"Connect New York"

Introduction

The respondent group detailed below is proud to provide the following submission to the New York Energy Highway Request for Information (RFI). The information contained within this response addresses the requirements of the RFI and includes additional information regarding property, interconnection, operational, socio-economic, and environmental issues among others. An Index is also included to map the projects benefits to the Energy Highway's objectives.

Simply stated, the Connect New York proposal:

- Provides for the construction of a 1,000 MW DC underground transmission line, with the option of an additional 1,000 MW's, utilizing existing public and private rights-of-way which become a main route on the "New York Energy Highway" and will satisfy many of the Cuomo Administration's energy goals;

- Satisfies "New York's energy policy goals of providing affordable and reliable energy, while improving the environment, creating and retaining jobs, and promoting economic growth, as New York transitions to a more efficient, lower carbon and cleaner, greener energy economy; and

- Reduces transmission system congestion that prevents the delivery of power from northern and western generating stations to southern load centers, reducing a significant financial burden on ratepayers.

Section I – Respondent Information

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Iberdrola USA, a subsidiary of global energy leader Iberdrola S.A., is an energy services and delivery company serving about 2.7 million customers in upstate New York and New England. Its primary subsidiaries are New York State Electric & Gas, Rochester Gas and Electric and Central Maine Power.

Iberdrola USA, and its parent, bring tremendous experience and investment capabilities to New York. Iberdrola USA is in the midst of a $1.4 billion upgrade of its transmission system in the state of Maine. The project, called MPRP, includes over 400 miles of new transmission lines, five new substations, and upgrades to numerous existing lines and substations. The company is about 1/3 of the way into the 5 year project and the project is on time and on budget. This project has created over 3,300 direct and indirect jobs for the state of Maine. Importantly, the project's DART rate (a measure of safety incidents) is .09 through March 2012 vs. a national

average of 2.1. The completion of this project in early 2015 fits well with the likely construction schedule for this proposal.

Iberdrola is also a leader in the utilization of technology. For example, the MPRP project will be fully compliant with IEC 61850, an international best practice standard for substation automation and communications. Iberdrola USA subsidiary, Central Maine Power, recently completed the full installation of automated or "smart" meters that will provide tremendous environmental and customer benefits. Consumers are able to better manage their energy usage. CMP eliminated over 2 million vehicle miles per year.

Our parent, Iberdrola S.A., is a global investor-owned company with experience forged over more than 150 years of history that provides service to 31 million customers in 38 countries and four continents.

After a significant process of growth and internationalization, which involved an investment of over $100 billion in the last eleven years, Iberdrola is today one of the five largest global utilities, the world leader in the wind sector, and the leading Spanish energy group.

Our 33,000 employees manage assets worth $130 billion that in 2011 produced revenues worth $42 billion and a net profit over $3.5 billion.

Iberdrola will continue to grow its core businesses: power generation through clean technologies and the build up and management of transmission and distribution networks. In addition, the continuous improvement of operational efficiency will remain one of the basic foundations of the Group's activities.

The path to sustainable growth in size, efficiency and profitability has brought Iberdrola a number of international awards, such as the nomination as leading electric utility on the "Global 100 Most Sustainable Corporations in the World". In addition, Iberdrola has been member of the "Dow Jones Sustainability Index" for the last eleven years.

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Throughout its 63-year history, Cianbro has safely and efficiently planned, managed, and constructed many technically complex, historic, and environmentally sensitive projects for a wide variety of public and private clients. A total commitment to safety combined with the enthusiasm of an innovative team of construction professionals, has enabled Cianbro to build a durable reputation for completing projects safely, on schedule, and within budget. Founded in 1949 by the Cianchette brothers, Cianbro is now one of the largest, most diverse, successful, 100% employee-owned, construction and construction services companies based on the East Coast. Presently operating in more than forty (40) states, in twelve markets, and employing over 4,000 team members, Cianbro self-performs civil, structural, mechanical, electrical, transmission, fabrication, and coating work.

Cianbro is also the managing member of Atlantic Energy Partners, LLC; the developer of the Neptune Regional Electrical Transmission System (Neptune). The Neptune Transmission System provides up to 660 MW of electric power from the PJM system to the LIPA grid on Long Island via a 500-kilovolt (kV), high voltage direct current (HVDC) cable. The HVDC cable extends between two converter stations, one in Sayreville, New Jersey, and one on Duffy Avenue in the community of New Cassel in the Town of North Hempstead. The Sayreville converter station takes alternating current (AC) power from the PJM system and converts it to DC power, while the Duffy Avenue station converts DC power back to AC for use on the LIPA system. The DC cable runs approximately 50 miles under the Raritan River in New Jersey and the Atlantic Ocean, and an additional 15 miles buried alongside the Wantagh Parkway. The Neptune Transmission System interconnects to PJM in Sayreville at a nearby First Energy substation, and interconnects to the LIPA system at the Newbridge Road substation in Levittown.

Since starting operation in mid-2007, Neptune has provided, on average, nearly 25 percent of the electric power used on Long Island, and runs at its full capacity of 660 MW most of the time. In addition, Neptune has performed as well or better than expectations, averaging nearly 98 percent availability. The Neptune HVDC cable allows LIPA to tap into a diverse range of power generation from PJM, including renewables such as wind and hydro, as well as oil, coal, nuclear, and natural gas. This diversity of generation sources is not available on Long Island. Because wholesale energy prices in PJM are generally much lower than on Long Island, power brought over the Neptune cable is less expensive than most of what can be generated on the island.

For LIPA, the Neptune HVDC cable was seen as an environmentally friendly, cost-effective solution to future power needs. According to LIPA, an economic assessment conducted prior to construction projected that the Neptune cable would provide about $1.4 billion in net benefits to LIPA, which was significantly more than any other project proposed to meet Long Island's long-term energy needs. As former LIPA Chairman Kevin Law has said, *"The Neptune cable provides LIPA with the opportunity to acquire lower-cost energy to meet customer needs while providing more flexibility in selecting the markets from which we acquire that energy. It is a significant win-win for Long Island."*

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For more than twenty-five years, Gilberti Stinziano Heintz & Smith, PC (GSH&S) has served the needs of clients in the energy field, including large, multi-plant power producers, natural gas pipeline operators, and electric transmission line developers, as well as the developers, installers and operators of various renewable energy systems and other smaller generating facilities. We have been counsel on power generation projects that total more than 5,000 megawatts of generating capacity and have counseled both gas pipeline and electric transmission companies on projects involving more than 450 miles of transmission line.

Together with the firm's CEO and Managing Partner, William J. Gilberti, Jr., the lawyers in the GSH&S energy group combine decades of in-depth industry knowledge and experience and include leading practitioners in the industry, such as a former executive vice president and

general counsel of the New York Power Authority, the largest state-owned power organization in the nation, and a former counsel to the U.S. Nuclear Regulatory Commission.

The firm's understanding of, and experience with, the applicable financing structures, regulatory requirements and governmental approvals needed for large infrastructure and commercial development projects in New York, including large scale energy generation and transmission projects, is unparalleled. From the initial planning and feasibility phases of a project through environmental review and permitting to completion of construction and beyond, GSH&S provides counsel and strategic advice to clients on every aspect of energy development.

GSH&S has successfully completed the permitting and environmental review for various power plants firing a wide variety of fuels and for hundreds of miles of transmission line in the State. The firm has served as lead counsel in several landmark cases under the State's Environmental Quality Review Act (SEQRA), including litigation establishing that certain previously approved industrial operations were "grandfathered" and not subject to review. GSH&S has also provided strategic legal counsel on the approvals needed for various major generation and transmission projects in New York, including, among others, a 130-mile underground electric transmission line, an aboveground 190-mile electric transmission line and a 50-mile overhead electric transmission line.

GSH&S often engages in complex litigation involving State and federal agencies regarding permitting and environmental issues. The firm served as lead counsel in such a case for the second largest independently owned cogeneration plant in North America. As a result of the firm's strategy and effort, the U.S. Court of Appeals for the 4th Circuit vacated and remanded the Federal Energy Regulatory Commission (FERC) interpretation of the Energy Policy Act of 2005 in a case of national first impression, knocking out federal licensing regulations that would displace state regulation of electric transmission lines; and the U.S. Court of Appeals for the 9th Circuit vacated and remanded to the federal Department of Energy, its determination to create the Mid-Atlantic National Interest Electric Transmission Corridor, the designation of which is a prerequisite for any shift of transmission line licensing from the states to FERC.

GSH&S regularly assists in the drafting and negotiation of various energy contracts, most recently having negotiated power purchase and interconnection agreements for the developer of a utility-scale solar photovoltaic project.

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Spectra was formed in 1993 and is a self-certified, federal Small Business Enterprise (SBE). Spectra maintains its corporate office in Latham, New York, just minutes away from the New York State capital office buildings in Albany, and has branch offices in Syracuse and Poughkeepsie, NY. Spectra has 47 employees that specialize in areas of infrastructure engineering, environmental analysis, planning, permitting, and compliance.

Spectra's engineers and scientists are leaders in integrated engineering solutions for a sustainable energy future. In the energy service market, Spectra provides environmental management,

permitting, conceptual design, site/civil engineering, project management, surveying, and construction management.

Spectra is owned and operated by Robert C. LaFleur and John H. Shafer, PE. Mr. Shafer has over 40 years in the field of transportation and infrastructure systems. Prior to joining Spectra, Mr. Shafer served as Executive Director of the New York State Thruway Authority (NYSTA) and Chief Engineer for the New York State Department of Transportation (NYSDOT). Mr. Shafer currently serves on several State advisory committees, including the committee overseeing the replacement of the Tappan Zee Bridge. Mr. LaFleur has 39 years of experience as an expert in environmental planning and permitting projects. He has been called upon to provide expert testimony in a number of legal proceedings concerning environmental and planning matters. Mr. LaFleur has acted as Project Manager on an extensive power transmission project under Article VII of the Public Service Law.

Spectra has experience working with a variety of federal and state regulatory agencies. Among these include the New York State Power Authority (NYPA), the New York State Office for Technology, the New York State Department of Environmental Conservation, the United States Environmental Protection Agency, as well as the NYSTA and NYSDOT. These are all agencies with an interest in this energy highway project being proposed by the Power Authority.

Section II – Project Description

"Connect New York" is a 1,000 MW DC bulk transmission line running from the Utica area to New York City (Zone E - Mohawk Valley to Zone J - New York City). This underground transmission initiative would utilize existing public and private right-of-way to build a new bulk transmission line that would enable the fulfillment of the "New York Energy Highway" and many of the Cuomo Administration's energy imperatives. It would include 244 miles of high voltage DC cable, two AC/DC converter stations and a small amount of high voltage AC cable. There is also the option to add a second 1,000 MW line. This is a technology that is in use in the United States and oversees. The permitting process is expected to be completed within two years, and the project is expected to be completed within four years, unless those timeframes are shortened as discussed in Section V below.

Section III – Project Justification

"Connect New York" is a bulk transmission initiative that would utilize existing right-of-way to build a new bulk transmission line that would enable the fulfillment of many of the Cuomo Administration's supply side energy imperatives. "Connect New York" is a practical, feasible and necessary prerequisite to the successful realization of many of the important energy precepts outlined in "Power NY" and the "New York Energy Highway".

"Power NY"

"Power NY states that… "New York's energy policy must meet the interrelated goals of providing affordable and reliable energy, improving our environment and creating jobs and economic growth through energy policy as we transition to a more efficient, lower carbon and

cleaner, greener energy economy. ("Power NY" Page 1) "Power NY" delineates its guiding principles as follows:

- **Affordability**… take steps to reduce energy costs
- **Energy Efficiency**
- **Smart Transmission and Distribution**
- **Economic Development** – job creation
- **Environmental Quality** – cleaner fuels and renewables
- **Reliability** – dependable and emergency prepared
- **Equity** – demands that one region or neighborhood not bear most of the costs of a certain policy while another receives the benefits
- **Good Execution and Government's Role** – facilitate and encourage private sector investments that supports our energy goals and these guiding principles
- **Transparency and Accountability**

"Power NY" delineates several supply side energy imperatives that form the foundation of the Cuomo Administration's energy policy. These ambitious energy goals include:

1. Upgrade and Expand the Transmission Grid

   "Improve Reliability and Reduce Costs by Upgrading our Transmission Infrastructure and Bringing Reliable, Low Cost Clean Energy to Areas Where it is Needed Most While Maintaining Regional Equity"

2. Improve the Environment Through Renewables and Clean Energy

   "Expand Wind and Solar Power and Repower Old Plants to Make them Cleaner and More Efficient"

   "Make New York the Nation's Leader in Wind Power"

   "Enact a New Power Plant Generation Siting Law"

   "Close Indian Point… We must find and implement alternative sources of energy generation and transmission to replace the electricity now supplied by the Indian Point Power facility.

3. Improve Energy Independence

   "By… supporting in-state energy resource development, New York will reduce outflow of dollars to pay for energy imports" (2009 State Energy Plan).

4. Renewable Portfolio Standard

   Renewable increased to 30% by 2015

5. Greenhouse Gas Emissions Reductions

   Executive Order #24: Decreased by 80% by 2050

While these energy precepts are logical, sensible and progressive there are many significant challenges confronting their realization. Some of these challenges are administrative, including permitting and siting. Some involve the limitations of older fundamental infrastructure, including in particular, the bulk transmission grid that constricts the flow of energy from existing and prospective generation sites to the marketplaces.

Transmission: The Foundation of a Progressive Energy Policy

Irrespective of what generation options are utilized, adequate bulk transmission is a necessary prerequisite to bring new age power to market and to realize the supply side energy imperative outlined in "Power NY" and in the "New York Energy Highway". This view is supported from almost every authoritative vantage point.

- NYISO Wind Generation Study (2010)

  "Although the addition of wind to the resource mix resulted in significant reduction in production costs, the reduction would have been even greater if transmission constraints between upstate and downstate were eliminated."

- 2009 State Energy Plan

  "(Transmission) investments are also necessary to support the state's transition to a clean energy economy, and will be driven by longer-term strategic needs, including the need to reduce GHG emissions."

- NYISO 2010 Comprehensive Reliability Plan

  "The Indian Point Plant retirement scenarios… show that loss of ISOs expectations would exceed criteria… thermal violations… and voltage performance on the system would be degraded."

The "Connect New York" Option

Simply stated, "Connect New York" is our vision of how to best advance the major supply-side energy objectives delineated in "Power NY". It would include a 1,000 MW DC bulk transmission line running from the Utica area to New York City. There is also the option to add a second 1,000 MW line. The routing would be underground utilizing existing public and private right-of-way. In doing so we can mitigate environmental and right-of-way concerns that derail most bulk transmission projects and avoid eminent domain and NIMBY issues. By burying an efficient, underground DC bulk transmission line, line losses will be reduced and aesthetic and health based concerns eliminated.

This bulk transmission path will significantly mitigate two of the three major transmission bottlenecks at the Central East interface costing Southeast New York over a billion dollars per year. In addition, the project will bring much needed new capacity to some of New York's most active wind development sites and existing cleaner gas fired plants in Upstate NY. Because the project will use public right of ways, it will provide a new source of revenue to the state. Additionally, this project will be a life-line to older upstate generating facilities that may currently be less environmental friendly by allowing them to repower with new technologies and to continue to support their local economies.

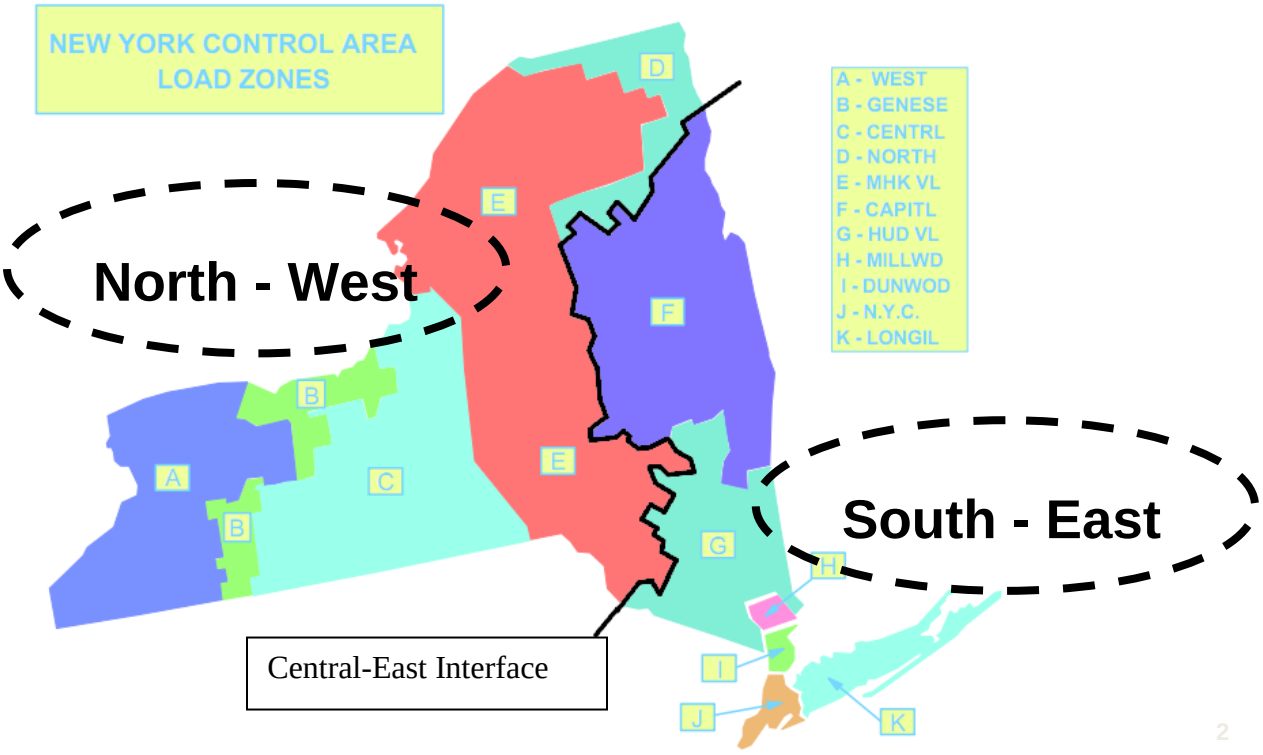
The Central-East Interface – Transmission Congestion

The Central-East Interface is the name given to a conceptual transmission boundary that separates the bulk transmission capabilities located in the North and West regions of New York from the load (demand) centers located in the South and East. Essentially it is the choke point where the ample generating capacity located in the North and Western regions are constricted from supplying the markets in the South and East regions. Figure 1, below, illustrates the Central-East Interface.

Figure 1

Central – East Interface

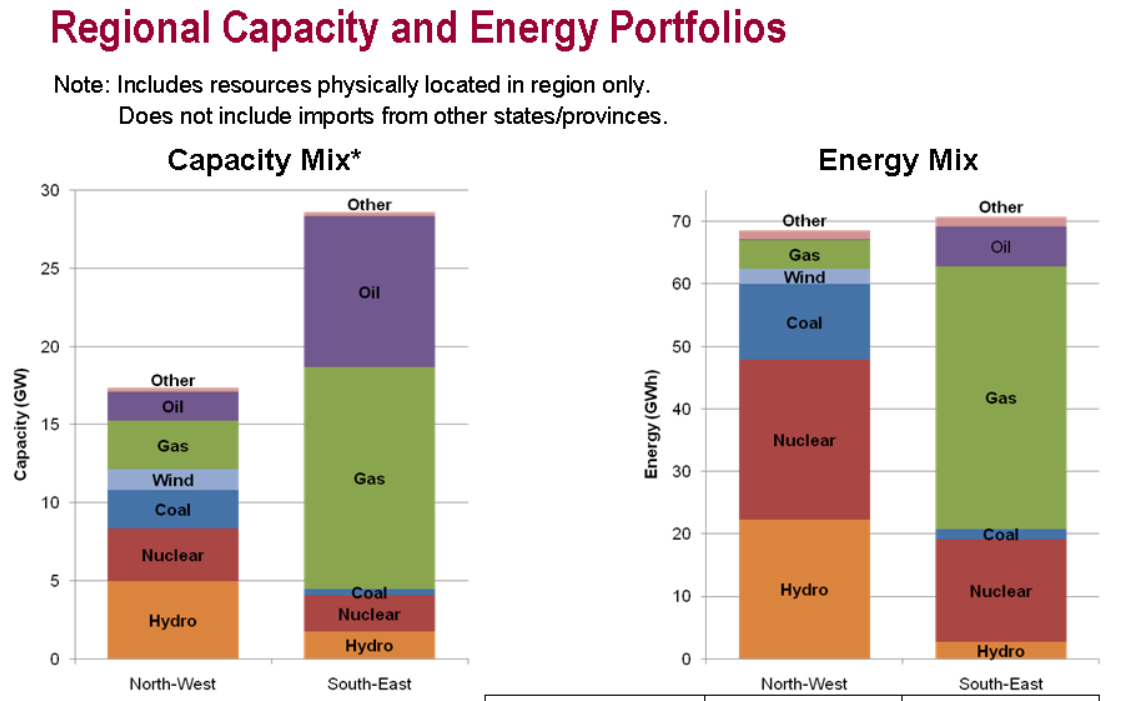
Divides New York into 2 distinct zones: North-West and South-East.



This interface creates two very distinct energy markets. These markets have different energy generation portfolios and demand profiles and accordingly different prices and different greenhouse emissions.

The bar graph below, Figure 2, illustrates the capacity mix of the generators in the North-West and the South-East. It also discloses the energy generated from these facilities.

Figure 2



** Values based on nameplate capacity (2011 NYISO Gold Book)*

Several observations can be made from this chart.

- The South-East is much more dependent on gas/oil base load capacity.
- As shown below, much of this gas/oil fixed capacity is older, less efficient steam units that rely on fuel with higher green house gas emissions
- Without Indian Point, the South-East generating facilities would be almost entirely gas/oil.
- The North-West regions produce more energy than they consume (net exporters).
- The North-West region's production is less than it would be if the bulk transmission transfer capability across the Central-East Interface were greater than it is.
- The South-East region is a net importer (38,259 GWh) with 14,112 GWh or 36% of these imports coming from the North-West. The remainder comes from out of state, i.e., representing a missed opportunity for in-state generators.

Figure 3

Pre-1970 downstate peaking generators

Owner/Operator	Generator & Unit	Town	Year in Service	Primary Fuel	Nameplate (MW)	2010 net GWh	Capacity Factor
Consolidated Edison Co. of NY, Inc.	East River 6	Manhattan	1951	Oil	156.2	480.6	35%
Long Island Power Authority	Glenwood ST 04	Glenwood	1952	Gas	114.0	95.3	10%
Long Island Power Authority	Far Rockaway ST 04	Far Rockaway	1953	Gas	100.0	189.9	22%
Consolidated Edison Co. of NY, Inc.	East River 7	Manhattan	1955	Oil	200.0	471.0	27%
Long Island Power Authority	Barrett ST 01	Island Park	1956	Gas	188.0	518.4	31%
Astoria Generating Company L.P.	Astoria 3	Queens	1958	Oil	376.0	728.3	22%
Long Island Power Authority	Port Jefferson 3	Port Jefferson	1958	Oil	188.0	238.2	14%
NRG Power Marketing LLC	Arthur Kill ST 2	Staten Island	1959	Gas	376.2	530.3	16%
Long Island Power Authority	Port Jefferson 4	Port Jefferson	1960	Oil	188.0	192.0	12%
Astoria Generating Company L.P.	Astoria 4	Queens	1961	Oil	387.0	636.9	19%
Astoria Generating Company L.P.	Astoria 5	Queens	1962	Oil	387.0	411.7	12%
TC Ravenswood, LLC	Ravenswood ST 01	Queens	1963	Oil	400.0	633.2	18%
TC Ravenswood, LLC	Ravenswood ST 02	Queens	1963	Oil	400.0	502.9	14%
Long Island Power Authority	Barrett ST 02	Island Park	1963	Gas	188.0	562.9	34%
TC Ravenswood, LLC	Ravenswood ST 03	Queens	1965	Oil	1,027.0	1,143.3	13%
Long Island Power Authority	Northport 1	Northport	1967	Gas	387.0	1,153.4	34%
Long Island Power Authority	Northport 2	Northport	1968	Gas	387.0	854.9	25%

Source: 2011 NYISO Gold Book

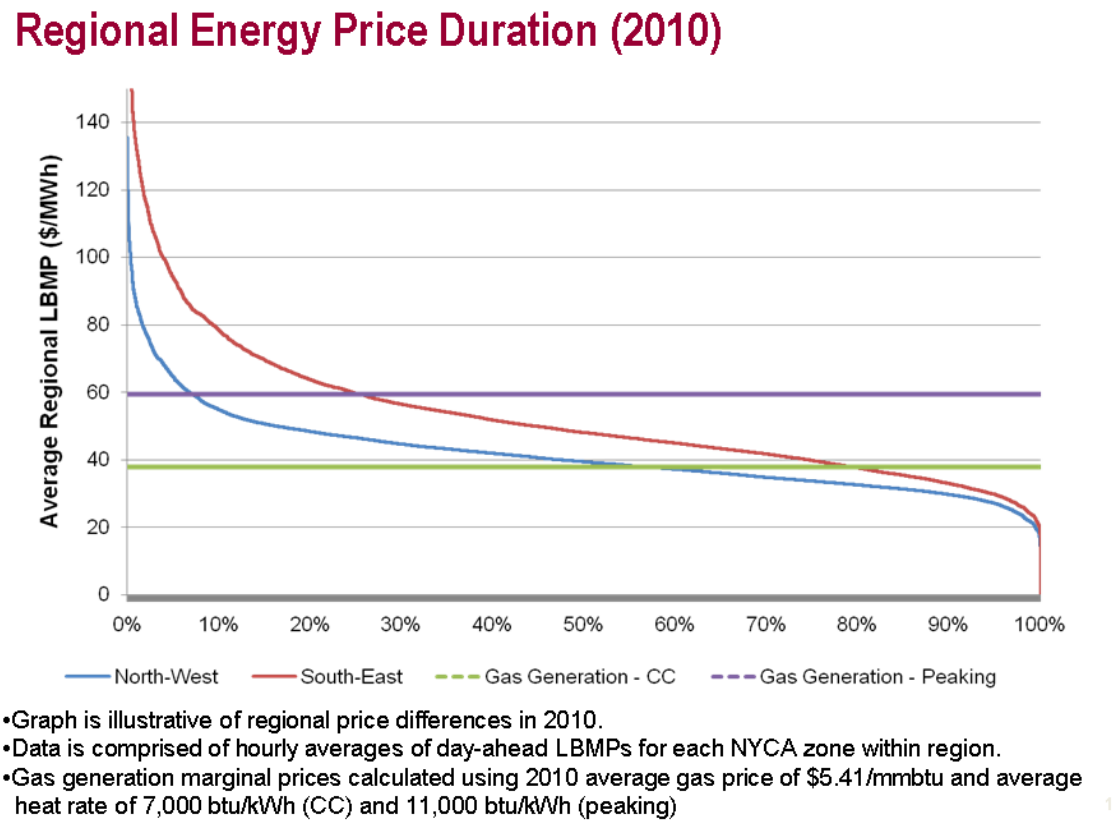
Price Impacts in North-West after Relieving Congestion

Some have suggested that new bulk transmission designed to relieve the bottlenecks at the Central-East Interface would materially increase the price of energy in the North-West. Comprehensive modeling would need to be completed to accurately forecast the various effects on prices throughout the state if new bulk transmission were built. This would be done as part of our proposal. Nevertheless, one can deduce that there is ample excess generating capacity in the North-West, capable of creating power that would flow into the South-East and not significantly increase the marginal cost of power in the North-West.

Specifically, the North-West had a nameplate capacity for gas of 3,100 MW and in 2010 had net generation of 4,630 GWhs representing a low 17% capacity factor. Of the 3,100 MWs of gas generating capacity, 2,292 MWs or 74% was combined cycle gas and ran at a low capacity factor of 19.8%. Again while comprehensive modeling would spell out the specifics, one can infer that given the low capacity for the combined cycle fleet, these units were setting the market price in the North-West market. More interestingly, the North-West combined cycle fleet has the capacity to export an additional 8,100 GWhs, assuming that they operated at a 60% capacity factor and that the bulk transmission's transfer capability at the Central-East Interface could accommodate it. Currently, the bulk transmission system cannot accommodate any additional exports from the North-West into the South-East. That is why the combined cycle gas fleet in the

North-West region operated at a 19.8% capacity factor and why the less efficient, more expensive, less reliable and dirtier gas/oil steam units listed in Figure 3 filled the void. The regional energy price duration below, Figure 4, graphically makes these points demonstrating the regional price difference.

Figure 4



- Graph is illustrative of regional price differences in 2010.
- Data is comprised of hourly averages of day-ahead LBMPs for each NYCA zone within region.
- Gas generation marginal prices calculated using 2010 average gas price of $5.41/mmbtu and average heat rate of 7,000 btu/kWh (CC) and 11,000 btu/kWh (peaking)

The Cost of Transmission Congestion

The practical consequences of the Central-East Interface transmission congestion increased the state-wide annual cost of power by an average of 12% over the period from 2004 through 2010. This represented an average annual cost of $1.4 billion included in the average state-wide cost of energy of $11.7 billion. Although 2011 numbers are still being finalized, it is estimated that total congestion for last year will be $1 billion. See Figure 5.

Figure 5

Historical New York Congestion Costs by Zone

Zone Name	Load Zone	Congestion Costs to NY Electric Consumers* 2004	2005	2006	2007	2008	2009	2010	Average ($ M)
West	A	-1	-5	1	-14	-25	-14	-1	-8
Genesee	B	1	-1	2	-14	-9	4	6	-2
Central	C	1	-1	4	9	18	8	11	7
North	D	0	-1	0	0	-2	-3	-1	-1
Mohk. Valley	E	0	0	2	5	10	4	5	4
Capital	F	8	19	27	74	143	53	62	55
Hud. Valley	G	5	20	54	87	176	57	73	67
Milwood	H	3	12	27	31	78	16	23	27
Dunwoodie	I	4	24	44	56	124	41	49	49
NY City	J	582	809	673	700	1,403	503	560	747
Long Island	K	230	508	708	518	624	274	350	459
Total		833	1,384	1,542	1,452	2,540	943	1,136	1,404
Total Energy Cost to Load		10,059	15,314	11,969	12,831	15,485	7,397	9,005	11,723
Congestion % - original		8%	9%	13%	11%	16%	13%	13%	12%

Cost to New York consumers averaging $1.4B per year

86% of that cost borne by New York City and Long Island

Congestion has averaged 12% of consumer energy costs

*Source: Congestion costs results from NYISO's PROBE analysis, a model designed to reproduce market prices as closely as possible.

2008 results are high due, in large part, to very high natural gas prices which can occur periodically in a commodity's life cycle.

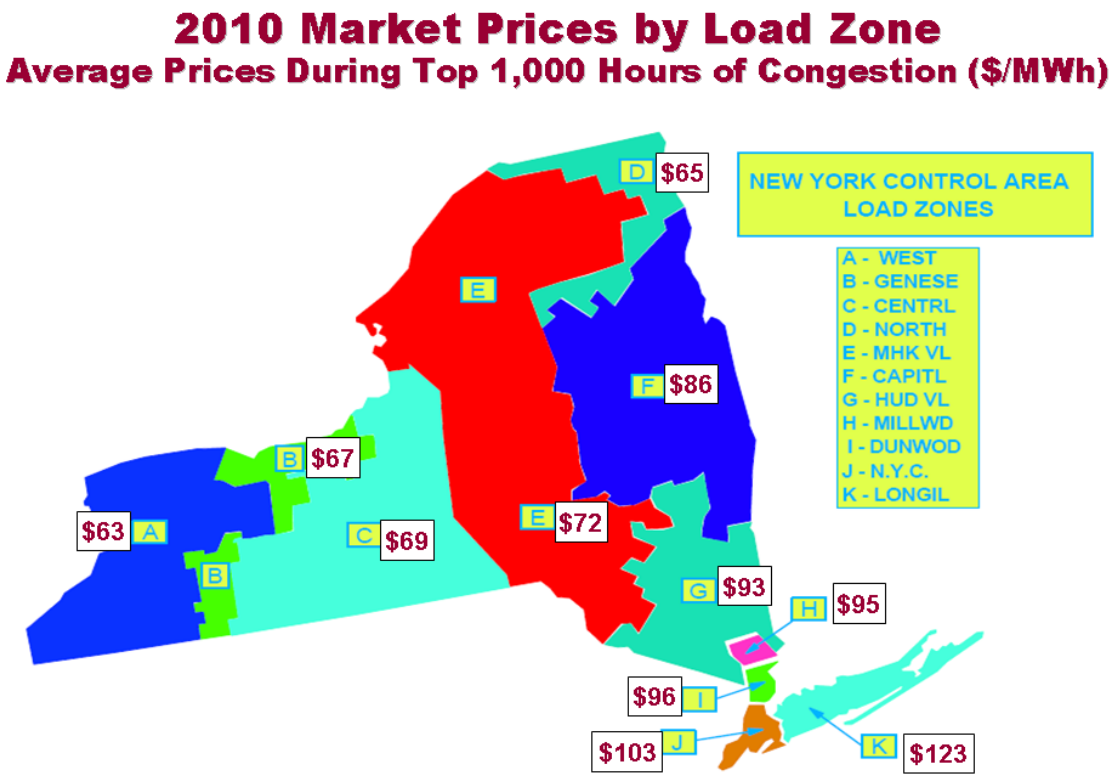
Highlighted areas represent load zones that will benefit from the transmission project.

Several observations can be made including:

- New York City and Long Island have paid nearly 86% of this annual congestion cost averaging $1.4 billion.
- The congestion peaked in 2008 at 16% due to very high natural gas prices which can and will occur periodically in a commodity's life cycle.
- Even during the historical economic downturn in 2009 and 2010 the congestion cost was $1.0 billion each year.
- This additional cost of energy for New York and Long Island consumers could have been avoided if new bulk transmission across the Central-East interface had been in place.

The map below, Figure 6, illustrates the 2010 average market prices by Load Zone during the highest 1,000 hours of congestion.

Figure 6



It is the reduction of these congestion costs that represents the primary commercial justification for building "Connect New York". Nevertheless, other important strategic benefits are associated with this proposal and will, in time, bring commercial returns.

Reinvigorating Renewable Development

If New York State is committed to meeting its RPS goal, several initiatives could be introduced that would reverse the downward momentum for wind development. Principal among these is relieving the congestion that prevents export of low cost North-West wind power to high cost South-East load centers. This commitment could also be backstopped by requiring utilities and state agencies to enter long-term fixed-price bundled contracts with credible wind developers with proven track records. Utilities have traditionally been hesitant to sign long-term contracts due to rating agency implications, but there are regulatory means to address these concerns.

To realize the potential of the State's renewable resources, bulk transmission must be expanded to reach north and west into the most promising wind development zones. This bulk transmission must be supplemented with a plan to develop new secondary transmission lines to gather the newly developed wind energy and deliver it to the newly developed bulk transmission system.

Second, the reauthorized Public Service Law Article X process, with its 25 megawatt threshold and application to renewable generation projects, needs to be implemented in a way that maximizes the potential benefits of single entity (Public Service Commission) approval within one year from complete application (or 6 months for certain modifications of existing facilities). Further consolidating and/or streamlining the State Environmental Quality Review Act process for smaller renewable generation sources is necessary and might be accomplished by establishing time limits for completion of hearings, decisions and appeals for renewable projects of certain dimensions/features, regardless of whether they are reviewed under SEQRA or under the Public Service Law.

Finally it is conventional wisdom that off-shore wind is significantly more expensive than on-shore wind. The state's agencies should focus on the most realistic renewable options to meet the RPS mandate that is only four years away. Now is not the time to experiment with the exotic alternatives.

Environmental Compatibility

"Connect New York" will utilize a combination of existing public and private right-of-ways, which have been previously disturbed and will significantly minimize, if not entirely eliminate, impacts to visual, historic, archaeological and other important environmental resources. By proposing efficient, buried transmission lines, the proposal will also address many of the concerns associated with aerial transmission lines and towers, such as their visual impacts and aesthetics, electromagnetic radiation effects and impacts on property value. Connect New York will also allow for the transmission of energy from wind farms and other clean upstate generating facilities that produce less greenhouse gas emissions than the older generating facilities downstate.

The Indian Point Question

The Fukushima nuclear accident refocused attention on the Indian Point nuclear plant and the effort to renew the plant's two operating licenses when they expire in 2013 and 2015. The practical reality is that the plant's 2,000 MW capacity is currently a vital piece of the energy portfolio for southern and eastern New York. Its power is "clean" and low priced. Nevertheless it represents a recognized potential safety risk to the greater New York City metropolitan area.

There cannot be a serious discussion about closing Indian Point without simultaneously proposing an alternative energy supply that meets the reliability requirements of the region. New bulk transmission is a necessary prerequisite to filling this potential energy void.

"Connect New York" is not the exclusive answer to replacing the potential loss of Indian Point energy but it could be an important piece of the puzzle that could, with the right support delivered in an urgent manner, come to the market in a reasonably timely fashion.

Summary of Benefits
How Connect New York Could Advance
Governor Cuomo's Supply-side Energy Imperatives and Satisfy the Goals of the New York Energy Highway

There are many compelling benefits associated with the "Connect New York" initiative but perhaps the most important one is that it is achievable. Many of the mine fields threatening the approval of customary transmission proposals are avoided with the "Connect New York's" approach. Environmental and NIMBY challenges are largely circumvented by utilizing the existing right-of-way. Eminent domain is similarly not an issue.

Equally important "Connect New York" is all about New York. It will foster New York's desire for energy independence by building an energy highway that will change the financial dynamics of repowering upstate plants while encouraging new investment in on-shore wind development east of Lake Ontario. It will reduce the state's annual energy bill by reducing congestion and allowing lower cost, cleaner energy upstate to flow into New York City and Long Island. This will finally reduce downstate energy bills at a time when consumers need some relief.

The energy most likely to be transmitted on "Connect New York" (gas and renewables) will displace more expensive and higher green house gas energy produced by the older vintage fossil fuel plants in the metropolitan New York/Long Island regions thereby reducing greenhouse emissions as well as energy costs.

Finally, "Connect New York" will create thousands of New York jobs not only during the construction period but subsequently by enhancing prospects for older upstate coal plants to invest in repowering as a new downstate energy market is opened up. The same holds true for renewable development east of Lake Ontario, assuming that long-term power purchase contracts can be put in place to support the 2015 RPS mandate.

In summary, the time has come for this transmission infrastructure proposal to be implemented as the foundation for Governor Cuomo's "Power NY" vision and the "New York Energy Highway".

Section IV – Financial

As a privately funded capital project, the business case for developing "Connect New York" is predicated on securing long-term capacity purchase contracts with New York State's load serving entities. The high level business case for "Connect New York" is commercially attractive:

1. Build a 1,000 MW DC line with two converter stations, with the option to add a second 1,000 MW line;
2. Underwrite the investment with a fixed price transmission contract; and
3. New York electric consumers realize a significant annual reduction in energy costs attributable to reduction in congestion costs.

Alternative approaches could be used to determine how the project costs would be allocated among the load serving entities. Some regions in the country utilize an allocation methodology based on which customers benefit from the project. Although this may be the most fair approach, the process of determining beneficiaries is complicated and can become contentious. Other regions in the country use a postage stamp allocation. Under this approach, the project is determined to have benefits for the state or region as a whole and the costs are allocated on a prorated usage basis. This is by far the simplest approach, but it could be argued that those customers that are not receiving the large majority of the projects benefits should not pay an equal share. It may be determined that some combination of the two approaches, one that recognizes the allocation of project benefits but that does not get bogged down into detailed and potentially contentious modeling discussions is the correct middle path.

Section V – Permit/Approval Process

The current administrative and regulatory construct would require the following approvals, each of which will be sought concurrently, with the associated time frames running in parallel. The list below includes an approximation of the time required to secure those approvals based on historical precedents and assuming conventional approach to gaining these approvals. Vigorous support and follow through by the Administration could reduce these timeframes.

A. Public Service Commission Article VII Application – 2 years

An Article VII proceeding before the Public Service Commission (PSC) typically requires approximately two years to complete. The Respondents control the rights to certain application materials and intellectual property that have been maintained on the active docket before the PSC. If utilized as part of the current conceptualized proposal, this position on the active docket could potentially shorten the time frame for permitting, as well as the overall construction date, by approximately six months or more.

B. NYISO System Reliability Impact Study
- Preparation of system impact study – 6 months
- NYISO review and approval – 6 months
  (A similar project was previously evaluated and a system reliability impact study was performed and approved)

C. FERC authorizations to sell transmission rights at negotiated rates – 6 months

D. Acquisition of right-of-ways
- Various public entities

Index

As a final reference, the table below indicates that all four of the Energy Highway objectives, detailed on Page 11 of the New York Energy Highway RFI, are satisfied by "Connect New York". The following table provides the appropriate Energy Highway RFI page references.

Energy Highway Objectives		Page Reference
Reduce constraints on the flow of electricity	√	4, 7-13
Assure long-term reliability	√	7-10, 13-14
Encourage development of renewable generation	√	13-14
Increase efficiency of power generation	√	4, 7-14

Page 13 of the New York Energy Highway RFI listed additional benefits that should be addressed in the submission. The table below demonstrates that these have been met by this submission and provides the appropriate page references.

Additional Project Benefits		Page Reference
Create Jobs	√	15
Environmentally Sustainable	√	4, 9-14
System Performance and Operation	√	4, 7-14
Rate Payer Value	√	7-13
Demonstrate ability to go through NYISO SRIS/SIS Process	√	16