**Date:** June 12, 2007

To: Pacific Northwest Demand Response Project

From: Rich Sedano/RAP and Chuck Goldman/LBNL (Ken Corum??)

**Subject:** Cost-effectiveness Working Group: Approach and Issues

At the May 2, 2007 meeting of the Pacific Northwest Demand Response Project, we agreed to form three Working Groups to explore DR issues in more detail (Costeffectiveness, Pricing, and Integrating DR into Distribution System Planning and Investment). We also agreed that our initial focus would be on the Cost Effectiveness Working Group. This memo provides suggestions for a proposed approach to be taken by the Cost-Effectiveness Working Group.

We envision that the Working Group will develop and discuss strawman proposals for the evaluation of cost-effectiveness of Demand Response resources. One potential outcome would be for state regulators and utilities in the region to use (and possibly adopt) consistent approaches to assess the cost-effectiveness of different types of DR resources.

Conceptually, we think it may be helpful to organize the discussion along the following lines and questions:

- 1) Screening Level Analysis: In the initial screening of DR program options, what types of costs and benefits should be accounted for and what analytic methods are appropriate?
- 2) Portfolio Level Analysis: In evaluating the treatment of DR program options as alternatives to elements of an integrated utility resource plan, what types of costs and benefits are accounted for and what analytic methods are appropriate?
  - a. Are there some benefits of DR that are not fully captured in either screening or portfolio level analysis (e.g., reduced volatility of energy prices, mitigation of market power, reliability benefits, environmental effects)?
- 3) Dynamic pricing tariffs/strategies: For dynamic pricing tariffs such as RTP or CPP, what type of cost-effectiveness analysis should be conducted?
  - a. Is cost-effectiveness analysis appropriate and/or necessary for a voluntary, "opt-in" tariff?
  - b. If a default or mandatory tariff is being considered or adopted for a group of customers, what type of cost-effectiveness analysis is appropriate?

This structure allows us to differentiate between DR programs in which customers receive explicit compensation for their load curtailments (beyond the pricing signal sent by their underlying retail tariff) vs. dynamic pricing strategies. It also provides a practical framework that mimics the existing planning framework to talk through the issues and process used by utilities as they assess and evaluate different types of DR program options.

## Next Steps:

- 1) We propose to develop a set of structured questions that go into more depth in these three areas, which would be addressed by several utilities at our first Working Group meeting (see attached questions).
- 2) We also propose to have one or more conceptual presentations from outside experts on one or more of these topic areas to provide input and common foundation for the Working Group.

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