ColumbiaGrid Planning Under Order 1000: Subregional and Interregional Collaboration

HARVARD ELECTRICITY POLICY GROUP
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ColumbiaGrid Planning

- Independent staff of twelve – six devoted to planning
- Independent 3 member Board:
  - Ed Sienkiewicz, Shelly Richardson, and Jim Miller
- Anyone can participate - Open stakeholder process
- Planning and Expansion Function Agreement (“PEFA”)
  - Develop Biennial Transmission Expansion Plan which builds on an annual System Assessment
  - Conducts studies focused on specific issues (e.g., Puget Sound area plan, Mid-Columbia Area Plan, Centralia closure, wind integration, cross-Cascades)
- Independent staff makes cost allocation recommendation to participants; independent board decides disputes; FERC provides ultimate backstop under PEFA
PEFA Network
System Assessments

Completed each year to assess the system’s ability to meet NERC TPL requirements

Normally available each year in July

See www.columbiagrid.org
Biennial Plans

Completed every other year with updates in the off years

Normally a final draft is available in December with Board consideration in February

See www.columbiagrid.org
Planning and Expansion
Project Types Under PEFA

ColumbiaGrid’s PEFA authorizes independent transmission planning on a single-utility basis for participants’ interconnected network, including:

- Existing Obligation Projects
- Requested Service Projects
- Capacity Increase Projects
- Single System Projects
- Expanded Scope Projects
<table>
<thead>
<tr>
<th></th>
<th>Existing Obligation Project</th>
<th>Requested Service Project</th>
<th>Capacity Increase Project</th>
<th>Expanded Scope Project</th>
<th>Single System Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>ColumbiaGrid Staff develops cost allocation recommendation among TOPP's if Affected Persons cannot reach agreement.</td>
<td>X</td>
<td>X</td>
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<tr>
<td>ColumbiaGrid can allocate costs to another TOPP based on the ability of the project to meet a Need on a TOPP’s system. The amount allocated may not exceed the cost that the TOPP would have occurred if it had met that Need with its own project. No other project benefits may be considered (e.g., a decrease in losses)</td>
<td>X</td>
<td>X</td>
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<tr>
<td>ColumbiaGrid develops a cost allocation if requested by a Planning Party</td>
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<td>X</td>
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<tr>
<td>ColumbiaGrid is free to consider all impacts and benefits from the project in developing the cost allocation</td>
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<td>X</td>
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</tbody>
</table>
Existing Obligation Project

1. Collect and compile existing Transmission Plans
2. CG completes System Assessment to determine where existing transmission obligations cannot be met
3. CG prepares draft System Assessment report and draft Needs Statements
4. Presented to Board for review and comment

Study Teams formed to develop project(s) that resolves the Need(s)

Timely Development?

Yes

A recommended EOP is included in draft plan when all Affected Persons agree to do so and there are no Unmitigated Material Adverse Impacts

No

Staff shall make recommendation for any Unresolved elements of EOP. No unsponsored Non-transmission alternatives in staff recommended plan.

EOP is submitted in draft plan/update to Board for approval
Requested Service Project

Note: dotted line is outside of the language of the agreement but it is not excluded from occurring.
Capacity Increase Project

1. Planning Party(ies) notify CG of CIP
2. Do project sponsors ask CG to form Study Team?
   - Yes: CG facilitates formation of Study Team
   - No: Does an Affected Person ask for an evaluation of unmitigated Material Adverse Impacts?
     - Yes: Study Team works with project sponsors to evaluate alternatives and to identify and resolve any unmitigated Material Adverse Impacts
     - No: Party(ies) submit project for inclusion in the Plan
Single System Project

System Assessment by CG identifies need on a TOPP system that is likely to be resolved by action on its system.

Single System Project Plan developed and submitted to CG by TOPP.

CG informs Planning Parties of draft SSP.

Does any Affected Person think there are any unmitigated Material Adverse impacts?

Yes

CG convenes Study Team to determine if unmitigated Material Adverse Impacts exist.

No

SSP included in Plan.

Are there unmitigated Material Adverse Impacts?

Yes

Sent to EOP Process.

No

End of Process.
<table>
<thead>
<tr>
<th>Board Actions</th>
<th>Recommended Existing Obligation Project</th>
<th>Staff Recommended Existing Obligation Project</th>
<th>Recommended Requested Service Project</th>
<th>Staff Recommended Requested Service Project</th>
<th>Capacity Increase Project</th>
<th>Expanded Scope Project</th>
<th>Single System Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding of no unmitigated Material Adverse Impacts</td>
<td>May approve Study Team finding</td>
<td>May approve Study Team or Staff finding</td>
<td>May approve Study Team finding</td>
<td>May approve Study Team or Staff finding</td>
<td>Note impacts, which are left for WECC process to resolve</td>
<td>May approve Study Team finding</td>
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<tr>
<td>Cost allocation if Affected Persons do not agree</td>
<td>May approve Study Team or Staff finding</td>
<td>May approve Study Team or Staff finding</td>
<td></td>
<td>May recommend allocation</td>
<td></td>
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<tr>
<td>Project meets Need</td>
<td>May approve Study Team finding</td>
<td>May approve Study Team or Staff finding</td>
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<td>Project serves transmission service request</td>
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<td>Project meets underlying Need or request without higher cost than original project</td>
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<td>May approve Study Team finding</td>
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<tr>
<td>Transmission allocation</td>
<td>May approve Study Team or Staff finding</td>
<td>May approve Study Team or Staff finding</td>
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<tr>
<td>Plan of Service</td>
<td>May approve Study Team or Staff finding</td>
<td>May approve Study Team or Staff finding</td>
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<td>Sponsorship</td>
<td>May approve Study Team or Staff finding</td>
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<tr>
<td>Schedule</td>
<td>May approve Study Team or Staff finding</td>
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<tr>
<td>Items Board may modify if supported by record</td>
<td>Cost allocation or transmission allocation</td>
<td></td>
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Planning and Expansion Agreement Benefits

• Coordinated and collaborative open planning process
• Transparency of data and methodologies
• Independent facilitation, studies, and review
• Enhanced ability to integrate renewable resources across multiple transmission systems
• Mechanism to encourage FERC to take action should entities not voluntarily construct needed projects
Interregional Planning

- Interconnections originally designed for localized power exchanges, now integral to reliable operation in other areas
  - Interconnections among adjacent utilities historically were implemented to facilitate business transactions
  - Such interconnections collectively formed a complex, massive, almost organic operating system
  - Today, the “independence” of any given interconnection is increasingly at issue
  - Incidents on any single system element are widely felt
Interregional Planning, cont.

• Pacific Northwest’s historical continuum of transmission coordination – not isolated events
  - Pattern of connecting, then pulling away: NRTA, WRTA, IndeGo, RTO West, Grid West

• Contemporary context: WECC is the FPA “Regional Entity” in the western interconnection

• Establishment of eight “sub regional” planning and coordination groups: ColumbiaGrid, Northern Tier Transmission Group, WestConnect, others:
Western Interconnection Sub-Regional Planning Groups (SPGs)
July 2010

Subregional Planning Groups
WECC Initiatives

- Subregional Planning Coordination Group
- Regional Transmission Expansion Planning Project: expand the depth and breadth of WECC’s existing regional transmission planning processes:
  - Create multi-constituency steering group
  - 10 year regional transmission plan
  - Acquire new long-term planning tools
  - Create educational materials
WECC Initiatives, cont.

10 Year Plan will not include:

• Quantification of impacts to specific ratepayers
• Selection of preferred projects to build
• Cost allocation of projects
• Permitting/siting of projects
Ten-Year Plan
Major Transmission Projects