

NRG Energy, Inc. Comments on Consideration of Alternatives to Transmission or Conventional Generation to Address Local Needs in the Transmission Planning Process

Name	Company	Date Submitted
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NRG Energy, Inc. (“NRG”) submits the following comments with regards to the CAISO’s proposal for Consideration of Alternatives to Transmission or Conventional Generation to Address Local Needs in the Transmission Planning Process (“TPP”).

The CAISO envisions a three-step process for transitioning to a greater reliance on preferred resources to meet local area needs: (1) developing a generic resource catalog by differentiating resources based on their response times, energy durations and availabilities; (2) determining an effective mix of non-conventional resources that meets the needs of the local area; and (3) monitoring the development of the non-conventional generation solution. At the September 23 TPP meeting, the CAISO invited parties to bring it ideas and proposals for how non-conventional resources can meet local area needs. The CAISO intends that the results of its consideration of non-conventional alternatives will be incorporated in the initial results of the 2013-2014 TPP analyses expected to be released in January 2014.

In light of California’s commitment to preferred resources (Demand Response (“DR”), Energy Storage (“ES”), Energy Efficiency (“EE”) and renewable resources), and the preliminary reliability plan for Southern California’s emphasis on using preferred resources to meet local needs, it is both timely and appropriate that the CAISO has initiated this effort. This effort is very important and should be started now. To the extent that NRG has concerns about this effort, those concerns involve (1) the proposed schedule for this effort and (2) the lack of clarity regarding the process the CAISO is proposing, including what opportunities stakeholders and other agencies will have to participate in, review and inform the CAISO’s analyses and conclusions.

With regards to schedule: NRG views this essential effort to fundamentally reshape the way in which local reliability needs are met as requiring the same level, kind and duration of engagement as other efforts to deal with fundamental aspects of how reliability is maintained, such as the efforts to develop the RMR agreement and to craft the fundamental aspects of the Resource Adequacy (“RA”) program. Expecting thoughtful and durable results from this groundbreaking effort in only three months seems very optimistic.

NRG views this effort as fundamentally affecting the nature of meeting reliability requirements for the following reasons. Through its history, the CAISO has met Southern California local area reliability needs primarily, if not exclusively, through gas-fired generation. Because gas-fired generation is assumed to be fully available (except when on forced outage, an allowance for which is built into the Planning Reserve Margin used in the RA Program), if local area needs are met primarily or exclusively through gas-fired generation, it is reasonably presumed that if the area is reliable for the most affecting contingency at the time of peak demand, that area is reliable at all other times. The “top-down” nature of the RA program design makes the same assumption.¹ Conversely, if the CAISO constructs a particular

¹ Two different approaches to the RA program design were considered: the “bottoms up” approach and the “top down” approach. The “top down” approach was ultimately selected in D.05-10-042. In the “top down” approach adopted, “Maximum Cumulative Capability” buckets are used to ensure that load-serving entities do not rely too

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“mix” of intermittent, use-limited and availability-limited resources that successfully meets a narrowly defined set of reliability needs for a projected peak-hour demand in a given month, it is not clear whether that mix of resources will meet all of the local area’s reliability other needs in all other hours in that month. This may be especially true when considering the ongoing need to perform transmission or generator maintenance in off-peak seasons. The need for resources to maintain reliability is not always the greatest during times of peak demand, as the CAISO’s “duck chart” and initial projections of monthly flexibility requirements shows. As a result, additional analyses to determine if the resource mix that meets the reliability need at the time of peak demand also meets the area’s reliability needs for all other hours in the month may be needed. This is not to say that local area needs cannot be met except through gas-fired generation. Preferred resources can and should play an important role in meeting local area needs. But reliably meeting all local area needs through preferred resources *under all conditions* will require more analysis than just peak-hour analysis of a particular resource mix.

With regards to process: NRG does not fully understand the process the CAISO is proposing and exactly what the final work product of this effort will be. For example, NRG does not understand whether the CAISO envisions developing a single mix of non-conventional resources that can meet the local area’s needs at the time of peak demand, or developing alternative mixes of non-conventional resources, each of which could each meet the local area’s needs at the time of peak demand. It is also not clear to NRG what criterion or mix of criteria (cost, performance, speed of implementation, network effectiveness) the CAISO will use to develop the resource mix to pursue.

Further, it is not clear how stakeholders and regulatory agencies will engage in this very important process. At the September 25 TPP meeting, the CAISO indicated that it was asking parties to bring proposals to the CAISO as part of this process. While such an invitation has the feel of a procurement solicitation, it is not clear how the CAISO will evaluate these proposals and what role stakeholders and others will play in that evaluation process or in the review of the final outcome.

In conclusion, the time and circumstances strongly support the need for a process to consider how preferred resources can maintain local reliability, and the CAISO is to be commended for starting this work now. However, such work cannot just narrowly focus on maintaining reliability at time of peak demand, but also must ensure that any resource mix adopted maintains reliability under all other conditions. Given the importance of this process, which will transform fundamental aspects of the way the CAISO carries out its core mission, as well as the potential to establish precedents for how preferred resources will meet reliability needs for years to come, NRG respectfully requests the CAISO consider using a more rigorous, deliberative and participatory process for this critical work.

heavily on use-limited resources to meet their RA requirements. However, it is unclear to what extent those MCC bucket limitations constrain procurement, or are enforced, in the RA program. To NRG’s understanding, the MCC bucket limitations do not now constrain RA procurement, perhaps because as the RA program matured, parties moved away from limited products (such as liquidated damages contracts for energy) and more toward physical capacity resources to meet their RA obligations.