EXHIBIT 3

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Champlain Hudson Power Express, Inc.
Case 10-T-0139

Request No.:	IPPNY-44 Supplement	Date of Request:	June 1, 2012
Requested By:	Independent Power Producers of New York, Inc.	Reply Date:	June 18, 2012
Subject:	New York Energy Highway Request for Information	Witness:	

REQUEST:

a. Did Applicants or their affiliates submit any proposals in response to the Energy Highway Task Force's New York Energy Highway Request for Information?

b. If yes, please provide the proposals.

RESPONSE:

Applicants object to this request on the grounds that the materials requested are not relevant to any issue in this proceeding, and on the further ground that the information contained in the materials requested is not publicly available at this time.

Without waiving the foregoing objections, Applicants state as follows:

a. A response to the Energy Highway Task Force's New York Energy Highway Request for Information was submitted by TDI-USA Holdings Corp. on May 30, 2012. Hydro-Québec Production ("HQP") has informed Applicants that it also submitted a response to the New York Energy Highway Request for Information referencing the Champlain Hudson project on or about May 30, 2012.

b. Notwithstanding the fact that the Energy Highway Task Force has established that it will produce a summary of all submissions but copies of this information will not otherwise be made available absent the submission of a Freedom of Information Law request, Applicants elect in this instance to attach to this response cop ies of the May 30, 2012 submission s to the Energy Highway Task Force of both TDI and HQP.

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The New York Energy Highway

Response to

Request for Information (RFI)

Submitted by:

TDI-USA Holdings Corp.

May 30, 2012

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Transmission Developers Inc.

Respondent Information

Respondent's Name: TDI-USA Holdings Corp.
Pieter Schuyler Building
600 Broadway
Albany, New York 12207

Primary Contact: William Helmer
Senior Vice President and General Counsel
Pieter Schuyler Building
600 Broadway
Albany, New York 12207
518.465.0710
bill.helmer@transmissiondevelopers.com

TDI-USA Holdings Corp. ("TDI") is a Delaware corporation formed by Transmission Developers Inc. in 2008 for the purpose of developing merchant energy transmission projects throughout North America. Energy transmission has been identified by the utility industry and the United States Department of Energy ("DOE") as one of the primary vehicles by which costs to electricity consumers may be reduced and newer and cleaner generation resources may enter the marketplace.[1] Since wholesale energy markets were opened to competition by the Federal Energy Regulatory Commission ("FERC") nearly two decades ago, transmission development of new transmission facilities has lagged for a number of reasons. Two reasons in particular stand out: (a) community opposition to overhead transmission lines; and (b) the complexity and controversy arising out of determining who benefits from and who pays for the service under a traditional cost-of-service model. Given these realities, TDI has developed a simple strategy:

1. Develop projects on a merchant (entrepreneurial) business model;
2. Use best in class technology; and
3. Develop projects in the most environmentally responsible manner and pay utmost respect to community values and concerns.

In order to achieve these strategic objectives, TDI adopted the FERC merchant transmission model, whereby TDI must find its own customers to pay for the transmission service, selected high voltage direct current ("HVdc") technology, and determined to bury the transmission system in existing, well-established corridors of maritime, railway, and road transportation and other upland rights-of-way ("ROWs"). Given the fact that buried cable technology can be three to five times more expensive to install than traditional overhead transmission, TDI concluded

[1] National Electric Transmission Congestion Study, August 2006; http://nietc.anl.gov/documents/docs/Congestion_Study_2006-9MB.pdf; *See also,* Power Trends State of the Grid 2012: http://www.nyiso.com/public/webdocs/newsroom/power_trends/power_trends_2012_final.pdf

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that it should focus its efforts on projects that presented the best combination of need, available ROWs, and environmental merit.

TDI began by assembling a core team of exceptionally experienced senior managers, beginning with Donald Jessome, Anthony Turner, and William Helmer. The biographies of these managers are appended to this response to the New York Energy Highway Request For Information ("RFI") and attest to their extensive experience in the energy area. Less than a year after the Champlain Hudson Power Express Project ("CHPE Project") was publicly announced in February of 2009, TDI was acquired by the Blackstone Group, L.P. ("Blackstone"), the largest private equity fund in the world, and was added to Blackstone's portfolio of energy companies. Shortly after the acquisition, TDI added Thomas O'Flynn and Todd Singer to its senior manager roster, and their biographies, also appended to this RFI response, confirm the exceptional talents they bring to TDI and the CHPE Project. The biographies of TDI's senior managers are appended to this RFI as Appendix A.

Project Description[2]

Project Name:	Champlain Hudson Power Express
Type of Proposed Project:	Transmission
Size of Proposed Project:	1,000 MW (expected annual energy delivery up to 8.3 TWh, expected capacity rights of between 600-1,000 MW)
Proposed Project Location:	U.S.-Canada Border to Zone J, Astoria-Queens, NYC (Project Map is Appendix B to this RFI)[3]
Fuel Source:	Anticipated to be predominantly hydroelectric power[4]
Commercial Operations Date:	Q4-2017
Project Technology:	HVdc Voltage Source Converter similar to the attached information provided below at "Project Justification" #2.

[2] In the Article VII proceeding now pending before the New York State Public Service Commission, TDI has also proposed to construct a 345 kV cable circuit connecting NYPA's Astoria Annex to the Rainey Substation owned and operated by the Consolidated Edison Company of New York, Inc. (the "Astoria-Rainey Cable"). The Astoria-Rainey Cable will be constructed to increase the amount of electric energy that can flow fw from the Astoria Annex into Con Edison's transmission system without violating applicable reliability requirements and is not included in the definition of the "CHPE Project" for purposes of this RFI Response.

[3] From north to south, the CHPE Project traverses Lake Champlain; Washington, Saratoga, Schenectady, Albany and Greene Counties; the upper Hudson River; Rockland County; the lower Hudson and Harlem Rivers; Bronx County; the East River; and Queens County.

[4] Hydro resources currently represent nearly ninety-eight percent (98%) of the power generation in the Hydro-Québec control area. Hydro-Québec, Annual Report 2011, pg. 5. http://www.hydroquebec.com/publications/en/annual_report/pdf/annual-report-2011.pdf

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Project Justification

The following discussion explains how the CHPE Project will address the objectives and goals outlined in the RFI.

1. **Reduce constraints on the flow of electricity to, and within, the downstate area; and expand the diversity of power generation sources supplying downstate.**

   The downstate area of New York has increasingly relied on natural gas power generation sources as coal and oil generation has declined. Once in operation, the CHPE Project will bring clean and reliable hydroelectric energy from the Quebec control area to consumers in and around New York City and will enhance fuel diversity in the downstate mix of generation.[5] Furthermore, the major constraints on bringing this new generation source to downstate through the existing, congested grid will be averted by the CHPE Project, and resulting savings to consumers have been estimated by the New York State Public Service Commission ("PSC") staff to be as high as $720 million in 2018 from energy benefits alone.[6] These consumer savings are generated through reductions in congestion costs on the existing transmission system assuming operation of the most efficient in-state generation resources along with the energy supplied by the CHPE Project. In addition, PSC staff has estimated that the environmental benefits of the CHPE Project would reach 838 tons of SO_2, 1,432 tons of NOx, and 2.2 million tons of CO_2 in its 2018 test year analysis. Environmental benefits are forecasted at similar levels in subsequent years.[7]

2. **Assure the long-term reliability of the electric system is maintained in the face of major system uncertainties.**

   The CHPE Project will both add new clean and reliable energy resources to New York's electric system and help reinforce the grid by using state-of-the-art HVdc technology with its inert cables installed in existing ROWs. The CHPE Project is expected to be in-service for at least 40 years and will use HVdc voltage source converter technology to deliver the energy and capacity into New York's electric system. The CHPE Project will be a ± 320 kV, 1,000 MW HVdc cable circuit, comprised of two polymer ("XLPE") cables for both the land and marine portions of the cable route. The system design uses HVdc voltage-sourced converters ("VSC"), which allows for fully independent control of both the active and the reactive power flow over its operating range. An overview of two manufacturers' Voltage Source Converter technology (which is typical of VSC technology in general) can be found at:

[5] NYISO, *Power Trends 2012, State of the Grid* at pg. 19.

[6] Champlain Hudson Power Express, Inc. Joint Proposal for Settlement. Submitted to the New York State Public Service Commission on February 24, 2012. On-line at: http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={C5F63E41-5ED5-46A2-99A5-F1C5FC522D36} ; See pg. 58. ¶ 137.

[7] *See*, Joint Proposal filed February 24, 2012, ¶ 141.

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https://netfiles.uiuc.edu/ysharon2/www/enrgysym/talks/larsson_talk.pdf and http://www.ieee.org.br/t-dlamerica2010/T_D_2010_Brasil_paineis_PDF/on%2010_11/morning/IEEE%20HVDC_PLUS%20Technology_Overview.pdf

This technology not only offers unprecedented flow control to the New York Independent System Operator ("NYISO") as it works to balance the system, it also incorporates world-class "smart grid" technologies such as phasor m easurement units at each end of the converter station. As the CHPE Project will be in service for a long period of time, it will not only help to address the near-term uncertainties of the state's aging transmission system, potential generation retirements, and energy-demand growth, it will also add a clean and reliable long-term source of secure supply into the New York market.

3. **Encourage development of utility-scale renewable generation resources throughout the State.**

The CHPE Project has the ability to increase access to its facilities by adding additional intermediate converter stations in the future, if and when economic conditions supporting such a capital investment arise. Most critically, the hydroelectric power resources that will flow from the Québec control area have extremely responsive operational characteristics both in terms of fine scale load-following and frequency control along with the longer term energy balancing of the operational spectrum. Energy balancing allows system operators to maximize the integration of utility-scale renewable generation resources, which tend to be intermittent in nature. Thus, the CHPE Project can help to facilitate the development of wind generation by providing the NYISO with an important means of balancing the transmission system on a real-time basis.

4. **Increase efficiency of power generation, particularly in densely populated urban areas.**

The CHPE Project will lower power costs to consumers in the downstate region through the introduction of reliable, lower cost energy and capacity resources. Power prices in the NYISO Zone J market will therefore trend lower for existing generators, which should have the effect of inducing them to make investments in re-powering. In general, the effect of lower power costs will be to incent improvements to efficiency.

5. **Create jobs and opportunities for New Yorkers.**

The CHPE Project on average will save consumers an estimated $650 million per year, year after year, through the introduction of lower cost, clean , and reliable hydroelectric power. A study performed by London Economics International ("LEI") and Regional Economics Modeling, Inc. ("REMI") estimates that the consumer savings will create approximately 2,400 indirect and induced jobs across a wide s pectrum of the New York State economy. In addition, during the 3.5 year construction period, the study projects that, on average, 300

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construction jobs will be created by the CHPE Project (with a peak employment of 600), and an additional 1,200 indirect and induced jobs will be created during this period.

6. **Contribute to an environmentally sustainable future for New York State.**

Given the clean and reliable sources of power that are anticipated to utilize the CHPE Project, substantial and sustained environmental benefits will accrue to New York State. As noted above, PSC staff has estimated that the CHPE Project will lead to reductions of 838 tons of SO_2, 1,432 tons of NOx, and 2.2 million tons of CO_2 in the test year 2018.[8] Annual environmental benefits in subsequent years will be on a similar scale. The CHPE Project converter station is planned to be situated in what may be characterized as the Astoria energy campus in northern Queens. Traditionally, the Astoria campus has housed conventional fossil-fuel generation. For many years, the people of Queens have struggled with high electricity prices while hosting a disproportiona te number of fossil-fuel generating facilities. A buried 1,000 MW transmission project that will displace higher-cost fossil generation with clean power, save hundreds of millions of dollars through reduced consumer costs, and increase the reliability of the grid will be a very positive event for the people of Queens. Furthermore, if approved, the Hudson River and Lake Champlain Habitat Enhancement, Restoration, and Research/Habitat Improvement Project Trust (the "Trust"), discussed in detail below, will establish a lasting legacy of stewardship that will benefit New York State's environment for decades to come.

7. **Apply advanced technologies that benefit system performance and operations.**

The CHPE Project will utilize best-in-class HVdc voltage source converter station technology, along with inert XLPE transmission cable. An HVdc transmission system integrated into the existing HVac transmission network allows grid operators enhanced control over both voltage and frequency, the most significant reliability metrics of the transmission grid, and also improves grid system operation.[9] The innovative technology chosen by TDI will also include many "smart grid" technologies, including phasor measurement units at each end of the converter station. This technology will give real time synchronized data regarding the operations of the CHPE Project to the NYISO, a critically important advantage in the management of the modern power system. In addition to the advantages of the HVdc technology, the hydroelectric power resources that will flow easily on the line from the Québec control area will allow for much needed fast responding regulation and frequency control, along with the capability to balance the existing and new intermittent resources being integrated into the transmission system.

[8] *See*, Joint Proposal filed February 24, 2012, ¶ 141.

[9] D.E. Martin, W.K. Wong, D.L. Dickmander, R.L. Lee and D.J. Melvold, *Increasing WSCC Power System Performance with Modulation Controls on the Intermountain Power Project HVDC System*. 1992.

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8. Maximize New York State electric ratepayer value in the operation of the electric grid.

The CHPE Project employs a privately-financed, user-pay transmission model that will not impose the cost of service on the ratepayers of New York State. Notably, the CHPE Project will significantly reduce the cost of service borne by utility customers in the downstate region without increasing costs in other parts of the state. As noted above, consumer benefits from the CHPE Project have been estimated by PSC staff to be as high as $720 million in 2018 from energy benefits alone. These consumer savings are generated by reducing congestion costs on the existing transmission system by incenting reliance on the most efficient in-state generation resources, along with the energy supplied by the CHPE Project. In addition to the estimated energy benefits, the introduction of up to 1,000 MW of capacity in the Zone J market will help dampen capacity prices well into the future. In addition, as discussed above, environmental benefits were estimated by PSC staff to be as high as 838 tons of SO_2, 1,432 tons of NOx, and 2.2 million tons of CO_2 in 2018. Environmental benefits are forecasted at similar levels in subsequent years.

9. Adhere to market rules and procedures and make recommendations for improvements as appropriate.

The CHPE Project has been involved in the NYISO interconnection process since 2008 occupying queue position 305. The CHPE Project has completed its System Reliability Impact Study ("SRIS") and is currently participating in the 2012 Class Year Facilities Study.

Financial

As noted above, TDI was purchased by Blackstone in January of 2010. Blackstone is a leading global investment and advisory firm that has a remarkable track record in terms of its energy portfolio. Since the acquisition of TDI in January 2010, Blackstone has invested approximately $30 million in the CHPE Project, and Blackstone is fully committed to investing the approximately $500 million of equity required to build the CHPE Project. In addition, TDI is securing the debt required for the CHPE Project through a combination of shipper's access to capital markets, sovereign banks associated with the potential equipment suppliers, and other traditional project financiers. TDI has committed in its Article VII Certificate application now pending before the PSC to develop the CHPE Project as a privately-financed, shipper-pay merchant transmission line with no requirement for ratepayer or governmental support. In response to the RFI's inquiry with respect to public-private partnerships, TDI remains open to such a structure if it increases the CHPE Project's benefits to all parties and is consistent with the commitments made in the "Joint Proposal of Settlement," discussed below.

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Permit/Approval Process

In order to develop , construct, and operate the CHPE Project, TDI is seeking or has obtained a number of state and federal permits. It may be noted that, on June 8, 2011, the New York State Department of State ("DOS") completed its review of the CHPE Project by issuing its concurrence pursuant to the Federal Coastal Zone Management Act ("CZMA"), and, on July 1, 2010, FERC approved a negotiated rate and open season process for this merchant transmission project. The key permits and approvals still to come are as follows:

1. *PSC (Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law).* TDI submitted its initial application to the PSC on March 30, 2010. Since that initial application was filed, extensive public and intervener consultation has been carried out, and this effort culminated with the filing of a Joint Proposal of Settlement ("Joint Proposal") on February 24, 2012 supported, in whole or in part, by 14 state agencies, municipalities, environmental groups, and an electric utility.[10] The Joint Proposal is currently under review by the PSC Administrative Law Judges supervising Case 10-T-0139. TDI anticipates that the PSC will make its final ruling granting a Certificate of Environmental Compatibility and Public Need (the "Article VII Certificate") before the end of 2012.

2. *Other New York State Approvals.* The PSC will issue a Water Quality Certificate pursuant to section 401 of the federal Clean Water Act ("CWA") contemporaneously with the Article VII Certificate. In addition, TDI will apply to the PSC for a number of ancillary approvals, such as a regime of "lightened regulation," late in 2012. Finally, TDI will apply to the New York State Office of General Services ("OGS") for an interim construction permit (and draft grant of lands under water pursuant to the New York State Public Lands Law) in mid -2012.

3. *DOE (Presidential Permit).* TDI submitted is initial application to the DOE on January 27, 2010 . DOE is preparing an Environmental Impact Statement ("EIS") to evaluate potential environmental impacts associated with the CHPE Project in accordance with the National Environmental Policy Act of 1969 ("NEPA"). The EIS will only address potential impacts in the United States; NEPA does not require an analysis of environmental impacts that occur within Canada. The EIS, however, will evaluate all relevant environmental impacts within the United States related to or caused by project -related activities in Canada. The original application to DOE was amended on August 5, 2010, updated on July 7, 2011 to reflect the DOS CZMA consistency determination, and further amended on February 28, 2012 to reflect revisions to the application arising out of the Joint Proposal. The draft EIS is expected later this year, with a final determination regarding the Presidential Permit application expected in the first half of 2013.

[10] See Footnote No. 5 above and references below.

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4. *Other Federal approvals.* TDI has applied to the United States Army Corps of Engineers ("ACOE") for permits pursuant to section 404 of the CWA and section 10 of the 1899 Rivers and Harbors Act, and this permitting process is proceeding on a parallel track with the DOE permitting and NEPA processes. A final determination regarding these applications is expected in early 2013.

5. *NYISO approval of interconnection agreement.* As noted above, the CHPE Project is participating in the 2012 Class Year Facilities Study, and conclusion of this study and final approval of the CHPE Project interconnection agreement is expected by mid-2013.[11]

Other Considerations

1. *Anchor Supply Background.* It bears repeating that the source of supply for the CHPE Project is of utmost importance in terms of its overall benefits. Hydro-Québec, which will most likely be the anchor tenant for th e CHPE Project, as well as its predecessor companies, have sold power to New York State for decades in the wake of the construction of the Cedars -Dennison intertie in the late 1910's and more recently, the Châteauguay-Massena intertie in the early 1980's. It is the opinion of Hydro-Québec and TDI that the addition of the CHPE Project will significantly contribute to fostering already deep and long-standing electricity relationships between New York State and the Province of Québec by adding 1,000 MW of intertie capacity to the existing 1,700 MW. Hydro-Québec currently owns or controls approximately 37,000 MW of generation capacity, as of the end of 2011, producing approximately 195 TWh of energy every year, nearly 98% of which flows from hydroelectric power stations. Hydro-Quebec continues to add resources in its generation fleet in Quebec as well as capacity improvements to its existing generation stations. Since 2005, nearly 1,600 MW of hydroelectric generation capacity have been commissioned (including the Eastmain-1, Péribonka, and Toulnustouc powerhouses) and 918 MW of new capacity will be commissioned in 2012 after the completion of the Eastmain -1A/Sarcelle/Rupert project. In addition, the four -station, 1,550 MW Romaine hydro complex, currently under construction, will be put in service incrementally starting in 2015.

[11] Additional NYISO approvals may also be required for the Astoria -Rainey Cable proposed in the Joint Proposal in the Article VII proceeding.

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2. *Ancillary Benefits.* If the HV ac transmission and distribution system suffers a shut-down, or "blackout," conventional generators must have an energized HVac system to connect to before they can begin to restore power. This can take considerable time in conventional generation systems. There is need to be able to start-up the system from the blackout, and this is known as "Blackstart" capability. The VSC technology used in the CHPE transmission system has an inherent Blackstart capability, which means that it can provide up to 1,000 MW of power into a completely blacked-out system as required by the system operator.

Property

For a project of its scale and scope, the CHPE Project is fortunate in having a very limited number of "landlords." Well over 90% of the route will occupy ROWs owned by the State of New York (the beds of Lake Champlain, the beds of the Hudson, Harlem and East Rivers, and state highways 9W and 22) and two large and established railroad corporations (CSX Transportation and the Canadian Pacific Railway). Incidental landlords or providers of real property rights will include some upland municipalities and, potentially, a limited number of commercial landowners. A detailed description of the CHPE Project routing can be found in Exhibit B to the Joint Proposal. The CHPE Project converter station will be located in the Astoria neighborhood of the Borough of Queens in an area that has been dedicated to industrial and commercial use for many years.

Projected In-Service Date and Project Schedule

A Gantt chart of the currently anticipated CHPE Project schedule is appended to this RFI response as Appendix C.

Interconnection

The CHPE Project point of interconnection will be the Astoria Annex 345 kV substation in Astoria, which is owned by the New York Power Authority ("NYPA") and is located on land owned by the Consolidated Edison Company of New York, Inc. ("Con Edison"). The Astoria Annex interconnects with the Con Edison system through two cables that connect to its East 13th Street substation. In addition, Con Edison is in the process of constructing an additional interconnection between the Astoria Annex and its Astoria East 138 kV Substation. An interconnection diagram is appended to this RFI response as Appendix D. The Astoria interconnection point was selected for a number of different reasons including voltage level, breaker positions, and proximity to land for the converter station, as well as consideration of deliverability and reliability. TDI has agreed to upgrade facilities at the Astoria Annex so that the energy deliverability to the Con Edison system will be at least 1,550 MW, thus ensuring that both the CHPE Project and Astoria II Project can deliver low-cost energy supplies to the market. As noted above, the CHPE Project is currently participating in the 2012 Class Year Facilities Study, and conclusion of this study and final approval of the CHPE Project interconnection agreement is expected by mid-2013.

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Technical

The CHPE Project is expected to be in service for at least 40 years. TDI is requesting that the construction contractor ultimately selected to provide engineering, construction, and procurement services (the "EPC Contractor") provide a three-year equipment guarantee, and it is anticipated that the EPC Contractor will also be responsible for the ongoing maintenance and emergency repairs to the CHPE Project.

Construction

TDI is currently conducting an EPC Contractor selection process. It is expected that the construction teams will be companies based in the United States, with the equipment manufacturers being suppliers with some on-shore based manufacturing capability. Labor to construct the project will be primarily local and drawn from the communities in which the cables will be installed and from the New York City area. Cable manufacturing capability will be in the critical path for the construction of the CHPE Project , as there is limited manufacturing capability and high demand in t he European and Asian markets. It may be necessary to form a cable manufacturing consortium in order to manufacture the cable on the timeline required by TDI. The HVdc voltage source converter technology, as well as the submarine and terrestrial HVdc cables, are commercially available and are used throughout the wold.[12] The CHPE Project is expected to be in service for at least 40 years, and historical experience with the cable and converter station technologies has demonstrated that properly -maintained equipment can be in service much longer. If the technology becomes uneconomic or inoperable, the least environmentally disruptive option would be to leave the inert cables *in situ*.

Operational

The CHPE Project has en expected lifespan of 40 or more years. During this period, it is estimated that the transmission system will maintain an availability of 95%, which translates to a capability of delivering up to 8,322 GWh of clean, reliable energy year after year. The HVdc voltage source converter technology uses best in class real time fault detection equipment to clear any fault in 50 milliseconds (0.05 seconds), making the risk of damage to human health and the environment *de minimis*. In addition, the cables are buried to depths that minimize the risk of potential external mechanical damage from ship anchors or fishing equipment. Finally, the transmission cables will both be shielded and buried, so the magnitudes of the electric field levels will be inconsequential. The CHPE Project will meet applicable regulatory standards with respect to magnetic fields and the impacts to potential receptors, if any, are projected to b insignificant.

[12] See, http://www.abb.com/industries/us/9AAF400197.aspx ;and http://www.transbaycable.com/

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Socio-Economic

As noted above, LEI and REMI prepared a study detailing the socio-economic benefits of the CHPE Project. Inasmuch as the CHPE Project will be primarily installed in ROWs, the impacts to the affected communities will be limited to the construction periods. For those communities in which the CHPE Project will be buried along railroad ROWs or streets and highways, an estimated $20 million of property taxes will be paid annually. Once the CHPE Project is *in situ*, there will be little or no burden on the communities. Property values in the communities are also expected to be unaffected by the CHPE Project as the project is almost wholly invisible once buried. It may also be noted that the CHPE Project will receive a grant of land underwater from OGS, and this will generate tens of millions of dollars towards the State's general fund. As previously stated in this RFI response, the introduction of a lov-cost, clean, reliable energy source in Astoria will be a very positive event due to the introduction of zero emissions energy in their community. During the three to four year construction period, an estimated 300 unionized construction jobs will be created in a number of trades and crafts. At the peak of construction, there will be 600 workers employed by the CHPE Project. The LEI/REMI study also has determined that 1,200 indirect and induced jobs will be created from this construction activity. Once the CHPE Project is operational and the estimated $650 million of annual energy cost savings flows into the economy, the LEI/REMI study has determined that approximately 2,400 sustainable jobs will result from the energy cost savings. Finally, the CHPE Project will be the largest and longest HVdc transmission project in North America. As such, New York State will be able to showcase the implementation of the technology, bringing further prominence to the emerging high tech revolution that is occurring in the Capital District region of New York State and once again restoring New York State to the forefront of the electric power industry.

Financial

The CHPE Project is a privately-financed merchant transmission project. The CHPE Project will be financed as follows:

1. *Customer Commitments.*

    a. TDI will enter into a 35-40 year Transmission Service Agreement with Hydro-Québec Production or other entity for 750 MW of transmission capacity;

    b. TDI will offer the remaining 250 MW in an open season process. Such process will be administered by the third party evaluator Boston Pacific in accordance with FERC order ER10-1175-000 issued July 1, 2010; and

    c. Qualifying parties will need to offer, at a minimum, investment grade credit.

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2. *Sources of Project Finance.*

   a. Hydro-Québec may supply all debt for the CHPE Project;

   b. Sovereign Export banks can and may supply between 25-50% of the debt financing for those suppliers selected to manufacture the cables and converter stations;

   c. Traditional project finance may be utilized; and

   d. TDI continues to be a participant in DOE's "Section 1703" Loan Guarantee Program established pursuant to the Energy Policy Act of 2005.

3. *Source of Equity.* Blackstone will provide all equity for the CHPE Project. Current estimates are that equity will represent 25% of the required capital.

4. *Customer Revenues.* TDI will not assume ownership of the energy and capacity that will be sold into the NYISO administered markets, but rather will transport these valuable products to the market. The expected markets that Hydro-Québec and other shippers are expected to access include the energy (Zone J Locational Marginal Price), New York In-City capacity markets, and, potentially, the ancillary services markets administered by the NYISO.

5. *Risk in Price Changes.* TDI is currently in the process of selecting an EPC Contractor for the CHPE Project through a request for proposal process. The risks associated with commodity prices (e.g. copper, lead, etc.) will be borne by the EPC Contractor after issuance of the "notice to proceed" with the work identified by the conract. Risks associated with geotechnical and environmental conditions will be apportioned between the EPC Contractor and TDI in accordance with determinations regarding which of the parties can best manage a particular risk. Risks associated with the NYISO markets will be borne by the shippers using the CHPE Project and will be managed in accordance with the shippers risk management strategies.

6. *Public Service Commission.* The CHPE Project is a merchant, privately-financed, user-pay transmission project and is therefore not involved in any PSC rate-making proceedings. The CHPE Project is, as noted above in this RFI response, the subject of the PSC Article VII siting proceeding, Case No. 10-T-1039.

7. *Power Purchase Agreement.* The CHPE Project will be a merchant, privately-financed, user-pay transmission project and TDI is not seeking a Power Purchase Agreement with any utility or state authority. If in the future an authority or utility in New York undertakes a power purchase request for proposal process, it is anticipated the shippers using the CHPE Project may participate, offering their long-term, clean, and reliable energy supply to the New York market on a competitive basis.

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Environmental

TDI has completed a thorough review of the environmental aspects of the development, construction, and operation of the CHPE Project in the context of the PSCArticle VII process. On February 24, 2012, the Joint Proposal was filed on behalf of the following parties:

1. The Applicants (TDI subsidiaries Champlain Hudson Power Express, Inc. and CHPE Properties, Inc.);
2. PSC Staff;
3. New York State Department of Environmental Conservation ("NYSDEC") ;
4. New York State Department of State (" DOS");
5. New York State Department of Transp ortation ("NYSDOT");
6. New York State Department of Agriculture and Markets ("Ag & Mkts") ;
7. Adirondack Park Agency ("APA") ;
8. Riverkeeper, Inc. ("Riverkeeper");
9. Scenic Hudson, Inc. ("Scenic Hudson");
10. New York State Council of Trout Unlimited ("Trout Unlimited") ;
11. City of Yonkers ;
12. City of New York ("CNY") ;
13. New York State Office of Parks, Recreation and Historic Preservation ("OPRHP");
14. Palisades Interstate Park Commission; and
15. Vermont Electric Power Company – Only with respect to those sections associated with co-located infrastructure.

As part of the Joint Proposal, a comprehensive review was conducted regarding all aspects of the CHPE Project. The application, testimony, and exhibits designated for inclusion in the evidentiary record describe the nature of the probable environmental impacts of the CHPE Project and are briefly summarized below. The environmental impacts associated with the CHPE Project are expected to be avoided, minimized or mitigated, provided that the Best Management Practices ("BMPs") and Guidelines for the preparation of the Environmental Management and Construction Plan ("EM&CP Guidelines") agreed to by the signatory parties are adhered to in the preparation of the Environmental Management and Construction Plan ("EM&CP") and provided that the EM&CP and the proposed Certificate Conditions agreed to by the signatory parties are strictly complied with during CHPE Project construction, operation, and maintenance. The signatory parties have agreed in the Joint Proposal that the CHPE Project, located and configured as provided therein, represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. The route of the CHPE Project is preferred

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because it would avoid and/or minimize the disturbance of natural habita and would primarily use existing and previously disturbed ROWs.

The Joint Proposal further details the environmental aspects of the CHPE Project in the following sections:

Environmental Impact: Sections 24-98

a. Topography, Geology, Soils: Section 26
b. Aquatic Physical Characteristics: Sections 27-34
c. Aquatic Sediment and Water Quality: Sections 35-39
d. Benthic Resources: Sections 40-45
e. Finfish: Sections 46-50
f. Lacustrine and Aquatic Protected Species: Sections 51-58
g. Freshwater and Tidal Wetlands and Water Resources: Sections 59 -62
h. Terrestrial Wildlife and Plants and Protected Species: Section 63 -68
i. Land Use: Sections 69-74
j. Agricultural: Sections 75-76
k. Visibility from Area s of Public View: Sections 77-80
l. Cultural and Historic Resources: Sections 81-82
m. Transportation: Sections 83-88
n. Noise: Section 89
o. Communications: Sections 90-91
p. Electric and Magnetic Fields: Sections 92-98

Environmental Benefits: Section 141

Studies in the Joint Proposal also indicated that the CHPE Project would result in environmental benefits by reducing the emissions of SC_2, NO_X, and CO_2 due to the displacement of electric power that would have otherwise been generated by burning fuel in power plants as outlined below in Table #1.

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Table 1

Emissions Reductions	**SO_2 (tons)**	**NO_X (tons)**	**CO_2 (tons)**
PSC Staff estimate	499 - 828	748 - 1,432	1.5-2.2 million
LEI Updated emissions reduction benefit with CHPE @ 75%- 90%	454 – 571	952-1,114	2.5-2.9 million

The signatory parties have agreed upon the establishment a $117 million Trust, as detailed at proposed Certificate Condition 165 in Appendix C of the Joint Proposal, to be used exclusively for in-water mitigation studies and projects that have a direct neus to the construction and operation of the CHPE Project. The signatory parties have participated in extensive discussions to develop and implement a variety of studies and projects that will minimize, mitigate, study, and/or compensate for the short-term adverse aquatic impacts and potential long-term aquatic impacts and risks to these water bodies from construction and operation of the CHPE Project.

Project Contract/Request for Proposal ("RFP") Status

The CHPE Project is a privately-financed merchant transmission project and has therefore not been submitted to a New York agency or authority in response to a Request for Proposals.

Public Outreach and Stakeholder Engagement

TDI has pursued an extensive public outreach program as documented below:

1. Public Announcement February 23, 2010
2. TDI Public Meetings:
    a. Albany, New York: March 10,2010
    b. Plattsburgh, New York: April 13,2010
    c. Kingston, New York: April 20, 2010

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d. Scotia, New York: May 4, 2010
e. Yonkers, New York: May 12, 2010

3. DOE Public Scoping Meetings
   a. New York City: July 9, 2010
   b. Yonkers, New York: July 12, 2010
   c. Kingston, New York: July 13, 2010
   d. Albany, New York: July 14, 2010
   e. Glens Falls, New York: July 15, 2010
   f. Plattsburgh, New York: July 16, 2010

4. PSC Public Statement Hearings on Article VII Completed Application
   a. Yonkers, New York: Oct 24, 2010
   b. Kingston, New York: Oct 28, 2010
   c. Schenectady, New York: November 4, 2010
   d. Whitehall, New York: November 8, 2010
   e. Plattsburg, New York: November 9, 2010

5. PSC Public Statement Hearings on Filed Joint Proposal
   a. Whitehall, New York: April 3, 2012
   b. Catskill, New York: April 4, 2012
   c. Ravena, New York: April 5, 2012
   d. Schenectady, New York: April 10, 2012
   e. Haverstraw, New York: April 12, 2012
   f. Astoria, Queens, New York: April 24, 2012

In addition to the public meeting, there have been two forty-five (45) day public comment periods noticed on the Federal Register by the DOE, the first on June 18, 2010 and the second o n April 30, 2012. Members of the public can also express their opinion regarding the CHPE Project through the PSC Article VII process on an ongoing basis. Finally, to ensure that the public is well informed with respect to the CHPE Project, there are several websites that the public can access to obtain all public information available. The sites can be found at:

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TDI Website: www.chpexpress.com

DOE EIS Website: http://chpexpresseis.org

PSC Article VII Website: http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=10-T-0139

It should be noted that the following additional parties have expressed support for the Joint Proposal and/or the CHPE Project generally:

- Twenty members of New York's Congressional Delegation[13]
- New York League of Conservation Voters
- New York City Councilman Peter Vallone, Jr.
- Hydro-Québec
- Long Island Association
- Plattsburgh-North Country Chamber of Commerce
- New York State Energy Consumers Council
- International Union of Operating Engineers
- Laborers' International Union of North America
- New York State Laborers' Union
- Empire State Development Corporation
- New York City Economic Development Corporation
- Coalition Helping Organize a Kleaner Environment ("CHOKE")
- Middletown Times Herald Record
- Watertown Daily Times

[13] The Honorable Tom Reed, Paul Tonko, Tim Bishop, Peter King, Steve Israel, Carolyn McCarthy, Gary Ackerman, Gregory Meeks, Jerry Nadler, Ed Towns, Yvette Clarke, Mike Grimm, Carolyn Maloney, Charlie Rangel, Richard Hanna, Eliot Engel, Ann Marie Buerkle, Bill Owens, Nita Lowey and Louise Slaughter.

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Transmission Developers Inc.

APPENDIX A

Donald Jessome
President and CEO

Mr. Jessome is President and CEO of Transmission Developers Inc, and a co-founder of the Company. He earned his undergraduate degree in Electrical Engineering from the Technical University of Nova Scotia (currently referred to as Dalhousie University) in 1987 and his Masters of Business Administration, with Distinction, from Saint Mary's University in 1999.

Mr. Jessome spent his entire career in the energy field starting with 22 years at Emera Inc., a publicly traded company in Canada with $5.3 Billion in energy infrastructure assets centered on power and natural gas. Mr. Jessome has worked in a broad range of areas while at Emer including Transmission & Distribution Operations and Construction, Integrated System Planning, System Operations, Generation Operations and Fuel Procurement, Marketing and Sales, and most recently Director of Asset Optimization and Power Trading for Emera Energy Inc. a wholly owned non-regulated trading and asset Optimization Company of Emera Inc. During this tenure, Mr. Jessome has sat on numerous advisory boards including his membership as one of the inaugural members of the NBSO Market Advisory Committee and a founding member of the CEA Power Marketing Committee. Mr. Jessome has extensive knowledge of the power markets in the North East including ISO-NE, NYISO, IESO, TransÉnergie, NBSO, and PJM through his extensive marketing and trading experience with both the regulated and non-regulated business at Emera.

Prior to co-founding Transmission Developers Inc, Mr. Jessome joined Riverbank Power in 2008 as the Vice-President of Marketing and Trading to assist Riverbank Power in developing its commercialization strategy for its 1,000 MW underground pump -storage technology referred to as Aquabank¢â. This commercialization strategy included the development of economic models and programs for the sale of energy, capacity and renewable attributes for both the regulated and market based energy markets that Aquabank¢â is currently developing sites. In addition, Mr. Jessome was responsible, along with the CEO, in raising equity financing for Riverbank's development plans. Mr. Jessome is a board member to Riverbank Power.

Mr. Jessome serves as a Director for Transmission Developers.

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Transmission Developers Inc.

Tom O'Flynn
Chief Operating and Finance Officer

Mr. O'Flynn is a seasoned energy executive. From 2001 -2009, he served as the Chief Financial Officer of PSEG, a New Jersey based power and utility company with approximately 2.4 million utility customers, 16,000 megawatts of unregulated generation, and operator of a large transmission system in the PJM system. Mr. O'Flynn was responsible for all PSEG corporate and operating financial and strategic functions from 2007 – 2009.

Mr. O'Flynn also served as President of PSEG Energy Holdings, a subsidiary that owned major electric distribution businesses in Chile and Peru and has approximately 2,600 megawatts of generation, primarily in the United States.

From 1986 to 2001, Mr. O'Flynn was in the Global Power and Utility Group in the Investment Banking Division of Morgan Stanley, based in New York City. He served as a Managing Director for his last five years and as Head of the North American Power Group in 2000 - 2001. He was responsible for senior client relationships and led a number of large merger, financing, restructuring and advisory transactions.

Mr. O'Flynn graduated from Northwestern University in 1982 with a B.A., Economics and from the University of Chicago in 1986 with an MBA, Finance. Mr. O'Flynn served as a member of the Board of Directors of Nuclear Electric Insurance Limited from 2003 - 2009, serving as Chairman of the Finance Committee from 2007 - 2009. He is on the Boards of the New Jersey Performing Arts Center and the Newark Museum.

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Bill Helmer
Senior Vice President, General Counsel, and Secretary

Bill Helmer has practiced energy, environmental, contract, and real estate law during a career spanning over a quarter century. He has occupied senior positions in New York State government, litigated groundbreaking cases before federal courts and the highest court in New York State, and handled the leg al issues associated with the development and financing of many large and complicated power projects.

Bill is a graduate of Hamilton College, and he earned a Masterof Arts degree at Columbia University in New York City. He graduated with honors from the Law School of the State University of New York at Buffalo in 1982. After a judicial clerkship, Bill practiced law privately in Albany, New York for a dozen years until he was placed in charge of the Environmental Protection Bureau in the State Attorney Ge neral's office.

The Bureau serves as the litigation counsel for all environmental cases involving state bodies such as the Departments of Environmental Conservation and State, the Adirondack Park Agency, and many others. During his tenure as Bureau Chief, Bill managed a staff that included over thirty attorneys, six scientists, and dozens of other employees in offices located in Buffalo, Albany, and New York City.

From 1999 until 2007, Bill served as Special Counsel in the New York Power Authority's Law Department. At the Authority, Bill oversaw all legal matters associated with the Authority's nuclear fleet until the plants were sold to Entergy Corporation late in 2000. Shortly before the sale, Bill also assumed responsibility for the Authority's hydroel ectric relicensing portfolio. By early 2007, new 50 -year federal licenses had been issued for the Authority's projects on the St. Lawrence and Niagara Rivers.

Bill is a sought -after writer and lecturer. He has served as an adjunct faculty member at Union College, where he designed and taught "The Land and the Law" Environmental Studies course, and he frequently appears in programs sponsored by the New York State Bar Association. At the Bar Association, Bill sits on the Executive Committees of the Environ mental and General Practice Sections. He is also a past Chairman of the latter section and a past member of the Public Utility Law Committee.

Bill's published works include scores of articles and sixteen entries in the official Encyclopedia of New York St ate. He has served as a quarterfinals judge for the National Environmental Law Moot Court competition held annually at Pace Law School. He is also the co-host of the "Capital Green Scene" weekly radio program on WVCR-FM 88.3, which made its debut on Earth Day, 2008.

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Transmission Developers Inc.

Todd Singer
Vice President of Finance and Treasurer

Mr. Singer is the Vice President of Finance and Treasurer for Transmission Developers. He is a senior finance and business development executive with over 17 years ofiverse corporate and investment banking experience. He has significant expertise in the alternative energy and power/utility industries. During his investment banking career, Mr. Singer was responsible for originating and executing over $97 billion in capital markets transactions and $3.6 billion in M&A transactions. He was formerly a Consultant and Head of Strategy and Corporate Development for Energy Storage and Power LLC, a wind energy storage company that is a portfolio company of PSEG. He was also a Consultant with the Natural Resources Defense Council in its Center for Market Innovation where he was focused on energy efficiency finance.

Mr. Singer worked for over eight years as an investment banker at Morgan Stanley where he was an Executive Director. Following business school, Todd was also a Consultant at Price Waterhouse Coopers and an investment banker at Bank of America. He also worked in advertising finance at Time Warner's Time Inc. subsidiary.

Mr. Singer received his MBA from Columbia Business School in 1996 and his BSBA in Management with a Minor in Art History from Bucknell University in 1991. Mr. Singer is currently the Co-Chair of the Bucknell Professional Networks, a 2,500-member network of alumni covering a broad range of industries and disciplines. He was also the founding Co-Chairman of the Bucknell Finance Network, a worldwide network of all Bucknell alumni working in Finance. He is also a former Chairman of the Reunion Gift Committee and has been a guest lecturer at Bucknell. Mr. Singer is also on the Board of Directors for Green Allowance, a non-profit focused on making homes more energy efficient.

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Transmission Developers Inc.

Anthony Turner
Vice-President of Engineering

As VP of Engineering, Mr. Turner has more than 40 years' experience in electrical engineering, including a variety of aspects relating to high voltage direct current and alternating transmission systems. This experience includes HVdc manufacturing, research, lecturing and consultancy, high voltage cable systems, power systems studies, energy management systems, renewable energy and railway electrification and restructuring of electrical utilities. This has included major projects in Canada, the Gulf States, the United States, China, Central America, Europe, Africa, India, Brazil and Panama.

The experience in HVdc Transmission systems has included Contractor's responsibility for the design and commissioning of the Master Controls and HVdc Line Protection systems of the Nelson River Bipole 1 HV dc Project, and as Owner's Engineer for the supervision of the factory testing and commissioning of the Leyte-Luzon and the Chandrapur Padghe HV dc transmission systems.

Mr. Turner's HV Cable system s experience includes responsibility, again as the Owner's Engineer, for supervision of all aspects of the installation of the cable systems for the Leyte-Luzon 350 kV HV dc project (Philippines), the designs and tender evaluation of the 345 kV AC cable crossing between Newark and New Jersey (USA) and the 400 kV land and cable system between Bahrain and Saudi Arabia. In the early 1980's, Mr. Turner was responsible for the HVdc Cable component for the detailed studies of the Strait of Belle Isle crossing, the HVdc cable crossing of the Cabot Strait and the HV dc crossing between Québec and Iles de la Madeleine.

Mr. Turner has carried out numerous power system studies for integrated generation/transmission/distribution systems and for production facilities such as smelter plants, and has been Project Manager for a number of HV ac and HVdc transmission projects in Canada, the Philippines, Panama and India.

He has authored papers on HVdc systems, submarine cable crossings, energy management, renewable energy resources and the electrification of railway systems, and has been a member of a number of CIGRE, CEA, IEEE and other committees and panels.

Mr. Turner holds a B.Tech. (Honours), Electrical Engineering, University of Technology, Loughborough, England 1967, Technical Teacher Certificate, England 1973 and a Masters in Engineering., Power Systems, McGill University, Montreal, Québec, Canada 1978.

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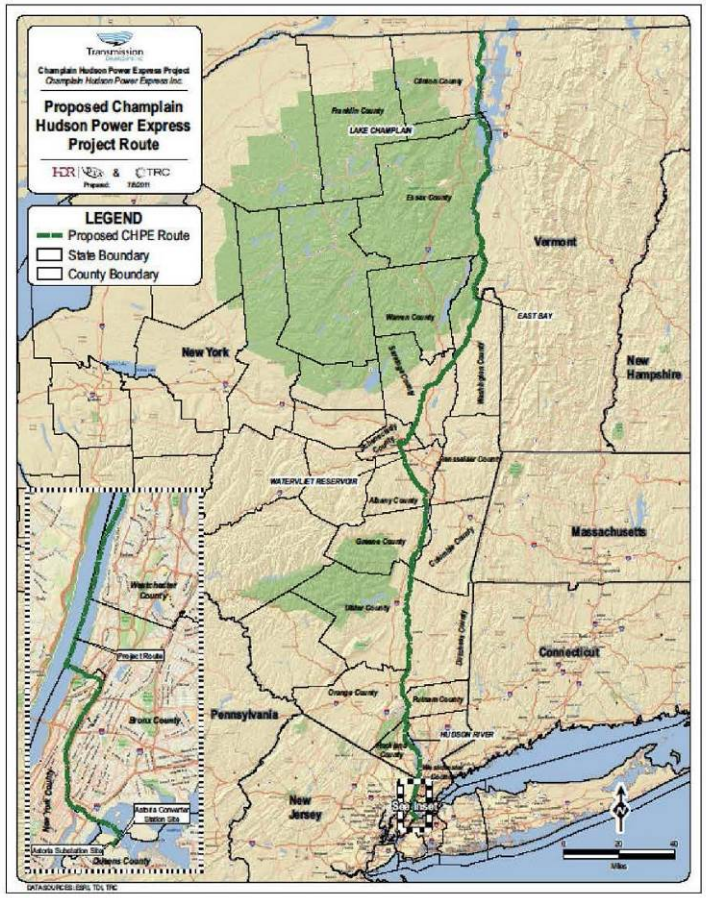
APPENDIX B



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APPENDIX C

PROJECT SCHEDULE

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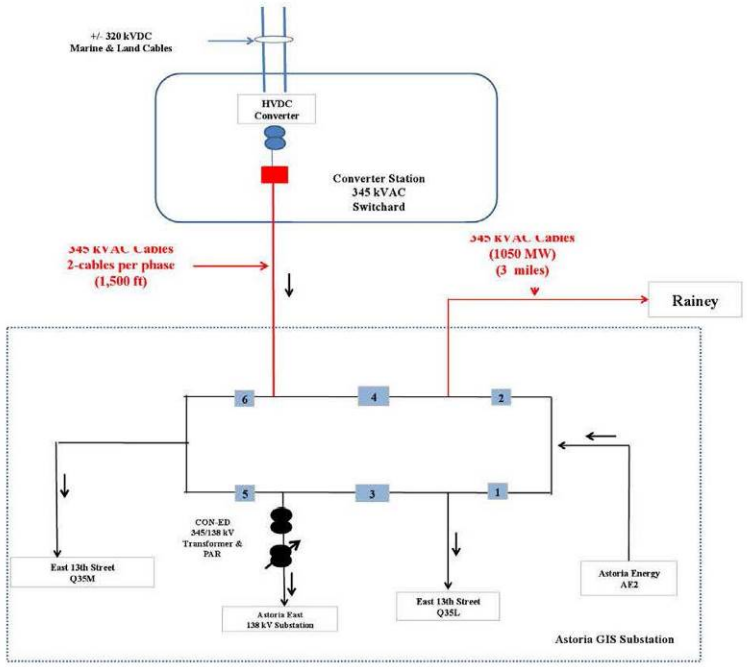
APPENDIX D

INTERCONNECTION DIAGRAM



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Hydro-Québec
Response to
The New York Energy Highway
Request for Information
May 30, 2012

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Respondent Information

Respondent's Name: Hydro-Québec Production
75 Rene Levesque Blvd, 18th Floor
Montreal, Québec H2Z 1A4

Primary Contact: Stephen Molodetz
Vice President – Business Development
H. Q. Energy Services Inc. ("HQUS")
A wholly owned subsidiary of Hydro-Québec
225 Asylum Street, 27th Floor
Hartford, CT 06103
(860) 241-4021
Molodetz.Stephen@Hydro.Qc.Ca

Respondent Background

For over 50 years Hydro-Québec, a Crown corporation wholly owned by the province of Québec, has been successfully developing and operating Québec's vast hydropower resources. Hydro-Québec generates, transmits and distributes electricity and is made up of four divisions: Hydro-Québec Production, its power generation division; Hydro-Québec TransÉnergie, its transmission division; Hydro-Québec Distribution; and, Hydro-Québec Equipment and Services, its construction division. At the end of 2011, the company operated a fleet of nearly 37,000 Megawatts ("MW") of installed capacity with hydropower accounting for 98% of its output. Since 2005, approximately 2,500 MW of new hydropower capacity has been commissioned. An additional 1,550 MW is currently under construction, and will be put in service progressively starting in 2015 [1].

In developing these resources, Hydro-Québec applies the principles of sustainable development from the planning phase all the way through to construction and operation. Hydro-Québec does not undertake a project unless it is profitable under market conditions, environmentally acceptable and favorably received by local communities. As a result, Hydro-Québec is able to provide a renewable, low-carbon, reliable and affordable supply of electricity for both its domestic and export markets.

As Canada's environmental regulations are among the most stringent in the world, all of Hydro-Québec's hydropower projects undergo rigorous and extensive environmental and ecological impact assessment[2]. For example, the environmental impact assessment for the Romaine hydropower project evaluated all the potential environmental and social effects of the project. Based on the results, mitigation and compensation measures have been designed to reduce the environmental impacts and enable land users to continue their traditional activities. The extent of the studies, mitigation measures and environmental monitoring is estimated at nearly $320 million for this project alone.

[1] This represents new capacity from the Romaine project.
[2] http://www.hydroforthefuture.com/approche/6/the-hydropower-development-process

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In addition to our environmental stewardship, Hydro-Québec works in close concert with all of the host communities for its projects, Aboriginal and non-Aboriginal. Québec recognizes 11 Aboriginal nations in 55 communities throughout the province and endeavors to develop mutually beneficial partnerships with all of these communities. Host communities are consulted at the very start of a project, and when possible, participate in all phases of a project – from conducting environmental impact studies, through construction, to the on-going environmental monitoring that follows every project. Since 1975, Hydro-Québec has signed more than 30 agreements with Aboriginal communities to promote their long-term development well after its hydropower projects are completed. Furthermore, every effort is undertaken to ensure that the host communities benefit from the economic spin-offs of a project, usually through comprehensive agreements in the case of Aboriginal communities.

H. Q. Energy Services Inc. ("HQUS") is the U.S. energy marketing and business development subsidiary of Hydro-Québec and has been an active participant in the New York electricity market since the inception of the New York Independent System Operator ("NYISO") in 1999. Prior to establishing HQUS, Hydro-Québec and its predecessor companies sold power to New York State for decades following the construction of the Cedars-Dennison intertie in the late 1910s, and more recently following the construction of the Chateauguay-Massena intertie in the early 1980's. Since this time, Hydro-Québec has provided New York with large quantities of energy and displaced a considerable quantity of greenhouse gas ("GHG") emissions[3]. Today, Hydro-Québec is committed to annually providing 900 MW of capacity into New York State through 2030.

Submission Description

Hydro-Québec is pleased to make this submittal to the Request for Information for the New York Energy Highway Initiative. This submission is comprised of two distinct projects that offer the potential for significant improvements to the reliability, efficiency and environmental performance of the New York State power system.

Project 1 consists of Hydro-Québec's participation in the proposed new Champlain Hudson Power Express ("CHPE") HVDC transmission line[4], combined with a renewable, low-carbon supply of electricity into the downstate area.

Project 2 outlines Hydro-Québec's commitment to work closely with the state to evaluate opportunities that enable increased power flows from Québec into and throughout the State of New York.

[3] Hydro-Québec estimates that in 2011 alone, up to 12 million tonnes of CO2 emissions were avoided as a result of the export of energy from the Hydro-Québec system into neighboring systems.
[4] Project 1 should be considered in combination with the submission from TDI-USA Holdings, which is developing the transmission infrastructure for the US portion of the CHPE project.

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Hydro-Québec requests that the two projects be evaluated individually since they are not mutually exclusive and could therefore both be pursued, although they would likely advance and be implemented on significantly different time horizons.

Project 1: Hydro-Québec participation in the Champlain Hudson Power Express

Project Description

The CHPE is a 1,000 MW high-voltage merchant transmission line being proposed to interconnect the province of Québec with the State of New York in the New York City area. The CHPE project would provide a wide range of benefits to the state because it consists of both an HVDC transmission line, and a renewable, low-carbon supply of electricity. Hydro-Québec proposes to become the "anchor tenant" for the project by committing to up to a 40-year purchase of 75% of the transmission rights, effectively paying for the construction of the line[5].

Project Justification

The CHPE project would simultaneously address several of the primary objectives of the New York Energy Highway Initiative including to promote long-term power system reliability, environmental sustainability, power supply diversity in the downstate area and ratepayer value in the operation of the grid. Additional information about how the project meets each of the objectives contained in the Request for Information is provided below.

1. **Reduce constraints on the flow of electricity to, and within, the downstate area; and expand the diversity of power generation sources supplying downstate.**

   CHPE would provide the State of New York with access to another fuel and delivery source for electricity. In particular its potential to deliver significant quantities of hydropower and alter the resource mix in the downstate area is unique for a single project. Today the downstate area relies primarily on natural gas generation, with a limited ability to switch to oil under certain conditions. The recent New York State Transmission Assessment and Reliability Study ("STARS") report indicates the expectation that the downstate area will continue to rely heavily on natural gas for power generation through 2030. In addition, the City of New York is promoting the replacement of its inefficient oil generators. Inevitably, the addition of new gas capacity to meet growing demand, or replace retiring capacity, will advance the need for additional investment in upgrades to the natural gas transmission system and could create electric system reliability issues during peak periods. The addition of a significant energy and capacity source that is independent from natural gas supply needs and pipeline delivery systems to the area will significantly improve fuel diversity and reliability and mitigate the need for new gas system infrastructure. Additionally, the CHPE

[5] Hydro-Québec will also invest in new transmission necessary in Québec to support the full 1,000 MW capacity of the new interconnection.

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provides significant quantities of renewable electricity to the state without exacerbating the constraints that currently exist for the delivery of upstate resources.

2. **Assure the long-term reliability of the electric system is maintained in the face of major system uncertainties.**

While capacity levels in New York are reported by the NYISO and others to be adequate today, the state's traditional capacity resources face an uncertain future in the coming years due to the combination of pending federal environmental regulations, market conditions and public concern for continued operation of certain facilities. The CHPE would provide a highly reliable source of capacity to make up for a loss of capacity that could result from these uncertainties. To the extent that capacity losses occur in supply constrained areas, the CHPE would be particularly valuable since the area is limited in its ability to transfer power from other areas of the state, and generally, to develop large infrastructure projects.

Over the long-term, CHPE would provide the New York power system with an additional interconnection to Hydro-Québec's vast resource base of close to 37,000 MW that could be accessed under a variety of system operating conditions. All interties between Québec and New York are fully controllable, either with HVDC technology or with generation radially connected to the New York system. As a result, the Hydro-Québec system operates independent of system operating conditions in New York. In turn, disturbances in either area do not affect one another and system reliability is enhanced in both. For example, Hydro-Québec assisted New York during the 2003 blackout and continues to be available to provide support during abnormal and emergency power system events. CHPE would enhance Hydro-Québec's ability to provide this type of support into the future.

3. **Encourage development of utility-scale renewable generation resources throughout the State.**

Hydro-Québec's hydropower facilities are extremely valuable as dispatchable sources of energy. In other words, Hydro-Québec's hydropower resources can be ramped up or down to balance the output of intermittent resources such as wind and solar facilities. The CHPE project would support the integration of greater quantities of utility-scale renewable generation in New York because of the dispatchability and size of the resource base in Québec. Hydro-Québec's ability to provide this type of balancing service for intermittent renewable resources would be further enhanced by adding the CHPE project as an additional interconnection point into the New York control area. In addition, the HVDC transmission technology being used to construct CHPE is highly controllable, further enhancing its ability to provide balancing support for intermittent resources. Although it has been employed between Québec and its neighboring markets for decades, HVDC transmission technology has become increasingly

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attractive to deregulated energy markets in recent years due to its operating characteristics in comparison with AC transmission. In contrast to AC transmission lines where the power flows freely, an HVDC line's flow is completely controllable allowing the system operator to precisely adjust the flow at the delivery point to the amount needed. An approach that combines utility-scale renewables balanced with Québec hydropower presents a unique opportunity for the state to contribute to its renewable and carbon reduction goals.

4. **Increase efficiency of power generation, particularly in densely populated urban areas.**

   CHPE has the potential to improve the efficiency of existing power generators serving the New York City area indirectly. Because New York relies on competition among suppliers to serve the electric needs of consumers and CHPE would be an additional supplier, existing power generators will be motivated to improve the efficiency and performance of their resources to continue to compete in the market. In fact, it is these market dynamics that have made New York's wholesale electric markets successful and beneficial for consumers by promoting investment in existing and new resources.

5. **Create jobs and opportunities for New Yorkers.**

   Large incremental supplies of competitively priced energy and capacity will result in significant downward pressure on wholesale market prices in congested areas, enabling access to reliable and affordable energy; a critical driver for economic development. While the construction and operation of the CHPE project will create direct jobs and opportunities for New Yorkers, equally important are the indirect jobs that will be created through the access to competitively priced, renewable and low-carbon energy that the project will bring to New York State and the downstate region.

6. **Contribute to an environmentally sustainable future for New York State.**

   CHPE would have the capability to deliver up to 1,000 MW of additional renewable, low-carbon power into New York. Using a life-cycle analysis approach, Québec hydropower emissions are similar to those from wind power, a quarter of those from photovoltaic solar facilities, and 40 times less than those from a natural gas plant. Therefore, when coupled with supply from Hydro-Québec, CHPE would assist the state in making significant progress towards reducing carbon emissions as well as reduce other effluents such as SO2, NOx, heavy metals, and particulate matter. This will be particularly beneficial for air quality in New York City during peak summer and winter periods when the existence of the project could displace the use of higher-emitting resources on the power system. Additionally, as state and federal energy policies evolve and policymakers and stakeholders consider broader approaches to the use of

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renewable technologies, CHPE would assist New York in meeting, and potentially increasing, its commitments to renewable energy supplies.

7. **Apply advanced technologies that benefit system performance and operations.**

   Please see the submission from TDI-USA Holdings.

8. **Maximize New York State electric ratepayer value in the operation of the electric grid.**

   CHPE would enhance value to New York ratepayers in several ways. First, significant new quantities of competitively priced energy and capacity will be delivered directly to the higher-priced areas of the state. This will lower wholesale prices and save money for New York consumers[6]. Moreover, the project allows wholesale prices to remain low in the upstate region because it will not cause prices throughout the state to converge[7]. In fact, a recent analysis conducted by the staff of the New York Public Service Commission estimates hundreds of millions of dollars in wholesale market savings that will flow to ratepayers[8].

   Secondly, the addition of the CHPE line will increase competition in the downstate area by increasing the number of suppliers able to serve New York City electric demand. This is important since the downstate area currently relies on a limited number of suppliers. As a result these suppliers will be motivated to enhance the efficiency and performance of existing facilities that operate in the area. Additionally, competition from a lower-cost, highly available resource such as hydropower will minimize price spikes that add to the cost of electricity.

   Finally, the project requires significant transmission infrastructure investment in New York, and to a lesser extent Québec, that would be funded by Hydro-Québec's long-term transmission reservation on the line and therefore would not affect transmission rates in New York. Current investment projections estimate that the U.S. portion of the project will cost approximately $2.2 billion. With this project, New York ratepayers stand to benefit from a significant energy infrastructure addition at no cost.

9. **Adhere to market rules and procedures and make recommendations for improvements as appropriate.**

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[6] Lower wholesale prices will result in lower retail rates based on the retail ratemaking structure in the state.
[7] Price convergence is common in wholesale markets as a result of transmission investment that increases the deliverability of low priced resources to higher priced areas.
[8] NY PSC comments in support of TDI-USA Holding's CHPE project filed in article VII Case 10-T-0139 on March 16 and March 30, 2012. In the March 16, 2012 filing, page 25: "Staff estimated the long-term production cost savings of the Facility as the cost of the Facility plus the cost of the hydropower (dams), less the cost of the combined cycle plant and the present value of the plant's fuel and other operating and maintenance costs. Over a 35-year period, the savings (net present value) ranged from approximately $1.2 billion to $3.2 billion in 2015".

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Hydro-Québec has a long history of involvement in New York's wholesale electricity markets as a committed participant in the stakeholder process for market design and long-term power system planning. In this regard, Hydro-Québec experts actively engage in the various process steps with the staff of the NYISO, representatives of the various state agencies and stakeholders to appropriately design transmission facilities as well as market rules and transact in the market for the delivery of energy and capacity. Hydro-Québec suggests that clarity of the capacity market mitigation rules for merchant entry in the New York City area is very important for projects such as CHPE to be successful and to maximize the value of the facility for New York. This includes how the state may value the entry of supply that will contribute to New York State's public policy objectives.

Financial

Prospects for an Energy Partnership

CHPE will assist New York in resolving traditional power system challenges such as maintaining reliability, security and adequacy, as well as address many of the newer challenges in the marketplace such as the need to increase the use of renewable power sources, lower carbon emissions and ensure appropriate levels of fuel diversity to achieve balanced market outcomes for New York consumers.

Hydro-Québec expects the CHPE project to be economic despite significant market uncertainties that currently exist. However, Hydro-Québec also recognizes that the characteristics of the energy to be delivered have significant value for New York and are likely to have increasing value into the future.

Hydro-Québec proposes to work creatively with New York State to explore options for ensuring that as the value of the energy becomes increasingly important to New York in meeting its evolving policy goals for clean, affordable and renewable energy that there will be opportunities to consider how the various energy benefits enabled by CHPE may be utilized by the state. In addition, to the extent that the state desires to take a continued leadership role in the development of renewables and reduction of carbon emissions, CHPE offers such an opportunity. In this regard, Hydro-Québec proposes that the state of New York consider a stakeholder process that would consider innovative ways in which policy and regulation might prioritize and promote incremental hydropower deliveries.

General Financial Structure

The CHPE project uses a Federal Energy Regulatory Commission ("FERC") approved[9] merchant transmission funding structure, which allows the developer to subscribe up to 75% of the transmission rights to an anchor tenant, and subscribe the remaining transmission rights through an open season solicitation. Transmission development costs

[9] 132 FERC ¶ 61,006 (2010)

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in New York will be funded by Hydro-Québec's long-term transmission reservation on the line and therefore would not affect transmission rates in New York.

Permit/Approval Process
Please see the submission from TDI-USA Holdings.

Other Considerations

CHPE is consistent with Governor Cuomo's vision that New York's power system be comprised of a broad range of projects because it uses technology that can operate efficiently and reliably within an integrated system of diverse supply and demand resources. Commercialization of CHPE is also consistent with the state's goal of maintaining the benefits of wholesale markets that are open to all resources and provide incentives for performance and new investment.

CHPE would provide significant quantities of renewable electricity to New York without exacerbating the constraints that currently exist for the delivery of upstate renewable resources. Similarly, CHPE will add a new source of energy and capacity to the downstate area without adding to the infrastructure needs of the gas transmission system that may increase overtime with continued reliance on natural gas for reliable system operations.

Additional Information

For all additional information related to the development of the CHPE please see the submission from TDI-USA Holdings. For any other information, please contact Hydro-Québec.

Project 2: Increasing Hydro-Québec Power Flows into New York

Project Description

In addition to Hydro-Québec's proposed participation as the anchor tenant for the CHPE project, Hydro-Québec proposes to work in conjunction with the New York State transmission owners to optimize and expand the existing upstate New York – Québec transmission interconnections and relieve key New York congestion points.

In addition to transmission upgrades in Québec, substantially increasing power flows from Hydro-Québec would likely also require transmission upgrades in New York to remove existing deliverability constraints. Increasing the transfer capability over existing interfaces would increase deliverability of upstate generation into downstate areas, including new in-state renewable generation. As identified in the STARS report, the benefits from this type of new transmission investment can be maximized with increased imports from Hydro-Québec [10].

[10] http://www.nyiso.com/public/webdocs/services/planning/stars/Phase_2_Final_Report_4_30_2012.pdf

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Hydro-Québec proposes a coordinated transmission development approach to increase transfer capability between Québec and New York, while resolving internal constraints within the New York control area. We envision Project 2 encompassing a joint study to first identify the most economic and beneficial upgrades, changes to operating practices, etc; followed by a joint development agreement to ensure optimal coordination and implementation of the resulting recommendations.

As with Hydro-Québec's participation in the CHPE project (Project 1), this project would increase New York State's interconnection capability with the Québec control area and Hydro-Québec's vast portfolio of hydro resources, providing the state with increased access to competitively priced, renewable and low-carbon energy.

Project Justification

1. **Reduce constraints on the flow of electricity to, and within, the downstate area; and expand the diversity of power generation sources supplying downstate.**

   A coordinated initiative to increase imports to New York and relieve constraints within the New York system would directly address both congestion and fuel diversity concerns in the downstate area. Enabling power flows across the New York grid will allow diverse resources such as in-state wind and hydro to access natural gas reliant regions in constrained areas, increasing reliability and reducing wholesale energy costs throughout New York.

2. **Assure the long-term reliability of the electric system is maintained in the face of major system uncertainties.**

   Accessing incremental energy and capacity sources is critical in assuring the future reliability and efficiency of the grid. In addition, reducing constraints throughout the system will increase reliability by enabling power to flow freely and efficiently from generators to consumers. Constrained interfaces impede these flows, requiring the dispatch of less economic resources in order to maintain reliability requirements. Power supplies from Hydro-Québec can be available very quickly in the event of an emergency or contingency that may occur, helping further bolster reliability on the New York energy system. All interties between Québec and New York are fully controllable, either with HVDC technology or with generation radially connected to the New York system. As a result, the Hydro-Québec system operates independent of system operating conditions in New York. In turn, disturbances in either area do not affect one another and system reliability is enhanced in both. For example, Hydro-Québec assisted New York during the 2003 blackout and continues to be available to provide support during abnormal and emergency power system events. An increased ability to flow energy into New York would enhance Hydro-Québec's ability to provide this type of support into the future.

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3. **Encourage development of utility-scale renewable generation resources throughout the State.**

   Hydro-Québec's hydropower facilities are extremely valuable as dispatchable sources of energy. Therefore, Hydro-Québec's hydropower resources can be ramped up or down to balance the output of intermittent resources such as wind and solar facilities. Increased power flows from Hydro-Québec would support the integration of greater quantities of utility-scale renewable generation in New York because of the dispatchability and size of the resource base in Québec. An approach that combines utility-scale renewables balanced with Québec hydropower presents a unique opportunity for the state to contribute to its renewable and carbon reduction goals.

   In addition, optimizing the transmission system and eliminating bottlenecks will enable in-state utility-scale renewable generation projects in remote and oversupplied areas to access higher-priced load centers, which will both aid in the continued development of these projects, as well as increase reliability and lower costs and price volatility.

4. **Increase efficiency of power generation, particularly in densely populated urban areas.**

   Reducing bottlenecks within the state will eliminate the need to dispatch less economic resources in order to meet reliability standards in constrained areas. This will result in a more efficient and economic energy grid, allowing companies to make more informed and predictable investment decisions, allowing newer and more efficient generation and generation technologies to be integrated into the grid.

5. **Create jobs and opportunities for New Yorkers.**

   Large incremental supplies of competitively priced energy and capacity will result in significant downward pressure on wholesale market prices in congested areas, enabling access to predictable and affordable energy; a critical driver for economic development. Equally important are the indirect jobs that will be created through the increased access to competitively priced renewable, low-carbon energy that is made available to New York State.

6. **Contribute to an environmentally sustainable future for New York State.**

   Increased import/export capacity with Québec will allow incremental renewable, low-carbon power to flow into New York, which can be dispatched to aid in the integration of new intermittent renewable resources.

   Using a life-cycle analysis approach, Québec hydropower emissions are similar to those from wind power, a quarter of those from photovoltaic solar facilities, and

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40 times less than those from a natural gas plant. Therefore, increased deliveries would assist the state in making significant progress towards reducing carbon emissions as well as other effluents such as SO2, NOx, heavy metals, and particulate matter

7. **Apply advanced technologies that benefit system performance and operations.**

   If identified as a preferred opportunity, new transmission development will utilize the most up to date technology, which will increase efficiency and assure compatibility with the latest innovations in generation, transmission and smart grid technologies.

8. **Maximize New York State electric ratepayer value in the operation of the electric grid.**

   Optimizing the power flow capability between Québec and New York will ensure the most effective and efficient use of the energy system, resulting in increased reliability and predictable and competitive wholesale energy costs for New York ratepayers. As recognized in the STARS report, increasing energy flows from Québec would increase the economic benefits of upgrades developed within New York.

9. **Adhere to market rules and procedures and make recommendations for improvements as appropriate.**

   As outlined in the recent STARS [11] report, due to current NYISO operating practices regarding the treatment of a single external source, the import limit from Hydro-Québec's Chateauguay station into New York is nearly 1,000 MW below the facility's approved limit. A review of the relevant NYISO operating practices could lead to low-cost economic solutions for increasing power flows from Hydro-Québec.

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Prospects for an Energy Partnership

Hydro-Québec proposes an iterative partnership with New York and applicable transmission owners, and in conjunction with NYISO's long-term planning process, to assess the various operating practices and transmission infrastructure options that would enhance deliverability into and throughout the state. This would include

[11] The export limit from Hydro-Québec's Chateauguay station to New York is approved at 2,370 MW with all equipment in service, which includes four 765/120 kV transformers. The New York Control Area ("NYCA") import limit from the Québec Chateauguay-Massena single 765 kV interconnection is, however, limited to 1,380 MW per current NYISO operating criteria, which prevents a single external NYCA source from exceeding the largest internal contingency, in this case Nine Mile Point Station #2 at a projected capacity of 1,380 MW. If there is a desire, from a public policy perspective, to increase the import capability of hydro generation from Québec, additional analysis would be needed to determine how to best address the loss of single source contingency.

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collaboration on the scope, design and assumptions for the necessary studies as well as transmission funding mechanisms and agreements for treatment of new capacity.

In order to facilitate increased power flow capabilities between New York and Québec, partnership opportunities would need to be evaluated to ensure equitable long-term value for both Hydro-Québec and New York. One way to achieve this is to build on the current partnership with the State of New York, which commits long-term capacity sales from Hydro-Québec into the state. However, Hydro-Québec is open to all ideas and concepts.

General Financial Structure

Hydro-Québec is open to traditional and innovative funding structures, including structures in which the cost of the initial study is shared equally between Hydro-Québec and the New York transmission owners. Actual upgrade costs could be borne by Hydro-Québec for the upgrades needed in Québec and the appropriate transmission owners for the upgrades required in New York.

Permit/Approval Process

N/A at this time

Other Considerations

N/A at this time

Additional Information

Please contact Hydro-Québec for questions regarding additional information.

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