DOE OFFICE OF INDIAN ENERGY

Non Grant-based financing introduction, options and structures

“the winds are changing”
Investments
Diesel Generator Upgrades
Energy Efficiency
Solar

Positive Cash Flow
• Energy savings
• Power sales
• Tax credits
• Other incentives
Costs and Cash Flows

Investment

Capital Investment

Cash Flows
Sources of Capital for Investment

- Loans
- Your Funds
- Partner funds
- Tax Equity
- Grants/Incentives
What does a Lender want to see?

1. Credit History (rating)
2. Source of repayment of loan – cash flows from project
   - Can you convert energy savings into cash?
   - Power sales under a PPA
   - Level of confidence in the cash flows
3. Secondary source of repayment
   - Collateral
   - Guarantee (e.g. Village Corp, State or Federal entity)
   - Other funds
     - PCE payments
     - Shareholder dividends
4. What does the project or company look like under stress scenarios?
5. Insurance
6. O&M plan – Access to spare parts
TED Bonds
• Tribal Economic Development Bonds
• Federally recognized tribes
• Allocation to issue tax exempt bonds or tax exempt loans
• Ability to issue bonds beyond just for essential government services

Municipal Bonds
• Tax Exempt Bonds (Tax exempt Tribal bonds)

Private Bonds
• Native Corporations
• Village Corporations (?)

Tax Credit Bonds
• Qualified Energy Conservation Bonds (QECBs)
• Buyer of bonds gets a tax credit OR issuer of bonds gets subsidy
What is tax exempt debt?

**Taxable Interest**
- Interest rate = 8%
- How much you owe in taxes = 30%
- After tax interest you earn = 5.6%

**Tax-exempt Interest**
- Interest rate = 5.6%
- How much you owe in taxes = 0%
- After tax interest you earn = 5.6%

$100,000 \times 2.4\% = $2,400 saved per year in interest
**Investment Tax Credits**
- Solar
- Wind
  - Based on upfront qualified costs
  - Established phase out timeline

**Production Tax Credits**
- Wind
  - Production-based over 10 years
  - Established phase out timeline

**Depreciation (tax benefit)**
- Non cash expense that lowers taxes owned

**New Market Tax Credits**
- Tax credits worth 39% of project costs earned over 7 years
- Approximately 25% of funds for a project
- Combined with debt
- Yukon-Koyukuk Elder Assisted Living Facility (YKEALF)
What’s a tax credit?

A tax credit reduces dollar for dollar the amount of taxes you owe.

- If you owe $15,000 in taxes and you have a $10,000 tax credit, you reduce your tax bill to $5,000

Tax deduction (Depreciation)

- Reduces your taxable income subject to tax.
- Taxable income = $20,000. Pay $4,000 at a 20% tax rate
- Tax deduction of $6,000
- After deduction, taxable income is $14,000. Pay $2,800
- Save $1,200.
Status of federal tax credits

Takeaways

There is time to plan – but time goes fast

Begun Construction language

Potential for continued cost declines to offset declining percentage

Greater chance local business or sponsor can use tax credits as the size of these tax credits fall

Wind also eligible for ITC through 2019

Source: http://a2solar.com/2016/05/investment-tax-credit/

So why seek a partner who can take the tax credits?

- Tax incentives such as Modified Accelerated Cost Recovery System (MACRS) and either Production Tax Credit (PTC) or Investment Tax Credit (ITC) can represent up to half the project value, or reduce project capital costs by ~50%.
No Tax Benefits

Tribal Owned

<table>
<thead>
<tr>
<th>Metric</th>
<th>Base</th>
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<tbody>
<tr>
<td>Annual Energy</td>
<td>37,230,428</td>
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<tr>
<td>PPA price</td>
<td>12.62 c/kWh</td>
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<tr>
<td>LCOE Nominal</td>
<td>13.55 c/kWh</td>
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<tr>
<td>LCOE Real</td>
<td>11.00 c/kWh</td>
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<tr>
<td>Internal rate of return (%)</td>
<td>21.11 %</td>
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<tr>
<td>Minimum DSCR</td>
<td>1.57</td>
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<tr>
<td>Net present value ($)</td>
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<tr>
<td>Calculated ppa escalation (%)</td>
<td>1.00 %</td>
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<tr>
<td>Calculated debt fraction (%)</td>
<td>50.00 %</td>
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<tr>
<td>Capacity Factor</td>
<td>21.3 %</td>
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<tr>
<td>First year kWhac/kWdc</td>
<td>1,862</td>
</tr>
<tr>
<td>System performance factor (%)</td>
<td>0.82</td>
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</table>

~50% decrease

Tax Benefits

Third-Party Owned

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<tbody>
<tr>
<td>Annual Energy</td>
<td>37,230,428</td>
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<tr>
<td>PPA price</td>
<td>23.36 c/kWh</td>
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<tr>
<td>LCOE Nominal</td>
<td>27.22 c/kWh</td>
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<tr>
<td>LCOE Real</td>
<td>22.11 c/kWh</td>
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<td>Internal rate of return (%)</td>
<td>12.00 %</td>
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<tr>
<td>Minimum DSCR</td>
<td>3.36</td>
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<tr>
<td>Net present value ($)</td>
<td>$2,386,955</td>
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Federal Tax Benefits

$600,000 qualified investment in solar = $180,000 tax credit plus depreciation benefits.

**Business (taxable entity)**

- Buy and install a solar system and get the tax benefits in addition to lower utility bills. (e.g. Commercial enterprise)
- Buy, install and sell the electricity to another entity (e.g. school). Get tax benefits and revenue from electricity sales (e.g. Native Corporation).
- Buy, install and sell the electricity to a utility.

**Tax Equity Investors**

- Third parties who have a tax liability to offset
- Willing to invest capital in return for the tax benefits and some cash flow
- Once tax benefits are “used up”, these tax equity investors are often interested in exiting the transaction.
- Multiple tax structures depending on technology
Third Party Power Purchase Agreement

The customer agrees to **host** the system and **purchase** the electricity. Revenue from electricity sales is transferred to the **Local Community Facility**, which then sells the renewable electricity at fixed prices to the **Taxable Enterprise (and any partners)**. Remaining electricity needs are met by the **Local Utility**, which benefits from **Various project finance structures** and **Tax Benefits**. This arrangement is worth approximately 50% of the cost of a solar system.
Banner Wind in Nome*

- Banner Wind LLC
  - Partnership between Sitnasuak Native Corp (SNC) and Bering Straits Native Corp
  - Banner Wind sells power to Nome Joint Utilities Service (NJUS) under a 20 year PPA
  - SNC and BNC earned revenues from power sales and took the tax benefits
  - Grant for transmission line
  - Sold project to NJUS in 2015
  - Banner Wind LLC dissolved

*Barriers to and Opportunities for Private Investment in Rural Alaska Energy projects. December 2016. Prepared for AEA by ACEP at UAF.
Third Party Power Purchase Agreement

The customer agrees to **host** the system and **purchase** the electricity.

- **NJUS**
  - Revenue from electricity sales
  - Renewable electricity at fixed prices

- **Banner Wind, LLC**
  - Tax Benefits
Where to Seek out Private Capital Partners?

- Native Corps
- Financial Services
- Telecommunications
- Transportation / Logistics
- Tourism
- L48 Companies
Key Concept: Tax Benefits and Tax Equity

1. Valuable Incentives if you can monetize them

2. A taxable tribal entity may be able to monetize the tax credits directly and eliminate the need for a tax equity partner.
   - Taxable tribal enterprise buys PV system for own use.
   - Native or Village Corporation sells power under a PPA to tribal community facility or directly to a utility.

3. Buy electricity under a PPA from a third party and implicitly benefit from the tax credits (e.g. lower cost of electricity)

4. A taxable tribal entity can partner with third party and enter into some form of a partnership (flip transaction).
TAX EQUITY STRUCTURES
Potential Capital Structure with Tax Equity

Potential Capital Financing Sources

- Tax Equity
- Loan
- Cash Equity
- Other

Tax-Equity Investment Structures

- Partnership Flip
- Sale Leaseback
- Inverted Lease

Corporations
Project Company/Pass-Through Entity
Tax Equity
### Partnership Flip

<table>
<thead>
<tr>
<th>Resource Owner</th>
<th>Lender/Capital Provider</th>
<th>Utility/Off-taker</th>
<th>Project Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access/Site Control</td>
<td>Debt Payments ($/mo.)</td>
<td>Electricity</td>
<td>Debt Capital $$</td>
</tr>
<tr>
<td>Rent/Royalty $</td>
<td>Debt Capital $$</td>
<td>PPA ($/kWh)</td>
<td>Developer Equity $ (1%)</td>
</tr>
<tr>
<td>Income: 1% Pre-Flip; 95% Post-Flip</td>
<td>Income: 99% Pre-Flip; 5% Post-Flip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Investment $$ (99%)</td>
<td>MACRS and either ITC/PTC</td>
<td></td>
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**Tax-Equity Investors**

- Income: 99% Pre-Flip; 5% Post-Flip
- MACRS and either ITC/PTC
- Equity Investment $$ (99%)

1) Developer sells project to tax-equity investor. Developer receives: both sale proceeds from investor and cash from PPA (less lease payments and O&M). Option to purchase asset from tax equity both during and at end of the lease.

2) Tax equity leases project back to developer. Tax equity receives: ITC, MACRS, and lease payments. Possible buy-out price as well.
In the inverted lease, ITC is *passed through* to the tax-equity investor, allowing developer to retain ownership and some tax benefits (MACRS). Fair Market Value determination (appraisal)

1) Developer owns project and leases it to tax-equity. Developer receives: lease payments; retains MACRS. Developer owns asset in full at expiration of lease

2) Tax equity pays rent to lessor and sells power under the PPA. Receives ITC pass-through (in return for partial upfront funding of project) and cash from PPA.
Private Letter Ruling

What is a PLR?

A private letter ruling, or PLR, is a written statement issued to a taxpayer that interprets and applies tax laws to the taxpayer’s represented set of facts. A PLR is issued in response to a written request submitted by a taxpayer. A PLR may not be relied on as precedent by other taxpayers or by IRS personnel.
Private Letter Ruling


Based on your representation that the Renewable Energy Assets qualify as energy property under § 48 and our conclusion that an Indian tribal government is neither a governmental unit described in § 50(b)(4) nor an organization exempt from tax imposed by Chapter 1 for purposes of § 50, we conclude that Tribe may elect to pass investment credits associated with the Renewable Energy Assets to Lessee under § 50(d)(5).
June 29, 2016

In Private Letter Ruling 201310001, the Internal Revenue Service concluded that Tribe may elect to pass investment credits associated with the Renewable Energy Assets to an unrelated third party lessee (Lessee) under § 50(d)(5).

After reconsideration, we have concluded that Tribe may not elect to pass investment credits associated with the Renewable Energy Assets to Lessee under § 50(d)(5). Accordingly, Private Letter Ruling 201310001 is revoked prospectively, and Tribe may place no further reliance on the ruling.