Energy Efficiency Post-2011
Phase 2

Workgroup 3 Meeting 1

July 21, 2010
9:00am to 12:00pm
Public Power Council
Conference Room
825 NE Multnomah, Suite 1225
Portland, OR

Facilitators:
Andrew Miller (BPA)
Jill Steiner (Snohomish PUD)

BPA Participants:
Josh Warner (BPA)
Matt Tidwell (BPA)

Meeting Overview

- Overview and "prioritization" of the CPA issues list that surfaced in Phase 1 of the Post 2011 process.
- Utilities and regional stakeholders shared their experiences in conducting CPAs and lessons learned with CPAs. A robust dialogue among participants took place around the many ways a CPA can be used and data collection methods that are needed to better characterize load.
- A desire for a formal and standardized CPA process surfaced that can be used to inform the Northwest Power and Conservation Council's regional assumptions on conservation potential.

Decision/Action Items

- Recommended agenda items for the next meeting to be focused around the role of BPA and where BPA can add value in the CPA process. Ideas include – standardized methodology, tool development and a regional consultative workgroup.

Meeting Notes[1]

1. AM: Focus of this group is to understand what public power customers want to get out of CPAs. What is the role that BPA can play for the region and for public power toward the goal of CPAs?
2. AM: it would be helpful to have any customers who have experience with CPAs to share their experiences.

[1] **Due to privacy concerns, only BPA staff and workgroup co-chairs are listed in these meeting notes.

3. JW: particularly with this group, it is very important that we get as much feedback and pro-active work from participants as much as possible. We heard in Phase 1 that CPAs can provide many benefits, so having a full discussion will help determine how BPA will move forward with supporting CPAs.
4. We're going to be doing a CPA in the fall and would like to hear from others who have done a CPA, how long, dollars, the dos and the don'ts, contractors to select, etc. We're going in there blind, so hearing lots from others would be beneficial.
5. AM: good segue to hear from others
6. JS: Snohomish is in the process of finalizing their second, formal, comprehensive CPA. What drives the schedule is the integrated resource planning process. In September it has to submit to the department of commerce and needs the CPA to be able to report on conservation potential. Two years ago was the first CPA, done by Quantec, which informed the utility's 2008 IRP. It assessed that 50% of load growth could be met with conservation. The results were used to set the first bi-annum target for I-937. We saw differences between this preparation and getting in line with the council's new targets. The methodology from Quantec was in line with the Council. Going into this year's IRP we wanted more alignment with the Council's methodology and measures. In our IRP we are looking at four different possible future scenarios that have been forecasted. For each, we had to access conservation potential; each scenario has different assumptions related to load, economic conditions, etc. so we get different conservation potentials. Then we're putting together an action plan. Our IRP is due in September in the even number years and our bi-annum targets for conservation are based at the end of odd years, so there's lots of time to assess conservation. The amount of time it takes "depends." The classic planning and evaluation answer. It depends on how much you want to drill down. When you start with some of the council measure characteristics and look at their applicability you can start to drill down to assess the applicability of those measures. We started out knowing that our results would be different than the Council's because we had lower saturations than the rest of the region, but we also have a different concentration of multi-family housing units. So depending on how wide and how long you want to make your matrix, you can get much wider and go into a lot more detail to really assess your conservation potential. It depends on your ability to characterize your service territory at a certain level of granularity. We did a residential inventory so we had a good grasp of housing type, vintage, water heater saturation levels, etc. We didn't feel we had as much of a handle on our commercial sector. By breaking this down by building types (18 different types according to the Council), so we're trying to get a sense of our building types and within those types what customers look like in those buildings, e.g. what percentage have electric space heat, what is the light saturation, etc. There is an infinite level of detail you can go toward. We used some data from various sources to get a handle on the buildings, but we didn't have the time or money to get a more accurate assessment of our buildings. We did a three hour board presentation on our last CPA and would be happy to share the slides.
7. How long did it take for the first and second CPAs?

8. JS: nine months of not very interactive work the first time. We met with the contractor and let them do some research but we didn't interact with them very much. This time we had about six months of very interactive development of our IRP. Reviewing the results with our program folks who would have to implement the findings and we spent about 170k.
9. So for the first time, it could take about a year? We do have some data, but the contractor would have to do some data mining.
10. JS: a year would not be an exaggeration, particularly if you had to do site visits, surveys, etc. which extend the timeframe.
11. Then you said you put together an action plan, and that took some time?
12. JS: ideally, you would have a couple months after a finished CPA and getting your IRP done. We'd been working in parallel paths, so it has felt a bit hectic. I would target getting your CPA done a few months before the IRP.
13. Does the consultant do the action plan with you?
14. JS: …we're not working on a five year strategic plan. You start with the wide end of the funnel where you look at all your options and then you narrow down into projected impacts or the conservation resource stream. There are two numbers, a base number and a stretch number, which we'll strive for but there's many exogenous variables that may affect our ability to get the higher number. The action will expand upon the annual base and stretch targets with program strategy, budget requirements, staffing and other resource needs, evaluation plans and adaptive management approaches.
15. With the CPA, do you look over a five year period? Then is your action plan covering the same period.
16. JS: we looked over a 13 year period and that gave us our 10 year action plan. It was the basis for our 2012-2013 I-937 bi-annum targets. 13 year planning horizon, but we don't really have a specific timeframe for the action plan. We know we're going to redo our IRP in two years. Action plan focuses on near term actions (2 to 5 years).
17. Did you look at doing least costly measures up-front, or when you put together the action plan, how did you design that, least-cost first?
18. JS: no, we have been to be able to develop a sustained infrastructure for delivery. There are options for heating that are costly now, but will have lots of savings in the future. These measures are not least-costly currently but we must pursue them so that the infrastructure is in place when we need it. Another thing different from the first CPA, is that based on the council's "technical and achievable" and "economic and achievable"…We're now imposing some ramping on some retrofit measures that indicates when we can get these resources..
19. AM: a couple things came up in that discussion that would be helpful to get thoughts from some of the smaller utilities, e.g. where they are in the CPA process. Then there is someone from EWEB, who might be able to share their thoughts. Then we could review the issue list.
20. 5 of 6 members of western Montana are in the process of doing our first CPA. Contracted with Charlie Black, 20k a piece is forecasted. About an 8-9 month process. Our objective was to look at our offering to see if we're missing any opportunities to see if we're participating in programs that don't make sense.

Trying to get a handle on what we can do here. Mostly residential with a little commercial. We haven't seen the first draft, next month. We're expecting to meet our objectives.

21. JW: What kind of information that your consultant was requested and that you had to gather and provide?
22. In the residential sector, find out how many were stick built, manufactured, multifamily, etc. Then how they were heated. Most hot water heating is electric with a little propane. We had a pretty good handle on that. You could use your county base and look at customer usage. Commercially, we had no info on square footage by location, so that's something we'll have to build on. We only have education guesses with heating.
23. I have not heard of Charlie Black.
24. He knows the Council's methodologies better than we do.
25. We just completed our second one. First was in '06. Second one, just read yesterday, we contracted with an insider who recently retired. We worked on it for about 8 months. We've had conservation for about 20 plus years and the biggest thing we learned is that our data management and collection and what we know about our customers is our biggest obstacle, so getting data about our customers was the most important and was a huge stumbling block, which we didn't expect cause we've been doing this for so long. We spent a lot of time just trying to characterize our load. Our biggest uncertainty is that we just don't know our load well enough. We don't have data on our commercial square footage. Over 8,000 commercial and industrial customers, but putting them into the right categories and integrating that with all of the projects we've done and aligning the measures with the Council's measure types was a big challenge, but once that is overcome, once the load is characterized, it's mostly done.
26. Did your contractor help you with this?
27. Most of the eight month period was getting the raw data and sorting through it. Cleaning up the data was where the work was. We've come out with a plan to better get data out of our customers when we go visit them.
28. AM: now we can go through the issues list.
29. JS: might be good to go through all of them comprehensively and then we could say for each one whether or not it's a big deal or not.
30. JS: we could spend a lot of time on the first bullet (part one)
31. AM: maybe, since this is the main question, we could put that in the parking lot and try to digest something more manageable for the moment.
32. AM: Size threshold question?
33. Thinking of I-937, we essentially have to do it.
34. I believe there is a size at which you start to ratchet down the amount of effort and detail you go into because eventually you're just not going to get the return and spend too much money. There are utilities that have mainly residential load and they have a good idea of their load, every few years they could have a residential survey. There is a limit.
35. JS: this would kind of roll back to how CPAs are used. They can be used for setting resource targets, as part of your "plan" for figuring out how you'll balance supply and demand. One way in which they haven't been as effective is in helping

programming and program opportunities. This is a different kind of conservation potential assessment. Important to think about all the ways in which they can be used and what the needs are on the utility level.

36. The cost of implementing the program is a lot more than a really good CPA. The results from all the data mining in order to get a good CPA pays dividends when you have to go offer a program.
37. JS: the larger the utility, the more opaque their customers are to them. Some of the smaller utilities may be that they really know their customers. You're CPA is as good as your understanding of your customer base.
38. We also piloted the utility potential calculator and I think that worked out well. So there are levels of potential assessments you could do. So one utility may be able to spend just a few days gathering data and entering it into a reasonably easy calculator. There could be a few levels of detail that people could use depending on the utility.
39. JS: we also used the UPC, and using it as a guide for data collection was pretty effective. Getting a hold of data collection templates would allow a pretty quick and easy run.
40. Would have been nice to have this data about ten years ago. It bothers me that we've come to this point where we don't have this data in order to do a really good CPA.
41. You can check your county records.
42. JS: we have a project planned where we're going to merge two databases to try and create this more complete look at the customer. We're looking at how to approach this.
43. Going back to the calculator, it's good to get a small utility in the "ballpark" but we also need to realize that the calculator is based on the council's plan and small utilities have to recognize that they may have things that don't fit into the council's plan.
44. The next best thing is to figure out how to get the data in order to do a fairly accurate CPA. I don't want to spend the money and not get a good estimate of savings.
45. One approach that I've been thinking about, all the data about developing your own CPA, I started an ongoing updates of the customer database, so the little bits and pieces are collected over time, e.g. this year, I'll update this study and then next year I'll update that study, so my approach is to continually update rather than try to get all the data right before you do the CPA.
46. That's a good idea.
47. AM: what role do customers want BPA to play and another question, what role is there for BPA to collect data for inputs? What do customers want BPA to do in assisting or collecting data to understand customer base. Standardizing a process to collect data is critical for regional programs and taking issues to the Council.
48. We can't do it region wide. We're treating it as a resource so we don't want to overestimate. It needs to be done on a utility basis.
49. JS: the calculator is based on the measures by the Council, ?...BPA's role could be in vetting those measure assumptions.

50. I tend to think of the calculator as "top down" approach and then they squeeze into a utility's slice of pie, so I could see BPA assistance in developing "bottom up" data sets for various customers. Maybe that would vary with the utility size and what resources they have available to do that. Could be everything from classifying the accounts, or doing some archer assessment of building stock. For Tacoma, we've been doing that on our own. We still have some holes. We classify a lot more building types than the CVSA would do. For us, the question might be different, than others.
51. Going to need to be different levels of CPAs. Not sure BPA will be able to help utilities given that we're all so different. We could describe what information would be beneficial.
52. In the early 90s, BPA did develop informal assessments for every utility in their service area.
53. JS: over half the cost of the home inventory was the development of the survey and the analytical approach and only half the money went toward asking customers questions, so coming up with a standard template and methodological approach that feeds into a calculator would be helpful, so that everyone knew for sure that they were collecting the data they needed when they survey their customers. If we start to collect the data on the utility level, we want to share this data at the regional level, i.e. take it to the Council. NEET recommendation was to work to develop some standard data collection tools that makes it easier to develop analysis on the utility and regional level.
54. You make a good point. For us, the biggest thing was categorizing our load.
55. AM: I'm hearing that BPA's role could be standardization on how to go about collecting data. Guidelines creation.
56. AM: what are some of the key timelines that must be met to make CPAs most useful?
57. Two things: it would be nice to have some guidelines, but I'm concerned about BPA getting into that area because people would then think that because BPA creates the guideline, people would think they would have to follow the guideline. We could come up with something, e.g. handbooks, resources, but it's important to do it so that it's not 'gospel.' In terms of timelines, they have to be set by individual utilities. PNGC does our IRP and we're trying to align CPA with the IRP, but that's internal. Trying to do it in coordination with BPA rate cases. I'm not too sure the establishment of timelines could be useful. A timeline regarding how long a CPA would take could be useful, but one that says "you need to do one before a rate case," doesn't seem to make sense.
58. JS: individual utilities are also affected by state requirements. It's not a BPA-centric question.
59. With Washington utilities, it tends to be a two-year cycle. Now I'm planning for 2012 and 2013, our CPA and IRP are looking at this timeframe. Have to look that far ahead to make sure we have the funds available for the programs.
60. JS: I think it's very dependent on how CPAs are being used.
61. The timeline for me is the five year plan for the 6th plan, which we're behind the curve.

62. AM: three of the “issues” surfaced: utility size threshold, what role do customers want BPA to play (whether with calculators or data collection), and how to assist.
63. AM: something that has come up often during this discussion is how the CPAs are going to be used.
64. Your description of the CPAs is a little narrow. I represent many interests; BPA is not an agency owned by the public utilities, is serves the interests of the region, so your CPA goals are a little narrow.
65. JW: it’s important that we focus on what’s going to add the most value to our customers and what role BPA should play.
66. I react negatively to “what is important to the utilities.” Other people are participating in addition to the utilities.

Break

1. AM: a good way to kick of this second part is: “Why do CPAs”
    a. What are the things a CPA can do for the all things we do?
2. For us, incorporate conservation into our load forecast. CPA helps with program planning; we can go measure by measure in connecting the dots on the CPA and which programs to have. Helps with TRC calculations.
3. I have a process question: I don’t understand why we’re talking about “why do a CPA.” It seems that everyone on the phone has a good idea of why to do a CPA. If this is a workgroup to talk about the mechanics of doing a CPA, that’s a little different than a workgroup talking about CPAs.
4. JS: the discussion is not just about how does BPA help individual utilities, but how do CPAs factor into improving the working relationship and our abilities to acquire aggressive conservation in the post-2011 period. I was hoping for a brainstorming session on all the ways how we might use these CPAs and for working together throughout the region. Do other folks feel that we have a strong understanding of all the reasons for CPAs? I think there is an opportunity to think more broadly about how we use CPAs and the questions this workgroup asks itself.
5. AM: the discussion will also allow us to structure the conversation going forward, e.g. the connection to utility size. There’s going to be trade-offs between what BPA can do now and what it can do post-2011.
6. JW: I think we’re all trying to get to the same place. Making sure everybody is on the same page. Not everybody probably knows about “why CPAs.” But then we need to move to how BPA can add value to this process? If we ask “where BPA can add value” too early, there might just be silence.
7. Do you ask “why”?
8. JS: I want to ask why, not a restrictive why, but a broad “why.”
9. AM: A CPA can characterize load and feed into programs.
10. JS: part of the “why,” we’re all cognizant of the how individual utility targets feed into the regional targets for public power, but the illustration I gave during the break was, for example, on the energy smart grocer program. We had BPA come out and talk about the program after their contract with PECI. One of the things they shared was the “performance target” associated with the contract between BPA and PECI. We asked how does that relate to identified conservation

potential. When BPA decides on program offerings, it gives us a lot more comfort in terms of knowing how these contributes to the goals, not stepping on each other's toes going after the same buckets of conservation.

11. I see a great benefit for the power side, for the IRP. This is why I need to be as accurate as possible, because we don't want to have bad data and have the planners using this bad data. So my focus is on the power side.
12. JS: The other thing is that a CPA can become a sort of repository for the data and information on measures, their costs, their savings, and what we know about our customers and that factors into how these measures apply or don't apply to our customers.
13. Is there a list of consultants that do the CPAs?
14. JS: I think the list is not very long. So Cadmus, EES Consulting, Charlie Black, are the three lead ones, Global Energy Partners is another. Building this list could be helpful. Not sure how BPA feels about being in that role.
15. AM: any other thoughts? Can move to prioritizing the list of issues.
    a. JS and I will probably put together a work plan.
    b. I've identified three main issues that have surfaced to the top.
16. AM: Action items for the August 4th meeting. The three issues I've identified.
17. What about expected size? Might be a good discussion.
18. JW: we want to be careful about the size discussion because other things we talk about will influence our discussion of "size." I don't want people to have the impression that we're going to have an absolute requirement about CPAs.
19. Wouldn't any utility that is growing want to do a CPA? If conservation is the least-cost, why would a utility not want to do a CPA?
20. JW: there's a difference between a utility wanting to do a CPA and what BPA can provide in terms of guidelines, etc.
21. JS: I would hope that our discussion would lead to things like depending on the characteristics of your utility there would be different approaches or levels. I would like to see a matrix of approaches and those are mapped to the specific needs of the utility, e.g. load situation, customer available data, historical accomplishments, etc. Then it could be a recommendation of this group that there's a value proposition to the utility for doing the CPA or not and there are ways to make it easier to do it.
22. A good idea, but I go back to what this workgroup should accomplish. It seems to me that one of the more important things that we need to come to some closure on is the role of BPA. Perhaps BPA could come up with the matrix to help utilities determine which level of CPA they should do. We should talk about the role of BPA in terms of issues like "does BPA develop tools for utilities to use," "should they set up guidelines," "does BPA have a role on a regional level and taking that data."
23. So you think the next question to address should be the role of BPA?
24. Yes yes.
25. JW: I tend to agree with that direction to frame it as "where can BPA add value." And maybe a useful tool might be for folks to submit comments now and mid-next week on where do people see BPA adding value. A number of ideas have come up already, e.g. templates, etc. If people could submit that information.

26. AM: next meeting is scheduled at the same time, 9 to noon. The main topic will be "what should the role be for BPA and where can BPA add value?"
27. I would like to hear from BPA on the role for BPA in terms of helping the utilities. What do you think BPA could do to help utilities?
28. JW: we could do very little, e.g. the calculator, we could help with methodologies, data collection, put guidelines and standards together. This is a relatively new thing to the region and to a number of utilities and we just want to see where customers feel and the region feels where BPA can add value. We don't have an interest in going beyond what customers are interested in. But during Phase 1 we heard a lot of interest in CPAs and we want to be responsive to that. We're actively participating, but we're a bit in listening mode. The discussion needs to be a bit more narrowed before we can really provide that feedback.
29. JS: I think there's going to be an interest in doing some "what if" discussions. We're all concerned about the regional targets and our relationships with those targets is changing and the targets are becoming more of a benchmark and mandate than something to aspire to. So the elephant in the room is what if we look at all the conservation potential among the utilities and we discover that it doesn't add up to the council's targets, then what would BPA's action plan be?
30. JW: these are things we should talk about and make some preliminary decisions about.
31. We would need some specific parameters for the utilities in order to go this, so that the guidelines and parameters are the same.
32. JS: if we decide that we want BPA to give substantive feedback to the Council, what would utilities do to help BPA in the endeavor?
33. The parameters and guidelines would probably be fairly consistent with the Council's numbers and methodologies.
34. JS: one of the ways of doing that is an approach that is aligned with the methodology and looking at how you would change and make modifications as necessary.
35. JW: Tom and Charlie would say they use the data that is available, so the more and more utilities that do CPAs, this data would be available for the Council's calculations.
36. AM: any additional comments or questions, please send to the email: workgroupthree@bpa.gov.