Northwest Power and Conservation Council

August 30, 2007

MEMORANDUM

TO: Power Committee

FROM: Terry Morlan

SUBJECT: Status of the Power Division Work Plan

The Power Committee will review the current status of the Power Division work plan at its meeting on September 11. This review was carried over from the August meeting. There are four attachments to this memorandum that provide increasing amounts of detail on the work plan. The first is a three page summary of the status and it will provide a good overview.

The second is a more detailed review that focuses first on major issues that we are working on, and then on the other items that are included in the Division's work plan. When we last presented the work plan status, Chair Kempton asked for some way to identify work items that need to be completed before the next power plan. I have identified such items with a different bullet as noted at the top of the attachment. The numbers shown correspond to work plan item numbers. The relationship between these work plan numbers and actions from the power plan are shown in attachment 3.

The final attachment shows the work plan in detail. Updated milestones, status, or comments are highlighted. Although this provides more discussion of each work plan item, the second attachment actually shows a more detailed breakdown of the specific tasks under each work plan item.

As always, we are interested in Power Committee feedback on the form and content of the work plan. For internal management, I find the second attachment to be the most useful for tracking progress and scheduling agenda items for the Power Committee and Council. The comments and status reports in the fourth attachment are also useful, but are primarily intended to inform Council members of our progress.

I want to call your attention to one recommendation relating to Plan action item CNSV-13, which is included in work plan item 4. Staff recommends that this action not be pursued at this time. Action item CNSV-13, calls for consideration of System Benefit Charge (SBC) alternatives to utility-run conservation programs if utility disincentives seriously impede utility

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investment in conservation. It says the Council will review the performance of SBC in the region and in other areas of the country. However, utility disincentives are not seriously impeding utility investment at this time. In fact, utility conservation activity is on the rise for a variety of reasons. In addition, a review of the Oregon SBC system was recently completed by an independent firm. And there are reviews of SBC programs in other states around the country that have been prepared by others. A Council paper reviewing the success of SBC programs would be of little value relative to the purpose envisioned in the power plan.

Washington State adopted legislation which requires both public and private utilities to assess and develop all cost-effective conservation. In Oregon, new legislation was passed to allow investor-owned utility funding of conservation beyond levels set in 1999 for Oregon's system benefit charge which is managed by the Energy Trust of Oregon. The Idaho Public Utility Commission recently adopted a pilot program to test revenue decoupling as a means to encourage additional conservation at Idaho Power. Furthermore, across the region, utilities are faced with increasingly high costs for new thermal and renewable power generation and power purchases. This is encouraging many utility power managers to call for increased energy efficiency acquisitions.

Attachments

Major Power Issues for 2007

❖ Denotes items that are important for the 6th Power Plan

Wind Confirmation: [6]

Status - Council initiated the Northwest Wind Integration Action Plan jointly with Bonneville in the summer of 2006. The action plan has been completed and describes the findings and specific additional tasks that need to be accomplished over the coming year or two. The Council has formed the Northwest Wind Integration Forum to be the focal point for funding and executing the action plan.

- Adoption of the Wind Integration Action Plan [complete]
- Creation of Northwest Wind Integration Forum [complete]
- Manage Northwest Wind Integration Forum, participate in analysis [ongoing]
- Complete development of high resolution wind data set [Dec 07]
- ❖ Reassess capacity and energy value of wind [Dec 07]
- ❖ Wind integration cost estimate [interim Jan 08, final Dec 08]
- ❖ Evaluate delivery of wind energy from Montana [Dec 08]
- ❖ Develop flexibility options and tradeoffs [Dec 08]
- Develop planning framework to maximize value of wind resources [6th Plan]
- ❖ Preliminary engineering analysis of plans to alleviate transmission bottlenecks [Dec 08]

Resource Adequacy: [8, 9]

Status - The Council acting on the recommendations of the Northwest Adequacy Forum has adopted a voluntary energy standard, a pilot capacity standard, and a process for implementing the standards. Currently work is focused on model validation, developing economic standards, refining the capacity standard, and providing guidance for utility self-assessment. Further refinement and implementation of the standards will be an ongoing activity of the Forum.

- Develop prototype data reporting standards [complete]
- First assessment of regional adequacy by Council [complete]
- WECC development of west-wide capacity [2007] and energy [2008] metrics and targets, including input from the Forum on recommended application to the Northwest [2007-8]
- Council staff chairs the Loads and Resources Subcommittee for the WECC Power Supply Assessment. [ongoing]
- Review and refine methods used for adequacy assessment [Nov 07]
- If needed, revise data reporting standards based on first assessment experience [Summer 07]
- Benchmark the model used for adequacy assessment [Sept 07]
- ❖ Develop economic adequacy targets [Sep 07]
- ❖ Collect utility wind data and assess energy and capacity contribution [Oct 07]

- ❖ Potential development of further implementation mechanisms, beyond reporting and public assessment of regional results [Fall 07]
- Develop adequacy guidance for use by individual utilities [Nov 07]
- ❖ Adoption of final adequacy standards [Mar 2008]

Regional Dialogue: [18]

Status - The public process for developing Bonneville's regional dialogue policy was completed in the fall of 2006. The final policy and record of decision were released on July 19, 2007. Some important issues still need to be settled and the details of implementation need to be worked out by the end of this year. Bonneville intends to offer contracts to utilities in August 2008 and to have them signed by December 2008.

- Bonneville policy and ROD [complete]
- Monitor progress toward implementation and new contracts [Ongoing 2007-08]

Conservation Acquisition: [1, 2, 3, 4]

Status - The region as a whole was close to meeting the Plan's conservation targets in 2005 and 2006. Several trends point to continued improvement in achieving cost-effective efficiency including; utility IRPs, revised appliance efficiency standards, and updated building codes.

- Reconstitute the RTF membership [complete]
- Secure RTF funding & implement funding mechanisms [complete]
- Facilitate and coordinate the Regional Technical Forum [ongoing]
- ❖ Collect and assess data on utility conservation acquisitions [ongoing]
- Work with NEEA and Oregon Energy Trust [ongoing]
- ❖ Work to fill funding gaps for promising conservation resources [ongoing]
- Participate in national and regional efforts to improve building codes and energy efficiency standards [ongoing]
- Work with others on appliance efficiency agreements with manufacturers [ongong]
- Provide input and guidance to utility assessments of conservation potential [ongoing]
- ❖ Identify and research improved efficiency technologies [ongoing]
- ❖ Explore new sources of survey data on end-use energy consumption and efficiency [ongoing]
- ❖ Conduct research and evaluate efficiency technologies and programs [ongoing]
- ❖ Revise data and models [ProCost enhancement complete]
- Work with Washington to implement provisions of I-937 [ongoing]
- Assess experience with system benefit charge programs [Aug 07, cancel?]
- ❖ White paper on achievable penetration rates [Complete]

Demand Response and Distributed Resources: [5]

Status - The Pacific Northwest Demand Response Project (PNDRP) has been formed and has selected a set of issues to explore. Funding has been secured through the Department of Energy for the Regulatory Assistance Project to help facilitate PNDRP.

- Work with PNDRP and Regulatory Assistance Project to develop recommendations [Apr 07- Mar 08]
- Participate in national and other state processes to develop demand response [ongoing]
- ❖ Report on PNDRP analysis and recommendations [Mar 08]
- ❖ Develop methodologies to analyze demand response resources using the Council's planning models [Mar 08]

Transmission Organizations and Western Reliability Initiatives: [10, 11, 12]

Status - Staff is following or participating in ColumbiaGrid, NTTG and WECC efforts to improve the reliability of the power system and the operational efficiency of the transmission system. Council staff co-chairs the Transmission Expansion Planning Policy Committee's Technical Advisory Committee (TEPPC-TAS) for WECC. The Northern Tier Transmission Group (NTTG) was formed to address transmission issue on the eastern side of the region. The Northwest Transmission Assessment Group (NTAC) continues to address region-wide issues.

- ColumbiaGrid planning and expansion functional agreement signed [Jan-Feb 07]
- NTTG implemented regulation sharing (ACE diversity interchange) program [spring 07]
- ColumbiaGrid, NTTG and TEPPC develop formal processes for regional coordination of planning efforts under FERC Order 890 [spring-summer 07]
- ❖ Both ColumbiaGrid and NTTG utilities announced major transmission construction plans, to be developed under the processes of the two groups respectively, with coordination and joint study as needed [spring 07]
- ColumbiaGrid developing functional agreement for joint OASIS portal [fall-winter 08]
- Bonneville developing and testing redispatch protocols, with participation of ColumbiaGrid [summer 07]
- Follow and/or participate in WECC, ColumbiaGrid, NTAC, and NTTG [ongoing]

Other Work Plan Items

5th Power plan implementation

(Many power plan implementation activities are also covered in the major power issues section)

1. Coordinate regional conservation activities: (See conservation issue above)

2. Revise and adopt state and federal energy codes and efficiency standards that capture all regionally cost-effective savings: (See conservation issue above)

3. Manage, operate and secure funding for the Regional Technical Forum: (See conservation issue above)

4. Other conservation implementation activities: (See conservation issue above)

5. Demand Response: (See demand response issue above)

6. Confirm wind development potential (see wind integration issue above):

7. Reassess role of coal-fired generation in the Fifth Plan

- ❖ Further analysis of alternative coal technologies based on findings of biennial assessment [Nov 08]
- ❖ Evaluate information on petroleum coke, its cost and availability in future [Nov 08]
- Analyze effects of new information on long-term resource choices in plan [6th plan]

8. Establish regional and west-wide reporting standards for the assessment of adequacy (See adequacy issue above):

9. Carry out a process to establish adequacy standards for the Northwest (See adequacy issue above):

10. Plan for long-distance transmission needs to support the resource development called for in the Plan (See transmission issue above):

11. Transmission providers work to improve utilization of available transmission capacity (See transmission issue above):

12. Region agrees to and begins implementation of transmission solutions (See transmission issue above):

13. Bonneville and Council review respective 6(c) policies:

- Work with Bonneville to revise policies following ROD on regional dialogue policy [Mar - July 07][delayed by ROD]
- Resume discussion with Bonneville regarding augmentation consistency issues and 6(c) policy (July 07)

14. Participate in utility IRP processes:

- Participate in administrative rulemaking for Washington's HB 1010 and I-937 [ongoing]
- Assigned staff participate in utility IRP advisory committees [ongoing]
- Report on IRP status and comparison with Council plan [Aug 07]

Monitoring and Analysis

15. Continued analysis of the CO2 production of the Northwest power system:

- Analysis of CO2 emissions for five specific conditions [Jun-Aug 07]

16. Provide analysis and information about the Power Plan and the regional energy system:

- Respond to requests for analysis and data [ongoing]

17. Monitor climate change science and policy:

- Follow development of policies related to climate change and provide analysis as needed [ongoing]
- Develop white paper on climate change and its likely effects on the Northwest power generation and use, and on anadromous fish [complete as Council Quarterly, Spring 2007]
- Adapt refined analysis of the effects of climate change on Northwest temperatures and water conditions [2008][Support WA DOE contract]
- ❖ Work with others to develop potential mitigation strategies for impacts to the power system [Mar 08]
- ❖ Develop methods to incorporate climate change effects into the Council's resource planning models [Mar 08]

18. Monitor progress toward implementation of Council recommendations on Bonneville's future role: (See Regional Dialogue issue above)

19. Periodically report on load resource situation:

- Report on forecasted water conditions [Jan - Aug 07]
- Assess status of power supply 3 to 5 year out relative to adequacy standards [Jun 07]

20. Review the data and forecasts underlying the plan, provide monitoring reports

- Biennial monitoring report for Fifth Power Plan [complete]
- Revise fuel price forecasts [Aug 07]
- Regular review of electric demand, fuel prices, resource costs and technologies, and efficiency measures and costs [ongoing, report on demand and fuel price, Jul 07]
- Develop revised electricity price forecast using recent fuel price forecasts and water conditions [Sep 07]

- Reassess marginal CO2 production estimates for RTF and ProCost model [Oct 07]
- Maintain database of regional resource development activities

Planning Tools and Data

21. New demand forecasting system (long and short-term forecasts):

- ❖ Complete short-term forecasting model, working with Bonneville, and produce forecasts for use in adequacy assessments [complete]
- ❖ Map out long-term model enhancements and develop and update data inputs [complete]
- ❖ Contract for long-term model enhancements [Apr - Sep 07]
- ❖ Produce preliminary long-term forecast [Dec 07]
- ❖ Initiate analysis of linkages between demand models and other Council models [Nov 07]
- ❖ Preliminary long-term forecast presented to Council [Dec 07]

22. Continue the development and documentation of the Olivia Model

- ❖ Technical development of model, user interfaces, and documentation [Jan - Sept 07]
- Begin training classes for utilities that want to use Olivia to develop portfolio models for their own service areas [Nov 07]

23. Maintain the AURORA$^{XMP}_{TM}$ Market Price Forecasting Model and prepare periodic near-term forecasts:

- ❖ Review recent version releases and update model if warranted [Sep 07]
- ❖ Review and update data base [Apr 07][complete][again early 2008]

24. Maintain and update data on conservation technologies:

- ❖ Develop efficiency and end use inputs for long-term demand forecasting model [Sep 07]
- ❖ Review new residential housing characteristics survey and other new data sources [ongoing]
- ❖ Stay abreast of emerging efficiency technologies [ongoing]

25. Maintain and improve data for fuel price and demand forecasting

- ❖ Maintain data bases on energy consumption and prices [ongoing]
- ❖ Develop data bases for new short and long-term demand forecasting models [through Sep 07]

27. Maintain and improve the GENESYS model

- ❖ Update load and resource data as necessary [ongoing]
- ❖ Develop a benchmarking process for this model, in particular the hourly dispatch algorithm. [Sept 07]
- Work with Bonneville and PNUCC to improve reliability and consistency of power plant data used for planning and reliability analyses.

Northwest Power and Conservation Council

Summary of Work Plan Status - August 2007

Fifth Power plan implementation

We are continuing to make good progress on implementation of the Council's Fifth Power Plan.

The Wind Integration Action Plan (WIAP) is complete and we have formed the Northwest Wind Integration Forum to implement the work plan. The Council hosts the Wind Integration Forum in a manner analogous to the RTF. Funding is contributed from Bonneville and the region's utilities. Implementation of the actions called for in the WIAP will lead to the accomplishment of Action GEN-8 over the next two years.

In June, the Council performed the first adequacy assessment under the standards developed by the Northwest Resource Adequacy Forum and adopted by the Council. The forum is now working on several fronts; validation and enhancement of the assessment model, developing an economic standard, assessing the energy and capacity contribution of wind resources, and creating guidelines for utilities to assess their own loads and resources relative to the regional standards. Later this year the forum will calibrate and refine the capacity standard. The staff is also working with WECC on its adequacy assessments, and currently chairs the WECC Loads and Resources Subcommittee.

The Pacific Northwest Demand Response Project (PNDRP) is underway with funding from the Department of Energy and staffing from The Regulatory Assistance Project. The work of PNDRP is focused in three areas with a workgroup for each area: (1) pricing structures, (2) cost-effectiveness, and (3) transmission and distribution system integration. There is very good participation from utilities and others in the region, but the progress is slow.

The staff is working with WECC, NTAC, Columbia Grid, and NTTG to develop transmission solutions for improved planning and operation of the transmission system. These organizations are where several actions in the Power Plan related to transmission, wind integration, and resource adequacy are most likely to be implemented.

Conservation implementation is ongoing. Staff has completed the reconstitution of the RTF members and secured funding commitments for most of its budget. Staff also is involved directly in utility conservation planning for their IRPs, state and federal efficiency initiatives, building code revisions, and formulation of Washington's I-937 implementation rules.

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Staff is actively participating in all current IRP processes for electric utilities, and for some natural gas utilities as well. A key accomplishment related to conservation assessment has been the enhancement and revision of the ProCost model.

Staff is beginning to prepare for the 6th Power Plan. We expect to begin the preliminary data and modeling work in January of 2008. We will have some planning meetings over the next couple of months to lay out schedules and begin the coordination of activities necessary to put together a power plan. This includes identification of key issues, developing analytical approaches to assess those issues, laying out a schedule, and getting public input on key issues of importance to the region.

Monitoring and Analysis

Based on recommendations in the Biennial Monitoring Report, staff has developed revised fuel price forecasts. A reassessment of coal technologies and petroleum coke was also recommended in the Biennial Monitoring Report, but that has been delayed by other demands on Jeff King's time, including the analysis of CO_2 emissions from the Northwest power system and management of the Wind Integration Forum. We would now recommend a brief update in the fall related to these fuels, and a detailed assessment as part of the 6th Power Plan process early next year.

The Council has responded to numerous requests for data. We have also provided analysis of the effect of the President's budget proposal, forecasts of expected wind development for WIAP, analysis of the risk mitigation value of conservation, and input on the evaluation and implementation of Washington I-937. We have also done many presentations on our activities and planning methods.

Our intensive monitoring of progress toward the record of decision (ROD) on the Regional Dialogue has finally paid off. Bonneville issued its Long-Term Regional Dialogue Final Policy and ROD on July 19. The residential exchange and service to DSIs issues are unresolved in the policy, and many implementation details remain to be worked out. Bonneville plans to be able to offer new 20-year contracts to its customer utilities by August 2008 and have signed contracts by December 2008.

Planning Tools and Data

Data collection and analysis are ongoing activities in the Power Planning Division. Our data on regional loads, energy prices, conservation achievements, and generating resources form the basis for monitoring progress on plan implementation and identifying departures from our key planning assumptions. Accurate data are also required for modeling and analysis.

We are on schedule for developing a new demand forecasting system. A short term forecasting model has been completed, and we are in the process of refining and testing a new long-term forecasting approach.

Staff is using an updated version of the Aurora Energy Market Model™ for analysis of CO_2 emissions. We are making enhancements to the Genesys Model to improve our simulation of the

hourly patterns of generation. This will help with capacity adequacy assessment. We have also completed the revision of ProCost, the conservation planning tool, to better incorporate fuel savings, CO2 effects and to enhance outputs.

Refinement of the Olivia Model is continuing after some significant delays due to problems in some of the vendor software that the model uses. Some of these problems are still unresolved and may require fallback solutions, which are available. Meanwhile development of user interfaces continues.

Workplan Numbers & Topics		Action	Status
1	CNSV 3 Strategic Plan	Delete	Replaced with #1 Coordinate Regional Conservation Activities
2	CNSV-6 Revise/adopt codes		Updated #2
3	CNSV-7 lost-oops mechanism/funding		In new #4 Other Conservation Activities
4	CNSV -8 reporting and tracking	Conservation Tracking	In new #3 RTF
5	CNSV -13 SBC analysis		In new #4 Other Conservation Activities
6	DR-2,4,6,8 Demand response development	DR	Updated #5
7	GEN-1 Lost-op cogen and renewables	Non-Council Detail	Removed
8	GEN-2 evaluation procedures for cog/ren	Non-Council Detail	Removed
9	GEN-3 remove disincentives for IPP acquis.	Non-Council Detail	Removed
10	GEN-4 Uniform interconnection standards	Non-Council Detail	Removed
11	GEN-5 Acquisition under 1, 2, 5	Non-Council Detail	Removed
12	GEN-6 Sales of surplus power	Non-Council Detail	Removed
13	GEN-7 Build inventory of options per plan	Non-Council Detail	Removed
14	GEN-7a Report on IGCC status by 2007	Coal Technology	In new #7 coal-fired generation
15	GEN-8 & 8a Wind confirmation activities	WIAP related	In new #6 wind confirmation
16	GEN-9 Wind shaping effects on hydro	WIAP related	In new #6 wind confirmation
17	GEN-10 Wind integration products market	WIAP related	In new #6 wind confirmation
18	GEN-11 State of the art gen technology	Non-Council Detail	Removed
19	GEN-12 State of the art gen evaluation		In new #???
20	GEN-13 Consider IGCC Option	Coal Technology	In new #7 coal-fired generation
21	GEN-14 Carbon sequestration technology	Coal Technology	In new #7 coal-fired generation
22	GEN-15 Oil sands feasibility analysis		In new #???
23	GEN-16 Energy storage technologies	Non-Council Detail	Removed
24	GEN-17 Small-scale renewables demo	Non-Council Detail	Removed
25	ADQ-1 West-wide reporting standards		Updated #8
26	ADQ-2 adequacy standards		Updated #9
27	ADQ-3 risk analysis in IRPs	IRP related	Included in #14 IRP Task
28	F&W-1	Delete?	Deleted
29	TX-1 transmission needs for resource dev.		Updated #10
			New Task #11 improve ATC utilization
30	TX-3 implement transmission solutions		Updated #12
31	MON-1 Semiannual L/R reports		Updated #19
32	MON-2 Monitor conservation development	Conservation Tracking	In new #3 RTF
33	MON-3 Wind integration progress	WIAP related	In new #6 wind confirmation
34	MON-4 Climate change effects		Updated #17

35	MON-5 Demand response	DR	In updated #5
36	MON-7 Review of data and assumptions		Updated #20
37	MON-8 BPA role		Updated #18
38	MON-9 6(C) policy		Updated #13
39	New demand forecasting system		Updated #21
40	Olivia development		Updated #22
41	Providing information		Updated #16
42	RTF Management		In new Task #3
43	Participate in utilities' IRP processes	IRP related	Included in #14 IRP Task
45	Electric market price forecast		In new #23 Aurora Model updates and analysis
		New Item	#15 CO2 analyses
		New Item	#24 Data and information - conservation
		New Item	#25 Data and information - generation
		New Item	#26 Data and information - demand and fuel prices

Item Number	Description
	Plan Implementation
1	Coordinate Regional Conservation Activities
2	Revise & adopt state & federal energy codes and efficiency standards
3	Manage, Operate, and Secure Funding for the Regional Technical Forum
4	Other Conservation Implementation Activities
5	Demand Response
6	Confirm wind development potential
7	Reassess the role of coal-fired generation in the Fifth Plan
8	Establish regional and West-wide reporting standards for the assessment of adequacy
9	Carry out a process to establish adequacy standards for NW
10	Plan for long-distance transmission needs to support the resource development called for in the plan
11	Transmission Providers Work to Improve Utilization of Available Transmission Capacity
12	Region agrees to and begins implementation of transmission solutions
13	Bonneville and Council review respective policies re implementing 6©
14	Participate in Utility IRP Processes
	Monitoring and Analysis
15	Continued analysis of the CO2 production of the Northwest power system
16	Provide analysis and information about the plan and the regional energy system
17	Monitor Climate change science and policy
18	Monitor progress toward implementation of Council recommendations re Bonneville's Future role
19	Periodically report on load resource situation
20	Review data, forecasts underlying plan, recommend plan revision if necessary
	Planning Tools and Data
21	New demand forecasting system (Long and short-term forecasts)
22	Development and documentation of Olivia/ Portfolio model
23	Maintain the AURORA^{xmp}™ Market Price Forecasting Model and prepare periodic near-term forecasts
24	Maintain and update data on electricity uses and conservation technologies
25	Maintain the power plant data base

Item	Description	Relation to 06 WP
	Plan Implementation	
1	Coordinate regional conservation activities	CNSV-3
2	Revise & adopt energy codes and efficiency standards	CNSV-6
3	Regional Technical Forum	CNSV-8, MON-2 and RTF
4	Other conservation implementation activities	CNSV-7 and 13
5	Demand Response	DR-2,4,6,8, MON-5, and Non-wires
6	Confirm wind development potential	GEN-8,8a,9,10, MON-3
7	Reassess the role of coal-fired generation in the Fifth Plan	GEN-7a,13,14
8	Reporting standards for the assessment of adequacy	ADQ-1
9	Establish adequacy standards for NW	ADQ-2
10	Transmission needs to support the resource development	TX-1
11	Improve utilization of available transmission capacity	TX-2
12	Implementation of transmission solutions	TX-3
13	Review policies re implementing 6(c)	MON-9
14	Participate in Utility IRP Processes	ADQ-3 and IRP
	Monitoring and Analysis	
15	Continued analysis of CO2 production	New
16	Provide analysis and information	updated
17	Monitor Climate change science and policy	MON-4
18	Monitor progress toward Bonneville's role changes	MON-8
19	Periodically report on load resource situation	MON-1
20	Review data, forecasts underlying plan, recommend plan changes	MON-7, GEN-12, GEN-15
	Planning Tools and Data	
21	New demand forecasting system (Long and short-term forecasts)	DFS updated
22	Development and documentation of Olivia/ Portfolio model	Olivia updated
23	Maintain the AURORA^{xmp}™ Model; periodic near-term forecasts	New, EM price forecast
24	Data on electricity uses and conservation technologies	New
25	Maintain the power plant data base	New
26	Maintain and Improve Data for Fuel Price and Demand Forecasts	New

2007 Power Division Work Plan (January 2007)

PLAN IMPLEMENTATION

1. Coordinate Regional Conservation Activities

COUNCIL STAFF	OTHERS
Tom Eckman, Charlie Grist	Council, BPA, utilities, SBC Administrators, Alliance, regulators, state energy offices, efficiency industry, other stakeholders

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Quarterly meetings with regional coordination group. Identify progress and gaps in implementation. Prioritize and develop and implement solutions.	Quarterly Meeting. Expand participating members.	Quarterly Meeting.	Quarterly Meeting.
STATUS	Plan to meet in February to take up issue of cooperative evaluation of programs.			
COMMENTS	**Ongoing**. Formerly Action CNSV-3: Develop a strategic plan for conservation. Revised to be an ongoing assessment of progress and gaps and subsequent development of solutions to fill those gaps.			

2. Revise & adopt state & federal energy codes and efficiency standards that capture all regionally cost-effective savings: (CNSV-6)

COUNCIL STAFF	OTHERS
Tom Eckman, Charlie Grist	Council, State and local code bodies, DOE, HUD, BPA, Utilities, SBC Administrators, and The Alliance

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	• Participate in federal standards rulemaking on 3-5 products during the coming year. • Ongoing-- Work with state code agencies in code revision cycles to adopt new codes where warranted.	Prepare energy savings and life cycle cost analysis for proposed revisions to Oregon residential energy code Participate in Oregon code revision process	Participate in federal standards rulemakings. Participate in Oregon code revision process.	Participate in federal standards rulemakings.
STATUS	EPACT 2005 established standards for 15 products. These were issued October 18, 2005. EPACT 2005 also required that DOE promulgate new standards for an additional 10 products. Several states and NRDC are suing DOE to require the agency to meet its statutory deadlines. In 2005 OR and WA adopted efficiency standards on 6 additional products not covered by the new federal law.			
COMMENTS	**Ongoing**: Consider improving commercial MCS based on finalized NEEA study on NWBest. Washington adopted revisions to residential code that will take effect July 1, 2007. Savings estimated to be 10% improvement over current code. Idaho legislature adopted residential and commercial codes, bill now waiting governor's signature. Staff is working with other parties (e.g., CEC, NRDC, ACEEE, PG&E) to negotiate an agreement with appliance manufacturer's on improved federal efficiency standards and Energy Star program requirements. Several of these agreements have now been incorporated into draft federal energy legislation being considered by Congress.			

3. Manage, Operate, and Secure Funding for the Regional Technical Forum

COUNCIL STAFF	OTHERS
Tom Eckman, Charlie Grist	Council, BPA, Utilities, SBC Administrators, the Alliance, Regulators, the States

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	• Reconstitute the forum membership. • Secure funding & implement funding mechanisms.	• Revise ProCost • Complete annual survey of regional conservation progress	• Suite of new and revised programs available to BPA customers by September	Develop work plan for FY08
STATUS	Secured three year funding sponsorship commitments for at least $285,000/yr. Circulating draft work plan for review and comment. Selection process for new members completed.	Conservation survey completed. Staff is preparing summary for distribution and posting on Council/RTF web site. Final work plan adopted.	Initial draft of revised ProCost model complete and out for review. PTR system enhanced incorporate CO2 savings. Revised version of ProCost will be used to populate data base.	
COMMENTS	Ongoing. Continue to establish the RTF as the leading regional source for resolving technical issues in conservation. Includes planning and conducting about 10 one-day meetings per year. Manage about a dozen projects including market and technical research, and program evaluation. Support and enhance the Program Tracking and Reporting (PTR) system. Includes Conservation Tracking (CNSV-8). See RTF workplan for details.			

4. Other Conservation Implementation Activities

COUNCIL STAFF	OTHERS
Tom Eckman, Charlie Grist	Council, BPA, Utilities, SBC Administrators, the Alliance, Regulators, the States

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	• White Paper on Achievable Penetration Rates • Assess 5th Plan targets in light of biennial assessment • Scope SBC Performance Paper	• RFP & Contract for SBC paper		• Final report on SBC Performance
STATUS	Region appears to have achieved 5th Plan's conservation target for 2005 and is well positioned to accomplish the 2006 target. BPA's *actual* conservation achievements in both 2005 and 2006 were below its share of target, but it met its savings goal by claiming savings carried over from prior years	• Reasons for SBC paper have not materialized (CNSV-13). • White paper on Achievable Penetrationrates drafted and sent out for comment. • Uncertainty concerning the resolution of issues in Regional Dialog constrained early participation in BPA's conservation CAA and CRC programs		
COMMENTS	**Ongoing**. Includes the following: Help implement aspects of Washington I-937; Work with regional utilities and SBC administrators on program implementation issues; Participate in regulatory forums on conservation targets, decoupling, and regulatory incentives; White papers on conservation issues important to implementation such as achievable acquisition rates and accounting for free riders; Assist utilities and Bonneville is reaching Council conservation targets. Funding and implementation for orphaned conservation efforts best done regionally (CNSV-7). Evaluate performance of System Benefits Charge (SBC) Programs: CNSV-13. Includes conservation monitoring MON-2. The Plan called for consideration Of SBC alternatives to utility-run conservation programs if utility disincentives seriously impede utility investment in conservation. This has not been the case. Washington's I-937 and the Oregon legislation expanding ETO funding both should increase utility conservation funding and implementation. Further, several reviews of SBC programs in Oregon and around the country have been prepared by others. A Council paper reviewing the success of SBC programs would be of little value at this time.			

5. Demand Response - cost-effectiveness methodology; cost and benefits of improved metering and communication technologies; exploring price mechanisms: DR-2; DR-4; DR-6; DR-8

COUNCIL STAFF	OTHERS
Ken Corum	Council, BPA, Utilities, Regulators

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Organizing meetings of Pacific Northwest Demand Response Project (PNDRP) Genesys analysis of costs avoided by demand response in a hydro-dominated power system Continue to monitor Bonneville's work on non-wires alternatives to transmission construction	Organizing meetings of Pacific Northwest Demand Response Project (PNDRP). Genesys analysis of costs avoided by demand response in hydro-dominated power system. Work sessions of PNDRP Report on analysis Progress report on DR Monitor development of DR (Ongoing) Continue to monitor Bonneville's work on non-wires alternatives to transmission construction	Work sessions of PNDRP Continue to monitor Bonneville's work on non-wires alternatives to transmission construction	Continue w/ work sessions of PNDRP's work groups. Conclusions and recommendations of PNDRP likely to be delayed past the end of 2007. Continue to monitor Bonneville's work on non-wires alternatives to transmission construction
STATUS	As of 11/1/06, draft proposal for PNDRP waiting for revision by Regulatory Assistance Project Staff is participating on a technical advisory group for CA research on DR. Also presenting our work at national conferences on DR	Initial meeting of PNDRP scheduled for May 2, 2007	First meeting of PNDRP's cost effectiveness work group July 11 Staff participating in "peer group" monitoring CA development of proposal of electricity rate structure designed to encourage conservation and DR.	
COMMENTS	PNDRP is cooperative effort (Council, BPA, state utility commissions, Regulatory Assistance Project and others) to stimulate development of demand response. PNDRP as proposed would address cost-effectiveness, improved metering and price mechanisms issues. Staff participating in CA efforts and national conferences.			

6. Confirm wind development potential

COUNCIL STAFF	OTHERS
King	Bonneville (Mainzer); Policy Steering Committee of Wind Integration Action Plan

TIMELINE	**1st Quarter 2007**	**2nd Quarter 2007**	**3rd Quarter 2007**	**4th Quarter 2007**
MILESTONES	Wind Integration action Plan (WIAP) Technical Work Group issue draft first phase report. WIAP Policy Steering Committee approve first phase report and proposed follow-on organization	Establish proposed Northwest Wind Integration Forum. - Secure funding, and contract for development of high-resolution wind data set. - Initiate work to address market barriers to flexibility services. -Monitor & facilitate high-priority actions lead by others.	Steering Committee semi-annual meeting. Review progress on all actions.	Complete development of high resolution wind data set.
STATUS	Final Wind Integration Action Plan adopted 3/21/07. Layup of the printed version is underway.	The Council will be asked to approve the charter for the Wind Integration Forum at its April meeting.		
COMMENTS	Bonneville and the Council initiated the Wind Integration Action Plan (WIAP) in 2006 to identify actions needed to integrate anticipated near - and longer-term wind power development (action GEN-8A). The Wind Integration Action Plan (WIAP), adopted by the WIAP Policy Steering Committee in March 2007, identify specific actions to support anticipated near-term wind power development and to maximize the economic and environmental value of wind power over the longer-term. The WIAP includes recommendations incorporating the relevant portions of Actions GEN-8, -9 and -10, TX-1 and -2, and GEN -16. The WIAP recommends formation of a Northwest Wind Integration Forum to oversee implementation of the recommended actions, ant the Council is expected to play a key role n the work of the Forum, much like the Northwest System Reliability Forum.			

7. Reassess the role of coal-fired generation in the Fifth Plan

COUNCIL STAFF	OTHERS
King	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Prepare an assessment of the commercial status of advanced coal technologies suitable for Northwest applications, including supercritical steam-electric and gasification combined-cycle (Action GEN-7a).	Prepare a paper including background information on petroleum coke and a forecast of its availability through 2030.	Assemble cost, performance and other planning assumptions for "CO2-ready" IGCC and conventional coal plants. Complete a re-assessment of the timing, amount and technology of coal-based generation in the Fifth Plan.	
STATUS	Because of competing projects it will be necessary to defer this effort by at least a quarter.			
COMMENTS	Biennial Assessment findings indicate: (1) The accepted design availability of base load power generating technologies is higher than assumed in the Plan; (2) Spare gasifiers may need to be included in IGCC plants to accepted levels of plant availability, increasing costs above those assumed in the Plan; (3) Supercritical steam-electric technology has advanced more rapidly than anticipated; (4) IGCC efficiency may be less than anticipated in the Plan; (5) the capital cost of coal-fired power plants and other generating technologies has increased significantly since adoption of the Plan and (6) petroleum coke may be a feasible fuel for IGCC power generation in the Northwest. In view of these developments, staff has concluded that it is desirable to reassess the future role of coal-fired generation and specific coal technologies.			

8. Establish regional and West-wide reporting standards for the assessment of adequacy: ADQ-1

COUNCIL STAFF	OTHERS
Wally Gibson, John Fazio	Resource Adequacy Forum, WECC, NWPP, CREPC, BPA, regional utilities and regulators.

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Work with the PNUCC and the Forum to develop a prototype data-reporting standard.	Review data received for 2007 with respect to the prototype data-reporting standard. Examine wind generation data to establish a guideline for counting resources. WECC LRS present revised numerical RA metrics to Planning Coordination Committee (PCC)	Finalize the data reporting standard for the northwest. WECC PCC present revised RA metrics to Board for approval, for use in 2007 PSA Examine wind generation data to establish a guideline for counting wind resources.	PNUCC sends out data requests for 2008 using the new data-reporting standard. WECC Board approve revised RA metrics for use in 2007 PSA
STATUS				
COMMENTS	Continue working with WECC Load and Resources Subcommittee (LRS) to improve Power Supply Assessment (PSA) and related WECC reports, including reporting standards -- Ongoing through year			

9. Carry out a process to establish adequacy standards for NW: ADQ-2

COUNCIL STAFF	PARTICIPANTS
Wally Gibson, John Fazio	Resource Adequacy Forum, NWPP, BPA, regional utilities and regulators, WECC, CREPC

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Develop a benchmarking process for resource adequacy analysis. Update resource and load data required for analysis. Synchronize the GENESYS and HYDSIM (BPA) models. Develop alternatives for resource adequacy economic targets. Develop a guideline for individual utilities to interpret the regional standard for their own use.	Review and, if necessary, revise the definition of curtailment events used for LOLP analysis. Examine the relationship between cost and LOLP. Develop analysis to show that meeting the adequacy standard will not impact fish and wildlife operations. Perform a top-down assessment of the region's power supply and compare to PNUCC's bottom-up approach.	Based on the second quarter work, revise the energy and pilot capacity standards as necessary. Work with the WECC to make sure that the NW standard is consistent with WECC guidelines. Update the production version of GENESYS. Analyze economic targets, curtailment events, LOLP thresholds, and associated costs after the benchmark process is complete.	Develop a final Forum proposal for resource adequacy standards and submit to the Council for adoption. Prepare draft documentation to support the final proposal. Update the production version of GENESYS.
STATUS	Synchronization of GENESYS and HYDSIM complete.	A prototype methodology for assessing impacts to fish operations has been completed. Analysis of economic targets, curtailment events, LOLP thresholds and cost has been delayed until the benchmark process is complete. Work continues on developing guidance to individual utilities. The steering committee will decide the extent of guidance.	Analysis of economic targets, curtailment events, LOLP thresholds and cost has been delayed until the benchmark process is complete. Work continues on developing guidance to individual utilities. The steering committee will decide the extent of the guidance.	
COMMENTS				

10. Plan for long-distance transmission needs to support the resource development called for in the plan: TX-1

COUNCIL STAFF	OTHERS
Gibson; King, Schilmoeller	Bonneville, other transmission providers, Power Pool; NTAC, WECC

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Develop and adopt TEPPC and TAS work plans. First WECC biennial plan targeted at Feb 08 ColumbiaGrid offers Planning and Expansion Functional Agreement for signature. Northern Tier Transmission Group (NTTG) proposes to assume regional planning duties for participants under expected FERC tariff revisions.	Specific TEPPC/TAS milestones will follow from work plan	Specific TEPPC/TAS milestones will follow from work plan	Specific TEPPC/TAS milestones will follow from work plan
STATUS	Final versions of TEPPC/TAS work plans out for comment; adoption targeted May 07 TEPPC meeting			
COMMENTS	Staff co-chairing WECC Transmission Expansion Planning Policy Committee's (TEPPC) Technical Advisory Committee (TAS) -- ongoing. TEPPC provides framework and larger geographic scope studies for sub-regional planning groups like NTAC, NTTG and ColumbiaGrid in the Northwest. NTTG consists of PAC, Idaho, NWE, UAMPS, Deseret (latter two in Utah) and potentially BCTC and complements systems represented by ColumbiaGrid			

11. Transmission Providers Work to Improve Utilization of Available Transmission Capacity: TX-2

COUNCIL STAFF	OTHERS
Wally Gibson	Bonneville, other transmission providers, regional transmission customers, states

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	NTTG working to establish process to address ATC calculations on behalf of members ColumbiaGrid has delayed addressing NW OASIS and ATC calculations (timing uncertain)		NTTG working to establish process to address ATC calculations on behalf of members.	
STATUS				
COMMENTS	NTTG consists of PAC, Idaho, NWE, UAMPS, Deseret (latter two in Utah) and potentially PGE and BCTC and complements systems represented by ColumbiaGrid			

12. Region agrees to and begins implementation of transmission solutions: TX-3

COUNCIL STAFF	OTHERS
Wally Gibson	Bonneville, other transmission providers, regional transmission customers, states, IPPs

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	ColumbiaGrid works with Bonneville to develop redispatch protocols for Summer 07 operation Northern Tier Transmission Group (NTTG) working to establish regulation sharing program (will address some wind integration problems for members)	ColumbiaGrid works with Bonneville to develop redispatch protocols for Summer 07 operation		
STATUS	NTTG targets regulation sharing program pilot go-live date of end of March			
COMMENTS	NTTG consists of PAC, Idaho, NWE, UAMPS, Deseret (latter two in Utah) and potentially PGE and complements systems represented by ColumbiaGrid.			

13. Bonneville and Council review respective policies re implementing 6c: MON-9

COUNCIL STAFF	OTHERS
Legal Division	Council, Bonneville

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Initiate discussions with Bonneville after release of Regional Dialogue ROD	Bonneville and Council processes on 6c policy revision	Complete revised 6c policy	
STATUS	Waiting for regional dialogue. Have had some discussions with Bonneville on consistency definition.	Working with Bonneville of an approach to a programmatic 6(c) process for renewable augmentation	Met with Bonneville to begin process of developing a consistency process for resource augmentation programs.	
COMMENTS	Bonneville is considering purchase or renewable resources in near term, and is concerned about Council plan consistency.			

14. Participate in Utility IRP Processes

COUNCIL STAFF	OTHERS
Assigned staff for each utility	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Participate in WA CTED administrative rulemaking process for HB1010. Ongoing participation in utility IRP process and advisory groups. Report on completed IRPs as they become available. Compare plans to Council's resource portfolio	Participate in CTED administrative rulemaking process for HB1010 and I-937	Summary report on IRPs Participate in CTED administrative rulemaking process for HB1010 and I-937	
STATUS	Staff is working with utilities, PUCs and ETO to help incorporate risk measures into planning Presented overview of Council IRP process at WA CTED's initial HD1010 workshop. Participating in OPUC's rulemaking for CO2 uncertainty in IRPs.	Presented Council's approach to treatment of CO2 uncertainty in resource planning at 4/12 OPUC workshop. Worked with PacifiCorp to address risk issues in their draft IRP. Staff has been actively participating in all ongoing utility IRP processes.	Summary report on IRPs to the August meeting of the Power Committee.	
COMMENTS	Participation in utility IRP processes is a key strategy for encouraging regional achievement of the plan and for tracking progress in its implementation. (See action items GEN 1- 6 and CNSV – 8) **:** Help implement new Washington IRP requirements (HB1010). Participate in conservation aspects of regional utility IRPs. Track assigned regional IRPs. Get utility IRPs to consider 5th Plan findings on the cost and risk benefits of conservation. Participate in BPA IRP if they do one for augmentation or Tier 2 products.			

MONITORING AND ANALYSIS

15. Continued analysis of the CO2 production of the Northwest power system

COUNCIL STAFF	OTHERS
King	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Refine and extend the July 2006 forecast of the CO2 production of the Northwest power system, including the following cases: • Base w/2000 backcast • Committed development • Utility IRP • Low conservation • State RPS • No summer spill • Lower Snake R. dam breaching			
STATUS	Base case w/o 2000 backcast completed for the March Council meeting.	Committed development case and 2000 backcast will be complete for the April Council Meeting.	CO2 analysis presented at July meeting. Paper for comment to be completed for August meeting.	
COMMENTS	A draft forecast of regional power system CO2 production was brought to the Power Committee at its July 2006 meeting. At that meeting, the Committee requested refinement of the analysis and additional cases. The Committee agreed to a plan of work presented at its August meeting. This work was subsequently deferred for completion of the Biennial assessment of the Fifth Plan and the first phase of the Wind Integration Action Plan (WIAP) project. The CO2 assessment was resumed in January following release of the draft first phase WIAP report.			

16. Provide analysis and information about the plan and the regional energy system

OWNERS	OTHERS
All Staff	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES				
STATUS	Provided analysis of presidents budget proposal impacts. Provided forecasts of wind development for WIAP. Ongoing work with WA CTED to implememt RPS and planning legislation. Completed an analysis of the risk mitigation value of conservtation, which staff presented to the OPUC as part of an ETO effort to have OPUC recognize a cost-effectiveness level above market. Made similar presentation to the Power Committee. Completed an analysis of how decision criteria affects resource choice.	Staff has been working with CTED to help define consistency with the Council's planning methods for I-937 implementation. Made presentation to an OPUC workshop on the Council's approach to addressing carbon risk in IRPs. Made presentations on regional model and Power Plan to California Energy Commission staff. Invited to provided testimony to the California Energy Commissioners in June. BPA has requested we work with them to make the regional model available for their resource planning efforts. Grant County PUD, Puget Sound Energy, and Portland General Electric Co. continue to inquire about how best to incorporate the plan's methods.	Staff will continue to support I-937 process and provide information to utilities as requested.	
COMMENTS	This is an ongoing activity that requires a substantial amount of staff time and resources. Council adopted a policy for approval of analysis requests of different magnitudes and sensitivities. Staff has been emphasizing the important role of improved efficiency in the context of RPSs and the biofuels focus.			

17. Monitor Climate change science and policy: MON-4

COUNCIL STAFF	OTHERS
John Fazio, Ken Corum	University of Washington Climate Impacts Group, BPA, EPA, Congress

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Monitor political actions regarding emissions. Monitor research on climate change.	Council staff white paper on Climate Change. Review and update the relationship between temperature and loads, for modeling purposes. Council staff (Public Affairs) is planning to release a document on climate change for the northwest.	Council staff will assess the effect of various carbon cap-and-trade programs on the west coast power market. Further analysis of effects of carbon tax or cap-and-trade on PNW utilities and electricity users.	
STATUS		Council staff continues to provide seminars and presentations on potential impacts to the northwest power supply. A new short-term hourly load model has been completed that can help quantify effects of temperature change on loads. Spring 2007 Council Quarterly featured climate change issues. Reviewed legislative proposals for cap-and-trade system for carbon emissions W/ Jeff King, used AURORA to model the effect of carbon tax or cap-and-trade on West Coast electricity market.	Council staff will monitor greenhouse gas control proposals in Congress to assess their possible impacts on the Northwest Power Supply. This is an ongoing process.	

COMMENTS	This is an ongoing process. As new information is received, it will be assessed and reported to the Council. Revised data from U of Washington Climate Impacts Group will not be available until the first or second quarter of 2008.

18. Monitor progress toward implementation of Council recommendations re Bonneville's Future role: MON-8

COUNCIL STAFF	OTHERS
Terry Morlan	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Review and comment on Bonneville Regional Dialogue ROD	Comment on ROD? Follow progress in developing contracts and products	Ongoing - Bonneville developing contracts for post 2011 to be signed in December 2008	
STATUS	Activity has been between Bonneville and utilities since January. Expect ROD to go to DC by first week of April.		Bonneville its Regional Dialogue Final Policy and Record and Decision on July 19, 2007. They will discuss with Council at August Meeting.	
COMMENTS	Some progress on agreements regarding the residential exchange is reported. The major outlines and policies of the regional dialogue policy are unchanged, although some of the details have been revised. The Residential Exchange and the service to DSI remain unresolved. The use of surplus secondary revenues issue has been folded into a broader financial policy development process.			

19. Periodically report on load resource situation – Regular semi-annual reports: MON-1

COUNCIL STAFF	OTHERS
John Fazio, Terry Morlan	BPA, PNUCC, other utilities

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Report on forecasted water conditions and power supply status through the end of summer.	Assess the status of the power supply 3 and 5 years out relative to the newly adopted energy and capacity standards. Compare the Council's top-down assessment to PNUCC's bottom-up assessment and reconcile differences.	Assess the power supply status for the upcoming winter. If necessary, based on the 3 and 5-year assessment, take actions as outlined in the adequacy warning implementation plan.	Update load and resource data for next year's analysis.
STATUS		These activities were completed in June of 2007. No actions required by region, but individual utilities may need to firm up resources.		
COMMENTS	The Council maintains a power supply outlook web page, which contains a summary of the water supply, loads, resource development, imports and exports and other adequacy assessments.			

20. Review data and forecasts underlying plan, recommend plan revision if necessary: MON-7

COUNCIL STAFF	OTHERS
Morlan lead with others	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Biennial Monitoring Report - Jan.		Interim assessment of loads, resources, fuel prices etc.	Review status of various coal technologies.
STATUS	Completed Biennial Monitoring Report.	Currently reviewing fuel price forecasts. Plan to review coal technologies and costs used in plan. (delayed by wind and CO2 analysis) Developed substantial new short term load data and forecasting model.	Done in July Council meeting. Revised fuel price forecasts out for comment, final in August. Revised electricity price forecast in Sept or Oct.	
COMMENTS	Ongoing: Maintain data bases on loads, fuel and power prices, and resources. Requires ongoing collection and analysis of data on demand, fuel prices, evolving technology for generation and efficiency, hydroelectric capability			

PLANNING TOOLS AND DATA

21. New demand forecasting system (Long and short-term forecasts)

COUNCIL STAFF	OTHERS
Massoud Jourabchi	Demand Forecasting Advisory Committee, BPA staff

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Produce short-term hourly load forecast for non-DSI. Produce report on application of short-term forecasting model for Resource Adequacy capacity standards and targets. Present short-term and long-term modeling methodologies to the Advisory committee. Present to Council forecast for summer of 2007-2010. Map out and start long-term model enhancements. Conservation & end use inputs for 2020 forecasting system	Complete test of long-term demand forecasting system's structure. Complete documentation of short-term forecasting model Update short-term model with 2004 and 2006 load data*. Meeting of the Demand Forecasting Advisory Group.	Acquire long-term economic forecast Complete long-term model enhancements. Work with Demand Advisory group on long-term forecasting model assumptions. Produce preliminary forecast with exogenous market prices. (2008-2028). Present preliminary forecast to Advisory committee.	Initiate review of linkage of short-term and long-term models with other models used in-house. If completed, present a preliminary long-term forecast to Council.
STATUS	Completed short-term hourly load model. Produced the report on application of short-term forecasting model for Resource Adequacy. Presented short-term forecast to the Council. Have started enhancements to the long-term model for residential sector.	Completed documentation and a preliminary manual for the short-term forecasting model. Produced hourly demand forecast for TEPPC. Expanded residential sector end uses in long term model Updated Load-shapes for long-term model with the new data Obtained macro-economic forecast from Global Insight.		
COMMENTS	We will need help from NWPP on updating short-term model with 2003-2006 hourly data.			

22. Development and documentation of Olivia/ Portfolio model

OWNERS	OTHERS
Michael Schilmoeller	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Complete data editor interface and Council staff beta test	Revise writing routines to incorporate changes identified in task list (3/8/03, rev. 02, 3/13/06)	Evaluate and possibly implement transmission flow model. Prepare class materials and help files	Utility training classes.
STATUS	January status report to Power Committee. Interface development is underway, but staff beta testing has not begun. Unanticipated delays with Palisade's evaluation due to vendor's software bug and unresponsive support. If Palisades does not fix its bug, there is no reason for preference over Crystal Ball. Consequently, prior to identifying the bug, we purchased and are developing Olivia and the regional model for use with CB 7.2.2.	Suspended Palisade's evaluation after continued difficulties with their software. We will resume after the data editor interface is complete. Initiated a study of the influence that prediction accuracy has on the optimal resource choice, that is, on the plans along the efficient frontier. Resumed Olivia coding on May 10 after six-month interruption. As of July 24, 2007, three of the eight data wizards are complete. Most of the logic development is in the first wizards and will transfer to others.		
COMMENTS	Work on Olivia has proven difficult to plan. Some of this is inherent in the work. Because our concepts – not to mention the computer implementation – are original, there is no template for this work. We only know the problems we have run into to date. It seems impossible to forecast when or how versions of the software on which we rely, Excel, Crystal Ball, etc., will change. Some of it, however, is inherent in the nature of our work. More pressing studies and tasks displace development of this application. We will periodically communicate our progress.			

23. Maintain the AURORA^{xmp}™ Market Price Forecasting Model and prepare periodic near-term forecasts

COUNCIL STAFF	OTHERS
King	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Review recent AURORA releases (Versions 8.3 and 8.4); update version if warranted. Review and update the AURORA input data base as needed (Also see "Maintain the power plant data base").	Prepare a near-term market price forecast using fuel prices from the EIA short-term energy outlook and current water year conditions.	Updated market price forecast.	
STATUS		Model updated for CO2 analysis. Updated price forecasts will be done following revised fuel prices.	Model used for analysis of effects of CO2 costs.	
COMMENTS	The AURORA^{xmp}™ Market Price Forecasting Model is used by the Council to prepare market price forecasts and for certain analyses of resource cost-effectiveness, system operations and environmental impacts. An annually-updated short-term market price forecast is used to assess the electricity price implications of current water year conditions and fuel prices and of possible near-term changes in system operations.			

24. Maintain and update data on electricity uses and conservation technologies

COUNCIL STAFF	OTHERS
Tom Eckman, Charlie Grist	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Conservation & end use inputs for 2020 forecasting system	Review new residential housing characterization survey Review Energy Star new homes lighting persistence research		Work with RTF to develop updated conservation technology data in preparation for Power Plan.
STATUS	Working with NEEA and larger PNW utilities and ETO to secure customer characteristics data	Developing data sources for new short and long-term demand forecasting models.	Reviewing recently completed PacifiCorp conservation potentials assessment for regional applicability. Working with BPA, NEEA, and Energy Trust; on revisiting industrial energy consumption for the region, by state.	
COMMENTS	**Ongoing.** Includes: Compile new measures lists; Develop new commercial prototypes for analysis; Convert 5th Plan Supply Curves to new ProCost model including off-line adjustments; Fill out supply curves in $60-$80/MWh range; Investigate revising ProCost to include Crystal Ball or other mechanism to assess alternate avoided cost futures; Update ProCost inputs for T&D deferral benefit; Update EUIs from NEEA DEI study; Develop inputs to feed Energy 2020 forecasting system; Prepare to calibrate conservation supply curves and forecasting system; Harvest NEEA New Building Baseline Characteristics data;			

25. Maintain the power plant data base

COUNCIL STAFF	OTHERS
King	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Post updated inventories of existing and proposed power plants. Update the GenRes input data file for the GENESYS model in support of reliability model benchmarking studies. Update the Resource input database of the AURORA model.	Post updated inventories of existing and proposed power plants. Review the GENRES input data file in support of the long-term system reliability assessment.	Post updated inventories of existing and proposed power plants. Review the GENRES input data file in support of the winter system reliability assessment.	Post updated inventories of existing and proposed power plants. Prepare assessment of progress toward Fifth Plan generating resource optioning and development targets (Action GEN-7)
STATUS	Updated power plant inventories posted 1/19/07. AURORA resource database update to be complete week of 4/2/07.	Power plant data updated and provided for June adequacy assessment.		
COMMENTS	The Council maintains an inventory of existing and proposed power generation projects that is updated on a quarterly basis and posted to the Council's website. This inventory is used to develop the regional generating resource data files for GENESYS and AURORA models. In 2007 we plan to update the Generating Resource (GenRes) input data for GENESYS during the first quarter to support the benchmarking studies planned by the System Reliability Forum. We will review GenRes and update it as necessary to support the second quarter long-term reliability assessment and the third quarter winter reliability assessment. Though it is not certain that GENESYS will be the model selected for ongoing assessment of system reliability, a similar schedule of updates and reviews will be needed in future years for whatever model is selected for this application. We also will establish an annual schedule for updating the Northwest portion of the AURORA Resource input data file to support a first-quarter near-term price forecast and other studies.			

26. Maintain and Improve Data for Fuel Price and Demand Forecasts

COUNCIL STAFF	OTHERS
Massoud Jourabchi, Terry Morlan, Ken Corum	

TIMELINE	1st Quarter 2007	2nd Quarter 2007	3rd Quarter 2007	4th Quarter 2007
MILESTONES	Maintain data bases on energy consumption, electricity and fuel prices, hourly temperatures, energy conservation, enduse inputs to the long-term and short-term forecasting systems.	Develop a revised fuel price forecast for natural gas, coal, and oil.	Present revised fuel price outlook to Council and post to web site.	
STATUS	Enhance database for short-term forecasting on hourly monthly, seasonal basis. Maintaining the hourly temperature data for 1993 - 2006, for the four sites that are used in creating regional temperature. Updated and improved fuel and electricity price data bases.	Have revised the fuel price forecasting model and begun researching other forecasts. Updated regional load with 2005 data. Developed proposed fuel price forecast, reviewed with NGAC.	Modified fuel price forecast and presented to Council in July. Out for comment, expect final in August.	
COMMENTS	Ongoing. Council staff maintains data bases to monitor and forecast electricity prices, fuel prices for natural gas, oil and coal. We maintain data bases on consumption of electricity and other fuels, as well as electricity loads at the generator. We also track commercial and residential floor stock. These data are inputs to forecasting models and analysis and they help monitor performance of the forecasts.			