

Submitted By	Company	Date Submitted
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NRG submits these comments on the CAISO’s March 11, 2013 Contingency Modeling Enhancements Issue Paper.

NRG supports the CAISO’s efforts to develop alternatives for acquiring and pricing reserve (aka corrective) capacity that (1) will diminish the need for Exceptional Dispatch, and (2) recognize the value of capacity – not just energy - relative to network constraints.

The CAISO seeks feedback on these specific questions:

- 1. Is it appropriate to provide compensation to generators for corrective capacity, and, if so, what is the appropriate basis to determine the amount of capacity compensated? For example, a resource is moved to a lower dispatch point in order to provide a larger upward corrective capacity after a contingency. Should the appropriate compensation be based on the movement (downward in this example) or the corrective capacity that is created (for the resource to eventually move upward)?*

Contingency reserves – capacity held available to provide energy in the event of a contingency – are currently compensated for their capability to produce energy when directed, not for any dispatched movement directed to provide this capability. Said another way, while it may be appropriate under Order 755 to provide a mileage payment for resources providing regulation (in part because it is expected that such resources will be dispatched within their regulation range, while it is far less likely that energy from contingency reserves will be dispatched), it is more appropriate to provide resources that are providing corrective capacity based on the amount of corrective capacity they provide. If a resource is dispatched to a lower energy output to provide additional corrective capacity, the compensation for that resource should include – but not be limited to – the resource’s energy opportunity cost. However, that compensation should be based on the amount of corrective capacity provided.

- 2. Should all resource capacity contributing to meeting the corrective action be compensated at the resource location locational marginal capacity price or should only those resources that demonstrate a lost opportunity receive compensation?*

The CAISO’s current contingency reserve design provides compensation that includes both a biddable capacity payment and the resource’s energy opportunity cost. The corrective capacity that the CAISO contemplates is essentially location-specific contingency reserve, and, as such, should mimic the current market design by providing both a biddable capacity payment and an energy opportunity cost.

Contemplating location-specific contingency reserves will surface, invariably, the issue of local market power. NRG expects that, consistent with the current energy market design, where the CAISO must obtain corrective capacity in situations in which there is a non-competitive supply of corrective capacity, the capacity bids associated with that supply of corrective capacity will be mitigated. What the mitigated capacity bid price should be is a topic for further discussion.

- 3. When there are multiple system operating limit constraints binding such that a resource is contributing to meeting the corrective capacity of multiple constraints, how should the*

resource be compensated considering its contribution to multiple constraints?

The CAISO's current market software is capable of calculating a Locational Marginal (energy) Price in situations in which a resource is providing counter-flow to more than one binding constraint. NRG expects that the Locational Marginal (capacity) Price of a resource providing corrective capacity could be determined from the resource's energy and capacity bids in a similar way.