



651 Commerce Drive  
Roseville, CA 95678

phone (916) 781-3636  
fax (916) 783-7693  
web [www.ncpa.com](http://www.ncpa.com)

## **Comments of Northern California Power Agency Flexible Ramping Product Cost Allocation – Straw Proposal**

**March 28, 2012**

Northern California Power Agency (“NCPA”) provides the following comments in response to CAISO’s Flexible Ramping Product Cost Allocation Straw Proposal posted on March 15, 2012. NCPA operates in the CAISO as a Load Following Metered Subsystem (“LF MSS”). NCPA is uniquely situated in the market as a LF MSS, and based on the facts described below NCPA strongly believes that any costs incurred by CAISO for procurement of Flexible Ramping Products should not be allocated to LF MSS entities.

### **MSS Load Following Requirements**

NCPA, operating as a LF MSS, is contractually obligated to balance its integrated portfolio of supply and demand in real-time through use of Load Following Capacity, to ensure its net portfolio deviations (whether such deviations are attributed to supply or demand) are contained within a tight deviation band. If NCPA is unable to balance its supply and demand portfolio in real-time, NCPA is assessed significant Load Following Deviation Penalties in accordance with the CAISO Tariff. In order for NCPA to successfully follow its load, it must reserve capacity on its generation resources that can be dispatched by NCPA in real-time to manage its portfolio balance. The capacity reserved by NCPA is called Load Following Capacity. Load Following Capacity is reserved as Load Following Up Capacity (“LFU”) and Load Following Down Capacity (“LFD”). NCPA uses its Load Following Capacity to regulate in real-time to respond to its portfolio deviations. Load Following Capacity is not free. Load Following Capacity has an associated opportunity cost that NCPA must bear because the MW quantity of Load Following Capacity reserved by NCPA cannot be offered into the energy or ancillary services markets.

As explain by CAISO in the straw proposal, the Flexible Ramping Products (both upward and downward capacity) are designed to specifically target the 5-minute real-time dispatch (“RDT”) imbalances due to variability and uncertainties. CAISO proposes to allocate the costs for the flexible ramping product based upon deviations

that are aligned with setting the procurement target. CAISO claims that the expectation of potential deviations across all market participants causes the CAISO to procure the flexible ramping products, and that the total system need will reflect the offsetting impacts of positive and negative deviations.

NCPA is already contractually required to use its Load Following Capacity to self-manage the same variability and uncertainties CAISO is working to address with Flexible Ramping Products. Once NCPA reserves Load Following Capacity on its generating facilities, the reserved capacity is used by NCPA to manage load forecast errors, generation deviations and/or other deviations within its portfolio, as required, up to and through real-time. The MW quantity of Load Following Capacity reserved by NCPA is based on its anticipated variability and uncertainties. Similar to the process described by CAISO for determining what amount of Flexible Ramping Products are required, NCPA performs statistical analysis using historical data and other factors to determine the amount of capacity it will reserve as Load Following Capacity.

A LFF MSS is required to adjust its supply portfolio during every 10-minute interval to respond to changes in its load obligation. Since each of NCPA’s interchange points with CAISO are metered, NCPA’s loads and generation deviations are measured on a 10-minute settlement interval basis. For example, please see the simplified example below:

**LF MSS Self-Management of UIE**

Settlement Interval	10-MIN Interval	10-MIN Interval	10-MIN Interval	10-MIN Interval	10-MIN Interval	10-MIN Interval
Demand	+10	+5	-2	-6	+5	0
Supply	+10	+5	-2	-6	+5	0
Net UIE	0	0	0	0	0	0

\*\* Based on Settlement Quality Meter Data

In this simplified example, NCPA self-manages its variability and uncertainty in real-time (throughout each 10-minute interval) by dispatching its reserved Load Following Capacity to follow any real-time deviations. In the first 10-minute settlement interval NCPA’s load positively deviated by 10 MW; therefore in the same settlement interval NCPA increased its generation output by 10 MW to follow the load deviation. To the extent NCPA, operating as a LF MSS, is unable to self-manage its deviations in real-time within a tight deviation band, NCPA is exposed to significant deviation penalties; therefore NCPA already has a very strong incentive to manage its real-time variability

and uncertainty. During the past 10 years of operating as a LF MSS, NCPA has successfully operated within its deviation band more than 99% of all hours.

Allocating Flexible Capacity Products costs to LF MSS entities based on gross deviations is not consistent with CAISO's cost allocation principles, and is not warranted. For example, in the first 10-minute settlement interval above, NCPA would be allocated Flexible Ramping Products costs based on 20 MW of uninstructed deviation (10 MW from load, and 10 MW from generation), when in fact NCPA intentionally adjusted its portfolio in real-time to self-manage its deviations; resulting in zero impact on the system. Since NCPA is contractually obligated to self-manage its variability and uncertainty, CAISO can reduce the system Flexible Ramping Products procurement targets upfront to account for the fact that CAISO will not need to manage variability and uncertainty attributed to NCPA's loads and resources.

Since NCPA is already contractually obligated to self-manage its variability and uncertainty in real-time, and NCPA's failure to do so will result in significant load following deviation penalties, NCPA strongly believes that LF MSS market participants should be exempt from Flexible Ramping Products cost allocation. This is strongly correlated and supported by the principle of cost causation, in that CAISO can reduce its Flexible Ramping Products procurement targets to account for NCPA's requirement to self-manage its respective variability and uncertainty in real-time. This treatment is consistent with how other costs are allocated to MSS LFF entities.