Kake - Petersburg Intertie

Project Status

D. Hittle & Associates, Inc.

Tetra Tech EC

September 14 2011
Introduction

- Provide update on work that has been conducted since last March
- Review cost estimates
- Indicate activities that are expected to be conducted over the next few months
Purpose of Intertie

- Interconnect Kake to SEAPA power grid
- Purchase power from SEAPA, Metlakatla or other interconnected utilities
- Bring lower cost power to Kake
  - Retail rates as high as 65 cents/kWh
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
Kake – Petersburg Intertie: Northern and Center-South Routes
## Estimated Total Cost of Construction 69-kV ($000)

<table>
<thead>
<tr>
<th></th>
<th>Northern Route - No Road</th>
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<tbody>
<tr>
<td></td>
<td>With</td>
<td>With</td>
<td>With</td>
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<tr>
<td></td>
<td>Center - South w/Bore</td>
<td>Submarine Cable</td>
<td>With Bore and UG Cable</td>
</tr>
<tr>
<td>Overhead Line</td>
<td>$ 17,924</td>
<td>$ 20,978</td>
<td>$ 23,484</td>
</tr>
<tr>
<td>Clearing and Road Constructi on</td>
<td>3,991</td>
<td>5,792</td>
<td>6,139</td>
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<tr>
<td>Underground Constructi on</td>
<td>-</td>
<td>-</td>
<td>3,365</td>
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<tr>
<td>Submarine Cables</td>
<td>4,007</td>
<td>7,892</td>
<td>-</td>
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<tr>
<td>Directional Bore Crossings</td>
<td>2,379</td>
<td>-</td>
<td>1,914</td>
</tr>
<tr>
<td>Switchyards and Substations</td>
<td>1,977</td>
<td>1,611</td>
<td>1,611</td>
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<tr>
<td>Subtotal - Direct Costs</td>
<td>$ 30,279</td>
<td>$ 36,272</td>
<td>$ 36,512</td>
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<tr>
<td>Indirect Costs</td>
<td>$ 2,422</td>
<td>$ 2,902</td>
<td>$ 2,921</td>
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<tr>
<td>Contingency (15%)</td>
<td>4,905</td>
<td>5,876</td>
<td>5,915</td>
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<tr>
<td><strong>Total Costs</strong></td>
<td><strong>$ 37,606</strong></td>
<td><strong>$ 45,050</strong></td>
<td><strong>$ 45,348</strong></td>
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</table>
Estimated Construction Costs

- Northern route would cost approximately $6 million less if a DOT road were in place before the intertie is built
- Northern route would cost about $3 million less if underground construction is not needed in and adjacent to Kupreanof
- Costs are about $3 million higher for 138-kV
Upcoming Engineering Work

- Conduct detailed evaluation of underwater crossing alternatives
  - Directional drilling
  - Submarine cables
- Update cost estimates as needed
- Potentially define preferred route
Kake - Petersburg Intertie

Typical USFS Road on Kupreanof Island
Project Status

✓ Notice of Intent published in Federal Register

✓ Public scoping was completed in April/May 2010

✓ Finalized Work Plan and met with USFS for pre-fieldwork prior to beginning stream surveys in Fall 2010 along portion of roaded sections and in June 2011 for all other surveys

✓ All Field-related surveys were completed during Fall 2010 and Summer 2011 per USFS protocols
Resource Specific Surveys Conducted

- All streams within the 300-foot wide corridors were mapped, characterized, and stream class determined
- Heritage resource inventories were conducted along both route corridors
- General wildlife surveys for T&E, Forest Service sensitive-listed, and Management Indicator species were conducted
- Protocol goshawk surveys were completed within 200 meters in suitable habitat along both route corridors
- Conducted sensitive plant surveys along both route corridors
Environmental Survey Highlights (Preliminary)

- Surveys conducted along both main route corridors:
  - Field surveys were conducted by 12 staff specialized in fisheries, wildlife, botany, soils, hydrology, and heritage/archaeology resources
  - A total of 207 goshawk calling stations were identified and surveyed twice (June and late-July); 2 new nests/territories were documented
  - Stream surveys inventoried a total of 497 streams within the 300-foot wide corridors (Northern Corridor=169; Center-South=250; Shared Route Corridor=78)
    - Class 1: 85
    - Class 2: 148
    - Class 3: 26
    - Class 4: 254
## Next Steps and Milestones

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Scheduled Date</th>
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<tr>
<td>Update and Publish NOI</td>
<td>Mid-October 2011</td>
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<tr>
<td>Analysis of Field Data and Prepare Resource Reports</td>
<td>Late-October 2011</td>
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<tr>
<td>Publish Draft EIS</td>
<td>Late-March 2012</td>
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<tr>
<td>Public Meetings on Draft EIS</td>
<td>Mid-April 2012</td>
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<tr>
<td>Prepare Preliminary Final EIS based on Public Review and Comment to USFS for Review</td>
<td>Late-July 2012</td>
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<tr>
<td>Revise and Publish Final EIS and ROD; Starts 45-day Appeal Period</td>
<td>Late-October 2012</td>
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<tr>
<td>End of Appeal Period</td>
<td>Early-December 2012</td>
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Questions