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

August 4, 2015

MEMORANDUM

TO: **Council members**

FROM: **Tom Eckman**

SUBJECT: **High Level Overview of Proposed Draft Action Plan**

BACKGROUND:

Presenter: Tom Eckman

Summary: Staff will present a proposed set of key items for inclusion in the Seventh Plan's Action Plan. Action items will focus on resource development, research and demonstration and recommended actions that Bonneville, the region's utilities, utility commissions, NEEA and the Council itself should engage in to implement the Plan.

Relevance: The Act specifies that the Council plans include a set of actions that parties in the region should engage in to implement the plan. Along with the Plan's resource strategy, the Action Plan is viewed by the region as one of principle elements.

Workplan: 1.B. Develop Seventh Power Plan and maintain analytical capability

Background: Staff have been working with the Council's Advisory Committees to develop specific action items that are required and/or would facilitate the implementation of the plan's resource strategy as well as better prepare the region for future resource development. A complete set of these action items will be distributed for Council review and consideration as part of the draft plan's development process. This agenda item is intended to highlight only the most significant and/or potentially controversial of these draft proposals.

851 S.W. Sixth Avenue, Suite 1100
Portland, Oregon 97204-1348
www.nwcouncil.org

Steve Crow
Executive Director

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

Draft Action Plan High Level Overview

Council Meeting

August 12, 2015

Northwest Power and Conservation Council

SEVENTH NORTHWEST POWER PLAN

RESOURCE STRATEGY

Secure Thermal Generation Options

Item	Maintain options to build generation for energy, capacity and ancillary service needs
Implementer(s)	BPA, Utilities and Utility Regulators
Specific	The region needs to maintain options to build thermal plants and monitor and build plants if load growth or ancillary service needs justify construction
Measureable	IRPs should be monitored for this action item
Actionable	The Council recommends utility IRPs and the BPA Resource Program examine the need for additional thermal generation compared to long-term contracts to meet adequacy standards consistent with the Adequacy Assessment
Realistic	Utilities often maintain these type of options or execute Power Purchase Agreements with companies that have options
Time-bound	This recommendation is for any IRPs released after the 7th plan

Develop Demand Response Infrastructure

Item	Expand Regional Demand Response Infrastructure
Implementer(s)	Utilities that dispatch resources, utility regulators and States
Specific	Create or contract for systems to enable a rapid expansion of DR programs and robust and dependable methods for integrating and dispatching DR
Measureable	Utilities should an include an assessment of DR in their IRPs and actions to develop DR infrastructure
Actionable	The Council recommends utilities adopt these systems to maintain regional adequacy
Realistic	Utilities have a wide range of experience with DR
Time-bound	Systems should be well established ahead of scheduled coal retirements and maintained as a resource for low-water conditions, high load and/or conditions of system stress

Develop Cost-Effective Conservation

Item	Set a regional target for achieving cost-effective energy efficiency in a manner consistent with the RPM findings
Implementer(s)	Council, RTF, NEEA, Utilities, Energy Trust, BPA
Specific	Design programs with reasonable assurance of achieving, 1400 aMW by 2021, 3100 aMW by 2026 and 4500 aMW cumulative by 2035. Development should follow this schedule through 2027.

FY16-17	FY18-19	FY20-21	FY22-23	FY24-25	FY26-27
370	470	590	660	700	690

Measureable	BPA and utilities should work with the Council to track progress.
Actionable	The Council recommends BPA and utilities design programs based on this goal to be consistent with the 7th plan
Realistic	Similar tracking was done for the 6th plan
Time-bound	Annual progress reports

Conservation Council 5 SEVENTH NORTHWEST POWER PLAN

Meet Existing Renewable Portfolio Standards

Item	Consider utility scale solar as an option when developing RPS compliance strategies
Implementer(s)	Utilities and Utility Regulators
Specific	Utility scale solar and wind are cost competitive in the region but each utility should consider its own cost profile
Measureable	IRPs should be monitored for this action item
Actionable	The Council recommends utilities should include an assessment of utility scale solar in IRPs when forming strategies for RPS compliance
Realistic	Many IRPs already have considered solar
Time-bound	This recommendation is for any IRPs released after the 7th plan

Northwest Power and Conservation Council 6 SEVENTH NORTHWEST POWER PLAN

CONSERVATION

Acquire Conservation for Resource Adequacy

Item	Purchase additional conservation for adequacy
Implementer(s)	BPA
Specific	Establish a method consistent with the Council's Adequacy Assessment for purchasing conservation to meet adequacy standards beyond the cost-effective target at prices and levels consistent with the avoided cost of a thermal resource under critical to low water conditions
Measureable	BPAs resource program should outline the approach for this action item
Actionable	The Council recommends BPA adopt this as an agency priority for consistency with the 7th plan
Realistic	BPA has established methods for purchasing energy efficiency
Time-bound	A method should be established ahead of the next Adequacy Assessment

CONSERVATION - BPA ITEMS

Quantify Value of Conservation

Item	Quantify value of conservation in financial analysis and rate case forums
Implementer(s)	BPA
Specific	The value of conservation is often missing from discussions setting budgets for conservation. By quantifying this value, there would likely be greater buy-in for the expenditures.
Measureable	Calculation to estimate value of conservation, based on historical accomplishments and provide estimate as part of rate analysis.
Actionable	BPA will need to review budgets in context with historical achievements to estimate amount saved from conservation programs.
Realistic	From tracking systems, BPA should have robust data to make this estimate.
Time-bound	Before BPA's next IPR.

DEMAND RESPONSE

Form Demand Response Advisory Committee

Item	Create a Demand Response Advisory Committee
Implementer(s)	Council
Specific	With a major finding of the 7th plan related to expanding the regional DR infrastructure, an advisory committee would help with future plans in quantifying the supply of DR and qualifying regional barriers to implementation.
Measureable	Recruit advisory committee members and establish a charter
Actionable	This should be implemented by Council and Council staff
Realistic	Staff has experience running advisory committees
Time-bound	The advisory committee needs to be formed before the next update of DR supply data

Support Regional Market Transformation for Demand Response

Item	DR market transformation and cost reduction
Implementer(s)	Council, NEEA, Utilities, Energy Trust, BPA
Specific	Support market transformation efforts to reduce the cost of implementing demand response. Market transformation efforts target decision-makers, such as manufacturers and retail chains.
Measureable	BPA and utilities should work with the Council to track progress.
Actionable	The Council recommends BPA and utilities design programs to ensure sufficient supply of DR available to meet system adequacy needs at a low cost
Realistic	The region has previously pursued similar measures for energy efficiency
Time-bound	A systematic approach to market transformation should be well established two years in advance of the next power planning process

DEMAND RESPONSE - BPA ITEMS

Resolve Contract Barriers for Demand Response - BPA

Item	Create standard contracts that enable BPA customers to supply DR
Implementer(s)	BPA
Specific	Create institutional relationships or contract for third-party aggregation that enable BPA customers to easily and quickly supply DR of any reasonable size, especially under water or load conditions that are likely to stress the regional system
Measureable	BPA should report to the Council on current systems and identify any gaps in implementation of this action item
Actionable	The Council recommends BPA adopt this as an agency priority for consistency with the 7th plan
Realistic	BPA has already established contracts with aggregators
Time-bound	Systems should be well established ahead of scheduled coal retirements and maintained as a resource for low-water conditions, high load and/or conditions of system stress

Establish Demand Response Resource Acquisition Rules - BPA

Item	Create a methodological approach for acquiring DR
Implementer(s)	BPA
Specific	Establish a method consistent with the Council's Adequacy Assessment for purchasing additional DR at prices and levels consistent with high load and critical to low water conditions and maintain the size of existing programs unless the adequacy assessment shows long-term capacity surplus
Measureable	BPA should report to the Council when a method is established
Actionable	The Council recommends BPA adopt this as an agency priority for consistency with the 7th plan
Realistic	BPA has established methods for purchasing other resources, in particular energy efficiency
Time-bound	A method should be established ahead of the next Adequacy Assessment

RESOURCE ADEQUACY

Review Regional Resource Adequacy Standard

Item	Review the Council's resource adequacy standard
Implementer(s)	Council, RAAC, BPA, PNUCC
Specific	The Council's current adequacy metric (loss of load probability) and threshold (maximum value of 5%) may not be the most appropriate for determining the adequacy reserve margin, associated system capacity contribution and effective load carrying capability. The standard also does not line up with pilot NERC metrics. The Council should review and, if necessary, amend its standard.
Measureable	The Council's adequacy standard must be able to produce stable planning guidelines, such as ARM, ASCC and ELCC.
Actionable	Use the RAAC to review the current standard and recommend changes.
Realistic	The RAAC has proven to be a very effective committee in terms of reviewing and enhancing adequacy measures.
Time-bound	Any amendments to the adequacy standard must be adopted at least two years prior to the release of the next plan.

Import Assumptions

Item	Review the Council's assumptions regarding availability of imports
Implementer(s)	Council, RAAC, BPA, PNUCC
Specific	The Council's current assumptions regarding the availability of imports from out-of-region sources and from in-region market resources should be reexamined. The sensitivity of total system cost to import availability has been demonstrated in the RPM analysis. To minimize cost and avoid the risk of overbuilding, the maximum amount of reliable import should be considered.
Measureable	The adequacy of the region's power supply is very sensitive to import assumptions. Adequacy should be examined with various levels of import to quantify this sensitivity.
Actionable	Use the RAAC to review current import assumptions and include potential variations in the intertie availability.
Realistic	The RAAC has proven to be a very effective committee in terms of reviewing and focusing in on reasonable import assumptions.
Time-bound	Any amendments to the import assumptions must be made at least two years prior to the release of the next plan.

FLEXIBILITY AND OPERATING RESERVES

Establish Regional Reserve Requirements

Item	Perform a regional analysis of operating reserve requirements
Implementer(s)	Council
Specific	The Council should use the BPA analysis of reserve requirements and work with other regional stakeholders to complete a regional analysis of the most cost-effective method of providing operating reserves that meet reliability requirements at the lowest probable cost
Measureable	This will be included in the next power plan
Actionable	The Council should have an established method for including this in the next power plan
Realistic	This will take gathering data and creating methods for estimation where public data are not available. The accuracy will be best for BPA but it should be possible to add a regional context for the next power plan.
Time-bound	This analysis should be included in the 8th Power Plan