**From:** Hemstreet, Andrew W [mailto:andrew.hemstreet@pse.com]   
**Sent:** Thursday, December 31, 2009 2:00 PM  
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**Cc:** Ken.ross@terasengas.com; Shirley, Calvin E - Cal; Stolarski, Robert W; Ringel, H Grant; Gaines, Janet; Starnes, Todd A; France, H. Syd; Hopkins, William; Maclean, Thomas; O'Brien, Megan K; Younger, William J -Bill; Norton, Liz; Logen, Lynn; Englert, Eric; Wappler, Andrew W - Andy; Anderson, Daniel J; Anderson, Rebekah; Moran, Anna; Hemstreet, Andrew W; Atwood, Nancy; Worthington, Janet; Chahian, Mariana  
**Subject:** PSE's IRP Advisory Group Meeting - Dec 15, WAC 480-109 Compliance

Dear CRAG Members,   
    
A version of this email was just delivered to IRPAG members; my apologies to those of you who are receiving it twice!

Thank you for your participation in the discussion on compliance with the conservation provisions of WAC 480-109 (I-937) at the public IRPAG meeting on December 15.  In response to input received at that public meeting and our own review, attached are PSE's projected cumulative ten-year conservation potential and biennial conservation target range.  The changes from the draft figures presented on December 15 are due mainly to revision of the total conservation potential projections to be consistent with the data that was the basis for the graph in Figure 8-8 of the 2009 IRP, as well as the feedback received at the meeting.

<<WAC 480-109 Potential Target FINAL 12-30-09.pdf>>   
    
The cumulative ten-year conservation potential of 3,748,773 MWh (427.9 aMW) at the customer meter level, or 3,990,138 MWh (455.5 aMW) at the generator, primarily consists of the optimized level of demand-side resource potential selected by PSE's resource portfolio model for the 2009 IRP, plus the estimated potential for distribution system efficiency, also from the 2009 IRP.  This combined demand-side resource potential and distribution efficiency potential is referred to as Bundle D in the 2009 IRP.  In addition to the Bundle D potential from the IRP, PSE subsequently estimated the potential for electric energy savings from improvements to the efficiency of PSE's power generation facilities in Washington State.  The total of Bundle D plus generation facility efficiency improvements constitutes the total 10 year conservation potential that complies with the definition of conservation in WAC 480-109-107 and with the requirements for projecting the 10 year conservation potential in WAC 480-109-010.

The revised biennial target range is 608,032 MWh to 790,862 MWh (69.4 aMW to 90.3 aMW) at the customer meter level, or 647,980 MWh to 842,174 MWh (74.0 aMW to 96.1 aMW) at the generator.  The top of the range represents the maximum amount of conservation identified in Bundle D of the 2009 IRP that is technically available, cost-effective, and achievable in the long run. This includes all potential savings from any combination of utility programs, new codes and standards, and market transformation.   It assumes that all retrofit end use energy efficiency and fuel conversion potential is accelerated and acquired at an even rate over ten years without regard to real-world timing issues that would cause conservation resources to be acquired at an uneven rate.  The bottom of the range was developed to address a number of  short term market feasibility and uncertainty factors, including those considered for Bundle D38, which represents the planned level of conservation savings in the 2009 IRP electric resource plan, as well as others identified subsequent to the IRP.

By contrast, PSE's share of the Power Council's 5th regional plan would be a cumulative ten-year potential of 219.4 aMW (2009 - 2018, the latest period in the Council's published calculator) and a 2010-11 "target" of 42.7 aMW.

One request made at the December 15 IRPAG meeting was to show the path for acquiring the energy savings in the ten-year conservation potential if the low end of the target range were achieved.  The attachment includes such a projected path, although subsequent IRP analysis over the next ten years will be used to refine the amount and trajectory of the potential.  The Low Target scenario achieves the same level of savings as the High Target (Bundle D) level of savings by the 2020-2021 biennium.  This is consistent with the path followed by Bundle D38, which was the level of conservation potential used in the 2009 IRP electric resource plan.

The ten-year conservation potential and biennial conservation target range will be described and documented in compliance with reporting requirements in WAC 480-109-010 and filed with the WUTC by January 31, 2010.

Best regards,   
Andy

Andy Hemstreet | Program Manager, Energy Efficiency Services | Puget Sound Energy   
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