

June 25, 1997

MEMORANDUM FOR THE SECRETARY

FROM: John C. Layton  
Inspector General

SUBJECT: INFORMATION: Report on "Audit of  
the Western Area Power Administration's Contract  
with Basin Electric Power Cooperative"

BACKGROUND:

At the request of the Western Area Power Administration (Western), we conducted an audit of charges to Western made by Basin Electric Power Cooperative (Basin), under Contract No. DE-MP65-82WP-19001. The contract for Western's purchase of electric power from Basin was entered into on April 15, 1982, and was in effect from January 1, 1986, through October 31, 1990. Western identified 17 areas where overcharges might have occurred. The purpose of the audit was to determine whether Western had been charged costs in excess of those permitted by the contract for the 17 areas identified.

DISCUSSION:

We found that Basin overcharged Western approximately \$23.8 million. These overcharges occurred because Basin: (1) did not recognize or amortize as gain its overestimate of completion and correction costs for Antelope Valley Station (AVS) Unit 2; (2) did not amortize the gain on the sale/leaseback of AVS Unit 2 as an offset to lease costs; (3) billed Western prematurely for lease and interest costs; (4) overcharged for the cost of coal by including administrative and general expenses and profit, as well as incorrectly calculating discounts, royalty payments, and imputed interest costs; (5) made faulty calculations of amortization rates for deferred costs; (6) used a shorter depreciation period for AVS common facilities than it had used for other power plants; (7) retained tax benefit transfers; and (8) charged Western for interest and depreciation that had been paid by others.

In addition to the \$23.8 million in overcharges, we estimated interest accrued on the overcharges through December 31, 1996, to be approximately \$22.1 million, resulting in a total of \$45.9 million due Western.

We recommended that Western seek a refund from Basin in the amount of \$23,843,592, plus accrued interest. Western management agreed with the findings and recommendation.

Attachment

cc: Deputy Secretary  
Under Secretary

U.S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL

AUDIT OF  
THE WESTERN AREA POWER ADMINISTRATION'S  
CONTRACT WITH BASIN ELECTRIC POWER COOPERATIVE

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AUDIT OF  
THE WESTERN AREA POWER ADMINISTRATION'S  
CONTRACT WITH BASIN ELECTRIC POWER COOPERATIVE

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U.S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL  
OFFICE OF AUDIT SERVICES

AUDIT OF  
THE WESTERN AREA POWER ADMINISTRATION'S  
CONTRACT WITH BASIN ELECTRIC POWER COOPERATIVE

Audit Report Number: DOE/IG-0409

SUMMARY

At the request of the Western Area Power Administration (Western), we conducted an audit of 17 areas with respect to possible overcharges on a power contract between Western and Basin Electric Power Cooperative (Basin), Contract No. DE-MP65-82WP-19001. The contract for Western's purchase of electric power from Basin was entered into on April 15, 1982, and was in effect from January 1, 1986, through October 31, 1990. During this 58-month period, Basin billed Western approximately \$197.6 million.

Overall, we found that Basin overcharged Western approximately \$23.8 million. These overcharges occurred because Basin: (1) did not recognize or amortize as gain its overestimate of completion and correction costs for Antelope Valley Station (AVS) Unit 2; (2) did not amortize the gain on the sale/leaseback of AVS Unit 2 as an offset to lease costs; (3) billed Western prematurely for lease and interest costs; (4) overcharged for the cost of coal by including administrative and general expenses and profit, as well as incorrectly calculating discounts, royalty payments, and imputed interest costs; (5) made faulty calculations of amortization rates for deferred costs; (6) used a shorter depreciation period for AVS common facilities than it had used for other power plants; (7) retained tax benefit transfers; and (8) charged Western for interest and depreciation that had been paid by others.

In addition to the \$23.8 million in overcharges, we estimated interest accrued on the overcharges through December 31, 1996, to be approximately \$22.1 million, resulting in a total of \$45.9 million due Western.

\_\_\_\_\_(Signed)\_\_\_\_\_  
Office of Inspector General

PART I

APPROACH AND OVERVIEW

INTRODUCTION

At the request of Western, we performed an audit of charges to Western made by Basin under Contract No. DE-MP65-82WP-19001. Western identified 17 areas where overcharges might have occurred (see Appendix A). The purpose of the audit was to determine whether Western had been charged costs in excess of those permitted by the contract for the 17 areas identified.

#### SCOPE AND METHODOLOGY

The audit was performed primarily at Basin's headquarters in Bismarck, North Dakota, from May 29, 1996, through August 30, 1996. To accomplish the audit objective, we:

- o reviewed Western's contract with Basin;
- o analyzed Code of Federal Regulations, Title 7-Agriculture, Part 1767, Accounting Requirements for Rural Utilities Service Electric Borrowers (7 CFR 1767);
- o examined invoices and supporting documentation;
- o determined which costs could be charged to Western; and,
- o held discussions with Western and Basin personnel.

In determining applicable criteria for costs, we looked to the contract and to 7 CFR 1767. Both references cited "reasonableness" as criteria, without significant elaboration. Therefore, we searched for further guidance. Because the Federal Acquisition Regulation (FAR) contained cost principles and definitions, we used the FAR as criteria. The FAR is comprehensive, authoritative, has been in effect for many years, and identifies what is generally acceptable to the Federal Government concerning contract costs. Although Western's contract with Basin was not specifically covered by the FAR, we believe application of the FAR was appropriate in situations where cost guidance beyond that found in 7 CFR or the contract was needed.

To fulfill our audit responsibilities, we contracted with the independent public accounting firm of KPMG Peat Marwick LLP to conduct the audit for us, subject to our review.

Except as discussed in the following two paragraphs, the audit was conducted in accordance with generally accepted Government auditing standards.

The audit was limited to the 17 areas where overcharges might have occurred. Accordingly, we do not express an opinion on the allowability of all Basin charges to Western or Basin's internal controls. Had we reviewed other Basin charges to Western, other matters might have come to our attention that would have been reported.

In addition, Basin essentially limited discussion and contacts to only two Basin personnel--Basin's Assistant General

Counsel and a Senior Financial Reporting Analyst. Our requests for information and documents were provided to the analyst, who in turn would contact other Basin personnel, obtain information and documents, and relay the information and documents to us. As a result, we did not have the opportunity to discuss issues in depth with those individuals responsible for carrying out work related to the issues being audited and who possibly could have provided additional information on the audit issues. We also did not have the opportunity to obtain documents directly from those individuals, as the documents were pre-screened prior to being made available to us. Consequently, because of this scope impairment, we did not have assurance that we were provided all information and documents pertinent to the audit issues.

Except for matters described in the preceding paragraphs, we conducted our audit in accordance with generally accepted Government auditing standards that applied to this financial related audit. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the data and records reviewed are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the data and records reviewed. An audit also includes assessing the accounting principles used and significant estimates made by the contractor. We believe that our audit provides a reasonable basis for our audit conclusions.

#### BACKGROUND

##### Western's Contract and Cost Guidelines

Western entered into a contract with Basin on April 15, 1982, to purchase 185 megawatts (MW) of power from Basin's Antelope Valley Station Unit 2, which was under construction at the time. On December 3, 1985, Basin entered into a sale/leaseback of AVS Unit 2. As a result, the contract was modified on December 13, 1985, to allow Western to pay for its share of lease costs, to establish the contract start date as January 1, 1986, to show that the accredited rating of AVS Unit 2 was anticipated to be 450 MW, and to provide for other details concerning various contract provisions. Power became available from AVS Unit 2 on January 1, 1986, and the unit became fully operational by June 1986. The contract ended on October 31, 1990.

With respect to costs, the contract stated that Basin should operate the facilities to the best of its ability using prudent utility practices that were expected to accomplish results at the lowest reasonable cost, consistent with reliability, safety, and expedition. The contract provided for specific allowable account numbers from which costs were to be computed.

Federal guidelines for costs for rural utility electric borrowers are provided in 7 CFR 1767, which states, in part, that cost is defined as the amount of money actually paid for property or services, amounts included in the accounts shall be just and reasonable, and electric plant is to be recorded at cost. Basin, a Rural Electrification Administration (now known as the Rural

Utilities Service) borrower, was required to apply 7 CFR 1767 to its accounts.

#### Description of Basin and its Subsidiaries

Founded in 1961, Basin is a consumer-owned, not-for-profit, regional cooperative located in Bismarck, North Dakota. Basin generates and transmits electricity to more than 120 member rural electric systems in eight states. These member systems distribute electricity to 1.5 million consumers. Basin produces electricity from four power plants that have a combined generating capacity of 3,304 MW. One of these four plants is the AVS, located in Beulah, North Dakota, which has two units--AVS Unit 1 and AVS Unit 2. Each unit has a capacity of 450 MW. Western contracted to purchase 185 MW of the 450 MW from AVS Unit 2.

Basin has four major subsidiaries:

- o Basin Cooperative Services, incorporated in 1981, is a wholly owned, not-for-profit property management subsidiary.
- o Basin Telecommunications, Inc., is a for-profit subsidiary formed in 1995. It is a network of services that includes a travel agency, a dispatch center, and telecommunications services such as Internet access, long-distance discounts and cellular plans.
- o Dakota Coal Company is a wholly owned, for-profit subsidiary incorporated in 1988 to provide financing for the Freedom Mine and to purchase the lignite coal produced there. The Freedom Mine, owned and operated by The Coteau Properties Company, supplies lignite for Basin's Leland Olds and AVS stations, Dakota Gasification Company's synfuels plant, and United Power Association's Stanton, North Dakota Station. The Coal Company has a division called Wyoming Lime Producers which owns a lime kiln that began operating in 1993; it produces 400 tons of lime daily for use in dry scrubbers that remove sulfur dioxide from emissions at the AVS and Laramie River stations and at other coal-fired power plants in the region.
- o Dakota Gasification Company is a wholly owned, for-profit subsidiary incorporated in 1988 to own and operate the Great Plains Synfuels Plant near Beulah, North Dakota. The plant produces high-BTU natural gas from lignite and byproducts, such as agricultural fertilizers and chemicals from the coal gasification process.

## PART II

### FINDINGS AND RECOMMENDATION

During the 58-month contract period, January 1986 through October 1990, Basin billed Western approximately \$197.6 million.

The audit disclosed that Basin had overcharged Western by \$23.8 million. The findings that follow describe the overcharges.

### 1. Completion and Correction Fund

As part of the sale/leaseback proceeds from AVS Unit 2, Basin established (with Rural Electrification Administration approval) a Completion and Correction Fund (Fund) of \$66,311,540. The Fund was to be used for four specific types of expenditures related to completing and correcting AVS Unit 2. During 1985-1991, additions to the Fund for interest earned and other items exceeded expenditures. Basin overestimated the amount needed for the completion and correction of AVS Unit 2, although the amount needed should have been reasonably known, since AVS Unit 2 was substantially complete at the time of the sale/leaseback. Basin used the Fund's ending balance, \$48,917,906, to pay off AVS and non-AVS notes. However, paying off notes was not an authorized type of expenditure from the Fund.

According to our calculations, had Basin established the Fund at \$29,811,540, instead of \$66,311,540, the Fund would have been sufficient to meet authorized expenditures. The difference of \$36,500,000 would have been an additional gain on the sale/leaseback. Amortization of this gain as a partial offset to the lease costs Basin charged Western would have reduced lease costs to Western by \$2,410,864 over the contract's term. Accordingly, Basin owes Western \$2,410,864, plus interest.

As a result of our inquiry, Basin calculated that it owed Western \$49,354. However, as indicated above, \$2,410,864, plus interest, is owed to Western.

### 2. Gain on Sale of AVS Unit 2

Basin realized a gain (profit) of \$69,299,827 on the sale/leaseback of AVS Unit 2. Since Western's contract with Basin was a cost-type contract, the gain should have partially offset the lease costs charged to Western. However, Basin amortized the gain to other income, and Western received no benefit as a result of the AVS Unit 2 sale/leaseback gain.

Because the FAR defines contract cost to be net of allocable credits, Basin should have reduced the lease charges to the net cost, which was the monthly lease payment less the amortized gain. Therefore, Basin should refund \$4,296,502, plus interest, to Western for the amount of the gain that should have been used to reduce Western's charges for lease costs.

### 3. Lease Payment Intervals

Basin billed Western monthly for the AVS Unit 2 lease payment, but Basin made semi-annual payments on the lease. Basin told us that they billed Western monthly because (1) they were required under generally accepted accounting principles to post the accrued lease obligation monthly, and (2) they were required to bill Western the amounts in the accounts specified in the contract.



Although it is not inappropriate for Basin to post the accruals monthly, billing Western monthly for the amounts violated the contract, which was based on cost. Federal regulations defined cost as the amount of money actually paid for property or services. The monthly accrual of the lease obligation did not represent an amount of money actually paid, since the actual payment did not occur until the semi-annual lease payment was made by Basin.

As a result of Basin's premature billing of Western during 1986-1990, Basin should refund \$1,040,239, plus interest, to Western.

#### 4. Coal Quantity Discount and Meridian Royalties

Basin overcharged Western \$700,477 for coal costs during 1986-1987 because Basin inappropriately applied a quantity discount to coal consumed by both AVS Units 1 and 2. Because the Joint Coal Supply Agreement based the quantity discount on coal consumed by AVS Unit 2, the entire discount should have been applied as a reduction of AVS Unit 2's costs.

Basin overcharged Western an additional \$21,767 for coal costs in November 1986 when Basin recorded royalties to Meridian Minerals Company for the period December 1985 through October 1986. The overcharge resulted because Basin did not consider the differences in quantities of coal burned by AVS Units 1 and 2 and because the royalties were based partly on a time period (March 1986 through July 1986) for which Western was not billed for any energy charges.

Basin should refund \$722,244, plus interest, to Western for the above overcharges for coal costs.

#### 5. Deferred Cost of Freedom Mine Development

Basin's calculations of 1986, 1987, and 1990 amortization rates for the deferred costs of developing the Freedom Mine were faulty and resulted in excessive charges to Western of \$801,398. This occurred for three reasons. First, Basin did not use a consistent amortization period. In 1988, Basin changed from a 32-year period to amortize the costs to 20 years. Second, Basin included projected additional loans to be made by Basin in the amortization rates, but the loans were never made. Third, Basin's estimate of the amount of coal to be purchased was low and resulted in a higher cost per ton of coal each year.

Our recalculation of amortization rates, based on the above, showed that an additional \$1,075,272 of interest would have been deferred during 1986-1990. This would have reduced interest charged to Western by \$442,056.

Basin should refund \$1,243,454, plus interest, to Western for the above overcharges.

#### 6. Amortization Periods for Common Facilities

Basin overcharged Western \$2,769,180 for interest and \$828,781 for depreciation during June 1986 through October 1990. This occurred because Basin amortized deferred expenses for the AVS Common Facilities over 10 years rather than 20 years, although Basin had previously used a 20-year time period for common facilities relating to its other power plants. Basin reverted to the 20-year amortization period for AVS in 1991-- after the contract with Western ended.

Basin overcharged Western an additional \$477,827 for interest and \$83,005 for depreciation because Basin early amortized deferred interest and depreciation during June 1988 through September 1989, but did not adjust monthly amortization charges to Western. The early amortizations should have resulted in reduced monthly charges to Western, but Basin continued to charge Western on the basis of a straight-line amortization of the June 1, 1986, balance of deferred charges, the balance prior to the early amortizations.

Basin should refund the above total overcharges of \$4,158,793, plus interest, to Western.

#### 7. Basin's Cost Allocation System

We tested Basin's billings to Western for 5 different months of the 58-month contract period during 1986-1990 (1 month from each of the 5 years) and found that billing records matched the records at Western, billings were mathematically accurate, and capacity and energy costs on the billings generally agreed with Basin's supporting computerized records. We also found that account and cost center charges appeared to be allowable and allocable, except for the following:

a. Basin received tax benefits based on tax benefit transfers on the AVS Common Facilities, but retained the benefits as Other Income rather than offsetting related costs. This resulted in overcharges of \$1,174,674 to Western.

b. Basin overcharged Western \$768,847 for the cost of coal during November 1988 through October 1990 because administrative and general expenses and profit margins were included in the costs. Western's contract with Basin did not allow such charges.

c. Basin billed Western monthly for interest costs that were paid quarterly and semi-annually. As a result, Western lost \$114,068 in interest income due to the premature billing by Basin.

Based on the above three exceptions, Basin should refund \$2,057,589, plus interest, to Western.

#### 8. Cost Sharing with Basin Subsidiaries

Basin overcharged Western \$7,913,907 during 1986-1990 for interest and depreciation on the Common Facilities. This occurred because the costs had already been paid by the ANG Coal

Gasification Company (ANG) and by ANG's successor company--the Dakota Gasification Company (DGC).

Basin had agreements requiring ANG/DGC to pay Basin for sharing the use of five Common Facilities for which Western was also being charged. Two of the facilities, Water Transportation and Railroad Spur, required ANG/DGC to pay 100 percent of related interest and depreciation expenses. However, Western was also billed for those costs, which resulted in Basin collecting costs that had already been paid.

Basin should refund \$7,913,907, plus interest, to Western for the overcharges.

#### SUMMARY OF OVERCHARGES TO WESTERN

Reason for Overcharge	Amount Overcharged
1. Basin did not recognize \$36,500,000 of the Completion and Correction Fund monies as a gain, which should have been amortized as an offset to lease costs.	\$ 2,410,864
2. Basin recorded a \$69,299,827 gain (profit) from the sale/ leaseback of AVS Unit 2 that should have been amortized as an offset to lease costs billed to Western.	4,296,502
3. Basin billed Western monthly for lease costs, but only made lease payments semi-annually.	1,040,239
4. Basin overcharged the cost of coal due to inappropriate application of discounts and calculation of royalties.	722,244
5. Basin's calculations of amortization rates for deferred costs were faulty, and additional interest should have been deferred.	1,243,454
6. Basin amortized deferred costs for AVS Common Facilities over 10 years rather than its customary 20 years, and Basin did not adjust monthly charges to Western when early amortizations occurred.	4,158,793
7. Basin retained tax benefits rather than offsetting related costs (\$1,174,674), included administrative and general expenses and profit margins in the cost of coal (\$768,847), and billed Western monthly for interest costs but paid the interest quarterly and semi-annually (\$114,068).	2,057,589

8. Basin charged Western for two Common Facilities costs that it had already collected 100 percent of the costs from others.	7,913,907
Total Overcharges	\$23,843,592
Interest on Overcharges (1/1/86-12/31/96) (See Appendix B)	22,073,411
Total Overcharges and Interest (through 12/31/96)	\$45,917,003

#### RECOMMENDATION

We recommend that Western seek a refund from Basin in the amount of \$23,843,592, plus interest accrued from January 1, 1986, to the date such refund is received.

#### PART III

##### MANAGEMENT AND AUDITOR COMMENTS

In responding to our initial draft version of this report, the Western Administrator concurred with the information (facts presented, findings and recommendation, and reasonableness of the estimated monetary impact) contained in the report. The Administrator further stated that Western was working to reach closure on the issue of overcharges made by Basin.

##### Auditor Comments

Management's comments are responsive to the recommendation.

#### PART IV

##### APPENDICES

APPENDIX A  
Page 1 of 1

##### Summary of Areas Audited

1. Leveraged Lease Transaction
2. Completion and Correction Fund - (See Finding No. 1)
3. Gain on Sale of Antelope Valley Station Unit 2 - (See Finding No. 2)
4. Lease Payment Intervals - (See Finding No. 3)

5. Coal Quantity Discount and Meridian Royalties - (See Finding No. 4)
6. Coal Sales Agreement - (See Finding No. 7)
7. Royalties Paid on Development of Freedom Mine
8. Imputed Interest on Development of Freedom Mine - (See Finding No. 5)
9. Loan Advance to Construct Secondary Crusher
10. Non-refundable Down Payment for Dragline C
11. Change in Depreciable Assets
12. Deferred Depreciation and Interest on Common Facilities - (See Finding No. 6)
13. Amortization Periods and Revisions for Common Facilities - (See Finding No. 6)
14. August 1987 Change in Amortization of Facilities
15. Basin's Cost Allocation System - (See Finding No. 7)
16. Administrative/General and Indirect Costs - (See Finding No. 7)
17. Cost Sharing with Basin Subsidiaries - (See Finding No. 8)

APPENDIX B

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2. What additional information related to findings and recommendations could have been included in this report to assist management in implementing corrective actions?
3. What format, stylistic, or organizational changes might have made this report's overall message more clear to the reader?
4. What additional actions could the Office of Inspector General have taken on the issues discussed in this report which would have been helpful?

Please include your name and telephone number so that we may contact you should we have any questions about your comments.

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