STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of Deepwater Wind South Fork, LLC for a Certificate of Environmental Compatibility and Public Need for the Construction of Approximately 3.5 Miles of Submarine Export Cable from the New York State Territorial Waters Boundary to the South Shore of the Town of East Hampton in Suffolk County and Approximately 4.1 Miles of Terrestrial Export Cable from the South Shore of the Town of East Hampton to an Interconnection Facility with an Interconnection Cable Connecting to the Existing East Hampton Substation in the Town of East Hampton, Suffolk County.	Case No. 18-T-0604

SUPPLEMENTAL INFORMATION IN SUPPORT OF
MOTION OF SIMON V. KINSELLA TO
COMPEL PSEG LONG ISLAND, LLC TO RESPOND
TO INFORMATION REQUEST SI KINSELLA #32

I, Simon V. Kinsella, am an intervenor in the above-caption proceeding. To the extent that I am neither a lawyer nor have I hired a lawyer (due to lack of intervenor funding), I respectfully request a degree of latitude regarding the submission of this supplemental information.

I respectfully submit this information in support of my motion for an order to compel PSEG Long Island LLC to respond fully and completely to Information Request Si Kinsella #32 submitted September 30, 2020 (“Motion to Compel”).

This supplemental information came into my possession only last Thursday afternoon (October 1, 2020 at 2:16 pm) and was not in my possession at the time when I filed my Motion to Compel (on September 30, 2020).

To avoid duplication, exhibits that are referenced with a letter (i.e. “A” or “B”) have the same reference as those exhibits to the Motion to Compel filed September 30, 2020. Newly introduced exhibits in this submission of supplemental information are referenced with a roman numeral (i.e. “I” or “IV”).

I. Background

On September 30, 2020, I filed with New York State Department of Public Service (“NYSDPS”) a motion for an order to compel PSEG Long Island, LLC (“PSEGLI”) to respond to information Request Si Kinsella #32 (“IR SK #32”).

A day later (on October 1, 2020), I received from State of New York Office of the State Comptroller (“OSC”) a response to Freedom of Information Law (“FOIL”) Request #2020-0444.

The response from OSC contained the following files (listed below) –

Exhibit	I	Email from FOIL@osc.ny.gov to si@wainscott.life (Oct 1, 2020)	Pages 1
Exhibit	II	2020-0444 Response	Pages 2
Exhibit	III	C000883 Deepwater Wind VRQ 1-26-17	Pages 12
Exhibit	IV	C000884 - East Hampton Energy Storage VRQ 5-23-17_Redacted	Pages 10
Exhibit	V	C000884 - LI Energy Storage VRQ (Sub) 7-20-17_Redacted	Pages 12
Exhibit	VI	C000885 Montauk Energy Storage VRQ 5-23-17_Redacted	Pages 10
Exhibit	VII	VR for C000883-6015200_Redacted	Pages 136
Exhibit	VIII	VR for C000884-6015200_Redacted	Pages 23
Exhibit	IX	VR for C000885-6015200_Redacted	Pages 54
			Total Pages 260

Arguments
in light of new information

II. Claim of Confidentiality

On August 24, 2020, I submitted IR SK #32 to PSEGLI seeking information that is "relevant and material" to this proceeding and "information likely to lead to such information" pursuant to 16 NYCRR § 5.1(a).

IR SK #32 requests information relating to PSEGLI's administration of a Request for Proposals for South Fork Resources issued June 24, 2015 ("South Fork RFP") and its subsequent award determination of a power purchase agreement ("PPA") pursuant to that RFP to the Applicant, Deepwater Wind South Fork, LLC.

On September 3, 2020, PSEGLI objected to questions (2) and (4) though (10). Its objections are all identical and read as follows –

> *PSEG Long Island objects to this request on the grounds that it seeks confidential information that is neither relevant to, nor reasonably calculated to lead to, the discovery of admissible evidence in this Article VII proceeding.*

On September 3, PSEGLI promised to contemplate providing just "the names of the companies and the dates when they submitted the bids." [1]

The following day (September 4), I received PSEGLI's reply (via email) that reads –

> *Yesterday we had a telephone conversation where you asked me if I could provide the names of the companies and the dates when they submitted the bids. I promised you I would reply with a response by COB today (September 4, 2020). In response to that second question, on December 2, 2015, 21 proposals were received from 16 entities. In response to your first question, there are at least 3 of those 16 entities that have been publicly identified, such as:*
>
> *1. Applied Energy Group (implementation of a load reduction program);*
>
> *2. Deepwater Wind South Fork, LLC (offshore wind farm); and*
>
> *3. LI Energy System, LLC (battery storage in Montauk and East Hampton).*

[1] See Exhibit D – IR SK #32 Email Chain between PSEGLI & SK (Sep 3, 2020)

We are not providing you with a list of the other 13 entities that submitted bids on December 2, 2015. I understand that you may be asking for this information in a Motion to Compel; it is our position that this confidential information is neither relevant to, nor reasonably calculated to lead to, the discovery of admissible evidence in this Article VII proceeding [emphasis added].

On August 24, 2020, I submitted Freedom of Information Law ("FOIL") Request #2020-0444 requesting information from State of New York Office of the State Comptroller ("OSC") as follows –

Pursuant to New York State Freedom of Information Law (FOIL), I hereby request a copy of each "record" of the Office of the NYS Comptroller ("OSC") and each "agency" of OSC (as the terms "record" and "agency" are defined in Public Officers Law §86), specifically:

1) *The names and addresses of all respondents to the Request for Proposals for South Fork Resources released June 24, 2015 ("2015 South Fork RFP") issued by PSEG Long Island, LLC ("PSEG LI") through its operating subsidiary, Long Island Electric Utility Servco, LLC as agent of and acting on behalf of Long Island Lighting Company d/b/a LIPA ("LIPA") that filed a NYS Vendor Responsibility Questionnaire with OSC;*

2) *A copy of each "NYS Vendor Responsibility Questionnaire" filed with OSC by any respondent pursuant to the 2015 South Fork RFP; and*

3) *Any correspondence between OSC and any respondent that file a NYS Vendor Responsibility Questionnaire pursuant to the 2015 South Fork RFP with OSC pertaining to the 2015 South Fork RFP.*

The time period covered by this FOIL request is from June 24, 2015 through to January 31, 2017.[2]

[2] See Exhibit X - OSC FOIL Request #2020-0444 – VRQ - August 24, 2020

The information sought in OSC FOIL Request #2020-0444 is similar to that sought in PSEGLI IR SK #32. Both OSC and PSEGLI information requests ask for the names of respondents pursuant to the 2015 South Fork RFP. IR SK #32 requests more information from the administrator of the South Fork RFP, PSEGLI that would not be in the possession of OSC.

On October 1, 2020, OSC provided the requested information to the extent it was in its possession.

Respondents to the South Fork RFP were not required to submit to OSC Vendor Responsibility Questionnaires if the proposal was limited to services such as grid management or load reduction software services.[3] For example, PSEGLI did not require Applied Energy Group, Inc. to file a Vendor Responsibility Questionnaire with OSC a for its load reduction program.[4]

On October 1, 2020, OSC provided information (i.e. bidders' names and addresses, etc.) that PSEGLI objects to providing. By its disclosure, OSC undermines PSEGLI's claim that the information is confidential. If it were true that the information requested from PSEGLI in IR SK #32 was indeed confidential, then it would not have been disclosed by OSC (to the extent that such information was in OSC's possession).

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[3] Such proposals are defined to be a service provider agreement within the meaning of Public Authorities Law Section 1020-cc(ii)

[4] See Exhibit M – LIPA Board of Trustees Authorization to enter into a Power Purchase Agreement with Deepwater Wind South Fork, LLC dated January 25, 2017 (at p. 4, footnote 4).

III. South Fork RFP – Respondents

In its response to FOIL Request #2020-0444, OSC provided Vendor Responsibility Questionnaires for the following companies (listed below) –

No.	Vendor Responsibility Questionnaire Name of Company	Project/ Contract No.	Date
1	LI Energy Storage System, LLC	C000884/885 Two Lithium Ion Battery Installations of 5MW/40MWh each	Nov 24, 2015
2	Nextra Energy Resources Acquisitions, LLC		Dec 01, 2015
3	East Hampton Energy Storage Center, LLC		May 23, 2017
4	Montauk Energy Storage Center, LLC		May 23, 2017
5	LI Energy Storage System, LLC		Jul 20, 2017
6	AES Generation Development, LLC	Fuel Cell Arrays 30 MW	Nov 30, 2015
7	Convergent Energy and Power Inc.	Battery Storage ~ 10 MW/40 MWh	Nov 30, 2015
8	Energy Hub, Inc.	Demand Response	Nov 30, 2015
9	Halmar International, LLC	Aeroderivative Turbine (25-30 MW)	Dec 01, 2015
10	Deepwater Wind, LLC	C000883 - OS Wind Up to 180 MW	Dec 01, 2015
11	Deepwater Wind South Fork, LLC		Jan 26, 2017

Vendor Responsibility Questionnaires had been filed with the Office of the State Comptroller ("OSC") pursuant to the South Fork RFP by eleven companies (listed above). At first glance, it may appear as though eleven companies submitted eleven bids for eleven projects in a competitive RFP, but this would be misleading.

The first five companies are all indirect wholly-owned subsidiaries of Nextra Energy, Inc. and between them submitted one bid for one project comprising two battery storage facilities, one in Monatuk and one in East Hampton (collectively "LI Energy Storage").

Likewise, the last two companies are wholly-owned subsidiaries of Deepwater Wind Holdings, LLC and they, too, submitted one bid for one project (collectively, "Deepwater Wind"). The project submitted by Deepwater Wind pursuant to the South Fork RFP is the same project that is currently before the Public Service Commission in this Article VII proceeding.

Energy Hub, Inc. filed a Vendor Responsibility Questionnaire, but to the best of my knowledge, it provides only demand response and energy efficiency products and services. It was not, therefore, required to file a Vendor responsibility Questionnaire with OSC as its proposal would have related to a service contract.

In total, there were only five bids for five projects involving power production and/or energy storage that were submitted pursuant to the South Fork RFP. They are as follows –

1.	LI Energy Storage	Energy Storage
2.	AES Generation Development	Energy Storage
3.	Convergent Energy and Power Inc.	Energy Storage
4.	Halmar International, LLC	Aeroderivative Turbine
5.	Deepwater Wind	Offshore Wind

AEG

Also, PSEGLI/LIPA had publicly disclosed the name of another company, Applied Energy Group, Inc. ("AEG") that submitted a proposal pursuant to the South Fork RFP. AEG submitted a bid and was awarded a service contract for a load reduction program designed to shed load during peak-load events via smart thermostats among other initiatives. PSEGLI did not require AEG to file a Vendor Responsibility Questionnaires with OSC because it was awarded a service contract as opposed to a power purchase agreement ("PPA").

Similar companies to AEG may have proposed load reduction products or services in the South Fork RFP procurement, but because such companies were not required by PSEGLI to file Vendor Responsibility Questionnaires, we neither know how many companies submitted such bids, if any, nor the names of those companies, if they exist.

Anbaric Microgrid II may have been one such company to have submitted a bid (for a solar/batter/microgrid solution), but we neither know the nature of its bid nor indeed if it submitted one. This is reason for seeking PSEGLI to respond to IR SK #32.

This supplemental information, therefore, centers on the principle objectives as defined in the South Fork RFP[5] only as they pertain to power production and energy storage. It does not address service contracts for load reduction products or services because neither PSEGLI nor LIPA have disclosed respondent companies' names for service contracts pursuant to the South Fork RFP (except of Applied Energy Group, Inc).

IV. South Fork RFP – Objectives

The South Fork RFP, under title: "1.2. Description of Solicitation and Objectives", states that if "peak load growth were to occur without the addition of local resources (i.e. Load Reduction and/or Power Production) in the [South Fork] load pocket, new transmission lines would need to be built. As an alternative to adding new transmission lines, this Request For Proposals ("2015 SF RFP") seeks to acquire sufficient local resources to meet expected peak

[5] See Exhibit A - South Fork Resources Request for Proposals, June 24, 2015 (at p. 4)

load requirements until at least 2022 in the South Fork [63 MW], and 2030 in the east of Buell subarea [84 MW]."[6]

These same objectives are repeated in the RFP as follows:

1. *Meet the requirements of REV via the PSEG Long Island Utility 2.0 East End Infrastructure Deferment program.*
2. *Acquire additional local Power Production and/or Load Reduction resources **in** the South Fork to meet projected load growth and thereby defer the need for new transmission.*
3. *Support "load demand **in** the South Fork to the degree necessary to avoid overload of existing transmission assets during transmission outages that limit transmission capacity to the South Fork load area.*
4. *Support system voltage **in** the South Fork to avoid voltage collapse during a transmission outage."*[7]

There are three principle issues the South Fork RFP is unambiguously designed to address – (1) peak demand, (2) local resources in the South Fork, and (3) deferment of new transmission lines.

Three of the five companies that submitted proposals pursuant to the South Fork RFP: (1) LI Energy Storage, (2) AES Generation and (3) Convergent Energy; all proposed using decentralized battery storage facilities located locally in the South Fork next to either the East Hampton Substation or the substation in Montauk. The fourth company, (4) Halmar International, proposed installing an aeroderivative turbine that would similarly have been installed next to a substation.

[6] *Id.* (at p. 2 and Fig. 1-2 at p. 3)
[7] *Id.* (at p. 4)

The advantages of all four of these locally sited facilities are as follows:

i. The facilities are designed to quickly supply power onto the grid during peak-load when there is a short-fall in power supply. Depending on the type and capacity of the facility and the peak load, the facility would have provided power for a short period of time (approximately 2 to 8 hours depending on the facility and peak load);

ii. As the demand for power on the South Fork increased each year,[8] the modular design of the facilities could be expanded and contracted seasonally and expanded each year as demand increased thereby providing a lower initial cost, flexibility and degree of responsiveness if necessary;

iii. In the event when a source of renewable energy fails to generate power,[9] the facility is designed to quickly supply power onto the grid to make up the short-fall in power supply for a short period of time;

iv. The facilities are all designed to be locally sited in the South Fork. If there were a natural disaster, for example, where the transmission system between the South Fork with Long Island west of Shinnecock Canal is disrupted, the facilities could provide power for a short period of time;

v. Since the facilities as proposed would be sited next to a substation, they do *not* require new transmission lines (other than a short interconnection between the facility to the substation);

[8] *Id.* (Figure 1-2 at p. 3)

[9] Renewable energy resources are an intermittent source of power. For example, when wind speed in insufficient to turn the blades of wind turbine, that turbine does *not* generate power, or when the sun is shaded behind dense cloud-cover on overcast days, a solar facility does not generate to same power it would on days when the sun shines unimpeded.

vi. At the time of the South Fork RFP, the facilities were to permit PSEGLI and LIPA to have more time to up-grade an aging, neglected and frail transmission and distribution system in the South Fork.

In summary, the three battery storage facilities and the aeroderivative turbine facility all satisfy objectives as specified in the South Fork RFP and are each tailored to address the problems of: (1) peak demand, (2) local resources in the South Fork, and (3) deferment of new transmission lines.

Of the five companies that submitted proposals for power production and energy storage pursuant to the South Fork RFP, only one company submitted a proposal that did *not* satisfy *any* of the objectives of the South Fork RFP. That company is Deepwater Wind South Fork, LLC.

According to the South Fork RFP, the "South Fork has a unique load profile, with significant summer, weekend, and holiday activity in the Hamptons and surrounding towns, and corresponding peaks in energy usage … the South Fork typically reaches its peak electric demand at a different time than the rest of Long Island, and is primarily driven by residential air conditioning load [emphasis added]."[10] Further. "Residential customer loads in the South Fork are much more weather sensitive than commercial. On a peak summer day, up to sixty (60%) percent of the average residential load is directly attributable to air conditioning [emphasis added]."[11]

The problem with relying on offshore wind to power air conditioning systems on hot summer days, is that during this time the winds off eastern Long Island are at their weakest and offshore wind turbines may *not* be capable of generating *any* power due to low wind speeds that

[10] *Id.* (at p. 53)
[11] *Id* (at p. 54)

are less than a turbines' rated cut-in wind speed (i.e. typically between 3.0 and 3.5 meters per second).

Deepwater Wind South Fork has chosen to use Siemens Gamesa 8 MW wind turbine generators which have a cut-in speed of 3 meters per second and a cut-off speed of 25 meters per second.[12] The wind turbines, therefore, will generate power only when the wind speed is between 3 and 25 meters per second.

For example, a wind turbine on the Outer Continental Shelf (OCS) southeast of Nantucket (near NOAA Station 44008) for the year 2016, it would *not* generate power on average for

– More than 1 hour every 1.3 days
– More than 4 hours every 4.0 days
– More than 8 hours every 11.0 days
– More than 12 hours every 18.3 days

The longest continuous period when an offshore wind turbine would *not* have generated power due to low wind speed would have occurred on August 10, 2016 and lasted for 1.8 days. The average daily peak temperature for that week of August in 2016 was 84°F. In this scenario, both the East Hampton Energy Storage Center and the Montauk Energy Storage Center would have depleted their energy reserves within three to five hours and the Town of East Hampton would need one hundred Accabonac Solar Farms to produce the same energy as the two energy storage facilities. If the Town of east Hampton were relying on an offshore wind farm without upgrading the South Fork's fragile the transmission system, the Town would experience serious power supply problems and possible black-outs that could last days. What happened in California in the summer of 2020 would happen far more regularly on eastern Long Island if the

[12] See Exhibit X - Siemens Gamesa Specification (SG 8.0-167 DD)

South Fork were to rely on offshore wind.

Scenarios such as this would occur more often during the summer months when winds are weak and when we demand power more than at any other time of the year. This is the fundamental flaw inherent with offshore wind in off the eastern coast of the U.S.

A similar scenario would have happened if the wind turbine had been located closer to Long Island, just 23 nautical miles south-southwest of Montauk point (near NOAA Station 44017). In this location an offshore wind turbine, during 2015, it would *not* generate power on average for

– More than 1 hour every 1.4 days

– More than 4 hours every 3.6 days

– More than 8 hours every 10.0 days

– More than 12 hours every 31.1 days

The longest period when an offshore wind turbine would *not* have generated power in 2015 would have occurred on September 17, 2015 and lasted for 1.4 days.

In 2017 during a presentation to the Wainscott Citizens' Advisory Committee, Deepwater Wind produced a slide titled: Hourly Electrical Load and 90 MW Wind Farm. To the best of my knowledge the demand curve for power on the South Fork appears to accurate (see Exhibit XII). The summer-time "Peak Demand" spikes during the months of July through to August and into early September in any given year on the South Fork.

Conversely, the power output from Deepwater Wind's proposed "90 MW Wind Farm" was not as accurate, so it was replaced with a more accurate simulated power output curve based on 2015 wind data from NOAA Station 44008.[13]

[13] NOAA Station 44008 Southeast of Nantucket (40°30'15"" N 69°14'52"" W). Anemometer height of 5 m above site elevation. Wind speed recorded every 10 minutes from January 14 to December 31, 2015 (50, 448 readings). https://www.ndbc.noaa.gov/station_page.php?station=44008

The gap between peak demand and power output from offshore wind is greatest during the summer (see Exhibit XII). If Deepwater Wind's proposal for an offshore wind farm submitted in the 2015 South Fork RFP procurement is designed to meet peak demand, then its power output curve would match the demand curve for power, but it does not.

This graph illustrates the fundamental flaw in relying on offshore wind off the eastern coast of the U.S. to meet peak demand during the summer months. The converse is true in Europe where demand for power peaks during the winter months (for heating) when demand is matched by a corresponding peak in power output from stronger offshore winds.

Of the South Fork RFP's three principle objective: (1) peak demand, (2) local resources in the South Fork, and (3) deferment of new transmission lines, Deepwater Wind's proposal is clearly *not* designed to meet peak demand.

As for the remaining two objectives, proposing an offshore wind farm approximately sixty miles away from its interconnection point (at the East Hampton Substation) is *not* by any stretch of the imagination a "local" resource. Each of the other four proposals sited their energy storage and generation facilities according to the RFP's requirements, locally in the South Fork. Their facilities are all located immediately adjacent to either the East Hampton Substation or the substation in Montauk and stand in stark contrast Deepwater Wind's proposal to locate its generating facility out to ocean on the Outer Continental Shelf. Deepwater Wind, again, fails to meet the South Fork RFP's objective to –

> 2. *Acquire additional local Power Production … in the South Fork to meet projected load growth and thereby defer the need for new transmission [emphasis added].*

The third objective of the South Fork RFP was to defer the need for expensive transmission upgrades, but by Deepwater Wind proposing to locate its power generating facility out to ocean half-way between the interconnection point on eastern Long Island and Nantucket, it creates a need for a massive new and very expensive offshore transmission system. Deepwater Wind South Fork does *not* propose to defer transmission lines, in fact, the subject of this Article VII proceeding is a new transmission line. Unlike the other four proposals that would have allowed for more time to up-grade frail transmission lines, Deepwater Wind only shifts the cost of new transmission lines off PSEGLI's and LIPA's balance-sheet temporarily.

In fact, Deepwater Wind proposes to double-up on expense transmission lines insofar as it has to build its sixty-mile-long undersea and onshore transmission system to deliver power to East Hampton Substation and then in addition to that, PSEGLI and LIPA have to up-grade the fail and aging transmission lines on the South Fork to handle the additional power from Deepwater Wind's offshore wind facility. The local South Fork transmission and distribution system was built to handle load fifty years ago and without expensive transmission upgrades *cannot* handle the additional power that Deepwater Wind proposes to deliver from its facility. Deepwater Wind's proposal would effectively double the load for which the system was originally designed and built.

Indicative of the fragility of the local South Fork transmission system is a fire that broke out at PSEG Long Island's Bridgehampton Substation on January 24, 2020.[14] This occurred in the dead of winter when demand for power is at its lowest, yet, old equipment and a fail transmission system caused a transformer to erupt in flames. If the transmission system on the South Fork catches fire, now, when the system is not flooded by intermittent power from an

[14] See Exhibit XIII – East Hampton Star, *Fire Broke Out at PSEG Long Island Substation*, published Jan 24, 2020

offshore wind facility, without serious up-grades to the transmission system *before* Deepwater Wind goes online, the transmission system would not be able to handle the power and collapse.

The proposal submitted by Deepwater Wind South Fork is a project the OSC valued at $1.62 billion and is more expensive than the other four proposals by several orders of magnitude.

Out of the five proposals, all but that proposed by Deepwater Wind satisfies the objectives of the South Fork RFP, so why did PSEGLI award a power purchase agreement to the only company that did *not* satisfy *any* of the objectives pursuant to the South Fork RFP and was many time more expensive than the other, better, proposals?

PSEGLI and Deepwater Wind both claim that the subject transmission system "addresses the need identified by LIPA in its 2015 technology-neutral competitive bidding process ("South Fork RFP") [emphasis added]."[15] The information recently provided by the OSC raises serious questions as to the validity of this claim.

Analogy

If the South Fork RFP is an Olympic 400 meter sprint, competitors like Carl Lewis and Michael Johnson crouched down on their starting blocks and ran a great race only to have PSEG Long Island award the trophy to an overweight guy riding a horse. Is this race a "technology-neutral competitive bidding process" or a one-horse race?

[15] Executed Joint Proposal filed with on September 17, 2020 (at pp. 11-12)

For the aforementioned reasons, I respectfully request that PSEGLI be compelled to respond fully and completely to IR Si Kinsella #32 pursuant to Motion of Simon V. Kinsella to Compel PSEG Long Island LLC to Respond to Information Request Si Kinsella #32 submitted September 30, 2020.

Respectfully submitted,

Si Kinsella

Dated: October 5, 2020

Wainscott, New York