Jennifer Anders Chair Montana

> Vacant Montana

Guy Norman Washington

Patrick Oshie Washington



July 9, 2019

Richard Devlin Vice Chair Oregon

> Ted Ferrioli Oregon

> > Jim Yost

Jeffery C. Allen

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

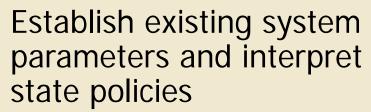
development.

Workplan: A.4.2 Develop environmental methodology, existing system, transmission

availability, renewable portfolio standards, emissions and other datasets

for the 2021 Plan

503-222-5161 800-452-5161 Fax: 503-820-2370



Power Committee | July 16, 2019 Gillian Charles



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Starting at the beginning...

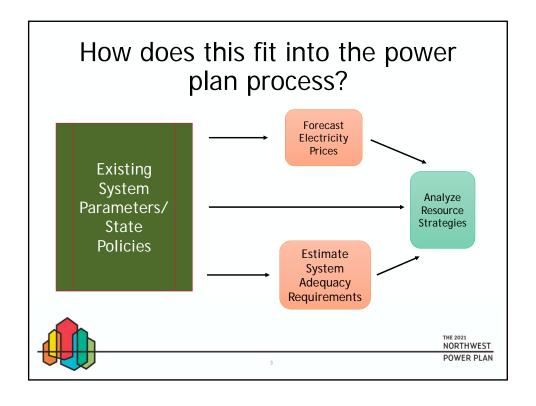
The existing power system resources, including known future retirements, and the state policies that govern current resource operation and future resource development serve as the foundation and guideposts when determining the power plan's future resource strategy

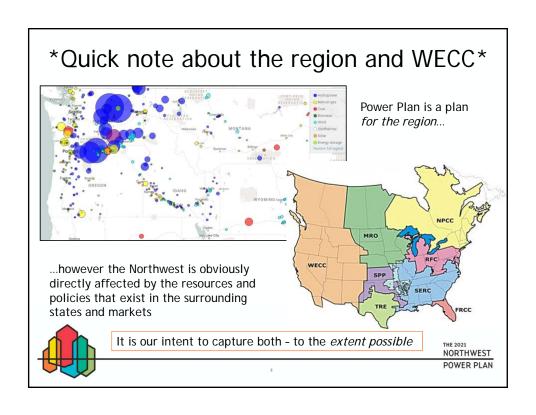




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Resources – in Region

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

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.



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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

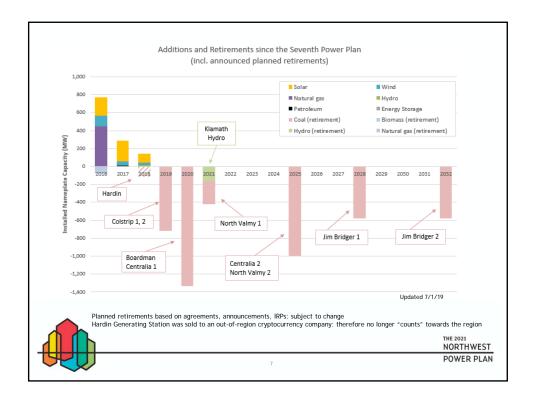
- Transmission capacity for imports and exports
- Wheeling charges

Historical operations

• Annual carbon emissions



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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



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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



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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*



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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





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