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The Honorable Douglas R. M. Nazarian  
Chairman, Maryland Public Service Commission  
William D. Schaefer Tower  
6 St. Paul Street, 15th Floor  
Baltimore, MD 21202

Re: In The Matter of the Investigation of the Process and Criteria for Use in  
Development of Request for Proposal by the Maryland Investor-Owned  
Utilities for New Generation to Alleviate Potential Short-Term Reliability  
Problems in the State of Maryland – Case No. 9149

Dear Chairman Nazarian:

NRG Energy Inc. (“NRG”) is an independent power producer and developer of electric power generation facilities nationwide. NRG is committed to investing in new generation technologies that would provide Maryland with reliable, clean and efficient sources of power and offers these comments in response to the Commission’s solicitation of comments in Case No. 9149 (“Gap RFP”).

NRG is a strong supporter of efficient competitive wholesale markets and is confident that properly-structured markets can deliver the reliable and affordable energy supplies that Maryland needs, including the desired environmental and performance characteristics. NRG also recognizes, however, that the Commission has chosen to take more direct action by instituting a process to address immediate system needs and objectives that are not being addressed by the markets alone. NRG is committed to working with state policymakers to ensure that the competitive wholesale markets

provide reliable and affordable energy products and services to meet the state's needs whenever possible, and to utilize complementary contract-based mechanisms when needed.

**About The NRG Companies:**

NRG is a national independent power generator, with more than 24,000 MW of natural gas, nuclear, coal, wind and oil-fired generation, including more than 7,000 MW on the eastern seaboard. The Company owns a 170 MW oil-fired peaking generating station in Vienna, Maryland and is an active participant in the wholesale electricity market operated by PJM. Further, NRG has participated in Maryland's Standard Offer Service auctions and has as one of its major initiatives a comprehensive development and repowering program. One of NRG's subsidiaries, NRG Thermal, LLC, is a leading developer, owner and operator of Combined Heat and Power ("CHP") projects.

**Summary of the NRG Comments**

NRG supports the efforts by the State of Maryland to undertake an organized effort to plan for its long-term power supply needs.<sup>1</sup>

NRG supports the Reliability Pricing Model ("RPM") as a well-designed market that, if permitted to perform efficiently, free from distortion or undue suppression, would retain existing generation in the State of Maryland and attract additional resources as needed. NRG further supports the role of PJM in performing regional planning, identifying the necessary levels of capacity, and identifying the most efficient solutions on a regional basis. Only through such regional markets will end-use customers obtain

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<sup>1</sup> NRG envisions a portfolio of different contracts with various durations. Long-term contracts (e.g., 20 years) would allow the Commission to obtain new capacity, while pursuing innovative technologies, fuel diversity, environmental objectives, and the long-term resource adequacy of the state.

the optimum resources at the lowest achievable price, and thus the efficient market outcome.

NRG also recognizes, however, that states have a legitimate interest in addressing reliability, resource adequacy, fuel diversity, and the environmental impact of their generation portfolio. Thus, the use of state-approved Requests for Proposals (“RFPs”) is an effective tool to secure the construction of new generation projects in accordance with these policy objectives. The use of competitive RFPs will ensure that Maryland receives the reliability benefits of any new generation at a competitive and predictable price.<sup>2</sup>

There is a high level of regulatory uncertainty and risk of regulatory intervention that contributes to a risk premium that a new entrant would seek to recover, and thus dampens the response of potential new entrants. Long-term contracts can be used to address these factors, and to obtain new investment at competitive rates for consumers. NRG suggests the following steps to ensure Maryland achieves its objectives for reliability, in-state generation, energy price stability and environmental protection:

- Establish a long-term state resource assessment (“SRA”) process to identify what generation resources are needed in the state;
- Utilize one or more competitive State-administered RFP processes for specific energy assets with objective criteria and a transparent resource selection process;
- Require load-serving entities (“LSEs”) to enter into long-term contracts with successful bidders in order to facilitate the financing necessary to attract the widest number of new generation sources; and

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<sup>2</sup> Such RFPs, and the resulting contracts, should not be pursued in a manner that undermines the efficiency of the wholesale market, however, but rather should be done in response to price signals therefrom. RFPs that oversupply the market and depress prices below efficient levels would distort the market prices and thus undermine their value as a benchmark for efficient contracting. In addition, such an efficiently-operating wholesale market is an important mechanism that LSEs should utilize to balance their capacity obligations with their load, and to buy and sell excess capacity.

- Institute a proceeding designed to identify any existing impediments or appropriate incentives to the development of CHP projects in Maryland.

Such competitive planning and procurement processes will provide ratepayers with the price advantages of competition while enabling the state to manage its energy needs.<sup>3</sup>

Other states have already successfully implemented such processes.

**A. Maryland Should Employ a Long-Term State Resource Assessment to Establish What Resources are Needed – Whether Transmission, Generation, or Demand-Side Management.**

Maryland needs a long-term resource assessment process in order to determine whether the State has sufficient generating capacity to meet its reliability needs and identify the specific assets that would be needed to fill any gaps. Long-term planning of new generation projects is critical to ensuring that Maryland consumers do not pay for generation capacity that they do not need and to ensure that any additional capacity is selected through an open and transparent process and procured at competitive prices. An SRA process will allow the State to establish:

- Whether additional capacity is needed and whether that capacity is most efficiently satisfied through transmission (together with contracts for imported power), new in-state generation, or other means (i.e., demand-side management);
- Where additional generation should be located geographically;
- The types of generation best suited to improving reliability; and
- A transparent and competitive framework that will allow for an open and fair competitive solicitation.

The siting, permitting and construction of power generating stations is, by its very nature, a long-term endeavor, requiring investments of potentially hundreds of millions of

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<sup>3</sup> NRG envisions that the Commission would require all LSEs to bear their pro-rata share of the cost of contracting to maintain resource adequacy by requiring them to contract accordingly.

dollars. It is critical that any SRA process is open and transparent in order to ensure that that independent power producers, as well as incumbent utilities, are included in the planning process. The SRA should be conducted by the State or by independent experts working at the direction of the State.

Importantly, the SRA process should be used to evaluate the comparative cost-benefit of competing solutions – such as transmission and generation. The Commission must recognize that authorizing the construction of new transmission lines, with the assurance of rate-based recovery and of FERC-authorized incentive return on equity, does not necessarily result in the most efficient outcome for consumers. This is especially true if one recognizes that ultimately transmission alone does not provide for resource adequacy, but that “imports” are only as firm as the contracted-for out-of-state capacity. Thus, transmission is not a “substitute” for generation if generation capacity still needs to be procured.

In-state generation is likely the most cost-effective solution for ratepayers, but such generation will require contracts so that generators can obtain funding on an efficient and cost-effective basis, as compared with a transmission project with its guaranteed cost recovery through rates.

There are significant benefits to consumers in planning to spend a dollar on new generation as opposed to new transmission. Among other factors, the investment in generation may be superior to the investment in transmission for the following reasons:

<b>Factor</b>	<b>Generation</b>	<b>Transmission</b>
Cost-certainty	Contract provides for a definite price	Cost overruns and missed projections borne by ratepayers

<b>Factor</b>	<b>Generation</b>	<b>Transmission</b>
Construction Risk	Borne by contracting generators	Borne by ratepayers
Operations risk	Borne by contracting generators	Borne by ratepayers
Capacity	Provides valuable capacity	<i>Still need to buy capacity</i>

**B. The State Should Utilize a Competitive Request for Proposal Process to Acquire New Capacity.**

Once the SRA process is completed, the State will have the information it needs to issue one or more RFPs with detailed energy asset specifications and requirements. Issuing focused RFPs will enable the commission to run an efficient process and allow for a fair “apples-to-apples” comparison of bids. Any truly competitive RFP must involve:

- Specific generator requirements determined during the SRA process;
- Establishment of clearly defined bidding criteria, which have been established and communicated to the bidders before the submission of bids, and
- An independent evaluation of proposals, which if done by the Commission, would warrant separate divisions within the Commission for the distinct roles of (i) evaluating and selecting the winning bids, and (ii) monitoring the process, adjudicating complaints and approving the selected contracts.

An RFP with detailed requirements and criteria is more likely to attract new generation projects that address the reliability needs identified during the SRA process. Competitively bid long-term contracts will result in long-term price stability for Maryland consumers and, furthermore, ensure that adequate generation is built where it is most needed.

In Connecticut, the state Department of Public Utility Control (“DPUC”) has recently conducted several RFPs for generating resources. The DPUC’s most recent procurement was notable for its focus, transparency and rigorousness. Utilizing outside consultants to conduct a detailed analysis, the DPUC identified a specific need for additional peaking resources and thus the RFP was limited to securing only peaking assets. The solicitation yielded robust competition from private companies interested in developing generation. The first round of bidding in Connecticut saw 16 companies competing to build 19 projects and over 3,000 MW of new capacity in the state. The second round of bidding included 8 companies submitting bids. Connecticut thus had a number of bids to compare before it chose the three projects that, in its opinion, best served the identified reliability needs at the lowest price for Connecticut consumers.

NRG, in partnership with The United Illuminating Company, was among the winners and recently executed a contract with The Connecticut Light & Power Company supporting the construction and operation of a 200 MW project. In addition to Connecticut, other states, including New York, are also successfully developing generation through competitive procurement processes.

As shown by these various State programs, a competitive and transparent RFP process can be highly successful in bringing generation to market very quickly.

**C. Long-Term Contracts are Necessary to Competition and will Promote Price Stability.**

The Commission should invite generators to submit bids involving long-term contracts to address any capacity shortfalls identified by the State. There is clearly a market need for the contract term to vary based on the technology of the winning project.

Allowing for the potential of a long-term contract will help attract additional new projects into the RFP process, and ensure that consumers have access to long-term price stability for any new generation acquired.

NRG, for example, owns a power generating facility with expansion and repowering capability in Vienna, Md. The Company is actively evaluating adding capacity at the Vienna site, including new oil-fired units, a biomass facility or new gas-fired units. The addition of natural gas-fired units would require a new gas pipeline, and such an infrastructure project would need the support of long-term contracts.

Additionally, NRG is actively looking for other potential sites in Maryland where it could build new generation supported by long-term contracts.

Maryland, Delaware and New Jersey all require their regulated utilities to enter into Standard Offer Service (“SOS”) or Basic Generation Service (“BGS”) type arrangements, to cover a portion of their capacity needs. These forward contracts obligate suppliers to provide electric generation services – including capacity – at a fixed price for up to three years. However, the three year contract period of the existing SOS is simply too short a time period for many suppliers to commit to building new generation in Maryland, particularly given the environmental and siting risks involved in building generation in the state.

The establishment of a procurement process to acquire power through long-term contracts would provide generators the certainty they need to obtain capital at the most competitive rate and thus to competitively bid new generation projects, ensure the widest range of responses, and provide price stability for ratepayers.

**D. The Commission Should Initiate a Proceeding to Examine the Regulatory Environment for Combined Heat and Power Facilities.**

The Commission should examine whether any barriers exist to construct or expand CHP facilities. CHP facilities provide unique reliability benefits by both providing additional generation capacity in load pockets while also reducing the need for transmission, and thus deserve special consideration in this proceeding.

As the Commission is aware, CHP projects are more efficient because the thermal energy that they produce is used not only for power generation, but also as “heat” for industrial or heating processes. Because such projects need a thermal customer, and are generally developed in response to the thermal customer’s needs, they are not great candidates for generic RFPs. Accordingly, the Commission should take this opportunity to open a special docket to review changes to Maryland law and policies that would incent, or simply reduce regulatory barriers to, CHP, such as:

- Ensuring that CHP facilities and their power customers have access to a reasonable rate for stand-by service without punitive demand ratchets; and
- Ensuring that CHP facilities are permitted to sell behind-the-meter production to more than one end-use customer without becoming a state-regulated public utility (i.e., support the development of micro-grids).

By strategically placing CHP facilities where both the power and the heat byproduct can be used efficiently, Maryland can improve the reliability of its power supply, reduce costs, and lower emissions.

The CHP incentive program launched by the New York State Energy Research and Development Authority (“NYSERDA”) has been enormously effective in attracting new CHP facilities in New York and could provide a model for Maryland to follow. Since 2000, the incentives provided by NYSERDA have resulted in CHP development at

over 50 projects reaching operational status. NYSERDA found that these projects:

(1) provided great reliability benefits during the 2003 blackout; (2) improved energy efficiency at a number of sites; (3) resulted in the acquisition of economic capacity; and (4) reduced peak system load.<sup>4</sup>

NRG's thermal division, NRG Thermal, LLC, is a leading developer, owner and operator of CHP projects throughout the country. Based on this experience, NRG makes the following recommendations:

A. The Commission should create a mechanism for new CHP facilities to sell their excess capacity and energy through contracts at prices determined through RFPs.

The Commission should require its LSEs to purchase the output of any new CHP facility at the market price for energy determined during the RFP process. This would provide a powerful incentive for new CHP facilities to locate in Maryland, by affording them the ability to obtain a contract to sell excess capacity and energy. Such a contract would facilitate their development and financing. Moreover, by relying on the price resulting from a competitive RFP, the Commission will be assured that the price paid for the excess CHP electrical output is a competitive and fair price established through a clear and transparent process.

B. CHP host facilities should be allowed to acquire standby service at reasonable rates.

Standby service is necessary to ensure the CHP facility and its customers are able to operate during times when the CHP facility is off-line for maintenance or other reasons. During such times, the host needs to draw power from the grid. However, the

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<sup>4</sup> The NYSERDA website provides additional information about its CHP incentive program: <http://www.nyserda.org/chpnys/success.asp>.

current rate structure for standby service is often prohibitively expensive and often includes a lump sum payment, or demand ratchet, if the host relies on the grid for even a short period of time. A CHP facility may avoid these additional demand charges by installing redundant backup generating capacity, but this is rarely an economic alternative. The reliability benefits of CHP facilities, along with their ability to reduce peak demand in an environmentally benign manner, warrants the State taking special steps to fix the existing standby rate structure. Thus, the Commission should investigate such rate structures and whether the public interest would best be served by allowing CHP facilities and their customers to purchase back-up power directly from the PJM market at wholesale rates.

C. Regulatory barriers preventing the use of “micro-grids” should be eliminated.

The “micro-grid” concept is premised on the idea that a single CHP project should be allowed to serve multiple nearby buildings. Creating a micro-grid decreases the cost for each individual customer and allows CHP technologies to be deployed more effectively. Further, up to a point (well below traditional integrated utility-scale installations), CHP facilities increase in efficiency as the size of the project increases.

Impediments to the use of micro-grids include limitations on the CHP facility’s number of customers and its ability to cross a public thoroughfare without being subject to significant regulation. There is little justification for subjecting an electrical/thermal micro-grid energy facility that can cost-effectively serve multiple adjoining customers (who are sophisticated businesses that contract for such service) to such regulatory oversight, and the Commission should ensure that a single CHP facility selling power to

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multiple behind-the-meter customers is fully permissible. NRG recommends that the Commission investigate whether there are any regulatory barriers that could be removed to facilitate the development of CHP in Maryland.

The Commission should encourage the use of CHP technology so that any significant new commercial or industrial construction within the state has the ability to use CHP if economically justified. Projects that include multiple structures (rather than individual buildings), such as town centers, hospitals, or universities are all prime candidates for a CHP project that also includes a micro-grid for electric service.

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NRG applauds Governor O'Malley and the Maryland Public Service Commission for moving forward with the process to attract new generation into Maryland. A competitive procurement process, including objective bidding criteria and specific requirements determined as part of a state resource assessment process will allow Maryland to meet its goals of maintaining reliable sources of energy at reasonable costs while continuing to improve the environment. We look forward to working with you on this plan and moving forward with the development of new, innovative generation technologies in Maryland.

For NRG Energy Inc.

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