EquiPower Resource Corp. (EquiPower) is pleased to offer the following comments on PJM’s August 20th Capacity Performance Proposal. EquiPower owns and operates a generation fleet of approximately 8,500 MWs, with more than 3,600 MWs located in PJM. The EquiPower fleet includes more than 6,300 MWs of natural gas generation so we know well the challenges presented by the gas/electric coordination issues.

As the owner of approximately 3,300 MWs of generation in New England, EquiPower was an active participant in the ISO-NE stakeholder discussions on the ISO-NE Performance Incentive (PI) proposal, which was recently approved by FERC. During those discussions, we expressed our view that generators should not be penalized for limitations outside of their control and therefore, we applaud PJM for including in the Capacity Performance Proposal exemptions from penalties when PJM has not dispatched a generator or the generator is precluded from either partially or fully operating due to a transmission constraint.

Before addressing the specifics of the Capacity Performance Proposal, we want to address other market rule changes that PJM is considering and should implement whether or not the Capacity Performance Proposal moves forward as proposed:

- **PJM should change the timing of its Day Ahead Market (DAM)**.
  As PJM knows, the gas market is liquid only during a few hours each weekday morning when many gas generators procure gas for the next gas day. And, generators must nominate their gas deliveries by the gas pipeline Timely Nomination Cycle deadline of 12:30 PM EPT in order to have assurance that their gas will reach their plants. (We support FERC’s recommendation to delay the close of the Timely Nomination Cycle to 2:00 PM and ask PJM to voice its support also.) It is important that PJM change the time that the DAM clears from the current 4:00 PM to a time prior to the end of the Timely Nomination Cycle so that gas generators have an opportunity to lock in their gas purchases to match their DAM commitments. Without this change, generators will continue to estimate their DAM commitment when they nominate their deliveries or worse will lose the ability to utilize any firm transportation that they own if they do not anticipate clearing in the DAM. We understand that on January 7th, 8,600 MWs of the 9,300 MWs of gas generators that could not get fuel had not cleared in the DAM. Moving the DAM clearing time to be earlier than the end of the Timely Nomination Cycle will help minimize the amount of generation that is unable to find and schedule gas in response to PJM dispatch.

- **PJM should allow hourly supply offers and re-offers throughout the electric day**.
  As was evidenced last winter, gas prices are incredibly volatile on the coldest days. Gas generators need to be able to adjust their offers hourly to help address the mismatch between the gas and electric days. Generators need to price their offers in the early hours of the electric day based on one day’s gas price and in the later hours based on the next day’s gas price.
when PJM calls on a generator to operate after the clear of the DAM, generators need to be able to reflect the intraday price of gas in their supply offers. Generators should not be put in the position of facing substantial financial losses, or even bankruptcy, by responding to a PJM dispatch that would require them to buy gas at a much higher price than what was estimated when they submitted their reoffers on the day prior to the current electric day. To its credit, ISO-NE is implementing this same market rule change as of December 2014, and it is expected to materially improve a significant gas/electric coordination problem.

Capacity Performance Proposal

EquiPower offers the following comments on the Capacity Performance Proposal for PJM’s consideration:

Risk/reward balance

It appears to EquiPower that the risk/reward balance is heavily skewed on the risks of participating as a Capacity Performance product. PJM has proposed setting a Stop Loss Limit at 2.5 times the annual RPM revenue for those generators providing the Capacity Performance product but has also limited the risk adder that can be offered based on an expected cost of non-performance as a function of the historical system EFORD. This risk adder does not take into account the reliability of individual generators or the risks of a catastrophic event that could occur if a generator was unable to perform due to a long forced outage during a series of Cold Weather Alerts. It appears that the only upside for the generator that sets the clearing price would be the return on the investment that the generator must make to be eligible for the Capacity Performance product. This upside will likely not be enough for generator owners to risk the significant downside that could materialize from the proposal.

EquiPower recommends that PJM could achieve a better balance of risks and rewards by:

1. Allowing generators to include a risk adder that incorporates all of the risks that the generator faces to provide the Capacity Performance product. The market will discipline the bidding of the generators as they seek to clear the BRA as the premium product with the assumed higher clearing price.

2. Changing the Stop Loss Limit to a multiple of Net CONE but less than the full annual revenue that a generator might receive in the BRA. Since generators will not know what their annual revenues will be prior to the BRA, tying the Stop Loss Limit to a multiple of Net CONE, which is known, will allow generators to build their assessment of that risk into their offers. Setting the Stop Loss Limit at less than the total annual revenues will also make financing of new build much easier than if the generator is at risk of losing more than its annual RPM revenues. Also, setting the Stop Loss Limit at less than the total RPM revenues also eliminates the significant credit that generators would need to furnish if they could lose much more than their RPM revenues. ISO-NE’s initial PI proposal did not have any Stop Loss Limit, but feedback from the generator and financial communities convinced them to set an annual Stop Loss Limit equal to three times the Monthly Stop Loss Limit, which is equal to price where the declining clock auction begins.

3. Instead of returning the penalties for non-performance that some generators will pay back to the load, spread those penalties among the generators that performed better than their UCAP
That will give generators an incentive to outperform their UCAP level, which is what PJM is depending on each generator to provide. Again, the ISO-NE PI proposal distributes the penalties paid by some generators that underperform to the generators that over perform and provides additional upside to incent generators to provide their output when it is most needed.

Eligibility of gas-only generators

EquiPower is the owner of gas-only generators in the PJM footprint. As such, we have listened intently to PJM on how it believes gas-only generators will be able to qualify for the Capacity Performance product simply by being willing to pay up for natural gas products and services that were previously “too expensive.” We believe that PJM should be more broadly and better informed as to the ability of some gas-only generators to perform up to the reliability level expected by purchasing firm gas transportation, no-notice service, or other products.

As PJM knows, even if a generator has firm service back to an unconstrained point on the gas system, if the generator does not submit gas nominations in the Timely Nomination Cycle it loses rights to that firm service for the next day. The firm service does nothing to allow a generator to flow gas or operate its unit intraday. As we mentioned earlier, PJM should modify the timing of the DAM so that generators have visibility to gas price, can buy gas, and schedule it during the Timely Nomination Cycle. Also, it appears that some parties have told PJM that no-notice service is readily available as long as generators are willing to pay for it. This is a fallacy. If some no-notice service exists at a few locations inside PJM, we doubt that it is adequate to fuel more than a few generators, never mind the entire PJM gas-only fleet. If PJM has not yet discussed the availability of no-notice service and similar products with the major pipelines, we recommend you do so immediately. EquiPower believes that the interstate pipelines will paint a far less optimistic view of the availability of no-notice service and similar “flexible” products to the PJM gas-only generator fleet than PJM seems to currently believe.

Gas-only generators that are behind an LDC have even greater obstacles to qualify and likely will not be able to do so. EquiPower knows of peaking generators that have gas storage agreements in place which are rendered useless when the LDC designates a “Critical Day” when usage is highest. The ability of the generator to vary its hourly take or pull from storage is eliminated. A peaking unit that received a dispatch schedule would be obligated to run or purchase fuel for the full 24 hours of the gas day if it knew of the need to run and scheduled gas during the Timely Nomination Cycle, but only if allowed by the LDC.

EquiPower also believes that the hourly flexibility to schedule the full day of gas then to “sell it off hourly” when the generator does not need to run has no basis in reality. During last winter, pipelines and LDCs did not provide the flexibility that PJM believes exists and gas-only generators will not be able to count on that flexibility when submitting offers into the 2015 BRA. In addition to the massive financial harm implicit in such a strategy, it is critical to note that this approach does nothing to deal with the ratable flows that are likely to be required by the pipelines on the days that concern PJM most.

If a generator takes more gas than it has nominated during Critical Days it is more than just an economic issue. The pipeline or LDC can institute a meter specific Operational Flow Order (OFO) or even physically
shut the valve to the offending generator leading to reliability problems for PJM. Additionally, pressure problems, as occurred last winter, prevent a generator from operating even if it has firm service and scheduled gas during the Timely Nomination Cycle. There is nothing that a generator can do to buy out or avoid these issues on the gas system. There is no contract, firm transportation or otherwise, that can preclude, prevent or forestall operational problems on pipelines. EquiPower believes that the corporate officers of gas generators, who face these issues, will have a difficult time attesting that their units can meet the current obligations of the Capacity Performance product, and therefore, PJM may end up with insufficient quantity of the Capacity Performance product to meet the 85% of capacity target.

EquiPower is not asking PJM to change the definition of the Capacity Performance product but suggests that PJM does need to modify its expectations of what gas-only generators can realistically do at any price and/or reduce the amount of the Capacity Performance product that they are seeking (85% of the total MWs) since many of the gas-only units will be unable to meet the requirements to participate.

**Interplay with the FERC Gas-Electric Efforts**

We applaud PJM’s efforts to address the performance issues of generators during the polar vortex winter of 2013/14. Clearly this extreme winter surfaced weaknesses in the gas-electric systems, and we acknowledge generators need to improve their performance. However, we have seen poor performance in other areas of the electric system in the past and have seen a much more deliberate and even handed set of solutions, namely by FERC. The Capacity Performance product as presented is based on shaky assumptions about the existence and access to natural gas products and seems to place gas generators with the entire risk of not only their performance but also the of the natural gas delivery system. To that end, EquiPower recommends PJM pursue a broader set of input concerning the gas markets and transition the introduction of the Capacity Performance product as outlined below. In addition, EquiPower believes that the efforts by FERC on gas-electric issues could have an influence on the PJM efforts, and PJM may be well advised to let the FERC process play out. It should be noted that FERC (along with ISO-NE) has been focused on the gas-electric issues prior to the winter 2013/14 when PJM received its introduction to the potential issues with the two systems, and FERC has been very deliberate and measured in their approach as we believe they understand the complexities of the problems that exist and the limitations of the potential solutions that are just and reasonable. We believe that putting a solution in place that is based on the full spectrum of input and facts, and that has been well thought out and tested, to the extent possible, has the greatest potential to solve the issue at hand and guard against unintended consequences that could actually exacerbate the problem.

**Transition**

EquiPower understands the urgency for PJM to put the Capacity Performance product into place. However, we question whether adequate time is being allowed for generators to determine how they can participate as a Capacity Performance product and provide PJM with the amount of MWs it seeks. Recognizing that PJM will need to run incremental auctions to provide this product in the 2015/16, 2016/17, and 2017/18 delivery years anyway, EquiPower recommends that PJM delay the institution of the Capacity Performance product until the 2016 BRA. This extra year will give generators additional
time to find ways to provide PJM with the reliable product it seeks as opposed to non-participation from generators that could qualify if given adequate time to prepare. It will moreover avoid the possibility of Base Capacity product price collapse in the 2015 BRA if too little supply can meet the requirements of the Capacity Performance product and is forced into the Base Capacity product.

We expect that the incremental auctions will provide a higher reliability product for the 2015/16, 2016/17, and 2017/18 delivery years and will provide incremental revenue above the already established BRA clearing prices. We also assume that PJM may need to adjust its 85% target in the early years if it discovers that supply resources cannot meet the stringent requirements of the Capacity Performance product without undertaking capital projects to install dual fuel capability, etc.

EquiPower would be happy to further discuss these comments and recommendations should PJM desire. Please contact us using the information below.

Comments submitted by:

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