



July 8, 2019

Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: Comments In Advance of Staff-Led Public Meeting**

FirstLight Power Resources, Inc. (“FirstLight”) hereby submits these Comments in advance of the Federal Energy Regulatory Commission (“Commission”) Staff-led public meeting scheduled for July 15, 2019. FirstLight offers the following comments to assist the Commission staff preparations for the July 15<sup>th</sup> public discussion of the fuel security-related market design changes being discussed within the New England Power Pool (“NEPOOL”) Markets Committee.<sup>1</sup>

**I. BACKGROUND**

The fuel security challenges New England faces are not new. Fuel security challenges first surfaced in the January 2004 Cold Snap. At that time, ISO New England Inc. (“ISO-NE”) and NEPOOL focused on changes to improve ISO-NE’s awareness of winter resource availability (i.e., obtain advance knowledge where resources could not get fuel), including improved communication with gas pipeline companies and implementation of new ISO-NE operator tools to estimate how many gas generating resources could be fueled. These discussions

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<sup>1</sup> FirstLight is a party to the proceedings in Docket Nos. ER18-1509, ER18-1639, ER18-2364, and ER19-1428.

also led to changes in the ISO-NE day ahead energy market timelines to better coordinate with gas pipeline inter-day nomination windows, and an increased level of operating reserve requirements.<sup>2</sup> As later events evidence, these changes alone were not sufficient. Years later, ISO-NE sought and received permission to implement an out-of-market Winter Reliability Program for the winter of 2013-14 to give side payments to oil-fired units and dual fuel units to fill their oil tanks and to demand resources to reduce demand in tight winter periods.<sup>3</sup> This was intended to be a temporary program pending the development of improved Forward Capacity Market (“FCM”) performance incentives that eventually were implemented as the Pay-for-Performance (“PFP”) changes approved in FERC Docket No. ER14-1050 and implemented with the start of the ninth Commitment Period (June 1, 2018). Preceding the filing and approval of FCM PFP, ISO-NE issued a November 5, 2012 memorandum entitled *Market Participant Performance Obligations* identifying ISO-NE’s understanding that the fuel-related obligations assumed by a resource selling capacity include a tariff obligation to “get” fuel sufficient to meet any day ahead or real-time dispatch.<sup>4</sup> This clarification spawned a Section 206 complaint from the New England Power Generators Association (“NEPGA”) disagreeing with the ISO-NE interpretation that a failure to get fuel to cover a real-time dispatch obligation could not be a

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<sup>2</sup> See *ISO New England Inc.*, Interdependencies of Market and Operational Changes to Address Resource Performance and Gas Dependency (Oct. 2013), available at [https://www.iso-ne.com/static-assets/documents/committees/comm\\_wkgrps/strategic\\_planning\\_discussion/materials/interdependency\\_of\\_iso\\_proposals\\_to\\_key\\_spi\\_risks.pdf](https://www.iso-ne.com/static-assets/documents/committees/comm_wkgrps/strategic_planning_discussion/materials/interdependency_of_iso_proposals_to_key_spi_risks.pdf)

<sup>3</sup> The first iteration of the Winter Reliability Program was approved by the Commission in Docket Nos. ER13-1851-000,001,002.

<sup>4</sup> See [https://www.iso-ne.com/static-assets/documents/committees/comm\\_wkgrps/mrktls\\_comm/mrktls/mtrls/2012/nov782012/a09a\\_iso\\_memo\\_11\\_05\\_12.pdf](https://www.iso-ne.com/static-assets/documents/committees/comm_wkgrps/mrktls_comm/mrktls/mtrls/2012/nov782012/a09a_iso_memo_11_05_12.pdf)

failure to follow the tariff where the gas-only resource simply could not get fuel in real-time. The Commission agreed with NEPGA, but indicated that a resource selling capacity was expected to get fuel to meet its day ahead energy schedule.<sup>5</sup> Ironically, the one thing that NEPGA and ISO-NE did agree upon was that there was not enough gas infrastructure to get fuel for all gas-only generators on the coldest of winter days.<sup>6</sup>

Then, in 2018, ISO-NE's Operational Fuel Security Analysis ("OFSA") rang the winter fuel security alarm again. The OFSA identified various scenarios, including the impact that a retirement of Mystic 8 & 9 (and the related Distrigas LNG facility) would have on winter system reliability, indicating risk of significant load shedding and sustained operating reserve deficiencies absent that facility. In light of these results, FirstLight and other stakeholders sought further detail. Specifically, FirstLight sought insight into the extent of unavailability of resources by fuel class type that yielded such poor reliability outcomes. To date, ISO-NE has not provided this aggregate level information (e.g., hourly unavailability for aggregate of gas-only resources). The OFSA scenario became reality with a Retirement De-List Bid for Mystic 8 & 9 (indeed all of Mystic station) for Forward Capacity Auction ("FCA") 13. This led to the much debated Waiver Request (Docket No. ER18-1509-000), the Mystic 8 & 9 Reliability Must Run ("RMR"),

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<sup>5</sup> Commission Order on Rehearing in Docket No. EL13-66-001 at paragraph 18.

<sup>6</sup> See NEPGA Complaint in Docket No. EL13-66 at p. 41 ("As ISO-NE explained in its Gas Dependence White Paper at 4, '[d]uring their peak winter days, the pipelines are fully utilized with not enough infrastructure to meet the needs of the gas-fired fleet.' (emphasis added). Going forward, it is understood that '[a]bsent further expansion of pipeline capacity, New England will likely experience more limitations on gas delivery to generators and, during winter cold conditions, may experience more extreme disruptions, even with all supply sources fully committed.'"). The ISO-NE, Addressing Gas Dependence (Draft) at 9 (Jul. 2012) ("Gas Dependence White Paper") is included as Exhibit 4 in the NEPGA Complaint.

the FCA 13 (and soon FCA 14) price suppression impacts, and the resulting FERC directive for ISO-NE to file a competitive market solution by October 15, 2019, the impetus for the instant ISO-NE Energy Security market changes.<sup>7</sup> Throughout all of this history, the core issue of whether it is even possible for the aggregate of gas-only fired generators qualified and sold as winter capacity to get gas on peak winter days has remained unaddressed.

Subject to important real-time energy (and reserve) pricing detail that has not yet been defined, FirstLight is generally supportive of the ISO-NE Energy Security (“ES”) changes proposed so far, with the exception that FirstLight believes it is time to finally address the core issue and assure that all gas-only winter capacity qualified to assume a Capacity Supply Obligation (“CSO”) has associated fuel storage capability to even make fuel off-take possible at high winter day ahead energy and reserve prices under the ES changes.<sup>8</sup> Such an analysis is (and has been) performed for all other non-Intermittent Power Resources sharing common fuel storage.<sup>9</sup> In order for the ES market design changes to assure that the right number of fuel buckets *are* filled, and how high, FirstLight believes it is now necessary to assure that all gas-only resources qualified to obtain winter capacity awards bring a unique bucket to fill under that design.

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<sup>7</sup> *ISO New England Inc.*, 164 FERC ¶ 61,003, at P 2 (2018) and Notice of Extension of Time, Docket No. EL18-182-000 (March 18, 2019).

<sup>8</sup> FirstLight is concerned with the conceptual proposal to include a months’ forward energy (or energy call option) component which could suppress the new day ahead energy and reserve prices proposed by ISO-NE and the real-time energy and reserve prices. However, the ISO-NE has indicated that the forward procurement component will not be part of its October 15<sup>th</sup> filing. FirstLight agrees with ISO-NE that no meaningful dialogue can even occur on the forward component without first understanding how the day-ahead and real-time market elements will work.

<sup>9</sup> ISO-NE auditing provisions currently permit the system operator to require individual oil-fired or hydro generators sharing a common fuel source to simultaneously operate during an audit to demonstrate the ability to operate all such units simultaneously off the common fuel storage.

## II. COMMENTS

### A. A Lesson From New England’s Decade-Plus Long Fuel Security First Aid

While the decade-plus quest to address winter fuel security was driven by concerns that many gas-only units would not be able to get gas on peak winter days because insufficient gas storage remained after accounting for retail gas use, the prior years’ measures stepped around this core issue. Instead, solutions focused on how to fill oil tanks higher (or more frequently), incentivize conversion of gas-only units to dual fuel, and incentivize winter peak demand reduction – all methods to keep the system running without relying on the full extent of gas-only fired generating capability. While an attempt was made in later years of the Winter Reliability Program to include compensation of LNG contracts, it had limited success.

Success of the recently proposed changes to day ahead energy and reserve markets relies on assuring an adequate set of generating resources backed by adequate fuel storage capabilities. That is, it requires that there is enough infrastructure for the necessary resources to take fuel out of storage to meet real-time demand as signaled through day ahead energy and reserve purchases. Based on the current state of design, ISO-NE’s proposed ES changes are far superior to prior fuel specific subsidies. While the ES changes will send signals in the day ahead energy and reserve prices to those capable of taking fuel out of storage to be prepared to do so, it will not be able to do that effectively if a significant portion of the gas-only resources are left without residual gas storage to get fuel at peak winter demand (at any price).<sup>10</sup>

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<sup>10</sup> “Storage” here refers to the combination of residual line-pack remaining after accounting for firm, retail gas demand served by LDCs plus priority access to hourly off-take from LNG (limited by the vaporization capability). In the coldest winter days, it is assumed that off-take of pipe line-pack will be restricted by ratable take provisions unless there is in-kind replacement of line-pack with LNG injections.

This is why FirstLight has proposed that ISO-NE be required to verify that the aggregate fleet of gas-only resources granted a qualified winter capacity rating is backed by sufficient gas storage capability to support their simultaneous operation (if necessary) on peak winter days, and where that is not possible on the coldest of winter days, to cap the winter qualified capacity of gas-only resources to a level that *is* backed by sufficient gas storage.

#### **B. FirstLight Proposal to Assure Qualified Winter Gas-Only Capacity Can Get Fuel**

At the June 2019 NEPOOL Markets Committee meeting, FirstLight identified the importance of assuring adequate gas storage infrastructure exists for the aggregate of winter capacity purchased from gas-only generating resources to even have the *capability* to get fuel on a peak winter day.<sup>11</sup> In order to achieve this goal, FirstLight proposed to require a demonstration that gas-only generating resources qualified for winter capacity sales are backed by associated gas storage on a peak winter day. While a simultaneous physical audit of all gas-only generating resources cannot practically be done (on a peak winter day or any other day), it is possible for ISO-NE to evaluate the extent of residual pipe line-pack plus LNG vaporization capability that could be used to fuel winter gas-only generation on a peak winter day. Indeed, this is a critical consideration already employed by the ISO-NE in its OFSA evaluation (now an evaluation under Appendix I to Market Rule 1 and Planning Procedure 10). That evaluation already considers the maximum hourly off-take possible from the combination of residual (i.e., not committed and needed by firm retail demand) pipeline line-pack off-take and LNG vaporization within the

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<sup>11</sup> FirstLight June 11, 2019 presentation to the NEPOOL Markets Committee, *available at* [https://www.iso-ne.com/static-assets/documents/2019/06/a2b\\_5\\_firstlight\\_presentation\\_energy\\_security.pdf](https://www.iso-ne.com/static-assets/documents/2019/06/a2b_5_firstlight_presentation_energy_security.pdf)

region. FirstLight proposes that ISO-NE now apply this maximum natural gas hourly off-take to determine how many gas-only resources can be qualified to sell winter capacity.

FirstLight has initially proposed that the aggregate of winter qualified capacity of gas-only resources, new and existing, would be limited to the level of such generation that the ISO-NE analysis indicates can be simultaneously fueled. Specifically, FirstLight has proposed that as part of the qualification process preceding each FCA, ISO-NE would evaluate the extent to which existing gas-only generating resource winter capability could be qualified to sell winter capacity in the FCA (i.e., is backed by associated gas storage capability to support simultaneous operation of such aggregate winter gas-only resources on a cold winter day). If, for example, there is only enough gas storage to support simultaneous operation of 80% of the requested winter qualified capacity of existing gas-only resources on peak winter days, each resource's winter qualified capacity would be prorated to 80% of its winter capability.<sup>12</sup> Once the proration of existing qualified gas-only capacity is calculated (e.g., 80%), the same proration rate would then apply to the winter qualified capacity rating of new gas-only resources. FirstLight recognizes that this lagging approach to factoring new capacity into the prorationing can lead to qualification of slightly more winter capacity in a single FCA; however, it avoids the complexity of changing the proration throughout the auction (an approach FirstLight expects would involve significant modification to the FCA clearing process). Any related overstatement of gas-only qualified capacity would be corrected in the subsequent FCA qualification process since any

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<sup>12</sup> The evaluation would reduce the total gas storage deemed available to support generation on a peak winter day by the amount of firm pipeline offtake or priority access to LNG storage vaporization that is contracted by new or existing resources. Such resources would be given the full credit of their contracted rights to achieve a higher qualified winter capacity rating.

cleared new capacity becomes existing in the next FCA and is factored into that first step prorationing (if required). In subsequent NEPOOL Markets Committee discussions, FirstLight will be considering further modifications to this design and adding further detail based on feedback from ISO-NE and the NEPOOL stakeholders.

### **C. How the FirstLight Proposal Fits into ES**

Currently, the ES design does not connect the dots between the resource adequacy purchased through the FCM and the energy security that ES hopes to secure through day ahead energy, and reserves procurements and will ultimately rely on a set of generating resources that is ultimately backed by adequate fuel storage capability. Whether there is adequate gas storage to support simultaneous operation of all of the gas-only megawatts with a CSO has never been tested (so far) since the high gas prices arising from gas scarcity pushes them to the top of the dispatch stack on peak winter days and more non-gas units are used to meet load. The level of gas-only units that are not backed by associated gas storage capability currently lurks behind that non-dispatch, yet it could be critical to whether firm load could be met if the gas-only units were needed (e.g., due to a combination of non-gas unit retirements or outages in sustained cold winter weather).

Assuring that the set of winter CSO resources upon which the future year ES day ahead energy and reserve clear depends is capable of getting gas seems critical to the success of ES.



### III. CONCLUSION

FirstLight respectfully requests that Commission Staff consider these comments in advance of its public meeting on July 15, 2019.

Respectfully submitted,

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