Northwest **Power** and **Conservation** Council

September 3, 2014

MEMORANDUM

TO: **Power Committee**

FROM: **Tom Eckman**

SUBJECT: **Proposed Seventh Plan Work Plan**

BACKGROUND:

Presenter: Tom Eckman

Summary: Staff will present a proposed work plan and schedule for the development of the Council's Seventh Regional Power and Conservation Plan to the Power Committee.

Relevance: The primary charge to the Council under the Northwest Electric Power Planning and Conservation Act is to prepare a long-term forecast of regional electricity needs and a plan to meet those needs. Under the Act the Council has an obligation to review and if deemed necessary update these plans at five-year intervals.

Work Plan: 1.D Prepare for Seventh Power Plan and maintain analytical capability

Background: The Seventh Plan development major input assumptions this fall and winter. Resource portfolio analysis will commence at the beginning of the second quarter of 2015 with issuance of a draft plan scheduled for late summer. Under the proposed work plan public comment and consultations on the draft plan would occur during September and October and final plan adoption in December of 2015.

More Info: See Attached of Major Milestones

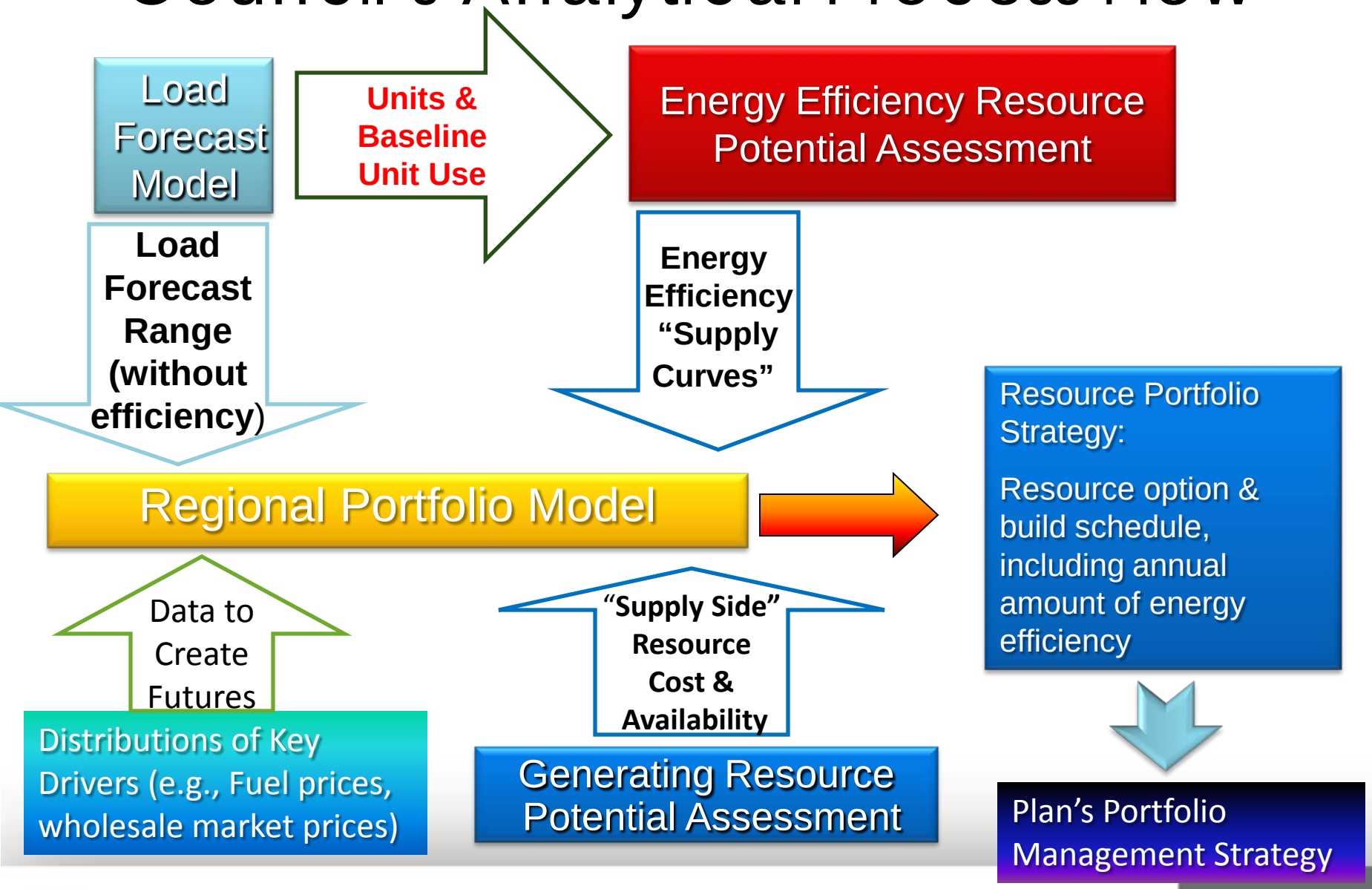
Proposed Major Tasks and Schedule for Seventh Plan Development

Seventh Plan Development Task and Council Decision	Council Action Date	Power Committee Review	Advisory Committee Review?
Financial Assumptions, Including Sponsor Profiles, and Treatment of State and Federal Tax Incentives for Resource Development	Oct 2014	Oct 2014	No
Draft Plan Wholesale Power Price Forecast Range	Nov 2014	Nov 2014	GRAC
Method for Quantification of Environmental Costs and Benefits Approved for Draft Plan Use	Dec 2014	Oct 2014	RSAC
Draft Plan Demand Forecast Range Approved (includes discussion of direct use of natural gas and other factors)	Dec 2014	Nov 2014	DFAC
Approach to Capacity, Balancing and Flexibility for Draft Plan	Jan 2015	Dec 2014	RSAC/SAAC/RAAC
Policy Issues for Energy Efficiency Inputs Assumptions for Use in RPM	Jan 2015	Dec 2014	CRAC/RSAC
Assessment and Treatment of Emerging Generating Resources Technologies (e.g., Energy Storage, Small Modular Nuclear, Wave, etc.)	Feb 2015	Feb 2015	GRAC
Demand Response Supply Curves for Use in RPM	Feb 2015	Jan 2015	CRAC/GRAC/RSAC
Assessment and Treatment of Emerging Energy Efficiency Technologies	Feb 2015	Jan 2015	CRAC
Conservation Resource Characteristics (i.e. supply curves) for use in RPM	Mar 2015	Jan 2015	CRAC/RSAC
Generating Resource Characteristics (i.e., supply curves) for use in RPM	Mar 2015	Jan 2015	GRAC/RSAC
Decision Rules for Energy Efficiency Acquisition for use in RPM	Mar 2015	Feb 2015	CRAC/RSAC
Rebuilt Version of RPM Tested and Accepted	Mar 2015	Feb 2015	SAAC
Conceptual Definition of Scenarios and Strategies to be Analyzed Approved	April 2015	Mar 2015	RSAC/GRAC/CRAC/SAAC
Final Adequacy Analysis Complete	May 2015	April 2015	RAAC
Method to Integrate Capacity and Flexibility into the RPM Analysis	June 2015	May 2015	SAAC
Needs Assessment for Energy, Capacity, and Flexibility Completed	June 2015	May 2015	RSAC
Sensitivity Studies for Resource Strategy Identified for RPM	June 2015	May 2015	SAAC
Model Conservation Standards and Surcharge Recommendation	July 2015	June 2015	CRAC
Council Approves Draft Plan Resource Strategy	Aug 2015	July 2015	RSAC
Council Approves Draft Plan Action Plan	Sept 2015	Aug 2015	CRAC/GRAC/RSAC
Council Approves Release of Draft Plan for Public Comment	Sept 2015	Aug 2015	No
Council Approves Final Plan w/Action Plan	Dec 2015	Dec 2015	No
Council Approves Response To Comments	Jan 2016	Jan 2016	No

Proposed Work Plan for Seventh Plan Development

September 9, 2014

Council's Analytical Process Flow



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

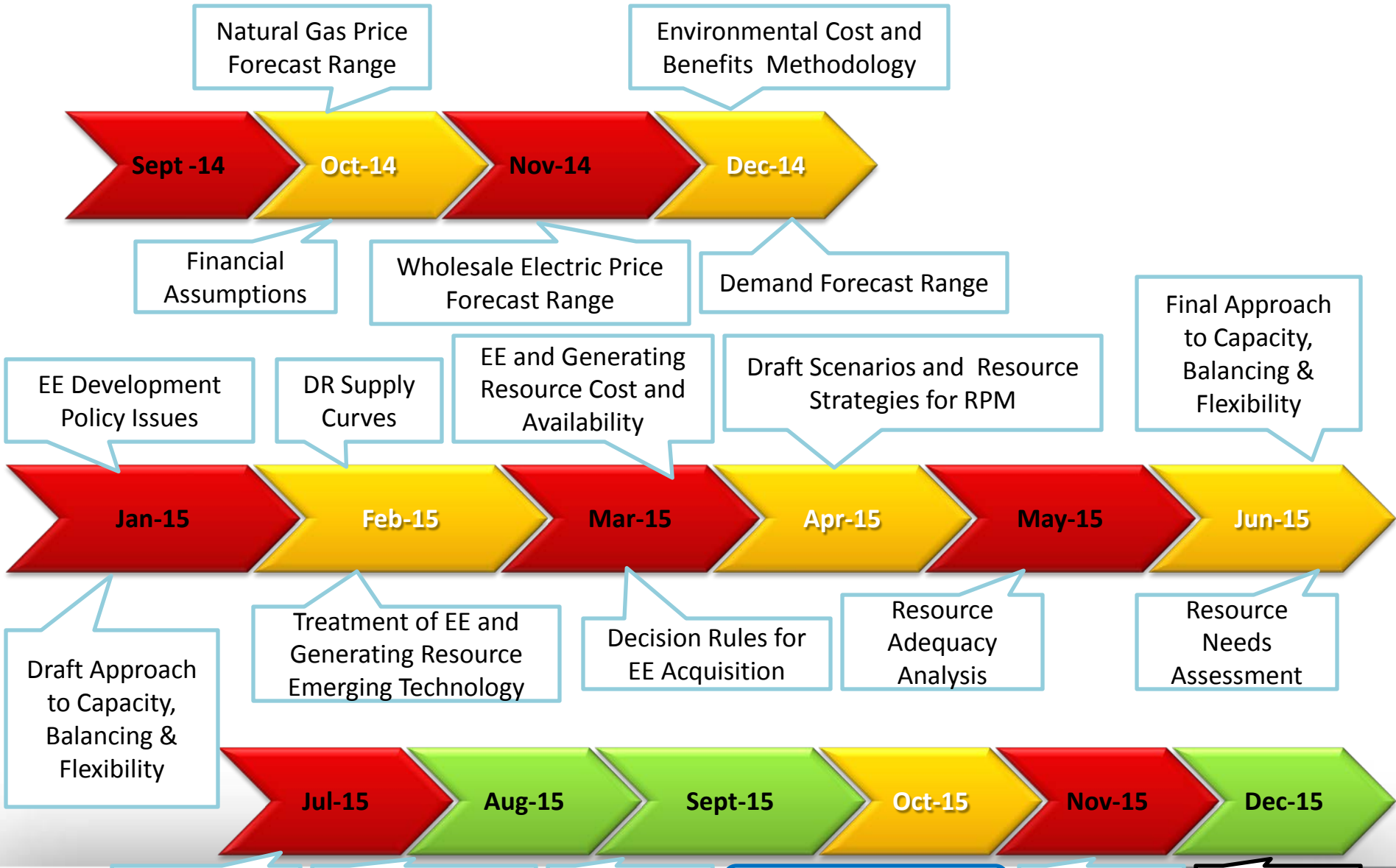
Major Presentations

- 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



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