Black Start and System Restoration Phase 2

Issue Paper

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Summary:

Calpine supports the development of black start capability in the Bay Area. Based on our understanding of the limited set of qualifying resources and market power concerns, we agree that the while procurement process can be competitive, compensation may necessarily be based on cost. We also agree that in order to make capital investments, and opportunity to earn a return of, and on that capital confirms the need for a multi-year term. Finally, the viability of the underlying resource should be addressed as part of this proceeding.

Competitive Procurement Process

Calpine believes that a competitive process can be developed to acquire black start capability ("BSC"). Once the "cranking path" is identified (e.g., 230kV Bay Area facilities) a request for proposals can be issued to identify specific resources capable of, and costs associated with modifying the power train to include BSC.

The RFP should be sufficiently specific as to capacity needs and operational requirements, while recognizing the very real constraints of the Bay Area Air Quality Management District (or relevant air district) and restrictions on the use of liquid fuels.

Compensation

If indeed, there are very few resources that can provide effective BSC, marketbased compensation could prove problematic. As such, cost-of-service principles could be applied, allowing not only a recovery of incremental variable costs and invested capital, but a reasonable return on that capital. To the extent that the addition of BSC exposes the owner to higher NERC compliance, cyber

1/30/2017

or physical security standards, those costs should also be included. This compensation principle was applied to the synchronous condenser modifications at Huntington Beach and was the historic practice for the calculation of RMR costs.

The level of required capital might be material and would be depreciated over some reasonable period of time. Most likely, this depreciation schedule would require a multi-year commitment for compensation.

No Need to Create a New Wheel.

Calpine recently participated in a similar request for BSC in the PJM market. Schedule 6A of the PJM OATT describes the provision of, procurement of, and compensation for BSC. While Calpine will quibble with some of the conditions therein, Schedule 6A provides an excellent starting point for the development of a CAISO (or LSE) procurement process. The resulting RFP (issued July 1, 2013) is also available on the PJM website.

http://www.pjm.com/media/documents/merged-tariffs/oatt.pdf

Underlying Resource

The obligations imposed upon a Black Start Resource must be flanged-up with the availability and viability of the underlying resource. It obviously serves no purpose to invest in BSC if the underlying facility is not sufficiently compensated for ongoing operations. Sufficient overall compensation could be provided through a multi-year bilateral or RMR agreement. Absent such a commitment, the ISO should plan for both routine revisits of BSC capability as well as exit conditions for Black Start Resources that seek to withdraw from the market.

Thanks