Conservation Resources Advisory Committee
Northwest Power and Conservation Council
November 19, 2012, 1:00pm-4:00pm

A list of the Conservation Resource Advisory Committee (CRAC) members and other interested parties attending the meeting accompanies these notes.

Tom Eckman: Opened the meeting and made introductions. He explained the role of the CRAC and what the Council hopes to gain from the deliberations of the CRAC. Tom explained the CRAC is an advisory committee to the Council chartered, like all Council advisory committees, with a certain responsibilities to provide advice and expertise into our planning processes. Part of the Regional Act formalizes the use of scientifically and statistical advisory committees. He further explained that the Council also solicits advice from experts on similar advisory committees for generation, load forecasting, fuel prices, systems analysis and other topic areas as part of developing every Council power plan.

The CRAC will look at both conservation resource potential and the issues associated with conservation deployment - in particular how much is available at what cost and how much of that we can achieve. As this is an advisory committee to the Council, the committee will not be taking votes.

The CRAC focuses on policy and programmatic issues more than technical issues of costs and savings. The Council typically gets technical input from the Regional Technical Forum (RTF) and others on costs and savings. Eckman noted that the Council may also host a sub group to look in detail and the Seventh Power Plan supply curves, like it did in the Sixth Power Plan.

After reviewing the agenda Eckman went over the slides posted on the CRAC web page http://www.nwcouncil.org/energy/crac/meetings/2012_11/

Discussion of slides on work plan elements:

- Eckman explained the effort will be to look at the Conservation Resource Assessment. He and Charlie Grist will look at what conservation potential remans and what is achievable in both near term and long term.
- Eckman noted that the Council will ask the CRAC for its recommendation on regional conservation acquisition targets, implementation strategies and implementation mechanisms to be included in the plan's Action Plan.

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- The Council has statutory responsibilities to produce a set of Model Conservation Standards (MCS) and a recommendation on a BPA surcharge policy to implement.

Discussion of conservation resource assessment slide:

- Council will seek input on program administrative costs, financial funding assumptions and other programmatic inputs and parameters.

Discussion of typical issues for the CRAC on modeling conservation will include:

- How fast can we build conservation and what it cost to do so?
- Discussion on the pace of retrofit and lost opportunity might be going forward?
- The maximum deployment rate for retrofits.
- Other development decision rules.

Discussion of action plan recommendations:

- The Sixth Plan contained 22 conservation action items, the CRAC will review where we are on those as part of this process and assess if any of those action items have been satisfied.
- Identify other action items the region might take to deploy the region's efficiency resource economically.
- On the portfolio modeling we will look at the input assumptions, particularly the input to electric prices, gas prices, carbon costs. As well as the necessity for market price adder for conservation cost-effectiveness.
- Specific issues for R&D
- Whether or not the regions conservation target that has been traditionally in the plan ought to be continued and if so how they ought to be stated.

Then Eckman asked the group to consider their role, which part of the plan they think they will be involved in, and if there are other issues that need to be on the table.

The following issues were raised:

- Fred Gordon suggested the CRAC take a role in identifying the appropriate consideration of emerging technologies and innovations in the conservation supplies over 20 years planning period. "We know assuming no new technology is the wrong answer"
- Mary Smith asked if the Mid-Term Assessment would impact near-term cost and savings and suggested that, if not, assessing the change might wait until the next plan cycle.
- Hossein Haeri asked, What about the behavior-based measures? You have it in Industrial in the Sixth Plan. Does the Council have plans for expanding behavioral measures to other sectors/measures? Eckman noted that measurability of persistence is the issue for behavioral measures.
- Tom Scumacher asked, How long will the CRAC last and how many meetings would you anticipate? Eckman answered we will have it completed within the next two years. Quarterly to begin within 2013 and as we get close to finishing the draft plan, we might meet monthly or bi-monthly.
- Bruce Folsom asked, Will distribution efficiency be in the Seventh Plan? Tom replied it will likely be incorporated in this plan.

- Eugene Rosolie suggested, CRAC needs to look at impact of I-937 regulatory requirements.
- Stan Price added a quick note on the earlier conservation discussion on emerging technology & behavior. Seventh Plan should also look at whole building approaches. Tom added that the cost effectiveness of bundling tends to be where we agree or disagree or what the resource is and how we package it. Charlie added, we should be careful not to double count potential when measure bundles overlap.
- Nicholas Garcia asked what is the process if CRAC members don't agree? Tom replied, the committee is an advisory committee and doesn't vote. Where there are dissents the staff takes those policy pros and cons to the Council. Ultimately the Council decides.
- Josh Warner asked if it be useful to put a work plan together and clarify how it folds into the development and adoption of the plan. Tom replied once we identify the key issues that have been brought up today, we will go back to staff and figure out a timeline to work in the issues and get them calendared and bring back to you on the next meeting or before that on a draft work plan so you can plan your year. Charlie added we are planning to do the same for the seventh power plan making the process open and transparent as possible, by including more formal work planning and schedules and sharing those with the public.
- Mary Smith suggested that it might make sense to put together a questionnaire for utilities and others in the region who are delivering programs to provide measure cost and performance data. Tom agreed and Charlie added it will be on the early on the work plan.
- Kevin Smit suggested that it would be good if the Seventh Plan could disaggregate conservation potential by acquisition mechanism, Utility programs vs. NEEA and code and standards. He added that the Council has shied away from that in the past, but it would be good to discuss it for the Seventh Plan.
- Nancy Hirsh asked what is the role of the CRAC with regard to the Mid-Term Assessment (MTA) of the Sixth Power Plan?
- Charlie Black responded that the Council will be issuing the MTA in December and there will be a 30-day comment period. One issue for the Seventh Plan is for this committee to help us on which types of measures, which types of approaches to energy efficiency are going to fit better in the system from the perspective of capacity and flexibility.
- Fred Gordon suggested that one useful thing to do is to look at the energy cost and the bills going to the consumer and determine how much of that cost is related to peak cost.
- Charlie Black asked if the CRAC addressed demand response in the past. Tom Eckman replied we haven't in the past, it is open for this group to decide if they recommend taking it up. Grist added, it is addressed by the demand response advisory committee.
- Nancy Hirsh suggested that there are apparent gaps between economic and achievable potential when comparing Council analysis to some utility analyses. It would be good to get an understanding of differences.
- Nancy Hirsh asked if the ten percent conservation credit was the right number? Should this body take a look at it? Eckman suggested the CRAC consider the ten percent conservation credit in its cost-effectiveness discussions.
- Nicholas Garcia asked what is the appropriate metric for risk? How is it calculated and how do you add it in?
- Josh Warner asked how the Council decides what issues are for the CRAC and what for the RTF. Do all technical issues all fall to the RTF? Eckman responded that the CRAC

can take up any issues it wants, including technical issues. The RTF does a good job of looking at savings per measure and cost per measure

- Dick Adams suggested that the Seventh Plan needs to look at peak needs reductions from energy efficiency.

On conservation achievements and going forward:

Charlie Grist went over the Slide Show on Accomplishments found at this link: http://www.nwcouncil.org/media/4522523/CRAC-Nov-2012-Conservation-Accomplishments-Outlook.pdf

Grist gave updates on what was done in conservation over the last two years since the release of the Sixth Plan. He explained the Sixth plan called for a doubling of efficiency savings over the next decade to 3000 average megawatts by 2020. The Plan identified the need to accelerate acquisition of cost effective resources with the Action Plan calling for budgeting to achieve around 1200 average megawatts of conservation over the five years 2010-2014, with expectations to achieve between 1100 and 1400 average megawatts depending on circumstances. Conditions like underlying load growth, avoided costs and how fast the region can actually make conservation happen will impact the actual number achieved. Grist added that over the 20-year forecast period there is around 6,000 average megawatts of what we think to be cost effective conservation available to the region.

Grist explained that the 2011 target was 220 average megawatts, and that the region achieved 277 - a good shot above what the Council estimated was achievable. In fact, the achievements have been higher than Council plan targets in every year since 2005. He noted that since 2005 the region has seen the "longest sustained period of utility acquisitions in 30 years." Grist showed savings by sector from 2008 through 2012 and explained differences between sectors. While there are differences, savings trajectories are up in all sectors. Utility efficiency spending has almost doubled since 2008, but the utility cost of conservation acquisitions remains very low - about two cents per kWh. Eckman explained the NEEA and Bonneville expenditures in the chart for emerging technology and research

Question from participants:

- Why we are constantly doing better than the target? Grist replied, we don't have a really good data to take that apart. But the big increase in 2009 was largely from faster deployment of CFLs than we thought. This is one of the notable things we saw from the data. In the last few years the biggest sector jumps have been in industrial and commercial.
- Tom Shumaker commented there was a big push for utility level conservation planning. Since BPA's conservation budget is going down in the next year or two, would acquisitions flatten out more going forward?
- Nancy Hirsch commented that increases in funding and increases in achievement in the commercial and industrial sector outpaced the increase in the budgets. Other participants asked what measures were driving the high commercial and industrial sector the savings? What policies and regulations may have contributed to savings increases?

- Difference in utility reported savings and Council Plan targets may be due to difference in baseline assumptions.
- Has the Council compared the I-937 utilities projections for 2012-2013 with their submissions to WA Dept. of Commerce?
- Do we know which measures were used to achieve the "overage?"
- How much of the savings are going to come from codes and standards? -- This factor will influence how much we can achieve from "lost-opportunity" resources?
- If capacity problems dominate going forward, cost comparison with "peaker" would also be useful. What would be the net cost if the "peaker" was purchased for wind integration?

Presentation on the Wholesale Electricity Price Forecast:

On the last item of the meeting Steve Simmons went over the Wholesale Electricity Price Forecast slides found at this link:
http://www.nwcouncil.org/media/4430/Presentation_on_Wholesale_Electricity_price_forecast.pdf

Questions and comments on the presentation included:

- Garcia: Source and timing for retirements and replacements?
- Canon: CO2 where power is generated? Yes.
- Canon: Add MW size on each plant for CO2 by plant chart
- Gordon: Is price range similar to Sixth Plan? What facilities? Any on grid?
- Haeri: Is $20/MWh the effect of CO2?
- Garcia: What about CO2 cost in the Seventh Plan?
- Carr: Is CO2 cost consistent with BPA?
- Gurvinder Singh: What is levelized price of power?
- Garcia: What wind is in the price forecast? RPS estimates were updated, mostly RPS wind in here.
- Grist: What is the effect of Boardman and Centralia closures? Wind, gas, fewer exports from PNW.
- Black: Low carbon intensity getting even lower.
- Black: Spot prices low, impacts avoided costs for Energy Efficiency (EE). And lots of low-cost EE still available.
- Penguilly: Do Idaho coal plants include out-of region coal? Yes
- Garcia: What source is the top range of gas from?
- Hirsch: How does this compare to WECC and TEPC work on carbon impacts?

Participant Round Table Discussion of Draft Issues List:

Grist presented the draft issues list developed by staff and opened the table for discussion.
http://www.nwcouncil.org/media/4427/Issues_List_for_CRAC_Nov_2012_11_13_2012.pdf

- Ralph Cavanaugh suggested moving lost revenue issue to an implementation barrier issue. Counting lost revenues as cost of conservation is not part of the Council methodology or any viable methodology. Lost revenues are not a cost.
- Bud Tracy wants to look at revenues from a utility perspective.
- Fred Gordon: Gas cost-effectiveness collapsing. Most weatherization measures are no longer passing cost-effectiveness as practiced. Is societal test being applied appropriately? A bunch of ideas of revising cost-effectiveness tests to accommodate accordingly? Is there a theoretical basis for changing the way we look at cost-effectiveness? Look first at the theoretical basis and do not be influence by apparent non-cost-effectiveness of particular measures.
- Hossein Haeri: Capacity value of efficiency will be important to analyze carefully.
- Nicholas Garcia: Efficiency has no capacity value.
- Pat Keegan: It has been a soft economy. Does it make sense to address broader economic impacts of resource choices? Do you want to take jobs into account?
- Ken Canon: What does conservation avoid in the RPS requirements? Does that count as a benefit? It could be a barrier/incentive. Hirsh suggested renewables might also have a hedge value for risk reduction.
- Dick Adams: Quantify contribution of efficiency to meeting peak loads. Need to produce some metrics for capacity value as well as energy.
- Fred Gordon: It’s a small value, but worth reporting. What’s local and what is regional might be important.
- Hossein Haeri: Might not be a valuable number for individual utilities.
- Hirsh: Deferred T&D has value at a minimum.
- Eugene Rosolie: Issue IIIA. Do not want the word “should” in utility goals.
- Mary Smith: Utilities need to know what savings are no longer in targets due to accomplishments by codes and standards.
- Ken Canon: What’s next? Staff will provide a draft schedule for uptake of issues for the CRAC.
- Lauren Gage: It might be helpful to focus that schedule on inputs and deliverables to supply curves and feeding of the RPM and other models used in the Plan development. Want to get to inputs, parameters and methodology. CRAC needs to weigh in on infrastructure max deployment (set at 160 MWa/year retrofit for Sixth Plan).
- Garcia: Inputs on issues welcome remainder of week? Yes.

Eckman adjourned the meeting at 4 PM

Attendees:

Name	Affiliation
Tom Eckman, Chair	NWPCC
Charlie Grist, Vice-chair	NWPCC
Charlie Black	NWPCC
Mary Smith	Snohomish County PUD
Lauren Shapton	PGE
Dick Adams	PNUCC
John Morris	Fluid
Nancy Hirsh	NW Energy Coalition
Hossein Haeri	Cadmus
Eli Morris	PacificCorp
Marty Stipe	Oregon Department of Energy
Karen Horkitz	NEEA
Bud Tracy	Idaho Public Member
Ken Canon	Public Member
Kevin Smit	EES Consulting
Josh Warner	BPA
Eugene Rosolie	Cowlitz PUD
Danielle Gidding	BPA
Lauren Gage	BPA
Roger Spring	Evergreen Consulting Group
Fred Gordon	Energy Trust of Oregon
Nicolas Garcia	Tacoma Power
Via Phone and Web Conference	
Pete Pengilly	Idaho Power Company
Geoff Carr	Northwest Requirements Utilities
Ken Baker	Idaho Industrial Consultant
Bruce Folsom	Avista
Bill Thomas	Northwestern Energy
Tom Schumacher	Benton PUD
Tom Karier	NWPCC
Glenn Blackmon -	WA Dept of Commerce
Dave Warren	WA PUD
Ralph Cavanagh	NRDC
Patrick Keegan	ECOVA
Marcus Wilcox	Cascade Energy Engineering, Inc.
G. Singh	Puget Sound Energy
Glenn Atwood	Seattle City Light
Alan Fraser	
Ken Eklund	IDWR
Stacey Donohue	Idaho Public Utilities Commission
Deborah Reynolds	UTC

Darroll Clark	
Juliet Johnson	Public Utility Commission of Oregon
Dave Hewitt	New Buildings Institute
Kathy Hadley	National Center for Appropriate Technology
Stan Price	Northwest Energy Efficiency Council
Kevin White	Benton PUD
Larry Blaufus	Clark PUD
Juliana Williams	