

**STATE OF NEW YORK PUBLIC SERVICE COMMISSION**

In the Matter of a Review of Tariff Provisions Regarding  
Natural Gas Service to Electric Generators.

Case 17-G-0011

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**STATEMENT OF COMMENTS BY POTOMAC ECONOMICS, LTD.**

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Pursuant to the Notice Soliciting Comments on January 19, 2017, Potomac Economics respectfully submits its comments in the above-captioned proceeding. Potomac Economics respectfully requests that its statement be accepted late into the record of this proceeding.

Potomac Economics currently serves as the Market Monitoring Unit (“MMU”) for the New York Independent System Operator, Inc. (“NYISO”). The NYISO Market Services Tariff requires the MMU to help ensure that the NYISO’s markets are created and operated in a “robust, competitive, efficient and non-discriminatory” manner.<sup>1</sup> As the MMU, we are also responsible for reporting on: “use of the New York State Transmission System as such system affects or may affect competitive conditions in or the economic efficiency of any of the New York Electric Markets, including but not limited to the nature, extent and causes of any congestion on such system and the costs of or charges for such congestion”.<sup>2</sup> Several of the elements discussed in the Staff Initial Findings Report and Additional Questions would have broad implications for the congestion costs that are borne by New York’s electricity consumers, particularly in New York City and Long Island.

Potomac Economics commends the Commission for soliciting feedback from participants to gather the most comprehensive background on the subject. Potomac Economics is interested in

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<sup>1</sup> See NYISO’s Market Administration and Control Area Services Tariff (“Market Services Tariff” or “MST”) Attachment O §30.1.2.

<sup>2</sup> See MST Attachment O §30.1.1.

ensuring the long-term efficiency of New York’s electricity markets and our interests cannot be adequately represented by any other party. These comments discuss how natural gas rates and terms affect the electricity market. We hope these comments will be helpful to the Commission as it considers this matter.

## **I. Introduction**

Gas delivery service rates are important not only to the healthy operation of natural gas distribution firms and electric generation firms, but also because they have significant effects on the costs that are ultimately passed on to electricity consumers. As it balances these considerations, we recommend the Commission evaluate the effects of two elements of the staff proposal in particular.

Specifically, we are concerned that substantial increases in the Value Added Charge (“VAC”) and the Annual Minimum Bill (“AMB”) components would lead to changes in the pattern of generation that would be inefficient and increase emissions of air pollution. Moreover, increasing these components would lead to increased costs to electricity consumers in the form of higher energy prices and higher capacity prices. Ultimately, substantial increases in the VAC and AMB components would result in market inefficiencies and cost increases that would run counter to the principles of the gas rate elements guideline stated in the Commission’s filing.<sup>3</sup>

These comments do not estimate the specific levels of the VAC and/or AMB components that would be large enough to cause substantial market inefficiencies. Such estimates would require additional time and could not be completed within this comment period. However, we

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<sup>3</sup> See Docket titled “Staff Initial Findings Report and Additional Questions,” Pgs. 2-3. Available at <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=52581> .

recommend the Commission consider such information before approving significant changes in the VAC and AMB rate components.

## **II. Energy Market Inefficiencies Resulting from Certain Distribution Charges**

In an efficient market, the price of a particular service equals the marginal cost of providing the last (or next) unit of that service. When this happens, buyers purchase the service when they value the service more than the marginal cost of providing it, and the service is provided to the buyers who value it most. For a production input such as the natural gas that is purchased by a wholesale electric generator, setting charges consistent with the system operator's marginal cost of the next unit will lead to an efficient allocation of fuel across the system, which generally helps lower costs for consumers since marginal cost pricing is also used to set prices in the NYISO's wholesale market.

In the NYISO electricity market, the newest most fuel-efficient and lowest-polluting generators tend to have the highest capacity factors, while older less efficient generators tend to have low capacity factors. Consequently, increasing the VAC and AMB components will tend to shift more production away from clean fuel-efficient generators to older generators for two reasons.

First, the VAC component is charged per unit of consumption, so it increases the marginal cost of production for high capacity factor units relative to the costs of generators on interstate pipelines. To the extent that the VAC exceeds the marginal cost of delivering natural gas to the generator, this will lead to under-utilization of fuel-efficient high capacity factor units that must pay the VAC. Second, the AMB component is a sunk cost for units with a capacity factor below 50 percent because they have to pay for more distribution service than they would otherwise use. Consequently, such units do not incur additional distribution costs from additional operation on a day-to-day basis, so they have incentives to consume gas at times when the marginal cost of

delivering natural gas is greater than it is worth to the low-capacity factor unit. Hence, the larger the VAC and AMB components are, the more it will shift generation from clean new fuel-efficient units to older ones.

We respectfully request that, to the extent that it modifies the VAC component, the Commission make it more (rather than less) consistent with the marginal cost of delivering the next unit of gas. In this regard, it may be appropriate to vary the VAC component based on system conditions, the timing of nominations, and/or other factors that may affect the marginal cost of operating the gas system. We recommend eliminating the AMB component because (to the extent it actually affects a generating unit's consumption) it will lead the generator to consume more than the efficient amount of natural gas.

### **III. Increased Costs to Electricity Consumers**

Natural gas delivery rates affect the costs borne by electricity consumers in two primary ways: higher prices in the NYISO energy market, and higher prices in the NYISO installed capacity market.

First, as described in the previous section, increasing the VAC component will lead electricity generators to raise their offer prices in the wholesale electricity market. Increasing the offer price of the electric generator that “sets the price” in the electricity market will lead to a direct increase in the clearing price within a particular region. In other cases, increasing the offer price of a generator may lead another less fuel-efficient generator to be scheduled in its place, either because the generator is on an inter-state pipeline or the generator has an incentive to over-generate because of the AMB component as discussed in the previous section. In all of these cases, increased VAC component charges to wholesale generators are typically passed on to consumers in the form of higher prices. This is an efficient outcome when the increased charge

to the generator reflects the marginal cost of delivery, but it is inefficient when it exceeds that cost.

Second, increased charges to wholesale generators also lead to increased prices for installed capacity, which are the costs that electricity consumers bear to maintain the NYISO's installed generating capacity. This is not only because raising the costs of wholesale generators will increase the capacity prices that an investor would require before investing in a generating asset, but also because capacity prices in the NYISO market are explicitly tied to the estimated costs of a hypothetical generator known as the "demand curve unit".

Specifically, the pricing mechanism used in the capacity market is based on the estimated cost of new entry for a new hypothetical peaking generator (known as the "demand curve unit") after deducting the operating profit that a generator would earn from selling electricity and ancillary services. Therefore, to the extent the costs of an increased VAC component leads a generator to run less or receive a smaller margin, it will reduce the operating profit that is netted against the cost of new entry. Consequently, this will raise the level of the pricing mechanism that is used in the capacity market, leading to higher prices.

The AMB component would also reduce the operating profit of the hypothetical peaking generator because the AMB is essentially a large fixed charge that a generator must pay whether it runs 0 percent of the time or 50 percent of the time. Since the NYISO study evaluating the hypothetical peaking generator estimated that it would run on natural gas in less than 10 percent of hours in upstate New York and approximately 25 percent in New York City, the AMB would lead to a large reduction in the operating profits of these generators. This would raise the level of the pricing mechanism that is used in the capacity market, leading to higher capacity prices.

#### **IV. Conclusions**

As the Commission considers how to balance various objectives in this proceeding, we respectfully recommend it consider the effects of certain natural gas delivery charges on market efficiency and on the ultimate costs borne by electricity consumers in New York. To this end, we request that the Commission devise a VAC component that is more consistent with the marginal cost of delivering gas. Otherwise, it may lead to an inefficient allocation of fuel and higher overall production costs, which are ultimately passed on to consumers in the form of higher electricity prices. We also recommend that the Commission eliminate the AMB component since this will consistently lead to inefficiently high levels of generation and air pollution from older less fuel-efficient generators that would otherwise consume less than the 50 percent level.

Respectfully submitted,

*/s/ Pallas LeeVanSchaick*

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