Panel Discussion: 9/25/2020 PC Special Session - Storage As a Transmission Asset Meeting

Panel Format:

- Each panelist will have 15 minutes to make a presentation. Stakeholders will be asked to hold questions until after all presentations have been completed. A combined Q&A session will be reserved for the end following the completion of all presentations.

Introduction and Questions to the Panelists

This panel is intended to serve as a stakeholder-driven discussion to explore a concept articulated in FERC Commissioner James Danly's dissenting statement to the Commission's Order approving MISO's proposal to allow for the selection of a storage facility as a transmission-only asset (SATA) in the MISO Transmission Expansion Plan. *Midcontinent Independent System Operator, Inc.*, 172 FERC ¶ 61,132 (Aug. 10, 2020) (Danly, dissenting). In paragraph 7 of his dissenting statement, Commissioner Danly suggests that:

> storage facilities can provide the transmission-related services that MISO contemplates when they offer the best solution to a transmission constraint. However, provision of such services should be through the sale of an ancillary service in competition with other generation facilities, as is done today for ancillary services such as reactive power and frequency control.

The purpose of this discussion is to simply explore: whether this proposed construct is feasible, the proposal's pros and cons as compared to treating storage as a transmission asset, and how (if at all) the construct might assist in identifying an efficient, cost effective solution to a particular reliability violation or market efficiency driver. Even though these topics are triggered by an opinion dissenting from the Commission's acceptance of a MISO filing regarding storage as a transmission only asset, an exploration of these issues during this ongoing stakeholder process further adds to the diversity of views being expressed during our robust discussions.

In furtherance of these objectives, PJM encourages each panelist to address the following questions as part of a 15 minute presentation, with a particular focus on the top 3 questions:

Highest priority question for focus:

1. How would you write the product definition and how does that product definition differ from existing ancillary services? What would be the product definition of the specialized ancillary service that could serve as an alternative to addressing transmission issues through the use of a storage as a transmission asset? Would the proposed ancillary service be designed to be open to all potential providers of the service (including generation and demand response) or should the ancillary service product definition be designed with explicit recognition of both the value and limitations of energy storage?

Second highest priority question for focus:

2. PJM would need a comparative methodology to assess whether an ancillary service solution (as opposed to a traditional transmission solution) should be deployed to address a reliability violation or market efficiency driver. How would you propose that assessment be made? What specific measures would be utilized to assist in an "apples to apples" comparison that leads to a reliable and cost effective solution?

Third highest priority for focus:

3. What do you see as the benefits to creating a new ancillary service product in place of treating energy storage as a transmission asset? What are the downsides of the proposed ancillary service product approach?

Other potential questions for panelists to touch on:

4. Today, PJM's compensation for ancillary services include market-based compensation (such as in the case of operating reserves and regulation) or cost-based compensation (such as in the case of black start and reactive support). How would you recommend that energy storage and other potential providers of this new ancillary service be compensated, and would that suffice to attract solutions such as energy storage?

5. Does the ancillary service concept make it easier (or more difficult) to answer questions about: whether to allow the asset to participate in other markets, whether a transmission owner is impacting market outcomes and LMPs when it operates the unit, and issues relating to who is responsible for ensuring that the unit maintains its state of charge?

6. Would PJM need to mandate that the provider of the ancillary service continue to provide the service, at least until a transmission solution were implemented, in the event the provider were to seek to exit the market? How easy would it be to obtain a new provider at that point and what limitations on exiting the market should exist, if any, so as to not jeopardize reliability? What recommendations do you have for PJM and stakeholders to consider on this issue?