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Mr. Ake Almgren
Vice Chair, PJM Board of Managers

Mr. Howard Schneider
Chairman, PJM Board of Managers
PJM Interconnection, LLC
2750 Monroe Boulevard,
Valley Forge Corporate Center
Audubon, Pennsylvania 19403

March 29, 2017

Re: Agenda for the April 6, 2017 Liaison Committee Meeting

Dear Messrs. Almgren and Schneider:

The members of the Liaison Committee ("LC") and I appreciate the Board of Managers' ("Board") comments to our proposed topics for the April 6, 2017 Liaison Committee meeting. We look forward to an engaged and constructive discussion of the following agenda:

- 1. Opening Remarks (5 minutes)**

- 2. The Future of Demand Response in PJM (35 minutes)**

Capacity Performance established a bright-line requirement that all capacity resources must be available to PJM throughout the delivery year. This single product design has become one of the most contentious aspects of Capacity Performance. PJM has definitively stated its intent to investigate avenues to improve market opportunities for Demand Response ("DR"). Potential reforms may include defining new revenue streams for Demand Response outside of the Reliability Pricing Model ("RPM") or further refinement of the capacity aggregation product. In light of PJM's ongoing effort to craft a whitepaper discussing the future of demand response in our markets, stakeholders wish to explore the following issues with the Board:

- a. What is the future of DR?

- b. In the near-term (e.g. next two years), what tactical improvements are needed?
Examples may include:
 - i. Aggregation rules;
 - ii. Measurement and Verification;
 - iii. Transition to CP; and/or
 - iv. Modifications to Price Responsive Demand (“PRD”).
- c. There are currently multiple models by which DR can participate in PJM’s markets including DR load-reduction programs, PRD, and wholesale cost avoidance through peak-load management. What are the comparative benefits of these models? Do other models exist that could, or should, be implemented by PJM?
- d. In the longer-term (e.g. beyond two years), what is the end state of DR? The discussion would explore subjects like:
 - i. Energy market participation;
 - ii. Capacity market participation; and/or
 - iii. Developing other revenue streams or cost avoidance mechanisms.

3. Changes in Wholesale Energy Markets (40 minutes)

The current wholesale electric market construct and the physical systems built to meet reliability needs were developed during a time when the vast majority of electric demand was met by large, centralized plants that burned fuel to produce electricity. Wholesale electricity markets were developed with the goal of minimizing the cost of electric production necessary to satisfy reliability. In short, the most efficient, lowest-cost centralized stations were utilized and set clearing prices in wholesale markets whether energy or capacity. The past several years have seen the introduction of larger quantities of distributed and renewable generation spurred on by several factors including technological improvements, governmental support, and customer demand for such resources. These resources are displacing energy production from traditionally fueled centralized stations and are changing the mix of generation technologies within PJM. These developments pose opportunities and challenges.

While these resources often have lower marginal operating costs and desirable environmental characteristics, their intermittency may pose challenges in assuring reliable operations and efficient market prices. The LC seeks to explore the potential impacts and opportunities, and potential challenges associated with integrating these types of resources as they become a larger share of PJM’s asset base.

4. Market Rule Corrections and Changes – Financial Impacts on Market Participants (30 minutes)

What options are there for market participants whose investments become stranded or whose contractual arrangements are negatively impacted when PJM market rules are modified to correct a

design error, or to address an urgent market flaw or reliability issue? This circumstance has come up numerous times in the last several years where existing rules were found to create operational and/or reliability issues for PJM. The necessary change in rules is financially borne by market participants that fully complied with PJM market rules, followed intended market signals, and assumed finality and integrity of PJM market outcomes.

In some cases, PJM market participants have been provided with transitional markets as bridges, in other cases there have been phase in of rules, in still others there have been the option to be kept whole when market rules have changed, and in some cases providers were forced to bear the entire economic consequence of the reform. From a market-wide perspective some, instances affect a small subset of market participants are impacted, and in other instances the fallout is more widespread. The various LC sectors may offer examples and suggestions on how to address these issues including opinions on retaining the status quo, and discuss with the Board the potential for a standard set of parameters to apply when these situations arise so as to provide enhanced stability and confidence in investments.

5. Closing Remarks (5 minutes)

The LC members and I reiterate our appreciation for the Board's assistance in crafting this agenda. We look forward to productive meeting.

Very truly yours,



Michael R. Borgatti
Director – RTO Services
Gabel Associates, Inc.
Liaison Committee Chair

CC: Mr. Andy Ott, PJM Interconnection, LLC
Mr. Dave Anders, PJM Interconnection, LLC