STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

CASE 16-G-0058 - Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of KeySpan Gas East Corp. dba Brooklyn Union of L.I. for Gas Service.

Rebuttal Testimony of Richard L. Levitan and Alexander J. Mattfolk

On behalf of the Long Island Power Authority

June 10, 2016

I. Introduction & Summary

Q Panel, please state your names, position, and business address.

A I am Richard L. Levitan, President of Levitan & Associates, Inc. (LAI). I am Alexander J. Mattfolk, an Executive Consultant at LAI. Our business address is 100 Summer Street, Suite 3200, Boston, MA 02110.

Q Did you previously provide testimony in this case?

A Yes, we filed direct testimony on behalf of the Long Island Power Authority (LIPA) on May 20, 2016.

Q What is the purpose of your rebuttal testimony?

A The primary purpose of our testimony is to address certain recommendations of the New York Department of Public Service's Gas Policy and Supply Panel (hereafter "Staff"). As an initial matter, Staff's recommendations address many of our concerns and represent a significant step forward. We support Staff's recommendation to reduce the KEDLI daily balancing requirement to the 2% level, not zero, and Staff's recommendation to apply the remaining imbalance to a monthly account that can be netted or traded among "similarly situated customers" (p. 58, L24 – p. 59, L3). We also support Staff's practical consideration oriented around gas system integrity on Long Island, for what Staff called a "no harm, no foul" approach to imbalances for firm and interruptible customers alike (p. 58, L6-7). Lastly,

we support Staff's recommendation for KEDLI to perform a detailed analysis of the cost incurred to serve electric generators as well as contributions received from generators. However, we disagree with Staff's proposal to reclassify cashout premiums, discounts, and the $10 per Dth adder (which we will refer to collectively as "Cashout Charges") as charges for unauthorized use or "penalties" (Staff, p. 60). Such a step is likely to have unintended negative consequences for the efficient operation of the electric system, electric and gas prices, and the environment. These unintended consequences are addressed below. Finally, we present general economic rules or considerations that may guide the detailed cost analysis Staff has proposed.

II. Staff's Cashout Charge Recommendation

Q What is Staff's recommendation to reclassify Cashout Charges?

A Staff has proposed explicit language to reclassify Cashout Charges as "penalties", thereby excluding all such costs in any bid submitted to NYISO for economic dispatch purposes.

Q Why does Staff seek to exclude these costs from electricity prices?

A Staff has set forth a multi-pronged explanation. First, Staff points out that adding these charges to bids could raise electricity prices (Staff, p. 60). Second, Staff notes that any imbalance beyond the 2% tolerance band has

"the potential to cause cost and reliability issues for the firm gas ratepayers" (Staff, p. 52). Later, Staff states that imbalances represent "significant risks to the natural gas system" (Staff, p. 54). Finally, in response to Exhibit No. __(RLL/AJM-13) regarding the Cashout Charges, Staff states that "[t]hese costs are established as a deterrent and should be avoided."

Q Do you agree with Staff's rationale for reclassifying Cashout Charges as penalties?

A No. While we agree that reliability is of paramount concern for both the gas and electric systems, we believe that this structural change to the SC-14 tariff will remove generators' ability to rely on the gas system when local gas system reliability should not be an issue, while moving further away from traditional electric *and gas* price efficiency objectives. The structural change to the SC-14 tariff may leave "money on the table" in regard to credits to KEDLI's gas customers. Furthermore, treating costs associated with imbalance resolution as penalties will likely increase electricity prices – the result Staff sought to avoid in the first place. Moreover, from an operational perspective, there should <u>not</u> be a "one-size fits all" approach which treats all imbalances beyond the 2% tolerance band as having the same significance regardless of conditions on the local distribution system. We will return to this point later in our testimony.

Q When would it be appropriate to treat an imbalance as unauthorized use?

A During an OFO event or a curtailment event, as defined by the current KEDLI tariff.

Q Should KEDLI's SC-14 tariff distinguish between OFO and non-OFO days?

A Yes. There is an important operational distinction between OFO and non-OFO days that warrants modifications to KEDLI's cashout provisions. Unauthorized gas use on OFO days may compromise the reliable operation of the local distribution system. We therefore have not challenged the OFO related penalties KEDLI has in place to ensure system integrity. But gas use under the imbalance mechanism on non-OFO days should not be categorized as "unauthorized" if there is no imminent threat to local system integrity. Levying penalties on non-OFO days when there is headroom on the local distribution system to accommodate LIPA's requirements without jeopardizing gas system integrity undercuts the no-harm, no-foul principle Staff has lauded in its testimony, a principle, in our experience, that many interstate pipelines and LDCs throughout the U.S. commonly employ in their administration of imbalance resolution procedures. In updating the SC-14 tariff, in particular, KEDLI's imbalance resolution procedure, the

Commission must weigh an equitable balance between gas and electric customers on Long Island.

Q Do gas overpulls by electric generators compromise service to core customers?

A Staff's response to Question 30 of Request No. LIPA-6, attached as Exhibit No.__(RLL/AJM-14), shows that Staff is not aware of any occurrence where KEDLI's firm customers have ever been adversely affected by electric generators' overpulls.

Q In your opinion, are operating conditions on Long Island so different than operating conditions elsewhere on the New York Facilities System, or, for that matter, at other LDCs, that it would justify a more restrictive imbalance resolution procedure during both OFO and non-OFO days?

A No. Like KEDNY, Con Edison and other LDCs doing business in the tri-state area (New York, New Jersey and Connecticut), or, for that matter, Arizona, KEDLI's local system delivery capability is designed to ensure reliable operation under extreme temperature conditions. Gas system operators manage their respective portfolio to ensure safe and secure system operations under the design temperature criterion. On Long Island, KEDLI's pipeline and conventional storage entitlements are supplemented with satellite LNG storage capability at Holtsville to ensure reliable gas system

operations 365 days a year, including cold snaps. Previously working in close coordination with many gas LDCs including KEDLI, KEDNY, and Con Edison, we conducted a technical review of local distribution infrastructure capability. We performed a confidential analysis for the NYISO and the other Eastern Interconnection Planning Collaborative participants. The analysis was performed on KEDLI, KEDNY and Con Edison, Central Hudson Gas & Electric, and many other LDCs in PJM and Ontario. While there are usually operating conditions and system design criteria that differentiate one local distribution system from another, technical review of KEDLI's distribution system capability to support gas-fired generation has informed our perspective in the present context.

Q What operational concerns specific to NYISO Zone K (Long Island) can lead to real time deviations in gas-fired generation from dispatch planned by NYISO day-ahead market?

A LIPA relies on transmission imports from NYISO Zone I across two-345 kV lines – Y49 (637 MW) and Y50 (653 MW) – as well as two HVDC lines from PJM and ISO-NE. LIPA also has a 138 kV connection from Norwalk Harbor, CT to Northport, Long Island and ties with Con Edison at Lake Success and Jamaica. As an import-constrained zone, LIPA's generators are called on to adjust up or down on-island generation to account for deviations and outages in three Regional Transmission Organizations. There are

complex, interrelated market dynamics in the Lower Hudson Valley, downstate New York, PJM and New England that invariably result in the need for imbalance resolution under the KEDLI tariff. On non-OFO days, applying the "spirit" of no-harm, no-foul, such resolution is entirely consistent with the functionality of the SC-14 tariff, and should not be changed to increase uneconomic costs on LIPA's customers or environmental harm.

Q Do you believe there could be additional unintended consequences ascribable to Staff's recommendation of having all incremental gas use beyond a 2% tolerance band be considered unauthorized?

A Yes. Based upon the NYISO rules, a generator is not required to submit real time bids when the acceptance of those bids would cause the unauthorized use of natural gas. This would require LIPA to bid overnight real time generating bids with oil, not natural gas. And, because the quick-start units available in the real time market burn kerosene or distillate oil, the oil price would reflect a premium grade oil rather than lower cost residual fuel oil.

Q What would be the impact of this change?

A There would be a significant adverse cost impact attributable to this change. Instead of bidding $45 per MWh ($3.00 per Dth for natural gas x 15,000 Btu/kWh), LIPA would bid incremental generation on oil at $180 per MWh ($12 per Dth equivalent distillate oil x 15,000), a four-fold increase. In

addition to this significant adverse cost impact, there could also be significant adverse environmental effects attributable to high carbon content and other primary emissions such as sulfur dioxide and nitrous oxides.

Q Do you have economic concerns about Staff's recommendation?

A Yes. Staff acknowledged that power generation is subject to greater load variations because of NYISO dispatch requirements (Staff, p. 49). However, the current cashout provisions are merely focused on providing an "incentive...to better manage imbalances" (Staff, p. 50) without offering any tools for doing so. To the extent that the gas system can physically accommodate generator imbalances, the issue should be how to price such a service. In response to LIPA-5, Q. 27, Staff agrees that such a service could be considered if the right assets exist to support it. We suggest that exploring the feasibility of new services to manage imbalances be part of the study that Staff has recommended. By setting a cost-based price for balancing, one that is differentiated on OFO versus non-OFO days, gas customer interests would be protected and the NYISO would be afforded more options for serving electric load than merely switching to oil-fired generation. We agree with Staff that "it is imperative to set these rates appropriately." (Staff, p. 51). Such considerations will become even more acute in the future. As renewable energy penetration levels associated with solar and wind increase over time, natural gas operations on Long Island and

across NYISO will become more complex in order to support the variability on cloudy days or when the wind dies down. The gas tariff should help provide the required thermal operational hedges on Long Island across NYISO to support variable generation with load following capability. If gas-fired generation is unable to respond to real-time deviations in renewable energy because of an incentive to avoid Cashout Charges, the resultant increased oil burn would negate the environmental benefits ascribable to increased renewable energy penetration.

Q Would allowing balancing cashout discounts and surcharges to continue to be included in generator bids threaten gas system reliability?

A No. Gas system integrity is protected through KEDLI's ability to issue an OFO and to fully or partly interrupt customers as needed anytime throughout the year. Day in, day out, LIPA must offer its generation resources into the NYISO market, including during cold snaps when local deliverability conditions are often bottlenecked. Regardless of the magnitude of the discount or surcharge deemed "penalty" related, KEDLI's operators will *always* take whatever action is warranted to ensure that the local distribution system is running safe and secure for purposes of maintaining service to core customers. Precluding the consideration of balancing cashout discounts and surcharges in bid prices would impair allocative efficiency objectives– *without moving the "needle" in regard to gas system integrity.*

Q Are Cashout Charges addressed in the Con Edison gas rate proceeding underway in Case 16-G-0061?

A Con Edison proposes to change the cost of gas calculation associated with cashouts so that it is based on the average of the daily high spot prices published for a "Citygate Company Receipt Point" rather than based on a single daily high spot price. This is because the relevant price indices in New York City are Transco Zone 6-NY (TZ6-NY), Texas Eastern Zone M-3 (TETCOM3), and Iroquois Zone 2 (IGTSZ2). See Testimony of Ivan Kimball, p. 54, L.12-16. In its testimony in the Con Edison case, Staff agreed with an averaging approach, though it recommends using a daily volume weighted index around mid-point prices. See Testimony of Staff Gas Supply and Reliability Panel, p. 12, L.1-11. Staff's testimony in this proceeding did not address this issue. We recommend that the same approach be applied here.

III. Cost-of-Service Study Recommendations

Q Staff has recommended that KEDLI perform a detailed analysis, with input from Staff, of the cost incurred to serve electric generators as well as contributions received from generators. Can you comment on the minimum components of the analysis set forth by Staff?

A Yes. The first component is a comprehensive marginal cost study of serving all of KEDLI's customers, both firm and interruptible. In our view, a marginal cost study should reflect the discernible costs associated with KEDLI's high-pressure backbone versus the distribution system. It should also address time, that is, short run versus long run marginal costs. Under the circumstances, it should address all of the components underlying the delivered cost of gas to support gas-fired generation across the New York Facilities System, the Lower Hudson Valley, Connecticut, and New Jersey. Not normally part of a marginal cost study, operational constraints affecting the designation of unauthorized gas use that compromises reliable operation of the local distribution system should be addressed in order to confirm the reasonableness of authorizing gas use under the tariff that does not compromise reliability. Finally, the study should provide an analytical basis for a tariff that harmonizes the gas, electric and environmental policies of the State through its recognition that KEDLI does and should serve an important *commercial* function without compromising the integrity of the gas system by being the occasional supplier/buyer of last resort due to the inherent variability and unpredictability of electric generator gas demand. Later in the gas trading day, the decreasing liquidity in the intra-day gas market on Iroquois, and, to a lesser extent, Transco, renders KEDLI a "source" or a

"sink" of last resort so long as there is sufficient operational headroom to accommodate the variability in LIPA's gas use.

Q The second part of the detailed analysis recommended by Staff includes a bypass analysis for each individual generator. How should this analysis be performed?

A Bypass analysis should allow for groups of generators that are similarly situated, not individual units, thereby sensibly apportioning joint fixed costs among benefited units. Northport is located next to the Iroquois mainline. Barrett is located near the Transco mainline. Other generation plants under contract with LIPA are located along the high pressure backbone or lower pressure distribution system, where a direct pipeline interconnection may not be feasible. The comparatively low cost of establishing a direct connection for Northport and Barrett at or nearby interstate pipelines must be quantified as well as the higher cost of establishing a direct connection for those inland facilities located across the heart of KEDLI's distribution system.

Q The third part of the detailed analysis recommended by Staff references alternate fuels and/or other factors that might make a subset of interruptible customers more or less price elastic. Can you recommend specific factors that should enter into the determination of LIPA's price elasticity affecting the demand for local transportation service on Long Island?

A Yes. There are three factors affecting LIPA's price elasticity of demand, as follows (in no particular order): first, the physical infrastructure in place to store different oil types for dual-fuel capable generation on Long Island, including replenishment logistics via barge or truck associated with residual fuel oil, kerosene, and ULSD; second, the cost competitiveness of oil versus natural gas delivered to Long Island; and, third, applicable air permit restrictions for the dual fuel generating plants that often restrict the amount of oil use.

Q Another component set forth by Staff pertains to the evaluation of value-based and cost-based interruptible rate design. Do you agree that recognition of value of service principles is an appropriate part of the detailed cost study?

A Yes. The appropriate starting point for the detailed analysis should be traditional cost of service analysis. The results of such analysis should help inform the Commission regarding the appropriate rates chargeable to interruptible customers for the array of transportation and balancing services levied under the SC-14 rate. Discriminatory deviations from cost of service based rates may still be permissible based on value of service principles. The Commission must safeguard against tariff reform that is unduly discriminatory, however.

Q Do you have anything else to add?

A Yes. We recommend that the analysis also evaluate the provisions underlying a new load following service for electric generators tailored for scheduling flexibility on Long Island. LIPA looks forward to participating in that process.

Q Does this conclude your testimony?

A Yes.