MEMORANDUM

TO: Power Committee Members

FROM: Gillian Charles

SUBJECT: Establish existing system parameters and interpret state policies

BACKGROUND:

Presenter: Gillian Charles

Summary: In preparation for the 2021 Power Plan, staff will be providing the Power Committee a series of presentations on different aspects critical to developing the Plan. This presentation will focus on the existing system parameters and interpretation of existing state, city, and utility policies.

The quantities, attributes and operating characteristics of the existing resources in the region and the existing state policies serve as a base for the power plan's future resource strategy. Parameters - such as the nameplate capacity of the Columbia gorge wind fleet, the heat rate of thermal technologies operating in the region, and the seasonal shape of renewables - inform the analyses as to the quantity and behavior of the existing system. The requirements (or limitations) on future resource builds by existing policies – such as state renewable portfolio policies and carbon regulations – create the initial boundaries for future resource development.

Workplan: A.4.2 Develop environmental methodology, existing system, transmission availability, renewable portfolio standards, emissions and other datasets for the 2021 Plan
Establish existing system parameters and interpret state policies
Power Committee | July 16, 2019
Gillian Charles

Starting at the beginning...

The existing power system resources, including known future retirements, and the state policies that govern current resource operation and future resource development serve as the foundation and guideposts when determining the power plan’s future resource strategy.
How does this fit into the power plan process?

- Existing System Parameters/State Policies
- Forecast Electricity Prices
- Analyze Resource Strategies
- Estimate System Adequacy Requirements

*Quick note about the region and WECC*

Power Plan is a plan for the region...

...however the Northwest is obviously directly affected by the resources and policies that exist in the surrounding states and markets

It is our intent to capture both - to the extent possible
Resources - in Region

✓ Existing resources in operation or under construction at the start of planning period
✓ Planned retirements of existing resources
× New resources that are proposed but not yet under construction... with exceptions!

Staff judgement may be necessary to make some resource determinations. For example, if a proposed resource is under power purchase agreement with high confidence of development, but not yet under construction at the start of the planning period.

Examples of existing system parameters

Existing plant/unit parameters
• Capacity
• Fraction dedicated to the region
• Heat rate
• Forced outage rate/maintenance outage assumptions

Existing transmission parameters
• Transmission capacity for imports and exports
• Wheeling charges

Historical operations
• Annual carbon emissions
Policies and Regulations – in Region

- Existing **state** regulations governing the operation of existing system resources and development of future resources
- To the extent possible, existing **utility** and county/city-wide goals
- Proposed state regulations
- Federal regulations (catalogued and interpreted in environmental methodology process)
- Company/Corporation goals and pledges
Examples of existing policies to catalog and interpret

**Renewable portfolio standards**
- State standards, rules, and eligible resources
- Qualified resources assigned to meet RPS, renewable energy credit (REC) bank balances

**Clean energy policies**
- Requirements of state legislation, rules, eligible resources
- Qualified resources in operation/under construction to meet targets

Analysis relies on staff interpretation and application of the policies; we rely on our advisory committees to aide us in this process.

Lots of activity in WECC

- Several WECC-wide coal retirements announced and in process
- State/utility/city clean energy policies and initiatives recently enacted or currently being pursued

- Therefore, the scope for WECC-wide analysis of resources and policies will follow the guidelines set forth for the region *to the extent possible*
What’s Next

• June/July/August – Ongoing work!
• August 20 GRAC/SAAC joint meeting
  • Present and vet analysis and assumptions
• September 17 Power Committee
  • Present draft plan analysis for existing system and policies
• November → ??? – Analysis incorporated into power system models; iterations as needed