credited to this account as discretionary offsetting collections for the sole purpose of funding such expenses, with such funds remaining available until expended: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred.* (Energy and Water Development and Related Agencies Appropriations Act, 2009.)

### Explanation of Change

The FY 2010 Budget allows for the reclassification as discretionary offsetting collections of power receipts that are currently classified as mandatory for Falcon and Amistad in the amount of annual expenses for FY 2010 and for subsequent years. Reclassification of these receipts would be achieved through this legislation with a FY 2010 impact of \$2,348,000. This impact is reflected as a change in a mandatory program in the associated receipt account.



**Western Area Power Administration**  
**Overview**  
**Appropriation Summary by Program**

(dollars in thousands)

|   | FY 2008 Current<br>Appropriation | FY 2009 Original<br>Appropriation | FY 2009<br>Additional<br>Appropriation <sup>a</sup> | FY 2010<br>Request |
|---|----------------------------------|-----------------------------------|---|--------------------|
| Western Area Power Administration Accounts  |                                  |                                   |   |                    |
| Construction, Rehabilitation, Operation and<br>Maintenance (CROM) Account Operating Expenses<br>(Gross) | 753,788                          | 901,634                           | 10,000  | 899,317            |
| Less Use of Alternative Financing <sup>b</sup>  | -212,242                         | -276,804                          | 0   | -288,920           |
| Offsetting Collections from Colorado River Dam<br>Fund (P.L. 98-381)                                    | -3,937                           | -3,366                            | 0   | -3,879             |
| Offsetting Collections, annual Operation and<br>Maintenance and Program Direction expenses              | 0                                | 0                                 | 0   | -147,530           |
| Offsetting Collections, Purchase Power and<br>Wheeling (PPW) expenses                                   | -308,702                         | -403,118                          | 0   | -349,807           |
| Total, CROM Account Budget Authority  | 228,907                          | 218,346                           | 10,000  | 109,181            |
| Falcon and Amistad Operating and Maintenance Fund   | 2,477                            | 2,959                             | 0   | 2,568              |
| Offsetting Collections, annual operation and<br>maintenance expenses                                    | 0                                | 0                                 | 0   | -2,348             |
| Total, Falcon and Amistad Operating and Maintenance<br>Fund Budget Authority                            | 2,477                            | 2,959                             | 0   | 220                |
| Colorado River Basins Power Marketing Fund<br>(CRBPMF) Operating Expenses                               | 232,145                          | 240,284                           | 0   | 261,723            |
| Offsetting Collections Realized   | -255,145                         | -263,284                          | 0   | -284,723           |
| Total, CRBPMF Budget Authority  | -23,000                          | -23,000                           | 0   | -23,000            |
| Total, Western Area Power Administration  | 208,384                          | 198,305                           | 10,000  | 86,401             |
| Reclassification of Mandatory Receipts to Discretionary<br>Collections                                  | 0                                | 0                                 | 0   | +149,878           |

**Preface**

The Department of Energy (DOE) leads a critical effort to strengthen national and economic security, in promoting a diverse supply of reliable, affordable and environmentally-sound energy. Western Area Power Administration (Western), in conjunction with the U.S. Army Corps of Engineers (Corps), the U.S. Bureau of Reclamation (BOR) and the Department of State's International Boundary and Water

<sup>a</sup> \$10,000,000 was enacted in the American Recovery and Reinvestment Act of 2009 for Western to implement activities authorized in Section 402 of the Act.

<sup>b</sup> FY 2008, FY 2009 Request, and FY 2010 CROM funding amounts include \$166,552,000, \$197,842,000, and \$199,040,000 respectively, for planned alternative financing of the PPW subprogram; including use of Western's Continuing Fund as necessary to respond to below normal hydropower generation conditions. In addition, the FY 2008, FY 2009, and FY 2010 CROM funding amounts include \$45,690,000, \$78,962,000, and \$89,880,000 respectively, for planned alternative financing of Western's Construction & Rehabilitation, Operation & Maintenance and Program Direction subprograms.

Commission (IBWC), strongly supports this effort in managing the multipurpose operation of the Federal hydropower system to reliably deliver renewable energy across a high-voltage, integrated transmission system.

Within the three appropriation accounts (e.g. Construction, Rehabilitation, Operation and Maintenance Account (CROM), the Falcon and Amistad Operating and Maintenance Fund, and the Colorado River Basins Power Marketing Fund (CRBPMF)), there is one program: the Western Area Power Administration. Within Western, there are a total of eight subprograms; five in the CROM Account, one in the Falcon and Amistad Operating and Maintenance Fund and two in CRBPMF.

**Mission**

Western markets and delivers reliable, cost-based Federal hydroelectric power and related services throughout the central and western United States.

**Benefits**

Western’s marketing efforts and delivery capability span a 1.3-million-square-mile area serving a diverse group of approximately 665 wholesale customers, including municipalities, cooperatives, public utility and irrigation districts, Federal and State agencies and Native American tribes. In turn, wholesale power is used to provide service to millions of retail consumers.

**Strategic Themes and Goals, and the Secretary’s Initiatives**

A new strategic plan has not yet been established and approved by the Secretary of Energy. The Secretary has established major priorities and initiatives.

The following chart aligns the current Strategic Plan with the Secretary’s priorities:

| Strategic Theme    | Strategic Goal Title     | Secretary’s Priorities | GPRA Unit Program Number | GPRA Unit Program Title           | Office |
|--------------------|--------------------------|------------------------|--------------------------|-----------------------------------|--------|
| 1. Energy Security | 3. Energy Infrastructure | Economic Prosperity    | 17                       | Western Area Power Administration | WAPA   |

**Contribution to Secretarial Priorities and the GPRA Unit Program Goal 1.3.17**

Western, through its three accounts (CROM, Falcon and Amistad Operating and Maintenance Fund and CRBPMF), contributes to the Secretarial Priority 3, Economic Prosperity, by performing its mission in a manner that promotes development of higher capacity U.S. energy infrastructure to ensure flexible, reliable operations and efficient energy markets. Specifically, Western is modernizing its energy infrastructure, incrementally improving facilities to increase transmission capacity and enhance grid reliability to support continuing utility industry change, requests for interconnection to the Federal system, and evolving regional needs and interest in renewable resources. Western also jointly plans, develops, and finances system enhancements, encouraging partnerships for transmission development by fostering cooperation and economic coordination among transmission partners.

**Means and Strategies**

Western will use various means and strategies outlined below to achieve its GPRA Unit Program Goal to ensure customers continue to receive maximum benefit of Federal resources. Although various

external factors may impact Western's ability to achieve this goal, through the collaborative support of our Federal power partners, Western will continue to market and deliver cost-based, high-value power products and services that support Department efforts to ensure America's energy security.

Western will implement the following means:

- Improve the capability, performance and reliability of the integrated grid through technology and equipment enhancements.
- Strengthen our ability to participate in large-scale transmission projects to improve Western's transmission infrastructure, maintain or enhance system reliability, support customer projects and increase the overall effectiveness of the nation's integrated grid.
- Improve workforce organizational capabilities and employee skills; hiring, training, and retaining a high-performing team to carryout the agency's mission.
- Operate the Federal power system effectively and efficiently updating power system operation technologies to maintain required industry standard compliance.
- Conduct business process reviews to maximize organizational capabilities, improve organizational efficiency and better align or design the agency to meet growing demands in complying with transmission service commitments and energy policy requirements.

Western will continue to implement the following strategies:

- Ensure efficient transmission system operations to support the Nation's integrated power grid.
- Maintain and modernize systems and infrastructure to increase the reliability, efficiency, and use of Federal assets.
- Use sound business practices and prudent risk management in the conduct of agency activities and operations.
- Meet the increasing demands on maintenance for our aging infrastructure, from transmission growth and evolving transmission and regulatory reliability compliance standards.
- Manage power delivery costs.
- Participate in decision-making processes with natural resource agencies and others where decisions will affect Federal hydropower generation.
- Participate in reliability and restructuring initiatives in Federal, state and industry forums and transmission studies, as an advocate for customer benefits.
- Continue to provide open access to Western's transmission system in furthering industry restructuring and to support local/regional utilities in the delivery of electricity to their customers.

These strategies will result in a well-maintained, reliable Federal power system, and an exemplary workforce to operate and maintain the system in the most cost effective and efficient manner possible.

The following external factors may affect Western's ability to achieve its goal: Generally, system reliability can be affected by weather, natural disasters, changes in North American Electric Reliability Corporation (NERC) operation standards, industry deregulation, changing electric industry organizational structures, interconnections, open access and the lack of adequate funding resources. More specifically:

- The Nation's energy infrastructure is not keeping pace with the growth in energy supply and demand, thereby endangering the reliability of the integrated electrical system.
- Western's transmission infrastructure continues to age, despite an ongoing replacement program.
- A number of states have adopted aggressive Renewable Portfolio Standards calling for the integration of renewable resources into the nation's energy mix further straining the grid.
- Grid operations are becoming more complex.
- Many of the best sites for these renewable generating sources--wind, solar and biomass--are located in parts of the West and Midwest that are not near load centers, and many of the nearby transmission lines lack available capacity to transport this energy.
- Industry efforts to improve the reliability of the bulk power grid are placing more requirements on our workforce to implement mandatory reliability standards.
- Our highly-skilled technical workforce continues to age and we are competing with the rest of the electric utility industry to attract and retain the caliber of workforce needed to provide reliable power supply and transmission services.

Successful collaboration of the Federal partners to include the U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, U.S. State Department's International Boundary and Water Commission, customers, and regional utilities on program activities is necessary for Western to achieve its goal to market and reliably deliver Federal power to customers, as well as to provide for the most efficient use of Federal assets and resources.

### **Validation and Verification**

To validate and verify program performance as required by the Government Performance and Results Act, Western system performance for power supply and delivery reliability is evaluated annually by an independent accounting firm as part of the financial statement audit. These measures are also benchmarked against NERC operating standards for the electric utility industry. Western will include a newly-established efficiency measure to reflect the adequacy of our efforts in managing the costs associated with operating and maintaining Federal power assets and infrastructure. Our resulting performance not only will be verified as part of the annual financial statement audit, but also validated and benchmarked annually against public power entities in the utility industry.

Western's program is subject to continuing independent review by external entities to include Congress (Congressional Research Service), the Government Accountability Office, the Department's Office of Inspector General, Federal Energy Regulatory Commission (FERC), the U.S. Environmental Protection Agency, Office of Personnel Management, NERC, and regional reliability councils.

To ensure the continuous operation and reliability of the power system, Western partners with the Department's Office of Cyber Security and Special Reviews and the other power marketing administrations (PMAs) to recertify and accredit mission-critical SCADA systems under the U.S. Department of Commerce's National Institute of Standards and Technology to ensure energy security.

### **Other**

The 2010 performance targets reflect efforts by the PMAs to synchronize performance reporting to provide for benchmarking of costs and efficiency in operating, maintaining and enhancing the Federal grid. As previously stated, Western's 2010 Performance Plan will include a newly-established efficiency measure to reflect our efforts in managing the costs associated with operating and maintaining Federal power assets and infrastructure. Our performance results not only will be verified as part of the

**Western Area Power Administration/**

**Overview**

**FY 2010 Congressional Budget**



annual financial statement audit, but also validated and benchmarked annually against public power entities in the utility industry.

Western's performance targets are extremely ambitious in light of the increasingly fast-paced and complex nature and environment within the electric utility industry, as coupled with the challenges associated with operating, maintaining and expanding the grid to meet future needs. However, we will work to ensure we are positioned to manage industry trends and issues—be they regulatory, budgetary, legislative, environmental or any other initiatives “not yet conceived”; and will continue to market and deliver Federal power to our customers as well as contribute to enhancing America's energy security and sustaining our economic vitality.

### **Major Program Shifts and Changes**

- The President's FY 2010 budget proposes the permanent reclassification of receipts from mandatory to discretionary to offset the annual expenses of the Western, Southwestern and Southeastern Power Marketing Administrations (PMAs) to allow for better operations and maintenance planning and execution, leading to a more reliable power system. Reclassification of these receipts would be achieved through legislation with a FY 2010 impact for all of the PMAs of \$189.384 million.
- The American Recovery and Reinvestment Act of 2009 provided \$10 million in nonreimbursable appropriations to Western to support implementation of activities authorized in section 402 of the Act.
- The American Recovery and Reinvestment Act of 2009 provided Western borrowing authority for the purpose of constructing, financing, facilitating, planning, operating, maintaining or studying construction of new or upgraded electric power transmission lines and related facilities with at least one terminus within the area served by Western; and delivering or facilitating the delivery of power generated by renewable energy resources constructed or reasonably expected to be constructed after the date of enactment. This authority to borrow from the United States Treasury is available to Western on a permanent, indefinite basis, with the amount of borrowing outstanding not to exceed \$3.25 billion at any one time. Western has established a separate program and office to administer the borrowing authority and to comply with the transparency and reporting requirements established under the Act. The new Transmission Infrastructure Program will support Western's and the Department of Energy's priorities by facilitating the delivery of renewable energy resources to market.

## Annual Performance Results and Targets

| FY 2005 Results | FY 2006 Results | FY 2007 Results | FY 2008 Results | FY 2009 Targets | FY 2010 Targets |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|

Strategic Goal 1.3, Energy Infrastructure

Western Area Power Administration

System Reliability Performance:  
Attain acceptable North American Electric Reliability Council (NERC) ratings for the following Control Performance Standards (CPS) measuring the balance between power generation and load: 1) CPS1 which measures generation/load balance and support system frequency on one minute intervals (rating>100); and 2) CPS2 which limits any imbalance magnitude to acceptable levels (rating>90).  
 (MET GOAL)

Actual:  
 CPS1: 183.9  
 CPS2: 98.2

Industry average:  
 CPS1: 161.4  
 CPS2: 95.9

System Reliability Performance:  
 Accountable customer and/or transmission element outages will not exceed the average number of outages for the past five years. (MET GOAL)

Goal: <= 23 outages  
Actual: 23

System Reliability Performance:  
Attain acceptable North American Electric Reliability Council (NERC) ratings for the following Control Performance Standards (CPS) measuring the balance between power generation and load: 1) CPS1 which measures generation/load balance and support system frequency on one minute intervals (rating>100); and 2) CPS2 which limits any imbalance magnitude to acceptable levels (rating>90).  
 (MET GOAL)

Actual:  
 CPS1: 184.4  
 CPS2: 98.7

Industry average:  
 CPS1: 161.5  
 CPS2: 97.0

System Reliability Performance:  
Attain acceptable North American Electric Reliability Corporation (NERC) ratings for the following Control Performance Standards (CPS) measuring the balance between power generation and load: 1) CPS1 which measures generation/load balance and support system frequency on one minute intervals (rating>100); and 2) CPS2 which limits any imbalance magnitude to acceptable levels (rating>90).  
 (MET GOAL)

Actual:  
 CPS1: 181.1  
 CPS2: 98.6

System Reliability Performance:  
 Limit accountable customer and/or transmission element outages. (MET GOAL)

Goal: <= 26 outages  
Actual: 18

System Reliability Performance:  
Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments. (MET GOAL)

Actual:  
 CPS1: 187.3  
 CPS2: 99.2

Industry average:  
 CPS1: 184.4  
 CPS2: 98.9

System Reliability Performance:  
 Accountable customer and/or transmission element outages will not exceed 26 for FY 2008. (MET GOAL)

Actual: 22

System Reliability Performance:  
Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.

System Reliability Performance:  
 Accountable customer and/or transmission element outages will not exceed 26 for FY 2009.

System Reliability Performance:  
 Meet North American Electric Reliability Corporation (NERC) Control Performance Standards (CPS) of CPS1>100 and CPS2>90 and meet or exceed industry averages. CPS1 measures a generating system's performance at matching supply to changing demand requirements and supporting desired system frequency in one minute increments. CPS2 measures a generating system's performance at limiting the magnitude of generation and demand imbalances in ten minute increments.

System Reliability Performance:  
 Effectively operate the transmission system to limit the number of accountable outages to no more than 26 annually.

| FY 2005 Results | FY 2006 Results | FY 2007 Results | FY 2008 Results | FY 2009 Targets | FY 2010 Targets |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|

System Reliability Performance:  
 Maintain ratio of unanticipated repair work hours to total maintenance hours at 16% or less. (MET GOAL)

Actual: 7.1%

Repayment of Power Investment: Ensure unpaid investment is equal to or less than the allowable unpaid investment. Achieve a ratio of unpaid to allowable unpaid <= 1.00. (MET GOAL)

Actual: 1.0

Repayment of Power Investment: Ensure unpaid investment is equal to or less than the allowable unpaid investment. Achieve a ratio of unpaid to allowable unpaid <= 1.00. (MET GOAL)

Actual: <=1.0

Repayment of Investment Performance: Ensure unpaid investment (UI) is equal to or less than the allowable unpaid investment (AUI) in accordance with DOE Order RA 6120.2 and Reclamation Law. Achieve a ratio of unpaid to allowable unpaid <= 1.00.

Repayment of Investment Performance: Ensure timely repayment of Federal Investment in accordance with DOE Order RA 6120.2 and Reclamation Law by maintaining unpaid investment (UI) equal to or less than the allowable unpaid investment (AUI).

Recordable Accident Frequency Rate: Achieve a recordable accident frequency rate for recordable injuries per 200,000 hours worked of not greater than 3.3. (MET GOAL)

Actual 1.6

Efficiency Performance:  
Provide power at the lowest possible cost by keeping total operation and maintenance expense per kilowatt-hour generated below the national median for public power.

**Construction, Rehabilitation, Operation and Maintenance  
Western Area Power Administration**

**Funding by Site by Program**

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Western Area Power Administration                              | 753,788 | 901,634 | 899,317 |
| Total, Construction, Rehabilitation, Operation and Maintenance | 753,788 | 901,634 | 899,317 |

**Site Description**

Western’s service area covers 1.3-million square-miles in 15 States. Western markets and delivers energy to about 665 wholesale power customers. These customers, in turn, provide retail electric service to millions of consumers in these central and western States: Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah and Wyoming.

Western annually markets and transmits about 10,000 megawatts of power from 56 hydropower plants and sells about 40 percent of regional hydroelectric generation. Western also markets the United States’ entitlement from the coal-fired Navajo Generating Station near Page, Arizona.

Western operates and maintains an extensive and complex high-voltage transmission system to deliver power to its customers. Using its 17,107-circuit-mile Federal transmission system, Western will market and deliver reliable electric power to most of the western half of the United States.

The power facilities are made up of 14 multipurpose water resource projects and one transmission project. The systems include Western’s transmission facilities and power generation facilities owned and operated primarily by the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers and the U.S. Section of the International Boundary and Water Commission.

Power sales, transmission operations and engineering services for Western’s system are accomplished by its employees at 51 duty stations located throughout its service area. These include the Corporate Services Office in Lakewood, Colorado, and four customer service regional offices in Billings, Montana; Loveland, Colorado; Phoenix, Arizona; and Folsom, California. The Colorado River Storage Project Management Center in Salt Lake City, Utah, also provides customer support.

**Falcon and Amistad Operating and Maintenance Fund  
Western Area Power Administration**

**Funding by Site by Program**

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Western Area Power Administration                        | 2,477   | 2,959   | 2,568   |
| Total, Falcon and Amistad Operating and Maintenance Fund | 2,477   | 2,959   | 2,568   |

**Site Description**

The Falcon-Amistad Project consists of two international dams located on the Rio Grande River between Texas and Mexico. The United States and Mexico operate separate powerplants on each side of the Rio Grande River. The power output is divided evenly between the two Nations. The Department of State's International Boundary and Water Commission (IBWC) owns and operates the U.S. portion of the projects.

Falcon Dam is located about 130 miles upstream from Brownsville, Texas. The United States' portion of construction, operation and maintenance was authorized by Congress in 1950. Construction was started in that year and completed in 1954. The United States' share of Falcon Powerplant capacity is 31.5 megawatts (MW). The powerplant came on line in 1954.

Amistad Dam is located about 300 miles upstream from Falcon Dam. The Amistad Powerplant was constructed by the U.S. Army Corps of Engineers, as agent for the IBWC. The United States' portion of construction, operation and maintenance was authorized by the Mexican-American Treaty Act of 1950. Amistad Dam was completed in 1969. The United States' share of the two generating units, which came on line in 1983, is 66.0 MW.

Project power is marketed to a cooperative in south Texas via Central Power and Light Company's transmission system. There is no Federal transmission associated with these two projects.

**Colorado River Basins Power Marketing Fund  
Western Area Power Administration**

**Funding by Site by Program**

(dollars in thousands)

|   | FY 2008 | FY 2009 | FY 2010 |
|---|---------|---------|---------|
| Western Area Power Administration                 | 232,145 | 240,284 | 261,723 |
| Total, Colorado River Basins Power Marketing Fund | 232,145 | 240,284 | 261,723 |

**Site Description**

The Colorado River Basins Power Marketing Program is comprised of three power systems: the Colorado River Storage Project, including the Dolores and Seedskadee Projects; the Fort Peck Project; and the Colorado River Basin Project. Western Area Power Administration is responsible for construction, maintenance, and operation of facilities for transmitting and marketing the electrical energy generated in these power systems. A brief description of each follows:

The **Colorado River Storage Project (CRSP)** was authorized in 1956. It consists of four major storage units: Glen Canyon, on the Colorado River in Arizona near the Utah border; Flaming Gorge on the Green River in Utah near the Wyoming border; Navajo on the San Juan River in northwestern New Mexico; and the Wayne N. Aspinall unit on the Gunnison River in west-central Colorado.

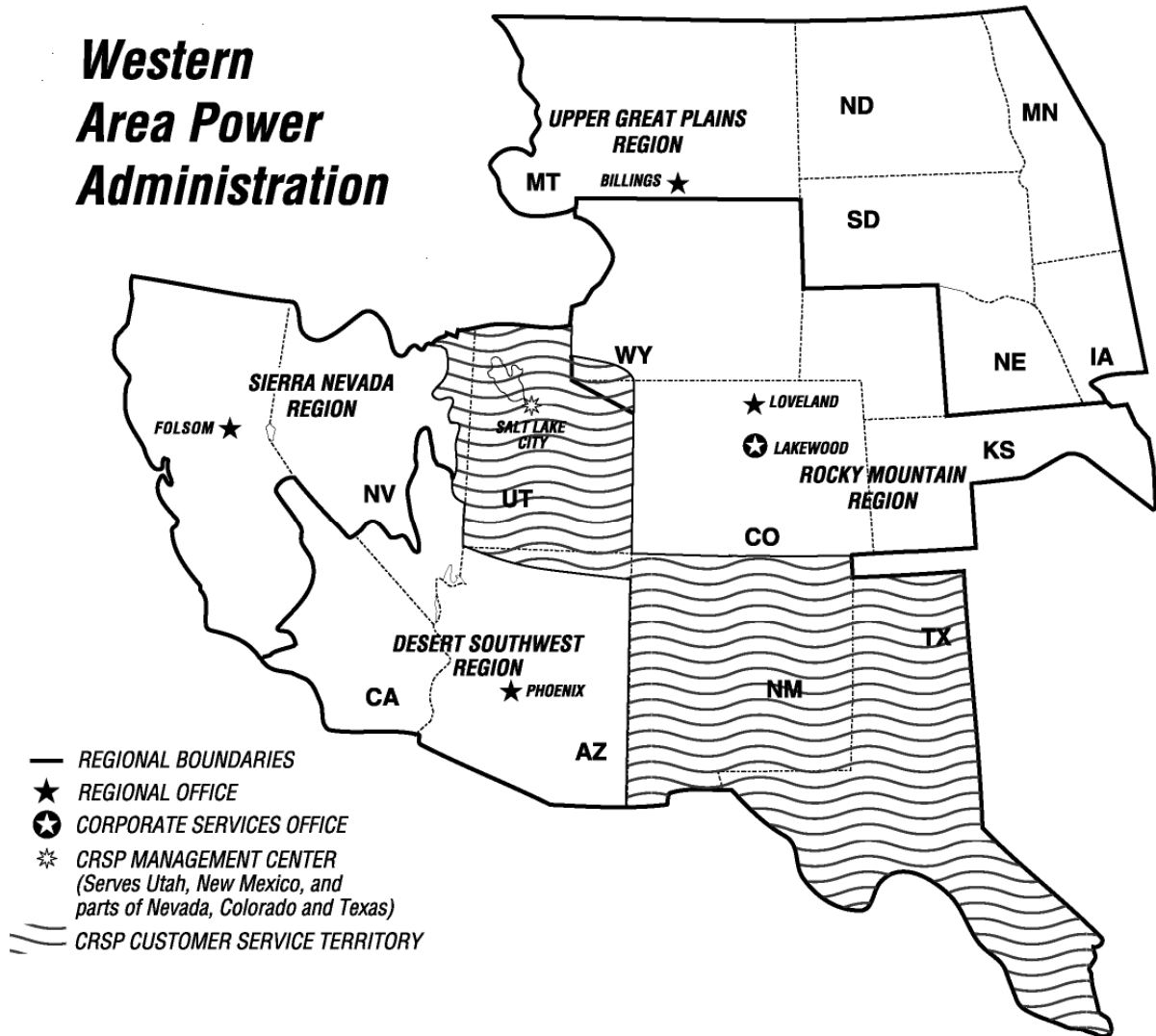
CRSP has a combined storage capacity that exceeds 33.5 million acre-feet. Five Federal powerplants associated with the project, with 16 generating units, have an operating capacity of 1,710 MW. CRSP provides for the electrical needs of more than a million people spread across Colorado, Utah, New Mexico and Arizona. Portions of Nevada and Wyoming are also served by CRSP power.

The **Dolores Project**, located in Montezuma and Dolores counties in southwestern Colorado, and the **Seedskadee Project**, located in southwestern Wyoming, were authorized as participating projects of CRSP. Dolores, a multipurpose project, provides 12.8 MW of installed power generating capacity along with municipal and industrial water, irrigation water, and recreation and fish and wildlife enhancement. The Dolores Project powerplants at McPhee Dam and the Towaoc Canal produce 1.3 and 11.5 MW, respectively. Seedskadee's power facilities, associated with the project's Fontenelle Dam, include an 11.5-MW powerplant, switchyard and necessary transmission lines to interconnect with the CRSP transmission system at Flaming Gorge Powerplant.

The **Fort Peck Project**, located on the Missouri River in northeastern Montana, was begun under an Executive Order in October 1933 as part of the Public Works Administration. The Fort Peck Project Act of 1938 authorized the completion, maintenance and operation of the project, and the Flood Control Act of 1944 authorized operational integration of the project with the Pick-Sloan Missouri Basin Program to serve a common market area. Installed generating capacity of the 5 units is 218 MW, which is delivered primarily to customers in eastern Montana and western North Dakota.

The Central Arizona Project (CAP) was authorized as an element of the **Colorado River Basin Project** to furnish irrigation and municipal water supplies to Arizona and New Mexico, and for other purposes. For financing, Western uses reimbursable arrangements to provide for its CAP expenses in lieu of revolving fund authorities.

# Western Area Power Administration



## Construction, Rehabilitation, Operation and Maintenance

### Funding Profile by Subprogram

(dollars in thousands)

|  | FY 2008 Current<br>Appropriation | FY 2009 Original<br>Appropriation | FY 2009<br>Additional<br>Appropriation <sup>a</sup> | FY 2010<br>Request |
|--|----------------------------------|-----------------------------------|---|--------------------|
| Construction, Rehabilitation, Operation and<br>Maintenance Account (CROM)                  |                                  |                                   |   |                    |
| Operation and Maintenance (O&M) <sup>b</sup>   | 52,873                           | 52,365                            | 0   | 57,159             |
| Construction and Rehabilitation <sup>c</sup>   | 62,419                           | 74,544                            | 0   | 104,971            |
| Purchase Power and Wheeling (PPW) <sup>d</sup>   | 475,254                          | 600,960                           | 0   | 548,847            |
| Program Direction <sup>e</sup>   | 156,128                          | 166,423                           | 10,000  | 180,756            |
| Utah Mitigation and Conservation   | 7,114                            | 7,342                             | 0   | 7,584              |
| Total, CROM (Operating Expenses)   | 753,788                          | 901,634                           | 10,000  | 899,317            |
| Use of Alternative Financing   | -212,242                         | -276,804                          | 0   | -288,920           |
| Offsetting Collections–Colorado River Dam Fund<br>(P.L. 98-381)                            | -3,937                           | -3,366                            | 0   | -3,879             |
| Offsetting Collections, annual Operation and<br>Maintenance and Program Direction expenses | 0                                | 0                                 | 0   | -147,530           |
| Offsetting Collections–PPW (P.L. 108-447, P.L.<br>109-103)                                 | -308,702                         | -403,118                          | 0   | -349,807           |
| Total, CROM (Budget Authority)   | 228,907                          | 218,346                           | 10,000  | 109,181            |
| Receipt reclassification scoring adjustment  | 0                                | 0                                 | 0   | +147,530           |

#### Public Law Authorizations:

Public Law 57-161, “The Reclamation Act of 1902”

Public Law 78-534, “Flood Control Act of 1944”

Public Law 95-91, “Department of Energy Organization Act” (1977)

Public Law 102-486, “Energy Policy Act of 1992”

Public Law 66-389, “Sundry Civil Appropriations Act” (1922)

<sup>a</sup> \$10,000,000 was enacted in the American Recovery and Reinvestment Act of 2009 for use by Western to complete activities authorized in section 402 of the Act.

<sup>b</sup> O&M funding amounts include activities of the Boulder Canyon Project which are funded through Colorado River Dam Fund receipts via a reimbursable agreement with the Department of Interior as authorized in P.L. 98-381. By year, the amounts are \$929,000, \$803,000, and \$867,000 for FY 2008, FY2009, and FY 2010, respectively. Funding also includes use of alternative financing methods in the amount of \$5,000,000, \$15,499,000, and \$400,000 for FY 2008, FY 2009, and FY 2010, respectively.

<sup>c</sup> Construction and Rehabilitation funding includes use of alternative financing methods in the amount of \$30,690,000, \$47,663,000, and \$83,760,000 for FY 2008, FY 2009, and FY 2010, respectively.

<sup>d</sup> PPW program includes use of receipts from the recovery of PPW expenses of \$308,702,000, \$403,118,000, and \$349,807,000 in FY 2008, FY 2009, and FY 2010, respectively. In addition, alternative financing methods are included in the amounts of \$166,552,000, \$197,842,000, and \$199,040,000 for FY 2008, FY 2009, and FY 2010, respectively.

<sup>e</sup> Program Direction funding amounts include activities of the Boulder Canyon Project funded through the Colorado River Dam Fund via a reimbursable agreement in the amounts of \$3,008,000, \$2,563,000, and \$3,012,000 for FY 2008, FY 2009, and FY 2010, respectively. Funding also includes use of alternative financing methods in the amount of \$10,000,000, \$15,800,000, and \$5,720,000 for FY 2008, FY 2009, and FY 2010, respectively.



**Public Law Authorizations:**

Public Law 76-260, "Reclamation Project Act of 1939"

Public Law 80-790, "Emergency Fund Act of 1948"

Public Law 102-575, "Reclamation Projects Authorization and Adjustment Act of 1992"

"Economy Act" of 1932, as amended (41 stat. 613)

"Interior Department Appropriation Act of 1928" (44 stat. 957)

Public Law 70-642, "Boulder Canyon Project Act" (1928)

Public Law 75-756, "Boulder Canyon Project Adjustment Act" (1940)

Public Law 98-381, "Hoover Power Plant Act of 1984"

**Mission**

Western markets and delivers reliable, cost-based Federal hydroelectric power and related services.

**Benefits**

Western delivers reliable power and related services across a 1.3-million-square-mile area to a diverse group of about 665 customers, including municipalities, cooperatives, public utility and irrigation districts, Federal and State agencies, and Native American tribes. Western's marketing efforts and delivery capability provide for recovery of annual operational costs, including the generating agencies' hydropower related costs, and repayment of taxpayer investment in the Federal hydropower program. Western repays the Federal investment for which it is responsible within the timeframes established by law and regulations.

## Operation and Maintenance Funding Schedule by Activity

(dollars in thousands)

|  | FY 2008 <sup>a</sup> | FY 2009 | FY 2010 |
|--|----------------------|---------|---------|
| Operation and Maintenance <sup>b</sup>       |                      |         |         |
| Regular Operation and Maintenance            | 25,138               | 29,166  | 38,305  |
| Replacements and Additions                   | 27,735               | 23,199  | 18,854  |
| Total, Operation and Maintenance             | 52,873               | 52,365  | 57,159  |
| Alternative Financing <sup>c</sup>           | -5,000               | -15,499 | -400    |
| Use of Receipts from Colorado River Dam Fund | -929                 | -803    | -867    |
| Offsetting Collections                       | 0                    | 0       | -37,038 |
| Total, O&M Budget Authority                  | 46,944               | 36,063  | 18,854  |

### Description

The mission of Western’s Operation and Maintenance (O&M) subprogram is to assure continued reliability of the Federal power system by operating and maintaining Western’s transmission system at or above industry standards, including replacement of aging equipment and removal of constraints which would impede power flows.

### Benefits

Western’s O&M subprogram supports DOE’s Strategic Theme 1, Energy Security, by emphasizing replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers, to support a stable and reliable interconnected power system, to contain annual maintenance expenses, and to retain the value of its assets. Western ensures reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its 15-State service territory by maintaining its power system at or above industry maintenance standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing revenues gained from non-firm energy and transmission sales.

### Detailed Justification

Supplies and materials, such as wood poles, instrument transformers, meters and relays must be procured to provide the necessary resources to respond to routine and emergency situations in Western’s high-voltage interconnected transmission system. Western implemented reliability-centered

<sup>a</sup> FY 2008 adjustment reflects the 0.91 percent general rescission of \$398,122 (P.L. 110-161).

<sup>b</sup> Program descriptions and funding amounts include activities of the Boulder Canyon Project. These activities are funded through receipts from the Colorado River Dam Fund via a reimbursable agreement with the Department of Interior as authorized in P.L. 98-381.

<sup>c</sup> Alternative financing for Operations and Maintenance is dependent on cash advances from customers.

maintenance (RCM) scheduling to contain costs. RCM focuses on identifying critical components in a system and uses preventive and predictive maintenance practices to repair or replace equipment as needed. Technical services, such as waste management disposal, environmental impact analyses, and pest and weed control are used as needed.

Western’s planned replacements and additions activity is based on an assessment of condition and criticality of equipment, maintenance/frequency of problems for individual items of equipment, availability of replacement parts, safety of the public and Western’s personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western’s power customers, who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e., electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relays and oscillographs must be made to assure reliable service to Western’s customers. System component age, availability of spare parts, environmental concerns, and risk to system reliability necessitate orderly replacement before significant problems develop.

Replacement, upgrade and installation of fiber optics, Supervisory Control and Data Acquisition (SCADA) systems, and other communication and control equipment continues to provide increased system reliability and to reduce maintenance and equipment costs.

Capitalized movable equipment, such as special purpose vehicles (e.g., cranes, auger trucks, manlifts), special purpose equipment (e.g., pole trailers, industrial tractors, brush chippers), specialized test equipment (e.g., motion analyzers and relay test equipment), computer-aided engineering equipment, office equipment, and IT equipment and software, must be upgraded and replaced.

Personnel expenses and personnel performance accomplishments associated with the O&M subprogram are combined with those of the Construction and Rehabilitation subprogram and are reflected in the Program Direction subprogram of Western’s budget request.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**25,138      29,166      38,305**

**Regular Operation and Maintenance**

Supplies and materials necessary to respond to routine and emergency situations in Western’s high-voltage interconnected transmission system will be purchased. This includes miscellaneous equipment, and software used for power billing, transmission planning, e-tagging, and energy scheduling, as well as supplies and materials such as wood poles (individual pole replacement; excludes whole line replacements), instrument transformers, meters, relays, etc. necessary to respond to routine and emergency situations in Western's high-voltage interconnected transmission system. The request includes \$867 thousand for activities in the Boulder Canyon Project, funded directly through receipts from the Colorado River Dam Fund.

The continuing maintenance of Western’s transmission system at or above industry standards supports DOE’s Strategic Theme 1 by minimizing sudden failure, unplanned outages, and possible regional power system disruptions. Safe working procedures are discussed before work begins to optimize safety for the public, Western’s staff, and equipment. The request is based on projected work plans for activities funded from this account. Estimates are based on historical data of actual supplies needed to operate and maintain the transmission system and recent procurement of similar items.

**Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Operation and Maintenance**

**FY 2010 Congressional Budget**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Replacements and Additions**

**27,735      23,199      18,854**

Western’s planned replacements and additions activity is based on an assessment of condition and criticality of equipment, maintenance/frequency of problems on individual items of equipment, availability of replacement parts, safety of the public and Western’s personnel, environmental concerns, and an orderly work plan. Replacement of aged power system components maximizes the reliability and availability of Western’s system by reducing the risk of equipment failure, unplanned outages, and possible regional power system disruptions. Removing environmental hazards and replacement of aged equipment eliminates safety hazards for the public and Western’s personnel. Planned activity is detailed by category below.

▪ **Electrical Equipment** **12,673      9,334      7,801**

Electrical equipment, such as circuit breakers, transformers, switchgears, relays, batteries and chargers, reactors, meters, buses, surge arresters, capacitor banks and disconnect switches, will replace obsolete equipment at facilities throughout Western’s 15-State area. Also included is test equipment used by maintenance crews, such as metering and relaying test sets, pentameters, Ohm testers, oil dielectric testers, battery load testers, and specialized communication and environmental control test equipment. Replacement and rehabilitation of single wood pole structures, overhead ground wires, and line hardware will extend the life of aging, deteriorating transmission lines.

Estimates are based on analysis of system operation/maintenance requirements and concerns, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques.

▪ **Communications Equipment** **5,626      3,943      2,783**

Western will continue to maintain system reliability by replacing remote terminal units, telephone systems, microwave links, and aged 7 Ghz analog radio systems with digital radio and fiber optics. The staged movement to narrow communications band spectrums for UHF radios as directed by the National Telecommunications and Information Administration (NTIA) continues. Western's communication systems are currently made up of approximately 8 percent fiber optics, 72 percent fixed radio, and 20 percent mobile radio. Western currently has 1,470 radio frequency authorizations for fixed radio bands, of which 357, or 24 percent, are analog. The funding requested here will not be used to replace equipment impacted by the Spectrum Relocation initiative. In addition, Western will continue upgrades to its existing SCADA systems which control Western’s electric power system. These hardware and software upgrades improve grid reliability by allowing the main computer to communicate with remote terminal units in over 300 substations across Western's territory, thus allowing the dispatcher to operate a device in any of these substations to make changes rapidly to respond to power industry requirements or system emergencies. Also included in this estimate is the incremental replacement of PBX with VOIP, and replacement of the Merino Communication Building. The current building has developed cracks in the fiberglass structure allowing water to enter. A new scheduling settlements system is also included, which will replace two non-integrated systems and create one system which will include both functionalities.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Costs are based on analysis of system operation/maintenance requirements, customer-coordinated work plans, actual costs of recent similar projects, and bottom-up budgeting techniques.

▪ **Spectrum Relocation Equipment** **0**      **0**      **0**

In December 2004, the Congress passed and the President signed the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), creating the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from certain spectrum bands to accommodate commercial use by facilitating reimbursement to affected agencies of relocation costs. The Federal Communications Commission has allocated this spectrum for Advanced Wireless Services. Funds have been made available to agencies from the crediting of auction receipts to the SRF during fiscal year 2007 and system relocation efforts have commenced. The amount received by Western for this effort is \$108 million and includes Western's estimated relocation costs, as approved by the Office of Management and Budget, and as reported to the Congress by the Department of Commerce in December 2005. Since receipt of these funds, Western has completed much of the preliminary design work to include radio path analysis, tower load analysis, communications building upgrades or replacements, receipt of new radio frequency authorizations, and a majority of the radio and other communication equipment purchases. Structural loading analyses for both radio and fiber optic systems occurred during the first half of FY 2008, as did the building specification process. Radio orders were placed upon receipt of frequencies from NTIA. FY 2007 was a planning and design year, with FY 2008 through FY 2010 being construction years for the Spectrum Relocation Fund with tower modifications, the installation of antennas and waveguide, building replacements, and installation of radio and fiber optic equipment. The phased replacement of 2 GHz radio systems will continue into FY 2011. The funding for the Spectrum Fund is mandatory and agencies will return to the SRF any amounts received in excess of actual relocation costs. No appropriations are being requested for this activity.

▪ **Capitalized Movable Equipment** **9,436**      **9,922**      **8,270**

These funds will purchase special purpose line trucks and specialized trailers. Western's first choice of vehicle coverage is a GSA lease, when such vehicles are available. However, GSA cannot always accommodate our needs, especially in the Upper Great Plains Region and somewhat in the Desert Southwest Region, where vehicles must be equipped for extreme weather conditions that exist. At those times, it is necessary to purchase such vehicles, and this request is representative of that condition. All sedans, vans, SUVs, and light trucks are GSA-leased. Western uses 728 vehicles, 482 (66 percent) of which are leased from GSA. Replacement of government-owned vehicles is based on the Federal Management Regulations guidelines, the same guidelines used by GSA. Specialized equipment such as man lifts, snow cats, forklifts, bi-directional tractors and flail mowers, cranes, front-end loaders, and caterpillars are also included.

Other capitalized movable equipment in this estimate that are needed to support the O&M of the interconnected power system include substation test equipment, brush chippers, switch replacements; security equipment such as perimeter intrusion detection devices, card readers and

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

associated software, security cameras and recording devices at various sites throughout Western; Information Technology equipment such as server and router additions and replacements, operation center map board, firewalls, cyber security upgrades, LAN upgrades, network equipment replacements, replacement of a regional business tape library, additional storage devices, computer-aided design equipment (CAD) used for engineering-specific applications and drawing archives, global information system hardware upgrades; cyclical replacement of equipment for the MiniPower Simulator at Western's Electric Power Training Center to accommodate changes in technology; and helicopter equipment replacements that add value to the helicopter or extend the service life, such as engine, rotor blades, avionics, airframe, and other major components.

Replacement needs are based on age, reliability, and safety of equipment, customer-coordinated review, cost analysis of rebuild versus replacement, availability of replacement parts, and obsolescence of diagnostic maintenance tools. Estimates are determined using actual costs of similar items.

**Total, Operation and Maintenance**

|               |               |               |
|---------------|---------------|---------------|
| <b>52,873</b> | <b>52,365</b> | <b>57,159</b> |
|---------------|---------------|---------------|

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Regular Operation and Maintenance

- The overall net increase in regular O&M is attributed to inflation and increased cyclical maintenance activity to Western's aging transmission system which includes miscellaneous non-cap equipment. Also included is the critical restocking of Western's wood pole inventory used to replace storm damaged and aging poles, and environmental/compliance activities at substations facilities. +9,139

### Replacements and Additions

- The decrease in replacements and additions of electrical equipment (-\$1.5 million) results from a decrease to the purchase of specialized test equipment, and fewer requirements for major transformer replacements. The decrease in communications equipment (-\$1.2 million) is primarily caused by the decrease requirement for a system upgrade, which is now in a maintenance cycle, slightly offset by an increase for a new scheduling settlements system which will replace two obsolete non-integrated systems. The decrease in capitalized movable equipment is attributable to a reduction in special vehicle purchases (-\$1.6 million). -4,345

### Total Funding Change, Operation and Maintenance

---

**+4,794**

**Construction and Rehabilitation  
Funding Schedule by Activity**

(dollars in thousands)

|   | FY 2008 <sup>a</sup> | FY 2009 | FY 2010 |
|---|----------------------|---------|---------|
| Construction and Rehabilitation                         |                      |         |         |
| Transmission Lines and Terminal Facilities              | 26,778               | 26,176  | 43,224  |
| Substations   | 30,270               | 40,522  | 43,157  |
| Other <sup>b</sup>                                      | 5,371                | 7,846   | 18,590  |
| Subtotal, Construction & Rehabilitation                 | 62,419               | 74,544  | 104,971 |
| Alternative Financing <sup>c</sup>                      | -30,690              | -47,663 | -83,760 |
| Total, Construction & Rehabilitation (Budget Authority) | 31,729               | 26,881  | 21,211  |

**Description**

The mission of Western’s Construction and Rehabilitation (C&R) subprogram is to assure continued reliability of the Federal power system by modification, replacement, additions, and interconnections to the Federal power system.

**Benefits**

Western’s C&R subprogram supports DOE’s Strategic Theme 1, Energy Security, by emphasizing replacement and upgrading of existing electrical system infrastructure to sustain reliable power delivery to our customers, to support a stable and reliable interconnected power system, to contain annual maintenance expenses, and to retain the value of its assets. Replacement and upgrade of aged power system components are crucial to system reliability, and communications improvements maintain vital control over system operations. Both contribute to attaining or exceeding monthly control performance standards established by the North American Electric Reliability Corporation (NERC) by reducing the risk of equipment failure, unplanned outages, and possible local and regional power system disruptions. C&R subprogram activities support the repayment of Federal power investment by promoting a well-planned C&R program with a relatively stable budget over the long term, by avoiding significant additional costs of emergency “breakdown maintenance,” and by preventing outages which could impact power deliveries, purchase power costs, and power revenues. Reducing the hazards associated with worn or aging equipment, correcting design deficiencies, and replacing deteriorated wood poles which present a serious climbing hazard to linemen, minimizes Western’s exposure to unsafe conditions. In addition, public safety is protected by avoiding or minimizing the negative impacts of unplanned outages and by minimizing the instances of downed lines.

<sup>a</sup> FY 2008 is adjusted \$48,000 to reflect the 1.6 percent rescission for Congressionally directed funding, and \$447,775 to reflect the 0.91 percent general rescission for other funding.

<sup>b</sup> Other includes communication equipment, maintenance facilities, power facility developmental costs, and minor unscheduled jobs.

<sup>c</sup> Alternative financing for Construction and Rehabilitation is dependent on cash advances from customers.



## Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

The C&R request incorporates the most current information to identify and schedule necessary C&R projects. Western assigns the highest program priority to those situations that pose the highest risk to safety and system reliability, while meeting the mandates for open access to our transmission system. If conditions change, Western will shift funding as necessary to ensure the highest program priorities continue to be met to maintain the reliability and integrity of Western’s power transmission system.

Western’s transmission system has 17,107 circuit-miles of line and 302 substations. Of the 8,038 miles of wood poles, 5,917, or 74 percent, exceed the normal service life of 40 years, with 4,696, or 58 percent, exceeding 50 years. Western is continually testing, treating, and replacing individual wood poles and hardware to delay the need for replacing an entire transmission line. As substation equipment (such as power transformers, circuit breakers, and control equipment) ages, maintenance costs increase, replacement parts become unavailable, risk of outages increase, and system reliability declines. The normal service life for power transformers and power circuit breakers is 40 years and 35 years, respectively. While replacement of this equipment is systematically planned over 10 years, actual replacement varies depending on condition and criticality. All replacement and rehabilitation plans are coordinated with customers to help establish the timing and scope of work at specific substations. When upgrades or additional capacity are required, Western actively pursues opportunities to partner with neighboring utilities to jointly finance activities, which result in realized cost savings and increased efficiencies for all participants.

Western's FY 2010 C&R request is above prior year levels because of the aging power system infrastructure, backlog of rehabilitation needs, increasing industry requirements (FERC, NERC, WECC), and greater reliability concerns resulting from increasing loads and the need for integrating new generation sources to meet those loads.

Financing of the FY 2010 C&R budget will rely heavily on customer participation in alternative financing methods. Approximately 80% of the program, or \$83.8 million, will be requested from customers.

Personnel costs and related expenses for the workforce to plan, collect field data, write specifications, design facilities, award construction contracts, and purchase government-furnished equipment for the C&R activity are combined with those of the O&M activity and are reflected in the Program Direction section of Western’s budget request.

Costs incurred within the C&R program are generally capitalized and recovered with interest over the useful life of the asset. In rare cases where a C&R project is abandoned, associated costs are expended.

For purposes of budget display, the C&R subprogram is broken into three activities: Transmission Lines and Terminal Facilities, Substations, and Other. The Other category includes communications equipment (microwave, fiber optic, and telecommunications), maintenance facilities, power facility development costs, and minor unscheduled jobs. Planned activity is detailed by category below.

|  |               |               |               |
|--|---------------|---------------|---------------|
| <b>Transmission Lines and Terminal Facilities</b>                        | <b>26,778</b> | <b>26,176</b> | <b>43,224</b> |
| ▪ <b>Transmission Lines and Terminal Facilities,<br/>Continuing Work</b> | <b>24,678</b> | <b>17,826</b> | <b>24,957</b> |

Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Construction and Rehabilitation

FY 2010 Congressional Budget

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Continuation of modifications and rehabilitation of the following transmission lines (TL) to ensure power system reliability and stability is planned in FY 2010.

- Rebuild 9.8 miles of existing Gila-Yuma Mesa Tap (Arizona) 34.5-kV transmission line using existing right of way where feasible. Built in 1943, the wood poles are in need of replacement. Due to the deteriorating condition of these structures, a failure is possible that could result in service interruption, property damage, and injury to the general public or Western’s personnel. The existing line was constructed without an overhead ground wire to protect against lightning strikes. Replacement of the existing wood pole line with steel poles and overhead ground wire will increase the safety and reliability of the system.
- Rebuild the 46-mile Erie-Hoyt 115-kV transmission line (Colorado) with a 115/230-kV single pole double circuit line. The existing line was placed in service in 1952 and is approaching its maximum service age. Rebuild is necessary to improve system reliability and minimize maintenance costs. The 115-kV circuit will be capable of operating at 230-kV providing for future growth and additional capacity for potential wind generation projects. Customer participation in the rebuild will provide for the second 230-kV circuit.
- Reconductor the 9-mile Shasta-Flannigan-Keswick 230-kV transmission line (California) to relieve current congestion for generation from the Shasta Powerplant by upgrading the line to a higher capacity conductor. Reconductoring the 40 year old line will increase capacity by 40 MW; improving transfer capability to Central Valley Project customers and improving system reliability.
- Upgrade the 500-kV California-Oregon Intertie (COI) to increase transfer capabilities across the California-Oregon border. The upgrade will increase the north-to-south COI rating by 300 MW, from 4800 MW to 5100 MW, allowing for greater import of energy, either renewable or non-renewable, from the Pacific-Northwest into California.
- O’Banion-Elverta Double Circuit 230-kV line for Sacramento Municipal Utility District and the City of Roseville (California).

The funding level is determined by estimating the cost to complete each project and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience.

▪ **Transmission Lines and Terminal Facilities,**

|                              |              |              |               |
|------------------------------|--------------|--------------|---------------|
| <b>Rehabilitation Starts</b> | <b>2,100</b> | <b>8,350</b> | <b>18,267</b> |
|------------------------------|--------------|--------------|---------------|

The following transmission line and terminal facility rehabilitation starts are planned in FY 2010. Transmission line and terminal facility starts address specific system reliability risks or operational problems.

- Rebuild existing 27.3 mile Davis Switchyard to MEC Kingman Tap transmission line (Arizona). The 60 year old line is well beyond its engineered life span and is showing significant deterioration. The condition of the line, operated radially from Davis Substation, is a reliability concern for several utilities; it’s also a safety concern for maintenance crews and residential and

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

commercial areas encroaching on the existing right-of-ways.

- Rebuild the Wellton-Mohawk transmission lines No. 1 and No. 3 providing Parker-Davis Project power to the Wellton-Mohawk Irrigation and Drainage District (Arizona). The lines are a reliability and safety concern due to their age, design, and location.
- Rebuild the 70 year old 12-mile Western Granby Pumping Plant-Windy Gap transmission line (Colorado). The project is part of a joint program to improve transmission reliability in the area impacted by low voltage and restrictions on maintenance and potential loss of service as a result of the current radial design.
- Central Wyoming Transmission improvement project (Wyoming) – Multi-year rebuild and upgrade of Western transmission lines in central Wyoming to improve system reliability and load carrying capability. The area includes 182 miles of Western-owned 115-kV transmission lines ranging from 38 to 60 years old. Pole testing indicates a high number of deteriorated or damaged structures. The project will be accomplished in independent useable segments over a number of years, placing emphasis on the more critical segments of the system first.
- Rebuild a 15-mile section of the Lovell-Yellowtail No. 1 and No. 2 transmission lines within the National Park Service boundary at 230-kV (Wyoming), including reclamation of redundant and non-critical access roads within the park. The rebuild of the 55- and 45-year old lines, respectively, are needed to improve reliability and system capability in the northern Wyoming service area. Inspections show an increasing percentage of deteriorating structures; nearly one out of every three was rejected.
- Reconnector the existing 62-mile 230-kV transmission line from Hurley to Tracy (California). The reconnectoring of the 40 year old line is needed to maintain reliability and comply with WECC/NERC reliability standards. Load growth in the greater Sacramento area poses a serious reliability concern for Western and the interconnected transmission system. The reconnectoring will increase capacity by 200 MW without requiring new structures or changes to existing right-of-ways. The project will be accomplished over several years in useful segments.

Estimates are based on actual costs of recent similar projects, expected costs of needed equipment and services, cost estimating guides, and experience.

▪ **Transmission Lines and Terminal Facilities, Work Funded by Others**

|   |   |   |
|---|---|---|
| 0 | 0 | 0 |
|---|---|---|

Western’s work for others has increased significantly under the open access transmission tariff adopted in response to FERC Order No. 888. The tariff requires Western to provide interconnections to its transmission system. New generation projects typically surface quickly and provide little advance warning for internal planning and budgeting. Western must work with requestors to meet their needs.

Design of these facilities must be closely coordinated with, or accomplished by, Western’s design staff to ensure compatibility with Western’s equipment and facilities and compliance with applicable electrical and safety codes. These projects also affect transmission system loading and operation.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Potential impacts to other system facilities and equipment must be determined since the cost of any necessary modifications must be borne by the interconnection project proponents.

Potential transmission line and terminal reimbursable work in FY 2010 includes, but is not limited to, planning, design or construction of:

- Havre-Rainbow 230-kV TL Rebuild with new overhead ground wire and conductors due to generation additions request (Montana).
- Erie-Hoyt transmission line upgrade for Tri-State Generation and Transmission Association (Colorado).

|                                       |               |               |               |
|---------------------------------------|---------------|---------------|---------------|
| <b>Substations</b>                    | <b>30,270</b> | <b>40,522</b> | <b>43,157</b> |
| ▪ <b>Substations, Continuing Work</b> | <b>15,450</b> | <b>21,394</b> | <b>26,028</b> |

Continue modifications and rehabilitation of the following substations in FY 2010 to ensure power system reliability and stability. The funding level is determined by estimating the cost to complete each project and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience.

- Replace transformers KU3A and KU4A at the Bismark Substation (North Dakota) with 200 MVA units and construct a dedicated 230-kV bay for KU4A to provide increased reliability required by the addition of another interconnection and significant commercial and residential load growth in the area.
- Replace the Brookings Substation (South Dakota) 115/69, 18.75 MVA KY1A transformer with a 50 MVA unit and replace associated electromechanical relays and protection schemes. Transformer KY1A, installed in 1954, has exceeded its life expectancy and should be replaced before catastrophic failure causes degradation to the power system and customer outages. The existing 115-kV main and transfer bus will be converted to a breaker and a half scheme. The city of Brookings has two lines at 115-kV serving their loads. Because of the existing bus design, both lines are lost in the event of a bus differential trip. Converting to a breaker and a half design will mitigate this situation.
- Replace the Sioux City 161/69-kV, 75 MVA, KY3A transformer (Iowa). The transformer was installed in 1962 and has exceeded its expected service life. System studies warrant replacement at 100 MVA to improve system reliability.
- Replace the Sioux Falls (South Dakota) transformers KV3A (230/115 33.3 MVA) and KV5A (230/115 33.3 MVA) with 250 MVA 3-phase autotransformers to improve system reliability. System studies identify capacity deficiencies in the existing transformers as a result of significant commercial and residential load growth.
- Replace the Forman Substation 115/69-kV, 20 MVA, KY1A transformer (North Dakota). The transformer was installed originally in Valley Substation in 1952, and moved to Forman Substation in 1971. The transformer has far exceeded its expected service life of 40 years. System studies have identified capacity deficiencies in the transformer and warrant replacement

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

at 40 MVA to improve system reliability.

- Replacement and upgrade of equipment at Morris Substation (Minnesota) to accommodate new generation from customer construction of a 600 MW power plant in the vicinity of the Morris substation. The project includes addition of a 230-kV bay, and replacement of an existing 230/115-kV 100 MVA transformer with a 300 MVA unit to avoid overloads.
- Replace Valley City Substation (North Dakota) 115/69-kV 50 MVA KY1A transformer and associated control equipment. The transformer and most of the control equipment, installed in 1952, have exceeded their useful lives. The transformer is leaking and the control equipment requires extensive maintenance. Systems studies have identified capacity deficiencies; replacement of the transformer with a 70 MVA unit is warranted to address reliability requirements.
- Rebuild Bouse Tap (Arizona) as a three breaker ring bus to improve system reliability by restoring remote operating and emergency line-break capability to this segment of the Parker-Gila 161-kV transmission line. The existing switchyard, constructed in the early 1950's, has exceeded its useful life and can no longer support remote operations. Customer participation in funding is anticipated to cover more than a quarter of the project's costs.
- Rebuild aging Davis Switchyards (Arizona) built in the late 1940s to provide increased reliability. The bulk of the equipment in the yards is operating beyond their useful service lives. Problems include failing circuit breakers, unreliable regulating transformer, broken disconnects, oil leaks, and abandoned equipment. The rebuild will provide a more effective bus arrangement, replace oil-filled circuit breakers with SF6 gas breakers to eliminate over 140,000 gallons of oil from the site adjacent to the Colorado River, and construct a control building to house the relays, control equipment, and battery systems.
- Upgrade of ED5 Tap Substation (Arizona) with a new five circuit breaker ring bus to replace the existing tap. Constructed in 1952, the existing motor-operated disconnects have not been upgraded, are deteriorating, and are a reliability concern. They are not capable of interrupting load or fault current, making maintenance difficult and costly. Spare parts are obsolete and difficult to replace.
- Rebuild equipment at Empire Tap Substation (Arizona) due to age, deterioration, obsolete equipment, and resulting safety and reliability problems. Acquire land and rebuild the substation in a three-breaker-ring configuration to improve reliability, safety, and outage response capability.
- Replacement of old and failing equipment at Gila Substation (Arizona). This 34.5-kV yard was placed in service in 1945 as part of the Parker Dam Project. The circuit breakers and switches are obsolete with no replacement parts available. Failure of this equipment prevents Western from serving its customer loads and meeting contractual obligations. The project will replace six 34.5-kV circuit breakers and 18 disconnect switches, as well as reconfigure the station service transformer feed.
- Construct a new 500-kV O'Banion Substation (California) with 500/230-kV transformation.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Loop the existing PG&E's Table Mountain – Tesla 500-kV line into the new 500-kV yard. Add breaker bay and associated protection and control circuits to the existing O'Banion 230-kV yard as required. The project will improve the reliability of the CVP transmission system, conform to NERC/WECC reliability criteria, meet Western's transmission service obligations, and inhibit uncontrolled system-wide outages and loss of load which will have a definite impact on local and regional system/economy.

- Rebuild the 40 year old O'Neill Substation (California) to improve the reliability of the electrical supply facilities for the O'Neil pump/generating station. The substation is the sole source of power to six large pump/generation units operated by the U.S. Bureau of Reclamation as part of the San Luis Water Project.
- Upgrade Tracy 230-kV Substation (California) to a double-breaker, double-bus configuration by adding breakers, disconnects, bus, and associated control, protection and communication equipment. The upgrade is necessary to meet operational reliability requirements for this very critical substation that serves central California and the San Francisco Bay Area. The current substation design is a main and transfer bus configuration which can lead to loss of up to six critical 230-kV transmission lines, two major ties to the Tracy 500-kV Substation, and the entire Tracy pumping plant if breaker failure happens due to human error or failure of breaker protection equipment. This would represent a loss of 2,150 MVA of transfer capacity, potentially causing a major West Coast power outage during critical load times of the year.

▪ **Substations, Rehabilitation Starts** **14,820** **19,128** **17,129**

The following substation rehabilitation starts are planned in FY 2010:

- Construct a 230-kV switching station on the Granite Falls-Watertown 230-kV line near Boyd (Minnesota) including control building, ring bus, breakers, and associated switching and communications equipment. The switching station is necessary to support the current weak underlying system that is vulnerable to outages from increased loading.
- Addition of 230-kV bay in the main and transfer bus of the Granite Falls Substation (Minnesota) to provide outlet for 600 MW customer-owned powerplant under construction in the vicinity of the Granite Falls substation.
- Addition of 115-kV interconnection to the Killdeer Substation (North Dakota), including expansion of existing yard, construction of ring bus, installation of circuit breakers, switches, capacitor banks, and communication and protection equipment, and replacement of control building and boards. The interconnection is necessary to support reliability and load growth in the area.
- Construct a 115-kV switching station near Max (North Dakota) consisting of a control building, ring bus, circuit breakers and associated switches, transformers, and communication and protection equipment. The switching station is necessary to improve reliability and provide service for increased load in the area.
- Construct a 230-kV switching yard on the Heskett-Dickinson 230-kV line located west of Mandan (North Dakota), consisting of a control building, ring bus, circuit breakers and

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

associated switches, transformers, and communication and protection equipment. The switching station is necessary to improve reliability and provide service for increased load in the area.

- Construct a tap to the 115-kV Martin-Philip transmission line near Wanblee (South Dakota) on the Pine Ridge Indian Reservation. The project will require land for the facilities, and include circuit switchers, disconnect switches, a take-off box structure, and miscellaneous bus and station service equipment. The tap will provide improved reliability to support increasing load in the area.
- Replace the 345-kV transformer at Liberty Substation in western Phoenix (Arizona) supporting the critical 345-kV Liberty to Peacock transmission line. Testing on the 43-year old transformer indicates both internal and external deterioration, including extensive leaking from several areas of the transformer. Replacement is necessary to avoid catastrophic failure and/or lengthy outage on the heavily loaded Liberty-Peacock transmission line.
- Replace the 345-kV transformer at Mead Substation south of Boulder City (Nevada) providing the sole feed from Mead Substation to the heavily loaded Mead-Peacock 345-kV transmission line. Testing on this 45-year old transformer indicates both internal and external deterioration, including leaking, bushing and insulation degradation. Replacement will improve reliability of this critical component of the Mead to Peacock system, dramatically reducing the risk of failure and line outage.
- Replacement of deteriorating components of the water supply and fire protection supply systems at Mead Substation (Nevada). Maintaining the integrity, reliability, and safety of these systems is essential to the continued operation of the critical Mead Substation.
- Addition of a 230/115-kV transformers and power circuit breakers at Ault and Weld Substations (Colorado). This is part of a joint project in combination with transmission line upgrades providing greater voltage support for northern Colorado loads.
- Addition of 15MVAR 115-kV shunt capacitor bank at Fort Morgan West Substation (Colorado). The substation has required mobile shunt capacitor bank support to provide voltage support for loads in this area. Installation of a permanent capacitor bank is required for reliability.
- Reconfiguration and addition of nine breakers to the 230-kV Elverta Substation (California), including control, protection, and communication equipment to provide increased reliability and meet WECC and NERC compliance requirements. Elverta Substation, built 30 years ago, serves the Sacramento area load center which has grown substantially over the period. A failure under the current configuration could lead to loss of power to the entire Sacramento area impacting more than a million customers.

The funding level is determined by estimating the cost to complete each project and breaking out these costs by fiscal year. The estimates are based on recent actual costs to complete similar projects, updated individual project requirements, and past experience.

▪ **Substations, Work Funded by Others** 0 0 0

Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Construction and Rehabilitation

FY 2010 Congressional Budget

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Substation reimbursable work in FY 2010 includes:

- Havre Substation 230-kV Bay Addition (Montana).
- Modifications to Rainbow and Great Falls substations.
- Construction of 115-kV substation at Killdeer for McKenzie Electric (North Dakota).
- Anticipate substation activity in support of wind farm development, and various interconnections or integration of customer owned equipment at Western facilities.

|                                 |              |              |               |
|---------------------------------|--------------|--------------|---------------|
| <b>Other</b>                    | <b>5,371</b> | <b>7,846</b> | <b>18,590</b> |
| ▪ <b>Communications Systems</b> | <b>3,664</b> | <b>5,386</b> | <b>2,982</b>  |

Each project cost is determined using the actual costs of recent similar projects, estimated quantities of needed materials, past contract costs, specialized cost estimating guides, and in-house experience.

- Continue to replace/modernize/expand communication systems (microwave, fiber optic, global information system, and telecommunication) in the Central Valley Project and the Pick-Sloan Missouri Basin Program to operate and control the transmission system, including construction of an alternate control center for the Sierra Nevada Region sub-control area. Replacement parts for existing obsolete communications systems are difficult to obtain and the increased use of remote control of facilities, coupled with the need for greater integration of the Federal system with the rest of the grid and technological advances in the communications field, make secure and reliable communications crucial to Western's mission. Rapid advances in technology and manufacturers' phase-out of support for existing systems drive the need for communications replacements and upgrades. Effective control of remote facilities is crucial to the operation of the power system. The equipment requested here is not included in the Spectrum Relocation Fund initiative.

|  |              |              |               |
|--|--------------|--------------|---------------|
| ▪ <b>Miscellaneous</b>   | <b>1,707</b> | <b>2,460</b> | <b>15,608</b> |
| • Environmental remediation associated with the decommissioning and demolition of the Basic Substation (Nevada). The substation was originally constructed to provide for processing magnesium for use during World War II. In the process of decommissioning, Western has uncovered extensive unforeseen ground and potential groundwater contamination that must be addressed. |              |              |               |
| • Rehabilitation of approximately one mile of the access road to Mead Substation (Nevada). The road has been washed out numerous times and maintenance crews cannot access the critical Mead substation until debris is cleared, creating a reliability and security concern as well as hazardous safety conditions.   |              |              |               |

|                                   |          |          |          |
|-----------------------------------|----------|----------|----------|
| <b>Preconstruction Activities</b> | <b>0</b> | <b>0</b> | <b>0</b> |
|-----------------------------------|----------|----------|----------|

The following projects will have active preconstruction activities during FY 2010: Replacement of overhead ground wire with optical ground wire to improve system connectivity, protection, and security of facilities in Western's Sierra Nevada Region (California).

|   |               |               |                |
|---|---------------|---------------|----------------|
| <b>Total, Construction and Rehabilitation</b> | <b>62,419</b> | <b>74,544</b> | <b>104,971</b> |
|---|---------------|---------------|----------------|

Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Construction and Rehabilitation

FY 2010 Congressional Budget



## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Transmission Lines and Terminal Facilities

- The increase in Transmission Lines and Terminal Facilities is due to increases in both new and ongoing transmission line construction project activity. Larger ongoing activities include the O'Banion-Elverta double circuit 230-kV line providing critical voltage support for the growing Sacramento area, and upgrade of the 500-kV California-Oregon intertie to increase the transfer capabilities by 300MW. Larger reliability projects are also beginning in Wyoming and northern Colorado to address the aging transmission infrastructure and the expansive load growth along the Front Range communities. In addition, there are several projects to repair, rebuild, or relocate structures that have been identified as having system reliability, safety, and/or maintenance problems. +17,048

### Substations

- This increase is due primarily to several substation rehabilitation efforts ongoing from prior years that will be moving into the build phase. In addition, several more substation rehabilitation efforts will begin in FY 2010 reflecting the aging infrastructure across Western's service territory, as well as increasing demand on the Federal transmission facilities. +2,635

### Other

- Funding needs for Other capital expenditures, including communications, buildings, roads, and other miscellaneous construction activities is increasing to provide for the extensive remediation requirements associated with the decommissioning and demolition of a World War II support facility, the Basic Substation located in Henderson, Nevada. +10,744

### Total Funding Change, Construction and Rehabilitation

---

**+30,427**

**Purchase Power and Wheeling  
Funding Schedule by Activity**

(dollars in thousands)

|   | FY 2008  | FY 2009  | FY 2010  |
|---|----------|----------|----------|
| Purchase Power and Wheeling                           |          |          |          |
| Central Valley Project                                | 238,671  | 295,472  | 284,441  |
| Pick-Sloan Missouri Basin and Other Programs          | 236,583  | 305,488  | 264,406  |
| Subtotal, Purchase Power and Wheeling (Gross)         | 475,254  | 600,960  | 548,847  |
| Use of Alternative Financing <sup>a</sup>             | -166,552 | -197,842 | -199,040 |
| Subtotal, Purchase Power and Wheeling                 | 308,702  | 403,118  | 349,807  |
| Offsetting Collections Realized                       | -308,702 | -403,118 | -349,807 |
| Total, Purchase Power and Wheeling (Budget Authority) | 0        | 0        | 0        |

**Description**

The mission of the Purchase Power and Wheeling (PPW) subprogram is to support Western’s long-term firm power sale contractual agreements, including wheeling over non-Federal transmission lines as necessary to deliver the firm hydropower resource to customers.

**Benefits**

The PPW subprogram supports Western’s mission to market and deliver reliable, cost-based hydroelectric power and related services. These services are marketed at rates sufficient to recover expenses and Federal investment as established by law. To maximize the marketability of Western’s products, Western has entered into long-term contracts with customers of the Central Valley Project (CVP), the Pick-Sloan Missouri Basin Program, as well as other projects, to deliver power based on the normal (average over the long-term) amount of power and/or capacity available from each of the power systems. By its nature, hydropower is a variable resource; it is affected by reservoir storage, drought conditions, powerplant maintenance and other project purposes. Variations occur between load and the hydro-generation hour-by-hour or even minute-by-minute. Western buys power and related transmission services to fulfill its firm power-sale contractual commitments. Western also buys transmission services, as needed, to provide the benefits of the Federal hydropower resource to numerous Federal, State, municipal, and other preference customers not directly connected to Western’s system. Contracting for transmission services encourages the widespread use principle of the Flood Control Act of 1944 and avoids unnecessary Federal duplication of available transmission resources. The acquisition of non-Federal power and transmission services meets Western’s power marketing contract provisions which place binding responsibilities on Western to provide firm power to customers of the Pick-Sloan Missouri Basin Program-Eastern Division, Loveland Area Projects and Parker-Davis Project.

<sup>a</sup> Alternative financing for purchase power and wheeling in FY 2010 anticipates \$176.5 million and \$177.6 million net billing and/or bill crediting in FY 2009 and FY 2010, respectively. Alternative financing also includes reimbursable customer funding planned at \$21.3 million and \$21.4 million in FY 2009 and FY 2010, respectively.

The FY 2010 request provides for continuation of PPW receipt funded activities at the estimated level necessary to meet contractual firming needs. No appropriated budget authority is necessary. The request for receipt authority reflects current drought conditions affecting the Pick-Sloan Missouri River Basin, and the elevated market pressures for purchase power across Western's service territory.

The following table illustrates the PPW program assumptions.

### Purchase Power and Wheeling Program Assumptions

|   | FY 2007<br>Actual | FY 2008<br>Enacted | FY 2009<br>Request | FY 2010<br>Request |
|---|-------------------|--------------------|--------------------|--------------------|
| Power Purchases (gigawatthours)                   |                   |                    |                    |                    |
| Central Valley Project                            | 3,769             | 3,115              | 4,295              | 4,293              |
| Pick-Sloan Missouri Basin and Other Programs      | 4,972             | 4,414              | 4,996              | 4,290              |
| <b>Total, Purchases</b>                           | <b>8,741</b>      | <b>7,529</b>       | <b>9,291</b>       | <b>8,583</b>       |
| Purchase Power Prices (\$/megawatthour)           |                   |                    |                    |                    |
| Central Valley Project                            | 48.8              | 64.4               | 55.1               | 55.4               |
| Pick-Sloan Missouri Basin and Other Programs      | 56.4              | 49.3               | 57.4               | 57.2               |
| Cost of Power Purchases (\$000)                   |                   |                    |                    |                    |
| Central Valley Project                            | 183,749           | 200,532            | 236,601            | 237,945            |
| Pick-Sloan Missouri Basin and Other Programs      | 280,396           | 217,701            | 286,890            | 245,535            |
| <b>Total, Purchase Power Costs</b>                | <b>464,145</b>    | <b>418,233</b>     | <b>523,491</b>     | <b>483,480</b>     |
| Wheeling Costs (\$000)                            |                   |                    |                    |                    |
| Central Valley Project                            | 32,769            | 38,139             | 58,871             | 46,496             |
| Pick-Sloan Missouri Basin and Other Programs      | 10,849            | 18,882             | 18,598             | 18,871             |
| <b>Total, Wheeling Costs</b>                      | <b>43,618</b>     | <b>57,021</b>      | <b>77,469</b>      | <b>65,367</b>      |
| <b>Total, Purchase Power and Wheeling (\$000)</b> | <b>507,763</b>    | <b>475,254</b>     | <b>600,960</b>     | <b>548,847</b>     |

### Detailed Justification

(dollars in thousands)

| FY 2008        | FY 2009        | FY 2010        |
|----------------|----------------|----------------|
| <b>102,947</b> | <b>134,706</b> | <b>122,361</b> |

#### Central Valley Project

No appropriations are requested. This is authority to use offsetting collections only.

|  |                |                |                |
|--|----------------|----------------|----------------|
| ▪ <b>Central Valley Project, Program Requirement</b> | <b>238,671</b> | <b>295,472</b> | <b>284,441</b> |
|--|----------------|----------------|----------------|

In FY 2010, Western continues to deliver on its contractual power commitments to customers under the Central Valley Project's Post 2004 Marketing Plan. The budget request assumes current full

**Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Purchase Power and Wheeling**

**FY 2010 Congressional Budget**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

load service customers will continue to choose service from Western through “Custom Product” contractual arrangements. Western also purchases power to support variable resource customers on a pass-thru basis. If project net generation is not sufficient, Western may also purchase to support project use load, First Preference Customer load, and sub-control area reserve requirements.

▪ **Central Valley Project, Alternative/Customer Financing**      **-135,724**    **-160,766**    **-162,080**

Contractual arrangements have been made with customers providing opportunities for alternative financing of the purchase power requirements. Alternative financing methods include net billing, bill crediting, energy exchanges, and direct customer funding.

**Pick-Sloan Missouri Basin and Other Programs**      **205,755**    **268,412**    **227,446**

No appropriations are requested. This is authority to use offsetting collections only.

▪ **Pick-Sloan Missouri Basin and Other Programs, Program Requirement**      **236,583**    **305,488**    **264,406**

In FY 2010, the request continues to support long-term firm power commitments to customers of the Eastern and Western divisions of the Pick-Sloan Missouri Basin Program, the Fryingpan-Arkansas Project, and the Parker-Davis Project commensurate with the levels of average firm hydroelectric energy marketed by Western. The request also provides transmission support for the Pacific Northwest-Southwest Intertie Project. The total program estimates shown for FY 2010 are based primarily on market pricing of short-term firm energy, negotiated transmission rates, and Western and generating agency’ forecasts. The FY 2010 program forecasts reduced purchases.

▪ **Pick-Sloan Missouri Basin and Other Programs, Alternative/Customer Financing**      **-30,828**    **-37,076**    **-36,960**

Alternative financing methods negotiated with customers will be used where effective to provide an offset to the total program receipt financing requirement. Alternative financing methods include net billing, bill crediting, energy exchanges, and direct customer funding.

**Total, Purchase Power and Wheeling**      **308,702**    **403,118**    **349,807**

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Central Valley Project

- The gross PPW requirement of \$284.4 million in FY 2010 is down \$11.0 million from the \$295.4 million level anticipated in FY 2009. Additional resources were enacted in FY 2009 to accommodate California ISO market adjustments and other transmission charges anticipated to take effect.
- Note: The PPW amounts are for offsetting collection authority and alternative financing; no direct appropriations are necessary.

-11,031

### Pick-Sloan Missouri Basin and Other Programs

- The gross PPW requirement of \$264.4 million in FY 2010 is down by \$41.1 million from the \$305.5 million enacted in FY 2009. The decrease reflects a reduction in power purchased in anticipation of a bottom to the long term drought conditions experienced in the region.
- Note: The PPW amounts are for offsetting collection authority and alternative financing; no direct appropriations are requested for this activity.

-41,082

### Total Funding Change, Purchase Power and Wheeling

-52,113

**Program Direction  
Funding Profile by Category**

|  | (dollars in thousands) |         |          |
|--|------------------------|---------|----------|
|  | FY 2008 <sup>a</sup>   | FY 2009 | FY 2010  |
| Program Direction <sup>b</sup>                 |                        |         |          |
| Salaries & Benefits                            | 109,213                | 114,527 | 123,197  |
| Travel   | 8,327                  | 8,382   | 8,684    |
| Support Services                               | 20,429                 | 24,265  | 26,552   |
| Other Related Services                         | 18,159                 | 19,249  | 22,323   |
| Total, Program                                 | 156,128                | 166,423 | 180,756  |
| Less Use of Alternative Financing <sup>c</sup> | -10,000                | -15,800 | -5,720   |
| Use of Receipts from Colorado River Dam Fund   | -3,008                 | -2,563  | -3,012   |
| Offsetting Collections                         | 0                      | 0       | -110,492 |
| Total, Program Direction Budget Authority      | 143,120                | 148,060 | 61,532   |
| Full-time Equivalents                          | 1,059                  | 1,073   | 1,107    |

**Mission**

Western’s Program Direction subprogram provides compensation and all related expenses for the workforce that operates and maintains Western’s high-voltage interconnected transmission system and associated facilities; those that plan, design, and supervise the construction of replacements, upgrades and additions (capital investments) to the transmission facilities; and those that market the power and energy produced to repay annual expenses and capital investment.

The Program Direction subprogram supports DOE’s Energy Security Strategic Theme, Goal 1.3, Energy Infrastructure. To attain reliability performance, dispatchers match generation to load minute-by-minute to meet or exceed performance levels established by NERC. Western maintains the interconnected system at or above industry standards to reduce transmission outages. Energy schedulers maximize revenues from non-firm energy sales and power rates are reviewed and adjusted to support repayment of Federal investment. Western trains its employees on a continuing basis in occupational safety and health regulations, policies and procedures, and conducts safety meetings at employee, supervisory and management levels to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.

The Program Direction subprogram further supports Western’s Human Capital Management (HCM) Workforce Plan. HCM Workforce Plan activities include: exploring ways to increase HR efficiency through consolidation; the development and/or expansion of intern/apprenticeship programs in the occupations of energy marketing, dispatcher, lineman, and electrician; introduction of an under-study

<sup>a</sup> FY 2008 adjustment reflects the 0.91 percent general rescission of \$1,175,613 (P.L. 110-161).

<sup>b</sup> Program descriptions and funding amounts include activities of the Boulder Canyon Project. These activities are funded through a Reimbursable Agreement with the Department of the Interior, Bureau of Reclamation.

<sup>c</sup> Alternative financing for Program Direction is dependent on cash advances from customers.

program in Power Marketing, prior to an incumbent retiring; rotational training programs for engineers; strategic use of knowledge sharing and training events in critical occupations; and, succession planning development programs for mid- to upper-level graded Federal positions. Western's 50/5/5 Trainee Program is part of its succession planning which trains employees in critical positions in known areas soon to be vacated by retiring employees. By design, costs for these HCM programs will be minimal as local area expertise and facilities will be used to the maximum extent possible. The HCM Workforce Plan noted that no new A-76 studies were required and/or anticipated at this time.

Western operates and maintains a transmission system to deliver reliable electric power in a clean and environmentally-safe, cost-effective manner within its 15-State service territory. Western achieves continuity of service by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing environmental clean-up activities, and maximizing the benefits gained from non-firm energy sales. Additionally, Western operates the Western Electricity Coordinating Council's Rocky Mountain/Desert Southwest Reliability Coordination Center.

In concert with its customers, Western reviews required replacements and upgrades to its existing infrastructure to sustain reliable power delivery to its customers and to contain annual maintenance expenses. The timing and scope of these replacements and upgrades are critical to assure that Western's facilities do not become the "weak link" in the interconnected system. Western pursues opportunities to join with neighboring utilities to jointly finance activities, which avoid redundant facilities and result in realized cost savings and/or increased efficiencies for all participants.

### Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

#### Salaries and Benefits

**109,213      114,527      123,197**

Salaries and benefits are provided for Federal employees to operate and maintain, on a continuing basis, Western's high-voltage interconnected transmission system comprised of 17,107 circuit-miles of line, 302 substations, associated power system control and communication, and general plant facilities. Craft workers rapidly restore the transmission system following any disturbance, and routinely maintain and/or replace equipment to assure capability for reliable delivery of power. Dispatchers provide 24-hour-a-day operation of four dispatching centers and one reliability coordination center. Dispatchers respond to minute-by-minute changes to load and generation to meet or exceed NERC and industry averages for system reliability and performance. Engineers and craft workers maintain the interconnected system at or above industry standards to reduce transmission outages. Energy schedulers maximize revenues from non-firm energy sales. Staff provides continuing services such as system operations, power billing and collection, power marketing, rate setting, energy services, environmental, safety, security and emergency management. Due to the extreme hazards associated with a high-voltage electrical system, staff makes safety a priority in each and every task. Staff inspects construction activities in progress (identified in the Construction and Rehabilitation activity) to ensure quality results and safe working methods. General power resources planning and preconstruction activities continue, including planning, environmental clearance, collection of field data, design of facilities, and issuance of specifications for future rehabilitation and upgrades of existing transmission lines and the review/coordination of requests for transmission system interconnections. Staff evaluates general

**Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Program Direction**

**FY 2010 Congressional Budget**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

power resources, collaborating and planning with customers and other members of the interconnected transmission system, to identify the most effective transmission system improvements to maximize benefits to all participants. Western participates in public meetings with customers and initiatives supported by the Department.

Total FTE numbers for FY 2010 include 1,107 for Western's Construction, Rehabilitation, Operation and Maintenance (CROM) Account activities. Included in this amount are 17 FTE for Boulder Canyon Project (BCP) activities accomplished using receipts from the Colorado River Dam Fund under a reimbursable agreement with the Bureau of Reclamation. FTE reflected for CROM Account activities total 1,059 and 1,073 for FY 2008 and 2009, respectively, which includes the FTE associated with BCP activities of 19 for FY 2008 and 15 for FY 2009. The increase of within target FTE reflected in FY 2010 for Western's CROM Account is attributable to the salaries and benefits for Western's 50/5/5 Trainee Program, which trains new employees to fill critically defined positions of employees retiring within Western. Offsetting this increase is a shift of 19 FTE to Western's Colorado River Basins Power Marketing Fund (CRBPMF). The shifting of FTEs supports the increase of O&M activities within Western's CRBPMF program.

The FY 2010 funding request reflects anticipated salary and within-grade increases to fund the majority of the FTE financed in this account. The program request includes approximately \$2 million for salary and benefit activities of the Boulder Canyon Project, and other financing methods fund the remainder. Western's overall average budgeted salary/benefit costs per FTE for FY 2009 and FY 2010 are \$107,035 and \$111,896 respectively. More than 38 percent of Western's personnel salaries and compensation policies are determined through wage surveys and union negotiations (craft workers, power system dispatchers, schedulers, and marketers) and become effective at the beginning of a fiscal year rather than in January as do the General Schedule increases.

**Travel** **8,327**      **8,382**      **8,684**

Estimates, including \$167,566 for the Boulder Canyon Project, include transportation and per diem allowances for day-to-day performance of duties of Federal staff, including crews who maintain the interconnected system. The remote and rural locations in Western's 15-State service area result in less competitive pricing. Rental/lease of GSA vehicles and other transportation estimates are also included. Estimates are based on historical costs and an assessment of planned activity. The slight increase is attributable to inflation, offset by a decrease of planned travel activity.

**Support Services** **20,429**      **24,265**      **26,552**

Support services funded in this category include information processing, warehousing, job related training and education, engineering, miscellaneous advisory and assistance services, and general administrative support. The Boulder Canyon portion of the support services estimate totals \$377,402. The increase to this activity is required to support Western's mission needs in environmental analysis, planning engineering, ADP program support for the power billing system, and administrative support associated with transmission line reliability and substation upgrades. Other increases within this activity are primarily inflationary in nature.

**Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Program Direction**

**FY 2010 Congressional Budget**



(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Other Related Expenses**

**18,159      19,249      22,323**

Other related expenses include rental space, utilities, supplies and materials, telecommunications, personal computers, printing and reproduction, training tuition, and DOE's working capital fund distribution. The Boulder Canyon portion of these expenses total \$454,392. Rental space costs assume the General Services Administration's (GSA) inflation factor. Other costs are based on historical usage and actual cost of similar items. The increase in this activity is due to rising estimates of utilities, rental space, supplies and miscellaneous services, and a slight increase in Western's indirect distribution to this account. Other increases are inflationary in nature, slightly offset by a decrease in training, capital acquisitions, and services from other government agencies.

**Total, Program Direction**

**156,128      166,423      180,756**

**Explanation of Funding Changes**

|                                      |
|--------------------------------------|
| FY 2010<br>vs.<br>FY 2009<br>(\$000) |
|--------------------------------------|

**Salaries and Benefits**

- The increase to salary and benefits includes anticipated salary increases to fund the FTE financed in this account. This includes those salaries determined through negotiations and the temporary FTE increase for trainee positions as part of Western's succession planning. +8,670

**Travel**

- The increase to travel is attributable to inflation and a slight increase of planned travel activity. +302

**Support Services**

- The increase to this activity is required to support Western's mission needs in environmental analysis, planning engineering, ADP program support for the power billing system, and administrative support associated with transmission line reliability and substation upgrades. Other increases within this activity are primarily inflationary in nature. +2,287

**Other Related Expenses**

- The increase in this activity is due to rising estimates of utilities, rental space, supplies and miscellaneous services, and a slight increase in Western's indirect distribution to this account. Other increases are inflationary changes, slightly offset by a decrease in training, capital acquisitions, and services from other government agencies. +3,074

**Total Funding Change, Program Direction**

**+14,333**

Construction, Rehabilitation, Operation and Maintenance/  
Western Area Power Administration/  
Program Direction

FY 2010 Congressional Budget

### Support Services by Category

|   | (dollars in thousands) |         |         |
|---|------------------------|---------|---------|
|   | FY 2008                | FY 2009 | FY 2010 |
| Technical Support   |                        |         |         |
| Economic and Environmental Analysis                                 | 1,498                  | 2,738   | 3,981   |
| Test and Evaluation Studies   | 0                      | 0       | 0       |
| Total, Technical Support  | 1,498                  | 2,738   | 3,981   |
| Management Support  |                        |         |         |
| Management Studies  | 0                      | 0       | 0       |
| Training and Education  | 906                    | 1,006   | 1,161   |
| Automated Data Processing   | 5,909                  | 6,284   | 6,444   |
| Reports and Analyses Management and General Administrative Services | 12,116                 | 14,237  | 14,966  |
| Total, Management Support   | 18,931                 | 21,527  | 22,571  |
| Total, Support Services   | 20,429                 | 24,265  | 26,552  |

### Other Related Expenses by Category

|  | (dollars in thousands) |         |         |
|--|------------------------|---------|---------|
|  | FY 2008                | FY 2009 | FY 2010 |
| Training   | 294                    | 364     | 288     |
| Working Capital Fund   | 735                    | 1,174   | 1,159   |
| Printing and Reproduction  | 135                    | 104     | 118     |
| Rental Space   | 2,016                  | 1,858   | 2,303   |
| Software Procurement/Maintenance Activities/Capital Acquisitions | 2,899                  | 3,940   | 3,695   |
| Purchases from Government Accounts                               | 1,553                  | 1,131   | 976     |
| Architectural and Engineering Services                           | 1,822                  | 2,889   | 2,961   |
| Other Miscellaneous Expenses                                     | 8,705                  | 7,789   | 10,823  |
| Total, Other Related Expenses                                    | 18,159                 | 19,249  | 22,323  |

**Utah Mitigation and Conservation  
Funding Schedule by Activity**

(dollars in thousands)

| FY 2008 <sup>a</sup> | FY 2009 | FY 2010 |
|----------------------|---------|---------|
|----------------------|---------|---------|

|  |       |       |       |
|--|-------|-------|-------|
| Total, Utah Mitigation and Conservation Budget Authority | 7,114 | 7,342 | 7,584 |
|--|-------|-------|-------|

**Description**

The Reclamation Projects Authorization and Adjustment Act of 1992, Title IV, established the Utah Reclamation Mitigation and Conservation Account (Account) in the Treasury of the United States. The purpose of this Account is to ensure that the level of environmental protection, mitigation, and enhancement achieved in connection with projects identified in the Act and elsewhere in the Colorado River Storage Project in the State of Utah is preserved and maintained. The Administrator of Western is authorized to deposit funds into the Account. Such expenditures are to be considered non-reimbursable and non-returnable. The Utah Reclamation Mitigation and Conservation Commission established under Title III of the Act, is authorized to administer all funds deposited into this Account.

**Benefits**

This Account provides for the preservation of fish and wildlife and recreation resources impacted by the Central Utah Project and the Colorado River Storage Project in the State of Utah.

**Detailed Justification**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Utah Mitigation and Conservation**

|              |              |              |
|--------------|--------------|--------------|
| <b>7,114</b> | <b>7,342</b> | <b>7,584</b> |
|--------------|--------------|--------------|

A deposit of \$7,584 thousand will be made to this Account.

**Total, Utah Mitigation and Conservation**

|              |              |              |
|--------------|--------------|--------------|
| <b>7,114</b> | <b>7,342</b> | <b>7,584</b> |
|--------------|--------------|--------------|

---

<sup>a</sup> FY 2008 adjustment reflects the 0.91 percent general rescission of \$53,563 (P.L. 110-161).

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Utah Mitigation and Conservation

- This increase is based on the required calculation using factors found in the Economic Assumptions, CPI – Urban Customers.

+242

---

### Total Funding Change, Utah Mitigation and Conservation

+242

## Falcon and Amistad Operating and Maintenance Fund

### Funding Profile by Subprogram

(dollars in thousands)

|  | FY 2008<br>Current<br>Appropriation | FY 2009<br>Original<br>Appropriation | FY 2009<br>Adjustments | FY 2010<br>Request |
|--|-------------------------------------|--------------------------------------|------------------------|--------------------|
| Falcon and Amistad Operating and Maintenance Fund                              | 2,477                               | 2,959                                | 0                      | 2,568              |
| Offsetting Collections, Falcon and Amistad annual expenses                     | 0                                   | 0                                    | 0                      | -2,348             |
| Total, Falcon and Amistad Operating and Maintenance Fund<br>(Budget Authority) | 2,477                               | 2,959                                | 0                      | 220                |
| Reclassification of Mandatory Receipts to Discretionary<br>Collections         | 0                                   | 0                                    | 0                      | +2,348             |

#### Public Law Authorizations:

Public Law 103-236, "Foreign Relations Authorization Act, Fiscal Years 1994 and 1995"  
The Act of June 18, 1954 (68 Stat. 255)

#### Mission

The Falcon and Amistad Operating and Maintenance Fund (Maintenance Fund) was established in the Treasury of the United States as directed by the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995. The Maintenance Fund is administered by the Administrator of Western for use by the Commissioner of the U.S. Section of the International Boundary and Water Commission (IBWC) to defray administrative, O&M, replacements, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams.

#### Benefits

The Falcon-Amistad Project hydroelectric power generation plants sell generated power to rural electric cooperatives through Western. The United States' share of the generating capacity of the two powerplants is 97.5 MW. All revenues collected in connection with the disposition of electric power generated at the Falcon and Amistad Dams, except monies received from the Government of Mexico, are credited to the Maintenance Fund. Any monies received from the Government of Mexico are credited to the General Fund of the U.S. Treasury. Revenues collected in excess of expenses are used to repay, with interest, the cost of replacements and original investments, thus supporting Western's Program Goal. Full funding will support 24-hour/day operation and maintenance of the two powerplants to ensure response to ever-changing water conditions, customer demand, and continual coordination with operating personnel of the Government of Mexico. In addition, power will be marketed, repayment studies will be completed, and revenues collected. The Federal staff funded under this program continues to be allocated to the U.S. Section of IBWC by the Department of State.

**Falcon and Amistad Operating and Maintenance Fund  
Funding Schedule by Activity**

(dollars in thousands)

|   | FY 2008 | FY 2009 | FY 2010 |
|---|---------|---------|---------|
| Falcon and Amistad Operating and Maintenance Fund |         |         |         |
| Salaries and Benefits                             | 1,785   | 1,965   | 2,019   |
| Routine Services                                  | 573     | 803     | 392     |
| Miscellaneous Expenses                            | 104     | 176     | 142     |
| Marketing, Contracts, Repayment Studies           | 15      | 15      | 15      |
| Subtotal, Falcon and Amistad O&M                  | 2,477   | 2,959   | 2,568   |
| Offsetting Collections                            | 0       | 0       | -2,348  |
| Total, Falcon and Amistad O&M Budget Authority    | 2,477   | 2,959   | 220     |

**Detailed Justification**

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
|--|---------|---------|---------|

**Salaries and Benefits** **1,785**      **1,965**      **2,019**

Salaries and benefits are provided for 35 positions of the U.S. Section of the IBWC who operate and maintain the two power plants on a 24-hour/day basis, including planned maintenance activities, required safety services, and emergency response to flood operations and/or equipment failure. The slight increase is attributed to promotions, salary, and cost of living adjustments.

**Routine Services** **573**      **803**      **392**

Routine services such as inspection and service of the HVAC and air compressor systems, fire suppression systems, elevators, self-contained breathing apparatus, recharge and hydro-testing of fire extinguishers, calibration of test equipment, rebuild of electric motors, and repair of obsolete equipment when replacement parts are no longer available, will be provided. The request includes capitalized estimates of \$220,000 to cover the Excitation System replacement at the Amistad power plant. The replacement is necessary as the current equipment is operating beyond life expectancy and the equipment is no longer manufactured nor supported.

**Miscellaneous Expenses** **104**      **176**      **142**

Estimates include miscellaneous expenses for IBWC employees and technical advisors, including travel, training, communications, utilities, printing, and office supplies and materials. Planned training and travel activities include that which is essential for flood response, dam safety, power house safety, to comply with the standards of the Interagency Commission on Dam Safety (ICODS), Occupational Safety and Health Administration (OSHA), and the National Dam Safety Act.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Marketing, Contracts, Repayment Studies** **15**      **15**      **15**

Costs for marketing power, administration of power contracts, and preparation of rate and repayment studies are included. Based on accurate studies, staff ensures that power revenues are set at an appropriate level to recover annual expenses and meet repayment schedules.

---

**Total, Falcon and Amistad Operating and Maintenance Fund**  
**Budget Authority** **2,477**      **2,959**      **2,568**

**Explanation of Funding Changes**

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

**Salaries and Benefits**

- The increase is attributed to promotions, salary, and cost of living adjustments. +54

**Routine Services**

- The decrease in routine services is attributable to the completion of several multi-year projects, including the fiber optic network upgrades at both Falcon and Amistad power plants. -411

**Miscellaneous Expenses**

- The slight change in this activity is attributed to a decrease in training and permanent change of station estimates, offset by a slight increase attributable to inflation. -34

---

**Total Funding Change, Falcon and Amistad Operating and Maintenance Fund** **-391**

## Colorado River Basins Power Marketing Fund

### Funding Profile by Subprogram

(dollars in thousands)

|  | FY 2008<br>Appropriation | FY 2009<br>Original<br>Appropriation | FY 2009<br>Additional<br>Appropriation | FY 2010 Request |
|--|--------------------------|--------------------------------------|--|-----------------|
| Colorado River Basins Power Marketing Fund   |                          |                                      |  |                 |
| Equipment, Contracts and Related Expenses    | 190,444                  | 195,137                              | 0                                      | 212,766         |
| Program Direction                            | 41,701                   | 45,147                               | 0                                      | 48,957          |
| Total, Operating Expenses from new authority | 232,145                  | 240,284                              | 0                                      | 261,723         |
| Offsetting Collections Realized              | -255,145                 | -263,284                             | 0                                      | -284,723        |
| Total, Obligational Authority                | -23,000                  | -23,000                              | 0                                      | -23,000         |

**Public Law Authorizations:**

Public Law 75-529, "The Fort Peck Project Act of 1938"

Public Law 84-484, "The Colorado River Storage Project Act of 1956"

Public Law 90-537, "The Colorado River Basin Project Act of 1968"

Public Law 95-91, "Department of Energy Organization Act" (1977)

### **Mission**

Western operates and maintains the transmission system for the projects funded in this account to ensure an adequate supply of reliable electric power in a clean and environmentally safe, cost-effective manner. The Colorado River Basins Power Marketing Program (Program) is comprised of the three power systems: the Colorado River Storage Project, including the Dolores and Seedska-dee Projects; the Fort Peck Project, and the Colorado River Basin Project. This program is funded through Western's business-type revolving fund (Federal Enterprise Fund), the Colorado River Basins Power Marketing Fund.

### **Benefits**

Western achieves continuity of service by maintaining its power systems at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from non-firm energy sales. In concert with its customers, Western reviews required replacements to its existing infrastructure to sustain reliable power delivery to its customers and to contain annual maintenance expenses.

Revenues from the sale of electric energy, capacity and transmission services replenish the fund and are available for expenditure for operation, maintenance, replacements, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses. Power sales and other revenues, which are collected in excess of expenses, are used to repay Federal investments to the U.S. Treasury. This request represents Western's estimate of obligations to finance these business-type operations.



**Equipment, Contracts and Related Expenses  
Funding Schedule by Activity**

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Equipment, Contracts and Related Expenses        |         |         |         |
| Supplies, Materials, and Services                | 11,148  | 12,837  | 13,897  |
| Purchase Power Costs                             | 162,213 | 164,284 | 175,561 |
| Capitalized Equipment                            | 6,421   | 6,171   | 18,169  |
| Interest/Transfers                               | 10,662  | 11,845  | 5,139   |
| Total, Equipment, Contracts and Related Expenses | 190,444 | 195,137 | 212,766 |

**Description**

This program supports the Department of Energy’s Strategic Theme, Goal 1.3, Energy Infrastructure. Western ensures an adequate supply of reliable electric power in a safe, cost-effective manner, and achieves continuity of service throughout its service territory by maintaining its power system at or above industry standards, rapidly restoring service following any system disturbance, mitigating adverse environmental impacts, performing clean-up activities, and maximizing the revenues gained from ancillary services and cost-based non-firm energy sales.

**Benefit**

Western’s equipment, contracts and related expenses are necessary to operate and maintain this activity. Revenues from the sale of electric energy, capacity and transmission services replenish the fund and are available for expenditure for operation, maintenance, power billing and collection, program direction, purchase power and wheeling, interest, emergencies, and other power marketing expenses.

Supplies and materials, such as wood poles, instrument transformers, meters and relays, must be procured to provide necessary resources to respond to routine and emergency situations in the high-voltage interconnected transmission system. Technical services, such as waste management disposal and pest/weed control, are used as needed.

Western’s planned replacement and addition activity is based on an assessment of age and the maintenance frequency/problems of individual items of equipment, availability of replacement parts, safety of the public and Western’s personnel, environmental concerns, and an orderly work plan. The work plans, coordinated with Western’s customers who ultimately bear the burden of all Western expenses, reflect an overall sustainable level of effort, with shifts in emphasis between categories (i.e. electrical versus communication equipment) in any given year.

Electrical equipment replacements, such as circuit breakers, transformers, insulators, revenue meters, switches, control boards, relay and controls must be acquired to assure reliable service to Western’s customers. System age and environmental concerns necessitate orderly replacement before significant problems develop.

Replacement and upgrade of microwave, SCADA, and other communication and control equipment continues to provide increased system reliability, and reduce maintenance and equipment costs.

Capitalized movable equipment such as special purpose vehicles (e.g., truck tractor, diggers), special purpose equipment (e.g., pole trailers, brush chippers), specialized test equipment (e.g., motion analyzers and relay test equipment), computer-aided engineering equipment, office equipment, IT equipment and software must be upgraded and replaced.

Electrical resources and transmission capability to firm up the Federal hydropower supplies needed to meet Western’s contractual obligations will continue to be obtained. Transmission wheeling services are also purchased when a third party’s transmission lines are needed to deliver Federal power to Western’s customers.

Reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant and planned interest payments to the U.S. Treasury are also included in this section.

### Detailed Justification

(dollars in thousands)

| FY 2008       | FY 2009       | FY 2010       |
|---------------|---------------|---------------|
| <b>11,148</b> | <b>12,837</b> | <b>13,897</b> |

#### Supplies, Materials, and Services

Supplies, materials, and services necessary to respond to routine and emergency situations in the high-voltage interconnected transmission system will be procured, and reimbursements to the U.S. Army Corps of Engineers for operation and maintenance of the Fort Peck Powerplant will continue. A well-maintained transmission system supports Western’s attainment of reliability and transmission availability performance by preventing sudden failure, unplanned outages, and possible regional power system disruptions. By providing 24-hour/day reliable electric power delivery to its customers, Western secures revenues for repayment of the Federal investment. Safe working procedures are discussed before work begins to optimize public safety, Western personnel, and equipment. The target request is based on projected work plans for activities funded from this Account. Estimates are based on historical data of actual supplies needed to maintain the transmission system reliably, including emergency situations such as ice storms and tornadoes. Costs are based on recent procurement of similar items. The increase is primarily inflationary and also a slight increase requirement for this activity.

#### Purchase Power Costs

**162,213    164,284    175,561**

Electrical resources, transmission capability and wheeling services will be purchased. The request anticipates the continued low-steady-flow tests conducted at Glen Canyon Dam, as required by the Glen Canyon Dam Environmental Impact Statement Record of Decision. Additionally, amounts include obligational authority to accommodate replacement power purchases for customers served by the Colorado River Storage Project. The replacement power purchases, a provision of the Salt Lake City Area Integrated Projects electric power contracts, are made at the request of power customers at times when Western lacks sufficient generation to meet its full contract commitment. The funds for the replacement power purchases are advanced by the requestors prior to the purchase. Anticipated purchase power budget estimates increase in FY 2010 as a result of increased power costs to Western, and an increase in delivered MWh.

Colorado River Basins Power Marketing Fund/  
Western Area Power Administration/  
Equipment, Contracts and Related Expenses

FY 2010 Congressional Budget

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Capitalized Equipment**

**6,421      6,171      18,169**

Capitalized equipment including circuit breakers, transformers, relays, switches, transmission line equipment, microwave, SCADA, and other communication and control equipment, will be acquired to assure reliable service to Western’s customers. Replacement and upgrade of aged power system components are crucial to system reliability and transmission availability performance. Removing environmental hazards and replacing aged equipment eliminates safety hazards for the public and Western’s personnel.

Planned communications equipment purchases remain relatively constant and include funding for the continuation of the project to replace analog microwave with fiber optic ground wire and fiber optic terminals. New digital radios planned for the Yellowtail area will allow access to the microwave system that is used throughout the Upper Great Plains area. Microwave upgrades are planned for the Phoenix to Mexican Hat.

Transmission line estimates include the purchase of poles, crossarms, conductors, overhead ground wire and hardware for the continued transmission line rebuilds. Also in this estimate is \$7.8 million for the Williston to Watford City transmission line upgrade which includes a 230-kV wood pole H-frame structure and replacement of the conductor and overhead ground wires with optic ground wires. This project will also widen the right of way. Phase 3 of the Harve-Rainbow line rebuild is also included in which Western staff anticipates completing 10 miles of transmission line replacement per year.

Planned substation estimates include \$2 million for a 230-kV transformer which will convert the 115-kV bus into a 230-kV 3 terminal ring bus required for the conversion of the Charlie Creek-Watford City-Williston transmission line. This request also includes \$1.9 million to upgrade the Glen Canyon Substation, and \$1.5 million to replace the circuit break at Flagstaff. Also included are thyristor valve modules for the Miles City Converter Station as they are becoming obsolete and need to be replaced. Circuit breakers replacements are planned for Flagstaff and Glen Canyon substations. Western is beginning the fifth year of a 10-year program to replace older electro-mechanical relays with microprocessor relays due to aged equipment. The microprocessor relays will assist in finding faults faster in order to more efficiently restore service to the customer. Funding is also requested for a circuit switch upgrade and digital fault recorders at Mile City, to replace transformer gas monitors at Shiprock substation, and to replace a communication building due to cracks in the fiberglass structure which allow the elements to enter building. Other miscellaneous items required for substation replacements include surge arrestors, batteries and chargers, and monitoring equipment.

Planned movable capitalized property estimates include the replacement of aged and underpowered trucks, tractors, loaders, pole and lowboy trailers. The trucks planned for replacement have reached the end of their useful life and require major repairs and replacement of parts, of which some are no longer produced. Other estimates include the replacement of outdated test equipment, and test equipment to troubleshoot the new digital microwave radio system. Replacement is also planned for aging information technology support systems and router. The dependability of this equipment is nearing the

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

uncertainty mark and reaching vendor end of life. Other requests include funding for the continuation SCADA Upgrade program as well as other small minor enhancements that provide for the ease of maintenance, protection of equipment and materials, and environmental compliance.

**Interest/Transfers** **10,662**    **11,845**    **5,139**

Interest payments to the U.S. Treasury will occur. Estimates are based on Power Repayment Studies for the Projects funded in this account. The projected interest payment decreases in FY 2010 primarily due to a decrease in investment and an increase in principal payments made from the prior years estimated Power Repayment Study.

---

**Total, Equipment, Contracts and Related Expenses** **190,444**    **195,137**    **212,766**

**Explanation of Funding Changes**

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

**Supplies and Materials**

- The increase is attributable to inflation and a slightly higher level of activity. +1,060

**Purchase Power Costs**

- Purchase power costs increase in FY 2010 as a result of an increase in the costs of purchase power and the delivery of additional MWh. +11,277

**Capitalized Equipment**

- The increase in capitalized equipment purchases is primarily attributable to a planned conversion of the Williston to Watford City 230-kV transmission line; line rebuilds to include poles, conductors, and hardware; replacement of substation equipment to include transformers, circuit breakers, and upgrades; and, replacement of current ground wire for fiber optic ground wire at various locations. Also included is the Glen Canyon Substation upgrade and Flagstaff circuit breaker replacements. +11,998

**Interest**

- Planned interest payment to the U.S. Treasury in FY 2010 decreases due to a decrease in investment and an increase in principal payments made from the prior years estimated Power Repayment Study. -6,706

---

**Total Funding Change, Equipment, Contracts and Related Expenses** **+17,629**

**Program Direction**  
**Funding Profile by Category**

(dollars in thousands)

|                          | FY 2008 | FY 2009 | FY 2010 |
|--------------------------|---------|---------|---------|
| Program Direction        |         |         |         |
| Salaries and Benefits    | 29,913  | 32,113  | 34,845  |
| Travel                   | 2,182   | 2,362   | 2,990   |
| Support Services         | 5,196   | 5,338   | 5,653   |
| Other Related Expenses   | 4,410   | 5,334   | 5,469   |
| Total, Program Direction | 41,701  | 45,147  | 48,957  |
| Full Time Equivalents    | 281     | 272     | 291     |

**Mission**

Program Direction provides the Federal staffing resources and associated costs required to provide overall direction and execution of the Colorado River Basins Power Marketing Fund. Western trains its employees on a continuing basis in occupational safety and health regulations, policies and procedures, and conducts safety meetings at employee, supervisory and management levels to keep the safety culture strong. Accidents are reviewed to ensure lessons are learned and proper work protocol is in place.

**Detailed Justification**

(dollars in thousands)

| FY 2008       | FY 2009       | FY 2010       |
|---------------|---------------|---------------|
| <b>29,913</b> | <b>32,113</b> | <b>34,845</b> |

**Salaries and Benefits**

Salaries and benefits will be provided for Federal employees who operate and maintain the Program's high-voltage integrated transmission system and associated facilities; plan, design, and supervise the replacement (capital investments) to the transmission facilities; and market the power and energy produced to repay annual expenses and capital investment. Engineers and craft workers rapidly restore the transmission system, comprised of approximately 4,000 circuit-miles of transmission lines and associated substations, switchyards, communication, control and general plant facilities, following any disturbance. Staff routinely maintain and/or replace equipment to assure capability for reliable power delivery. Dispatchers respond to minute-by-minute changes to load and generation to meet or exceed the NERC and industry averages. Energy schedulers maximize revenues from non-firm energy sales, and power rates are reviewed and adjusted, thereby supporting the repayment of Federal investment. Staff provides continuing services such as system operations, power billing and collection, power marketing, energy services, technology transfer, environmental, safety, security and emergency management activities. Due to the extreme hazards associated with a high-voltage electrical system, staff makes safety a priority in each and every task. Staff evaluates general power resources, collaborating and planning with customers and members of the interconnected transmission system to

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

identify the most effective transmission system improvements to maximize benefits to all participants.

The 291 FTE supported in this account reflects both direct and indirect (portions of administrative and general expense support employees). Amounts are based on planned work associated with facilities funded through this Account and not on specific positions; therefore, FTE numbers may vary from year to year. The funding increase supports the increase of within target FTE and reflects anticipated salary and within-grade increases. As authorized in P.L. 99-141, Western annually establishes pay rates and compensation policy for some employees (craft workers, power system dispatchers, schedulers, and marketers) based on prevailing rates in the electric utility industry. Due to recruitment/retention issues for those occupations across the Nation and increased staff in these categories to meet the additional workload requirements attributed to FERC Order Nos. 888 and 889, Western's Federal salary/benefit costs for the dispatching/scheduling functions increase at varying rates.

**Travel** **2,182**      **2,362**      **2,990**

Transportation/per diem allowances for day-to-day performance of duties of Federal staff, including crews maintaining the transmission facilities will continue. Rental/lease of GSA vehicles and transportation of things are also included. Estimates are based on historical travel costs, adjusted for inflation and planned activity. Increased levels are attributable to inflation and an increased cost of transportation and in-house operation and maintenance work activities charged to this account.

**Support Services** **5,196**      **5,338**      **5,653**

Support services funded in this category include IT support, warehousing, computer-aided drafting/engineering, and general administrative support. The increase is attributed to inflationary factors, an increase in overhead distribution charged to this account, a slight increase in job related training, offset by a decrease to ADP and administrative support.

**Other Related Expenses** **4,410**      **5,334**      **5,469**

Other related expenses include, but are not limited to, DOE's working capital fund distribution, space, utilities and miscellaneous charges, printing and reproduction, training tuition, maintenance of office equipment, supplies and materials, telecommunications, personal computers, and multi-project costs. Intermittent specialized services, not included in on-going support service contracts, are also included. Rental space costs assume the GSA inflation factor. Other costs are based on historical usage and actual cost of similar items. The request reflects modest inflationary increases.

**Total, Program Direction** **41,701**      **45,147**      **48,957**

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Salaries and Benefits

- Increase in salaries and benefits is attributed to the increase in FTE charged to this account, as well as salary and within grade increases, including salaries determined by prevailing rates in the electric utility industry. +2,732

### Travel

- Increased levels are attributable to an increase in travel requirements for maintenance work, inflationary factors, and an increase in transportation and travel costs. +628

### Support Services

- The increase is primarily attributed to inflationary factors and a slight increase in work activity charged to this account. +315

### Other Related Expenses

- The majority of the change to this request reflects inflationary increases. +135

**Total Funding Change, Program Direction +3,810**

## Support Services by Category

|                                     | (dollars in thousands) |         |         |
|-------------------------------------|------------------------|---------|---------|
|                                     | FY 2008                | FY 2009 | FY 2010 |
| Technical Support                   |                        |         |         |
| Economic and Environmental Analysis | 0                      | 0       | 0       |
| Test and Evaluation Studies         | 0                      | 0       | 0       |
| Total, Technical Support            | 0                      | 0       | 0       |
| Management Support                  |                        |         |         |
| Management Studies                  | 0                      | 0       | 0       |
| Training and Education              | 152                    | 241     | 297     |
| ADP Support                         | 1,259                  | 1,246   | 1,290   |
| Administrative Support              | 3,785                  | 3,851   | 4,036   |
| Total, Management Support           | 5,196                  | 5,338   | 5,653   |
| Total, Support Services             | 5,196                  | 5,338   | 5,653   |

### Other Related Expenses by Category

(dollars in thousands)

|  | FY 2008 | FY 2009 | FY 2010 |
|--|---------|---------|---------|
| Training   | 91      | 31      | 30      |
| Working Capital Fund   | 185     | 204     | 268     |
| Printing and Reproduction  | 29      | 29      | 29      |
| Rental Space   | 689     | 743     | 806     |
| Software Procurement/Maintenance Activities/Capital Acquisitions | 401     | 796     | 545     |
| Other Services   | 3,015   | 3,531   | 3,791   |
| Total, Other Related Expenses                                    | 4,410   | 5,334   | 5,469   |



## Estimate of Gross Revenues <sup>a</sup>

(dollars in thousands)

|   | Preliminary<br>FY 2008 | FY 2009          | FY 2010          | FY 2011          | FY 2012          | FY 2013          | FY 2014          |
|---|------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Boulder Canyon Project                          | 83,562                 | 84,470           | 87,072           | 81,848           | 84,027           | 85,413           | 82,813           |
| Central Valley Project                          | 347,369                | 367,712          | 382,419          | 400,277          | 417,093          | 417,093          | 417,093          |
| Central Arizona Project <sup>b</sup>            | 0                      | 123,082          | 123,082          | 123,082          | 123,082          | 123,082          | 123,082          |
| Falcon-Amistad Project                          | 5,469                  | 4,797            | 4,796            | 4,794            | 4,793            | 4,792            | 4,791            |
| Fryingpan-Arkansas Project                      | 15,359                 | 16,872           | 16,137           | 15,341           | 15,341           | 15,292           | 15,292           |
| Pacific Northwest-Southwest Intertie<br>Project | 33,254                 | 31,187           | 32,046           | 32,906           | 33,765           | 34,620           | 34,620           |
| Parker-Davis Project                            | 54,336                 | 50,734           | 50,730           | 50,726           | 50,722           | 50,718           | 50,713           |
| Pick-Sloan Missouri Basin Program               | 483,528                | 497,981          | 461,986          | 477,702          | 489,948          | 489,880          | 486,890          |
| Provo River Project                             | 199                    | 299              | 305              | 306              | 306              | 306              | 306              |
| Washoe Project                                  | 1,949                  | 780              | 828              | 829              | 850              | 882              | 852              |
| Salt Lake City Area Integrated<br>Projects      | 188,713                | 171,411          | 185,974          | 186,777          | 186,777          | 186,777          | 186,965          |
| Financial statement adjustments                 | -19,325                | 0                | 0                | 0                | 0                | 0                | 0                |
| <b>Total, Gross Revenues</b>                    | <b>1,194,413</b>       | <b>1,349,325</b> | <b>1,345,375</b> | <b>1,374,588</b> | <b>1,406,704</b> | <b>1,408,855</b> | <b>1,403,417</b> |

<sup>a</sup> For most power systems, amounts are based on the FY 2007 Power Repayment Studies (PRS). The Central Arizona Project (CAP) amounts shown are estimated projections based on FY 2007 actual.

<sup>b</sup> Western has contracted with the Salt River Project (SRP) to act as the scheduling entity and operating agent for CAP's portion of the Navajo Generating Station's output (547 MW). In return, as Western retains marketing responsibility, SRP agreed to pay monthly costs to cover annual expenses. A change in revenue recognition for the FY 2008 Financial Statements results in no revenue shown for this CAP/SRP contract.

## Estimate of Energy Sales<sup>a</sup>

(in gigawatthours)<sup>b</sup>

|   | Preliminary<br>FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 |
|---|------------------------|---------|---------|---------|---------|---------|---------|
| Boulder Canyon Project                                    | 3,871                  | 3,785   | 4,047   | 4,069   | 4,076   | 4,081   | 3,958   |
| Central Valley Project                                    | 7,346                  | 8,954   | 9,053   | 9,275   | 9,508   | 9,752   | 10,009  |
| Central Arizona Project                                   | 4,441                  | 4,351   | 4,351   | 4,351   | 4,351   | 4,351   | 4,351   |
| Falcon-Amistad Project                                    | 200                    | 141     | 141     | 141     | 141     | 141     | 141     |
| Loveland Area Projects <sup>c</sup>                       | 2,658                  | 2,123   | 2,123   | 2,123   | 2,123   | 2,123   | 2,123   |
| Pacific Northwest-Southwest Intertie Project <sup>d</sup> | 0                      | 0       | 0       | 0       | 0       | 0       | 0       |
| Parker-Davis Project                                      | 1,344                  | 1,425   | 1,425   | 1,425   | 1,425   | 1,425   | 1,425   |
| Pick-Sloan Missouri Basin Program,<br>Eastern Division    | 10,684                 | 10,730  | 10,730  | 10,751  | 10,751  | 10,751  | 10,751  |
| Provo River Project                                       | 19                     | 22      | 22      | 22      | 22      | 22      | 22      |
| Washoe Project <sup>e</sup>                               | 0                      | 12      | 12      | 12      | 12      | 12      | 12      |
| Salt Lake City Area Integrated<br>Projects <sup>f</sup>   | 6,223                  | 5,431   | 5,390   | 5,433   | 5,433   | 5,433   | 5,439   |
| Total   | 36,786                 | 36,974  | 37,294  | 37,602  | 37,842  | 38,091  | 38,231  |

<sup>a</sup> For most power systems, sales amounts are based on FY 2007 Power Repayment Studies (PRS). The estimates for Central Arizona, Central Valley Project, Falcon-Amistad, and Provo River projects are typically based on average sales over the prior five years.

<sup>b</sup> One gigawatthour (GWh) equals one million kilowatt-hours (kWh).

<sup>c</sup> Loveland Area Projects include Fryingpan-Arkansas Project and the Western Division of the Pick-Sloan Missouri Basin Program.

<sup>d</sup> Pacific Northwest-Southwest Intertie shows no energy sales, but reflects revenues from the transmission of energy (refer to the Estimate of Revenues table). The Intertie Project is for transmission of energy only.

<sup>e</sup> Washoe Project show no sales in FY 2008 due to a change in the financial reporting associated with its energy exchange arrangements.

<sup>f</sup> Salt Lake City Area Integrated Projects include the Colorado River Storage Project, Collbran Project, Rio Grande Project, Seedskaadee Project, and Dolores Project.

## Estimate of Proprietary Receipts

(dollars in thousands)

|  | FY 2008        | FY 2009        | FY 2010       | FY 2011        | FY 2012       | FY 2013        | FY 2014        |
|--|----------------|----------------|---------------|----------------|---------------|----------------|----------------|
| <b>MANDATORY</b>   |                |                |               |                |               |                |                |
| Falcon Amistad Maintenance Fund, 895178  | 2,556          | 2,959          | 220           | 225            | 225           | 225            | 225            |
| Sale and transmission of electric power, Falcon and Amistad Dams, 892245   | 2,491          | 1,838          | 2,228         | 2,123          | 2,020         | 1,913          | 1,801          |
| Sale of Power and Other Utilities Not Otherwise Classified, 892249   | 265            | 30,000         | 30,000        | 30,000         | 30,000        | 30,000         | 30,000         |
| Sale of Power–Western–Reclamation Fund, 895000.27  | 140,576        | 190,952        | 58,236        | 153,424        | 56,766        | 109,307        | 124,163        |
| <b>Total, Mandatory Receipts</b>   | <b>145,888</b> | <b>225,749</b> | <b>90,684</b> | <b>185,772</b> | <b>89,011</b> | <b>141,445</b> | <b>156,189</b> |
| <b>DISCRETIONARY</b>   |                |                |               |                |               |                |                |
| Offsetting Collections from the recovery of power related expenses – Western – 89X5068.01                              | 308,702        | 403,118        | 349,807       | 314,672        | 393,729       | 326,093        | 319,165        |
| Less Purchase Power and Wheeling expenses  | -308,702       | -403,118       | -349,807      | -314,672       | -393,729      | -326,093       | -319,165       |
| <b>Subtotal, 89X5068.01</b>  | <b>0</b>       | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>       |
| Offsetting Collections from the recovery of annual expenses – Western - 89X5068.91 <sup>a</sup>                        | 0              | 0              | 147,530       | 144,381        | 148,869       | 152,837        | 157,758        |
| Less Operating and Maintenance expenses  | 0              | 0              | -37,038       | -34,173        | -34,447       | -34,153        | -34,563        |
| Less Program Direction expenses  | 0              | 0              | -110,492      | -110,208       | -114,422      | -118,684       | -123,195       |
| <b>Subtotal, 89X5068.91</b>  | <b>0</b>       | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>       |
| Offsetting Collections from the recovery of power related expenses – Falcon Amistad Maintenance – 89X5178 <sup>b</sup> | 0              | 0              | 2,348         | 2,446          | 2,548         | 2,654          | 2,765          |
| Less Operating and Maintenance expenses  | 0              | 0              | -2,348        | -2,446         | -2,548        | -2,654         | -2,765         |
| <b>Subtotal, 89X5178</b>   | <b>0</b>       | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>       |
| <b>Subtotal, Discretionary Receipts</b>  | <b>0</b>       | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>      | <b>0</b>       | <b>0</b>       |
| <b>TOTAL, PROPRIETARY RECEIPTS</b>   | <b>145,888</b> | <b>225,749</b> | <b>90,684</b> | <b>185,772</b> | <b>89,011</b> | <b>141,445</b> | <b>156,189</b> |

<sup>a</sup> The FY 2010 and outyear receipt estimates assume receipts associated with annual expenses of this account will be reclassified from mandatory to discretionary. The FY 2010 Budget Resolution expresses support for this reclassification.

<sup>b</sup> The FY 2010 and outyear receipt estimates assume receipts associated with annual expenses of the Falcon and Amistad Operating and Maintenance account will be reclassified from mandatory to discretionary. The FY 2010 Budget Resolution expresses support for this reclassification.

## Pending Litigation

Pending litigation that may impact Western's FY 2010 Congressional Budget request includes:

- **California Power Exchange Corp., United States Bankruptcy Court, Central District of California, Case No. LA 01-16577-ES.** On March 9, 2001, the California Power Exchange (PX) filed for bankruptcy under Chapter 11 of the Federal Bankruptcy Code. The filing was necessary after the PX had ceased operations on January 31, 2001. The PX could not operate after that date because it was not being paid by Pacific Gas & Electric (PG&E) and Southern California Edison (SCE) for purchases they were making from the PX. Western is owed approximately \$6.7 million by the PX. Western has filed a claim in the case and is being represented by bankruptcy counsel from the Department of Justice (DOJ) in Washington, DC. Final settlement of the bankruptcy is complicated due to the interrelationship of this case and many others stemming from the dysfunctional California electricity markets in 2000 and 2001. In order to pay its debts, the PX must ultimately be able to collect significant sums from PG&E and SCE. PG&E was itself in bankruptcy and SCE was in default for most of its obligations. The resolution of PG&E's bankruptcy has assisted in final resolution of the PX's bankruptcy. PG&E has escrowed significant funds to cover its obligations to the PX, as has SCE.

The PX has a court approved Reorganization Plan. Much of the plan is dependent on certain approvals being made by FERC. Among other issues, FERC must address: the allocation of defaults among participants in the PX markets, the disposition of collateral, the calculation of "refunds" in the "Refund Case" (See FERC Docket Nos. EL00-95-000, et al., below), and the winding up of litigation related to the PX markets.

Additionally, to wind up its FERC related activities, the Reorganized PX requires funding. In July 2002, the PX made a Section 205 application to FERC for approval of a rate schedule that would permit the PX to charge its participants for their appropriate share of the costs of winding up its operations. FERC approved the rate schedule in August 2002. In July 2004, the Court of Appeals for the DC Circuit struck down the rate, concluding it violated the "filed rate doctrine" and amounted to impermissible retroactive rate making. Settlement proceedings have successfully reached new rates for the PX, with the first settlement filed with FERC on September 1, 2005.

Additionally, as part of the rate settlement discussed above, California State Court proceedings related to "inverse condemnation" of the "block forward" contracts that were seized by former California Governor Davis immediately following the PX's initial defaults in January 2001 were dismissed. Similarly, litigation against former directors and officers for allegations of malfeasance at the time of the PX's demise in 2001 was dismissed in exchange for cash settlements with the "Director & Officer" insurers. The PX made filings in the appropriate fora to effectuate the settlement.

By its terms, the settlement discussed above is effective through December 31, 2007. In view of the current status of the refund proceeding (See also FERC Docket No. ER00-95, et al., below), it was very unlikely that PX's work will be concluded before the expiration of the settlement on December 31, 2007. The PX Board of Directors directed PX's management to make plans to extend the effective period of the settlement. There was no opposition to the extension of the settlement. On

May 4, 2007, the PX filed the request for the extension in FERC Docket No. ER07-861-000. The filing extends the prior settlement until December 31, 2010. FERC issued a letter order on July 2, 2007.

On November 16, 2007, Enron Power Marketing, Inc. (EPMI) filed an interpleader action in United States Bankruptcy Court for the Southern District of New York asking for resolution of rights the PX and PX participants, including Western, may have in \$17.5 million that results from a general unsecured claim the PX filed in the EPMI bankruptcy proceeding. A hearing is set for January 10, 2008.

- ***Quechan Indian Tribe vs. United States, United States District Court, Southern District of California, Docket No. 02 CV 01096 JH (AJB)***. On June 7, 2002, the Quechan Indian Tribe filed suit in Federal District Court in its own capacity, and as *parens patriae* on behalf of its members, seeking declaratory and injunctive relief and \$9.4 million in damages relating to the alleged impact to cultural sites that occurred within the Tribe's Fort Yuma Reservation located in Imperial County, California. The causes of action against Western are for money damages for injury or loss of property caused by the alleged negligent or wrongful acts or omissions of federal employees while acting within the scope of their office or employment when doing work on a project known as the Gila-Knob Pole 161-Kv Wood Pole Rehabilitation Project. The United States filed an Answer on October 22, 2002.

In July 2003, the Parties applied for and were granted a stay of the present litigation pending a ruling by the United States Supreme Court in a case that addressed whether the Tribe ceded ownership of its reservation in 1893. *See Arizona v. California*, 530 U.S. 392 (2000). A ruling by the Supreme Court could have resulted in the Tribe losing its interest in its Reservation, which would impact nearly all of the Tribe's claims in the present lawsuit. However, the parties settled the Supreme Court litigation. The Solicitor General's office requested comments from Western on the terms of the Supreme Court Settlement and Western formally objected to the language permitting the Tribe to retain all arguments in this case.

Following the Supreme Court settlement, the United States and the Tribe negotiated, and the Court approved, a Case Management Order that sets forth the following four phased approach: (Phase 1) fact discovery (which was completed on June 10, 2005); (Phase 2) summary judgment motions; (Phase 3) expert discovery; and (Phase 4) pretrial proceedings.

The Parties are now in Phase 2. The Parties filed Cross Motions for Summary Judgment on September 2, 2005, Responsive Briefs on November 4, 2005, and Reply Briefs on December 9, 2005. Oral argument was held on January 11, 2006, and we are still waiting on a ruling from the U.S. District Court Judge.

- ***California Independent System Operator Corp., Docket ER01-313-000 and Pacific Gas and Electric Company, Docket No. ER01-424-000 (consolidated), United States Court of Appeals for the District of Columbia, 04-1090, and Pacific Gas and Electric Company v. United States, United States Court of Federal Claims, 07-352-C***. In docket ER01-313-000, the California Independent System Operator Corporation (CAISO), tendered for filing an unbundled Grid Management Charge (GMC) on November 1, 2000. The purpose of the GMC is to allow the CAISO

to recover its administrative and operating costs. The CAISO requested that the unbundled GMC be made effective as of January 1, 2001.

In docket ER01-424-000, PG&E tendered for filing a GMC Pass-Through Tariff on November 13, 2000. PG&E alleges that the filing seeks to recover the costs proposed in the CAISO's GMC filing in Docket No. ER01-313-000. PG&E further alleges that it is a new service. PG&E requests an effective date of January 1, 2001, or the date the Commission makes effective the CAISO's filing. In the alternative, PG&E argued it was allowed to modify the existing contracts to pass through the GMC. Western argued that PG&E was not offering a new service for its existing contract customers. Western also argued the GMC was unjust and unreasonable. Finally, Western argued the filing was insufficient.

On December 29, 2000, the Commission consolidated ER01-313-000 with ER01-424-000, accepted the matter for filing and set the matter for evidentiary hearing. Western filed its answering testimony on August 17, 2001. Western filed a motion asking for summary judgment on the issue of whether PG&E could modify Western's existing contracts. The Presiding Judge granted Western's motion. As a result, the only issue at hearing was whether the charges were new services. From November 13, 2001 – December 20, 2001, the Presiding Law Judge heard the case. The Presiding Judge issued her initial decision on May 10, 2002.

The Initial Decision found that the charges for Control Area Service (CAS bucket) constituted a new service to PG&E's Control Area Agreement (CAA) customers, i.e. existing contract holders. The Initial Decision also found that charges for Market Operations (MO bucket) was not a new service for CAAs. Therefore, the Presiding ALJ ordered PG&E to make a compliance filing to reflect the existing charges for market operations under each CAA and those additional ISO MO charges. However, in the case of Western, the Presiding Judge acknowledged her earlier ruling on Summary Judgment that PG&E had not fulfilled its limited Section 205 rights under 2948A.

Western filed a brief on exceptions on June 10, 2002, asserting that the Initial Decision errs in finding that the CAS bucket constitutes a new service and violates Commission precedent. On May 2, 2003, the Commission issued an opinion affirming the Presiding Judge's opinion that the CAS pass through was a new service and reversing the Presiding Judge's finding that the MO component of the GMC was not a new service. On June 2, 2003, Western filed a request for rehearing. On January 23, 2004, the Commission issued an order denying Western's, and other parties', Requests for Rehearing. Western then requested that the Department of Justice seek judicial review of FERC's decision.

The Department of Justice filed a Petition for Review on March 22, 2004. In the meantime, numerous parties filed requests for rehearing on the Commission's Opinion 463-A, 106 FERC ¶61,032 (2004). As a result of these continued administrative proceedings, FERC Staff moved to stay the Circuit Court appeal proceedings and the Circuit Court granted that motion. On January 29, 2007, the Commission issued its final administrative order. As a result, the parties to the D.C. Circuit proceedings moved to lift the stay and negotiated a joint briefing schedule. The Department of Justice recommended Western participate in a joint brief with the other appellants and Western concurred in that recommendation. Final briefs are due on January 18, 2008 and the Court has not yet set a date for oral argument.

In the meantime, PG&E has sent invoices to Western for the GMC charges. Western, however, was unable to verify PG&E's loads on which it was basing the GMC charge. Therefore, Western was unable to pay the invoices. Also, Western's obligation to pay the invoice was dependent on the outcome of Western's D.C. Circuit Court appeal. On December 1, 2005, Western received a revised GMC bill from PG&E. On April 13, 2006, PG&E sent Western a Claim for Damages under the Contract Disputes Act (CDA) seeking \$5.5 million for the remaining unpaid balance PG&E alleges Western owes for GMC. On June 12, 2006, Western sent PG&E a letter denying its claim. PG&E had 90 days from the date it received Western's denial to provide notice it intended to pursue an appeal with the agency board of contract appeals. Instead of appealing to the agency board of contract appeals, PG&E had the option of bringing an action directly in the United States Court of Federal Claims within 12 months of the date it received Western's decision. PG&E filed such a claim in the Court of Federal Claims on June 5, 2007 in 07-352-C. Western filed an Answer and Counterclaim on September 5, 2007. PG&E filed an Answer on September 26, 2007. The Parties filed a Joint Preliminary Status Report indicating the case should be stayed pending the D.C. Circuit Court appeal, described above. On November 29, 2007, the Court held a scheduling conference and granted the parties request to stay the case.

#### Federal Energy Regulatory Commission Litigation

- ***Calpine Construction Finance Co., FERC Docket ER05-912-000.*** On December 21, 2005, Calpine Corporation and numerous affiliates filed a Chapter 11 Reorganization with the Federal Bankruptcy Court in the Southern District of New York. Western has numerous contracts with Calpine and is closely monitoring the proceedings. In a typical month, Calpine pays Western over \$1 million for transmission service under Western's Open Access Transmission Tariff. Western and Calpine executed an assurance agreement in May 2006. Under this agreement, Calpine will prepay Western 30 days in advance for transactions. Western bills Calpine 20 days in advance. Western filed its proofs of claim in April 2006 for more than \$1 million for certain pre-petition transactions. On June 20, 2007, Calpine filed a plan of reorganization. The Department of Justice, in conjunction with Western, is looking over the plan.
- ***San Diego Gas & Electric Company Investigation of Practices of the California Independent System Operator and California Power Exchange, California Electricity Oversight Board, et al., Docket Nos. EL00-95-000, et al.*** In the fall of 2000, the Commission began an investigation under Section 206 of the Federal Power Act into the dysfunctional California markets. The Commission has issued a series of orders addressing both price mitigation and potential refunds. The Commission eventually (June 19, 2001) ordered "hard" price caps in the California and WSCC spot markets. The Commission also made a finding that prices charged in the California markets were unjust and unreasonable. Important to Western was a Commission decision to assert jurisdiction over non-public utilities with regard to refunds.

FERC issued rehearing orders on December 19, 2001, largely upholding the earlier Commission orders in the case, including jurisdiction over non-public utilities. Hearings were first held in March 2002 to calculate the appropriate mitigated market clearing prices and scope of refunds. Subsequent hearings on Issues II and III ("who owes what to whom") were held in August 2002. The Presiding ALJ did preliminarily decide that Western's CRSP "exchange transactions" with the ISO were not subject to refund.

The Presiding ALJ issued his Initial Decision (ID) in December 2002. At approximately the same time, FERC responded to an order of the Ninth Circuit Court of Appeals in August 2002 that found that FERC had not developed an adequate record with respect to the extent of manipulation. FERC allowed an additional discovery period of 100 days. Western responded to over 140 data requests from the “California Parties” and organized a document repository at SNR. In March 2003, the Commission issued an order largely upholding the ID. Following the March 2003 Order, the Commission initiated proceedings to resolve outstanding issues relating to gas prices. These proceedings have continued and Western has worked in particular with the City of Redding regarding the filing of a Fuel Cost Allowance (FCA) claim on behalf of Redding. Notice of the FCA claim was filed with the Commission on April 1, 2005 and also submitted to the auditor, Ernst & Young, at that time. On August 30, 2005, Western submitted Redding’s final FCA to the ISO.

In September 2004, the Ninth Circuit ruled against the Commission and found that the Commission did in fact have authority to order refunds for the time period prior to October 2, 2000, based on the theory that certain sellers with market-based rate authority had failed to file required reports of sales with the Commission. The Commission has not yet issued any orders in response to the Ninth Circuit opinion.

The ISO and PX have generally finished conducting “reruns” of the markets for the refund period in order to calculate refunds in accordance with the Commission’s current rulings and formulae in the case. In December 2003, SNR and Montrose began receiving the first sets of rerun data for review and possible dispute proceedings. Latest indications from the ISO show it may still be many months before completion, probably not until sometime in 2008. The Commission has attempted to speed up the process in response to Congressional direction in the 2005 Energy Policy Act. The Act called on FERC to attempt to resolve these proceedings by the end of 2005 and to provide Congress a progress report at that time. On August 8, 2005, the Commission issued an order, in part to amend the procedural schedules, in order to meet these new time requirements. That order also set procedures for the submission of revenue shortfall filings. Western evaluated the potential of making cost filings, but under current Commission directives, found that it was not advantageous to do so. The August 8 Order also included provisions for entities to file “final” disputes regarding ISO and PX reruns. Western also evaluated that possibility, but did not file any further disputes. The Commission continues to hear matters related to the cost filings and other offsets.

On September 6, 2005, the Ninth Circuit ruled (in *Bonneville v. FERC*) that FERC did not have the authority under the Federal Power Act to order refunds from governmental sellers, such as Western, in these proceedings. The ruling was appealed (unsuccessfully) back to the Ninth Circuit and is now on final appeal to the United States Supreme Court. The Supreme Court should indicate by December 2007 whether it will hear the appeal. Until such time as the ruling is final and FERC takes action in accordance with the ruling, Western may still need to participate in continued proceeding in order to preserve procedural rights.

On December 5 and 29, 2005, Western received claims (under the Contract Disputes Act or CDA) from the California Parties in the approximate amount of \$30 million. This action was in response to the Ninth Circuit’s rejection of FERC’s jurisdiction over Western, BPA and other governmental sellers. Because of their setback at the Ninth Circuit, the California Parties have turned to the filing of administrative contractual claims against Western, BPA (under the CDA) and the other



governmental sellers (as administrative claims under California State law). The California Parties rely on a portion of the Ninth Circuit's opinion where the Court, while rejecting FERC's authority to order refunds under the FPA, raises the possibility of contract-based actions. The Ninth Circuit cited to FERC and Federal court proceedings to support this possibility. Western requested further information to support the claims. The California Parties refused to provide such information and on March 23, 2006, the claims were denied. In March 2007, the California Parties followed up these administrative claims with law suits in the COFC (See Pacific Gas & Electric Co., Southern California Edison Co., and California Electricity Oversight Board v. US; San Diego Gas & Electric Company v. US; and The People of the State of California, Ex Rel. Edmund G. Brown, Jr., Attorney General of the State of California and the Department of Water Resources by and through its California Energy Resources Scheduling Division v. US, under Federal Courts, above).

In August 2006, the Ninth Circuit issued an opinion in the "Scope Cases" finding that FERC did generally have authority to order refunds for the "Summer 2000" period and for exchange transaction; however, the Ninth Circuit did find that "CERS transactions (bi-lateral sales made to the California Department of Water Resource's - California Energy Resources Scheduling Division)" were not subject to refund. These changes to the scope of the case arguably increase Western's overall refund liability by as much as \$6 million, although those numbers have not yet been calculated by FERC. Following this decision, the Ninth Circuit also initiated a new settlement process in these proceedings, with the first settlement conference held in San Francisco on September 19, 2006. A further meeting was held in Pasadena in November between the various municipal sellers (including Western and BPA) and the mediators.

While the Ninth Circuit/Supreme Court proceedings have developed, Western has still engaged in settlement discussions with the California Parties. In February 2007, Western made a counteroffer to the California Parties, who replied with a further counter-offer. Western and Bonneville also met with the California Parties in San Francisco on March 1, 2007, for the purposes of settlement. Settlement discussions have now waned in the face of the COFC filings referred to above; however, the Ninth Circuit did hold another status conference in San Francisco in October 2007.

On April 2, 2007, the California Parties filed a motion with FERC seeking certain procedures to be put in place following the issuance of the Ninth Circuit mandate in Bonneville. The California Parties essentially ask FERC to continue the process of having the ISO rerun the markets for all participants, including governmental entities, which were effectively removed from the case by Bonneville. On April 17, 2007, Western and BPA answered and opposed the California Parties' motion. The California Parties answered that answer on April 30, 2007. Western and BPA further answered on May 14, 2007. Various other parties have weighed in on the issue of the FERC procedures to be implemented following the mandate, and Western and BPA responded to the motion of Pinnacle West on May 18, 2007. During this period, Western also filed comments on April 19, 2007, opposing the ISO's authority for making certain interest adjustments during the Refund Period and also on that same day opted out of the El Paso Marketing LP settlement. On October 19, 2007, FERC took action on the *Bonneville* mandate and issued an order confirming that governmental entities' sales are not subject to refund and ordering that collateral and receivables be paid out to the governmental entities, including Western. The order also, importantly, stated that FERC had not "reset" prices in the ISO and PX markets. This finding was important because it severely undercut arguments the California Parties were making in the contract claims litigation,

including those claims against BPA and Western in the COFC. The California Parties immediately sought clarification of FERC's order and on November 19, 2007, FERC reversed the October 19, 2007, order and said it had misspoken on the issue of "resetting" of the markets and now said that it had, in fact, reset the markets. Western, BPA and the other governmental entities sought rehearing of FERC's November 19, 2007, order. Additionally, of interest, on December 10, 2007, the Supreme Court denied certiorari of PG&E's request to have the Ninth Circuit's *Bonneville* opinion overturned.

# **Bonneville Power Administration**

# **Bonneville Power Administration**

## **Bonneville Power Administration**

### **Proposed Appropriations Language**

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for *the Leaburg Fish Sorter, the Okanogan Basin Locally Adapted Steelhead Supplementation Program, the Crystal Springs Hatchery Facilities, and, in addition, for official reception and representation expenses in an amount not to exceed \$1,500.*

During fiscal year [2009]2010, no new direct loan obligations may be made.

### ***Explanation of Changes***

Proposed FY 2010 appropriation language provides expenditure authority for construction of facilities as required by the Pacific Northwest Electric Power Planning and Conservation Act for new fish and wildlife facilities of \$1 million and an economic life greater than 15 years (PL 96-501, sec. 4(h)(10)(B)).

The proposed appropriations language restricts new direct loans in FY 2010 as in FY 2009.



**Bonneville Power Administration**

**Overview**

**Summary by Program**

|   | (accrued expenditures in thousands of dollars) |           |           |
|---|--|-----------|-----------|
|   | FY 2008  | FY 2009   | FY 2010   |
| Capital Investments                                     |  |           |           |
| Power Services  | 139,602  | 240,650   | 312,900   |
| Transmission Services                                   | 129,205  | 322,379   | 490,028   |
| Capital Equipment & Bond Premium                        | 21,526   | 29,916    | 42,638    |
| Total, Capital Investments                              | 290,333  | 592,945   | 845,566   |
| Accrued expenditures will require budget obligations of | 290,333  | 592,945   | 845,566   |
| Operating Expenses                                      | 2,331,246                                      | 2,891,259 | 3,029,504 |
| Projects Funded in Advance                              | 98,682   | 99,428    | 105,164   |
| Capital Transfers (cash)                                | 555,439  | 275,724   | 419,996   |
| BPA Net Outlays   | (372,000)                                      | (10,000)  | (10,000)  |
| BPA Staffing (FTE)                                      | 2,924  | 3,064     | 3,061     |

**Outyear Summary**

|   | (accrued expenditures in thousands of dollars) |           |           |           |
|---|--|-----------|-----------|-----------|
|   | FY 2011  | FY 2012   | FY 2013   | FY 2014   |
| CAPITAL INVESTMENTS                                     |  |           |           |           |
| Power Services  | 318,900  | 317,900   | 329,900   | 331,900   |
| Transmission Services                                   | 559,255  | 475,747   | 450,867   | 439,497   |
| Capital Equipment & Bond Premium                        | 51,413   | 51,620    | 51,751    | 52,209    |
| Total, Capital Investments                              | 929,568  | 845,267   | 832,518   | 823,606   |
| Accrued expenditures will require budget obligations of | 929,568  | 845,267   | 832,518   | 823,606   |
| Operating Expenses                                      | 3,302,804                                      | 3,328,453 | 3,500,221 | 3,545,349 |
| Projects Funded in Advance                              | 117,286  | 98,904    | 87,742    | 89,070    |
| Capital Transfers (cash)                                | 422,381  | 318,641   | 199,105   | 204,020   |
| BPA Net Outlays   | (10,000)                                       | (10,000)  | (10,000)  | (10,000)  |
| BPA Staffing (FTE)                                      | 3,060  | 3,060     | 3,060     | 3,060     |

## Overview

### **The accompanying notes are an integral part of this table.**

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Estimated Net Outlays could change due to changing market conditions, streamflow variability, and continuing restructuring of the electric industry.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also assumed.

The cumulative amount of actual advance amortization payments as of the end of FY 2008 is \$2,302 million.

FTE outyear data are estimates and may change.



## **Preface**

The Bonneville Power Administration (Bonneville or BPA) serves the Pacific Northwest through operating an extensive electricity transmission system and marketing wholesale electrical power at cost from Federal dams and other non-Federal generating units including some wind energy generation facilities.

The organization of Bonneville's FY 2010 budget reflects Bonneville's business services basis for utility enterprise activities. Bonneville's two major areas of activity on a consolidated budget and accounting basis include Power Services (PS) and Transmission Services (TS) with administrative costs included. The PS includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange Program (REP), Associated Projects O&M Costs, and Northwest Power and Conservation Council (Planning Council, Council).

## **Mission**

The strategic mission of Bonneville as a public service organization is to create and deliver the best value for its customers and constituents as it acts in concert with others to assure the Pacific Northwest:

- An adequate, efficient, economical and reliable power supply;
- A transmission system that is adequate to the task of integrating and transmitting power from Federal and non-Federal generating units, providing service to BPA's customers, providing interregional interconnections, and maintaining electrical reliability and stability; and
- Mitigation of the Federal Columbia River Power System (FCRPS) impacts on fish and wildlife.

As BPA shapes programs and plans spending levels, it is driven by its strategic vision that encompasses the following four pillars:

- High reliability;
- Low rates consistent with sound business principles;
- Responsible environmental stewardship; and
- Accountability to the region.

Bonneville is committed to cost-based rates and public and regional preference in its marketing of power. Bonneville will set its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the Federal investment in the system.

## **Benefits**

Bonneville provides electric power (about one third of the electricity consumed in the region), transmission (about three-fourths of the region's high voltage transmission capacity), and energy efficiency throughout the Pacific Northwest, a 300,000 square mile service area that includes a population of about 12.1 million people. Bonneville markets the electric power produced from 31 operating Federal hydro projects in the Pacific Northwest owned by the U.S. Army Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Reclamation), and also acquires non-Federal power, including the power from the Columbia Generating Station (CGS), to meet the needs of its customer utilities. Bonneville owns and operates over 15,000 circuit miles of transmission

lines, 259 substations and associated power system control and communications facilities over which this electric power is delivered. Bonneville also leases certain transmission facilities from others on a capitalized basis. Bonneville also supports the protection and enhancement of fish and wildlife, and provides leadership in conservation and renewables development, as part of its efforts to preserve and balance the economic and environmental benefits of the FCRPS.

Bonneville’s strategic direction establishes the agency’s most important long-term objectives and the actions that will help it manage to these objectives. The strategic direction is advanced by BPA consistent with its three core values: trustworthy stewardship of the FCRPS, collaborative relationships, and operational excellence.

**American Recovery and Reinvestment Act of 2009 (ARRA)**

The American Recovery and Reinvestment Act of 2009, Section 401, provides BPA a new increment of Treasury borrowing authority under the Federal Columbia River Transmission System Act (Transmission System Act) in addition to its existing authority. This new increment of Treasury borrowing authority gives BPA the certainty of sufficient access to capital to proceed with planned new projects and ensures that existing capital projects will be able to proceed as planned. BPA is committed to assuring that BPA’s actions contribute to and support the Administration’s goals under the ARRA. See the Department of Energy (DOE) Recovery website (<http://www.energy.gov/recovery/index.htm>) as a source for up to date information.

**Strategic Themes, Goals and the Secretary’s Initiatives**

A new strategic plan has not yet been established and approved by the Secretary of Energy. The Secretary has established major priorities and initiatives.

The following chart aligns the current Strategic Plan with the Secretary’s priorities:

| Strategic Theme    | Strategic Goal Title     | Secretary’s Priorities | GPRPA Unit Program Number | GPRPA Unit Program Title        | Office |
|--------------------|--------------------------|------------------------|---------------------------|---------------------------------|--------|
| 1. Energy Security | 3. Energy Infrastructure | Economic Prosperity    | 18                        | Bonneville Power Administration | BPA    |

**Contribution to the Secretary’s Priorities**

DOE’s five Secretarial priorities are Science and Discovery, Clean Energy, Economic Prosperity, National Security and Legacy, and Lower Green House Gas Emissions. Bonneville’s Government and Results Performance Act (GRPA) Unit Program Goal, to Market and Deliver Federal Power, supports DOE’s Economic Prosperity priority.

GRPA Unit Program Goal 01.03.18.00: Bonneville Power Administration. Market and Deliver Federal Power: Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Corporation's (NERC) Control Compliance Ratings, meeting planned repayment targets, and achieving targeted hydropower generation efficiency performance.

## **Contribution to GRPA Unit Program Goal 01.03.18.00: BPA. Market and Deliver Federal Power**

Bonneville contributes to this strategic goal through its strategic vision to advance a Northwest power system that is a national leader in providing reliability, low rates consistent with sound business principles, environmental stewardship, and accountability to the region. For FY 2009, BPA is continuing its emphasis on performance with 29 Key Agency Targets designed to measure progress toward achieving its business objectives. These objectives are focused within four interrelated perspectives: stakeholder value, financial performance, internal operations, and people and culture. Bonneville's infrastructure investments in the Pacific Northwest to meet power and transmission needs continue to support DOE's strategic goal on energy infrastructure.

Bonneville's strategic direction has helped to identify a number of key long-term issues. These issues center on providing Bonneville customers with certainty over load service obligations and enabling customers and the market to respond with the necessary electric industry infrastructure investments. Other key strategic interests include general market stability, BPA risk management, and long-term assurance of funding to repay the U.S. Treasury (Treasury) investment in infrastructure.

### **Basic and Applied R&D Coordination**

BPA's Technology and Innovation office leads the long-term strategy development and management for research, development, demonstration and deployment of new technology by BPA. BPA works with its customer utilities to identify a shared research and development agenda that delivers value to the Pacific Northwest electric system. BPA is continuing to forge partnerships with utilities, universities, and collaborative research organizations within the Pacific Northwest and throughout North America.

BPA uses technology road-mapping as a form of technology planning to inform and guide its research and development agenda. It has created technology roadmaps for physical security, energy efficiency, renewable energy, and transmission operations, construction, and design, with a strong current focus on wind integration. Future roadmaps will address climate change and hydro-generation.

### **Climate Change Technology Program Benefits**

BPA established in 2008 its first strategic business objective specifically addressing climate change: "BPA encourages and implements integrated, cost-effective policies which lead to greenhouse gas emission reductions". In support of this target, BPA developed a Climate Change Initial Roadmap. The roadmap describes BPA's existing efforts and will serve as a baseline for discussions with the region on how best to reflect climate change concerns in BPA business practices and initiatives. BPA's baseline work includes efforts to integrate greenhouse gas considerations into agency decision making, complete a greenhouse gas inventory, and to support energy efficiency, renewable development and climate-friendly business practices.

Internally, BPA will focus on the core staff competencies necessary to prepare the agency for the physical, economic and policy changes that stem from climate change developments. Externally, BPA is examining its regional role in a number of specific areas such as the interconnection of additional wind resources, the development of smart grid, and climate change technology innovation.

## Annual Performance Results and Targets

| FY 2005 Results  | FY 2006 Results  | FY 2007 Results  | FY 2008 Results  | FY 2009 Targets  | FY 2010 Targets  |
|--|--|--|--|--|--|
| Infrastructure GRPA Unit Program Goal 1.3.1: Bonneville Power Administration                               |  |  |  |  |  |
| System Reliability<br>Performance: Met Goal<br>Actual:<br>CPS1: 196.6%<br>CPS2: 93.9%                      | System Reliability<br>Performance: Met Goal<br>Actual:<br>CPS1: 193.3%<br>CPS2: 96.1%                      | System Reliability<br>Performance: Met Goal<br>Actual:<br>CPS1: 193.9%<br>CPS2: 96.01%   | System Reliability<br>Performance: Met Goal<br>Actual:<br>CPS1: 191.4%<br>CPS2: 95.0%  | System Reliability<br>Performance: Attain average<br>North American Reliability<br>Corporation (NERC)<br>compliance ratings for the<br>following NERC Control<br>Performance Standards (CPS)<br>measuring the balance<br>between power generation and<br>load, including support for<br>system frequency: (1) CPS1,<br>which measures<br>generation/load balance on<br>one-minute intervals (rating ><br>or =100); and (2) CPS2, which<br>limits any imbalance<br>magnitude to acceptable levels<br>(rating > or =90). | System Reliability<br>Performance: Attain average<br>North American Reliability<br>Corporation (NERC)<br>compliance ratings for the<br>following NERC Control<br>Performance Standards (CPS)<br>measuring the balance<br>between power generation and<br>load, including support for<br>system frequency: (1) CPS1,<br>which measures<br>generation/load balance on<br>one-minute intervals (rating ><br>or =100); and (2) CPS2, which<br>limits any imbalance<br>magnitude to acceptable levels<br>(rating > or =90). |
| Repayment of Federal Power<br>Investment Performance:<br>Met Goal (\$303 million)<br>Actual: \$618 million | Repayment of Federal Power<br>Investment Performance: Met<br>Goal (\$304 million)<br>Actual: \$646 million | Repayment of Federal Power<br>Investment Performance:<br>Met Goal (\$387 million)<br>Actual: \$618 million                                     | Repayment of Federal Power<br>Investment Performance: Met<br>Goal (\$409 million)<br>Actual: \$555 million                                       | Repayment of Federal Power<br>Investment Performance:<br>Meet planned annual<br>repayment of principal on<br>Federal power investments.  | Repayment of Federal Power<br>Investment Performance:<br>Meet planned annual<br>repayment of principal on<br>Federal power investments.  |
| <u>Hydropower Generation</u><br>Efficiency Performance: Met<br>Goal (97%)<br>Actual: 100% (EOY)            | <u>Hydropower Generation</u><br>Efficiency Performance: Met<br>Goal (97%)<br>Actual: 100% (EOY)            | <u>Hydropower Generation</u><br>Efficiency Performance: Met<br>Goal (97%)<br>Actual: 99.6% (cumulative<br>for the four quarters of FY<br>2007) | <u>Hydropower Generation</u><br>Efficiency Performance: Met<br>Goal (97.5%)<br>Actual: 98.8% (cumulative<br>for the four quarters of FY<br>2008. | <u>Hydropower Generation</u><br>Efficiency Performance:<br>Achieve > or = 97.5% Heavy-<br>Load-Hour Availability<br>(HLHA) through efficient<br>performance of Federal hydro-<br>system processes and assets,<br>including joint efforts of BPA,<br>Army Corps of Engineers, and<br>Bureau of Reclamation.<br>HLHA is actual machine<br>capacity available during<br>heavy-load hours (0700-2200<br>Monday-Saturday), divided by<br>planned available capacity<br>during heavy-load hours.                             | <u>Hydropower Generation</u><br>Efficiency Performance:<br>Achieve > or = 97.5% Heavy-<br>Load-Hour Availability<br>(HLHA) through efficient<br>performance of Federal hydro-<br>system processes and assets,<br>including joint efforts of BPA,<br>Army Corps of Engineers, and<br>Bureau of Reclamation.<br>HLHA is actual machine<br>capacity available during<br>heavy-load hours (0700-2200<br>Monday-Saturday), divided by<br>planned available capacity<br>during heavy-load hours.                             |

## Annual Outyear Performance Targets

| FY 2011 Targets  | FY 2012 Targets  | FY 2013 Targets  | FY 2014 Targets  |
|--|--|--|--|
| System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.   | System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.   | System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.   | System Reliability Performance: Attain average NERC compliance ratings for the NERC CPS measuring the balance between power generation and load, including support for system frequency.   |
| Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.  | Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.  | Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.  | Repayment of Federal Power Investment Performance: Meet planned annual repayment of principal on Federal power investments.  |
| <u>Hydropower Generation Efficiency Performance: Achieve &gt; or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.</u> | <u>Hydropower Generation Efficiency Performance: Achieve &gt; or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.</u> | <u>Hydropower Generation Efficiency Performance: Achieve &gt; or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.</u> | <u>Hydropower Generation Efficiency Performance: Achieve &gt; or = 97.5% Heavy-Load-Hour Availability (HLHA) through efficient performance of Federal hydro-system processes and assets, including joint efforts of BPA, Army Corps of Engineers, and Bureau of Reclamation. HLHA is actual machine capacity available during heavy-load hours (0700-2200 Monday-Saturday), divided by planned available capacity during heavy-load hours.</u> |

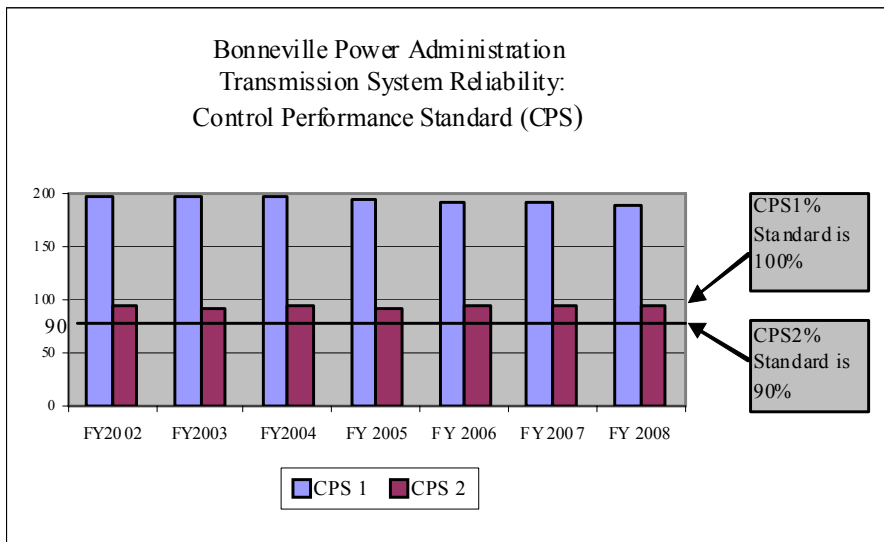
BPA is continuing to assess target measures that achieve the best alignment with its strategic objectives.

## Transmission System Reliability Performance Indicator

This indicator defines a standard of minimum monthly control performance as established by the NERC. Each control area within the system is to operate above minimum monthly control compliance ratings that can be achieved within the bounds of reasonable economic and physical limitations. Each control area is to monitor its control performance continuously against two standards, CPS 1 and 2.

The CPS-1 and CPS-2 performance indicators are industry standards that U.S. and Canadian electric utilities use in conjunction with NERC to help assure the reliability of the North American high voltage distribution system, and thereby to benefit the public. These measures are intended to indicate whether or not electric utility systems are being operated within acceptable operating parameters. Any deviation from the minimum standards must be reported to NERC. CPS-1 helps assure generation and load balance. CPS-2 helps limit the magnitude of any imbalance to acceptable levels, and provides a frequency sensitive evaluation of how well a control area meets its demand requirements.

Transmission System Reliability Target in FY 2010: Attain average NERC compliance ratings for the following NERC CPS measuring the balance between power generation and load, including support for system frequency: (1) CPS-1, which measures generation/load balance on one-minute intervals (rating  $\geq 100$ ); and (2) CPS-2, which limits any imbalance magnitude to acceptable levels (rating  $\geq 90$ ).



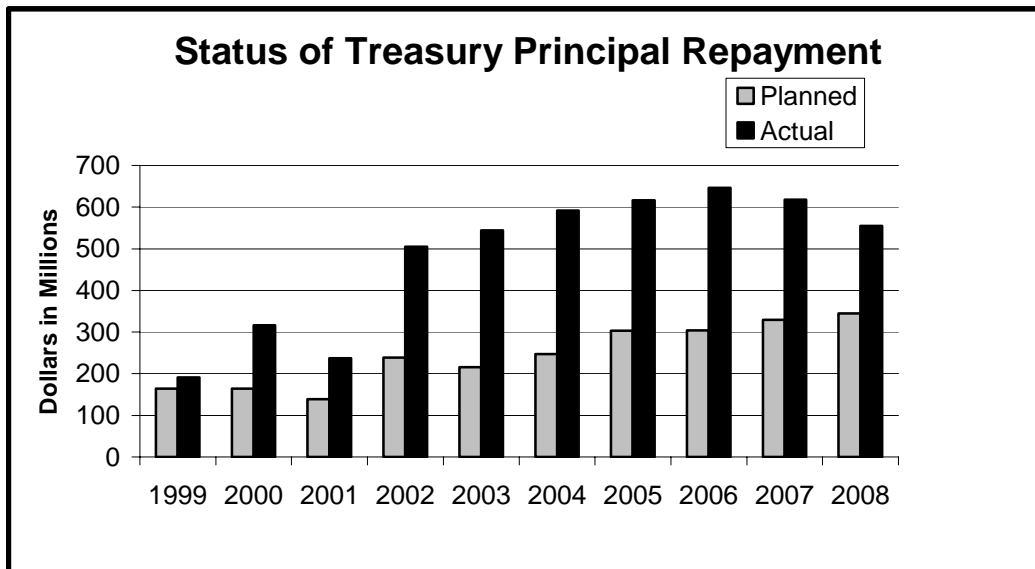
## Repayment of Federal Power Investment Performance Indicator

This indicator measures the variance of actual from planned principal payments to the Treasury.

Treasury payment outyear estimates for planned amortization of principal are based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and advanced amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its Federal Energy Regulatory Commission (FERC)-approved rate filings, resulting in a balance of advance repayment. Bonneville made its full FY 2008 payment of \$963 million to the Treasury comprised of \$555 million in amortization that includes \$211 million in advanced amortization, \$384 million in interest, and \$24 million of unfunded CSRS liabilities and other costs.

Repayment target in FY 2010 – Meet planned repayment of principal on Federal power investments in FY 2010.

The following chart displays principal repayment only.



### Notes:

FYs 1999 -2008 payments include portions of future planned amortization amounts consistent with BPA's capital strategy plan and debt optimization.

Advance amortization due to sale of low-voltage transmission facilities includes \$13 million and \$5.3 million in FYs 2003 and 2006, respectively.

FY 1999 payment includes a \$26 million bond rollover.

For FYs 2007 and 2008, the planned repayment of principal of Federal power investment reflects the amount calculated in the FY 2007 Supplemental Power Rate Case that was scheduled to be the lowest level of amortization satisfying the repayment requirements. This display of planned repayment of principal is consistent with all prior years shown on the table. The FY 2007 Supplemental Power Rate Case also included some amount of advanced repayment of principal to the U.S. Treasury that resulted

from the way BPA’s debt optimization program was designed to repay a relatively small portion of Energy Northwest (EN) debt.

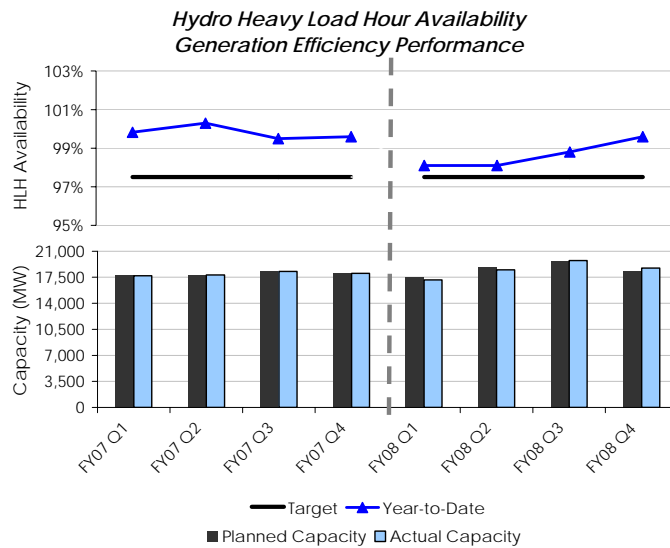
### Hydropower Generation Efficiency Performance Indicator

The fundamental programmatic role of Bonneville within the FCRPS is the marketing of electricity generated at the multi-purpose hydro projects in the Pacific Northwest owned and operated by the Corps and Reclamation. Heavy Load Hour Availability (HLHA) concerns the actual effective performance of the hydro system, reflecting joint work between BPA, the Corps, and Reclamation to improve performance of these generating projects when they are needed most for commercial power operation. It is important from a reliability and economic standpoint to have power generation available when loads are high.

HLHA is the ratio of actual available machine capacity during heavy load hours, divided by planned available capacity during heavy load hours, expressed as a percent.

Actual available machine capacity is measured directly from data supplied from the hydro plants. Planned available capacity is established annually through the Annual Outage planning process, then updated quarterly based on changes in load and water forecasts. The resulting outage plans are stored in BPA’s Outage Database.

Hydropower Generation Efficiency target: Achieve actual efficiency results at or above planned availability target levels for hydropower generation efficiency.



As represented above, FCRPS hydro performance tracked very closely to the HLHA targets for all of FY 2008, meeting the targets in all four quarters.



## **Means and Strategies**

Bonneville provides electric power, transmission, and energy services while supporting the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power in the Pacific Northwest.

BPA's strategic direction and balanced scorecard establish a key objective of meeting electricity availability, adequacy, reliability, and cost-effectiveness standards through power and transmission performance and expansion of the transmission system. The strategic direction and balanced scorecard efforts include a long-term vision of Bonneville's future and an assessment of critical environment factors and key objectives. The vision and assessment help direct Bonneville activities needed to meet its mission over the long-term. The objectives are supported by multi-year targets to lay out the long-term course for achieving the objectives.

To improve system adequacy, reliability and availability, BPA has embarked on major transmission infrastructure projects. The projects shore up the region's transmission system and help deliver the region's future power needs. These projects address multiple challenges, such as the need to relieve a number of congested transmission paths, the pressure to keep up with growing energy demands, and the need to meet FERC's open access policy in support of competitive markets.

For FY 2010 BPA's total transmission capital budget includes a total of \$595 million for main grid additions, upgrades and additions, system replacements, area and customer services, and projects funded in advance (PFIA). These investments, repaid entirely by revenues from BPA's transmission customers or benefiting third parties, are fundamental to BPA's transmission performance.

As part of BPA's strategic direction, Bonneville is also working to improve efficiency and initiate further cost reductions. Bonneville coordinates its power operational activities with the Corps, Reclamation, NERC, regional electric reliability councils, its customers, and other stakeholders to provide the most efficient use of Federal assets. Ongoing work with the Corps and Reclamation is focused on improving the reliability of the FCRPS, increasing its generation efficiency and optimization of hydro facility operation.

In addition, Bonneville is committed to continue funding efforts to recover listed fish and wildlife species in the Columbia Basin under the Endangered Species Act (ESA) and to work closely with the Council, regional fisheries managers, and other Federal agencies to prioritize and manage fish and wildlife program projects.

Bonneville initiatives are impacted by external factors such as continually changing economic and institutional conditions, competitive dynamics, and the continued restructuring of the electric industry.

Private and public sector partners have been and continue to be an important part of BPA's collaborative efforts to promote and foster efficient use of energy. BPA has initiated efforts to explore non-Federal financial participation in its transmission infrastructure projects with transmission customers and others in the region. Additionally, BPA has partnered and assisted with a DOE Wind Power crosscutting initiative to strengthen energy security by adding alternative sources of renewable energy.

Additional activities and products contributing to BPA's long-term achievement of its mission include the Regional Dialogue, an enhanced capital asset management plan, a workforce plan that addresses the long-term staffing needs of the agency, and continuing efforts to increase operational efficiencies. A separate Technology and Innovation office within BPA leads the long-term strategy development and management for research, development, demonstration and deployment of new technology by BPA.

## **Validation and Verification**

To validate and verify program performance, Bonneville conducts various internal and external reviews and audits. Bonneville's programmatic activities are subject to review by Congress, the U.S. Government Accountability Office (GAO), the Department's Inspector General, and other governmental entities. Bonneville accounts and financial statements are reviewed annually by an independent outside auditor. Bonneville has received a clean audit opinion since the mid-1980s and no material weaknesses have been identified in controls over financial reporting.

## **Program Perspectives**

This section provides an introduction to Bonneville operations and statutory authorities followed by a description of ongoing activities.

## **Introduction**

Bonneville is DOE's electric Power Marketing Administration for the FCRPS. Bonneville provides electric power, transmission, and energy efficiency throughout the Pacific Northwest. Created in 1937 to market and transmit the power produced by the Bonneville Dam on the Columbia River, Congress has since directed Bonneville to sell at wholesale the electrical power produced from 31 operating Federal hydro projects and to acquire non-Federal power and conservation resources sufficient to meet the needs of Bonneville's customer utilities. Bonneville also owns and operates over 15,000 miles of high-voltage transmission lines, transmitting power from the dams and other sources on an open-access non-discriminatory basis. Bonneville serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah, and Wyoming.

The Bonneville Project Act of 1937 provided the foundation for Bonneville's statutory utility responsibilities and authorities. In 1974, passage of the Transmission System Act placed Bonneville under provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110). The legislation provided Bonneville with "self-financing" authority and established the Bonneville Fund, a permanent, indefinite appropriation, allowing Bonneville to use its revenues from electric power and transmission ratepayers to directly fund all programs and to sell bonds to the Treasury to finance the region's high-voltage electric transmission system requirements.

In 1980, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) expanded Bonneville's utility obligations and responsibilities to: encourage electric energy conservation; develop renewable energy resources; and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's Treasury borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements. Bonneville received an additional

\$700 million in available Treasury financing through the FY 2003 Appropriations Act to help assure a sufficient level of infrastructure planning. The FY 2003 Appropriations Act increased to \$4.45 billion the aggregate amount of bonds Bonneville was authorized by statute to sell to the Treasury and have outstanding at any one time. The ARRA of 2009 increased the amount of borrowing that BPA conducts under the Transmission System Act by \$3.25 billion to the current authority for \$7.7 billion in bonds outstanding to the Treasury.

Bonneville's program is treated as mandatory and nondiscretionary. As such, Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and is not annually appropriated by Congress. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric power and transmission rates. Bonneville's revenues fluctuate primarily in response to market prices for fuels and stream flow variations in the Columbia River System due to weather conditions and fish recovery needs. Bonneville's permanent statutory borrowing authority authorizes the agency to sell bonds to the Treasury up to a cumulative total of \$7.70 billion outstanding at any one time. Through FY 2008, Bonneville has returned approximately \$24.7 billion to the Treasury for payment of FCRPS O&M and other costs (about \$3.0 billion), interest (about \$12.6 billion), and amortization (about \$9.1 billion) of appropriations and bonds.

In this FY 2010 budget, the term BPA "bonds" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13(a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtedness issued and sold to the U.S. Treasury.

Bonneville and Treasury completed negotiations in April 2008 on an agreement to establish a new, more formal and detailed banking arrangement that meets key aims of each agency. The arrangement also modernizes and formalizes the BPA-Treasury relationship, and aligns practices with current Treasury standards.

The new comprehensive arrangement covers BPA's short- and long-term Federal borrowings and establishes a phased-in approach to a market-based investing program. The arrangement is laid out in two primary agreements: 1) an Obligation Purchase Memorandum of Understanding and 2) an Interest Offset Credit Memorandum of Understanding. The borrowing process will be greatly streamlined and more flexible under the new arrangement and will provide BPA the ability to borrow for Northwest Power Act-related operating expenses in a financial emergency.

The Interest Offset Credit MOU provides for the phase out of the interest offset methodology over a 10-year period and establishes the procedures for the phase in of market-based investing of deposits in the BPA Fund.

The Northwest Power Act also required regional energy plans and programs and created the Pacific Northwest Electric Power and Conservation Planning Council, now commonly called the Northwest Power and Conservation Council.

## **Treasury Payments and Budget Overview:**

Bonneville made its full planned FY 2008 payment of \$963 million to the Treasury, including \$211 million in advanced amortization (as part of BPA's debt optimization program). Total FY 2008 4(h)(10)(C) credits applied to the Treasury payment for fish mitigation were about \$96 million. For FY 2009, Bonneville plans to pay the Treasury \$654 million: \$276 million to repay investment principal, \$340 million for interest, and \$38 million for Associated Project costs and pension and post-retirement benefits. The FY 2010 Treasury payment is currently estimated at \$824 million. FYs 2009-2010 4(h)(10)(C) credits, associated with fish recovery and to be applied toward BPA's Treasury payment, are estimated at \$101 million, and \$111 million, respectively.

Estimates of interest and amortization levels for outyear Treasury payments are based on preliminary Integrated Program Review (IPR) estimates. Bond and Appropriations Interest will continue to be revised based on upcoming capital investments and debt management actions. These estimates may change due to revised capital investment plans and actual Treasury borrowing. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings resulting in a balance of advance repayment. The cumulative amount of advance amortization payments as of the end of FY 2008 is about \$2,302 million. Amortization estimates in this FY 2010 budget include planned amortization in advance of scheduled amortization (due to earlier EN refinancing) in FY 2009 of \$78 million, consistent with power rate case documentation.

Starting in FY 1997, Bonneville began direct funding the Reclamation's Pacific Northwest power O&M costs, and in FY 1999 Bonneville began direct funding Corps Pacific Northwest power O&M costs. Bonneville began direct funding the U.S. Fish and Wildlife Service (USFWS) in FY 2001 to pay for O&M costs of the Lower Snake River Compensation Plan facilities. Bonneville's direct funding arrangement includes a portion of power O&M capital investments. Direct funded capital costs, previously funded through appropriations, are now being paid through BPA borrowing from the Treasury. BPA's total O&M direct funding, including the small capital program, was \$269 million in FY 2008.

This FY 2010 budget proposes Bonneville accrued expenditures of \$3,029 million for operating expenses, \$105 million for Projects Funded in Advance, \$846 million for capital investments, and \$420 million for capital transfers in FY 2010. The budget has been prepared on the basis of Bonneville's major areas of activity, power and transmission. This business structure arose as a response to FERC Orders 888 and 889 requiring separation of public utilities' power and transmission functions. As a Federal agency, Bonneville is not subject to FERC's jurisdiction but chooses to voluntarily comply with FERC open-access policy.

Spending levels in this budget are still subject to change to accommodate competitive dynamics in the region's energy markets, debt optimization strategies, and the continued restructuring of the electric industry.

## **Current Financial Status**

- BPA is striving to enhance its competitive, cost-effective delivery of utility products and services and continued delivery of the public benefits of its operations, while ensuring its ability to make its

payments to the Treasury on time and in full. BPA utilizes a strategic planning process using the balanced scorecard model to align all business units around specific goals and align resources to achieve these goals. From these efforts, results include continued efficiency gains, performance integration improvements, and a high assurance for repayment of Treasury borrowing.

- After several years of sustained effort, BPA has recovered from the financial effects of the 2000-2001 west coast power crisis. Continued cost management efforts have helped BPA regain adequate reserve levels despite mostly below-average water years. These gains are helping BPA continue its efforts to assure full recovery of its costs and to assure long-term financial stability while meeting its overall responsibilities to the Pacific Northwest and the U.S. taxpayer. In 2009, BPA is experiencing low water conditions and the effects of the downturn in the economy. It is expected that BPA will not achieve its modified net revenue target for the year, but the financial reserves BPA has established result in still having a near 100 percent probability that the annual scheduled Treasury repayment will be made in full.
- BPA conducted separate extensive consultation processes with stakeholders on its power and transmission cost structures in anticipation of establishing rates through FY 2009. These processes gave the region the opportunity to examine and provide input on the cost projections that formed the basis for BPA's 2007-2009 power rates and for BPA's 2008-2009 transmission rates.
- BPA aligned its transmission and power rate cases for the FY 2010-2011 rate period and consolidated its public processes on agency wide expenses and capital plans as part of its efforts to increase transparency for customers and stakeholders. The new public process established in 2008, the IPR, included updated power expenses for FY 2009, all expenses for FYs 2010-2011, and capital programs through FY 2013. Costs estimated in the IPR provided the basis for the final Supplemental Proposal for FY 2009 Power rates, which received interim approval from the Federal Energy Regulatory Commission (FERC) on October 31, 2008.
- BPA published in the Federal Register its initial proposal for power and transmission rates for the FY 2010 and 2011 rate period in February 2009 and expects to complete the rate case by August 2009. In spring 2009 BPA will initiate an abbreviated IPR2 to provide regional stakeholders an opportunity to revisit proposed program spending levels for FY 2010-2011 and to discuss risk mitigation and liquidity tools related to the upcoming power rate period.
- Bonneville released its Long-Term Regional Dialogue Policy and Record of Decision (ROD) in July 2007. The Regional Dialogue Policy is focused on defining how Bonneville will market its wholesale power after FY 2011 and to ensure it does so in a way that meets key regional and national energy goals and ensures BPA's ability to meet its Treasury obligations.
- Bonneville and 135 of its Northwest utility customers signed new power sales contracts in 2008 under which power deliveries will begin in October 2011. BPA is currently preparing a Resource Program to identify any gaps in its power supply and suggest types and amounts of resources to fill those gaps, as guided by the Council's Northwest Power Plan. BPA expects to release a draft Resource Program document for public comment in July 2009.

- In the Regional Dialogue Policy, BPA committed to updating its Financial Plan given the significant business and regulatory changes in the last decade. The new Financial Plan, released in July 2008, addresses financial risk metrics, access to capital, variation in annual financial performance, and cost recovery. In addition, the Financial Plan describes how BPA will continue to manage to ensure that it meets its Treasury repayment responsibilities. The new plan is intended to guide the development of new financial policies and practices as they are needed.

### **Infrastructure Investment:**

- Bonneville is planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue to support a competitive wholesale market in the Western Interconnection that encompasses 14 western States, two Canadian provinces and one Mexican State. These efforts will help meet the increasing demand for our service to meet regional greenhouse gas reduction and environmental goals. In support of these goals and as part of the Regional Dialogue implementation, BPA is working with stakeholders to determine its role in the development and use of energy efficiency for the post-2011 period. BPA is continuing to target transmission investments in those areas with reliability needs. BPA conducted a Network Open Season (NOS) in 2008 to ensure the region will have sufficient transmission infrastructure available for customers seeking capacity on BPA's transmission system network. Many of the requests were for delivery of wind-generated electricity.
- Bonneville has identified a number of actions that it is taking or could take over the next several years to provide additional electric system infrastructure relief. These actions include Federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long-term and short-term power purchases, and construction of transmission projects that reinforce the grid and integrate new generation.
- Bonneville considers other strategies to sustain funding for its infrastructure investment requirements as well. These additional strategies include restructuring of EN debt, reserve financing of some amount of transmission investments, and seeking, when feasible, third party financing sources. See the BP-5 Potential Third Party Financing Transparency table in the budget schedules section of this budget. This FY 2010 budget assumes \$15 million of annual reserve financing in FYs 2008-2014 for transmission infrastructure capital that is included in this budget in Projects Funded In Advance.
- As part of its continuing efforts, Bonneville is working to further optimize debt service costs (often referred to as debt optimization elsewhere in this budget). BPA, in collaboration with EN, is pursuing the refinancing of certain EN bonds as part of an ongoing debt optimization program. Through this program, BPA uses the reductions in debt service for its EN bonds to make advance payments on its Federal debt. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

## **Budget Estimates and Planning:**

- This FY 2010 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2009-2014. FY 2008 costs are based on BPA's FY 2008 audited actual financial results.
- Capital funding levels also reflect BPA's Capital Planning Review process and external factors such as the significant changes affecting the West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region and national energy security goals. Capital investment levels in this FY 2010 budget also reflect executive management decisions from BPA's Capital Allocation Board (CAB).
- The FYs 2008-2014 revenue estimates in this budget, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools; for example, upcoming rate adjustment mechanisms, reduced cost estimates, a net revenue risk adjustment, debt management strategies, and/or short-term financial tools to manage net revenues and cash.
- Revenue calculations include depreciation and 4(h)(10)(C) credit assumptions. These credits offset BPA's fish and wildlife program costs allocable to the non-power project purposes of the FCRPS, consistent with the Northwest Power Act. Credits for 4(h)(10)(C) included in this FY 2010 budget are \$96 million for FY 2008, and estimated at \$101 million and \$111 million for FYs 2009 and 2010, respectively. Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses.
- Bonneville's efforts to keep its rates as low as possible are augmented by the implementation of the BPA Appropriations Refinancing Act (part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996) that refinanced Bonneville's outstanding repayment obligations on appropriations. The legislation called for raising low interest rates on historic appropriations to then current Treasury market rates and resetting the principal of unpaid FCRPS appropriations. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to the Treasury. The Treasury then approved the BPA submission in July 1997, thus finalizing the implementation of the BPA Appropriations Refinancing Act refinancings.
- The Residential Exchange Program (REP) was created by the Northwest Power Act to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. In 2000, BPA and the region's six Investor Owned Utilities (IOUs) signed agreements that settled the REP and discontinued implementation of a traditional REP. In May 2007, the U.S. Court of Appeals for the Ninth Circuit held that the REP Settlement Agreements reached with IOUs were not consistent with the Northwest Power Act. The WP-07 Supplemental rate case was conducted in 2008 to respond to the Court's rulings and revise power rates for FY 2009. The 2007 Supplemental Wholesale Power Rate Case Administrator's Final Record of Decision (WP-07 Supplemental ROD), studies and documentation for the WP-07

Supplemental rate case determined the amount by which the Preference customers were overcharged in FYs 2002-2006 as a result of the REP Settlement Agreements, the PF and PF Exchange rates for FY 2009, as well as the magnitude of the initial amount to be returned to the Preference customers in FY 2009 for overcharges during FYs 2002-2006. See the BPA/Power Services- Operating Expense section of this FY 2010 budget for a more complete discussion of REP.

- The Energy Policy Act of 2005 authorized FERC to approve and enforce mandatory Electric Reliability Standards with which users, owners and operators of the bulk power system, including traditionally non-jurisdictional entities, are required to comply. These standards became enforceable on June 18, 2007, and compliance is monitored by the North American Electric Reliability Corporation (NERC) and the regional reliability organizations. Because FERC's authority includes the imposition of financial penalties for violations, BPA may be required to pay fines in the event of BPA violations of FERC-approved reliability standards.
- As part of its strategic staffing efforts and implementation of operational efficiency initiatives, Bonneville has shown a downward trend in Full-Time Employee (FTE) levels since FY 2003. BPA expects its succession planning efforts and continuing efficiency initiatives in targeted areas to level out FTE at slightly above 3,000 in the outyears. BPA continues to pursue various authorities, including the use of Voluntary Separation Incentive Payments (VSIP) and Voluntary Early Retirement Authority (VERA) to help achieve targeted levels. Annual Bonneville FTE projections included in this FY 2010 budget for FYs 2009 and 2010 are 3,064 and 3,061, respectively.

#### **Fish and Wildlife Program Overview:**

- Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS Biological Opinions (BiOps) [including the NOAA Willamette BiOp and the USFWS' 2006 Libby BiOp] with projects implemented under the Council's Fish and Wildlife Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection to meet both BPA's ESA and Northwest Power Act responsibilities.
- Bonneville's Fish and Wildlife program provides for extensive protection, enhancement, and mitigation of Columbia River Basin fish and wildlife adversely affected by the development and operation of Federal hydroelectric projects on the Columbia River and its tributaries from which Bonneville markets power. Bonneville satisfies a major portion of its fish and wildlife responsibilities by funding projects and activities designed to be consistent with the Council's Fish and Wildlife Program (Program) developed pursuant to Section 4(h) of the Northwest Power Act. Through the Program BPA also implements measures addressed to the recovery of fish in the Columbia River and its tributaries, listed as threatened or endangered under the ESA. Bonneville pursues a comprehensive approach to integrate the ESA requirements of the FCRPS BiOps with the broad resource protection, mitigation and enhancement objectives of the Program.
- BPA, the Corps and Reclamation signed historic 10-year agreements, known as the Columbia Basin Fish Accords, with five Columbia Basin Indian tribes and two states in May 2008. These



agreements provide specific hydro, habitat, hatchery and other measures that will address recovery needs and provide measurable biological benefits for fish. The agreements set a course of action for restoration of salmon and steelhead listed for protection under the ESA and other important non-listed populations.

- Included with the budget schedules section of this budget document is the current tabulation of Bonneville's fish and wildlife costs from FY 1996 through 2008.

### **Overview of Detailed Justifications:**

Bonneville's Detailed Justification Summaries, included in this FY 2010 budget, follow present budget requirements for budget line items on the basis of accrued expenditures. Accrued expenditure is the basis of presenting Bonneville's program funding levels in the power and transmission rate making processes and the basis upon which Bonneville managers control their resources to provide products and services. Accrued expenditures relate period costs to period performance. Traditional budget obligation requirements for Bonneville's budget are assumed on the Program and Financing Summary Schedule prepared in accordance with OMB Circular A-11.

The organization of BPA's FY 2010 budget and these performance summaries reflect Bonneville's business services basis for utility enterprise activities. Bonneville's major areas of activity on a consolidated budget and accounting basis include power and transmission with administrative costs included. PS includes line items for Fish and Wildlife, Conservation and Energy Efficiency, REP, Associated Projects O&M Costs, and the Council. Environmental activities are shown in the relevant power and transmission services, as are reimbursable costs. Bonneville's interest expenses, pension and post-retirement benefits, and capital transfers to the Treasury are shown by program.

The first section of performance summaries, Capital Investments, includes accrued expenditures for investments in electric utility and general plant associated with the FCRPS generation and transmission services, conservation and energy efficiency services, fish and wildlife, and capital equipment. These capital investments will require budget obligations and use of existing borrowing authority of \$846 million in FY 2010.

The near-term forecast capital funding levels have undergone an extensive internal review as a result of BPA's Capital Planning Review process and its associated capital asset management strategy. These capital reviews encompass project cost management initiatives, capital investment assessments, and categorization of capital projects to be funded based on risk and other factors. Consistent with BPA's near-term capital funding review process and BPA's standard operating budget process, this FY 2010 budget includes updated capital funding levels for FY 2009. Utilizing this review process helps Bonneville in its efforts to compete in the deregulated wholesale energy market. Bonneville will continue to work with the Corps and Reclamation to optimize the best mix of projects.

In addition to its extensive internal management assessment of capital investments, Bonneville has developed and implemented an associated external capital investment review process that provides significant benefits to Bonneville. The combined internal and external processes add value by both improving direction on what the FCRPS invests in (tying investments more closely to agency strategy) and by improving how those investments are made (better analysis and review of capital investments

and their alternatives). BPA will continue its efforts to refine and further implement its capital investment review process to improve the value provided.

Bonneville's second section of the performance summaries, entitled Annual Operating Expenses, includes accrued expenditures for services and program activities financed by power sales revenues, transmission services revenues and projects funded in advance. For FY 2010, budget expense obligations are estimated at \$3,029 million. The total program requirements of all Bonneville programs include estimated budget obligations of \$3,980 million in FY 2010.

**Bonneville Power Administration**

**Funding Profile by Subprogram 1/**

(accrued expenditures in thousands of dollars)

|  | Fiscal Year                  |                                |                     |                               |                  |
|--|------------------------------|--------------------------------|---------------------|-------------------------------|------------------|
|  | 2008<br>(Audited<br>Actuals) | 2009<br>Original <sup>2/</sup> | 2009<br>Adjustments | 2009<br>Revised <sup>2/</sup> | 2010<br>Proposed |
| Capital Investment Obligations                 |                              |                                |                     |                               |                  |
| Associated Project Costs <sup>3/</sup>         | 105,346                      | N/A                            | -                   | 158,650                       | 186,900          |
| Fish & Wildlife                                | 26,388                       | N/A                            | -                   | 50,000                        | 70,000           |
| Conservation & Energy Efficiency <sup>3/</sup> | 7,868                        | N/A                            | -                   | 32,000                        | 56,000           |
| Subtotal, Power Services <sup>4/</sup>         | 139,602                      | N/A                            | -                   | 240,650                       | 312,900          |
| Transmission Services                          | 129,205                      |                                |                     | 322,379                       | 490,028          |
| Capital Equipment & Bond Premium               | 21,526                       | N/A                            | -                   | 29,916                        | 42,638           |
| Total, Capital Obligations <sup>3/ 5/</sup>    | 290,333                      | 510,062                        | -                   | 592,945                       | 845,566          |
| Expensed and Other Obligations                 |                              |                                |                     |                               |                  |
| Expensed                                       | 2,331,246                    | 2,464,963                      | -                   | 2,891,259                     | 3,029,504        |
| Projects Funded in Advance                     | 98,682                       | 94,989                         | -                   | 99,428                        | 105,164          |
| Total, Obligations                             | 2,720,261                    | 3,070,014                      |                     | 3,583,632                     | 3,980,234        |
| Capital Transfers (cash) <sup>5/</sup>         | 555,439                      | 877,573                        | -                   | 275,724                       | 419,996          |
| BPA Total                                      | 3,275,700                    | 3,947,587                      | -                   | 3,859,356                     | 4,400,230        |
| Full-time Equivalent (FTEs)                    | 2,924                        | 3,000                          | -                   | 3,064                         | 3,061            |

**Public Law Authorizations include:**

Bonneville Project Act of 1937, Public Law No. 75-329, H.R. 7642

Federal Columbia River Transmission Act of 1974, Public Law No. 93-454 S. 3362

Regional Preference Act of 1964, Public Law No. 88-552

Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), Public Law No. 96-501, S. 885

## Outyear Funding Profile by Subprogram 1/

(accrued expenditures in thousands of dollars)

|  | Fiscal Year |           |           |           |
|--|-------------|-----------|-----------|-----------|
|  | 2011        | 2012      | 2013      | 2014      |
| Capital Investment Obligations                 |             |           |           |           |
| Associated Project Costs <sup>3/</sup>         | 202,900     | 211,900   | 223,900   | 225,900   |
| Fish & Wildlife                                | 60,000      | 50,000    | 50,000    | 50,000    |
| Conservation & Energy Efficiency <sup>3/</sup> | 56,000      | 56,000    | 56,000    | 56,000    |
| Subtotal, Power Services <sup>4/</sup>         | 318,900     | 317,900   | 329,900   | 331,900   |
| Transmission Services                          | 559,255     | 475,747   | 450,867   | 439,497   |
| Capital Equipment & Bond Premium               | 51,413      | 51,620    | 51,751    | 52,209    |
| Total, Capital Obligations <sup>3/ 5/</sup>    | 929,568     | 845,267   | 832,518   | 823,606   |
| Expensed and Other Obligations                 |             |           |           |           |
| Expensed                                       | 3,302,804   | 3,328,453 | 3,500,221 | 3,545,349 |
| Projects Funded in Advance                     | 117,286     | 98,904    | 87,742    | 89,070    |
| Total, Obligations                             | 4,349,658   | 4,272,624 | 4,420,481 | 4,458,025 |
| Capital Transfers (cash) <sup>5/</sup>         | 422,381     | 318,641   | 199,105   | 204,020   |
| BPA Total                                      | 4,772,039   | 4,591,265 | 4,619,586 | 4,662,045 |
| Full-time Equivalents (FTEs)                   | 3,060       | 3,060     | 3,060     | 3,060     |

**The accompanying notes are an integral part of this table.**

- <sup>1/</sup> This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.
- <sup>2/</sup> Original estimates reflect BPA's FY 2009 Congressional Budget Submission. Revised estimates, consistent with BPA's annual near-term funding review process, provide notification to the Administration and Congress of updated capital and expense funding levels for FY 2009.
- <sup>3/</sup> Includes infrastructure investments designed to address the long-term needs of the Northwest and to reflect significant changes affecting BPA's power and transmission markets.
- <sup>4/</sup> Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

5/ This FY 2010 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2009-2014.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

The cumulative amount of actual advance amortization payments as of the end of FY 2008 is \$2,302 million.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

### **Major Outyear Considerations**

Bonneville's outyear estimates reflect its ongoing efforts to achieve its long-term mission and strategic direction. The outyear estimates are developed with consideration of and support of BPA's multi-year performance targets that lay out the course for achieving BPA's long-term objectives. Outyear capital investment levels support BPA's infrastructure program, hydro efficiency program, conservation and energy efficiency projects, and its fish and wildlife mitigation projects.

With passage of the Energy Policy Act of 2005, Bonneville continues to incorporate the various aspects of the legislation related to its business, in particular the energy supply, conservation and new energy technologies for the future that are highlighted in the legislation.

**Power Services - Capital**

**Funding Schedule by Activity**

|  | (accrued expenditures)<br>(dollars in thousands) |                |                |
|--|--|----------------|----------------|
|  | FY 2008  | FY 2009        | FY 2010        |
| Power Services - Capital               |  |                |                |
| Associated Project Costs               | 105,346  | 158,650        | 186,900        |
| Fish & Wildlife                        | 26,388   | 50,000         | 70,000         |
| Conservation & Energy Efficiency       | 7,868  | 32,000         | 56,000         |
| <b>Total, Power Services - Capital</b> | <b>139,602</b>                                   | <b>240,650</b> | <b>312,900</b> |

**Outyear Funding Schedule**

|                                 | (accrued expenditures)<br>(dollars in thousands) |         |         |         |
|---------------------------------|--|---------|---------|---------|
|                                 | FY 2011  | FY 2012 | FY 2013 | FY 2014 |
| Total, Power Services - Capital | 318,900  | 317,900 | 329,900 | 331,900 |

**Description**

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Reclamation and Corps hydroelectric projects in the Pacific Northwest that provide for increased performance and availability of generating units. The Reclamation and Corps hydro projects produce electric power that is marketed by Bonneville.

Maintaining the availability and increasing the efficiency of the FCRPS is critical to ensuring that the region has an adequate, reliable and low-cost power system. The FCRPS represents about 80 percent of Bonneville’s firm power supply and is composed of 31 operating Federal hydro electric projects with over 200 generating units. These projects have an average age of over 45 years, with some that exceed 60 years of age. Through direct funding and the close cooperation of the Corps and Reclamation, Bonneville uses its Treasury borrowing authority to make investments needed to restore generation availability and improve efficiency, reducing demand on Corps and Reclamation appropriations for power-related investments. Since the beginning of direct funding, Bonneville along with these joint operating partners has significantly improved system performance. In 1999, at the direction of Congress, Bonneville issued a report that it soon began to implement called the “Asset Management Strategy for the FCRPS.” Bonneville concluded in this report that it needed to invest nearly \$1 billion in the projects over the next 12-15 years. Without these investments, which are focused on restoring and maintaining the reliability of the system, history indicates that unit availability may initially decline at a rate of about 1.5 percent per year. Supplementary analyses and experience with the system have revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for this and the next several rate periods.

These planned investments, included in these FY 2010 budget funding estimates, will maintain the output of the FCRPS. Moving forward with these cost-effective opportunities to expand the

generation and to preserve and enhance the capability of the Federal system is a smart economic and environmental decision when compared to purchasing power from the market to serve growing Pacific Northwest electricity needs.

Fish and Wildlife Program costs provide funding to implement measures to aid in the recovery of fish in the Columbia River and its tributaries that are listed as threatened or endangered under the ESA and the protection, mitigation, and enhancement, of fish and wildlife impacted by the development and operation of the FCRPS, from which Bonneville markets power.

Bonneville continues a comprehensive approach to integrate the ESA requirements of the FCRPS Biological Opinions with the broad resource protection, mitigation and enhancement objectives of the Columbia River Basin Fish and Wildlife Program (Program), adopted by the Council pursuant to the Northwest Power Act. Bonneville satisfies a portion of its fish and wildlife responsibilities by funding projects and activities that implement the Program. Bonneville also implements measures addressed to avoid jeopardizing listed salmon and steelhead as required under the ESA.

These ESA measures are part of the most recent BiOps issued by National Oceanic and Atmospheric Administration Fisheries Service (NOAA) and USFWS. In February 2006, USFWS issued a new BiOp for Libby Dam for the Kootenai River white sturgeon and bulltrout. In May 2008, NOAA issued the new, remanded FCRPS BiOp, which is again being challenged in Oregon District Court by the same plaintiffs. Also, as described below, in July 2008, USFWS and NOAA issued Willamette River BiOps for the first time, to address impacts from 13 USFWS federal dams located throughout the Willamette Basin. These BiOps, and the 2000 USFWS FCRPS BiOp, collectively, require the action agencies (Corps, Bureau, and BPA) to implement actions throughout the Columbia River Basin to address impacts stemming from the operation of the Federally operated hydro-dams on ESA-listed fish, and to ensure that operations of the federal dams do not jeopardize the continued existence of the listed species or adversely modify their designated critical habitat.

The 2004 FCRPS BiOp was challenged in Federal District Court. In October 2005, the District Court invalidated the 2004 BiOp, although leaving it “in place” during the remand period. The Court ordered the sovereign parties to collaborate during the remand process, to try to find an acceptable approach for the 2004 BiOp that would have regional support. The collaboration process progressed over the past two years and was completed in 2008 when NOAA Fisheries released the final FCRPS BiOp. As a result, and discussed below, expenditures above and beyond planned FY 2009 and FY 2010 budgets are required.

In addition, in 2008, the FCRPS Action Agencies signed agreements, the Columbia Basin Fish Accords (Fish Accords), with five Northwest Tribes, and the states of Idaho and Montana. The Fish Accords supplement the activities encompassed within the 2008 BiOp and the Council-adopted Program, by providing firm commitments to mitigation actions and secure funding for the next 10 years.

There has also been litigation directed at the USFWS Biological Opinions for Libby Dam. In 2003, the Corps and BPA reinitiated consultation for the operations at Libby Dam to address

impacts to recently designated critical habitat for the Kootenai River white sturgeon, and to evaluate information that had been developed on Kootenai River white sturgeon and bull trout since the 2000 USFWS BiOp. That consultation was completed in February 2006, but was challenged by environmental groups, the Kootenai Tribe, and the State of Montana in Federal District Court of Montana. That litigation was recently settled, in March 2009.

The 2008 Willamette BiOp was issued on July 11, 2008. In this BiOp NOAA Fisheries issued a Jeopardy Opinion with Reasonable and Prudent Alternatives (RPAs) that describe potential river operations and configuration changes, improvements to hatcheries, flow changes, and habitat actions designed to address Willamette Project impacts to the Upper Willamette River spring chinook and the Upper Willamette River steelhead, both listed as threatened under ESA in 1999. The USFWS also issued a BiOp for the Willamette Projects on July 11, 2008 that addresses Project impacts on bull trout and the Oregon chub. The Oregon chub was listed as endangered in 1993. The bull trout was listed as threatened in 1998.

The above referenced NOAA and USFWS BiOps and Fish Accord commitments, and projects undertaken to implement the Columbia Basin Fish and Wildlife Program pursuant to the Northwest Power Act, are the basis for BPA Environment, Fish and Wildlife division's planned capital investment. As a result of these requirements, capital investments of \$50 million for FY 2009 (\$11 million higher than proposed in the FY 2009 Budget Submission of February 2008) and \$70 million for FY 2010 are estimated.

Bonneville's fish and wildlife capital program is directed at activities that increase numbers of Columbia River Basin fish and wildlife resources including projects designed to increase juvenile and adult fish passage in tributaries and at mainstream dams and increase fish production and survival through construction of hatchery and acclimation facilities, land acquisitions for resident fish and wildlife that are consistent with Bonneville's Capital Policy, and fish monitoring facilities. Capital project funding will focus on integrating ESA-related priorities with the region's Columbia Basin Fish and Wildlife Program, in order to efficiently meet the regional costs of both salmon and steelhead recovery and the mitigation of hydrosystem impacts to other Columbia Basin fish and wildlife.

The FY 1997 Energy and Water Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel (ISRP) "to review a sufficient number of projects" proposed to be funded through Bonneville's fish and wildlife budget "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program." The Northwest Power Act further states that "... in making its recommendations to Bonneville, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the ISRP and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed and/or directly funded by Bonneville and to make funding recommendations to Congress. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power



Act as amended in 1996, and to provide a report to the Council by April 1 of each year. The Council, in turn, must report to Congress annually by May 15.

The Federal Caucus, a group of eight agencies operating in the Columbia River Basin that have natural resource responsibilities related to ESA, released in December 2000 a comprehensive long-term strategy to restore ESA-listed fish throughout the Columbia Basin. This strategy includes the “All-H” paper that focuses on the establishment of explicit, scientifically based performance standards to gauge the status of salmon and the success of recovery efforts. Consistent with the principles of the All-H Strategy, Bonneville is implementing much of the off-site mitigation actions required by the FCRPS Biological Opinions through the Council’s Fish and Wildlife Program.

Under the 1980 Northwest Power Act, the Council must develop a Fish and Wildlife Program that protects, mitigates and enhances Columbia River Basin fish and wildlife affected by any hydroelectric project in the basin. To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS Biological Opinions with projects implemented under the Columbia Basin Fish and Wildlife Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection that meets both BPA’s ESA and Northwest Power Act responsibilities. In order to address the *in lieu* provision of the Northwest Power Act, BPA continues its ongoing work with the Council and the regional fish and wildlife managers, customers, and Tribes to review projects to ensure ratepayers fund appropriate mitigation. For example, BPA established a cost sharing MOU with the U.S. Forest Service in 2005 that requires a programmatic 30 percent cost share for FY 2007-2009 for fish mitigation projects funded by BPA on U.S. Forest Service lands.

Conservation is an important part of Bonneville's diverse portfolio of resources that provides a reliable approach to meeting Bonneville’s load obligations. When acquiring resources to meet planned future loads, the Northwest Power Act requires the Administrator to first consider and acquire cost-effective conservation that the Administrator determines is consistent with the Northwest Power and Conservation Council’s Power Plan. The Council’s most recent Power Plan, finalized in January 2005, recommended that the region target 700 aMW of conservation over the next 5 years. Bonneville’s share of the conservation target is 40 percent or 280 aMW. Bonneville anticipates that between 100 and 150 aMW of this amount will be acquired under its capital conservation acquisition program. Program performance measurements (\$/aMW) indicate that Bonneville is realizing excellent value for these investments as benchmarked against other utilities across the nation.

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future. The demand for more energy efficiency is driven by potential climate change initiatives, the high cost of new generation, and citizens and businesses wanting to reduce costs and be green.

## Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

### Associated Project Costs

**105,346      158,650      186,900**

BPA will work with both the Corps and Reclamation to reach mutual agreement on those capital improvement projects that need to be budgeted and scheduled, are cost-effective and provide system or site-specific enhancements, increase system reliability, or provide generation efficiencies.

The work is focused on improving the reliability of the FCRPS, increasing its generation efficiency through turbine runner replacements and optimization of hydro facility operation, and small capital reimbursements associated with routine maintenance activities. Also, limited investments may be made in joint use facilities that are beneficial to both the FCRPS operations and to other Corps and Reclamation purposes.

#### ■ Corps of Engineers (known projects to date)

FY 2008: Completed main unit and station service breaker replacements at selected projects. Continued hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project. Completed spare transformers purchase contracts at four projects. Continued emergency notification system replacement/upgrades at several projects. Continued Intercontrol Center Communications Protocol (ICCP) improvements at multiple projects.

Completed the generator re-wedging project at Bonneville Powerhouse 2. Continued gantry crane replacement and headgates refurbishment/replacement at Bonneville. Continued exciter installation, DC and preferred AC upgrades, and HVAC upgrade at Bonneville Powerhouse 2. Continued rehabilitation work at Bonneville Powerhouse 1. Began the planning/design work for station service upgrades, fire protection upgrades and additional crane refurbishments at Bonneville. Completed exciter replacement installations at John Day and Willamette Valley projects. Repaired failed linkage for unit 16 at John Day. Continued fire protection upgrades and bridge crane refurbishment at John Day. Continued generator rewinds, intake crane rehabilitation, heat pump replacement, oil/water separator development and station service improvements at The Dalles.

Continued fire protection design, spare transformer replacement and disconnect replacement at The Dalles. Continued turbine runner replacement and bridge crane refurbishment at Hills Creek. Continued crane refurbishment and turbine runner replacement at Lookout Point. Completed plant upgrade and refurbishing of the turbine replacement which failed during testing at Cougar. Continued fire protection upgrades for all Willamette Valley projects. Continued generator winding replacement and electric reliability upgrades at Detroit.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Continued governor replacement project, control system installation, hi-lift pump replacement and protective relay replacements at Albeni Falls. Began design for auxiliary boards upgrades at Albeni Falls. Continued exciter replacement at Libby. Completed crane rehabilitation at Chief Joseph. Continued CO2 system replacement and 480 volt upgrade at Chief Joseph. Continued with turbine replacements at Chief Joseph by awarding contract for new runners. Continued design for exciter replacements, protective relay replacements and supervisory control console replacement and began automatic synchronizer replacement at Chief Joseph.

Continued DC and preferred AC upgrades at McNary. Continued plant modernization at McNary, including fire protection, external oil cooler installation, station service upgrades, transformer purchases and installations and generator winding replacements. Began drainage pump replacement and spare bulkhead replacements at McNary. Began bridge crane refurbishment and elevator refurbishment at Dworshak. Continued generator winding replacements at Lower Granite. Completed or continued replacement and upgrades on protective relays and fire protection at Lower Snake River and Dworshak projects.

Continued diesel generator purchases for Lower Granite, Little Goose and Lower Monumental. Completed elevator refurbishment at Little Goose and Lower Monumental and T-1 disconnect replacement at Lower Monumental. Continued intake crane refurbishment at Lower Granite and Lower Monumental, and tailrace crane refurbishment at Lower Monumental. Began bridge crane refurbishment at Lower Monumental. Continued turbine runner development for Ice Harbor. Continued spare draft tube bulkhead purchase for Lower Snake projects, plus a variety of smaller continuing or new investments and refurbishing of failed units.

FY 2009: Complete ICCP improvements at multiple projects. Continue hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project. Continue emergency notification system replacement/upgrades at several projects. Complete gantry crane replacement and exciter installation at Bonneville. Continue head gate refurbishment, DC and preferred AC upgrades, and HVAC upgrade at Bonneville Powerhouse 2. Continue rehabilitation work at Bonneville Powerhouse 1. Continue station service upgrades, fire protection upgrades, and additional crane refurbishments at Bonneville. Continue fire protection upgrades and bridge crane refurbishment at John Day. Begin protective relay replacement at John Day. Complete intake crane rehabilitation, heat pump replacement, disconnect replacement, and oil/water separator development at The Dalles. Continue generator rewinds, station service improvements, fire protection upgrades, and spare transformer replacement at The Dalles. Continue turbine runner replacement and bridge crane refurbishment at Hills Creek. Complete crane refurbishment at Lookout Point. Continue turbine runner replacement at Lookout Point. Complete fire protection for all Willamette Valley projects. Complete generator winding replacement and electric reliability upgrades at Detroit.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Continue governor replacement project, control system installation, hi-lift pump replacement protective relay replacements, and auxiliary board upgrades at Albeni Falls. Begin design for DC system upgrades at Albeni Falls. Complete exciter replacement at Libby. Complete CO2 system replacement at Chief Joseph. Continue turbine runner replacements, 480 volt upgrade and exciter replacements at Chief Joseph. Complete protective relay replacements, supervisory control console replacement, and automatic synchronizer replacement at Chief Joseph.

Complete DC and preferred AC upgrades, external oil cooler installation, transformer purchases, drainage pump replacement, and spare bulkhead replacements at McNary. Continue fire protection, transformer installations and generator winding replacements at McNary. Continue bridge crane refurbishment and elevator refurbishment at Dworshak. Complete generator windings replacement at Lower Granite. Complete fire protection at Lower Snake River and Dworshak projects. Complete diesel generator purchases for Lower Granite, Little Goose and Lower Monumental. Complete intake crane refurbishment at Lower Granite and Lower Monumental, and tailrace crane refurbishment at Lower Monumental. Continue bridge crane refurbishment at Lower Monumental. Continue turbine runner development for Ice Harbor. Complete spare draft tube bulkhead purchase for Lower Snake projects, plus a variety of smaller continuing investments. In addition, new investments and repairs to failed units will be pursued as needed per the Asset Plan.

FY 2010: Continue hydro optimization investigations and equipment installations at selected projects through the power plant efficiency improvements project. Complete DC and preferred AC upgrades, station service upgrades, and HVAC upgrade at Bonneville Powerhouse 2. Continue head gate refurbishment at Bonneville Powerhouse 2. Continue rehabilitation work at Bonneville Powerhouse 1. Continue fire protection upgrades and additional crane refurbishments at Bonneville. Continue fire protection upgrades and bridge crane refurbishment, and protective relay replacement at John Day. Continue generator rewinds, station service improvements, and fire protection upgrades at The Dalles. Complete spare transformer replacement at The Dalles. Continue turbine runner replacement and bridge crane refurbishment at Hills Creek. Continue turbine runner replacement at Lookout Point.

Complete hi-lift pump replacement at Albeni Falls. Continue auxiliary boards upgrades, and DC system upgrades at Albeni Falls. Continue turbine runner replacements, 480 volt upgrade and exciter replacements at Chief Joseph.

Continue transformer installations and generator winding replacements at McNary. Complete bridge crane refurbishment and elevator refurbishment at Dworshak. Continue bridge crane refurbishment at Lower Monumental. Continued turbine runner development for Ice Harbor, plus a variety of smaller continuing investments. In addition, new investments and repairs to failed units will be pursued as needed per the Asset Plan.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Bureau of Reclamation (known projects to date):**

FY 2008: Completed left/right power plants roof replacement and 500-230 kV relay replacements at Grand Coulee. Continued Grand Coulee runner replacements. Continued main unit breaker replacements, 11.95 KV switchyard upgrade, air housing cooler replacements, various transformer replacements, 500 KV differential relay replacements, right power plant station service upgrades, third power plant exciter replacements, and third power plant roof replacement and elevator refurbishment at Grand Coulee. Began third power plant governor replacement and left power plant spare transformer purchases at Grand Coulee. Continued hydro optimization investigations and equipment installations at Grand Coulee. Continued SCADA replacement at Grand Coulee and Hungry Horse. Continued various breaker replacements at Hungry Horse. Completed DC system upgrades and roof replacement at Palisades. Continued transformer replacements at Green Springs. Continued turbine seal ring and exciter replacements at Chandler. Continued transformer and exciter replacements at Roza, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2009: Complete main unit breaker and 11.95 KV switchyard upgrade, 500 KV differential relay replacements, and third power plant roof and elevator refurbishment at Grand Coulee. Continue Grand Coulee runner replacements. Continue air housing cooler replacements, various transformer replacements, right power plant station service upgrades, third power plant exciter replacements, and third power plant governor replacement at Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Continue SCADA replacement at Grand Coulee and Hungry Horse. Complete various breaker replacements at Hungry Horse except continue main unit breaker replacements. Continue transformer replacement at Green Springs. Complete turbine seal ring and exciter replacements at Chandler. Complete transformer and exciter replacements at Roza, plus a variety of smaller continuing investments. In addition, new investments and repairs to failed units will be pursued as needed per the Asset Plan.

FY 2010: Continue Grand Coulee runner replacements. Continue air housing cooler replacements, various transformer replacements, right power plant station service upgrades, third power plant exciter replacements, and third power plant governor replacement at Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Continue SCADA replacement at Grand Coulee and Hungry Horse. Complete main unit breaker replacement at Hungry Horse. Continue transformer replacement at Green Springs plus a variety of smaller continuing investments. In addition, new investments and repairs to failed units will be pursued as needed per the Asset Plan.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Fish and Wildlife** **26,388**      **50,000**      **70,000**

Specific project solicitation and funding decisions were completed in early 2008. The following projects require capital funding in FY 2010. It is Bonneville's intention to proceed with design, environmental review, and construction of those projects from this list and that are recommended for funding within the available budget. The costs indicated are preliminary estimates only and actual costs may be greater or lower than those estimates, depending on final environmental review decisions and design and construction costs.

The following fish facilities have been submitted for congressional expenditure authority for FY 2010 as authorized by the Pacific Northwest Electric Power Planning and Conservation Act for new fish and wildlife facilities of \$1 million and an economic life greater than 15 years (PL 96-501, sec. 4(h)(10)(B)): the Okanogan Basin Locally Adapted Steelhead Supplementation Program, the Leaburg Dam Fish Sorter, and the Crystal Springs hatchery Facilities. See Proposed Appropriations Language included earlier in this FY 2010 budget.

These facilities are based upon the best available science and are regionally important in that they provide high priority mitigation and recovery actions for fish and wildlife populations as affected by the FCRPS, under the auspices of the Northwest Power Act and the Endangered Species Act. Projects and facilities listed below deliver direct on-the-ground benefits to both ESA listed and non listed fish and wildlife throughout the Columbia River Basin and have been evaluated and coordinated with the Northwest Power and Conservation Council, State, Federal and Tribal fishery resource managers, local governments, watershed and environmental groups and other interested parties.

FY 2008-2010 efforts include continued implementation of high priority ESA-related projects and activities associated with the currently operative NOAA and USFWS BiOps.

Implementation of reforms to FCRPS hatchery programs that help reduce impacts upon ESA-listed populations will be done following ESA consultations with NOAA and after information on the types of changes to these facilities are established and priorities for sequencing implementation are developed.

Although not subject to the Northwest Power Act's section 4(h)(10)(B) for capital construction projects, Bonneville may include capitalization of investment in some wildlife habitat acquisitions and in land acquisition for fish and wildlife provided such land acquisition costs exceed \$1 million, such investment provides a creditable and quantifiable benefit against a defined obligation for Bonneville, and is consistent with Bonneville's Capitalization Policy.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

The five types of capital projects as defined by the FY 2007 Power Rate Case are as follows:

- 1) Tributary passage -- Activities that enhance fish passage to tributary rivers. For the purpose of this policy, a tributary is defined by the Council designated sub-basin of the tributary. Functionally interdependent work elements could contain the following: wells, ladders, screens, pumping, culverts, diversion (irrigation) consolidation, piping to reduce water loss, irrigation efficiencies (drip irrigation), lining of ditches (seepage reduction), removal of damming objects or pushup dams in conjunction with related construction, and construction related habitat restoration.
- 2) Gas abatement -- Projects that reduce or eliminate the super-saturation of gaseous nitrogen in water beneath the dam spillways.
- 3) Hatchery facility construction -- Projects and activities relating to the construction of fish hatcheries, including related satellite facilities (acclimation ponds). This may also include construction-related habitat restoration.
- 4) Mainstem passage -- Projects and activities which benefit fish passage in the mainstem of Columbia River or Snake River. Capital projects include: ladders, removable spillway weirs, collection facilities, PIT tag facilities, etc.
- 5) Land acquisition -- Land acquisition projects protect, enhance, and maintain instream wetland and riparian habitat and provide habitat units (HUs) for wildlife and instream miles for resident fish to fulfill the legal obligation of FCRPS.

Anadromous fish supplementation, production and related facilities, and/or juvenile and adult passage improvement projects that may require capital funds in FY 2010 include the following:

- Okanogan Basin Locally Adapted Steelhead Supplementation Program: This project will expand Cassimer Bar Hatchery to meet the estimated production level of 200,000 summer steelhead smolts to supplement natural production within the Okanogan River Basin. The goal is to increase abundance and accelerate recovery of endangered steelhead in the Basin. The Colville Tribes will operate the hatchery program using locally-adapted broodstock collected at weirs. The project will require development, review and approval of a Master Plan and completion of the other steps of the Council's 3-Step Review Process.

- Leaburg Dam Fish Sorter: This project is located on the Willamette River and will allow managers to efficiently separate natural origin Upper Willamette Spring Chinook (UWSC) from hatchery reared Chinook. The UWSC are listed as an endangered species under the Endangered Species Act. The Willamette Biological Opinion identifies the need to exclude hatchery reared salmon from entering habitat that is being reserved only for natural origin (wild) salmon. This project will ensure that only UWSC fish pass the dam and move into some of the most highly productive salmon habitat available in the Willamette River.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Crystal Springs Hatchery Facilities: This project will develop facilities for rearing and out-planting resident and anadromous fish in central and southern Idaho. The facility will be located near the American Falls Reservoir in Idaho. Resident fish include Yellowstone Cutthroat and Westslope Cutthroat trout. The anadromous fish include Snake River spring Chinook salmon and Snake River steelhead. The facility is sponsored by the Shoshone-Bannock Tribes, who are expected to operate and manage the facility once it is complete. The project will require development, review and approval of a Master Plan, completion of environmental analysis (including possibly a full EIS) and completion of other steps of the Council’s 3-Step Review Process, including review by the ISRP.

- Yakima River Spring Chinook Supplementation Facility, located in Cle Elum, Washington: This project includes the construction of an interpretive building for public education at Bonneville’s existing hatchery and for the design and construction of a monitoring and evaluation building at Nelson Springs for use by project biologists.

- Snake River Spring Chinook Salmon artificial propagation facilities (known as the Northeast Oregon Hatchery or NEOH); to be located on the Upper Grande Ronde River near La Grande, Oregon, on Catherine Creek near Union, Oregon, and on Lostine River near Enterprise, Oregon: While design has been ongoing for this project for several years, the decision to proceed with construction is pending approval by NOAA Fisheries of a Hatchery and Genetic Management Plan for the facility. This project, as a measure in the Council’s Fish & Wildlife Program, would also identify and develop artificial propagation facilities to protect and enhance salmon and steelhead native to the Imnaha and Grande Ronde River Basins.

- Kootenai River Hatchery: The Kootenai River sturgeon hatchery, in Bonners Ferry, Idaho, is in need of hatchery upgrades and expansion to improve temperature control and rearing conditions that will result in the increased overall survival of these ESA-listed fish after release from this facility. In addition this may also include development of a burbot production facility to offset the loss of natural production below Libby Dam. The project requires development and review of a Master Plan prior to implementation. Fish and wildlife resources in the Kootenai drainage were historically abundant and were used by the Kootenai Tribe for cultural and subsistence purposes. Over the past decades, native fish and wildlife populations have declined significantly due to large-scale habitat and ecosystem changes. Native kokanee from the South Arm of Kootenay Lake are considered “functionally extinct,” burbot from the lower Kootenai River are on the verge of extinction, and the white sturgeon population in the Kootenai River was listed as endangered by the U.S. Fish and Wildlife Service in 1994. The Kootenai River White Sturgeon Study and Conservation Aquaculture Project was initiated by the Kootenai Tribe of Idaho as a stopgap measure in 1989 to produce fish from wild Kootenai River adults until effective habitat restoration measures could be identified and implemented. Only the long life span of the sturgeon has forestalled extinction to date.



(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Natural recruitment has been absent or limited for decades and the current population of large old fish is steadily dwindling. Continued failure of natural recruitment means that the next generation of Kootenai white sturgeon will come almost entirely from the hatchery.

- Nez Perce Tribal Hatchery: Additional rearing and acclimation facilities are requested as part of the existing Nez Perce Tribal Hatchery in Clearwater County, Idaho, for reintroduction of up to 700,000 coho smolts into the Clearwater River in Idaho. The Master Plan is complete and is under review by regional entities, including the Council. The project will require an approved Master Plan prior to implementation. The Nez Perce Tribe (NPT) is motivated to implement the Clearwater Coho Restoration Project for the following reasons: 1) historically, coho salmon were one of the species making up a complex multi-species anadromous ecosystem within the Clearwater; and 2) coho salmon are a cultural resource to the NPT. The NPT goal is to restore coho salmon to the Clearwater sub-basin measured by 14,000 adults at Lower Granite Dam annually. The 2007-2009 proposal called for completing the Council's 3-Step planning process and construction based on the 2004 Master Plan. Plans are to develop an integrated management plan to optimize the use of hatchery fish to meet recovery and harvest objectives.

- Redfish Lake Sockeye Salmon Captive Broodstock expansion: This project continues to expand the sockeye salmon captive broodstock program by constructing new or increasing the capacity of existing facilities at Eagle Hatchery in Eagle, Idaho, Burley Creek Fish Hatchery in Kitsap County Washington, and at Oxbow Hatchery in Multnomah County, Oregon, to meet the interim goal of increasing production to 150,000 sockeye salmon smolts per year. An additional site will be selected in Idaho to increase production annually to between 500,000 and 1,000,000 smolts as called for in the 2008 FCRPS BiOp. Project requires development and review of a Master Plan prior to implementation. Precipitous declines of Snake River sockeye salmon led to their Federal listing as endangered in 1991 (56 FR 58619). In that same year, the Idaho Department of Fish and Game (IDFG) initiated a Captive Broodstock Program to maintain Snake River sockeye salmon and prevent species extinction. The ultimate program goal is to reestablish sockeye salmon runs to Stanley Basin waters and to provide for sport and treaty harvest opportunities. The program's near-term goal is to prevent species extinction, slow the loss of critical population genetic diversity and heterozygosity, and increase the number of individuals in the population.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Chief Joseph Dam Hatchery: BPA is proposing to fund the Chief Joseph Dam Hatchery Program, a comprehensive management program for supplementing Chinook salmon to increase the abundance, productivity, distribution, and diversity of naturally spawning populations of spring/summer and fall Chinook in the Okanogan River and in the Columbia River below Chief Joseph Dam, in Washington (between the confluence of the Okanogan River and Chief Joseph Dam). Project includes a new hatchery facility (at the base of the Chief Joseph Dam) and acclimation ponds (throughout the Okanogan River sub-basin), broodstock collection, egg incubation, rearing, release, and selective broodstock collection method development. The objective is to improve production of spring/summer and fall Chinook salmon in the Okanogan River Sub-basin below Chief Joseph Dam. Planned production levels are 2 million summer/fall chinook and 0.9 million spring chinook smolts. Exploration of potential cost sharing for O&M and capital is underway with three public utility districts having some level of mitigation responsibility for their hydro projects within this geographic area.

- Klickitat Production Expansion: The Klickitat River Master Plan was completed by the Yakama Nation, reviewed by the ISRP, recommended by the Council, and approved by BPA in 2008. The plan's goal is to restore and maintain sustainable, naturally producing populations of spring chinook and steelhead that support tribal and non-tribal harvest and cultural and economic practices while protecting the biological integrity and the genetic diversity of indigenous fish stocks in the sub-basin. Consistent with the Klickitat Master Plan, in early 2009 BPA completed the Lyle Falls Environmental Impact Statement (EIS) and ROD. In 2009, final designs for construction of the Lyle and Castile Falls passage improvements, the enumeration and collection facilities at Lyle and Castile, as well as certain Klickitat hatchery upgrades necessary for maintenance of existing program activities and hatchery safety concerns are expected to be complete. Construction for these components of the project is expected to be initiated in late 2009 and continue through most of 2010. Additionally, a new Klickitat Hatchery EIS is planned to begin in 2009 that will examine options for the development and operation of new supplementation facilities and acclimation alternatives, and upgrades to the existing hatchery facility. This EIS is anticipated to be completed in 2011.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Hood River Production Facility: This project includes expansion of existing Parkdale fish facility to accommodate spring chinook rearing, construction of new Hood River adult salmonid trapping facilities, and development of alternative adult trapping sites. Powerdale Dam, which is owned and operated by PacifiCorp, is scheduled for decommissioning during the summer of 2010. The dam forms an integral part of the Powerdale Dam Fish Trap, as fish are shunted into the fish trap as they ascend the fish ladder at the facility. Removal of the dam will also remove the fish trapping facility. The Powerdale Dam Fish Trap currently provides the foundation for many of the activities associated with implementation of the Hood River Production Program. These include: monitoring escapement, collecting life history characteristics, and broodstock acquisition. In order to continue implementing the production program, alternative trapping sites will need to be developed. The Hood River Production Program has four primary goals: 1) re-establish naturally sustaining runs of spring chinook in the Hood River; 2) re-build naturally sustaining runs of summer and winter steelhead in the Hood River; 3) maintain genetic characteristics of Hood River fish populations; and 4) provide fish for sustainable harvest by both sport and tribal fishers.

- Mid Columbia Coho restoration: Indigenous natural coho salmon no longer occupy the mid-Columbia river basins. Columbia coho salmon populations were decimated in the early 1900s. For several reasons, including the construction and operation of mainstem Columbia River hydropower projects, habitat degradation, release locations, harvest management, and hatchery practices and genetic guidelines, self-sustaining coho populations were not re-established in mid-Columbia basins. Currently, the lack of locally adapted stock and in-basin habitat degradation may be the biggest challenges to coho reintroduction in mid-Columbia tributaries. This program's vision is to re-establish naturally reproducing coho salmon populations in the Wenatchee and Methow sub-basins at biologically sustainable levels which provide significant harvest in most years.

Cultural, socio-economic, and ecological benefits are expected from the return of this species to areas where it once occurred in abundance. The phased approach incorporates development of a mid-Columbia hatchery broodstock, local adaptation to tributaries in the Wenatchee and Methow basins, and habitat restoration that will benefit coho as well as ESA-listed spring chinook, steelhead, and bull trout.

- Walla Walla Hatchery planning and design. Project requires development and review of a Master Plan prior to implementation. The Master Plan is undergoing review by regional fisheries managers. The proposed facility will rear spring Chinook on the South Fork Walla Walla River, near Milton Freewater, Oregon.

The FCRPS BiOp Remand Collaboration Process assessed potential hatchery reform actions for all Federally funded hatcheries including those funded by BPA as part of the Council Integrated Fish and Wildlife Program and those programs funded directly by BPA through the Corps, USFWS and Bureau. Specific actions designed to benefit ESA-listed stocks to be funded are identified in the 2008 FCRPS BiOp.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

-Yakama Coho restoration: Before the ocean and lower Columbia exploitation of salmon and steelhead in the late 19th century and early 20th century, and before the Yakima River valley was developed with extensive agricultural irrigation systems, the Yakima Sub-basin supported large runs of spring, summer and fall Chinook, summer steelhead, coho and sockeye. Historical returns of coho to the Yakima River Basin have been estimated in the range of 44,000 to more than 100,000 fish annually.

Cumulative effects from the disruption of the Yakima Sub-basin ecosystem functions and processes, out of sub-basin impacts, and harvest of salmon have resulted in a significant decline of fish and wildlife abundance from historic levels. Over the last ten years, Yakima River mouth returns of coho have ranged from about 800 to 6,200 salmon. The significant decrease in abundance of these fish is mirrored on the terrestrial landscape. The goal of this restoration project is to restore extirpated coho salmon to the Yakima River basin at biologically sustainable levels.

- Walla Walla River Juvenile and Adult Passage Improvements: This project would provide safe passage for migrating juvenile and adult salmonids in the Walla Walla Basin by constructing and maintaining passage facilities at irrigation diversion dams and canals.

Potential non-construction Wildlife Habitat Acquisitions (Including Conservation Easements):

- Grand Coulee and Chief Joseph Wildlife Habitat Acquisition
- Couer d'Alene Fish and Wildlife Habitat Acquisition
- Albeni Falls Wildlife Mitigation
- Blue Creek Winter Range Wildlife Habitat Acquisition
- Yakima Valley Fish and Wildlife Habitat Acquisition
- Grande Ronde Wildlife Habitat Acquisition
- Salmon River Fish Habitat Acquisition
- Fish and Wildlife Land Acquisition - Selah Gap to Union Gap
- Palisades and Minidoka Wildlife Habitat Acquisition
- Black Canyon, Boise Diversion, Anderson Ranch Wildlife Habitat Acquisition
- Willamette Fish and Wildlife Habitat Acquisition
- Libby and Hungry Horse Reservoirs Resident Fish Acquisitions

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
| 7,868   | 32,000  | 56,000  |

**Conservation and Energy Efficiency**

The conservation acquisition program offers several ways for customers to participate in regional conservation. Program components include: (1) utility standard offer and custom programs, which result in customer proposals to conserve energy through residential weatherization, commercial lighting and Heating, Ventilation, and Air Conditioning (HVAC), industrial processes and lighting, and irrigated agriculture; (2) third party delivery programs, such as residential compact fluorescent lighting, and the Energy Smart Grocer and Green Motors programs, and the Water and Waste Water Treatment Facilities program; (3) programs to help Federal installations in the region reduce energy use, which includes the Federal Hatcheries program and work at various dams to help the Corps and Reclamation in their efforts to reduce energy use; and (4) other initiatives still in the design stage.

**Total Power Services – Capital**

---

|                |                |                |
|----------------|----------------|----------------|
| <b>139,602</b> | <b>240,650</b> | <b>312,900</b> |
|----------------|----------------|----------------|

**Explanation of Funding Changes**

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

**Associated Project Costs**

- Reflects a reshaping of funding requirements based on the need to maintain a minimum level of generation each year. +28,250

**Fish and Wildlife**

- Incorporates increase in funding to implement Biological Opinions, Fish Accord commitments, and *Columbia Basin Fish and Wildlife Program* activities. +20,000

**Conservation and Energy Efficiency**

- Funding is consistent with the Council’s most recent Power Plan, finalized in 2005. +24,000

**Total Funding Change, Power Services - Capital**

---

**+72,250**

## Transmission Services – Capital

### Funding Schedule by Activity

|   | (accrued expenditures) |                |                |
|---|------------------------|----------------|----------------|
|   | (dollars in thousands) |                |                |
|   | FY 2008                | FY 2009        | FY 2010        |
| Transmission Services - Capital               |                        |                |                |
| Main Grid                                     | 9,515                  | 74,989         | 171,014        |
| Area & Customer Services                      | 18,849                 | 25,968         | 38,491         |
| Upgrades & Additions                          | 36,225                 | 79,011         | 110,577        |
| System Replacements                           | 64,616                 | 142,411        | 169,946        |
| Projects Funded in Advance                    | 98,682                 | 99,428         | 105,164        |
| <b>Total, Transmission Services - Capital</b> | <b>227,887</b>         | <b>421,807</b> | <b>595,192</b> |

### Outyear Funding Schedule

|  | (accrued expenditures) |         |         |         |
|--|------------------------|---------|---------|---------|
|  | (dollars in thousands) |         |         |         |
|  | FY 2011                | FY 2012 | FY 2013 | FY 2014 |
| Total, Transmission Services - Capital | 676,542                | 574,652 | 538,609 | 528,567 |

## Description

TS is responsible for about 75 percent of the Pacific Northwest’s high-voltage transmission. TS provides for all additions, upgrades, and replacements to the Federal BPA transmission system, resulting in reliable service to northwest generators and utility customers. The Federal BPA transmission system also facilitates the sale and exchange of power to and from the region.

The eastern blackout on August 14, 2003, alerted the Nation to the lack of investment in utility transmission infrastructure. BPA has been working on infrastructure investments and operational practices to improve the transmission grid since the West Coast disturbance on August 10, 1996. TS has made, and continues to make significant infrastructure improvements and additions to the system to assure reliable transmission in the Northwest. These improvements and additions will help the Federal transmission system continue to comply with national reliability standards, replace aging equipment, allow for interconnection of needed new generation, and remove constraints that limit economic trade or the ability to maintain the system. Prior to beginning the infrastructure improvements, TS had built no major transmission projects since 1987. Only incremental additions had been added to the system over the years.

The Northwest transmission system continues to show signs of stress, as two close calls in 2003 demonstrated. On June 4, 2003, voltage instability in the Spokane area was prevented by quick operator action on the Federal system. Two weeks later, the non-Federal transmission path between Montana and Idaho was overloaded for two days, and Washington operator adjustments prevented load loss. In 2004, it was noted that a small load change at BPA’s interconnection

with Idaho Power near LaGrande, Oregon, was causing an unusually large voltage change. These examples demonstrate how the transmission system is being 'pushed' to its limits of capacity to carry power. The completion of the Grand Coulee-Bell, Kangley-Echo Lake, and Schultz-Wautoma line projects have provided dispatchers with greater Operational Transfer Capability, and have reduced the likelihood of outages or reduction of transmission capacity for outage situations.

Bonneville's completed infrastructure investments that further strengthen the network consist of the following projects: Puget Sound Area Additions, North of Hanford/ North of John Day, Cross Cascades North, Celilo Modernization, Eastern Washington Reinforcement, and Portland Area Additions.

These projects relieve congestion and contribute toward restoring an adequate reliability margin to the grid. They will be used to respond to a competitive market, meet regional load during outages, move power to meet changing loads, perform maintenance without harming the market, and allow Columbia Grid to start with the regional grid less congested.

In 2005, with the Congressional approval of wind tax credits, a number of potential wind generation companies made requests for connection to the BPA transmission grid. In FY 2007, BPA built facilities to connect up to 2500 MW of wind generation and connected 650 MW. In 2008, 659 MW was connected and approximately 1100 MW will connect in 2009 to the FCRPS grid. Bonneville has several thousand MW in additional requests for wind project interconnection, many requesting interconnection in 2010, 2011 or 2012. The wind generation request quantities are in addition to approximately 1000 MW of natural gas and geothermal generation proposed for connection in 2012 and 2013. BPA estimates that another 850 MW of wind generation may interconnect in 2010, depending on the production tax credits and other market factors. BPA plans a major construction phase in 2011-2013, building several new large substations to meet the interconnection requests. Current projections are for approximately 1000 MW to interconnect in 2011, with similar amounts interconnecting in each of 2012 through 2015. Much of the wind generation interconnection will result from the Renewable Portfolio standards enacted by Oregon and Washington, requiring an estimated 5000 MW of renewable generation by 2015. Export to California could add another 2000-3000 MW during the same time period.

In June 2008, Bonneville concluded the first phase of its NOS. During that time, those desiring to secure long-term firm capacity on Bonneville's network transmission system but for whom no capacity was available were invited to sign agreements which committed them to take service at a specified time and under specified terms. BPA had received 153 requests from 28 customers for 6,410 MW of new service, about three-fourths for wind energy integration. BPA subsequently offered 1,782 MW of new transmission service on its existing system. Bonneville selected five new Main Grid capital projects from the NOS in early FY 2009: 1) McNary-John Day 500 kV transmission line, 2) Big Eddy-Substation Z 500 kV transmission line and substation, 3) Little Goose 500 kV transmission line and substation, 4) I-5 Corridor 500 kV transmission line and substation, and 5) West of Garrison remedial action scheme. These projects will provide almost 3,700 MW of new transmission service and Bonneville will construct new facilities and provide service at rolled-in rates.

As a means to sustain BPA's limited Treasury financing, third-party financing is currently being used as a financing option for some investments, including PFIA.

System Replacements replace high-risk, obsolete, and maintenance-intensive facilities and equipment and reduce the chance of equipment failure by: 1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; 2) replacing risky, outdated and obsolete Control Center and control and communications equipment and systems; and includes replacements provided for in the Commercial Spectrum Enhancement Act (CSE Act) (under PFIA); and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

As noted, Bonneville's capital program for Transmission Services includes a wide variety of specific investments that are determined after internal review and in some cases external review. On occasion, capital investments must be made on short notice because of unexpected needs, because of the identification of obsolete, worn out, failed, failing, or at risk systems, facilities, because of system reliability requirements, and because near-term opportunities to install or construct facilities arise as outages occur or as schedules for outages change. For these and other reasons, Transmission Services capital program is fluid and subject to change. Thus, Bonneville is unable to predict with particularity many of the new capital investments in the transmission system. Nonetheless the types of investments can be identified in general. These items may include but are not limited to: arrestor, braking resistor, bus and bus pedestal, circuit breaker, circuit switcher, communication tower, concrete pole, control center mapboard and video wall displays, control house, converter grading capacitors, converter transformers, current limiting reactor, current limiting resistor, current transformer, digital fault locator, digital cross-connect system (DCS), disconnect switch, engine generator, engineered steel pole, fiber optic cable, fiber terminal, fuel dispensing facility, grounding system, grounding transformer, microwave multiplex transmitter, network management system (NMS), overhead conductor, overhead ground wire, power transformer, radio multiples transmitter, relay, revenue meter, series capacitor, shunt capacitor, shunt reactor, station service transformer, station service inverter, substation dead end tower, substation perimeter fence, switchyard lighting, thyristor, transfer switch, transmission steel tower, voltage regulator, voltage transformer, water/sewer system, wood pole and cross-arm, and other similar items consistent with Bonneville's capitalization policy determinations (such as spacer damper replacements).

Notwithstanding that the capital program for Transmission Service is subject to change, Bonneville has identified several general areas where capital program investment will occur.

Bonneville will continue to fund fiber optic communications facilities needed to meet Bonneville's projected operational needs. To the extent that these investments create temporary periods of excess fiber optic capacity, such dark fiber capacity can be made available to telecommunications providers and to non-profits to meet public benefit Internet access needs for rural areas and other needs in Bonneville's service area. Bonneville's investments in fiber optics, including the role of the private sector in building fiber optic networks, is consistent with the "Fiber Optic Cable Plan" submitted to Congress on May 24, 2000, accompanying the FY 2000 Energy and Water Development Appropriations Act. In accordance with this plan, when



possible, Bonneville will establish partnerships with fiber optic facility and service providers to meet its needs.

In December 2004, the Congress passed and the President signed the Commercial Spectrum Enhancement Act (CSEA, Title II of P.L. 108-494), creating the Spectrum Relocation Fund (SRF) to streamline the relocation of Federal systems from certain spectrum bands to accommodate commercial use by facilitating reimbursement to affected agencies of relocation costs. The Federal Communications Commission has auctioned licenses for reallocated Federal spectrum, which will facilitate the provision of Advanced Wireless Services to consumers. Funds were made available to agencies in FY 2007 for relocation of communications systems operating on the affected spectrum. These funds are mandatory and will remain available until expended, and agencies will return to the SRF any amounts received in excess of actual relocation costs. The estimated BPA cost of this relocation is \$48.7 million.

As part of the Homeland Security Presidential Directives, Bonneville has completed a physical security assessment of all critical facilities and is implementing security enhancements at these facilities. These security enhancements increase access control to BPA’s facilities and provide video surveillance and monitoring capabilities.

### Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
| 9,515   | 74,989  | 171,014 |

#### Main Grid

Bonneville’s strategic objectives for Main Grid projects are to provide voltage support; provide a reliable transmission system for open access, per FERC criteria; provide for relief of transmission system congestion; and assure compliance with the NERC, Western Electricity Coordinating Council (WECC), and BPA reliability standards. During this budgeting period, projects are planned that will provide voltage support to major load areas that are primarily west of the Cascade Mountains, and provide for transmission access for new generation projects to the load center. Reinforcements along the Interstate-5 corridor are also planned.

- FY 2008: (1) Began the planning of Interstate-5 Corridor reinforcements; (2) Began the design of the Libby-Troy 115kv transmission line upgrade; (3) Completed the environmental work and started the design for the Olympia Peninsula Reinforcement project(formerly known as the Olympic Peninsula Addition project); (4) As a result of the NOS that Bonneville conducted, two new projects emerged: West of McNary Reinforcements Group 1 (WOMR 1) consisting of a new McNary-John Day 500kV line along with other line upgrades and the West of McNary Reinforcements Group 2 project (WOMR 2) a new 500kV line from Big Eddy substation to a new 500kV substation that will intersect the Wautoma-Ostrander 500kV line. An Environmental Supplemental Assessment was started for the McNary-John Day line and preliminary engineering and environmental work began for WOMR 2; (5) Continued planning studies to identify and

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

clarify needed infrastructure additions; (6) Continued planning studies to identify projects driven by NERC/ WECC reliability Standards; (7) Continued planning and design studies to comply with the N-2 outage criteria; (8) Continued planning studies to identify additional system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (9) Continued planning studies to relieve the transmission system capacity congestion and to integrate new generation facilities.

- FY 2009: (1) Continue planning and begin the design of I-5 Corridor reinforcements; (2) Continue the design, material ordering and begin the construction of the Libby-Troy 115KV transmission line upgrade; (3) Continue the construction for the Olympic Peninsula Reinforcement project; (4) West of McNary Reinforcements Group 1- continue design and procurement of materials and start construction; West of McNary Reinforcements Group 2- continue environmental and preliminary design studies; (5) Begin the design and material ordering for the Redmond 230/115 kv bank #2; (6) Continue planning studies to identify and clarify needed infrastructure additions; (7) Continue planning studies and design to identify projects driven by NERC/ WECC reliability Standards; (8) Continue planning and design studies to comply with the N-2 outage criteria; (9) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (10) Continue planning studies to relieve the transmission system capacity congestion and for integrating potential new generation facilities; (11) Begin planning studies and design for other projects related to the Network Open Season.
- FY 2010: (1) Continue design and material ordering and begin the construction of I-5 Corridor reinforcements; (2) Complete construction of the Libby-Troy 115KV transmission line upgrade; (3) Complete construction of the Olympic Peninsula Reinforcement project; (4) West of McNary Reinforcements Group 1 (WOMR 1)- complete design, procurement of materials, and continue construction; West of McNary Reinforcements Group 2 (WOMR 2)- continue environmental and preliminary design studies; (5) Complete the design and begin construction for the Redmond 230/115 kv Bank #2; (6) Continue planning studies to identify and clarify needed infrastructure additions; (7) Continue planning studies and design to identify projects driven by NERC/ WECC reliability Standards; (8) Continue planning and design studies to comply with the N-2 outage criteria; (9) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (10) Continue planning studies to relieve the transmission system capacity congestion and for integrating potential new generation facilities; (11) Continue planning studies and design for projects related to the Network Open Season.

|                                   |               |               |               |
|-----------------------------------|---------------|---------------|---------------|
| <b>Area and Customer Services</b> | <b>18,849</b> | <b>25,968</b> | <b>38,491</b> |
|-----------------------------------|---------------|---------------|---------------|

Bonneville's strategic objective for Area and Customer Service projects is to assure that Bonneville meets the reliability standards and the contractual obligations we have to our

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

customers for serving load.

- FY 2008: (1) Began design and construction of the SVC at Rogue Substation to serve Southern Oregon Coast; (2) Cancelled the design for shunt capacitor addition at Fords Prairie area; (3) Continued development of project scope for new Hooper Springs (formerly know as Lower Valley Reinforcement, Caribou Substation); (4) Began the design, material ordering and construction of the City of Centralia Reinforcement Project; (5) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA’s service area.
- FY 2009: (1) Complete construction for the SVC at Rogue Substation; (2) Cancelled the addition of the SVC at Port Angeles Substation; (3) Begin the design and material ordering and start the construction on Hooper Springs substation; (4) Complete the construction on the City of Centralia Reinforcement Project; (5) Begin the design and material ordering of the Drummond Shunt Capacitors; (6) Begin design and material ordering of the Albany-Eugene Rebuild; (7) Begin the design and material ordering for the Lebanon 115 kv shunt capacitors; (8) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA’s service area.
- FY 2010: (1) Complete construction on Hooper Springs substation; (2) Complete design and construction of the Drummond Shunt Capacitors; (3) Complete the construction of the Albany-Eugene Rebuild; (4) Complete the construction of the Lebanon 115 kv shunt capacitors; (5) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA’s service area.

**Upgrades & Additions** **36,225** **79,011** **110,577**

Bonneville’s strategic objectives for Upgrades and Additions are to replace older communications and controls with newer technology including fiber optics in order to maintain or enhance the capabilities of the transmission system; to implement special remedial action control schemes to accommodate new generation and mitigate immediate operational and market constrained paths; and to support communications and remedial action schemes, among other proposals.

During this budget period, BPA will complete design, material acquisition, construction and activation of several fiber optics facilities to provide bandwidth capacity and high-speed data transfers to eventually replace microwave analog radios, which are technologically obsolete and nearing the end of their useful life. Temporarily, in some areas, excess fiber capacity is being offered for a term to telecommunications providers or to public entities such as public utilities, schools, libraries, and hospitals, providing them access to high-speed

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

telecommunication services as a public benefit.

- FY 2008: (1) Continued developing project scope and agreement for the Maple Valley – SnoKing - Snohomish fiber optic project; (2) Completed design for the 2 mile taps for Sifton and Kennewick Fiber optic projects; (3) Designed 1 mile tap for Augspunger fiber project; (4) Designed 2 miles of fiber between Bonneville power house and Bonneville control house; (5) Continued construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (6) Completed design and construction of seismic upgrade projects; (7) Continued planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (8) Continued planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA’s service area.
- FY 2009: (1) Continue material acquisition and complete construction for Maple Valley – SnoKing - Snohomish fiber project; (2) Order materials and complete construction on the 2 mile taps for Sifton and Kennewick fiber projects; (3) Order materials and complete construction on the 1 mile tap for Augspunger fiber project; (4) Complete the design and order materials for the 2 miles of fiber between Bonneville power house and Bonneville control house; (5) Complete design and construction of seismic upgrade projects; (6) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (7) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA’s service area; (8) Continued construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system.
- FY 2010: (1) Continue negotiations for joint use fiber project from SnoKing to Intalco; (2) Continue material acquisition and complete construction on the 2 miles of fiber between Bonneville Power House and Bonneville Control House; (3) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (4) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA’s service area; (5) Continue construction of secondary fiber related projects and digital radio system upgrades to improve the operational telecommunication system.

|                            |               |                |                |
|----------------------------|---------------|----------------|----------------|
| <b>System Replacements</b> | <b>64,616</b> | <b>142,411</b> | <b>169,946</b> |
|----------------------------|---------------|----------------|----------------|

Bonneville’s strategic objectives for System Replacement are to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

failure by (1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; (2) replacing risky, outdated and obsolete control and communications equipment and systems, and includes mandated replacements due to legislation; and (3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Non-Electric Replacements:

- FY 2008: (1) Completed non-electric replacements as necessary; (2) Continued the design, material acquisition, and construction for the Access Road Program capital component; (3) Completed 12 security enhancement projects at various substations; (4) Completed order for replacement of three BPA helicopters for future delivery utilizing General Services Administration exchange sale authority.
- FY 2009: (1) Complete other non-electric replacements as necessary; (2) Complete seismic upgrades to substations and buildings; (3) Continued the design, material acquisition, and construction for the Access Road Program capital component; (4) Receive delivery of two helicopters. (5) Acquire land, begin design, and conduct required studies for the construction of the Maintenance Headquarters in the Tri-Cities, Washington area; (6) Continue design and construction of capital improvements for identified existing facilities.
- FY 2010: (1) Complete other non-electric replacements as necessary; (2) Continue the design, material acquisition, and construction for the Access Road Program capital component; (3) Receive delivery of one helicopter, (4) Begin and complete construction of Tri-cities Maintenance Headquarters facilities; (5) Continued design and construction of capital improvements for identified existing facilities.

Electric Replacements:

- FY 2008: (1) Continued replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability Centered Maintenance (RCM) criteria. Such replacements include relays, annunciators, oscillographs, metering and replacing and migrating analog to digital technology and Supervisory Control and Data Acquisition (SCADA) equipment; (2) Continued replacement of under-rated and high maintenance substation equipment; (3) Continued replacing spacer dampers on various 500kV lines; (4) Continued replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continued replacing deteriorating wood pole transmission line structures and insulators with Non-Ceramic Insulators (NCI).
- FY 2009: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using Reliability

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

Centered Maintenance (RCM) criteria. Such replacements include relays, annunciators, oscillographs, metering and replacing and migrating analog to digital technology and Supervisory Control and Data Acquisition (SCADA) equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Continue replacing spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures and insulators with Non-Ceramic Insulators (NCI).

- FY 2010: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCM criteria. Such replacements include relays, annunciators, oscillographs, metering and various types of communication related equipment replacing and migrating analog to digital technology and SCADA equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Continue replacing spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures, spacer dampers and insulators with NCI.

**Projects Funded in Advance**

**98,682**

**99,428**

**105,164**

This category includes those facilities and/or equipment where BPA retains control or ownership but which are funded by a third party or with revenues, either in total or in part. This category also includes investments associated with the CSE Act.

- FY 2008: (1) Continued to integrate various new wind generation projects into BPA transmission grid per Interconnection Requests via the Open Access Tariff; (2) Completed planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Continue environmental cleanup and other work necessary for the sale of BPA facilities; (4) Completed other projects as agreed to with customers; (5) Began design for the radio replacements associated with the CSE Act; (6) Began the design of the California-Oregon Intertie (COI) reinforcement project.
- FY 2009: (1) Continue to integrate various new wind generation projects into BPA transmission grid per Interconnection Requests via the Open Access Tariff; (2) Complete planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Continue environmental cleanup and other work necessary for the sale of BPA facilities; (4) Complete other projects as agreed to with customers; (5) Continue design and start construction for the radio replacements associated with the CSE Act; (6) Complete design, material ordering and begin construction of the COI reinforcement project.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- FY 2010: (1) Continue to integrate various new wind generation projects into BPA transmission grid per Interconnection Requests via the Open Access Tariff; (2) Continue planning studies to identify system impacts and needs regarding proposed new generation projects; (3) Engineer and begin construction of several large wind generation interconnection substations; (4) Complete environmental cleanup and other work necessary for the sale of BPA facilities; (5) Complete other projects as agreed to with customers; (6) Continue the design and construction for various radio replacements at accessible sites associated with the CSE Act; (7) Continue construction of the COI reinforcement project.

|   |                |                |                |
|---|----------------|----------------|----------------|
| <b>Total, Transmission Services – Capital</b> | <b>227,887</b> | <b>421,807</b> | <b>595,192</b> |
|---|----------------|----------------|----------------|

**Explanation of Funding Changes**

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

**Main Grid**

- Reflects increase to accommodate new projects associated with updated power flow study results and upgrade existing transmission projects. +96,025

**Area & Customer Services**

- Reflects increase in the number of new customer service projects. +12,523

**Upgrades & Additions**

- Reflects increase on both system wide controls schemes, fiber projects and communications upgrades and improvements and additions to other transmission facilities. +31,566

**System Replacements**

- Reflects continuing focus on system replacements. +27,535

**Projects Funded in Advance**

- Reflects increase of large customer funded projects related to generation integration. +5,736

|  |                 |
|--|-----------------|
| <b>Total Funding Change, Transmission Services - Capital</b> | <b>+173,385</b> |
|--|-----------------|

## Capital IT & Equipment/Capitalized Bond Premium

### Funding Schedule by Activity

|  | (accrued expenditures)<br>(dollars in thousands) |         |         |
|--|--|---------|---------|
|  | FY 2008  | FY 2009 | FY 2010 |
| Capital IT & Equipment/Capitalized Bond Premium        |  |         |         |
| Capital Information Technologies (IT) & Equipment      | 21,526   | 29,916  | 42,638  |
| Capitalized Bond Premium                               | 0  | 0       | 0       |
| Total, Capital IT & Equipment/Capitalized Bond Premium | 21,526   | 29,916  | 42,638  |

### Outyear Funding Schedule

|  | (accrued expenditures)<br>(dollars in thousands) |         |         |         |
|--|--|---------|---------|---------|
|  | FY 2011  | FY 2012 | FY 2013 | FY 2014 |
| Total, Capital IT & Equipment/Capitalized Bond Premium | 51,413   | 51,620  | 51,751  | 52,209  |

### Description

Capital Information Technologies provides for the acquisition of general and some dedicated special purpose capital information technologies, and acquisition of special-use capital and IT equipment in support of Bonneville’s strategic objectives. This category also includes BPA’s on-going efforts to facilitate delivery of a highly resilient organization, able to anticipate, withstand and effectively respond to disruptive events affecting it and its partners in the Northwest region. The four main areas of resiliency focus include asset management, emergency management, crisis management and continuity of operations.

As part of a major efficiency effort, BPA continues to move its IT infrastructure to a more efficient architecture. This FY 2010 budget supports, in part, this effort. IT seeks to eliminate redundancies in tools and applications, establish an agency-wide IT architecture with standardized IT purchasing criteria, standardize software licensing processes and minimize agency liabilities through stronger contracts, improve IT project management, and formulate an agency IT portfolio cost management strategy. The IT estimates in this FY 2010 budget, under Capital Information Technologies and Equipment include all IT functions within the agency except TS grid operations. See the Capital Program – Transmission Services section of this budget for additional discussion of transmission-related IT requirements acquisitions.

Capital equipment provides for the acquisition of general and some dedicated special purchases of capital office furniture and equipment.

Bonneville incurs a bond premium whenever it repays a Treasury bond before the due date. When bonds are refinanced, the bond premiums incurred are capitalized. Historically, Bonneville generally has chosen to finance capitalized bond premiums with bonds issued to the Treasury, as was envisioned in the Transmission System Act of 1974.



**Detailed Justification**

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Capital Information Technology/Equipment** **21,526**    **29,916**    **42,638**

Includes enhancements to Bonneville’s information technology processes to provide cost effective efficiencies for secure, timely and accurate information. Continue enhancements to Bonneville’s Enterprise systems that are designed to link key information systems throughout Bonneville and improve business processes. Current efforts include continued functional process improvements in areas not included in the initial development phase. Acquire capital office furniture and equipment, capital automated data processing (ADP) based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for certain Bonneville programs.

**Capitalized Bond Premium.** **0**            **0**            **0**

- Continue to assess financial market and when cost-effective, refinance available bonds as prudent.

|   |               |               |               |
|---|---------------|---------------|---------------|
| <b>Total, Capital IT &amp; Equipment/Capitalized Bond Premium</b> | <b>21,526</b> | <b>29,916</b> | <b>42,638</b> |
|---|---------------|---------------|---------------|

**Explanation of Funding Changes**

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

**Capital Information Technology & Equipment**

- Reflects increasing emphasis on BPA business resiliency efforts. +12,722

**Capitalized Bond Premium**

- No change 0

|   |                |
|---|----------------|
| <b>Total Funding Change, Capital Equipment/Capital Bond Premium</b> | <b>+12,722</b> |
|---|----------------|

## Power Services - Operating Expense

### Funding Schedule by Activity

|   | (accrued expenditures)<br>(dollars in thousands) |                  |                  |
|---|--|------------------|------------------|
|   | FY 2008  | FY 2009          | FY 2010          |
| Power Services - Operating Expenses               |  |                  |                  |
| Production  | 1,102,223  | 1,415,432        | 1,428,258        |
| Associated Projects Costs                         | 290,454  | 302,199          | 325,628          |
| Fish & Wildlife                                   | 148,756  | 199,998          | 230,000          |
| Residential Exchange Program                      | 329  | 212,985          | 221,426          |
| NW Power & Conservation Council                   | 8,245  | 9,450            | 9,641            |
| Conservation and Energy Efficiency                | 94,954   | 62,523           | 64,447           |
| <b>Total, Power Services - Operating Expenses</b> | <b>1,644,961</b>                                 | <b>2,202,587</b> | <b>2,279,400</b> |

### Outyear Funding Schedule

|   | (accrued expenditures)<br>(dollars in thousands) |           |           |           |
|---|--|-----------|-----------|-----------|
|   | FY 2011  | FY 2012   | FY 2013   | FY 2014   |
| Total, Power Services - Operating Expense | 2,504,714  | 2,479,818 | 2,596,036 | 2,581,515 |

### Description

Production includes all Bonneville non-Federal debt service (including EN debt), O&M of power system generation resources, including a large nuclear plant, business operations, short- and long-term power purchases, electric utility marketing of power, and oversight of hydro and nuclear projects. BPA develops products and services to meet the needs of Bonneville customers and stakeholders, and acquires resources as needed.

During FY 2009, BPA will be developing a long-term resource program to guide future resource acquisitions needed to meet customer loads. This plan is expected to be completed in time for acquisitions to begin as necessary in FY 2011. Once the plan is complete, BPA will modify its budget as needed to reflect expected acquisitions.

EN debt is one of Bonneville's largest expense components. BPA, in collaboration with EN, is pursuing the refinancing of certain EN bonds as part of an ongoing debt optimization program. Through this program, BPA uses the reductions in debt service for its EN bonds to make advance payments on its Federal debt. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment.

Bonneville's Power Transacting Risk Management Policy permits the use of power financial instruments to hedge Bonneville's exposure to market price risk and certain index sales contract provisions.

Associated Projects represents funding for operation and maintenance costs for the FCRPS, minor additions, improvements and replacements, and liabilities of the Corps and Reclamation

hydroelectric projects in the Pacific Northwest, which serve many purposes. All agencies emphasize efficient power production from existing facilities and improvement of the performance and availability of power generating units. Bonneville pays additional financing costs of the FCRPS facilities through its Interest Expense and Capital Transfer budget programs. Bonneville provides funding for the operations and maintenance costs that are part of the Lower Snake River Compensation Plan (LSRCP) hatcheries. Bonneville is responsible for annual payments to the Confederated Tribes of the Colville Reservation for their claims concerning their contribution to the production of hydropower by the Grand Coulee Dam in accordance with the Settlement Agreement between the United States and the Tribes (April 1994).

Bonneville's Fish and Wildlife program provides for extensive protection, enhancement, and mitigation of Columbia River Basin fish and wildlife adversely affected by the development and operation of Federal hydroelectric projects on the Columbia River and its tributaries from which Bonneville markets power. Bonneville satisfies a major portion of its fish and wildlife responsibilities by funding projects and activities designed to be consistent with the Council Fish and Wildlife Program (Program) developed pursuant to Section 4(h) of the Northwest Power Act. Through the Program BPA also implements measures to aid in the recovery of fish in the Columbia River and its tributaries, listed as threatened or endangered under the ESA. Bonneville pursues a comprehensive approach to integrate the ESA requirements of the FCRPS biological opinions with the broad resource protection, mitigation and enhancement objectives of the Program.

Bonneville implements these measures addressed to salmon and steelhead recovery required under the ESA as part of the most recent FCRPS Biological Opinions issued in 2006 by the USFWS (2006 BiOp), and in May 2008 by NOAA Fisheries (2008 BiOp) to address the effects of the operation of the FCRPS on threatened and endangered salmon, steelhead, Kootenai River white sturgeon, and bull trout. The Biological Opinions require the FCRPS Action Agencies to implement actions in the Columbia River Basin that address impacts of the Federal hydrosystem on ESA-listed fish to ensure that operation of the FCRPS does not jeopardize the continued existence of listed species or adversely modify their designated critical habitat.

NOAA Fisheries issued its 2008 FCRPS BiOp in May 2008. It replaces the 2004 BiOp that was challenged and remanded. The new opinion includes, with few modifications, the spill that the Court ordered as temporary injunctive relief in 2006. The 2008 BiOp was developed through a court-ordered collaboration process over the past two years. In addition, in 2008, the FCRPS Action Agencies signed agreements, the Columbia Basin Fish Accords (Fish Accords) with four Northwest Tribes and the states of Idaho and Montana. The Fish Accords supplement the 2008 BiOp and the Council's Fish and Wildlife Program and provide firm commitments to mitigation actions and secure funding for the next 10 years.

There has also been litigation directed at the U.S. Fish and Wildlife Service Biological Opinions for Libby Dam. In 2003, the Corps and BPA reinitiated consultation for the operations at Libby Dam to address impacts to recently designated critical habitat for the Kootenai River white sturgeon, and to evaluate information that had been developed on Kootenai River white sturgeon and bull trout since the 2000 USFWS BiOp. That consultation was completed in February 2006, but was challenged by environmental groups, the Kootenai Tribe, and the State of Montana in Federal District Court of Montana. This litigation was settled in March 2009 and includes a combination of hatchery, habitat and flow/spill actions subject to modification depending on the results.

As a result of these developments, expenditures planned for FY 2009 are higher by about \$57 million over the FY 2009 Budget Submission of February 2008. The 2006 BiOp, 2008 BiOp, Fish Accord commitments, and projects undertaken to implement the Columbia Basin Fish and Wildlife Program pursuant to the Northwest Power Act, are the basis for BPA Environment, Fish and Wildlife division's planned expense level of \$200 million for FY 2009 and \$230 million for FY 2010.

Bonneville's mitigation and recovery expenditures will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects, consistent with priorities established in Council Sub-basin Plans, designed to:

- increase survival of ESA-listed and non-listed fish at FCRPS dams and reservoirs;
- increase survival of ESA-listed and non-listed fish throughout their life cycle by protecting and enhancing important habitat areas;
- reform hatchery practices that affect ESA-listed populations and use hatcheries to contribute to conservation and recovery of ESA-listed and non-listed fish;
- provide for offsite mitigation projects for habitat, passage, and other improvements that address limiting factors for target species as defined in Sub-basin Plans;
- reduce harvest-related mortality on ESA-listed and non-listed fish and support sustainable fisheries; and
- support a focused and well-coordinated research, monitoring, and evaluation program.

To the extent possible, Bonneville is integrating the actions implemented in response to the FCRPS BiOps with projects implemented under the Council's Fish and Wildlife Program. Sub-basin plans that include prioritized strategies for mitigation actions will help guide project selection that meets both BPA's ESA and Northwest Power Act responsibilities. In order to address the *in lieu* provision of the Northwest Power Act, BPA continues its ongoing work with the Council and the regional fish and wildlife managers, customers, and Tribes to review projects to ensure ratepayers fund appropriate mitigation. For example, BPA established a cost sharing MOU with the U.S. Forest Service in 2005 that requires a programmatic 30 percent cost share for FYs 2007-2009 for fish mitigation projects funded by BPA on U.S. Forest Service lands.

The Energy and Water Development Appropriations Act of 1997 added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Science Review Panel (ISRP) "to review a sufficient number of projects" proposed to be funded through Bonneville's fish and wildlife budget "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program." The Northwest Power Act further states that "in making its recommendations to Bonneville, the Council shall consider the impact of ocean conditions on fish and wildlife populations and shall determine whether the projects employ cost effective measures to achieve program objectives." Today, most projects funded by Bonneville under the Program receive ISRP review as part of the Council recommendation process.

The Conference Report on the Energy and Water Development Appropriations Act of 1999 included a new assignment for the ISRP and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed, or directly funded, by Bonneville. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide

a report to the Council by April 1 of each year. The Council, in turn, must report to Congress annually, by May 15.

The REP was created through the Northwest Power Act to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. BPA's IOUs have been the most active utilities participating in the REP. The 1996 Comprehensive Regional Review recommended that Bonneville engage in settlement discussions regarding the REP. Bonneville then developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That Strategy proposed a comprehensive settlement of REP disputes with IOUs in the Pacific Northwest, which resulted in new contracts with regional IOUs that provided power and monetary benefits to their residential and small farm customers for FYs 2002-2011.

The 2000 REP Settlement Agreements, as amended, and the way the settlement costs were allocated in setting the Priority Firm (PF) rate for FYs 2002-2006, were challenged by public utilities and others in the U.S. Court of Appeals for the Ninth Circuit. The PF rate is the cost-based rate that preference customers pay for their requirements purchases from BPA. On May 3, 2007, the Court held that the REP Settlement Agreements were inconsistent with the Northwest Power Act and that the settlement costs were improperly allocated in setting the PF rate.

As a result of these Court rulings, payments to the IOUs were suspended in May 2007. However, the PF rate remained unchanged. BPA conducted a section 7(i) rate proceeding during FY 2008 to revise FY 2009 power rates and re-establish the REP. BPA also completed a public process to review and revise the 1984 ASC Methodology, to respond to the Court's rulings. These processes concluded at the end of FY 2008.

BPA has not implemented a traditional REP since 1996 due to the existence of settlements. Since the Ninth Circuit Court rulings, it has become clear to BPA that a traditional REP must be established. The components for re-establishing an REP are the utility's ASC, BPA's PF Exchange rate, and the utility's residential and small farm loads.

Payments made under the REP are based on the difference between BPA's IOU-specific PF Exchange rates and each utility's ASC, times the utility's residential and small farm loads. With BPA's new 2008 ASC Methodology, the ASCs that determine exchange payments are established in a public process that occurs prior to a rate case. Then, the subsequent rate case uses those ASCs and determines the PF Exchange rate. Payments are made monthly based on the actual exchange loads.

The WP-07 Supplemental rate case responded to the Court's rulings and revised power rates for FY 2009. This rate case also established the amount by which the preference customers were overcharged in FY 2002-2008 due to the REP Settlement Agreements found to be in violation of the Northwest Power Act by the Court. It also determined the approach to recovering those overcharges from the IOUs and returning them to the Preference customers who paid the too-high PF rates. The WP-07 Supplemental ROD, studies and documentation for the WP-07 Supplemental rate case determined the PF Exchange rate for FY 2009, as well as the magnitude of the initial amount to be returned to the Preference customers in FY 2009 for overcharges during FY 2002-2006.

The Council’s major activities include the periodic preparation of a Northwest Conservation and Electric Power Plan (a 20-year electric energy demand and resources forecast and energy conservation program) and a Columbia River Basin Fish and Wildlife Program of loss mitigation and resource enhancement actions. The Northwest Power Act directs that expenses of the Council, subject to certain limits based on forecasted Bonneville power sales, shall be included in Bonneville’s annual budget to Congress. Funding for the Council is provided by Bonneville and is recovered through Bonneville power rates.

BPA will acquire conservation resources consistent with the Council’s Power Plan and act as a catalyst for energy efficiency. Such action will: 1) meet conservation targets; 2) achieve a least cost resource mix; 3) lessen the cost impacts of power purchases; 4) avoid the costs of ramping programs and infrastructure up and down; 5) extend the value of the FCRPS to customers; and 6) build the region’s resource portfolio with conservation. Bonneville is also exploring how best to integrate demand-side management, distributed generation, and other leading edge technologies (i.e., Energy Web and Smart Grid applications) into its generation and transmission planning processes.

### Detailed Justification

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

#### Production

**1,102,223      1,415,432      1,428,258**

- Power Purchases: Includes purchased power to cover power supply obligations as well as balancing the hydro system. These purchases can be made in the form of long-term purchases to meet supply obligations based on long-term planning requirements or they can be made within the year due to the monthly shape of the loads and the monthly shape of the hydro electric generation. Also, purchases can be made within the month and within the day to fill shortages due to fluctuations in the hydro system and load changes.
- Power Scheduling/Marketing: Schedule and market (buy/sell) electric energy with Bonneville customers and the Pacific Northwest’s interconnected utilities. Scheduling includes PS’s implementation of physical and memo power schedules and associated transmission schedules, implementation of Electronic Tagging (ETag) in accordance with NERC and in accordance with FERC, implementation of electronic scheduling and the Columbia Grid as it evolves.
- Trojan: Decommissioning activities are complete and the Trojan operating license has been terminated by the NRC. BPA’s 30 percent share of the demolition of buildings and site restoration activities continued through FY 2008 with operation and maintenance continuing for the Independent Spent Fuel Storage Installation.
- Columbia Generating Station (formerly WNP-2): Continue to acquire full capability of Columbia Generating Station (CGS). CGS is on a 24-month fuel and outage cycle. A maintenance and refueling outage is planned for the spring of FY 2009.
- WNP-1/WNP-3: Continue to fulfill contractual obligations for WNP-1 and WNP-3.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Long-Term Power Purchases and Wheeling: Continue to acquire 100 percent of the following wind projects: Foote Creek 2 (2 MW) and 4 (17 MW), Condon (50 MW) and Klondike I (24 MW). BPA continues to purchase 41 MW of Foote Creek 1, 90 MW of the Stateline wind project, and as of November 2007, BPA purchases 50 MW of the Klondike III wind project. Wind purchases now total 274 MW. BPA also continues to purchase a 15 kW share of the output from the Solar Ashland Project.

#### Generation and Oversight:

FY 2008: Provided oversight of all signed contracts including oversight of large thermal generating plants from which Bonneville purchases capability to ensure that all Bonneville approval rights are protected; coordinated, communicated, and administered agreements, issues, and programs between Bonneville and the project owners. Continued to provide wind resource integration services for customer wind generation.

FY 2009: Continue to provide oversight of all contracts signed to date. Pursue cost-effective means to mitigate capacity demands associated with interconnecting large amounts of wind into the BPA system. Pursue acquisition of additional cost-effective renewable generation to meet load growth. Continue to provide oversight on the wind resource integration services currently purchased by public power customers and offer additional renewable resource shaping services to such customers using wind generation to serve their load.

FY 2010: Continue to provide oversight of all contracts signed to date. Pursue cost-effective means to mitigate capacity demands associated with interconnecting large amounts of wind into the BPA system. Pursue acquisition of additional cost-effective renewable generation to meet load growth. Continue to provide oversight on the wind resource integration services currently purchased by public power customers and offer additional renewable resource shaping services to such customers using wind generation to serve their load.

**Associated Project Costs** **290,454** **302,199** **325,628**

- Support FCRPS project costs and work to strengthen interagency and regional relationships to improve project performance, supporting functions, and to better understand project resource requirements and costs. This helps to maintain FCRPS reliability and system performance, as well as to attain BPA's strategic business objectives.
- Bureau of Reclamation:
  - FY 2008: Continued direct funding Reclamation O&M power activities.
  - FY 2009: Continue direct funding Reclamation O&M power activities.
  - FY 2010: Continue direct funding Reclamation O&M power activities.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Corps of Engineers:  
FY 2008: Continued direct funding Corps O&M power activities.  
FY 2009: Continue direct funding Corps O&M power activities.  
FY 2010: Continue direct funding Corps O&M power activities.

**Fish and Wildlife** **148,756** **199,998** **230,000**

- Specific project solicitation recommendations were made by the Council in late 2006 followed by BPA review and funding decisions completed in early 2007. These decisions were based upon the management objectives and priorities in the Program and Sub-basin Plans as well as an integration of ESA responsibilities as described in the NOAA Fisheries and U.S. Fish and Wildlife Service’s FCRPS Biological Opinions. Coordination continues among BPA, Council, Federal resource management agencies, states, tribes and others.
- Anadromous Fish: Continue implementing both ongoing and new projects that support ESA-listed species and other measures called for under the 2008 FCRPS BiOp and the Fish Accords. Prioritize projects that address the factors that limit mitigation success as identified in the Sub-basin Plans and that fulfill BPA’s responsibility for mitigation of the FCRPS. Implement and develop activities that protect and enhance tributary and estuary habitat; improve mainstream habitat on an experimental basis; reduce potentially harmful hatchery practices on ESA-listed populations; and contribute to sustainable fisheries. These activities have been selected in response to the Northwest Power Act section 2(6) to “protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries.”
- Resident Fish: Implement activities to determine the impacts of the FCRPS on lamprey and bull trout and mitigate for those impacts, and promote the reproduction and recruitment of Kootenai River white sturgeon. These activities have been selected in response to the 2006 BiOp, the Fish Accords, and the Northwest Power Act requirement to “protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries.”
- Continue mitigation using resident fish to offset anadromous losses (substitution); mitigate for reservoir operation impacts to resident fish; and continue to refine, quantify, and delineate the difference between the two. Those resident fish habitat acquisition projects that meet BPA’s Capitalization Policy will be funded under the capital portion of Bonneville’s Fish and Wildlife budget.



(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Wildlife: Use existing Bonneville policies to continue the current effort to mitigate wildlife in a manner consistent with Council’s 2000 Fish and Wildlife Program. These activities have been selected in response to the Northwest Power Act requirement to “protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries.” Those wildlife acquisition projects that meet BPA’s Capitalization Policy will be funded under the capital portion of Bonneville’s Fish and Wildlife budget.

**Residential Exchange Program** **329** **212,985** **221,426**

- Includes actual REP costs for FY 2008 and forecasts of possible REP costs for FY 2009 and FY 2010. Actuals for FY 2008 also reflect off-setting accounting treatments resulting from the decisions on the REP established in the WP-07 Supplemental rate case. In addition, FY 2008 actuals include a settlement payment for a contract for a geothermal resource that did not prove economic.

**Northwest Power and Conservation Council** **8,245** **9,450** **9,641**

- Continue support of the Council activities, as directed under the Northwest Power Act, including regional power plan development and maintenance, and fish and wildlife program activities.

**Conservation and Energy Efficiency** **94,954** **62,523** **64,447**

- Continue close-out of the legacy conservation resource acquisition contracts, which support Bonneville’s contractual obligation to serve customer load growth.
- Provide credible, unbiased information, and technical and financial support to conservation purposes. As an agency with independent responsibilities based on its authorizing legislation, Bonneville has a statutory responsibility to encourage and support the development of conservation in the Pacific Northwest. Bonneville is participating with other regional entities to support market transformation and development activities that meet the needs of Bonneville customers and create business opportunities for the private sector in the Pacific Northwest. Toward that end, BPA has been helping create a delivery infrastructure to ensure conservation savings are installed efficiently and effectively throughout the region.
- This FY 2010 budget for Conservation expense includes about \$36 million for a portion of power renewables in FY 2008 which are otherwise included in this budget in Power-Production for FYs 2009 and beyond, consistent with IPR data assumptions.

**Total, Power Services – Operating Expense** **1,644,961** **2,202,587** **2,279,400**

## Explanation of Funding Changes

|                                   |
|-----------------------------------|
| FY 2010 vs.<br>FY 2009<br>(\$000) |
|-----------------------------------|

### Production

- Primarily reflects increases in power purchases and CGS O&M +12,826

### Associated Project Costs

- Reflects minor changes to security, biological opinion requirements, non-routine extraordinary maintenance, WECC/NERC compliance activities, and improvements, replacements, and minor additions at the projects. +23,429

### Fish and Wildlife

- Reflects funding associated with Biological Opinions, Fish Accord commitments and Northwest Power Act activities. +30,002

### Residential Exchange

- Increase due to increase in forecast of public exchange costs. +8,441

### Northwest Power and Conservation Council

- Small increase reflects continuing Council program activities. +191

### Conservation and Energy Efficiency

- Small increase reflects normal program adjustments. +1,924

**Total Funding Change, Power Services - Operating Expense** +76,813

## Transmission Services - Operating Expense

### Funding Schedule by Activity

| (accrued expenditures)<br>(dollars in thousands)        |                |                |                |
|---|----------------|----------------|----------------|
|   | FY 2008        | FY 2009        | FY 2010        |
| Transmission Services - Operating Expense               |                |                |                |
| Engineering   | 27,828         | 64,594         | 66,384         |
| Operations  | 127,346        | 110,039        | 115,954        |
| Maintenance   | 151,503        | 162,391        | 184,519        |
| <b>Total, Transmission Services - Operating Expense</b> | <b>306,677</b> | <b>337,024</b> | <b>366,857</b> |

### Outyear Funding Schedule

| (accrued expenditures)<br>(dollars in thousands)        |         |         |         |         |
|---|---------|---------|---------|---------|
|   | FY 2011 | FY 2012 | FY 2013 | FY 2014 |
| <b>Total, Transmission Services - Operating Expense</b> | 375,066 | 381,986 | 394,800 | 406,729 |

### Description

This activity provides for the transmission system services of engineering, operations, and maintenance for Bonneville's electric transmission system, consisting of over 15,190 circuit miles (24,441 circuit kilometers) of lines, 259 substations, and the associated power system control and communication facilities, with an invested cost of more than \$6.0 billion. Primary strategies of this program are: 1) maintain the safety and reliability of the transmission system; 2) increase the focus on meeting customers' needs; 3) optimize the transmission system; and 4) provide open and nondiscriminatory transmission access; and 5) improve Bonneville's cost effectiveness.

### Detailed Justification

| (dollars in thousands) |               |               |               |
|------------------------|---------------|---------------|---------------|
|                        | FY 2008       | FY 2009       | FY 2010       |
| <b>Engineering</b>     | <b>27,828</b> | <b>64,594</b> | <b>66,384</b> |

Continue efforts to identify best methods for improving system reliability and maintenance practices, and continue cost reduction efforts by identifying opportunities for low-cost reinforcement and voltage support of the existing transmission system.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- **Asset Management:** Begin deploying the Asset Management approach to sustain the existing assets and expanding the system to meet Agency objectives. Prepare for certification to Publicly Available Specifications (PAS)-55 over three to five years.
- **R&D:** Conduct research focused on technologies related to business challenges BPA faces including reliability, energy efficiency, and integration of renewable energy resources. Technologies of interest are identified in BPA's Technology Roadmaps. A portfolio of research is selected every year through BPA's Portfolio Decision Framework.
- **Technical Support:** Provide technical support activities, such as transmission system planning and studies to optimize portions of the system. Provide support for non-wires solutions studies and pilot projects.
- **Capital-to-Expense Adjustments:** Conduct annual analysis of Bonneville's outstanding capital work orders to assess whether they should be expensed. As obsolete inventory is identified and disposed of, it is expensed.
- **Regulatory Fees:** Western Electricity Coordinating Council (WECC) dues based on the load of WECC members as a proportion of the total load within the WECC area. Includes planning, direction, and management of the comprehensive industry restructuring program aligned to meet BPA's mission and objectives, including leading BPA's analysis and support of the regional changes necessary for a transition to ColumbiaGrid.
- **Reimbursable Transactions:** Enter into written agreements with Federal and non-Federal entities that have work or services to be performed by Bonneville staff at the expense of the benefiting utilities. The projects must be beneficial, under agreed upon criteria, to Bonneville operations and to the Federal or non-Federal entity involved. Additionally, these activities contribute to more efficient or reliable construction of the Federal transmission system or otherwise enhance electric service to the region.
- **Leased and Other Costs:** Includes leases and other costs of financing transmission, delivery and voltage support facilities when such arrangements are operationally feasible and cost effective to deliver power. Capitalized leases enable BPA to continue to invest in infrastructure to support a safe and reliable system for the transmission of power. Other costs included are the accrued interest costs associated with Large Generator Interconnection Agreements (LGIA).

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

**Operations**

**127,346**

**110,039**

**115,954**

- FY 2008: Continued to operate within parameters of regional transmission authorities. Supported new compliance activities related to the reliability of the transmission system. Developed policies and procedures for integrating the high levels of wind generation into the transmission grid. Prepared for increased complexity of power system operations and dispatching including congestion management and outage scheduling as well as increased complexities in transmission scheduling. Addressed succession planning issues across key functions. Continued development and implementation of business systems and tools.
- FY 2009: Continue to operate within parameters of regional transmission authorities. Continue support of increased compliance activities related to the reliability of the transmission system. Continue developing policies and procedures and implementing systems to support the integration of high levels of wind generation into the transmission grid. Continue preparation for increased complexity of power system operations and dispatching including congestion management and outage scheduling as well as increased complexities in transmission scheduling. Continue to address succession planning issues across key functions. Continue development and implementation of business systems and tools.
- FY 2010: Continue to operate within parameters of regional transmission authorities. Continue support of compliance activities related to the reliability of the transmission system. Further refine policies and procedures and implementing systems to support the integration of high levels of wind generation into the transmission grid. Continue preparation for increased complexity of power system operations and dispatching including congestion management and outage scheduling as well as increased complexities in transmission scheduling. Continue to address succession planning issues across key functions. Continue development and implementation of business systems and tools.
- Substation Operations: Perform operations functions necessary to provide electric service to customers and to protect the Federal investment in electric equipment and other facilities. Includes equipment adjustments, switching lines and equipment during emergencies or maintenance, isolating damaged equipment, restoring service to customers, and inspecting equipment, reading meters, et cetera.
- Power System Dispatching and Supporting Functions: Perform central dispatching, control, and monitoring of the electric operation of the Federal transmission system. Also includes load, frequency and voltage control of Federal generating plants, and coordinating long and short term outages of system equipment. In addition, provides technical engineering support of dispatching function and provides all support for Dittmer Control Center (DCC) and Monroe Control Center (MCC) power system control centers.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- **Marketing and Sales:** Provide management and direction of transmission rates, and provide business strategy in marketing of transmission and ancillary products and services of Transmission Services. Involve customers and constituents in the process of product and rate development. Maintain accurate and complete historical records of current and past transmission agreements. Provide guidance for current and future transmission contract negotiations. Provide financial analysis of market strategies. Monitor and report on the financial health of Transmission Services. Support cost management by effective reporting and analysis of current expenditures. Ensure official budget submittals reflect current management financial strategies and adequately fund transmission programs.
- **Transmission Scheduling:** Provide open access to the Federal transmission system consistent with the Open Access Transmission Tariff. Schedule and market transmission capacity to Bonneville customers, California ISO, and Pacific Northwest's interconnected utilities. Manage the reservations and scheduling of all transmission services associated with the Open Access Transmission Tariff.

**Maintenance** **151,503**      **162,391**      **184,519**

In all aspects of maintenance, Bonneville is continuing the use of Reliability Centered Maintenance (RCM) practices. The use of RCM practices is focused on improving system reliability, increasing availability and meeting new and existing compliance regulations. In addition BPA is deploying Asset Management to optimize maintain/replace decision making. Maintenance costs are expected to increase as Bonneville addresses the aging transmission system, meeting Reliability Standards including Vegetation Management, and environmental constraints associated with construction, enhancement, and maintenance of the system. The Bonneville transmission system encompasses 15,190 circuit miles on over 8,600 right-of-way miles (many of these miles are through rugged, inaccessible terrain).

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- FY 2008: Continued to refine RCM practices in all of Bonneville's O&M regions. Implemented processes for monitoring and tracking compliance activities related to the reliability of the transmission system. Continued to improve performance meeting System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) targets. Continued efforts to achieve the SAIFI and SAIDI targets of no control chart violations for circuit importance categories 1-2 (highest importance), and not more than one violation for category 4. Control charts are statistically based graphs that illustrate variability in performance. Continued to improve availability performance by utilizing more efficient and cost-effective maintenance work practices and outage coordination. Used recruitment incentives to ensure succession of the current work force and remain competitive as an employer in the utility industry. Assured a safe work environment through safety awareness and improved work practices. Increased outage scheduling planning to increase customer satisfaction. Continued high levels of vegetation management and increased access road work to provide reliable access to facilities and ensure environmental compliance.
- FY 2009: Continue to refine RCM practices and deploying Asset management in all of Bonneville's O&M districts. Continue refining processes and procedures for monitoring and tracking compliance activities related to the reliability of the transmission system. Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to improve system availability performance through new maintenance procedures and work practices. Develop work practices and procedures for implementation of a new specialty crew using bare-handing practices for maintenance of high-voltage transmission lines. Continue increased emphasis on replacement of line hardware (life extension programs for insulators, connectors, dampers & fiber optic cable hardware). Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage scheduling and coordination planning to increase customer satisfaction and system availability. Increase emphasis on non-electric facilities to compensate for years of deferral. Continue high emphasis of vegetation management, implementation of an aggressive access road management plan to maintain roads at a level that minimizes response time, increases reliability, and ensures environmental compliance Continue improving environmental stewardship.

(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- FY 2010: Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue refining processes and procedures for monitoring and tracking compliance activities related to the reliability of the transmission system. Continue to improve system availability performance through new maintenance procedures and work practices. Continue to develop and implement work practices and procedures for implementation of a new specialty crew using bare-handing practices for maintenance of high-voltage transmission lines. Continue increased emphasis on replacement of line hardware (life extension programs for insulators, connectors, dampers & fiber optic cable hardware). Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning and coordination to increase customer satisfaction and system availability. Maintain vegetation management levels to ensure system reliability. Continue access road work to provide reliable access to facilities and ensure environmental compliance. Continue improving environmental stewardship.
- Transmission Line Maintenance: Maintain and repair 15,190 circuit miles (24,441 km) of high voltage transmission lines, of which over 7,617 km (4,734 circuit miles) are 500-kV transmission EHV (extra-high voltage), for which maintenance is two and one-half times more labor-intensive than maintenance of lower transmission voltages, although more efficient in transmission of power. This responsibility includes maintaining transmission rights-of-way to ensure system reliability, safety, and environmental compliance. Adopt work practices that improve system availability, reliability, and compliance.
- Right-of-Way Maintenance: Maintain and manage Bonneville's 8,600 right-of-way miles. This responsibility Includes vegetation management, danger tree management, and access road maintenance to ensure system reliability, safety, and environmental compliance. Adopt procedures and processes that improve system availability, reliability, environmental compliance, and reliability compliance.
- Substation Maintenance: Maintain and repair the transmission system power equipment located in Bonneville's 259 substations. Work includes inspections, diagnostic testing and predictive and condition based maintenance.
- System Protection Maintenance: Maintain relaying metering and remedial action scheme equipment used to control and protect the electrical transmission system and to meter energy transfers for the purpose of revenue billing. Additionally, field-engineering services provide technical advice and assure the correct operation of power system relaying and special control systems used to support interregional energy transmission capabilities.



(dollars in thousands)

| FY 2008 | FY 2009 | FY 2010 |
|---------|---------|---------|
|---------|---------|---------|

- Power System Control Maintenance: Test, repair, and provide field engineering support of Bonneville’s highly complex equipment, communications, and control systems, including seven major microwave systems, fiber optic systems, and other critical communications and control equipment that support the power system.
  
- Non-Electric Plant Maintenance: Maintain and manage Bonneville’s non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities, as well as, facilities asset management on Bonneville-owned or Bonneville-leased non-electric facilities.
  
- Maintenance Standards and Engineering: Establish, monitor, and update system maintenance standards, policies, and procedures, and review and update long-range plans for maintenance of the electric power transmission system.

|   |                |                |                |
|---|----------------|----------------|----------------|
| <b>Total, Transmission Services - Operating Expense</b> | <b>306,677</b> | <b>337,024</b> | <b>366,857</b> |
|---|----------------|----------------|----------------|

**Explanation of Funding Changes**

|                                      |
|--------------------------------------|
| FY 2010<br>vs.<br>FY 2009<br>(\$000) |
|--------------------------------------|

**Engineering**

- Reflects emphasis on system reliability improvements, research and development, and an increase in lease payments. +1,790

**Operations**

- Reflects continued emphasis on reliability compliance activities, wind integration activities, security, and control center systems support. +5,915

**Maintenance**

- Primarily reflects implementation of the facilities asset management plans, implementation of a new bare-handing crew, NERC/WECC compliance activities related to land rights and vegetation management, continuing maintenance program activities, including system protection, right-of-way, line maintenance, and performance improvements. +22,128

|   |          |               |
|---|----------|---------------|
| <b>Total Funding Change, Transmission Services – Operating Expense.</b> | <b>+</b> | <b>29,833</b> |
|---|----------|---------------|

**Interest, Pension and Post-retirement Benefits -  
Operating Expense and Capital Transfers**

**Funding Schedule by Activity**

|   | (accrued expenditures)<br>(dollars in thousands) |         |         |
|---|--|---------|---------|
|   | FY 2008  | FY 2009 | FY 2010 |
| Interest, Pension and Post-retirement Benefits        |  |         |         |
| BPA Bond Interest (Net)                               | 99,131   | 69,216  | 102,358 |
| BPA Appropriation Interest                            | 40,838   | 30,858  | 23,198  |
| Corps of Engineers Appropriation Interest             | 161,358  | 161,145 | 166,621 |
| Lower Snake River Comp Plan Interest                  | 16,487   | 16,485  | 16,485  |
| Bureau of Reclamation Appropriation Interest          | 43,794   | 43,390  | 43,390  |
| Subtotal, Interest – Operating Expense                | 361,608  | 321,094 | 352,052 |
| Pension and Post-retirement Benefits                  | 18,000   | 30,554  | 31,195  |
| Total, Interest, Pension and Post-retirement Benefits | 379,608  | 351,648 | 383,247 |

**Outyear Funding Schedule**

|   | (accrued expenditures)<br>(dollars in thousands) |         |         |         |
|---|--|---------|---------|---------|
|   | FY 2011  | FY 2012 | FY 2013 | FY 2014 |
| Total, Interest, Pension and Post-retirement Benefits | 423,024  | 466,649 | 509,385 | 557,105 |

**Operating Expense**

**Description**

Interest expense provides for the payment of interest due on Federal debt. This consists of capital investment in FCRPS hydroelectric generating and transmission facilities of Bonneville, the Corps and Reclamation. Investments were financed by Congressional appropriations and Bonneville borrowings from the Treasury. Bonneville repays Federal debt through its power sales and transmission services revenues.

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all Bonneville borrowing has been at market rates. As of Oct 1, 1996, all of Bonneville's repayment obligations on FCRPS appropriated investment (Corps and Reclamation FCRPS investment and Bonneville investment) financed with appropriations prior to the Transmission System Act that were unpaid as of Sept 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments Bonneville would make to the Treasury for these obligations in the absence of the legislation, plus \$100 million. The new principal amounts were assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligations on

appropriations at the end of FY 1996 were \$6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the Bonneville Appropriations Refinancing Act to Treasury for their review and approval. Treasury approved the implementation calculations in July 1997. The Act also calls for all future FCRPS appropriations to be assigned prevailing Treasury yield curve interest rates.

Interest estimates are a direct function of costs of Treasury borrowing to Bonneville, repayment status of outstanding FCRPS investments, and projected additions to FCRPS plant in service. These estimates may change over time depending on forecasted market conditions. The interest cost estimates below include the impact of Bonneville's appropriation refinancing legislation.

Bonneville has been paying its unfunded liability of the Civil Service Retirement System (CSRS) and post-retirement benefits into the General Fund of the Treasury (receipt account 892889) since FY 1998. These payments are consistent with the FY 2001 Administration's budget which assumed Bonneville would prospectively cover the full unfunded liability that accrues in fiscal years after FY 1997 of the Civil Service Retirement and Disability Fund (Disability Fund), the Employees Health Benefits Fund (Health Fund), and the Employees Life Insurance Fund (Insurance Fund) that it had not covered prior to FY 1998. As part of the FY 2001 Administration's Budget, Bonneville assumed its entire CSRS cost recovery would be phased in over a 10-year period, given that wholesale power and transmission rates for Bonneville were contractually frozen until the end of FY 2001, in order to meet competitive market pressures. For FY 2008, the final year of the scheduled 10-year period, \$18 million was recovered by Bonneville through rates and paid into the General Fund of the Treasury. Post FY 2008 amounts are unscheduled estimates and may change. Cost estimates include pension and post-retirement benefits for Bonneville and the power-related portion of the Corps, Reclamation, and USFWS.

## Capital Transfers

### Funding Schedule by Activity

|  | (accrued expenditures)<br>(dollars in thousands) |         |         |
|--|--|---------|---------|
|  | FY 2008  | FY 2009 | FY 2010 |
| Capital Transfers                      |  |         |         |
| BPA Bond Amortization /1               | 404,600  | 160,000 | 285,000 |
| Reclamation Appropriation Amortization | 675  | 0       | 248     |
| BPA Appropriation Amortization         | 75,462   | 105,649 | 71,322  |
| Corps Appropriation Amortization       | 74,702   | 10,075  | 63,426  |
| Total, Capital Transfers               | 555,439  | 275,724 | 419,996 |

### Outyear Funding Schedule

|                          | (accrued expenditures)<br>(dollars in thousands) |         |         |         |
|--------------------------|--|---------|---------|---------|
|                          | FY 2011  | FY 2012 | FY 2013 | FY 2014 |
| Total, Capital Transfers | 422,381  | 318,641 | 199,105 | 204,020 |

/1 BPA "Bond(s)" in this FY 2010 budget refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtednesses issued and sold to the U.S. Treasury.

### Description

This activity conveys funds to the Treasury for repayment of certain FCRPS costs not included in the Associated Project Costs budget. Since capital transfers are cash transactions, they are not considered budget obligations.

**BONNEVILLE POWER ADMINISTRATION  
TOTAL OBLIGATIONS/OUTLAYS**

Current Services  
(in millions of dollars)  
FISCAL YEAR

FB 27-Apr-09

**BP-1 SUMMARY**

1,3/

1 Residential Exchange Program

2 Power Services 2/

3 Transmission Services

4 Conservation & Energy Efficiency

5 Fish & Wildlife

6 Interest/ Pension 4/

7 Associated Project Cost - Capital

8 Capital Equipment

3 Planning Council

10 Misc. Accounting Adjs.

11 Projects Funded in Advance

12 Capitalized Bond Premiums

13 Misc. Accounting Adjs.

**TOTAL OBLIGATIONS/  
OUTLAYS 3/**

|  | 2008         |              | 2009         |              | 2010         |              | 2011         | 2012         | 2013         | 2014         |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Oblig.       | Outlays      | Oblig.       | Outlays      | Oblig.       | Outlays      | Oblig.       | Oblig.       | Oblig.       | Oblig.       |
| 1 Residential Exchange Program           | 0            | 0            | 213          | 213          | 221          | 221          | 220          | 222          | 221          | 222          |
| 2 Power Services 2/                      | 1,392        | 1,392        | 1,718        | 1,718        | 1,754        | 1,754        | 1,974        | 1,938        | 2,048        | 2,027        |
| 3 Transmission Services                  | 436          | 436          | 659          | 659          | 857          | 857          | 934          | 858          | 846          | 846          |
| 4 Conservation & Energy Efficiency       | 103          | 103          | 95           | 95           | 120          | 120          | 121          | 124          | 125          | 125          |
| 5 Fish & Wildlife                        | 175          | 175          | 250          | 250          | 300          | 300          | 296          | 292          | 298          | 304          |
| 6 Interest/ Pension 4/                   | 380          | 380          | 352          | 352          | 383          | 383          | 423          | 467          | 509          | 557          |
| 7 Associated Project Cost - Capital      | 105          | 105          | 159          | 159          | 187          | 187          | 203          | 212          | 224          | 226          |
| 8 Capital Equipment                      | 22           | 22           | 30           | 30           | 43           | 43           | 50           | 50           | 50           | 51           |
| 3 Planning Council                       | 8            | 8            | 9            | 9            | 10           | 10           | 10           | 10           | 10           | 10           |
| 10 Misc. Accounting Adjs.                | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 11 Projects Funded in Advance            | 99           | 99           | 99           | 99           | 105          | 105          | 117          | 99           | 88           | 89           |
| 12 Capitalized Bond Premiums             | 0            | 0            | 0            | 0            | 0            | 0            | 2            | 2            | 2            | 2            |
| 13 Misc. Accounting Adjs.                | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| <b>TOTAL OBLIGATIONS/<br/>OUTLAYS 3/</b> | <b>2,720</b> | <b>2,720</b> | <b>3,584</b> | <b>3,584</b> | <b>3,980</b> | <b>3,980</b> | <b>4,350</b> | <b>4,274</b> | <b>4,421</b> | <b>4,459</b> |

**REVENUES AND REIMBURSEMENTS**

Current Services  
(in millions of dollars)

FISCAL YEAR

BP-1 SUMMARY

|                                  | 2008         |              | 2009         |              | 2010         |              | 2011         | 2012         | 2013         | 2014         |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                  | Oblig.       | Outlays      | Oblig.       | Outlays      | Oblig.       | Outlays      | Oblig.       | Oblig.       | Oblig.       | Oblig.       |
| 13 Revenues 5/                   | 3,538        | 3,538        | 3,495        | 3,495        | 3,885        | 3,885        | 4,243        | 4,185        | 4,343        | 4,380        |
| 14 Project Funded in Advance     | 99           | 99           | 99           | 99           | 105          | 105          | 117          | 99           | 88           | 89           |
| 15 <b>TOTAL</b>                  | <b>3,637</b> | <b>3,637</b> | <b>3,594</b> | <b>3,594</b> | <b>3,990</b> | <b>3,990</b> | <b>4,360</b> | <b>4,284</b> | <b>4,431</b> | <b>4,469</b> |
| <b>BUDGET AUTHORITY (NET) 6/</b> | <b>166</b>   |              | <b>317</b>   |              | <b>427</b>   |              | <b>507</b>   | <b>527</b>   | <b>633</b>   | <b>620</b>   |
| 16 <b>OUTLAYS (NET) 6,7/</b>     |              | <b>(372)</b> |              | <b>(10)</b>  |              | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  |

**The accompanying notes are an integral part of this table.**

1/ This FY 2010 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2009-2014.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

- 2/ Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.
- 4/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.
- 5/ Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also assumed.
- 6/ BPA received \$49 million of additional budget authority in FY 2007 to accommodate the work necessary to relocate the radio spectrum consistent with the Commercial Spectrum Enhancement Act (P.L. 108-494). In subsequent years, per the assumed expenditures developed as part of BPA's work plans, outlays for the work performed are assumed.
- 7/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Estimated Net Outlays could change due to changing market conditions, streamflow variability, and continuing restructuring of the electric industry.

**EXPENSED OBLIGATIONS/OUTLAYS 1,4/  
Current Services**  
(in millions of dollars)  
**FISCAL YEAR**

|                                    | 2008   |         | 2009   |         | 2010   |         | 2011   | 2012   | 2013   | 2014   |
|------------------------------------|--------|---------|--------|---------|--------|---------|--------|--------|--------|--------|
|                                    | Oblig. | Outlays | Oblig. | Outlays | Oblig. | Outlays | Oblig. | Oblig. | Oblig. | Oblig. |
| 1 Residential Exchange Program     | 0      | 0       | 213    | 213     | 221    | 221     | 220    | 222    | 221    | 222    |
| 2 Power Services 2/                | 1,393  | 1,393   | 1,718  | 1,718   | 1,754  | 1,754   | 1,974  | 1,938  | 2,048  | 2,027  |
| 3 Transmission Services            | 307    | 307     | 337    | 337     | 367    | 367     | 375    | 382    | 395    | 407    |
| 4 Conservation & Energy Efficiency | 95     | 95      | 63     | 63      | 64     | 64      | 65     | 68     | 69     | 69     |
| 5 Fish & Wildlife                  | 149    | 149     | 200    | 200     | 230    | 230     | 236    | 242    | 248    | 254    |
| 6 Interest/ Pension 3/             | 380    | 380     | 352    | 352     | 383    | 383     | 423    | 467    | 509    | 557    |
| 7 Planning Council                 | 8      | 8       | 9      | 9       | 10     | 10      | 10     | 10     | 10     | 10     |
| 8 TOTAL EXPENSE                    | 2,332  | 2332    | 2892   | 2892    | 3029   | 3029    | 3303   | 3329   | 3500   | 3546   |
| 10 Projects Funded in Advance      | 99     | 99      | 99     | 99      | 105    | 105     | 117    | 99     | 88     | 89     |

**CAPITAL OBLIGATIONS/OUTLAYS**

Current Services  
(in millions of dollars)  
**FISCAL YEAR**

**BP-2 continued**

|   | 2008       |            | 2009       |            | 2010       |            | 2011       | 2012       | 2013       | 2014       |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|   | Oblig.     | Outlays    | Oblig.     | Outlays    | Oblig.     | Outlays    | Oblig.     | Oblig.     | Oblig.     | Oblig.     |
| Conservation & Energy Efficiency          | 8          | 8          | 32         | 32         | 56         | 56         | 56         | 56         | 56         | 56         |
| 11 Transmission Services                  | 129        | 129        | 322        | 322        | 490        | 490        | 559        | 476        | 451        | 439        |
| 12 Associated Project Cost                | 105        | 105        | 159        | 159        | 187        | 187        | 203        | 212        | 224        | 226        |
| 13 Fish & Wildlife                        | 26         | 26         | 50         | 50         | 70         | 70         | 60         | 50         | 50         | 50         |
| 14 Capital Equipment                      | 22         | 22         | 30         | 30         | 43         | 43         | 50         | 50         | 50         | 51         |
| 15 Capitalized Bond Premiums              | 0          | 0          | 0          | 0          | 0          | 0          | 2          | 2          | 2          | 2          |
| <b>16 TOTAL CAPITAL INVESTMENTS 15</b>    | <b>290</b> | <b>290</b> | <b>593</b> | <b>593</b> | <b>846</b> | <b>846</b> | <b>930</b> | <b>846</b> | <b>833</b> | <b>824</b> |
| <b>17 TREASURY BORROWING AUTHORITY TO</b> |            |            |            |            |            |            |            |            |            |            |
| <b>FINANCE CAPITAL OBLIGATIONS 4/</b>     | <b>341</b> |            | <b>593</b> |            | <b>846</b> |            | <b>930</b> | <b>846</b> | <b>833</b> | <b>824</b> |

**The accompanying notes are an integral part of this table.**

1/ This FY 2010 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2009-2014.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

2/ Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.

3/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

4/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.



BP-3

**CURRENT SERVICES**  
(in millions of dollars)

**CAPITAL TRANSFERS**

|                                   | <b>FISCAL YEAR</b> |              |              |              |              |              |              |
|-----------------------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                   | <b>2008</b>        | <b>2009</b>  | <b>2010</b>  | <b>2011</b>  | <b>2012</b>  | <b>2013</b>  | <b>2014</b>  |
|                                   | <b>Pymts</b>       | <b>Pymts</b> | <b>Pymts</b> | <b>Pymts</b> | <b>Pymts</b> | <b>Pymts</b> | <b>Pymts</b> |
| Amortization:                     |                    |              |              |              |              |              |              |
| 20 BPA Bonds                      | 405                | 160          | 285          | 290          | 175          | 133          | 71           |
| 21 Reclamation Appropriations     | 1                  | 0            | 0            | 1            | 0            | 0            | 0            |
| 22 BPA Appropriations             | 75                 | 106          | 71           | 61           | 75           | 52           | 47           |
| 23 Corps Appropriations           | 75                 | 10           | 63           | 71           | 69           | 15           | 86           |
| <b>24 TOTAL CAPITAL TRANSFERS</b> | <b>556</b>         | <b>276</b>   | <b>419</b>   | <b>423</b>   | <b>319</b>   | <b>200</b>   | <b>204</b>   |

|                                      | <b>STAFFING</b> |              |              |              |              |              |              |
|--------------------------------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>25 FULL-TIME EQUIVALENT (FTE)</b> | <b>2,924</b>    | <b>3,064</b> | <b>3,061</b> | <b>3,060</b> | <b>3,060</b> | <b>3,060</b> | <b>3,060</b> |

**The accompanying notes are an integral part of this table.**

The cumulative amount of actual advance amortization payments as of the end of FY 2008 is \$2,302 million.

**PROGRAM & FINANCING SUMMARY**

Current Services  
(in millions of dollars)

Identification Code: 89-4045-0-3-271

|   | est.         |              |              |              |              |              |              |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         |
| Program by activities:                  |              |              |              |              |              |              |              |
| Operating expenses:                     |              |              |              |              |              |              |              |
| 0.01 Power Services                     | 1,103        | 1,415        | 1,428        | 1,631        | 1,584        | 1,684        | 1,654        |
| 0.02 Residential Exchange Program       | 0            | 213          | 221          | 220          | 222          | 221          | 222          |
| Associated Project Costs:               |              |              |              |              |              |              |              |
| 0.05 Bureau of Reclamation              | 72           | 82           | 88           | 99           | 105          | 107          | 110          |
| 0.06 Corps of Engineers                 | 178          | 180          | 193          | 198          | 201          | 207          | 213          |
| 0.07 Colville Settlement                | 20           | 21           | 21           | 22           | 22           | 23           | 23           |
| 0.19 U.S. Fish & Wildlife Service       | 19           | 20           | 24           | 24           | 26           | 27           | 27           |
| 0.20 Planning Council                   | 8            | 9            | 10           | 10           | 10           | 10           | 10           |
| 0.21 Fish & Wildlife                    | 149          | 200          | 230          | 236          | 242          | 248          | 254          |
| 0.23 Transmission Services              | 307          | 337          | 367          | 375          | 382          | 395          | 407          |
| 0.24 Conservation & Energy Efficiency   | 95           | 63           | 64           | 65           | 68           | 69           | 69           |
| 0.25 Interest                           | 362          | 321          | 352          | 391          | 434          | 476          | 523          |
| 0.26 Pension and Health Benefits 1/     | 18           | 31           | 31           | 32           | 33           | 33           | 34           |
| <b>0.91 Total operating expenses 2/</b> | <b>2,331</b> | <b>2,892</b> | <b>3,029</b> | <b>3,303</b> | <b>3,329</b> | <b>3,500</b> | <b>3,546</b> |
| Capital investment:                     |              |              |              |              |              |              |              |
| 1.01 Power Services                     | 105          | 159          | 187          | 203          | 212          | 224          | 226          |
| 1.02 Transmission Services              | 129          | 322          | 490          | 559          | 476          | 451          | 439          |
| 1.03 Conservation & Energy Efficiency   | 8            | 32           | 56           | 56           | 56           | 56           | 56           |
| 1.04 Fish & Wildlife                    | 26           | 50           | 70           | 60           | 50           | 50           | 50           |
| 1.05 Capital Equipment                  | 22           | 30           | 43           | 50           | 50           | 50           | 51           |
| 1.06 Capitalized Bond Premiums          | 0            | 0            | 0            | 2            | 2            | 2            | 2            |
| <b>1.07 Total Capital Investment 3/</b> | <b>290</b>   | <b>593</b>   | <b>846</b>   | <b>930</b>   | <b>846</b>   | <b>833</b>   | <b>824</b>   |
| 1.08 Misc. Accounting Adjustments       | 0            |              |              |              |              |              |              |
| 2.01 Projects Funded in Advanced        | 99           | 99           | 105          | 117          | 99           | 88           | 89           |
| <b>10.00 Total obligations 4/</b>       | <b>2,720</b> | <b>3,584</b> | <b>3,980</b> | <b>4,350</b> | <b>4,274</b> | <b>4,421</b> | <b>4,459</b> |

**The accompanying notes are an integral part of this table.**

- 1/ See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.
- 2/ Assumes expense obligations, not accrued expenses.  
Power Services includes Fish & Wildlife, Residential Exchange Program, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ Assumes capital obligations, not capital expenditures.
- 4/ This FY 2010 budget includes capital and expense estimates based on preliminary IPR forecasted data for FYs 2009-2014.

For purposes of this table, this FY 2010 budget reflects, for FY 2008, actual third party financing expense only for PFIA.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

**Program and Financing (continued)**

Current Services  
(in millions of dollars)

|  | est.         |              |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         |
| Financing:   |              |              |              |              |              |              |              |
| 21.90 Unobligated balance available, start of year. 5/                       | 47           | 38           | 23           | 12           | 1            | 0            | 0            |
| 24.40 Unobligated balance available, end of year.5/                          | 38           | 23           | 12           | 1            | 0            | 0            | 0            |
| 25.00 Unobligated balance lapsing  |              |              |              |              |              |              |              |
| 39.00 <b>Budget authority (gross)</b>  | <b>3,191</b> | <b>3,911</b> | <b>4,417</b> | <b>4,863</b> | <b>4,807</b> | <b>5,059</b> | <b>5,084</b> |
| Budget Authority:  |              |              |              |              |              |              |              |
| 67.10 Permanent Authority: Authority to borrow from Treasury (indefinite) 6/ | 425          | 593          | 846          | 930          | 846          | 833          | 824          |
| Spending authority from off-setting collections                              | 3,033        | 3,594        | 3,990        | 4,360        | 4,284        | 4,431        | 4,469        |
| 69.47 Portion applied to debt reduction                                      | (480)        | (276)        | (419)        | (423)        | (319)        | (200)        | (204)        |
| 69.90 <b>Spending authority from offsetting collections (adjusted)</b>       | <b>2,333</b> | <b>3,318</b> | <b>3,571</b> | <b>3,937</b> | <b>3,965</b> | <b>4,231</b> | <b>4,265</b> |
| 71.00 Total obligations  | 2,720        | 3,584        | 3,980        | 4,350        | 4,274        | 4,421        | 4,459        |
| 87.00 Outlays (gross)  | 2,661        | 3,584        | 3,980        | 4,350        | 4,274        | 4,421        | 4,459        |
| Adjustments to budget authority and outlays:                                 |              |              |              |              |              |              |              |
| Deductions for offsetting collections:                                       |              |              |              |              |              |              |              |
| 88.00 Federal funds  | (28)         | (90)         | (90)         | (90)         | (90)         | (90)         | (90)         |
| 88.40 Non-Federal sources  | (3,005)      | (3,504)      | (3,900)      | (4,270)      | (4,194)      | (4,341)      | (4,379)      |
| 88.90 Total, offsetting collections  | (3,033)      | (3,594)      | (3,990)      | (4,360)      | (4,284)      | (4,431)      | (4,469)      |
| 89.00 <b>Budget authority (net)</b>  | <b>166</b>   | <b>317</b>   | <b>427</b>   | <b>507</b>   | <b>527</b>   | <b>633</b>   | <b>620</b>   |
| 90.00 <b>Outlays (net) 7/</b>  | <b>(372)</b> | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  | <b>(10)</b>  |

**The accompanying notes are an integral part of this table.**

5/ Reflects estimated cost for radio spectrum fund.

6/ The Permanent Authority: Authority to borrow (indefinite) from Treasury amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing is created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing from Treasury. This temporary use of cash on hand instead of borrowed funds creates the ability in future years to borrow money, when fiscally prudent. The FY 1989 Energy and Water Development Appropriations Act (P.L. 100-371 Of 7/19/88) clarified that BPA has authority to incur obligations in excess of Treasury borrowing authority and cash in the BPA fund.

7/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that, along with actual market conditions, will impact revenues and expenses. Actual Net Outlays are volatile and are reported in Report on Budget Execution and Budgetary Resources (SF-133). Estimated Net Outlays could change due to changing market conditions, streamflow variability, and continuing restructuring of the electric industry.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming rate adjustment mechanisms, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, causing the same Net Outlay result. Adjustments for depreciation and 4(h)(10)(C) credits of the NW Power Act are also assumed.

This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of current-law funding estimates.

**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of TREASURY BORROWING  
CURRENT SERVICES**  
(in millions of dollars)

BP-4A

|   | Fiscal Year           |                                |                           |                           |                       |                                |                           |                           |
|---|-----------------------|--------------------------------|---------------------------|---------------------------|-----------------------|--------------------------------|---------------------------|---------------------------|
|   | 2008                  |                                |                           |                           | 2009                  |                                |                           |                           |
|   | Net<br>Capital<br>Obs | Net<br>Capital<br>Obs<br>to BA | Net<br>Capital<br>Expend. | Bonds<br>Out-<br>Standing | Net<br>Capital<br>Obs | Net<br>Capital<br>Obs<br>to BA | Net<br>Capital<br>Expend. | Bonds<br>Out-<br>Standing |
| <b>Start-of-Year: Total</b>                                 | 1,430                 | 1,430                          | 2,523                     | 2,241                     | 1,511                 | 1,317                          | 2,604                     | 2,187                     |
| <b>Plus: Annual Increase</b>                                |                       |                                |                           |                           |                       |                                |                           |                           |
| Cum.-Annual Treasury Borrowing<br>Treasury Borrowing (Cash) | 291                   | 291                            | 291                       | 350                       | 593                   | 593                            | 593                       | 593                       |
| <b>Less:</b>  |                       |                                |                           |                           |                       |                                |                           |                           |
| BPA Bond Amortization                                       | 404                   | 404                            | 404                       | 404                       | 160                   | 160                            | 160                       | 160                       |
| <b>Net Increase/(Decrease):</b>                             | (113)                 | (113)                          | (113)                     | (54)                      | 433                   | 433                            | 433                       | 433                       |
| Cum.-End-of-Year: Total                                     | 1,511                 | 1,317                          | 2,410                     | 2,187                     | 1,944                 | 1,750                          | 3,037                     | 2,620                     |
| <b>Total Remaining Treasury Borrowing<br/>Amount</b>        |                       |                                |                           | 2,263                     |                       |                                |                           | 5,080                     |
| <b>Total Legislated<br/>Treasury Borrowing Amount</b>       |                       |                                |                           | 4,450                     |                       |                                |                           | 7,700                     |

**The accompanying notes are an integral part of this table.**

In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2010 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtednesses issued and sold to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2014.

The cumulative amount of actual advance amortization payments as of the end of FY 2008 is \$2,302 million.

**BONNEVILLE POWER ADMINISTRATION  
BPA STATUS of TREASURY BORROWING  
CURRENT SERVICES**  
(in millions of dollars)

BP-4B

|   | Fiscal Year |             |             |              |             |             |             |              |
|---|-------------|-------------|-------------|--------------|-------------|-------------|-------------|--------------|
|   | 2010        |             |             |              | 2011        |             |             |              |
|   | Net Capital |             | Net Capital |              | Net Capital |             | Net Capital |              |
|   | Net Capital | Obs Subject | Net Capital | Bonds Out-   | Net Capital | Obs Subject | Net Capital | Bonds Out-   |
|   | Obs         | to BA       | Expend.     | Standing     | Obs         | to BA       | Expend.     | Standing     |
| <b>Start-of-Year: Total</b>                       | 1,944       | 1,750       | 3,037       | 2,620        | 2,505       | 2,311       | 3,598       | 3,181        |
| <b>Plus: Annual Increase</b>                      |             |             |             |              |             |             |             |              |
| Cum.-Annual Treasury Borrowing                    | 846         | 846         | 846         |              | 930         | 930         | 930         |              |
| Treasury Borrowing (Cash)                         |             |             |             | 846          |             |             |             | 930          |
| <b>Less:</b>                                      |             |             |             |              |             |             |             |              |
| Total BPA Bond Amortization                       | 285         | 285         | 285         | 285          | 290         | 290         | 290         | 290          |
| <b>Net Increase/(Decrease):</b>                   |             |             |             |              |             |             |             |              |
| Total   | 561         | 561         | 561         | 561          | 640         | 640         | 640         | 640          |
| Cum.-End-of-Year: Total                           | 2,505       | 2,311       | 3,598       | 3,181        | 3,145       | 2,951       | 4,238       | 3,821        |
| <b>Total Remaining Treasury Borrowing Amount</b>  |             |             |             | <u>4,519</u> |             |             |             | <u>3,879</u> |
| <b>Total Legislated Treasury Borrowing Amount</b> |             |             |             | 7,700        |             |             |             | 7,700        |

**The accompanying notes are an integral part of this table.**

In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2010 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtednesses issued and sold to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2014.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of TREASURY BORROWING**  
**CURRENT SERVICES**  
(in millions of dollars)

BP-4C

|   | Fiscal Year |             |             |              |             |             |             |              |
|---|-------------|-------------|-------------|--------------|-------------|-------------|-------------|--------------|
|   | 2012        |             |             |              | 2013        |             |             |              |
|   | Net Capital |             | Net Capital |              | Net Capital |             | Net Capital |              |
|   | Net Capital | Obs Subject | Net Capital | Bonds Out-   | Net Capital | Obs Subject | Net Capital | Bonds Out-   |
|   | Obs         | to BA       | Expend.     | Standing     | Obs         | to BA       | Expend.     | Standing     |
| <b>Start-of-Year: Total</b>                       | 3,145       | 2,951       | 4,238       | 3,821        | 3,815       | 3,621       | 4,908       | 4,491        |
| <b>Plus: Annual Increase</b>                      |             |             |             |              |             |             |             |              |
| Cum.-Annual Treasury Borrowing                    | 845         | 845         | 845         |              | 833         | 833         | 833         |              |
| Treasury Borrowing (Cash)                         |             |             |             | 845          |             |             |             | 833          |
| <b>Less:</b>                                      |             |             |             |              |             |             |             |              |
| Total BPA Bond Amortization                       | 175         | 175         | 175         | 175          | 133         | 133         | 133         | 133          |
| <b>Net Increase/(Decrease):</b>                   |             |             |             |              |             |             |             |              |
| Total   | 670         | 670         | 670         | 670          | 700         | 700         | 700         | 700          |
| Cum.-End-of-Year: Total                           | 3,815       | 3,621       | 4,908       | 4,491        | 4,515       | 4,321       | 5,608       | 5,191        |
| <b>Total Remaining Treasury Borrowing Amount</b>  |             |             |             | <u>3,209</u> |             |             |             | <u>2,509</u> |
| <b>Total Legislated Treasury Borrowing Amount</b> |             |             |             | 7,700        |             |             |             | 7,700        |

**The accompanying notes are an integral part of this table.**

In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2010 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtedness issued and sold to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2014.

**BONNEVILLE POWER ADMINISTRATION**  
**BPA STATUS of TREASURY BORROWING**  
**CURRENT SERVICES**  
(in millions of dollars)

BP-4D

|   | Fiscal Year                      |                         |                           |                           |
|---|----------------------------------|-------------------------|---------------------------|---------------------------|
|   | <b>2014</b>                      |                         |                           |                           |
|   | Net<br>Capital<br>Capital<br>Obs | Obs<br>Subject<br>to BA | Net<br>Capital<br>Expend. | Bonds<br>Out-<br>Standing |
| <b>Start-of-Year: Total</b>                       | 4,515                            | 4,321                   | 5,608                     | 5,191                     |
| <b>Plus: Annual Increase</b>                      |                                  |                         |                           |                           |
| Cum.-Annual Treasury Borrowing                    | 824                              | 824                     | 824                       |                           |
| Treasury Borrowing (Cash)                         |                                  |                         |                           | 824                       |
| <b>Less:</b>                                      |                                  |                         |                           |                           |
| Total BPA Bond Amortization                       | 71                               | 71                      | 71                        | 71                        |
| <b>Net Increase/(Decrease):</b>                   |                                  |                         |                           |                           |
| Total   | 753                              | 753                     | 753                       | 753                       |
| Cum.-End-of-Year: Total                           | 5,268                            | 5,074                   | 6,361                     | 5,944                     |
| <b>Total Remaining Treasury Borrowing Amount</b>  |                                  |                         |                           | <u>1,756</u>              |
| <b>Total Legislated Treasury Borrowing Amount</b> |                                  |                         |                           | 7,700                     |

**The accompanying notes are an integral part of this table.**

In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital funding levels reflect external factors such as the significant changes affecting West Coast power and transmission markets, along with planned infrastructure investments designed to address the long-term needs of the region.

In this FY 2010 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtedness issued and sold to the U.S. Treasury.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry.

BPA reserve financing of \$15 million annually is assumed as part of TS capital-PFIA for FYs 2008-2014.



**BONNEVILLE POWER ADMINISTRATION  
POTENTIAL THIRD PARTY FINANCING TRANSPARENCY**  
(in millions of dollars)

BP-5

|   | Fiscal Year |            |            |            |            |            |            |
|---|-------------|------------|------------|------------|------------|------------|------------|
|   | 2008        | 2009       | 2010       | 2011       | 2012       | 2013       | 2014       |
| <b>Transmission Services - Capital</b>        |             |            |            |            |            |            |            |
| Main Grid                                     | 10          | 75         | 171        | 249        | 234        | 216        | 211        |
| Area & Customer Services                      | 19          | 26         | 38         | 8          | 8          | 10         | 22         |
| Upgrades & Additions                          | 36          | 79         | 111        | 129        | 87         | 71         | 75         |
| System Replacements                           | 65          | 142        | 170        | 174        | 146        | 154        | 132        |
| Projects Funded in Advance                    | 99          | 99         | 105        | 117        | 99         | 88         | 89         |
| <b>Total, Transmission Services - Capital</b> | <b>229</b>  | <b>421</b> | <b>595</b> | <b>677</b> | <b>574</b> | <b>539</b> | <b>529</b> |

**Federal and Non-Federal Funding**

|                              | Sources |      |      |      |      |      |      |
|------------------------------|---------|------|------|------|------|------|------|
|                              | 2008    | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Projects Funded in Advance   | 99      | 99   | 105  | 117  | 99   | 88   | 89   |
| Treasury Borrowing Authority | 130     | 322  | 490  | 560  | 475  | 451  | 440  |

**Scenario**

|  | Scenario |      |      |      |      |      |      |
|--|----------|------|------|------|------|------|------|
|  | 2008     | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Third Party Financing                  | 55       | 119  | 183  | 220  | 191  | 174  | 177  |
| Alternate Treasury Borrowing Authority | NA       | 203  | 307  | 340  | 284  | 277  | 263  |

**The accompanying notes are an integral part of this table.**

The table above shows both the potential use of Treasury borrowing authority for transmission capital projects based on this FY 2010 budget and the use adjusted for potential third-party financing to fund appropriate capital expenditures when feasible in lieu of Treasury borrowing. Estimates included in this FY 2010 budget are uncertain and may change due to revised capital investment plans, changing economic conditions, and an evolving financial market environment. The estimates of third-party financing included in the table show a reduction in the use of Treasury borrowing and do not reflect the actual notional third party financing commitment BPA may enter into in that particular year. The difference of reduction in use of Treasury borrowing and the actual notional third party financing commitment is primarily due to the difference in the timing of financing transactions between Treasury and third-party financing for capital projects with multi-year construction schedules.

Bonneville's Third Party Financing for Transmission Services consists primarily of lease-purchase agreements, which are capitalized leases that enable BPA to acquire the use of transmission facilities over time. BPA also undertakes the construction and installation of facilities from funds that customers advance to BPA for construction of BPA-owned facilities that assist the customers in obtaining necessary transmission service from BPA. These customers receive monetary payment credits in bills for transmission services from BPA up to the amount of funds advanced to BPA, plus interest.

BPA's historical Third Party Financing amounts may vary over time due to re-assignment of certain lease-purchase agreements to Treasury Financing.

**BPA Status of Treasury Borrowing with Potential Third Party Financing Scenario**

With the potential use of third party financing assumed in the scenario above, BPA's total remaining Treasury Borrowing Amount would be extended to the following amounts. See BP-4 BPA Status of Treasury Borrowing- Current Services.

|  | Fiscal Year  |              |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         |
| Start-of-Year: Total Bonds Outstanding           | 2,241        | 2,187        | 2,501        | 2,879        | 3,299        | 3,778        | 4,304        |
| Plus:  |              |              |              |              |              |              |              |
| Treasury Borrowing (Cash)                        | 350          | 593          | 846          | 930          | 845          | 833          | 824          |
| Less:  |              |              |              |              |              |              |              |
| <b>Potential Third Party Financing</b>           | NA           | 119          | 183          | 220          | 191          | 174          | 177          |
| BPA Bond Amortization                            | 404          | 160          | 285          | 290          | 175          | 133          | 71           |
| Net Increase/(Decrease) Bonds Outstanding:       | (54)         | 314          | 378          | 420          | 479          | 526          | 576          |
| Cum.-End-of-Year: Total                          | 2,187        | 2,501        | 2,879        | 3,299        | 3,778        | 4,304        | 4,880        |
| <b>Total Remaining Treasury Borrowing Amount</b> | <b>2,263</b> | <b>5,199</b> | <b>4,821</b> | <b>4,401</b> | <b>3,922</b> | <b>3,396</b> | <b>2,820</b> |
| Total Legislated Treasury Borrowing Amount       | 4,450        | 7,700        | 7,700        | 7,700        | 7,700        | 7,700        | 7,700        |

**TREASURY PAYMENTS**

(in millions of dollars)

|  | FISCAL YEAR |            |            |            |            |            |            |
|--|-------------|------------|------------|------------|------------|------------|------------|
|  | 2008        | 2009       | 2010       | 2011       | 2012       | 2013       | 2014       |
| <b>A. INTEREST ON BONDS &amp; APPROPRIATIONS</b> |             |            |            |            |            |            |            |
| <b>Bonneville Bond Interest</b>                  |             |            |            |            |            |            |            |
| 1 Bonneville Bond Interest (net)                 | 99          | 69         | 102        | 146        | 193        | 242        | 287        |
| 2 AFUDC <sup>1/</sup>                            | 22          | 20         | 23         | 31         | 35         | 30         | 28         |
| <b>Appropriations Interest</b>                   |             |            |            |            |            |            |            |
| 3 Bonneville                                     | 41          | 31         | 23         | 18         | 14         | 8          | 4          |
| 4 Corps of Engineers <sup>2/</sup>               | 161         | 161        | 167        | 167        | 168        | 166        | 171        |
| 5 Lower Snake River                              | 16          | 16         | 16         | 16         | 16         | 16         | 16         |
| 6 Bureau of Reclamation <sup>3/</sup>            | 44          | 43         | 43         | 43         | 43         | 43         | 43         |
| <b>7 Total Bond and Approp. Interest</b>         | <b>383</b>  | <b>340</b> | <b>374</b> | <b>421</b> | <b>469</b> | <b>505</b> | <b>549</b> |
| <b>B. ASSOCIATED PROJECT COST</b>                |             |            |            |            |            |            |            |
| 8 Bureau of Reclamation Irrigation Assistance    | 3           | 7          | 0          | 0          | 1          | 60         | 53         |
| 9 Bureau of Rec. O & M <sup>4/</sup>             | 1           | 0          | 0          | 0          | 0          | 0          | 0          |
| 10 Corps of Eng. O & M <sup>4/</sup>             | 2           | 0          | 0          | 0          | 0          | 0          | 0          |
| 11 L. Snake River Comp. Plan O & M <sup>4/</sup> | 0           | 0          | 0          | 0          | 0          | 0          | 0          |
| <b>12 Total Assoc. Project Costs</b>             | <b>6</b>    | <b>7</b>   | <b>0</b>   | <b>0</b>   | <b>1</b>   | <b>60</b>  | <b>53</b>  |
| <b>C. CAPITAL TRANSFERS</b>                      |             |            |            |            |            |            |            |
| <b>Amortization</b>                              |             |            |            |            |            |            |            |
| 13 Bonneville Bonds <sup>6/</sup>                | 405         | 160        | 285        | 290        | 175        | 133        | 71         |
| 14 Bureau of Reclamation Appropriations          | 1           | 0          | 0          | 1          | 0          | 0          | 0          |
| 15 Corps of Engineers Appropriations             | 75          | 10         | 63         | 71         | 69         | 15         | 86         |
| 16 Lower Snake River Comp. Plan                  | 0           | 0          | 0          | 0          | 0          | 0          | 0          |
| 17 Bonneville Appropriations                     | 75          | 106        | 71         | 61         | 75         | 52         | 47         |
| <b>Total Capital Transfers</b>                   | <b>556</b>  | <b>276</b> | <b>419</b> | <b>423</b> | <b>319</b> | <b>200</b> | <b>204</b> |
| <b>D. OTHER PAYMENTS</b>                         |             |            |            |            |            |            |            |
| 18 Unfunded CSRS Liability <sup>5/</sup>         | 18          | 31         | 31         | 32         | 33         | 33         | 34         |
| <b>21 TOTAL TREASURY PAYMENTS</b>                | <b>963</b>  | <b>654</b> | <b>824</b> | <b>876</b> | <b>822</b> | <b>798</b> | <b>840</b> |

The accompanying notes are an integral part of this table.

<sup>1/</sup> This interest cost is capitalized and included in BPA's Transmission System Development, System Replacements, and Associated Projects Capital programs. AFUDC is financed through the sale of bonds.

<sup>2/</sup> Includes interest on construction funding for Corp of Engineers (Corps) fish bypass facilities at Corps dams in the Columbia River Basin, including Lower Monumental, Ice Harbor, and The Dalles.

<sup>3/</sup> Includes payments paid by Reclamation to Treasury on behalf of Bonneville.

<sup>4/</sup> Costs for power O&M is funded directly by Bonneville as follows (in millions)

| FISCAL YEAR                  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------------------------|------|------|------|------|------|------|------|
| Bureau of Reclamation        | 72   | 82   | 88   | 99   | 105  | 107  | 110  |
| Corps of Engineers           | 178  | 180  | 193  | 198  | 201  | 207  | 213  |
| Subtotal Bureau and Corps    | 250  | 262  | 281  | 297  | 306  | 314  | 323  |
| Lower Snake River Comp. Plan | 19   | 20   | 24   | 24   | 26   | 27   | 27   |
| Total                        | 269  | 282  | 305  | 321  | 332  | 341  | 350  |

<sup>5/</sup> See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

<sup>6/</sup> In this FY 2010 budget, BPA "bond(s)" refers to all bonds issued by BPA to and advances received from the U.S. Treasury. This reference is consistent with section 13 (a) of the Transmission Act (PL Law 93-454), which defines BPA bonds as all bonds, notes, and other evidences of indebtedness issued and sold to the U.S. Treasury.

Does not include Treasury bond premiums on refinanced Treasury bonds.

**OBJECT CLASSIFICATION STATEMENT**  
(in millions of dollars) 1/

IDENTIFICATION CODE: 89-4045-0-3-271  
DIRECT OBLIGATIONS

**ESTIMATES**

|   | <b>2008</b>  | <b>2009</b>  | <b>2010</b>  |
|---|--------------|--------------|--------------|
| 11.1 Full-time permanent                      | 227          | 234          | 260          |
| 11.3 Other than full-time permanent           | 11           | 56           | 62           |
| 11.5 Other personnel compensation             | 24           | 15           | 17           |
| <b>11.9 Total personnel compensation</b>      | <b>262</b>   | <b>305</b>   | <b>339</b>   |
| 12.1 Civilian personnel benefits              | 75           | 19           | 21           |
| 13.0 Benefits for former personnel            | 18           | 25           | 28           |
| 21.0 Travel and transportation of persons     | 17           | 16           | 18           |
| 22.0 Transportation of things                 | 1            | 2            | 2            |
| 23.1 Rental payments to GSA                   | 1            | 1            | 1            |
| 23.2 Rents, other                             | 46           | 22           | 24           |
| 23.3 Communication, utilities & misc. charges | 7            | 6            | 7            |
| 25.1 Consulting Services                      | 190          | 323          | 359          |
| 25.2 Other Services                           | 1,188        | 1,788        | 1,992        |
| 25.3 Purchases from Government Accounts       |              |              |              |
| 25.4 O&M of Facilities                        | 3            |              |              |
| 25.5 R & D Contracts                          | 5            | 8            | 8            |
| 26.0 Supplies and materials                   | 89           | 201          | 223          |
| 31.0 Equipment                                | 2            | 8            | 4            |
| 32.0 Lands and structures                     | 42           | 42           | 47           |
| 41.0 Grants, subsidies, contributions         | 63           | 73           | 81           |
| 43.0 Interest and dividends                   | 711          | 745          | 827          |
| <b>99.0 Total obligations</b>                 | <b>2,720</b> | <b>3,584</b> | <b>3,980</b> |

Includes object classifications developed from updated GL accounting codes consistent with implementation of BPA's business enterprise system of accounts. The object classifications are subject to change as BPA's GL accounting codes continue to evolve to more effectively meet management information needs, and meet FERC and Federal reporting requirements.

**Estimate of Proprietary Receipts**  
(in millions of dollars)

|   | Fiscal Year |           |           |           |           |           |           |
|---|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | 2008        | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      |
| Reclamation Interest  | 44          | 43        | 43        | 43        | 43        | 43        | 43        |
| Reclamation Amortization  | 1           | 0         | 0         | 1         | 0         | 0         | 0         |
| Reclamation O&M   | 1           | 0         | 0         | 0         | 0         | 0         | 0         |
| Reclamation Irrig. Assist.  | 3           | 7         | 0         | 0         | 1         | 60        | 53        |
| Revenues Collected by Reclamation<br>Distributed in Treasury Account (credit) | -13         | -7        | -7        | -7        | -7        | -7        | -7        |
| Colville Settlement (credit)  | -5          | -5        | -5        | -5        | -5        | -5        | -5        |
| <b>Total 1/ Reclamation Fund</b>  | <b>31</b>   | <b>38</b> | <b>31</b> | <b>32</b> | <b>32</b> | <b>91</b> | <b>84</b> |
| Corps O&M   | 3           |           |           |           |           |           |           |
| CSRS  | 18          | 31        | 31        | 32        | 33        | 33        | 33        |
| <b>Total 2/ Repayments on misc.costs</b>                                      | <b>21</b>   | <b>31</b> | <b>31</b> | <b>32</b> | <b>33</b> | <b>33</b> | <b>33</b> |

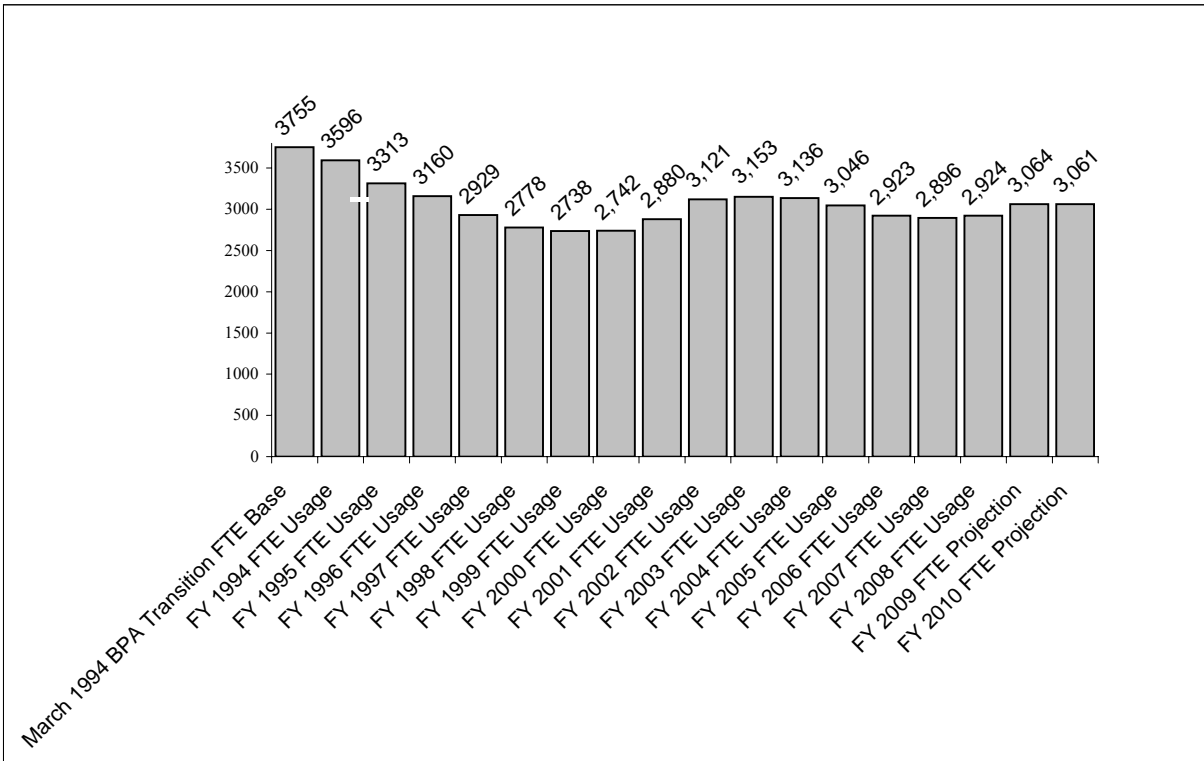
1/ Includes amortization of appropriations and irrigation assistance, and interest costs for Reclamation. The cost of power O&M for Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfer to Account #895000.26

2/ The costs of power O&M for the Corps and Lower Snake Comp. Plan are no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfers to Account #892889, Repayments on misc. recoverable costs, not otherwise classified. Costs for power O&M is funded directly by Bonneville as follows (in millions)

|                              | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------------------------|------|------|------|------|------|------|------|
| Bureau of Reclamation        | 72   | 82   | 88   | 99   | 105  | 107  | 110  |
| Corps of Engineers           | 178  | 180  | 193  | 198  | 201  | 207  | 213  |
| Lower Snake River Comp. Plan | 19   | 20   | 24   | 24   | 26   | 27   | 27   |

See Interest Expense, Pension and Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

**BONNEVILLE FTE  
(revised February 2009)**



BPA has utilized the following number of VSIPs: 190 in FY 1994, 240 in FY 1995, 137 in FY 1996, 135 in FY 1997, 121 in FY 1998, 81 in FY 1999, 43 in FY 2000, 12 in FY 2001, 0 in FY 2002, 80 in FY 2003, 0 in FY 2004, 98 in 2005, 35 in FY 2006, 37 in FY 2007, and 31 in FY 2008.

BPA continues to assume various authorities, including the use of VSIPs and VERA to help achieve BPA planning levels.

Actual FTE data is consistent with DOE personnel reports.

FTE outyear data are estimates and may change.

BONNEVILLE POWER ADMINISTRATION

FISH AND WILDLIFE COSTS <sup>1/</sup>

| COST ELEMENT  | 1999          | 2000          | 2001           | 2002          | 2003           | 2004          | 2005          | 2006          | 2007          | 2008           |
|---|---------------|---------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|
| <b>CAPITAL INVESTMENTS <sup>2/</sup></b>                                |               |               |                |               |                |               |               |               |               |                |
| BPA FISH AND WILDLIFE   | 14.7          | 13.9          | 16.5           | 6.1           | 11.6           | 8.5           | 12.2          | 36.3          | 36.2          | 26.9           |
| ASSOCIATED PROJECTS (FEDERAL HYDRO)                                     | 14.1          | 47.0          | 6.2            | 8.8           | 68.4           | 75.9          | 53.8          | 360.0         | 60.4          | 37.3           |
| <b>TOTAL CAPITAL INVESTMENTS</b>  | <b>28.8</b>   | <b>60.9</b>   | <b>22.7</b>    | <b>14.9</b>   | <b>80.0</b>    | <b>84.4</b>   | <b>66.0</b>   | <b>396.3</b>  | <b>96.6</b>   | <b>64.2</b>    |
| <b>PROGRAM EXPENSES</b>   |               |               |                |               |                |               |               |               |               |                |
| <b>BPA DIRECT FISH AND WILDLIFE PROGRAM</b>                             | <b>108.2</b>  | <b>108.2</b>  | <b>101.1</b>   | <b>137.1</b>  | <b>140.7</b>   | <b>137.9</b>  | <b>135.8</b>  | <b>137.9</b>  | <b>139.5</b>  | <b>148.9</b>   |
| <b>SUPPLEMENTAL MITIGATION PROGRAM EXPENSES <sup>3/</sup></b>           |               |               | 2.9            | 7.1           | 6.5            | 7.8           | 0.0           | 0.0           | 0.0           | 0.0            |
| <b>REIMBURSABLE/DIRECT-FUNDED PROJECTS <sup>4/</sup></b>                |               |               |                |               |                |               |               |               |               |                |
| O & M LOWER SNAKE RIVER HATCHERIES                                      | 13.0          | 12.4          | 12.7           | 14.9          | 15.1           | 17.3          | 17.2          | 20.1          | 19.3          | 19.4           |
| O & M CORPS OF ENGINEERS  | 19.9          | 19.7          | 23.1           | 28.2          | 30.3           | 32.3          | 32.5          | 31.8          | 32.9          | 34.4           |
| O & M BUREAU OF RECLAMATION   | 2.6           | 1.8           | 3.0            | 3.8           | 3.1            | 3.9           | 3.9           | 4.5           | 3.9           | 4.3            |
| OTHER (NW POWER AND CONSERVATION COUNCIL)                               | 3.4           | 3.7           | 3.7            | 4.0           | 4.0            | 3.7           | 4.3           | 4.3           | 4.2           | 4.1            |
| <b>SUBTOTAL (REIMB/DIRECT-FUNDED)</b>                                   | <b>38.9</b>   | <b>37.6</b>   | <b>42.5</b>    | <b>50.9</b>   | <b>52.6</b>    | <b>57.2</b>   | <b>57.9</b>   | <b>60.7</b>   | <b>60.3</b>   | <b>62.2</b>    |
| <b>TOTAL OPERATING EXPENSES</b>   | <b>147.1</b>  | <b>145.8</b>  | <b>146.5</b>   | <b>195.1</b>  | <b>199.8</b>   | <b>202.9</b>  | <b>193.7</b>  | <b>198.6</b>  | <b>199.7</b>  | <b>211.1</b>   |
| <b>PROGRAM RELATED FIXED EXPENSES <sup>5/</sup></b>                     |               |               |                |               |                |               |               |               |               |                |
| INTEREST EXPENSE  | 49.4          | 48.4          | 49.1           | 48.5          | 49.9           | 53.3          | 56.4          | 53.4          | 76.0          | 76.9           |
| AMORTIZATION EXPENSE  | 15.3          | 16.1          | 16.8           | 17.2          | 17.4           | 17.5          | 17.4          | 17.4          | 22.9          | 24.4           |
| DEPRECIATION EXPENSE  | 11.4          | 11.8          | 12.3           | 12.5          | 13.2           | 14.6          | 15.9          | 16.7          | 14.0          | 14.9           |
| <b>TOTAL FIXED EXPENSES</b>   | <b>76.1</b>   | <b>76.3</b>   | <b>78.2</b>    | <b>78.2</b>   | <b>80.5</b>    | <b>85.4</b>   | <b>89.7</b>   | <b>87.5</b>   | <b>112.9</b>  | <b>116.2</b>   |
| <b>GRAND TOTAL PROGRAM EXPENSES</b>                                     | <b>223.2</b>  | <b>222.1</b>  | <b>224.7</b>   | <b>273.3</b>  | <b>280.3</b>   | <b>288.3</b>  | <b>283.4</b>  | <b>286.1</b>  | <b>312.6</b>  | <b>327.3</b>   |
| <b>FOREGONE REVENUES AND POWER PURCHASES</b>                            |               |               |                |               |                |               |               |               |               |                |
| <b>FOREGONE REVENUES</b>  | 197.8         | 193.1         | 115.9          | 12.6          | 79.2           | 21.7          | 182.1         | 397.4         | 282.6         | 273.5          |
| <b>BPA POWER PURCH. FOR FISH ENHANCEMENT</b>                            | 47.6          | 64.8          | 1,389.6        | 147.8         | 171.1          | 191.0         | 110.8         | 168.2         | 120.7         | 274.9          |
| <b>TOTAL FOREGONE REVENUES AND POWER PURCHASES</b>                      | <b>245.4</b>  | <b>257.9</b>  | <b>1,505.5</b> | <b>160.4</b>  | <b>250.3</b>   | <b>212.7</b>  | <b>292.9</b>  | <b>565.6</b>  | <b>403.3</b>  | <b>548.5</b>   |
| <b>TOTAL PROGRAM EXPENSES, FOREGONE REVENUES, &amp; POWER PURCHASES</b> | <b>468.6</b>  | <b>480.0</b>  | <b>1,730.2</b> | <b>433.7</b>  | <b>530.6</b>   | <b>501.0</b>  | <b>576.3</b>  | <b>851.7</b>  | <b>715.9</b>  | <b>875.8</b>   |
| <b>CREDITS</b>  |               |               |                |               |                |               |               |               |               |                |
| 4(h)(10)(C) credits earned  | (46.0)        | (50.4)        | (336.6)        | (66.4)        | (73.6)         | (77.0)        | (57.7)        | (76.4)        | (66.1)        | (100.5)        |
| FISH COST CONTINGENCY FUND <sup>6/</sup>                                | -             | -             | (246.5)        | -             | (78.7)         | -             | -             | -             | -             | -              |
| <b>TOTAL CREDITS</b>  | <b>(46.0)</b> | <b>(50.4)</b> | <b>(583.1)</b> | <b>(66.4)</b> | <b>(152.3)</b> | <b>(77.0)</b> | <b>(57.7)</b> | <b>(76.4)</b> | <b>(66.1)</b> | <b>(100.5)</b> |

1/ For purposes of this presentation, this financial information has been made publicly available by BPA in April 2009 and is consistent with the financial system of record used in preparation of the audited financial statements for the respective period reported.

2/ Capital Investments include both BPA's direct Fish and Wildlife Program capital investments, funded by BPA's Treasury borrowing, and "Associated Projects", which include capital investments at the Corps and Reclamation projects, funded by appropriations and repaid by BPA.

3/ Includes High Priority and Action Plan Expenses and other supplemental programs.

4/ Reimbursable/Direct-Funded Projects includes the portion of costs BPA pays to or on behalf of other entities that is determined to be for fish and wildlife purposes.

5/ Fixed Expenses include depreciation and interest on investment on the Corps projects, and amortization and interest on the investments associated with BPA's direct Fish and Wildlife Program.

6/ The Fish Contingency Fund was exhausted in 2003

## GENERAL PROVISIONS

Sec. 301. Contract Competition.

(a) None of the funds in this or any other appropriations Act for fiscal year [2009] 2010 or any previous fiscal year may be used to make payments for a noncompetitive management and operating contract, or a contract for environmental remediation or waste management in excess of \$100,000,000 in annual funding at a current or former management and operating contract site or facility, or to award a significant extension or expansion to an existing management and operating contract, or other contract covered by this section, unless such contract is awarded using competitive procedures or the Secretary of Energy grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(b) Within 30 days of formally notifying an incumbent contractor that the Secretary intends to grant such a waiver, the Secretary shall submit to the Subcommittees on Energy and Water Development of the Committees on Appropriations of the House of Representatives and the Senate a report notifying the Subcommittees of the waiver and setting forth, in specificity, the substantive reasons why the Secretary believes the requirement for competition should be waived for this particular award.

(c) In this section the term "competitive procedures" has the meaning provided in section 4 of the Office of Federal Procurement Policy Act (41 U.S.C. 403) and includes procedures described in section 303 of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 253) other than a procedure that solicits a proposal from only one source.

Sec. 302. Unfunded Requests for Proposals. None of the funds appropriated by this Act may be used to prepare or initiate Requests For Proposals (RFPs) for a program if the program has not been funded by Congress.

Sec. 303. Department of Energy Defense Nuclear Facilities Workforce Restructuring. None of the funds appropriated by this Act may be used--

- (1) to augment the funds made available for obligation by this Act for severance payments and other benefits and community assistance grants under section 4604 of the Atomic Energy Defense Act (50 U.S.C. 2704) unless the Department of Energy submits a reprogramming [request]notice to the appropriate congressional committees; or
- (2) to provide enhanced severance payments or other benefits for employees of the Department of Energy under such section; or
- (3) develop or implement a workforce restructuring plan that covers employees of the Department of Energy.

Sec. 304. Unexpended Balances. The unexpended balances of prior appropriations provided for activities in this Act may be available to the same appropriation accounts for such activities established pursuant to this title. Available balances may be merged with funds in the applicable established accounts and thereafter may be accounted for as one fund for the same time period as originally enacted.

Sec. 305. Bonneville Power Authority Service Territory. None of the funds in this or any other Act for the Administrator of the Bonneville Power Administration may be used to enter into any agreement to perform energy efficiency services outside the legally defined Bonneville service territory, with the exception of services provided internationally, including services provided on a reimbursable basis, unless the Administrator certifies in advance that such services are not available from private sector businesses.

Sec. 306. User Facilities. When the Department of Energy makes a user facility available to universities or other potential users, or seeks input from universities or other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such availability or such need for input to universities and other potential users. When the Department of Energy considers the participation of a university or other potential user as a formal partner in the establishment or operation of a user facility, the Department shall employ full and open competition in selecting such a partner. For purposes of this section, the term "user facility" includes, but is not limited to: (1) a user facility as described in section 2203(a)(2) of the Energy Policy Act of 1992 (42 U.S.C. 13503(a)(2)); (2) a National Nuclear Security Administration Defense Programs Technology Deployment Center/User Facility; and (3) any other Departmental facility designated by the Department as a user facility.

Sec. 307. Intelligence Activities. Funds appropriated by this or any other Act, or made available by the transfer of funds in this Act, for intelligence activities are deemed to be specifically authorized by the Congress for purposes of section 504 of the National Security Act of 1947 (50 U.S.C. 414) during fiscal year [2009] 2010 until the enactment of the Intelligence Authorization Act for fiscal year [2009] 2010.

Sec. 308. Laboratory Directed Research and Development. Of the funds made available by the Department of Energy for activities at government-owned, contractor-operated laboratories funded in this Act or subsequent Energy and Water Development Appropriations Acts, the Secretary may authorize a specific amount, not to exceed 8 percent of such funds, to be used by such laboratories for laboratory directed research and development: *Provided*, That the Secretary may also authorize a specific amount not to exceed 4 percent of such funds, to be used by the plant manager of a covered nuclear weapons production plant or the manager of the Nevada Site Office for plant or site directed research and development[: *Provided further*, That notwithstanding Department of Energy order 413.2A, dated January 8, 2001, beginning in fiscal year 2006 and thereafter, all DOE laboratories may be eligible for laboratory directed research and development funding].

[Sec. 309. Reliable Replacement Warhead. None of the funds provided in this Act shall be available for the Reliable Replacement Warhead (RRW).]

Sec. [310]309. General Plant Projects. Plant or construction projects for which amounts are made available under this and subsequent appropriation Acts with a current estimated cost of less than \$10,000,000 are considered for purposes of section 4703 of Public Law 107-314 as a plant project for which the approved total estimated cost does not exceed the minor construction threshold and for purposes of section 4704 of Public Law 107--314 as a construction project with a current estimated cost of less than a minor construction threshold.

[Sec. 311. Energy Production. The Secretary of Energy shall provide funding to the National Academy of Sciences to conduct an inventory of the energy development potential on all lands currently managed by the Department of Energy together with a report, to be submitted not later than July 1, 2009, which includes (1) a detailed analysis of all such resources including oil, gas, coal, solar, wind, geothermal and other renewable resources on such lands, (2) a delineation of the resources presently available for development as well as those potentially available in the future, and (3) an analysis of the environmental impacts associated with any future development including actions



necessary to mitigate negative impacts.]

[Sec. 312.

(a) Reno Hydrogen Fuel Project. The non-Federal share of project costs shall be 20 percent.

(b) The cost of project vehicles, related facilities, and other activities funded from the Federal Transit Administration sections 5307, 5308, 5309, and 5314 program, including the non-Federal share for the FTA funds, is an eligible component of the non-Federal share for this project.

(c) Contribution of the non-Federal share of project costs for all grants made for this project may be deferred until the entire project is completed.

(d) All operations and maintenance costs associated with vehicles, equipment, and facilities utilized for this project are eligible project costs.

(e) This section applies to project appropriations beginning in fiscal year 2004.]

[Sec. 313.

(a) Integrated University Program. The Secretary of Energy, along with the Administrator of the National Nuclear Security Administration and the Chairman of the Nuclear Regulatory Commission, shall establish an Integrated University Program.

(b) For the purposes of carrying out this section, \$45,000,000 is authorized to be appropriated in each of fiscal years 2009 to 2019 as follows:

(1) \$15,000,000 for the Department of Energy;

(2) \$15,000,000 for the Nuclear Regulatory Commission; and

(3) \$15,000,000 for the National Nuclear Security Administration.

(c) Of the amounts authorized to carry out this section, \$10,000,000 shall be used by each organization to support university research and development in areas relevant to their respective organization's mission, and \$5,000,000 shall be used by each organization to support a jointly implemented Nuclear Science and Engineering Grant Program that will support multiyear research projects that do not align with programmatic missions but are critical to maintaining the discipline of nuclear science and engineering.]

*Sec. 310. None of the funds made in this or subsequent Acts may be used for the testing of nuclear explosives in the recovery of oil and gas.*

*Sec. 311. (a) Section 1801 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g) is amended in subsection (b)(2) by striking "amounts contained within the Fund" and inserting "assessments collected pursuant to section 1802 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g-1) as amended".*

*(b) Section 1802 of the Atomic Energy Act of 1954 (42 U.S.C. 2297g-1) is amended:*

*(1) in subsection (a):*

*(A) by striking "\$518,233,333" and inserting "\$663,000,000"; and*

*(B) by striking "on October 24, 1992" and inserting "with fiscal year 2011".*

*(2) in subsection (c):*

*(A) by inserting "(1)" before "The Secretary";*

*(B) by inserting after "utilities": ", only to the extent provided in advance in appropriation Acts";*

*(C) by striking "\$150,000,000" and inserting "\$200,000,000";*

*(D) by inserting "beginning in fiscal year 2011" after "adjusted for inflation";*

*(E) by striking "(1)" and inserting "(A)";*

*(F) by striking "(2)" and inserting "(B)";*

*(G) by adding a new paragraph 2, ",(2) Amounts authorized to be collected pursuant to this section shall be deposited in the Fund and credited as offsetting receipts."*

*(3) in subsection (d), by striking "for the period encompassing 15 years after the date of the enactment of this title" and inserting "through fiscal year 2025"; and*

*(4) in subsection (e):*

*(A) in paragraph (1), by striking "15 years after the date of the enactment of this title" and inserting "September 30, 2025";*

*(B) in paragraph (2), by striking "\$2,250,000,000" and inserting "\$3,000,000,000"; and*

*(C) in paragraph (2) by inserting "beginning in fiscal year 2011" after "adjusted for inflation".*

*Sec. 312. Not to exceed 5 per centum, or \$100,000,000, of any appropriation, whichever is less, made available for Department of Energy activities funded in this Act or subsequent Energy and Water Development Appropriations Acts may hereafter be transferred between such appropriations, but no such appropriation, except as otherwise provided, shall be increased or decreased by more than 5 per centum by any such transfers, and notification of such transfers shall be submitted promptly to the Committees on Appropriations of the House and Senate.(Energy and Water Development and Related Agencies Appropriations Act, 2009.)*