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**NEW JERSEY BOARD OF PUBLIC UTILITIES  
I/M/O THE BOARD'S INVESTIGATION OF CAPACITY PROCUREMENT AND  
TRANSMISSION PLANNING – DOCKET NO. EO11050309**

**LEGISLATIVE-STYLE HEARING – JUNE 17, 2011**

**COMMENTS BY JOHN SCHULTZ,  
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ON BEHALF OF HESS CORPORATION**

Good morning President Solomon and Commissioners. My name is John Schultz and I am the Vice President of Energy Operations for Hess Corporation. I appreciate the opportunity to come before you this morning to present the views of my company on a number of matters that are before this Board for consideration.

Hess entered the Northeast electric power markets in 1997 as a load serving entity participating in state competitive retail supply programs. Today, Hess is one of the largest load serving entities on the East Coast, a demand response provider and a significant consumer of electricity in the state of New Jersey.

On three occasions dating back to 2003, Hess has proposed power plant projects for PJM at various properties we own in New Jersey. One attempt was to build a new generating station in northern New Jersey on the site of our Port Reading refinery. We ultimately withdrew our interconnection request because the estimates of the PJM interconnection upgrade costs would have rendered that project financially infeasible. Hess' third and latest attempt to build in northern New Jersey started in 2007 with our request for interconnection with PJM for a combined cycle project called the Newark Energy Center. These experiences provide the basis for my comments today.

Power generation technology has greatly improved over the last few decades, yet a surprisingly large part of New Jersey's generating fleet relies on old, relatively inefficient and environmentally unfriendly technologies. Hess is not alone in the difficulties we've faced in bringing new generation projects to commercial operation. Indeed, PJM's own records indicate that over 33,000 megawatts of interconnection requests for proposed new projects in New Jersey

alone have been withdrawn since the inception of PJM's generation interconnection queue process. Over 31,000 megawatts of those projects were natural gas fired plants. **In other words, the success rate for proposed power generation projects in New Jersey is less than 10%.**

This poor success rate reflects a system and market that deter development of well-positioned, well-equipped merchant generation in an area of the most demonstrated need. The challenges facing potential power plant developers include some aspects of the new generator interconnection process and the current PJM Reliability Pricing Model (RPM) that favor the status quo over cleaner, more efficient new build opportunities.

My comments today will highlight the areas that have become real impediments to the development of new resources and offer some observations and suggestions for your consideration. This will include comment about New Jersey's Long-Term Capacity Agreement Pilot Program, or LCAPP, and how it helps overcome one of the largest obstacles to generation development – a lack of a long term price signal in capacity markets – and addresses some key policy objectives of this state that are simply not a consideration in today's PJM market.

### **Interconnection Process**

The first obstacle to new generation development in New Jersey, in fact in all of PJM, is the interconnection process itself. In theory, the multi-staged interconnection process is supposed to provide developers with increasing certainty on their interconnection timeline and costs, while ensuring reliable and efficient integration to the system. However, the reality is illustrated by Hess' most recent attempt to secure a PJM interconnection in New Jersey, which began in 2007. Our progress through the interconnection stages has been extremely slow with unpredictable and exorbitant upgrade costs. Estimates of our potential interconnect costs began at \$340 million in 2008, went down in 2009 to \$110 million, and went back up to \$180 million when PJM retooled our System Impact Study earlier this year.

As you can imagine, such a process is not conducive to attracting the necessary equity or debt needed to move forward with significant new investments. As a consequence, it ultimately favors preservation of the status quo.

Despite progress made by PJM in the past several years to improve the interconnection process, the ability to bring new generation on line has been hampered by multiple rule- and policy-based issues stemming from a process based on a historical paradigm that no longer exists.

First, the right to perform the interconnection study work largely resides with the Local Transmission Owner. The sheer number of queue positions that must be studied therefore leads

to a backup, particularly in the most congested areas of PJM. In other ISOs, developers have a right to bring in independent, approved, third party consultants to do study work. The Local Transmission Owners and RTO retain their oversight and approval rights. This a faster, more efficient and objective method, which is just as effective at ensuring reliable integration and provides a level of transparency that is lacking in today's process.

Second, when considering the need for upgraded facilities, each queue position study assumes that all previously filed queue positions are already online – despite significant evidence that only a fraction of these units will ever be built. With a 90% new project queue drop out rate, this method of studying projects leads to very high and unreliable interconnection cost estimates, multiple study retools and delays, deterring even much needed new entrants. Again, compare this method to other ISOs where projects are studied in clusters, and only existing units or new units that have committed to cost responsibilities are considered when evaluating the need for system upgrades.

A third deterrent is the cost allocation rule. Currently new entrants bear 100% of upgrade cost responsibilities, even though the developer's project may only fractionally contribute to the violation causing the need for upgrade and the benefit of the upgrades is realized by others. In Hess' experience with our Newark Energy Center, a line violation of less than 1% as far south as Baltimore has added \$30 million to our interconnection costs in New Jersey. Yet again, one can look to other ISOs and RTOs for examples of alternative methods for interconnection cost allocation. In Texas, load bears responsibility for system upgrade costs to integrate new generation. While I don't advocate a full adoption of this approach for PJM, clearly a more equitable distribution of costs to all beneficiaries would be an improvement from today's method.

Fourth, the policies and rules applicable to Capacity Injection Rights (CIRs), which are necessary to connect to the system, inequitably preserve the interests of the incumbents while erecting another barrier to new entrants. As I just described, a new resource can only obtain needed CIRs by paying for its interconnection upgrade costs. Yet incumbent generation with existing CIRs, many of which were paid for by consumers through rate base, enjoy free access to the current system and can transfer those rights to a new unit they may build in the future, or even sell them. Therefore the position of existing generators is preserved, at no cost to them, even if they retire an existing unit and choose to build a new one in competition with other new entrants. Clearly there is a value to those CIRs, but current policy allocates that value in a non-competitive manner and without respect to who paid for those rights to begin with.

Hess, with the support of PJM, successfully proposed and is an active participant in a PJM Interconnection Process Task Force. This task force is currently addressing potential solutions to the above mentioned problems, as well as many other interconnection issues.

### **Reliability Pricing Model**

Even those developers able to successfully navigate the interconnection process face other obstacles in the PJM Reliability Pricing Model.

The primary purpose of the PJM RPM is to ensure reliability. Unfortunately that reliability is achieved in large part through RPM's funding of older, dirtier inefficient generating stations and less through the development of new, cleaner, more efficient resources.

New Jersey is a striking example of this. Arguably, RPM and the capacity revenues it provides have kept a large number of older generating stations in service over the last ten years. In fact some station owners have openly declared an intent to retire units only to be provided with supplemental income by PJM in the form of Reliability Must Run or RMR payments, specifically to delay their retirement. Today, we rely on thousands of megawatts of generation installed in the early 1970s to keep our lights on, while few new large-scale generating projects have come to fruition in our state.

In my opinion, there are two key factors of the current PJM capacity markets that contribute to this situation.

*First, the RPM construct treats all reliability resources as equal* regardless of the generator's environmental impact, fuel efficiency or overall economic benefits to society. A demand response resource, a coal plant, a 40-year-old combustion turbine that only runs a few hours a year or the highest efficiency gas turbine all receive the same capacity price, which is the payment for a given megawatt of unforced capacity. I make this observation not to be critical of RPM, but to point out that many of the critical policy objectives of this Board and of the LCAPP Bill are not addressed in current PJM capacity market structure.

*Second, RPM's lack of a long term capacity price signal discourages investment* in new generation and acts as an incentive for older generating units to remain in service. The RPM is designed to yield a single year capacity price set three years in advance. In my opinion, this is not sufficient justification for most developers to spend the hundreds of millions of dollars required to build a new generating station that has a useful life of 20-30 years. It is certainly not sufficient for potential lenders to those projects, particularly given the volatility of RPM clearing prices. New Jersey capacity prices have varied between \$110 MW/day and \$245 MW/day over the seven

RPM annual auctions. For would-be developers of new generation, such a volatile and short term price signal is insufficient to make the necessary investment.

The one-year capacity price is, however, an effective incentive for an older resource to remain operational. An existing generating station must simply recover the fixed costs of one more year of operation. Price volatility is also less of an issue to existing generators that have sunk and in many cases fully depreciated investments.

RPM has essentially become a subsidy to most existing units by providing them capacity payments that generally far exceed their going forward operational costs, without the price certainty needed to encourage new, efficient clean generation which is a major goal for New Jersey as outlined in the recently issued Draft Energy Master Plan.

### **Minimum Offer Pricing Rule**

I would also like to say a few words about the recent changes to the Minimum Offer Pricing Rule (MOPR).

The original purpose of the MOPR was to mitigate attempts by net buyers to suppress capacity prices for their benefit in the RPM capacity market. The rule was an outcome of the original stakeholder settlement on RPM in 2006.

The recent and dramatic changes to the MOPR by FERC, made in response to the LCAPP, create unnecessary and additional impediments to new, natural gas generation projects, deemed by most experts as the most critical fuel resource for new power generation. The rule changes effectively toss out any test of whether a new entrant has the ability or intent to suppress capacity prices. It simply assumes that all new natural gas plants intend to suppress capacity price and must be mitigated.

The rigidity of this black line test with its severe financial consequences and singular focus on natural gas assets presents an imposing threat to even well-intended projects. The mere possibility that a project may not be able to receive capacity revenues for an indeterminate period of time would deter most gas-fired generation investment. This penalizes new sources of clean, efficient power generation, defying what is in the best interests of ratepayers and the environment.

Simply stated, the changes to MOPR were too dramatic and enacted too rapidly in response to a perceived threat. A more thoughtful stakeholder process would preserve the original intent of the rule without creating a new obstacle to the construction of natural gas plants.

## **Options Moving Forward**

Given these barriers to entry and the structural and market rules that preserve the status quo, the key question you have asked today is what can be done to change this.

The LCAPP Bill addressed the two structural RPM concerns I outlined here that are critical to fostering development of new efficient resources in New Jersey. The Bill gives significant consideration to the environmental, economic and other community benefits the resources will provide and affords a mechanism to offer price certainty for a period of time sufficient to make the needed investment.

My company's sole motivation for participation in the LCAPP process was the long-term price certainty that could not be achieved in today's capacity market construct. This long-term price certainty is so important to us that we have foregone the opportunity for any upside revenue potential on this project from future capacity markets. In fact, the standard offer capacity agreement for the Newark Energy Center as part of LCAPP sets a fixed capacity price that is lower than the clearing price in the past two Base Residual Auctions. To be clear, if our SOCA agreement had been in place over the past two years, my company would have made payments to New Jersey ratepayers, not the other way around.

LCAPP should be viewed as a supplement to PJM markets, not as a challenge. The LCAPP process offered long term price certainty where PJM would not and gave consideration to the merits of different types of generation where RPM does not. New Jersey took a huge step in fostering the development of new generation by incorporating these components into LCAPP, which are broader than the simple reliability objectives of RPM. As stated previously, the recent actions by FERC and PJM have resulted in additional hurdles for new generation.

To help realize the benefits of LCAPP and promote the development of the resources selected by this Board as those best able to provide the people of New Jersey with cleaner and more affordable power, we encourage the Board to coordinate its energy policies with other State agencies such as the New Jersey Department of Environmental Protection. **Strict enforcement of existing environmental regulations for older generating units, such as New Jersey's Reasonably Available Control Technology, or RACT, regulations for NOx emissions for High Electric Demand Day, or HEDD units, is the key to moving beyond the status quo in New Jersey and promoting development of a cleaner, more efficient generating fleet – and it is wholly within the control of the State of New Jersey.**

Essentially the State is in a Catch 22. The older units resist retirement claiming reliability concerns, yet new cleaner units cannot be built to provide needed reliability unless those older units are retired. New Jersey has a choice. Five years from now, we will either be a state that has one of the most modern and efficient generating fleets available or we will be relying on 45-year-old technology to keep our lights on. As I have outlined here in some detail, there is no mechanism in PJM that will accomplish the same and in fact the incentives are quite the opposite.

Many of the solutions I have discussed will require coordination among states, the FERC, PJM and its stakeholders and are admittedly complicated. As stated throughout my comments, the current Interconnection and RPM rules strongly favor preservation of the status quo, and we acknowledge that to date the stakeholder process has not produced any meaningful changes in allowing new entrants to penetrate the market. However, Hess believes in and will continue to participate in the stakeholder process as the initial means of effecting changes to the PJM markets.

The improvements I mentioned here today would address significant hurdles posed by the current interconnection process and capacity construct in PJM and would help address New Jersey's specified objectives to build new generation and we encourage the Board to remain engaged in the overall stakeholder process to help secure some of the changes.

I thank you again for this opportunity to speak and share our perspective on the challenges that lie before us.