### Comments of TURN on

#### Post-Release 1 MRTU Functionality for Demand Response

November 12, 2008

The ISO is proceeding diligently with plans to be capable of accommodating very complex products to providers of demand response (DR). This is in keeping with the FERC October 17<sup>th</sup> Ruling requiring that ISOs accept bids from DR for ancillary services comparable to any other A/S capable resources.<sup>1</sup> For the many reasons listed below, TURN urges the ISO to proceed slowly at each step. We must assure that we can walk before we can run, and that we are indeed running in a useful direction. Information provided in the CPUC's Demand Response docket (A. 08-06-001, *et al.*) supports our concern that providing full AS and RUC functionality using the method the ISO proposes could be extremely costly, of limited value to participants and ratepayers as a whole, and perhaps even have adverse consequences.

#### I. Functionality and Cost-Effectiveness

The ISO intends to offer AS functionality by adapting features of the Participating Load (PL) model, originally created for pumping load. Under MRTU, settlement for the original PL customer, the Department of Water Resources' State Water Project (DWR-SWP), will be at the Custom LAP (CLAP), rather than the default LAP used for non-participating load. Requiring all DR to settle at the CLAP, as provided under the Dispatchable Demand Response (DDR) model (also called DR as PL in MAP), creates the need for costly utility systems to identify detailed locations for each source of DR, forecast load by CLAP separate from the default LAP, forecast the demand response by CLAP, and

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<sup>&</sup>lt;sup>1</sup>John Goodin, CAISO, Introduction and Overview to meeting presentation November 5, 2008, slide 6. http://www.caiso.com/2075/2075b9b043c0.pdf

maintain detailed tracking of customers who leave the DR program. Both SCE and PG&E have noted in recent filings how costly this prospect will be:

- "The integration of DR into MRTU and MAP will require enhanced communications, Information Technology (IT) hardware and software, and process systems. Moreover, the ability to dispatch and settle DR by CAISO local capacity areas or Custom LAPs will require IT infrastructure and procedures to forecast, schedule, dispatch, measure, report, and settle DR by these LCAs or Customer LAPs...The estimated costs for this IT infrastructure work are not included in this 2009-2011 DR Application... " (A.08-06-003, PG&E Amended Prepared Testimony, 9/19/2008, Chapter 3, p. 3-6).
- Edison concurs that reaching the level of granularity of information needed to configure CLAPs could take at least a year. The pricing of DR at the CLAP may lead to mismatches between where DR is needed and where DR is offered. (CAISO, Participating Load Issue Identification, Prioritization and Resolution, 11/5/2008, p. 2).

These considerations of cost for IT systems and ongoing forecasting at a

granular level are completely separate from the cost of the telemetry requirements to provide these advanced products. As PG&E notes:

 "Specific activities related to modification of the settlement systems will include: 1) installing 5 minute interval metering, if required; 2) modifying upstream computerized metering system (Customer Care and Billing System) to retrieve meter load in 5 minute intervals and provide aggregated meter load data at Custom-LAPs to ISO Settlements; 3) modifying computerized metering system to receive, store, and process meter data in 5-minute intervals at Customer-LAPs, where meter loads for PL resources need to be flagged uniquely; 4) developing a process to submit metering load in 5 minute intervals at Customer-LAPS to CAISO; 5) implementing a new version of Master File with Customer-LAPS at the computerized ISO Settlement System "nMarket"; and 6) developing a tool to track migration of load-in and -out of the DR program pool and financial awards from "bid to bill" for DR load at Customer LAPs." (PG&E, ibid., p. 2-48).

In sum, there are potentially huge cost consequences for the LSEs in providing this level of functionality for DR load. TURN opposes aggressive efforts to provide this level of functionality until it is clear that there are

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2

significant benefits to participants and ratepayers as a whole from these advanced products.

While PG&E is proposing a pilot to test PL features with a few large Auto DR customers, PG&E admits that "under the pilot conditions, it is not clear if the market value of the products provided will be enough to compensate customers for the loss of utility due to curtailment." (PG&E, <u>ibid</u>., p. 2-48). PG&E may need to provide incentives that are greater than the value of the DR products if the customer does not have time to invest in systems to decrease their cost of providing AS. (Response of PG&E to TURN-2, Q 8 in A.08-06-033, attached). "If the customer compensation required for energy and AS, and telemetry upgrades is higher than the market value of the energy and AS, a long-term program can not be sustained." (PG&E, <u>ibid</u>., p. 2-49). If these products are not even cost-effective for the participant, there is little hope that they are cost-effective for ratepayers as a whole.

It is worth noting that in other ISOs demand response is bid in as the net load, entailing fewer complications than the full-scale PL functionality proposed by the CAISO. (See Data response of PG&E to TURN-2, Q 11 in A.08-06-003, attached) Such a system is more manageable. While it may not include the most advanced features that the ISO is planning (AS and RUC), it is probably more prudent to ascertain whether these features are cost effective first prior to rolling out a full scale and very costly functionality. Furthermore, while some research has indicated benefits from market impacts due to DR participation in advanced products, it is not clear that the size of those benefits would be replicated in the California market where the preponderance of capacity requirements are contracted a year in advance.

The ALJ Ruling of February 27, 2008 in A.07-01-041 encourages IOUs to evaluate whether the transition to PL is in its customers' interests. In TURN's view we should await the results of the 2009 AS pilots before contemplating

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3

proceeding with the advanced functionality for DDR, especially if that requires data at the level of CLAPs.

The ISO has recently proposed an interim DR product, Proxy Demand Resource (PDR) which is settled at the default LAP, rather than the CLAP as is PL. PDR is expected to provide many of the advantages of PL, including eventually AS, at far less cost. TURN supports further exploration of this product for cost reasons outlined above, as well as due to the adverse consequences of PL settlements as discussed below.

## II. Adverse Consequences

DDR will settle at the price derived in a Custom LAP, rather than the default LAP. This proposal contradicts a policy decision made earlier by the CAISO Board that all demand should settle at the LAP level (apart from an exception for DWR-SWP and certain Governmental Entities). There was to be no cherry picking, and no leakage from the large IOU LAPs. TURN does not believe that the CAISO Board has ever explicitly revised that policy. The following adverse consequences could arise due to allowance of settlements at Custom LAPs:

a) a potential DR provider with load in a high-cost Custom LAP would be incented NOT to supply DR, because the load would settle at the higher Custom LAP price for all of the energy the customer actually consumes during the event period, rather than at the lower cost default LAP price.

b) a DR provider with load in a low-cost Custom LAP would be incented to be a free rider. By doing nothing, the load would settle at the lower Custom LAP price.

c) There may be opportunities for gaming across areas -- clever market players could figure out how to do it.

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TURN strongly urges the CAISO to request a detailed review of these potential adverse consequences by the Market Surveillance Committee. It was never the policy of the CAISO Board to permit settlement at sub-LAPs, apart from a few original exceptions. These adverse consequences could completely undermine the implementation of demand response products, and cause costshifting to non-participants.

Because PDR settles at the default LAP, TURN advocates proceeding only with PDR functionality until this these potential adverse consequences are resolved.

5

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# Attachments

Response of PG&E to TURN 2, Q 8 and Q 11, in A.08-06-003.

6



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