Submitted By	Company	Date
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NRG offers the following comments on the CAISO's February 14, 2012 Cost Allocation Guiding Principles Straw Proposal.

• Causation and synchronization. Allocating costs on a causation basis has an undeniably simple appeal, but, in realty, identifying which individual market participants are causing which costs is a complex, if not impossible, endeavor. Allocating costs incurred based on CAISO projections of need to market participants based on actual operating outcomes may temptingly seem like applying the principle of causation. However, as the CAISO has aptly noted in the Straw Proposal, the actual outcome in a settlement interval may have nothing to do with what drove the CAISO to procure services in advance for that settlement interval. Causation is a useful guiding principle, but given that the CAISO runs markets in which it must procure services in advance of actual operating outcomes, causation cannot be applied independent of the principle of synchronization, that is, without looking to the factors that drove the procurement in the first place.

The CAISO procures the ancillary services it requires in advance of real-time operations based on a host of factors, such as projections of real-time conditions, which includes the mix of generation, load and interchange, historic variability of demand, and the most severe single contingency. What actually transpires in real-time may or may not match the projections the CAISO used to procure the needed services.

The primary purpose of ancillary services such as operating reserves is to ensure continuity of service to load when operating conditions change unexpectedly. The CAISO must operate the bulk power system taking into account the possibility of unexpected change in conditions, but it cannot foresee exactly what change will take place. There is no clear causal link between actual deviations and the procurement of ancillary services, at least not in the hour in which the deviations take place. The trends of such deviations may inform *future* CAISO ancillary services procurement, but it is unlikely that any individual deviation specifically and directly affected procurement decisions and costs for the hour in which it occurred. The need for flexibility does not correlate to individual deviations, but to more complex factors, such as the nature of connected demand, the mix of the generation fleet, the severity of interchange ramps, etc.

While causation is a noble guiding principle, it is misguided to look at causation as it relates to individual deviation events. Causation should be applied on a longer time horizon. The loss of a resource may give rise to the need to dispatch energy from operating reserve in a given interval, but the CAISO did not buy operating reserve expecting that particular unit to trip in that interval. Even if the resource that tripped is the largest single contingency that defined the CAISO's operating reserve requirement for that hour, it's not as if the CAISO would have purchased NO

operating reserve that hour if that unit was not operating.

In sum – causation is a useful principle, but causation is complex, and efforts to apply this principle using simply understood allocators – like net negative uninstructed deviations – will very likely violate the principle of synchronization.

- **Comparable treatment.** This, too, is a principle that may seem simple but is likely to be more complex than it appears. Certain market participants may be "similarly situated" with regards to certain attributes or characteristics, but not with regards to others. In order for this principle to be successfully applied, the market participants should be similarly situated with regards to the characteristic or attribute that gives rise to the cost to be allocated.
- Manageable and incentivize behavior. NRG supported the CAISO's recent efforts to restructure its Grid Management Charge so that CAISO costs would be more predictable. Costs that are allocated to encourage (or discourage) particular behaviors may not be predictable. It may be possible to apply these principles in concert with the principle of causation, but it seems likely that doing so will require looking at cost allocation on a longer-term basis (looking at the things that drive how much of a product or service the CAISO acquires), not shorter-term basis (moment-by-moment conditions).
- Policy Alignment. The CAISO has an unavoidable role in carrying out the state's policy
 directives. The CAISO is also charged with operating efficient competitive markets. Allocating
 costs to support policy goals may not support efficient competitive markets. In an ideal world,
 how the CAISO structures its markets and allocates costs would promote meeting policy goals
 through efficient, competitive markets rather than sacrificing one mandate in pursuit of the
 other.
- **Rational.** One could hardly object to a principle that says the benefits of allocating costs in a particular way must outweigh the costs of doing so, yet the CAISO's costs of executing a particular cost allocation are seldom transparent to market participants, which complicates the practical application of this principle.