Kake to Petersburg
Intertie Update

Southeast Conference
2012 Annual Meeting
Craig, Alaska
Kake – Petersburg Intertie
Northern and Center-South Routes
Technical Configuration

- Single pole overhead construction, 69-kV
- Follow existing USFS roads where possible
- Integrate with fiber optic telecommunication system components
- 2-3 year construction
## Estimated Total Cost of Construction 69-kV ($000)

<table>
<thead>
<tr>
<th>Northern Route - With Directional Bore</th>
<th>Center - South w/Bore</th>
<th>No Road, with UG Cable</th>
<th>With Road, w/o UG Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead Line</td>
<td>$17,924</td>
<td>$23,484</td>
<td>$22,208</td>
</tr>
<tr>
<td>Clearing and Road Construction</td>
<td>3,991</td>
<td>6,139</td>
<td>1,645</td>
</tr>
<tr>
<td>Underground Construction</td>
<td>-</td>
<td>3,365</td>
<td>212</td>
</tr>
<tr>
<td>Submarine Cables</td>
<td>4,007</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Directional Bore Crossings</td>
<td>2,379</td>
<td>1,914</td>
<td>1,914</td>
</tr>
<tr>
<td>Switchyards and Substations</td>
<td>1,977</td>
<td>1,611</td>
<td>1,611</td>
</tr>
<tr>
<td><strong>Subtotal - Direct Costs</strong></td>
<td>$30,279</td>
<td>$36,512</td>
<td>$27,590</td>
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<tr>
<td>Indirect Costs</td>
<td>$2,422</td>
<td>$2,921</td>
<td>$2,207</td>
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<td>Contingency (15%)</td>
<td>4,905</td>
<td>5,915</td>
<td>4,470</td>
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<tr>
<td><strong>Total Costs</strong></td>
<td>$37,606</td>
<td>$45,348</td>
<td>$34,267</td>
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</table>

Kake-Petersburg Intertie
Estimated Construction Costs

- Northern route would cost approximately $7.4 million less if DOT road funds were available to support the intertie.
- Northern route would cost about $3.4 million less if underground construction is not needed in and adjacent to Kupreanof (currently a local mandate).
- Northern route would cost about $5 million more if a submarine cable were used across the mouth of Wrangell Narrows instead of the directional bore.
- Costs are about $3 million higher for 138-kV.
Project Status

- Public scoping was completed in April/May 2010

- Completed environmental field during Fall 2010 and Summer 2011 per USFS protocols

- Prepared Draft Resource Reports and submitted them to the USFS for review (May/June 2012)
Tetra Tech staff worked with their USFS counterparts to prepare the following draft Resource Reports that will be used to support the EIS process.

- Wildlife
- Aquatics
- Botany
- Wetlands
- Scenery
- Soils and Geology
Tetra Tech staff also worked with the USFS to prepare drafts of the following required reports:

- Biological Assessment / Biological Evaluation for Wildlife
- Biological Evaluation for Botany
- Invasive Plant Risk Assessment

The USFS has subsequently reviewed and provided comments on all nine draft reports.
### Next Steps and Milestones for Environmental Work

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Scheduled Date</th>
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<tbody>
<tr>
<td>Meet with the USFS to discuss the Draft EIS</td>
<td>October 2012</td>
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<tr>
<td>Prepare and Publish Draft EIS</td>
<td>Winter 2012/2013</td>
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<tr>
<td>Public Meetings on DEIS</td>
<td>March 2013</td>
</tr>
<tr>
<td>Prepare Preliminary Final EIS based on Public Review and Comment to USFS for Review</td>
<td>June 2013</td>
</tr>
<tr>
<td>Revise and Publish Final EIS and ROD; Starts 45-day Appeal Period</td>
<td>September 2013</td>
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<tr>
<td>End of Appeal Period</td>
<td>November 2013</td>
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</tbody>
</table>
Power System in Kake

- Kake has an isolated electric system

- Local generation is diesel fueled
  - 2.6 MW installed capacity currently (3 units)

- Electricity is crucial to economic development
  - Average residential consumption of 366 kWh
  - High cost of retail electric service (as high as 64 cents/kWh with market fluctuations)
  - PCE reduces cost to residential, but not commercial users
Recent Management Milestones

MOU signed by SEAPA and IPEC (Highlights below)

1. SEAPA agrees to assume the Intertie ownership role providing that the recently signed MOU is agreed to by IPEC and AEA.
2. It is recognized that there are two potential routes for the KPI. It is acknowledged by all parties that a ‘preferred route’ must be identified.
3. It is agreed by all parties that a project management office needs to be established. (RFP Advertised)
4. Initial activities will include the development of a comprehensive project schedule including all expected and required activities to include engineering, permitting, geotechnical, legal, final design, funding requirements, and other related tasks.
5. The parties agree that a Power Sales Agreement (PSA) must be negotiated between the IPEC and SEAPA (or another power provider) for the purchase and delivery of power to IPEC.
6. The parties agree that an acceptable risk management plan needs to be developed with appropriate risk-sharing and mitigation.
Southeast Conference

Robert Venables, Energy Coordinator
Shelly Wright, Executive Director
Merrill Sanford, Chair, Energy Committee
Gordy Wrobel, President

Southeast Conference Annual Meeting, September 25-27, 2012 in Craig, AK