

## Short Summary of Demand Response Cost-Effectiveness Protocols

(Consensus Framework filed Nov. 19, 2007 in OIR.07-01-041 by IOUs and other parties)

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### Purpose

1. For ex ante cost-effectiveness evaluations of DR programs.

### Analytic approach

2. Value DR benefits at avoided costs of new combustion turbine (CT).
3. Use expected load impacts measured using the approved load impact protocols.
4. Time horizon: the length of the DR program (capital items may be amortized longer)
5. Use the four perspectives in the Standard Practice Manual (TRC, RIM, etc.)

### Avoided Generation Capacity Cost

6. CT cost annualized to \$/kW-year using a real economic carrying charge rate.
7. CT annual cost reduced to reflect “gross margins” earned by selling energy. (Not agreed; subject to litigation)
8. Annual value of capacity is allocated among hours of the year in which the program can be used, in proportion to utility’s hourly LOLP. Assume program is called when needed most.

### Avoided Energy Costs (relatively small impact for most DR programs)

9. Will be consistent with method used to determine gross margins (see item 7).

### Avoided Transmission and Distribution Costs

10. Whether DR programs avoid investments in T&D capacity is often uncertain. If so, avoided T&D cost will be based on marginal costs of T&D substation equipment, principally transformer capacity.

### Other Benefits

11. Non-event-based DR programs may reduce the need for procuring ancillary services (spinning reserves, etc.). Once this becomes clearer, utilities will consider this factor.
12. Costs of meeting standards for criteria pollutants should be included in avoided costs.

### Program Costs

13. Cost of customer incentives should be consistent with forecasted usage of the program.
14. Program costs should include all costs incremental to the program. Non-incremental marketing and overheads should only be included in the portfolio evaluation.

### Caveats

15. Framework provides guidance to be applied flexibly, not binding rules.
16. Parties may contest the appropriateness of [modifications to] the method and the input values in the DR application process.

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Status 4/29/2010:

- Consensus Framework has not been adopted by PUC.
- PUC instructed utilities to use Consensus Framework in 2009-2011 DR program applications.
- PUC is working on modified DR cost-effectiveness protocols.