Proposed Work Plan for Seventh Plan Development

October 2, 2014

GRAC

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Council’s Analytical Process Flow

Load Forecast Model
- Load Forecast Range (without efficiency)
- Units & Baseline Unit Use
- Energy Efficiency Resource Potential Assessment
  - “Supply Curves”
  - Energy Efficiency Resource Potential Assessment
  - “Supply Side” Resource Cost & Availability
  - Generating Resource Potential Assessment
  - Distributions of Key Drivers (e.g., Fuel prices, wholesale market prices)

Regional Portfolio Model
- Data to Create Futures
- Plan’s Portfolio Management Strategy
- Resource Portfolio Strategy: Resource option & build schedule, including annual amount of energy efficiency

Northwest Power and Conservation Council
Work Plan Components

- **Primers** – Background on Act’s requirements and Council analytical methods
- **Presentations** – In-depth background covering the findings from data or issue analysis
- **Decisions** –
  - Power Committee: “OK to proceed with further analysis, but I am not bound by this decision”
  - Council: “OK to include in draft plan”
Proposed Primers

- Power Plan Overview
  - What is a plan?
  - How do the parts come together?
  - Review of Models and Analytical Process
  - Role of Advisory Committees in Plan Development
- Power Planning 101 - Planning Under Uncertainty
- Power Act 101 - Legal Requirements Refresher
- Energy Efficiency Assessment Methodology
- Generation Resource Assessment Methodology
- Hydropower and Climate Change Impacts
Major Presentations

- Method for Quantification of Environmental Costs and Benefits
- Financial Assumptions, Including Sponsor Profiles, and Treatment of State and Federal Tax Incentives for Resource Development
- Resource and Load Impact Assessments
  - Distributed Solar PV Resources
  - Electric Vehicle and Data Center Loads
  - Energy Efficiency Resources
  - Utility Scale Solar PV Resources
  - Simple and Combined Cycle Combustion Turbine Resources
  - Reciprocating Engine Resources
  - WECC-wide RPS Resources
  - Wind Resources
  - Geothermal Resources
  - Biomass Resources
  - Hydropower Resources
  - Demand Response Resources
- Proposed Methodology for Integrating Power System Capacity, Balancing and Flexibility in Portfolio Analysis
Major Decisions Leading to Draft Plan

- Natural Gas Price Forecast (agreed to in July)
- Wholesale Power Price Forecast Range
- Demand Forecast Range (includes discussion of Direct Use of Natural Gas and other factors)
- Methodology for Quantification of Environmental Costs and Benefits
- Assessment and Treatment of Emerging *Generating* and *Energy Efficiency* Resource Technologies (e.g., Energy Storage, Small Modular Nuclear, Wave, Solid State Lighting, etc.)
- Demand Response Resource Characteristics (i.e., supply curves)
- Conservation Resource Characteristics (i.e., supply curves)
- Generating Resource Characteristics (i.e., supply curves)
- Conceptual Definition of Scenarios and Strategies for RPM Analysis, including Decision Rules for Energy Efficiency and Generating Resource Acquisition
- Methodology for Integrating Capacity and Flexibility into the RPM Analysis
- Needs Assessment for Energy, Capacity, and Flexibility
- Model Conservation Standards and Surcharge Recommendation
- Draft Resource Portfolio and Action Plan
Major 7th Plan Development Milestones

September 2014 (Sept-14)
- Natural Gas Price Forecast Range
- Financial Assumptions
- EE Development Policy Issues
- Draft Approach to Capacity, Balancing & Flexibility

October 2014 (Oct-14)
- Wholesale Electric Price Forecast Range
- DR Supply Curves
- Treatment of EE and Generating Resource
- Emerging Technology

November 2014 (Nov-14)
- EE and Generating Resource Cost and Availability
- Decision Rules for EE Acquisition
- Resource Adequacy Analysis

December 2014 (Dec-14)
- Demand Forecast Range
- Draft Scenarios and Resource Strategies for RPM
- Resource Needs Assessment
- Final Approach to Capacity, Balancing & Flexibility

January 2015 (Jan-15)
- MCS & Surcharge
- Draft Resource & Action Plan
- Public Comment

February 2015 (Feb-15)
- Draft Plan

March 2015 (Mar-15)
- Final Plan Adoption

April 2015 (Apr-15)
- Final Plan Revisions

May 2015 (May-15)

June 2015 (Jun-15)

July 2015 (Jul-15)

August 2015 (Aug-15)

September 2015 (Sept-15)

October 2015 (Oct-15)

November 2015 (Nov-15)

December 2015 (Dec-15)
Other Issues - TBD

- Staff with Advisory Committee input will be identifying other issues (e.g., low load growth, 111(d) regulations) that Council may wish to take up as part of Seventh Plan development
- Power Committee reviews issues and options for addressing them and determines how to proceed