LS Power Response to CCPPSTF Questions

1. How do you define the problem that you are trying to solve with your proposal?

There is a somewhat concerted effort by at least one technology class of generation resources to receive out-of-market payments (outside of the PJM settlement system) for tangible and intangible benefits the resource owners claim the current market does not currently recognize and therefore does not compensate the resources for those benefits. Resources owners contend that in certain circumstances, without the out-of-market payment the resource will most likely be forced to retire.

At least one state legislature has approved a subsidy for at least one nuclear resource located in PJM and there are lobbying activities on-going in other states within the PJM footprint to obtain subsidies for nuclear resources located in those states and within the PJM footprint. There is also an attempt in at least one state within PJM to obtain subsidies for coal plants located with that state.

These activities appear to be the most recent "subsidies-du-jour" and as other technologies find the competitive markets challenging, there may be additional attempts for additional subsidies to other technologies. LS Power does NOT, within the Capacity Construct/Public Power Senior Task Force (CCPPSTF) proceeding, take a position on the validity of these or future subsidies, and LS Power is proposing a method to accommodate the subsidized resources within the competitive market while minimizing the damage to the competitiveness of the market.

Our proposal also addresses and mitigates concerns with other proposals that are currently being vetted in the CCPPSTF. Namely:

- Limits price suppression from subsidized resources through the use of a weighted average clearing price as opposed to the VRR curve, which is nearly vertical
 - 1,000 MW movement on the VRR curve in RTO represents a \$25+/MW-Day impact in pricing
 - Using a weighted average approach results in a 1,000 MW resource having a less than 1% impact on the pricing in RTO
- Mitigates the concern of bidder behavior changes in the PJM and NRG re-pricing proposals and therefore mitigates the "race to the bottom" inherent in those proposals.
- Allows the non-subsidized resource owner, not the market design as in other proposals, to determine if they want to continue to clear in spite of a subsidized resource impacting the competitive market
- 2. Does your proposal accommodate resources with state government preferences on a non-discriminatory basis? How?

Any resource with a state preference as defined within the LS proposal is accommodated under the LS proposal, regardless of technology.

3. Will your proposal encourage or frustrate state policy objectives or other subsidies?

LS Power has not reviewed each state's policy objectives or other subsidies under consideration or yet to be considered and therefore, each state will have to determine on their own if the LS proposal encourages or frustrates their varied objectives.

However, since the LS proposal accommodates subsidized resources (as defined in the proposal) each state would have to take into consideration the impact on the competiveness of the market in determining whether the LS proposal encourages or frustrates their policy objectives and other subsidies.

4. What is your definition of an actionable subsidy (you may include specific factors such as MW or economic thresholds, timing of payment, rate and reasons for the subsidy, etc.)?

LS Power has adopted the IMM's definition of an Actionable Subsidy with a couple of changes to be consistent with the LS Power proposal. The LS Power definition of an Actionable Subsidy is as follows:

Actionable Subsidies include, commencing with 2017, any payments, concessions, rebates, or incentives other than Market Revenue where Market Revenue is defined as revenue that is received under a tariff administered by PJM or other RTO or ISO and regulated by the Commission. Actionable Subsidies shall not include (i) payments (including payments in lieu of taxes), concessions, rebates, subsidies, or incentives designed to incent, or participation in a program, contract or other arrangement that utilizes criteria designed to incent or promote, general industrial development in an area; (ii) payments, concessions, rebates, subsidies or incentives designed to incent, or participation in a program, contract or other arrangements from a county or other local governmental authority using eligibility or selection criteria designed to incent, siting facilities in that county or locality rather than another county or locality; or (iii) federal government production tax credits, investment tax credits, and similar tax advantages or incentives that are available to generators without regard to the geographic location of the generation, or (iv) financial hedges negotiated and entered into bythe parties. Additionally, Actionable Subsidies shall not include revenue or costs that are supported through any contracts obtained in any state-sponsored or state-mandated procurement processes that are deemed to be Competitive and Non-Discriminatory by the Office of the Interconnection and the Market Monitoring Unit. (The requirements for a procurement process to be deemed "Competitive and Non-Discriminatory" are specified in Attachment DD, Section 5.14 h) (7) ii).)

5. What impact does your proposal have on energy markets?

A concern was raised that the LS Power proposal could impact the energy market since more generation could clear the market under the LS proposal compared to other proposals. However, this concern is only valid in the event that generators that do NOT clear the capacity

market do not participate in the energy market. The performance of the energy markets indicates otherwise. In fact, the most recent state-legislated subsidy to a PJM generation resource resulted in that generator NOT clearing the BRA (public information released by the owner) and yet the subsidized payment to that resource is paid on the basis of the energy generated (not capacity) by that resource.

6. Will your proposal result in or mitigate long term price suppression in the capacity market and/or the energy market?

Unfortunately, accommodating subsidized resources in the capacity market will cause pricesuppression in the market. However, we believe the LS proposal minimizes the pricesuppression impact.

7. How do you think your proposal will impact bidding behavior?

The LS proposal is specifically designed to mitigate bidding behavior changes that could lead to the "race-to-the-bottom" as owners reduce their offers in an attempt to obtain a capacity obligation that is inherent in the other re-pricing proposals.

8. Please address the effects of your proposal on potential market manipulation.

The initial design of the LS proposal, not presented to the CCPPSTF, allowed the resource owner to determine magnitude of the movement in the clearing price the owner would be willing to continue to clear. However, after discussion with others, there was a concern expressed that this could have manipulation concerns and we changes the proposal where the movement is determined by the quantity of subsidized resources compares to the total quantity of resources.

9. Please address the potential for "leakage" (the effects of one jurisdiction's actions on other jurisdictions).

One of the consequences of individual state actions is the negative impact to other states as well as the market. The LS proposal clears the BRA similar to today and therefore if the BRA clears without the state providing the subsidy separating, then other states within the LDA will be impacted by the state subsidy.

10. What is the preferred implementation timing?

The changes should be implemented in the May, 2018 BRA for the 2021/2022 DY. Subsidies have already been approved in at least one state and there is activity in other states to provide subsidies so the sooner the better to mitigate and minimize the impacts.

11. For repricing proposals, please explain your treatment for "in between" resources and why you believe it is the right approach ("in between" resources are those that did not clear in one stage of a repricing proposal but offered at a level less than the final clearing price determined in a second stage).

The LS proposal is specifically designed to address the concern in other proposals for the treatment of the "in between" resources. Under the LS power proposal, all resources that clear the Step 1 BRA are assured of obtaining a capacity obligation providing they elect the Capacity Impact Election prior to the conducting the BRA. If resource owners do not want to risk obtaining a capacity obligation if the final clearing price should be below their BRA offer price (and cleared the BRA) they have that ability under the LS proposal by NOT electing the Clearing Price Impact Election. This is solely the owner's decision and not the market design.

12. How does your proposal address RPS, RGGI, ZEC and REC programs?

Under the LS proposal, subsidized resources are accommodated by allowing them to continue to participate in the market without the threat of MOPR-type treatment.