MAP Pending High Voltage Lines
A Road Map to Transmission Interconnections in the Western US

June 19, 2013

Presented by
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Today’s Topics

• Introduction and Remarks
• Studies required (environmental/technical)
• Cost allocation models
• Typical process followed by RE developers
• Use of eminent domain and private easements
• Permitting challenges and processes with state/local/tribal governments
• FERC Order 1000 process
Utility Study Requirements

- Prescriptive process detailed in Open Access Transmission Tariff (OATT) Large Generator Interconnection Procedures (LGIP)
  - Varies a bit, but must meet FERC Rules
- [http://www.westtrans.net/participants.html](http://www.westtrans.net/participants.html)
- Transmission Service is separate of Interconnection
- Two Kinds of Transmission Service – Network/PT
- Must be Made through OASIS
Process Overview

- Initial Contact by RE Developer
- Submit Application for Interconnection
  - Large or Small? Less than 20 MW
  - LGI or SGI Process Different - Fee Required
- Conduct Feasibility Study
  - Off Ramp
- Conduct System Impact Study
  - Off Ramp
- Conduct Facilities Study
  - Off Ramp
- Begin Environmental Process
- Begin Land Acquisition for Project(s)
Required Information

• Single Line Diagram
• Geographic Map
• List of Proposed Facilities
  – Generator Nameplate
  – Transformer, Breakers, Controls
  – Communications and Metering
• Description of Route, Size
• Tx Service Arrangements
• PPA?
Process Timeline

• Pre-Study Activities -- Scoping
• Feasibility Study Agreement
  – 15 Days to Offer, 30 Days to Accept
  – 60 Days to Complete Study*
• System Impact Study
  – 15 Days to Offer, 30 Days to Accept
  – 60 Days to Complete Study
• Facilities Study – Same as Above
  – Advance of Funds to Begin Env.
• Connected Action ?
Process Timeline

- Initial Review Can Begin With Feasibility Study
- Environmental Study Offer -- 15 and 30 Day
- CX, EA, EIS -- 6 to 24 months
- Interconnection Agreement
  - 60 Days or more if Negotiation Required
  - Who Pays for What Facilities ??
- Long Lead Time Equipment
  - Transformers Are 18-24 Months
  - Turbine Generators 12 – 18 Months
- Design and Construction Alternatives
  - New Substation May Be 24 Months
- Average Time 36 Months !!
  - SIS-3, Fac-3, Env-9, Const-18
Environmental Review

• Categorical Exclusion
  – 6-9 months, $50K Deposit
• Environmental Assessment
  – 9-12 months, $200K
• Environmental Impact Statement
  – 12-24 months, $500K
  – Depends on Facility Study
• Lead Federal Agency?
# Environmental Permits

<table>
<thead>
<tr>
<th>Permit Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endangered Species Act Section 7 Consultation and Biological Opinion</td>
<td>Required for potential direct or indirect impacts to federally listed species and/or associated habitats</td>
</tr>
<tr>
<td>Section 402 National Pollutant Discharge Elimination System (NPDES) Notification</td>
<td>Required for stormwater management during construction</td>
</tr>
<tr>
<td>Section 402 NPDES Notification</td>
<td>Required for stormwater management during operation</td>
</tr>
<tr>
<td>Section 106 Review &amp; Native American Consultation</td>
<td>Required to address impacts on Native American or cultural resources</td>
</tr>
<tr>
<td>Region 3 Project Review</td>
<td>Wildlife and habitat consultation for disturbance on BLM-managed land</td>
</tr>
<tr>
<td>Implementation of terms and conditions of the Biological Opinion</td>
<td>Potential impacts on common and special-status wildlife species (document compliance with the terms and conditions of the Biological Opinion)</td>
</tr>
<tr>
<td>Consent for Alteration of Protected Species</td>
<td>Required for taking any wildlife classified as protected.</td>
</tr>
<tr>
<td>Prevention of Significant Deterioration Program Major Source Permit</td>
<td>Required to consolidate potential air quality impacts of a proposed major project.</td>
</tr>
<tr>
<td>General Stormwater Permit for Construction Activities (Notice of Intent &amp; General Permit)</td>
<td>Construction activities disturbing more than 1 acre</td>
</tr>
<tr>
<td>Operating Permit to Construct</td>
<td>States may requires fugitive dust to be controlled.</td>
</tr>
<tr>
<td>Surface Area Disturbance / Dust Mitigation Control Plan</td>
<td>Required for a surface area disturbance is greater than 20 acres</td>
</tr>
<tr>
<td>Sand and Gravel Processing Plant</td>
<td>Required for construction/operation of new Asphalitic Concrete Plants, Concrete Batch Plants, and Sand &amp; Gravel Processing Plants in Lincoln County (NRS) 445B.155</td>
</tr>
<tr>
<td>Concurrence Letter or Letter of Approval to Construct.</td>
<td>Need permit to operate the water system upon satisfaction of the requirements set forth in NRS 445A.885 to 445A.915, inclusive, and the requirements set forth in the regulations adopted by the Commission.</td>
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<tr>
<td>Temporary Discharge Permit</td>
<td>Required for discharge to surface waters; for all purposes except working in waterways; maximum of 180 days</td>
</tr>
<tr>
<td>Section 401 Water Quality Certification</td>
<td>Required for impacts on water quality caused by discharges to a water body by construction activities</td>
</tr>
<tr>
<td>General Stormwater Discharge Permit</td>
<td>Required for stormwater discharge associated with construction activities disturbing at least one acre</td>
</tr>
<tr>
<td>Water Right Permit</td>
<td>Required for the issuance of water rights</td>
</tr>
<tr>
<td>Utility Environmental Protection Act</td>
<td>Required for the construction of a utility facility</td>
</tr>
<tr>
<td>Hazardous Materials Permit or Roving Permit</td>
<td>Required for storage of flammable and combustible liquids (includes fuel storage areas and fuel depot used more than 30 days).</td>
</tr>
<tr>
<td>Local Fire Safety Compliance Certification</td>
<td>Building and operation fire safety</td>
</tr>
<tr>
<td>Local Flood Damage Prevention Permit</td>
<td>Certification of flood zone location</td>
</tr>
<tr>
<td>Local Building Division</td>
<td>Construction of facilities</td>
</tr>
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7-Step Permitting Process

Improves permitting efficiency and agency coordination.

1. Applicant Contacts the BLM
2. Initial Project Presentation
3. Pre-Plan of Development Kick-off Meeting
4. Documentation of Information Needs
5. Pre-Plan of Development Schedule
6. Prepare Plan of Development
7. Submit Plan of Development
• The NOI initiates public comment on the proposal and allows agencies and affected local governments to identify applicable requirements and special issues of concern.

**Oregon Energy Facility Siting Council has Jurisdiction for geothermal, solar or wind with an average electric generating capacity of 35 megawatts or more. If a facilities generating threshold is lower, the county has primary jurisdiction.**

• ODOE issues the Project Order which identifies applicable statutes, rules and ordinances and defines the impact analysis areas.

• The applicant submits its application which describes the facility. Its anticipated impacts and how it will meet EFSC’s standards.

**TYPICAL TIMELINE IS 12 – 18 MONTHS**

• After ODOE requests comments from the public and from other state and local agencies on the Application for Site Certificate, ODOE will issue a Draft Proposed Order recommending approval or denial of the application.

• ODOE holds public hearings on the Draft Proposal Order.

• ODOE issues the Proposed Order based on comments from EFSC, the public and other government agencies.

• The contested case hearing is a formal hearing and only those persons who commented on the Draft Proposed Order may participate in the contested case.

• EFSC decides whether it will issue the Site Certificate.
The Washington Energy Facility Evaluation Siting Council (EFSEC) process is voluntary for wind projects. If an applicant opts out of the EFSEC process, the county has primary jurisdiction. SEPA is still required.
Federal Agencies Involved

- Dept Interior
  - BLM, BIA, USFS, FWS
- Dept Energy
  - WAPA, BPA
- Dept of State
  - Border Crossings
- Dept Army
  - COE
State Agencies Involved

- Department of Environmental Quality
- Set Policies for NEPA Compliance
- Public Service Commission
- Office of State Lands
- Grant Certificate of Public Need

- Stakeholder Groups
- Public Involvement -- Hearings
- FERC Order 1000
FERC Order 1000

- Four Major Principles
- Transmission Providers MUST Engage in Regional Planning Process
  - RE Projects Must Also Follow Process
  - Tehachapi Renewable Transmission Projects
- Non-Incumbent Provider Requirements
- Cost Allocation Methodology
- Compliance Reports Required
Thank you for your time!

QUESTIONS??

This Concludes The Continuing Education Program

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