

To: Analysis Group Inc. ("AGI") Burns & McDonnell ("BMCD") New York Independent System Operator, Inc. ("NYISO")

From: GenOn Energy Management, LLC and GenOn Bowline, LLC

Date: July 1, 2020

Re: Comments on Proposed Installed Capacity Demand Curve Parameters for the 2021/2022 through 2024/2025 Capability Years – Initial Draft Report

GenOn Energy Management, LLC and GenOn Bowline, LLC (collectively, "GenOn")<sup>1</sup> are pleased to submit the following comments regarding the June 4, 2020 Independent Consultant Study to Establish New York ICAP Demand Curve Parameters for the 2020/2021 through 2024/2025 Capability Years – Initial Draft Report prepared by AGI and BMCD, particularly as relates to the current recommendations as it relates to the selection and determination of appropriately applied gas prices for the proxy unit in Zone G (Rockland County).

AGI recommends that the natural gas prices for Zone G Rockland County be based on the price index for TETCO M3, including a \$0.27/MMBtu gas transportation adder. As has been commented on by other parties, we too fundamentally disagree with the proposed recommendations as not suitably reflecting both the true costs and risks faced by the proxy generator within Zone G Rockland. GenOn has retained natural gas market expert BTU Analytics to analyze the proposed proxy plant within the context of the recommended TETCO M3 gas index, with the completed analysis attached to this submission.

<sup>&</sup>lt;sup>1</sup> GenOn Bowline, LLC owns the Bowline Power Plant located in Rockland County, NY and GenOn Energy Management, LLC serves as the market participant with the NYISO and represents the Bowline Power Plant in the NYISO market.

Fundamentally, GenOn disagrees with the proposed recommendations for the following reasons:

- Gas availability at M3-based prices is not achievable. The TETCO M3 market area doesn't include Rockland County, NY and gas flowing through Rockland County from TETCO M3 market area is then on the Algonquin pipeline system and destined for points North of Rockland County with a higher demand for gas and higher price (particularly in the winter). The true costs sourced gas for Zone G Rockland, most notably in the Winter periods, are not accurately reflected by only the simple inclusion of a \$0.27/MMBtu transportation adder as proposed for the proxy unit.
- Winter periods also suffer from a distinct and noticeable lack of deliverability utilizing IT capacity due to pipeline constraints
- Market rules demand generators offer using the most economic fuel (lack of fuel availability is not a suitable excuse) thereby negating the assumed "interruptible only" model of gas delivery for the proxy unit. A proxy unit would either need to purchase gas a fully loaded, "delivered" cost or purchase firm transportation.
- To be compliant with NYISO market rules, the fixed cost structure of a new plant is much higher than has been modeled within the consultant report without the inclusion of full firm transportation economics.

The attached commentary and analysis demonstrate that the proposed delivered price for fuel for the proxy unit understates that achievable in the marketplace is not representative of the true underlying cost structure of the proxy unit in either a variable/dispatch economics-sense or in a fixed costs regime. We urge the NYISO, pursuant to tariff rules, to align the proxy unit fuel cost with those that would

be reasonably expected to be achieved by that unit.<sup>2</sup>

Respectfully submitted,

Jon Sacks, Vice President GenOn Energy Management, LLC GenOn Bowline, LLC

Attachment: Natural Gas Pricing and Deliverability for NYISO Load Zone G by BTU Analytics

<sup>&</sup>lt;sup>2</sup> GenOn reserves all rights to raise additional comments and to supplement that attached data as this matter continues through the NYISO Stakeholder and Board process and at the Federal Energy Regulatory Commission.



## Natural Gas Pricing and Deliverability for NYISO Load Zone G

Prepared for: GenOn Energy Management, LLC and GenOn Bowline, LLC June 26, 2020



**DISCLAIMER.** THIS REPORT IS FURNISHED ON AN "AS IS" BASIS. BTU Analytics, LLC DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF THE REPORT OR THE INFORMATION CONTAINED THEREIN. BTU Analytics, LLC MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE USE OF ANY INFORMATION CONTAINED IN THIS REPORT IN CONNECTION WITH TRADING OF COMMODITIES, EQUITIES, FUTURES, OPTIONS OR ANY OTHER USE. BTU Analytics, LLC MAKES NO EXPRESS OR IMPLIED WARRANTIES AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANT- ABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

**RELEASE AND LIMITATION OF LIABILITY:** IN NO EVENT SHALL BTU Analytics, LLC BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFIT) ARISING OUT OF OR RELATED TO THE ACCURACY OR CORRECTNESS OF THIS REPORT OR THE INFORMATION CONTAINED THEREIN, WHETHER BASED ON WARRANTY, CONTRACT, TORT OR ANY OTHER LEGAL THEORY.



- TETCO M3 is not a representative pricing point for a power plant in Rockland County as the pipeline does not enter New York in that area, which would require a plant sourcing gas from M3 to pay an additional transport cost to move gas from TETCO terminus onto Algonquin for delivery into Rockland. This adds an additional \$0.24/MMBtu on top of M3 price, which is much closer to an Algonquin Citygate price during times when Algonquin is unconstrained. However, Algonquin runs at high utilization serving demand downstream of Load Zone G limiting the availability of supply to a non-firm capacity holder. As a result AGT prices at significant premium to transport costs in the winter with an average premium of a \$1.61/MMbtu over TETCO M3 in winter since 2016.
- Algonquin and Millennium pipeline are the two pipelines a power plant could access in Rockland County, however Millennium East Pool
  price is also not representative of Rockland County gas price.
  - Millennium East Pool price represents receipts in Broome County, NY, and does not reflect a gas price for transactions further downstream. Similar to
    TETCO M3, a plant sourcing gas from Millennium East Pool would also need to pay an additional transport cost (\$0.59/MMBtu) on top of Millennium East
    Pool price, which is much closer to an Algonquin Citygate price during times when Algonquin is unconstrained. Supply availability for a power plant in
    Orange or Rockland counties off Millennium is limited as pipeline delivers material volumes to Algonquin downstream and the pipeline is fully committed.
    This would have a material negative impact to the proxy unit's earned energy margin over the analysis period.
- Running the NYISO model with M3 price compared to Algonquin Citygate price produces very different result a plant in Rockland County securing an Algonquin Citygate price would run less, based purely on dispatch economics. The same holds true for Millennium East Pool. A plant in Rockland County would pay a gas price much closer to Algonquin Citygate for most of the year than M3. This would make a material impact in the proxy unit's earned energy margins over the analysis period.
- Beyond economics, supply dynamics also contribute to the dispatch profile of a new entry plant. Millennium and Algonquin are both constrained in Zone G in the winter. Downstream demand deliveries on Algonquin would inhibit Zone G plant on Algonquin from running at all times it would be economic to do so, and running fuel oil is only rarely the economic choice.
- In Zone G Dutchess, Iroquois Zn 2 is representative of a gas price a power plant would pay in the Zone, but Iroquois faces many of the same supply constraints at pipelines in Rockland County.

TETCO M3 price zone ends at pipeline terminus in northern New Jersey. TETCO pipeline does not extend into New York except for Manhattan Lateral. Pipeline, and M3 price zone, only extends into Manhattan and does not reach Load Zone G. Volume of transactions in M3 is heavily weighted to Pennsylvania and New Jersey deliveries





Note: Millennium East Pool (MPC East Pool) pricing for receipts in Broome County NY Source: BTU Analytics

Moving gas from TETCO M3 into Algonquin or Transco for downstream delivery incurs an additional transport cost. Algonquin allows for deliverability into Load Zone G. Pricing spreads are narrower in the summer but still have averaged over \$0.48 higher in the summer time the previous 3 summers. In the winter time, IT capacity is rarely available resulting in significantly wider spreads between AGT and TETCO M3 of \$1.61 on average reflecting the scarcity of capacity





Source: BTU Analytics, NGI historical gas prices, Algonquin & Transco tariffs





## ULSD #2 vs Algonquin Citygate Outright

A peaking power plant sited in Rockland County in Load Zone G would need to connect to AGT or Millennium to access supply. However, the new plant would be competing with downstream end users on AGT for supply and would most likely incur a price analogous to AGT Citygate as firm capacity on both pipelines is fully subscribed in winter. AGT pricing results in a nearly 50% drop in generation over the modeled time frame substantially lowering earned energy margin over the analysis period.



TETCO M3 + \$0.27/MMBtu	Algonquin Citygate
Total MWh Generated Over Model Timeframe: 2,321,345	Total MWh Generated Over Model Timeframe: 1,261,315



NYISO Net AES Modeled Gas MWh Generated per Month by Pricing Point



—MWh per Month dispatched at TETCO M3 + \$0.27 /Mmbtu ——MWh per Month dispatched at Algonquin Citygate

AGT utilization already pushing limits on coldest days when dispatch model indicates a new peaking gas plant should run. Over the last 4 winters AGT utilization exceeds 95% utilization on 28% of days indicating no IT capacity would be available





Factoring in capacity constraints on AGT, indicates that during winter months "gas available" run days can be substantially lower than price implied model run days by at least 7% more or about 88,000 MWh over the modeled time frame





Note: NYISO model run days are economic gas run days while gas available run days are both economic, based on

NYISO model, and gas supply available to serve plant demand

Source: BTU Analytics, NYISO Net AES Fossil Model, Data as of June 24, 2020