

**STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE**

Docket No. 2015-06

**Joint Application of Northern Pass Transmission, LLC
and Public Service Company of New Hampshire
d/b/a Eversource Energy for a Certificate of Site and Facility**

**POST-HEARING MEMORANDUM OF
THE NEW ENGLAND POWER GENERATORS ASSOCIATION, INC.**

The New England Power Generators Association, Inc. (“NEPGA”)¹, by and through its attorney, respectfully submits this Post-Hearing Memorandum.

By Its Attorney,

/s/ Bruce Anderson

Bruce Anderson, Esq.

Vice President

New England Power Generators Association, Inc.

33 Broad St.

Boston, MA 02109

¹ The comments expressed herein represent those of NEPGA as an organization, but not necessarily those of any particular member.

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY.....	4
II.	LEGAL STANDARD.....	6
III.	THE APPLICANTS HAVE NOT DEMONSTRATED CAPACITY MARKET BENEFITS BY A PREPONDERANCE OF THE EVIDENCE.....	7
	A. HQP CAPACITY HAS NOT QUALIFIED TO PARTICIPATE IN THE FORWARD CAPACITY AUCTION AND WILL BE CHALLENGED TO DO SO.....	8
	B. HQP CAPACITY IS UNLIKELY TO CLEAR THE FORWARD CAPACITY MARKET ECONOMICALLY.....	13
	1. THE INTERNAL MARKET MONITOR WILL REQUIRE HQP TO INCLUDE THE COST OF GENERATION IN ITS NEW CAPACITY OFFER PRICE.....	14
	2. LEI FAILED TO INCLUDE THE COST OF NEW TRANSMISSION NECESSARY FOR HQP TO DELIVER CAPACITY OVER NORTHERN PASS.....	15
	3. LEI ASSUMES A 40-YEAR AMORTIZATION SCHEDULE WHEN THE INTERNAL MARKET MONITOR IS LIKELY TO REQUIRE A 20-YEAR AMORTIZATION.....	16
	C. LEI GREATLY EXAGGERATES THE POTENTIAL CAPACITY MARKET BENEFITS DUE TO SEVERAL INACCURATE ASSUMPTIONS AND UNLIKELY FUTURE CLEARING PRICES.....	18
	1. LEI PREDICTS PRICES WELL IN EXCESS OF HISTORICAL AND LIKELY FUTURE CLEARING PRICES.....	18
	2. LEI BASES ITS CLEARING PRICE PREDICTIONS IN PART ON INACCURATE ASSUMPTIONS.....	20
	A. NET INSTALLED CAPACITY REQUIREMENT.....	20
	B. MAXIMUM CAPACITY LIMIT.....	24

REDACTED VERSION

3. IF HQP CAPACITY CLEAR AT ALL, IT WILL LIKELY DO SO THROUGH A FORWARD CAPACITY MARKET DESIGN THAT WOULD REQUIRE EXISTING RESOURCES IN NEW HAMPSHIRE AND MAINE TO PERMANENTLY RETIRE AS A CONDITION OF ACQUIRING A CAPACITY SUPPLY OBLIGATION..... 29

D. CONCLUSION AND REQUEST FOR RELIEF..... 32

I. INTRODUCTION AND SUMMARY

On October 19, 2015, the Northern Pass Transmission Company LLC and Public Service Company of New Hampshire d/b/a Eversource Energy (collectively, the “Applicants”) filed a Joint Application for a Certificate of Site and Facility (“Certificate”) for the construction and operation of a proposed transmission line extending from the Canadian border in Pittsburg, New Hampshire to a substation located in Deerfield, New Hampshire (the “Project”).² The Applicants claim that Subcommittee approval of the Project is in the public interest, in part because it will cause “approximately \$63 million on average per year in wholesale electricity market benefits.”³ More specifically, the Applicants assert that generating resources in Quebec (the Hydro Quebec Production capacity, or “HQP Capacity”) delivered into New England over the Project will cause significant reductions in the New England Forward Capacity Market clearing prices. On May 30, 2016, the Subcommittee granted NEPGA Limited Intervenor status with the right to, *inter alia*, “address the public interest so far as it related to economic impacts on the competitive energy market.”⁴ Consistent with the terms of its intervention in this proceeding, NEPGA hereby files this memorandum addressing the Applicants’ assertion that, if approved, the Project will cause substantial economic benefits in the form of lower wholesale electricity costs.

NEPGA brings to this proceeding information and expertise regarding the operation of the wholesale electricity markets. NEPGA is an active participant in the New England Power Pool process and before the Federal Energy Regulatory Commission, and has offered testimony and expertise from its witness, William S. Fowler. Mr. Fowler is an expert in the development

² *Joint Application of Northern Pass Transmission LLC and Public Service Company of New Hampshire d/b/a Eversource Energy for a Certificate of Site and Facility for the Construction of a New 1,090 MW Electric Transmission Line* (“Application”), Transmittal Letter, p. 1, Docket No. 2015-06 (filed October 19, 2015).

³ App. Exh. 81, at p. 6.

⁴ *Subcommittee Order on Review of Intervention*, Docket No. 2015-6, May 20, 2016.

and operation of ISO-NE's wholesale energy and capacity markets, with 35 years of energy industry and market experience, who currently serves as the Vice-Chair of the NEPOOL Markets Committee.⁵ His conclusions are drawn from the operation of the ISO New England Inc. ("ISO-NE") wholesale market rules and his knowledge of the ISO-NE Internal Market Monitor offer mitigation review process, combined expertise possessed by no other witness in this proceeding.

The Applicants have failed to show by a preponderance of the evidence that the Project will cause the wholesale market benefits the Applicants assert. Instead, the record evidence, including that from NEPGA's expert witness Mr. Fowler, establishes the following:

- (1) The HQP Capacity is unlikely to qualify to participate in the Forward Capacity Auction because of transmission constraints and the surplus of generating capacity in New Hampshire, Maine and Vermont relative to the demand for energy and capacity in those states;
- (2) If the HQP Capacity qualifies to participate in the Forward Capacity Auction, it is unlikely to clear the auction economically;
- (3) If the HQP Capacity clears the Forward Capacity Auction economically, it will have far less of an impact on auction clearing prices than the Applicant asserts;
- (4) If the HQP Capacity clears the Forward Capacity Auction economically, it will cause capacity resources in New Hampshire and Maine to receive much lower capacity revenues, which in turn is likely to compel the retirement of one of more generating resources in New Hampshire and Maine. Once these offsetting retirements occur, any capacity market savings caused by the increase in capacity due to Northern Pass will cease; and
- (5) If the HQP Capacity is unable to clear the Forward Capacity Auction economically, but instead does so through the Competitive Auctions with Sponsored Policy Resource proposal recently filed for approval with the Federal Energy Regulatory Commission (the "CASPR" proposal), the CASPR design *requires* in almost all cases that capacity resources in New Hampshire or Maine retire in order for the HQP Capacity to obtain a Capacity Supply Obligation. If the HQP Capacity obtains a Capacity Supply Obligation through CASPR and replaces a retiring capacity resource, the Project will produce no capacity savings at all.

⁵ Exh. NEPGA-1, *Pre-Filed Testimony of William S. Fowler*, pp. 1-2 (detailing Mr. Fowler's experience and qualifications).

For these reasons, NEPGA asks that the Subcommittee find that the Applicant has not proven by a preponderance of the evidence that the Project will bring economic benefits to New Hampshire in the form of lower wholesale energy costs.

II. LEGAL STANDARD

New Hampshire law provides that the issuance of a certificate must “serve the public interest.”⁶ The Applicant asserts that the Project will serve the public interest, in part, by causing a significant reduction in wholesale energy and capacity market costs to New Hampshire ratepayers. The Applicant bears the burden of proving these asserted wholesale energy market benefits “by a preponderance of the evidence” and “of proving facts” sufficient for the committee to make such a finding.⁷

In support of the benefits they assert, the Applicants offer the testimony of Julia Frayer (London Economics International, or “LEI”) and Robert D. Andrew. These witnesses, however, fail to prove by a preponderance of the evidence facts sufficient to find that the HQP Capacity will qualify to participate in the Forward Capacity Auction, acquire a Capacity Supply Obligation by clearing in the Forward Capacity Auction as a new capacity resource, significantly suppress capacity market clearing prices for several years, and avoid compelling the retirement of one or more large generating units in New Hampshire or Maine. The Applicant therefore has failed to provide the Subcommittee with sufficient evidence upon which to make a finding that the Project will cause lower wholesale capacity market costs for New Hampshire. If the Subcommittee finds that the Project will cause lower wholesale capacity market costs, it must also find that the Project will cause existing generating resources in New Hampshire and/or

⁶ RSA 162-H:16, IV(e).

⁷ N.H. Admin. Rules, Site 202.19(a), (b).

Maine to retire, likely in an amount equal to the 1,000 MW of new capacity HQP seeks to deliver over the Northern Pass line, which in turn will extinguish any capacity market savings caused by the Project. These adverse employment and associated economic impacts should be taken into account and necessarily offset any asserted wholesale market benefits the Applicant claims.

III. THE APPLICANTS HAVE NOT DEMONSTRATED CAPACITY MARKET BENEFITS BY A PREPONDERANCE OF THE EVIDENCE

The Applicant asserts that the HQP Capacity will clear the Forward Capacity Auction, causing significant benefits to New Hampshire in the form of lower Forward Capacity Market clearing prices over a sustained period of time. The Applicants, however, fail to provide sufficient evidence to support their claims. The Applicants have provided no evidence to demonstrate that the HQP Capacity will qualify to participate in the Forward Capacity Auction. The record evidence instead suggests that it will be difficult for the HQP Capacity to qualify, and if it does so only at an additional cost not currently reflected in LEI's estimate of its new capacity resource offer price (referred to in hearing at times as its Minimum Offer Price Review Price or "MOPR Price"). Even if the HQP Capacity were to qualify, the Applicants make an unrealistic conclusion that the HQP Capacity can offer into the Forward Capacity Auction at a price well below the offer price the ISO-NE Internal Market Monitor is likely to require, calling into serious question whether the HQP Capacity can actually clear the auction economically.

If the HQP Capacity cannot clear based on its capacity market offer price, it may be able to obtain a Capacity Supply Obligation outside the Forward Capacity Auction and subsequently be permitted to clear the Forward Capacity Auction through a proposed change to the Forward Capacity Market currently pending approval before the Federal Energy Regulatory Commission

known as the Competitive Auctions and Sponsored Policy Resource (“CASPR”) proposal.⁸ The CASPR design, however, *requires* in almost all cases the retirement of existing capacity resources *within* New Hampshire or Maine⁹ in order for a capacity resource like the HQP Capacity delivered through the Project to acquire a Capacity Supply Obligation in the CASPR design’s Substitution Auction.¹⁰ This most likely of paths, if any, for the HQP Capacity to acquire a Capacity Supply Obligation will therefore cause adverse consequences for New Hampshire, including but not limited to the loss of high-paying jobs and millions in local tax revenue.¹¹ And if the HQP Capacity simply replaces existing generation and does not add to the overall supply of capacity in New Hampshire and Maine, there will be no capacity market savings at all.

A. HQP CAPACITY HAS NOT QUALIFIED TO PARTICIPATE IN THE FORWARD CAPACITY MARKET AND WILL BE CHALLENGED TO DO SO

The Forward Capacity Market is a physical market, meaning that a prospective capacity resource must demonstrate that it can actually deliver capacity into New England. In order to determine whether a new resource can deliver capacity, and therefore qualify to offer into a Forward Capacity Auction, ISO-NE conducts a capacity deliverability test on each prospective new capacity resource (“Deliverability Test”). Under the Deliverability Test, ISO-NE models the New England bulk power system and individual capacity zones to have all Existing Capacity

⁸ ISO New England Inc. Filing Re: Revisions to ISO New England Transmission, Markets and Services Tariff Related to Competitive Auctions with Sponsored Policy Resources, Docket No. ER18-619-000 (filed January 8, 2018) (“CASPR Filing”), *available at*: https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14633072.

⁹ There is relatively little in-state generation in Vermont, so even though Vermont retirements in theory would count towards the necessary offsetting retirements, Vermont in-state generation is likely to play little role.

¹⁰ An exception to this rule may occur if the Northern New England Capacity Zone does not price-separate even after the addition of the HQP Capacity into the capacity supply mix. That situation is highly unlikely to occur for the foreseeable future, as discussed *infra*.

¹¹ *See. e.g., NEPGA Partially Assented-to Request for Reconsideration of Denial of Petition for Limited Intervention*, at P 12, Docket No. 2015-06 (filed March 28, 2016) (explaining that NEPGA member generators provide more than 800 well-paying and highly skilled jobs within New Hampshire and their New Hampshire plants pay more than \$46 million annually in municipal and state taxes).

REDACTED VERSION

Resources¹² running at or in excess of their Capacity Supply Obligation output level (at their “CNRC” value),¹³ and then adds the quantity and location of the prospective new capacity resource, in the case of HQP Capacity 1,000 MW in southern New Hampshire.¹⁴ To the extent Existing Capacity Resources and the transmission topology limit or prohibit the new capacity resource from operating at its maximum capacity when existing resources also generate at their modeled maximum capacity, then the new resource will be required to upgrade the transmission system to alleviate the conflicts with existing capacity resources, or all or part of the new resource will be ineligible to participate in the Forward Capacity Market.¹⁵

The Deliverability Test is particularly challenging for a large new capacity resource like the HQP Capacity over the Project, in that it must find a way to deliver 1,000 MW of energy into New Hampshire without disrupting the ability of any other Existing Capacity Resource to deliver energy up to their CNRC. The existing transmission system makes this exceedingly unlikely absent significant new transmission upgrades well beyond those identified in the Northern Pass System Impact Studies¹⁶ or significant retirements within New Hampshire or Maine. Indeed, ISO-NE routinely disqualifies resources much smaller than 1,000 MW based on their failure to pass the deliverability test, as reflected in the Informational Filings ISO-NE files 90 days prior to

¹² ISO-NE Transmission, Markets and Services Tariff (“Tariff”), ISO-NE Planning Procedure 10, *available at* https://www.iso-ne.com/static-assets/documents/rules_proceeds/ison_e_plan/pp10/pp10.pdf (ISO-NE’s Planning Procedure 10 defines the deliverability test in detail). All capitalized terms not otherwise defined herein have the meaning set forth in the Tariff.

¹³ ISO-NE models Existing Capacity Resources as running at their Capacity Network Resource Capability (“CNRC”) value, a value that in all cases equals or exceeds their Capacity Supply Obligation output level. *See* ISO-NE Open Access Transmission Tariff, Section 1, Definitions, *available at*: https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_2/sch22/sch_22_lgip.pdf.

¹⁴ Evidentiary Hearing Transcript, November 17, 2017, Morning Session at p. 125 (“Nov. 17 AM Transcript”); NEPGA Exh. 1 at pp. 15-17.

¹⁵ Exh. NEPGA-1 at p. 16, *citing* ISO-NE Planning Procedure 10, *available at* https://www.iso-ne.com/static-assets/documents/rules_proceeds/ison_e_plan/pp10/pp10.pdf (ISO-NE’s Planning Procedure 10 defines the deliverability test in detail).

¹⁶ *See* Section III.A., *infra* (discussing the relevance of System Impact Studies to the delivery of energy into New England).

REDACTED VERSION

each Forward Capacity Auction.¹⁷ Mr. Fowler testified that he expects that capacity as large as that to be delivered over the Project, interconnecting to the grid in southern New Hampshire, to have difficulty passing the Deliverability Test without the need to fund significant additional transmission upgrades.

There is no record evidence that the Project or HQP has attempted to, or has passed the Deliverability Test. The Project has been subject to a related, but significantly easier test to pass, the System Impact Study. ISO-NE conducts a System Impact Study for any prospective new resource as a measure of the ability of the grid to absorb generation from that resource.¹⁸ Unlike the Deliverability Test, where all other in-state Existing Capacity Resources are “turned on” to their CNRC value, in the System Impact Study ISO-NE may model a *decrease* in generation output from other existing in-state resources to allow a new generating resource seeking to interconnect to squeeze itself into the transmission grid with the bare minimum of necessary transmission upgrades.¹⁹ In the case of Northern Pass, ISO-NE would reduce output from other local generators by 1,000 MW in order to balance supply and demand.²⁰ ISO-NE may run several variations on the location of capacity ramped down to match the modeled increase in energy delivery from a new resource, and in each case evaluate whether this substitution of energy will cause any problems on the transmission system.²¹ If transmission system issues arise, the System Impact Study will identify the transmission upgrades necessary in order for the resource to delivery energy only (where delivery can occur due to other units dispatching down),

¹⁷ Exh. NEPGA-1, at p. 16, (explaining that the Forward Capacity Auction Informational Filing to the Federal Energy Regulatory Commission lists some of the resources disqualified on a lack of deliverability basis); *see, e.g.*, Twelfth Forward Capacity Auction Informational Filing, pp. 13-18, *available* at https://www.iso-ne.com/static-assets/documents/2017/11/public_info_filing_fca_12.pdf (showing several resources disqualified from FCA 12 participation due to their failure to satisfy the deliverability test).

¹⁸ Nov. 17 AM Transcript, pp. 127-128.

¹⁹ *Id.*

²⁰ *Id.* at p. 128.

²¹ *Id.*

not capacity (where the prospective new resource must be able to deliver its full capacity value simultaneously with all other local capacity resources).

Mr. Fowler reviewed two System Impact Studies conducted by ISO-NE on the Project, one done in 2013 and the other in 2016. Each give Mr. Fowler reason to question whether the HQP Capacity may satisfy the more difficult Deliverability Test, the more recent System Impact Study even more so than the first. In the 2013 study, ISO-NE looked at five different scenarios in which it reduced generation to match the 1,000 MW of HQP Capacity, in each case but one reducing 1,000 MW of generation in New Hampshire.²² In the one case they dispatched down generation outside of New Hampshire, it was only 150 MW, with the remaining 850 MW dispatched down within New Hampshire.²³ That the System Impact Study could not find a single case (or if one was found, it is not part of the record evidence) under which the Project delivered the HQP Capacity without requiring reductions of 850-1,000 MW at other New Hampshire generation facilities indicates that the Project and HQP Capacity may have great difficulty passing the Deliverability Test.²⁴

LEI faults Mr. Fowler for drawing a conclusion from the 2013 System Impact Study when ISO-NE had conducted a more recent System Impact Study in 2016, suggesting that the 2016 System Impact Study would in some way lead to a different conclusion.²⁵ Yet the 2016 System Impact System is even more harmful to the Applicants' case, in that it looked at seven peak-load cases, with each case requiring only that New Hampshire resources would need to be reduced to accommodate the HQP Capacity.²⁶ The 2016 System Impact Study only reinforces

²² *Id.* at p. 131.

²³ *Id.*

²⁴ *Id.* at p. 132.

²⁵ App. Exh. 102, page 27 (Frayer Rebuttal Testimony); *see also* Nov. 17 AM Transcript, at p. 130.

²⁶ *Id.*

and in fact accentuates the potential case that the HQP Capacity is unlikely to pass the Deliverability Test absent additional significant transmission upgrades.

The Applicant clearly fails to appreciate the lack of evidence provided by the System Impact Study results. According to LEI, “the effect of the [System Impact Study] is simply to identify system upgrades that must be made to interconnect a new resource, and Northern Pass has priced those upgrades into its construction cost,” presumably referring to the construction costs it included arriving at the HQP Capacity offer price into the Forward Capacity Auction.²⁷ Nonetheless, LEI admits that “this topic is outside of LEI’s area of expertise”²⁸ and refers the Subcommittee to the pre-filed testimony of Robert D. Andrew²⁹ for further evidence on this issue.³⁰ Mr. Andrew however, likewise concludes that Northern Pass can interconnect with the New England transmission system “in a manner that assures system stability and reliability,” but fails to distinguish the ISO-NE finding as an energy-only interconnection. Mr. Andrew makes no mention at all in his testimony of the Deliverability Test, giving the impression that the System Impact Study findings are the end of the story. But any measure of Forward Capacity Market benefits from the HQP Capacity requires, as a basic requirement, that the HQP Capacity can actually qualify to participate in the Forward Capacity Auction.

The Applicant has not offered any such material evidence. LEI, the witness opining that the Project will deliver capacity market benefits, expects that HQP Capacity will qualify to deliver capacity, but fails to provide any evidence in support of that claim. Although LEI freely

²⁷ App. Exh. 102, p. 27.

²⁸ *Id.*

²⁹ By letter dated August 4, 2016, the Applicant notified the Committee that it was substituting as a witness Mr. Andrew for Bradley P. Bentley. The Applicant had earlier submitted Mr. Bentley’s pre-filed testimony in this proceeding. Mr. Andrew, therefore “adopt[ed] his pre-filed testimony.” *See Adam M. Dunville Letter to the Committee Re: Witness Substitution for System Impact and Reliability*, Docket No. 2015-06 (filed August 4, 2016).

³⁰ *See* App. Exh. 102, at p. 28, n. 30 (referring the Committee to the Substitute Pre-Filed Direct and Supplemental Testimony of Robert D. Andrew, March 24, 2017).

admits that “this topic is outside of LEI’s area of expertise,”³¹ it is not outside the expertise of NEPGA’s witness, Mr. Fowler, who provides substantial evidence demonstrating that the HQP Capacity will have difficulty passing the Deliverability Test, and if it does so will likely require significant transmission upgrades.

B. HQP CAPACITY IS UNLIKELY TO CLEAR THE FORWARD CAPACITY MARKET ECONOMICALLY

Prospective new capacity resources seeking to offer into the Forward Capacity Auction are subject to the Minimum Offer Price Rule (“MOPR”). The MOPR dictates that if a new capacity resource seeks to offer at a price below certain Tariff-defined thresholds by resource type, the project sponsor must demonstrate to the ISO-NE Internal Market Monitor that it can offer into the auction at a price below the Tariff threshold at a price consistent with its capital and other going-forward costs. The MOPR is intended to protect the Forward Capacity Market against uneconomic offers.

Capacity delivered over Northern Pass is considered an Elective Transmission Upgrade,³² which has a MOPR threshold price equal to the Forward Capacity Auction starting price, in the case of FCA 12 set at \$12.86/kW-month.³³ If it wishes to offer at a price below \$12.84/kW-month, HQP, the likely Market Participant to seek to deliver capacity over Northern Pass, will need to demonstrate that its amortized capital and other going-forward costs are below that level on a dollar per kW-month basis. LEI predicts that the Internal Market Monitor will allow HQP

³¹ App. Exh. 102, p. 27.

³² See ISO-NE Open Access Transmission Tariff, Schedule 25, Section I, available at: https://www.iso-ne.com/static-assets/documents/2015/02/sch_25.pdf. (defining Elective Transmission Upgrade interconnection procedures).

³³ See *ISO New England Inc.*, 161 FERC ¶ 61,035, at P 43 (2017) (explaining that the starting price is equal to 1.6 x Net CONE, or \$12.86/kW-month).

to offer the new capacity at an offer price of [REDACTED] LEI arrives at this value, in part, by ignoring the cost of the underlying generation, excluding the cost of transmission necessary to deliver capacity and energy from its source in Quebec to the New England border, and based on an unrealistic 40-year amortization period. These errors render LEI's offer price prediction inaccurate, which should be rejected by the Subcommittee.

A. THE INTERNAL MARKET MONITOR WILL REQUIRE HYDRO QUEBEC PRODUCTION TO INCLUDE THE COST OF GENERATION IN ITS NEW CAPACITY OFFER PRICE

The IMM will require HQP to include in its MOPR Price the costs associated with the generation in Quebec providing the capacity, costs LEI does not include in its offer price analysis.³⁵ LEI did not include these generation resource capital costs claiming that because the generation is surplus to Hydro-Quebec's load demand it therefore has no cost.³⁶ This position is inconsistent with the long amortization period LEI chose to use, and is therefore unlikely to survive the Internal Market Monitor's ("IMM") review.

In developing and approving MOPR thresholds, the IMM requires use of consistent assumptions. If the proponent seeks to use 40 years of revenues to justify its offer price (as LEI has done), then it must show 40 years of underlying costs.³⁷ In order to exclude those generation costs, HQP would need to demonstrate that at no point during the next 40 years (or 20 years, if the IMM approves a 20 year amortization schedule) will Hydro-Quebec be required to build any additional generating capacity to meet its load.³⁸ In other words, HQP would need to show that the 1,000 MW it asserts as "surplus" capacity on its system, that it seeks to deliver as capacity to

³⁴ App. Exh. 140 (LEI's indicative MOPR analysis).

³⁵ Nov. 17 PM Transcript, p. 7,

³⁶ *Id.*

³⁷ *Id.* at pp. 7-9.

³⁸ *Id.* at p. 8.

New England, remains “surplus” throughout the 40-year or any other amortization schedule HQP may posit to determine its new capacity resource offer price. Absent that showing, the IMM is expected to require that the capital cost of new generation be included in developing an acceptable offer price.³⁹ It is unclear what the cost of that generation may be, but its absence from LEI’s offer price analysis does not support a finding that HQP can clear its capacity in the Forward Capacity Auction.

B. LEI FAILED TO INCLUDE THE COST OF NEW TRANSMISSION NECESSARY FOR HQP TO DELIVER CAPACITY OVER THE NORTHERN PASS LINE

LEI failed to include in its MOPR analysis the capital costs necessary to construct new transmission on the Canadian side of the border, new infrastructure that is necessary in order for Northern Pass to deliver energy and capacity into New England. This new transmission line would run from a transmission substation in des Cantons, Quebec, to the Canada-United States border, and then to Franklin, New Hampshire. The estimated cost of the line that will run through Quebec was estimated to be \$460 - \$600 million.⁴⁰

LEI agrees that but for the Northern Pass Project, the Quebec Line will not be built.⁴¹ Yet, according to LEI, it is not appropriate to include these costs in HQP’s minimum offer price because HQP will not incur the capital costs. Instead, according to LEI, Hydro-Quebec Transmission will incur the capital costs, which in turn will be passed onto HQP through tariff rates for transmission service over the new line.⁴² It is this payment structure – Hydro-Quebec Transmission incurring the capital costs and recovering them through tariff rates from HQP – that LEI believes relieves HQP from including the costs of new transmission necessary to

³⁹ *Id.*

⁴⁰ June 9 AM Transcript at pp. 57-8.

⁴¹ *Id.* at p. 56.

⁴² *Id.*

delivery energy and capacity in its offer price. LEI also argues that HQP would not incur any “incremental” transmission costs as a result of delivering energy and capacity to New England over the new Canadian transmission build, because “[t]he energy that HQP would sell down Northern Pass is basically displacing energy they would otherwise sell to other market, and because that they don’t pay any incremental transmission in Quebec for that.”⁴³ This explanation, grounded in corporate structure and contractual design, does not address the way in which the IMM, for purposes of market mitigation, will assess these costs. As Mr. Fowler explained, “the IMM is a very thorough watchdog of how our markets work” and “has been really very consistent and thorough in trying to push through these structures to make sure they get to what the real costs are.”⁴⁴

Based on an estimated cost of \$460 - \$600 million dollars, and using the LEI cost workbook, adding the cost of the Canadian transmission, together with a more rational 20-year amortization schedule, discussed *infra*, would lead to an up to [REDACTED]

[REDACTED] This value doesn’t even account for the transmission upgrades likely made necessary by ISO-NE’s findings on the Deliverability Test, discussed *supra*.

3. LEI ASSUMES A 40-YEAR AMORTIZATION SCHEDULE WHEN THE INTERNAL MARKET MONITOR IS MORE LIKELY TO REQUIRE A 20-YEAR AMORTIZATION

LEI believes that the IMM will allow HQP to assume a 40-year amortization schedule for purposes of developing its new entry offer price threshold, asserting that 40 years is the “industry standard” for transmission assets.⁴⁵ LEI, however, cannot cite to a single case in which the IMM

⁴³*Id.* at pp. 68-70

⁴⁴ Nov. 17 PM Transcript at p. 87.

⁴⁵ June 9 AM Transcript at p. 38. LEI also claims “many examples in other jurisdictions” but fails to identify any specific example.

has allowed for a 40-year amortization schedule. The IMM's default amortization schedule for generation assets is 20 years.⁴⁶ Using the cost workbook LEI offered as evidence in this proceeding, and holding all else equal, a change from a 40-year amortization schedule to a 20-year amortization schedule causes a substantial increase in the predicted offer price, from [REDACTED] LEI's belief that the IMM will allow for a 40-year amortization schedule is therefore critical to its conclusion that the Project will clear the Forward Capacity Auction.

The 20-year default amortization schedule for generation assets is the more reasonable value to adopt, because it is HQP generation assets, not the Northern Pass line, that will be offered into the Forward Capacity Auction, if at all. Whether 40 years is the "industry standard" for transmission assets is likely irrelevant, in part because the 40-years standard is primarily used for purposes of regulated transmission rates, and in part because it is generation, not transmission assets, that would provide capacity over the Northern Pass line. LEI also cites to the economic life of transmission assets as a potential reason for the IMM to allow a 40-year amortization schedule, but acknowledges that there are many generation assets in New England that have been in service for longer than twenty years.⁴⁷ Yet the default amortization schedule for generation units is limited to 20 years for purposes of IMM evaluation of the competitiveness of new capacity bids.

Several other factors also weigh in favor of a finding that the IMM is unlikely to allow for a 40 year amortization schedule. First, the Massachusetts Request for Proposals for clean energy resources calls for 15-20 year energy contracts.⁴⁸ If Northern Pass is awarded a contract

⁴⁶ Nov. 17 PM Transcript at p. 6.

⁴⁷ June 9 AM Transcript, pp. 47-48.

⁴⁸ Mass. Gen. Laws, Session Law Act 2016, Ch. 188, *available at* <https://malegislature.gov/Laws/SessionLaws/Acts/2016/Chapter188> .

C. LEI GREATLY EXAGGERATES THE POTENTIAL CAPACITY MARKET BENEFITS DUE TO SEVERAL INACCURATE ASSUMPTIONS AND UNLIKELY FUTURE CLEARING PRICES

1. LEI PREDICTS CLEARING PRICES WELL IN EXCESS OF HISTORICAL AND LIKELY FUTURE CLEARING PRICES

LEI developed a Base Case and Project Case, the former showing its predicted Forward Capacity Auction clearing prices without capacity over Northern Pass clearing in the auction, and the latter assuming 1,000 MW of capacity over Northern Pass clears and remains in the Forward Capacity Market. It is the difference between Base Case and Project Case clearing prices that form the basis of the capacity market benefits asserted by the Applicant. The Base Case clearing prices LEI predicts, however, are well in excess of historical clearing prices and likely future clearing prices. LEI's predictions simply do not align with reality.

The majority of the capacity market benefits asserted by LEI [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] These sustained high clearing prices are unrealistic and indeed contradict the Forward Capacity Market design. As LEI acknowledged on cross-examination, the Forward Capacity Market Net Cost of New Entry ("Net CONE") value is intended to reflect the clearing price for a market in equilibrium (*i.e.*, clearing at the Net Installed Capacity Requirement quantity level) on average and over time.⁵² The Net CONE value for FCAs 12-14 is \$8.16/kW-month, meaning that in certain years the market will clear lower and in other years higher, but on average is expected to clear at \$8.16/kW-month at equilibrium. LEI predicts that the Forward Capacity Auction will clear [REDACTED]

⁵¹ App. Exh. 81, p. 24, Fig. 13.

⁵² June 9 PM Transcript at p. 77.

Capacity can clear the Forward Capacity Auction and, in the event it can clear, decreases the projected impacts on Forward Capacity Auction clearing prices. The inaccurate values LEI used included the Net Installed Capacity Requirement, the Northern New England Capacity Zone's Maximum Capacity Limit, and the quantity of capacity resource retirements in the twelfth Forward Capacity Auction.

A. NET INSTALLED CAPACITY REQUIREMENT

The Net Installed Capacity Requirement ("NOCR") represents a quantity of capacity necessary to meet ISO-NE's resource adequacy needs, with its value used to set the position of the system-wide demand curve in each Forward Capacity Auction.⁵⁸ The system-wide demand curve is positioned in a way that it crosses through the intersection of the NOCR quantity and the Net CONE value. If the NOCR value increases from one auction to the next, the demand curve shifts to the right, meaning that for a given quantity of capacity cleared in the auction, the auction clearing price will be higher versus the case with a lower NOCR value.⁵⁹ Likewise, if a predicted clearing price is based on a certain NOCR value assumption, and that NOCR assumption turns out to be higher than actual, the predicted clearing price will be higher than would be the case with the actual, lower NOCR value.

LEI developed NOCR values for each Forward Capacity Auction based on ISO-NE's peak demand forecast, net of ISO-NE's projections for incremental behind-the-meter solar capacity, as of 2016.⁶⁰ In two years since then, however, ISO-NE has significantly reduced its peak load forecast net of behind-the-meter solar, due to a change in its methodology for calculating behind-the-meter solar, which in turn has significantly reduced the NOCR value for FCA 12 and beyond.

⁵⁸ Nov. 17 AM Transcript at p. 140.

⁵⁹ *Id.*

⁶⁰ CFP Exh. 159, TS 11 1-9 (Applicant responses to Technical Session Memorandum Dated 03/03/17).

REDACTED VERSION

The actual NICR value for FCA 12 is 33,725 MW, approximately 440 MW lower than the FCA 12 NICR value LEI used for purposes of its clearing price prediction.⁶¹ Holding all else equal, this 440 MW difference in NICR will cause an approximate \$2.00/kW-month reduction in the FCA 12 clearing price at equilibrium.⁶²

LEI predicts a Base Case clearing price of [REDACTED] – with all else held equal, FCA 12 would instead clear at approximately [REDACTED] if the demand curve LEI modeled was based on the actual NICR value for FCA 12. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] This difference between the actual and LEI’s projected NICR values, if applied across LEI’s full range of FCA clearing price projections, would similarly decrease the projected clearing prices by approximately \$2.00/kW-month, all else held equal. The significant difference in projected FCA clearing prices calls into question the capacity market benefits of the Project in two primary respects.

First, it further casts doubt on whether the HQP Capacity, if even qualified to participate in the Forward Capacity Market, can clear the Forward Capacity Auction in FCA 12, FCA 13, or any other auction in which it may attempt to clear. LEI predicts that the IMM will allow HQP to offer into the Forward Capacity Auction at an offer price as low as [REDACTED] but, as discussed *supra*, LEI made several unrealistic assumptions in arriving at its offer price, including

⁶¹ Nov. 17 AM Transcript at p. 139.

⁶² *Id.* at p. 140.

⁶³ App. Exh. 81, p. 24, Figure 13.

⁶⁴ See NEPOOL Markets Committee materials, Internal Market Monitor Voting Memorandum, October 3-4, 2017, available at: https://iso-ne.com/static-assets/documents/2017/09/a5_voting_memo_dynamic_delist_bid_threshold.pdf.

REDACTED VERSION

that the IMM will: (1) allow HQP to amortize capital and other costs over a 40 year, rather than a 20 year period; (2) allow the cost of the generation underlying the capacity to not be included; and (3) that the IMM will not require HQP to include in its MOPR Price the cost of the incremental transmission build in Canada necessary to connect the prospective capacity resources to ISO-NE. It is all but certain that the IMM will require HQP to amortize the generation resource costs over an amortization period that is drastically shortened to match the expected duration of current surplus (without adding new supply to its system), else add the capital cost of generation, and include the Canadian generation and transmission costs, which together would result, based on LEI's indicative MOPR Price spreadsheet, in a minimum offer price in excess of [REDACTED]. Though the Internal Market Monitor's decision, subject to Federal Energy Regulatory Commission review, will ultimately dictate the HQP minimum offer price, even a more modest increase to the minimum offer price seriously calls into question whether HQP can clear a Forward Capacity Auction that clears at [REDACTED]

Second, it serves to decrease the magnitude of capacity market benefits LEI predicts. LEI calculates its predicted capacity market benefits as the difference between FCA clearing prices and quantities cleared in a Base Case and in a Project Case. Because the lower NICR values would apply to both the Base Case and Project Case, one might conclude that the decrease in FCA clearing price would apply equally to both the Base and Project Cases, and therefore the higher NICR value would not impact the delta or difference between the Base and Project Case clearing prices. But this is not the case, as incremental cleared capacity has less of a price effect

⁶⁵ See App. Exh. 140.

as the market clears in excess of NICR versus a case where the auction clears closer to NICR. This is because the demand curve is steeper as the quantity of capacity approaches (and reaches quantities below) NICR. LEI's higher predicted Base Case clearing prices show that LEI predicts that the FCA will clear quantities near to or less than NICR, whereas in the Project Case LEI predicts that the FCA will clear well long of NICR. A 440 MW reduction in NICR will therefore decrease the predicted clearing price in the Base Case more so than it will in the Project Case. The delta between the Base Case and Project Case clearing prices, therefore, would be smaller than those predicted by LEI.

B. MAXIMUM CAPACITY LIMIT

New England is separated into distinct Capacity Zones for each Forward Capacity Auction, which are defined by constraints on the ability of the transmission system to deliver capacity from one part of New England to another. At present, and likely for the foreseeable future, New Hampshire, Vermont, and Maine are collapsed into a single Capacity Zone known as the Northern New England ("NNE") Capacity Zone. The NNE Capacity Zone is "export-constrained" in that it has more capacity than load demand, and transmission constraints limit the amount of NNE capacity that may be exported to southern New England.⁶⁶ One of the parameters ISO-NE determines for each auction, and for the NNE Capacity Zone in particular is the "Maximum Capacity Limit." When the quantity of capacity inside the capacity zone comes close to, or exceeds this value, then the zone will "price-separate," meaning that capacity resources in NNE will receive a lower capacity clearing price than those outside of NNE.⁶⁷

⁶⁶ Nov. 17 AM Transcript at p. 141.

⁶⁷ *Id.* at pp. 141-143.

REDACTED VERSION

The Northern Pass line would deliver into New Hampshire, and therefore any capacity that offers into the Forward Capacity Auction over that line will participate as a NNE Capacity Zone resource. LEI predicts that the NNE Capacity Zone will not price-separate in any FCA in its forecast horizon, even with the addition of 1,000 MW of capacity over the Northern Pass line.⁶⁸ The magnitude of any price-separation increases significantly as the export-constraint zone clears MWs in excess of the MCL.

LEI predicts a MCL value of approximately 8,980 MWs for FCA 11, and 9,450 MW for FCA 12, an increase of approximately 500 MW from one auction to the next.⁶⁹ The actual MCL value for the NNE Capacity Zone for FCA 12, however, is 8,790 MW, a *decrease* from the FCA 11 MCL value of approximately 180 MW.⁷⁰ The first year of the LEI forecast, upon which LEI's subsequent assumptions follow, exaggerates the MCL for the NNE zone by 660 MW, with the actual trend in the MCL value for the NNE Capacity Zone is the opposite of that used by LEI. This recent decrease in the NNE Capacity Zone MCL has been driven largely by negative load growth in Maine, due to mill closings and other economic impacts on load growth.⁷¹ Absent a reversal to positive load growth in the NNE Capacity Zone, this trend in the MCL value would be expected to continue.

LEI's conclusion that the NNE Capacity Zone will not price separate is predicated in part on its belief that approximately 530 MW of Existing Capacity would retire in FCA 12.⁷² LEI's modeled retirement of 530 MW in NNE in FCA 12 (and the addition of a small amount of wind resources), combined with the addition of 1,000 MW of capacity over the Northern Pass line in

⁶⁸ June 9 AM Transcript at p. 89.

⁶⁹ June 9 AM Transcript at p. 93; *see also* App. Exh. 102, p. 18, Fig. 3.

⁷⁰ Nov. 17 AM Transcript at p. 144.

⁷¹ *Id.* at p. 146.

⁷² App. Exh. 102 at p. 17-18; *see also* CFP Exh. 159, TS 11 1-5 (Applicant responses to Technical Session Memorandum Dated 03/03/17).

REDACTED VERSION

FCA 12, results in a net increase of only approximately 500 MW of capacity in the NNE Capacity Zone in FCA 12.⁷³ None of LEI's forecasted 530 MW of NNE Existing Capacity resources, however, did in fact retire in FCA 12.⁷⁴ LEI acknowledged that to accurately model the NNE Capacity Zone in FCA 12, it would be appropriate to at the very least add back the 530 MW as supply clearing in FCA 12.⁷⁵ LEI had predicted that 9,050 MW of Existing Capacity in the NNE Capacity Zone would clear in FCA 12.⁷⁶ Adding back in the 530 MW of retirements predicted by LEI to the 9,050 of Existing Capacity LEI predicts will offer into FCA 12 would result in approximately 9,580 MW of capacity supply in the NNE Capacity Zone in FCA 12 (with Northern Pass capacity included).

Using LEI's figure depicting the NNE Capacity Zone demand curves,⁷⁷ these changes to the actual FCA 12 values show that NNE will almost certainly price-separate if 1,000 MW of capacity clears over the Northern Pass line if, as LEI asserts, the IMM allows HQP to offer low enough to clear as new capacity in the Forward Capacity Auction. As shown here, the vertical line labelled "FCA 12 NNE Capacity," set in the figure at approximately 9,050 MW, should be shifted to the right to be set at approximately 9,580 MW (shown by the purple line):

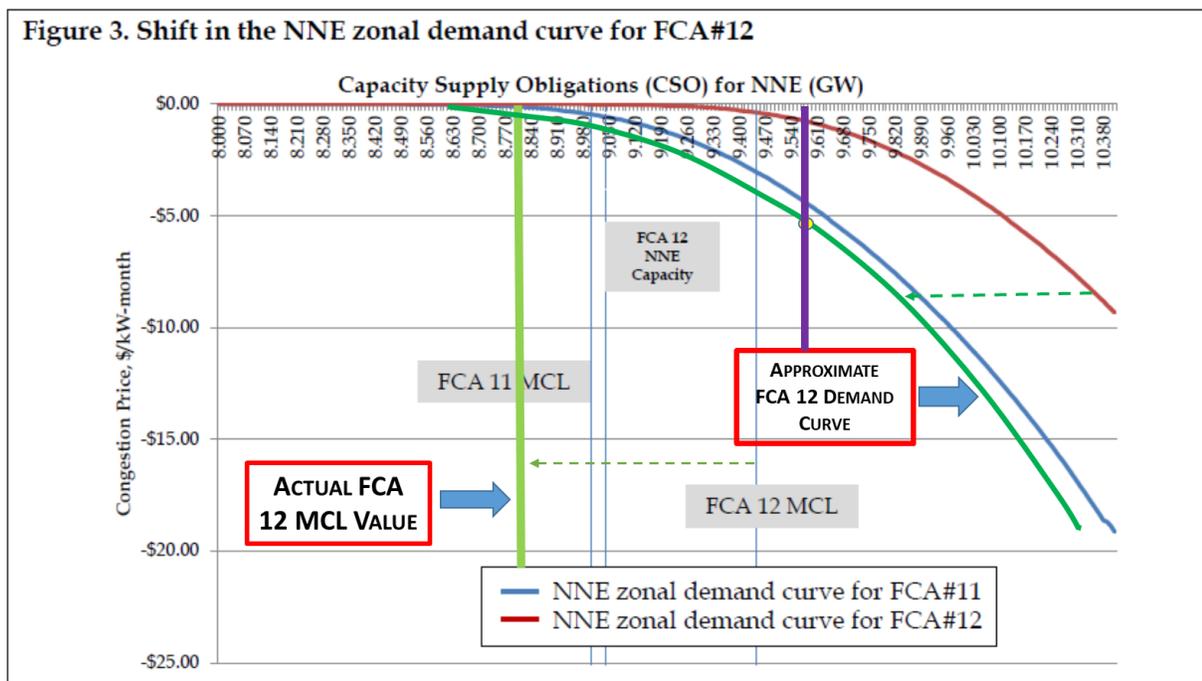
⁷³ App. Exh. 102 at pp. 17-18; June 9 AM Transcript at p. 101.

⁷⁴ *Id.* at p. 108.

⁷⁵ *Id.* at p. 109. LEI argues that "there's probably other changes that need be made" to accurately model FCA 12, but did not identify what other changes would need to be made.

⁷⁶ App. Exh. 102, p. 18, Fig. 3.

⁷⁷ *Id.*



The FCA 12 demand curve reflected in the figure in red should then be shifted to the left to align with the actual FCA 12 Maximum Capacity Limit of 8,790. As the approximate FCA 12 demand curve shows (shown in green), if 9,580 MW of NNE capacity clear the auction, the NNE Capacity Zone will price-separate at a discount to the price in other capacity zones in an amount that may exceed \$5.00/kW-month (shown at the intersection of the quantity of capacity offered and the approximate FCA 12 demand curve). If, for example, system-wide the Forward Capacity Auction cleared at the [REDACTED] price LEI predicts for FCA 12, the NNE Capacity Zone may clear [REDACTED] or lower, well below any clearing price in the history of the Forward Capacity Auction. Though these are approximations,⁷⁸ and other potential changes could be made to the demand curve and quantity of Existing Supply, it is obvious that capacity over Northern Pass would flood what is already a Capacity Zone with more

⁷⁸ LEI, for example, correctly noted that the actual curve of the shape may differ from that shown in the figure, but that, generally, the curve shape will be concave and not fundamentally differ from those shown in the figure. See June 9 AM Transcript at p. 116.

existing capacity than necessary to meet load in Northern New England, and far more than can be exported to southern New England due to the transmission constraints discussed *supra*.

So long as an export-constrained Capacity Zone like NNE is surplus of capacity, the market design dictates that the NNE capacity resources will receive less than capacity resources in the three southern New England states. The likelihood of the NNE Capacity Zone price-separating to a significant extent, and potentially for several years, raises the potential that Northern Pass could cause the retirement of one or more Existing Capacity resources in New Hampshire or Maine.⁷⁹ As Mr. Fowler explained, Forward Capacity Market revenues are a “critical source of revenue to all generators in New England, and to the extent those prices get pushed down to very low levels, then that would put a lot of stress on existing units and the likelihood of some or many of those retiring would be significantly increased.”⁸⁰ Though not conceding a [REDACTED], LEI agreed on cross-examination that, if capacity clearing prices decreased to that level “[i]t would cause folks to delist in the market and not willingly take on a capacity supply obligation.”⁸¹ Further, if the FERC approves the CASPR design changes filed by ISO-NE, capacity market entry by Northern Pass through the CASPR’s Substitution Auction will require retirement of resources in New Hampshire or Maine.

One or more retirements will have two potential consequences. First, the retirement of a large generator in New Hampshire would obviously cause negative economic and employment impacts for New Hampshire. The capacity cost savings forecasted by the Applicant are due to the overall increase in the capacity supply with the addition of the Project and with no offsetting retirements. Once retirements occur and the capacity supply drops back down to the pre-Project

⁷⁹ Vermont has very little in-state generation, most of which is run of river hydro, wind, and solar.

⁸⁰ Nov. 17 AM Transcript at pp. 148-9.

⁸¹ June 9 AM Transcript at p. 120.

level, the capacity savings disappear. Second, depending of the magnitude of the retirements, the market may signal the need for new entry in NNE or system-wide, which in turn would cause a higher clearing price (with HQP Capacity in the market) in one or more years of the LEI forecast horizon. By concluding that the NNE Capacity Zone will not price-separate with the introduction of capacity over the Northern Pass line, LEI unrealistically fails to account for these potential consequences in its findings on the economic impact of Northern Pass on New Hampshire, contributing to LEI's overestimation of economic benefits, if any, the Project may bring to New Hampshire.

3. IF HYDRO QUEBEC PRODUCTION CAPACITY CLEARS AT ALL, IT WILL LIKELY DO SO THROUGH A FORWARD CAPACITY MARKET DESIGN THAT WOULD REQUIRE EXISTING RESOURCES IN NEW HAMPSHIRE AND MAINE TO PERMANENTLY RETIRE AS A CONDITION OF ACQUIRING A CAPACITY SUPPLY OBLIGATION

Throughout the evidentiary hearing process, the New England Power Pool stakeholders and ISO-NE have discussed a major change to the Forward Capacity Market design, the so-called Competitive Auctions and Sponsored Policy Resources ("CASPR") proposal. The Subcommittee has expressed an interest in how the CASPR proposal, if adopted, might bear on Northern Pass' wholesale market impacts. At the conclusion of the evidentiary hearings, ISO-NE had not yet filed its proposal with FERC, but since has made its filing, defining the precise terms of the proposal. It is unknown yet whether FERC will approve the CASPR proposal, or approve it with condition, but if FERC approves the proposal it will create the most likely means by which HQP will acquire a Capacity Supply Obligation in the Forward Capacity Auction, if it is able to pass ISO-NE's Capacity Deliverability Test. As it would apply to the NNE Capacity Zone, the CASPR proposal requires that in order for a new New Hampshire capacity resource to receive a Capacity Supply Obligation, an equal amount of existing capacity in New Hampshire

or Maine must permanently retire (subject to the exception noted in footnote 10). The most likely means by which the capacity is to provide any wholesale market benefits therefore guarantees as a condition of those benefits the retirement of 1,000 MW of existing capacity in New Hampshire and/or Maine.

As ISO-NE explains in its FERC filing, under CASPR the Forward Capacity Auction will be run in two stages.⁸² In the first stage, ISO-NE will run the Forward Capacity Auction as it does now, with all new resource subject to the MOPR. If a state-sponsored resource, including any resource receiving a contract through the Massachusetts RFP, does not clear in the first stage, it is then entered as a supply resource in a second auction called the Substitution Auction.⁸³ A state-sponsored resource offering as supply in the Substitution Auction is not subject to the MOPR, and can obtain a Capacity Supply Obligation so long as it offers at sufficiently low price and, critical to this proceeding, an equal number of existing capacity resource MWs permanently retire.⁸⁴ A new state-sponsored capacity resource can therefore only acquire a Capacity Supply Obligation through the Substitution Auction at the pace of permanent retirements, meaning that capacity market benefits, if any, would be delayed until sufficient retirements pair with the state-sponsored capacity seeking to acquire a Capacity Supply Obligation.

Also critical to this proceeding is that the CASPR design requires, in almost all cases that involve a new resource injecting power into an export-constrained capacity zone such as the NNE Capacity Zone, that the sponsored-resource that receives the Capacity Supply Obligation

⁸² ISO New England Inc. Filing Re: Revisions to ISO New England Transmission, Markets and Services Tariff Related to Competitive Auctions with Sponsored Policy Resources, Docket No. ER18-619-000 (filed January 8, 2018) (“CASPR Filing”), Transmittal Letter at pp. 5-6.

⁸³ *Id.* at pp. 6-7.

⁸⁴ *Id.*

must be located in the same capacity zone as the resource that permanently retires.⁸⁵ The CASPR rules therefore require that if the HQP Capacity receives a Capacity Supply Obligation through the Substitution Auction, that an equal number of MWs of existing capacity resources retire in New Hampshire and/or Maine. The capacity market savings that the Applicant promises only occur when the addition of capacity due to the addition of the Project results in an overall increase in the total capacity of the region and the Forward Capacity Auction clears at a lower value due to the increase in total capacity supply. If the capacity associated with the NPT Project is offset by retirements through CASPR, there will be no difference in the Forward Capacity Auction clearing price and therefore no capacity market savings.

NEPGA accordingly asks that if the Subcommittee finds that Northern Pass will cause wholesale market benefits, that the Applicants have exaggerated the potential capacity market benefits, and wholly ignored the adverse economic impact of existing generating resource retirements in New Hampshire and/or Maine due to the HQP Capacity acquiring a Capacity Supply Obligation.

⁸⁵ *Id.* at pp. 23-24.

IV. CONCLUSION AND REQUEST FOR RELIEF

The Applicant has not met its burden to show by a preponderance of the evidence that Northern Pass would cause economic benefits to New Hampshire in the form of lower wholesale energy costs. The Applicants have provided no evidence, much less a preponderance of evidence, for the first and most basic of necessary findings that the HQP Capacity will qualify to participate in the Forward Capacity Auction. Assuming that the HQP Capacity qualifies, the Applicant has not shown that HQP is able to offer into the Forward Capacity Auction low enough to clear the capacity. The most likely opportunity for the HQP Capacity to clear is through the CASPR design, which is not yet approved by FERC and, if approved, will include a condition that, in almost all cases, if a state-sponsored resource obtains a Capacity Supply Obligation that an equal amount of existing generating capacity in New Hampshire and/or Maine permanently retire.

The capacity market savings that the Applicant promises only occur when the addition of capacity due to the addition of the Northern Pass Project results in an overall increase in the total capacity of the region and the Forward Capacity Auction clears at a lower value due to the increase in total capacity supply. If the HQP Capacity is offset by retirements through CASPR, there will be no difference in the Forward Capacity Auction clearing price and therefore no capacity market savings. The Applicants fail to account for the adverse economic impact of these retirements and, together with its exaggerated potential capacity market impacts, fails to show by a preponderance of evidence the measure of any potential wholesale capacity market benefits.

The Applicants have failed to meet their evidentiary burden with respect to the wholesale capacity market benefits they assert. Accordingly, NEPGA respectfully requests that the

REDACTED VERSION

Subcommittee find that: (1) the Applicants have failed to demonstrate that the Project will deliver any wholesale capacity market benefits; and (2) that the Subcommittee's finding on the public interest standard shall not account for any wholesale energy market benefits.

WHEREFORE, NEPGA respectfully requests that this Committee [to be added]:

Respectfully Submitted,

**NEW ENGLAND POWER GENERATORS
ASSOCIATION, INC.**

By its Attorney,

Date: January 12, 2018

By: /s/ Bruce Anderson
Bruce Anderson, Esq.
33 Broad Street, 7th Floor
Boston, MA 02019
(617) 902-2354
banderson@nepga.org

REDACTED VERSION

CERTIFICATE OF SERVICE

I hereby certify that on this day, January 12, 2018, a copy of the foregoing Response was sent by electronic mail to persons named on the Service List of this docket.

___/s/ Bruce Anderson_____