NRG Response to DSPP Markets and Pricing Committee

Stage 1: DER Penetration, Barriers and Utility Role

Ultimately, NRG Energy, Inc. ("NRG") encourages the Commission to create a market infrastructure where third-party suppliers will bring their investment capital and *systems* of resources to the market for dispatch by either the New York Independent System Operator ("NYISO") or the local Distribution System Planning Platforms ("DsPP"). By aggregating hundreds or thousands of small resources, third-party suppliers will be able to provide significant value to the local utility systems and the NYISO. Indeed, NRG is already working on the advanced Energy Management Systems ("EMS") necessary to facilitate this vision and has already actively invested hundreds of thousands of dollars in a host of behind-the-meter technologies. NRG is encouraged that the Commission is attempting to develop a long-term market platform that will allow such innovative behind-the-meter technologies to thrive.

However, currently many of the end-user and third party competitive DER infrastructure investments are going under utilized. This is largely the result of inadequate and inappropriate market structure.

In the Reforming the Energy Vision ("REV") proceeding there is an immediate opportunity to take first steps and plan short- and medium-term actions. the Commission has significant opportunities within its control to promote increased utilization of existing gridlocked and/or bottlenecked assets. Commission action will also increase deployment of new DER systems in the near, medium and long-term time horizons. This includes incenting the rollout of new and expanded DER system that rely on existing, proven technologies, as well as those that showcase cutting-edge, next-generation DER technologies. And with the recent court decision finding demand response to be a retail service, there is a critical need for the Commission to focus on expanding state-jurisdictional opportunities for Special Case Resources and other behind-the-meter DERs. We address the Commission's three questions below:

A. What needs to be done to increase utilization of existing DERs so as to improve distribution system efficiency and/or preserve system reliability? What are the barriers to expansion of existing or development of new DERs?

In the near-term time horizon, NRG Energy recommends the following steps: (1) expand existing utility programs with a proven track record of attracting DERs to the market; (2) remove certain regulatory barriers that make DER deployment more difficult, time consuming and expensive; and (3) establish a Request for Offers process where utilities will award contracts to for no- and low-carbon alternatives in key locations. To that end, we offer the following initial steps for the Commission's consideration.

DISTRIBUTION LOAD RELIEF MODELS

1. **Expand the Con Ed Distribution Load Relief Program (DLRP)**: The DLRP program has several key attributes that make it an obvious choice for expansion across the State of New York in Distribution Systems operated by regulated utilities, authorities and municipalities.

First, the DLRP program requires the utility to identify the areas on its distribution system where the value of DER adoption is the highest (Tier-1/Tier-2 target networks). NRG starts with the DLRP program as a model largely because it provides everyone with transparent information about the value of DER options in a particular geographic location and in an incredibly transparent and easy-to-understand fashion. Once the utility provides that information, third party competitive suppliers and end-use customers will be able to direct their efforts to the areas on the system where DERs have the greatest value. Once the utility identifies (on plain, easy to read street maps that show which side of the street is within what map area) the areas where DER adoption provides the most value, customers will be able to respond more easily.

Second, the DLRP program provides a transparent price signal, which includes both a reservation payment (with a stated per kilowatt of capacity rate) and an energy payment (per kilowatt-hour of actual energy provided). This transparent suite of prices greatly aids in customers' understanding the system and the ability of third-party suppliers to finance investment in energy infrastructure.

Third, the DLRP program could be replicated quickly across the State of New York. Utilities know best where on the system investment is needed. By identifying where investment is needed, end-users will be able to drive investment to the areas that need it most.

Fourth, the DLRP program is competitively neutral. Any end-use customer or third-party solutions provider can own and operate the DER resource on the customer-side of the meter and qualify for an extra revenue stream.

Fifth, the Commission should consider whether the expansion of the DLRP program can help fill the regulatory gap caused by the recent *EPSA v. FERC*, D.C. Circuit case declaring demand response to be a retail product. Post *EPSA*, New York will need a way to compensate and attract demand reduction, which currently receive both the DLRP price *and* an energy and capacity payment from the NYISO. By increasing the DLRP price, the Commission can continue to provide SCRs with adequate revenues necessary to ensure that these important resources continue participating in the program.

2. **Additional Regulatory Reforms:** NRG further recommends the following changes to the DLRP program that could expand its attractiveness to more DERs:

   a) Expand the DLRP program to include an enhanced participation option for clean DER that offers an annual reservation payment and daily call option with some appropriate notice.

   b) Create a stand-by rate exemption for DERs for targeted distribution networks where DERs would help address overloads and defer upgrades.

   c) Increase compensation for low-carbon or no-carbon facilities exporting power to the grid. For example, the Commission could reform the export/buy-back service by including an adder for properly located exports from DER that would provide a benefit to distribution system operation. The current Con Ed buy-back tariff pays only wholesale LMP. A wholesale rate is generally not sufficient to incent investment in new DERs. In addition, the low wholesale buy-back rate discourages existing DER resources from making existing excess capacity available to the market. Raising the price paid for this energy would clearly bring more megawatts that are currently hidden behind-the-meter into the market.

   d) Implement a pilot program to allow non-utility development of multi-customer micro-grids. This multi-customer aggregation program would waive the utility franchise territory prohibition on crossing public roads and land boundaries. A reasonable location for a pilot program would be in the areas of greatest need identified by the utilities per the Tier-1/Tier-2 target networks under the DLRP program.

3. **Other Regulatory Reforms:** In addition to expanding the DLRP program, NRG also recommends the following regulatory rule changes that could incent new DER investment in New York in the immediate near-term:

   - Increase CHP Net Metering limits from the current 10kW size limit on CHP net metering to 3 MW at a single site to create more opportunities to implement viable CHP projects and at least 5 MW of microgrids. 3 MW is needed to coincide with the optimal size of certain CHP equipment offered by manufactures in the market today. [1]

[1] Pennsylvania's 2004 Alternative Energy Portfolio Standards Act provides for net metering of microgrids and emergency systems to 5 MW, non-residential customers to 3 MW and residential customers to 50 kW. 73 P.S. § 1648.2 et seq.11/30/2004 (subsequently amended).

- Add a firm gas supply tariff for distribution-connected DER CHP facilities. Currently, the only gas tariff service accessible for small scale CHP is interruptible. DER CHP should be eligible for firm gas supply since it is providing point-of-use enhanced efficiency through combined electricity and thermal benefits that reduce both net demand on the electric grid and gas usage by large central power stations.

- Reduce interconnection barriers by adopting (a) generic meter standards; (b) definitive timelines for a utility to process interconnection applications; and (c) a simpler small generator interconnection process. PJM has excellent small generator and metering rules that could serve as a model for New York.

REFORM RETAIL COMPETITION MODELS AND OPTIONS

The other area for immediate reform in New York has to be on the retail competition side. While not glamorous, the Commission needs to seriously address the competitive problems in the retail electric market that make it harder for third party suppliers to meaningfully invest in long-term customers. Ultimately, innovation in non-essential, value-added energy services – such as DERs – will not be driven by monopoly utilities. Instead, history shows that innovation in the energy sector will come from competitive non-utility service providers. NRG's experience in the extremely competitive ERCOT market is that customers have access to a vast array of value-added services in that market, because energy supply companies (ESCOs) have (1) timely access to customer usage data, (2) the ability to operationally control customer consumption through both the utility network and other networks (e.g., the internet); and (3) billing and other rights that allow third party suppliers to establish meaningful customer relationships. While nobody expects New York to adopt Texas-style energy market deregulation, the level of customer engagement that the Commission is seeking to foster in New York will only exist when electric service becomes about more than just the absolute lowest commodity price. To this end, we recommend the following commonsense reforms:

i. Allow for immediate ESCO switching/day-one enrollments, seamless moves.

ii. Eliminate utility account number requirement for customer enrollments and allow ESCOs to access account numbers (with customer authorization) via a secure portal.

iii. "Enroll w/your wallet" account ID: a number that customers readily know or have in their wallet such as last 4 digits of phone number, last 4 digits of SSN, last 4 digits of driver's license, etc.

iv. Supplier billing options need to be expanded:

1) On-bill financing for energy management, energy efficiency and other DER related services;
2) Line items for non-commodity services and products; and
3) Purchase of Receivables collection of reasonable early termination fees ("ETFs")

v. Elimination of reverse slamming processes that send customers back to default supplier for any change to account; for example, change of address or marital status.

vi. Regulatory process changes:
1) Statewide uniform utility business rules/programs rather than on a utility-by-utility basis.
2) Take regulation of competitive business out of regulated utility contested case process
3) Competitive ESCOs should be able to use energy efficiency program funds collected through supplier billing consolidation systems, with the ability to include innovative energy efficiency systems.
- Use funds to provide whole house power monitors to customers in lieu of AMI deployment to collect usage data for products and services

B. What role can the utilities play in the first stage to facilitate DER development? What initial market or procurement models will facilitate DER penetration?

We strongly recommend that the Commission consider jump-starting adoption of no-carbon and low-carbon DER infrastructure by authorizing its utilities to competitively solicit a stated quantity of DERs.

California is the undisputed leader in the U.S. for renewable investment. As California seeks to reach its carbon reduction goals, energy procurement targets have expanded beyond renewables. For every solicitation for capacity needs, at least one-half of the supply must come from "preferred resources." Additionally, a separate storage target of 1325 MWs has been established which will also be filled by competitive solicitations with only 50% dedicated to utility-owned products.

The California success story was largely driven by the establishment of a series of Requests for Offers ("RFO"), whereby the California Public Utilities Commission directed its utilities to conduct a competitive solicitation for stated quantities of the specific product. Through use of designated targets combined with competitive solicitations open to third parties, California is leveraging its prior success in bringing renewables to market additional alternative technologies through its "preferred resources" all-source RFO (which is currently ongoing) and other solicitations. At the end of the process, California utilities will enter into long-term contracts with several gigawatts of storage and renewable, battery, microgrid and fuel cell technologies. If New York wants to catch up, it should strongly consider a similar program, tailored to New York's specific needs, whereby each utility would be required to contract for a stated quantity of DERs in the next 12-24 months.

The RFO program could easily be layered on top of an expansion of the DLRP program. By first requiring utilities to plainly identify the portions of their system where investment is most needed, the RFO solicitations can include a strong locational preference for investment in areas where that investment will do the most to reinforce the distribution system.

C. What information do utilities need to provide regarding where resources are needed and are most valuable to the distribution system, and what information should DER providers offer?

The utilities should follow the model established by the Con Ed DLRP program where they routinely post maps identifying target networks where DER would be helpful to alleviate and defer distribution system upgrades. This information could be enhanced to identify the type of service and operating characteristics that are desired. For example there may be limited call summer/winter peak response resources, daily peak shaving resources, quick-start/flexible dispatch resources, voltage support, and emergency network islanded service.