Morgan Stanley Capital Group Inc. (MSCG) believes the negative impacts of the PJM Capacity Performance proposal, if implemented, would be significant. However, we were not able to identify like-minded parties with which to form a coalition for a formal Board presentation by the October 28 deadline. For that reason, we have chosen to submit these comments informally to PJM Staff.

Conceptually, MSCG would be supportive of “pay for performance” designs for capacity reimbursement. The idea that parties should be remunerated for performance, and have payments adjusted or recaptured for non-performance, is aligned with our core principles for market design, compensation and assignments of costs and payments to causation and beneficiaries. However, there are a sufficiently large number of areas needing significant improvement in the specific proposal at issue which cause us to believe that it should not be implemented as currently proposed. Additionally, any proposal, even one we would find to be ideal, should not be implemented without substantial advance warning, due to the significant impact of any change on existing contractual agreements, for a wide variety of market participants.

MSCG believes that the capacity performance issues with gas fired resources in PJM are rooted in gas/electric coordination problems, and the market rules, and bidding and scheduling protocols, developed for generators with onsite fuel inventory. These rules prevent PJM dispatchers from fully utilizing generators with “just in time” fuel delivery characteristics. Some of these problems are intrinsic to either or both of the relative physics of the two systems and the nature of the natural gas infrastructure. Others, however, are within PJM’s control to improve or remedy.

Our core recommendation is to focus on how to address reliability concerns in the short term via some suggested PJM operational, bidding and scheduling protocol changes which are described in more detail below. These suggested changes will allow PJM to more fully and dependably utilize the pools gas fired capacity resources.

There are several simple operational steps that PJM could take to improve gas fired resources’ Capacity Performance. For short term reliability concerns, the operational solutions suggested below could be immediate, temporary and cost effective. Forcing a change to the RPM methodology for this winter will be difficult and unfairly disruptive to certain sectors of the market.

During the region’s transition from primarily coal and oil fired generation to primarily natural gas fired generation, PJM should consider adjusting current bidding and scheduling rules for gas fired generators needed for reliability. Current market rules and scheduling systems were developed back when power plants had coal piles or fuel tanks – i.e., on-site inventory. As the power generation stack evolves toward gas burning and the inherent just-in-time fuel delivery requirements, market rules and
bidding and scheduling protocols need to evolve as well. Considering this and the fact that a generator’s offer price is locked at 1800 the day prior to the operating day, it would be important to understand how many gas outages were actually due to an inability to procure gas, versus how often the “forced” outage was an economic decision not to procure gas at a price that is much greater than the generator’s locked offer price. Clearly, the “locked price” provision subjects the generator to unreasonable economic harm. Our contention is that allowing a generator to update prices in real-time would greatly reduce the frequency of “forced” outages caused by fuel delivery problems that are beyond the generator’s control.

Additional changes we believe would make material improvements in generators’ ability to perform in stressful conditions include:

1) Aligning the electric day and the gas day. Particularly in light of PJM rules for bidding, scheduling and dispatching power, having an “electric” day that spans two gas days makes it very difficult to plan gas deliveries in a way that matches power demand. MSCG is agnostic about whether the gas industry should change to align with the electric day or vice versa, but strongly believes that the two need to be in sync for both systems to operate smoothly. PJM can’t change the nationwide gas industry practices, but can unilaterally choose to alter its “electric day”. Alternatively, generators should be allowed to offer different prices for different segments of the electric day that correspond to the applicable gas days.

2) Allow generators dispatched for reliability to change offers in real-time. Consider a gas fired generator’s day-ahead decision making process. The generation owner has to ascertain the price of next day natural gas to calculate production cost. The generation owner then needs to determine if, at the given estimated cost of gas, it is likely to receive an economic day-ahead award. If the generator appears uneconomic the owner will not buy gas for the next day, as doing so would entail bearing unreasonable financial risk. However, being a capacity resource, the generator owner is required to offer in the next day market. So, given this dilemma, the question becomes, at what price to offer? Ultimately, the answer is that the generation owner will offer at a perceived risk adjusted intra-day gas price that is significantly higher than the day-ahead gas price.

Because current bidding and scheduling protocols lock a generator’s offer costs at 1800 prior to the operating day, if that generator is called on in the “reoffer” period, there is often a wide difference between the actual and offered gas costs. The variance can go in either direction - - cheaper or more expensive. The changes can be attributed to both changes in price and changes in gas transportation availability. When gas can be secured more cheaply than estimated, the generation owner can’t make the unit available on the lower price because of the “locking” rule. Some believe that this problem can be worked around if PJM will allow generators to change offer prices once the minimum run obligation has been fulfilled. However, our experience during the 2013-2014 winter is that whatever the validity of this option in theory, it is not made available in practice. Generators should therefore be allowed to adjust their terms of offer continuously, to reflect what can be
achieved at any given time with any given amount of notice. We would also note that this problem would potentially create particularly unfair performance evaluation issues under the new Proposal, and would suggest that any assessment of performance for reliability dispatches after day-ahead would need to be on a “best efforts” basis with regard to ability to procure gas supply.

3) Issue reliability dispatch instructions prior to the conclusion of the daily gas trading period, which is generally concluded by 10:00a.m. Eastern Prevailing Time. This would allow generators to make necessary arrangements for gas supply in order to perform on their dispatch obligations. Under the current system, generators must choose between “guessing” about their likelihood of being dispatched in advance of notification, or waiting until receiving a firm dispatch, but having to make gas supply arrangements during a highly illiquid timeframe, after most gas suppliers have committed the bulk of their portfolio. Either of these choices can result in both uncertainties about ability to perform, and adverse cost consequences not attributable to a generators’ own poor choices or decisions.

4) Do not issue financially binding day-ahead awards for reliability. We argue that, from a reliability perspective, this is counterproductive for gas-fired generators. Consider the gas generator in the above example that appeared uneconomic during the next day gas trading window and did not buy or schedule any gas. As discussed above, the generation owner must offer at some price. What happens when PJM needs the unit for reliability and issues a day-ahead award, which is unknown to generation owner until day ahead market results are posted and gas is not available? The reliability of the entire power pool is compromised, and the generation owner is at extreme negative economic risk. This is a “lose-lose” situation. PJM suffers a degradation of reliability, and the generation owner can suffer a huge financial impairment.

Additional observations on Proposed Capacity Performance penalties and resulting negative investment incentives

PJM’s penalty proposals are extremely asymmetric. More equitable solutions need to be devised. We observe that current PJM resource specific capacity offer rules allow generators to offer up to 100 percent of ICAP with no regard to actual past performance. Precisely, the rules state that the EFORd cannot exceed the greater of the EFORd calculated based on outage data for 12 months ending September 30th prior to the Base Residual Auction, the 5 Year Average EFORd based on outage data for 12 months ending September 30th prior to the Base Residual Auction, or the EFORd submitted by the market participant in their Base Residual Auction Sell Offer. This rule design seems to attempt to prevent generators from withholding available capacity. On the surface this appears to make sense. However we suggest PJM consider the negative incentive on capacity prices created by allowing generators to offer capacity greater than historical performance. What if generators were allowed to offer NO MORE THAN some calculation of past performance? Wouldn’t this work toward accomplishing PJM’s reliability goals without totally overhauling the current RPM model? Generators would have a clear incentive to work toward improving long term actual reliability. This adjustment to current rpm rules would motivate gens to perform without subjecting the solid performing 99 percent available unit
to crazy high penalties for not performing for 6 shortage hours because a mouse coincidentally chewed thru a control wire at same time pool experienced a shortage event. This volatility of capacity cash flows is very concerning to the investment community as well. The rule as proposed in its current form is much more manageable for firms with large portfolios within PJM that can spread risks across multiple resources, and conversely creates a very large risk for firms that have few or single resources within the PJM footprint.

Thank you for taking the time to consider our viewpoint. If there is any desire for follow-up communication, please contact Michael Phenix at (914) 225-9891, or via e-mail at Michael.Phenix@morganstanley.com.