Vermont Green Line Devco, LLC

Vermont Green Line Project

Exhibit 6

Economic Effects of Proposed Facility

EXHIBIT 6: ECONOMIC EFFECTS OF PROPOSED FACILITY

6.1 Effects on New York's Electric System and Energy Markets

The Project will provide an "energy bridge" that will allow additional development of new wind energy in upstate New York that would otherwise be constrained and uneconomic given the existing infrastructure for delivery to load centers in New York, thus providing economic benefits to the region. In addition, the Project will allow incremental deliveries of hydroelectricity from Canada across existing transmission facilities into New York. By providing an avenue for additional deliveries of hydroelectric energy to New York, the Project is consistent with the State's proposed Clean Energy Standard of supplying 50% of its energy needs from renewable sources by 2030.

The wind energy transfers to New England will be variable as is consistent with the intermittent nature of wind energy production, and these transfers will be firmed by hydro energy from Canada. While the firming energy will be a direct wheel-through from Canada to New England, Canadian imports above the firming needs will be available to New York consumers, again furthering New York's clean energy goals.

The Project retained ESAI Power LLC ("ESAI")[1] to assess the effects of the Project on New York's electric consumers and on air emissions. The following highlights the main findings of ESAI's analysis:

- Consumer benefits are positive, and average approximately $8.0 million/year from 2020-2030, resulting in a 20 year NPV of $79 million
- Production Cost impacts are positive for New York, averaging $53 million/year from 2020-2030, resulting in a 20 year NPV of $544 million
- Transmission upgrades required for the Project interconnection will allow for the construction of 421 MW of associated wind to support a 400 MW delivery to New England (accounting for losses). In addition to the wind generation that would be

[1] ESAI is an energy research and consulting firm that provides analysis covering all aspects of the Northeast electricity markets including energy pricing, transmission, capacity, renewables, emissions and demand response.

exported by the Project, the upgrades associated with the Project may enable further wind development.[2]

- Incremental wind capacity in this region would provide a boost to meeting the robust requirements currently under consideration in New York such as the 50 percent by 2030 proposal.
- Emissions Impacts Are Neutral to Marginally Lower
  - With the addition of the Project, there will be shifts in import patterns that will cause system dispatch to change slightly. This system dispatch can at times result in slightly higher emissions than would be the case without the Project. However, due to the increased availability of clean hydro power to New York (at times the Project will not need the full 400 MW of available import capability), overall emissions of CO2, SO2 and NOx will decrease. (Whether or not the Project is built, import patterns of Canadian hydro power are likely to change due to strategic initiatives underway to increase exports to New York and New England).
  - If incremental wind generation capacity is built beyond the 421 MW supporting the Project, then system-wide emissions will drop further.

6.2 Other Economic Effects

6.2.1 Long-Term Effects Related to Land Use Patterns

The Vermont Green Line Project will have a minimal effect on existing residential, commercial and industrial land use patterns in any area adjacent to the Project in New York. The cable will be entirely underwater or underground, with a temporary effect on public roads during construction (see Exhibit 4). Once construction of the cable is complete, adjacent land uses will be unchanged. The proposed location of the Beekmantown converter station is on existing vacant land. Once construction of the station is complete, land use will change from Vacant to Utility and Transportation.

[2] While the deliverability of additional wind resources was not studied as part of ESAI's analysis, a NYISO study, "Growing Wind, Final Report of the NYISO 2010 Wind Generation Study" (New York Independent System Operator, September 2010), found that the constraints relieved by Project's system upgrades were the same as those limiting wind development in Zone D.

6.2.2 Community Impacts

The Project will induce positive impacts to the communities in which it is located. The converter station and cables are located in the Town of Beekmantown, and the Applicant has negotiated a Payment In Lieu Of Tax ("PILOT") agreement with the Clinton County Industrial Development Authority ("CCIDA"), as well as an agreement with the Beekmantown Central School District ("BCSD"). These agreements set forth schedules of payments totaling $89.5 million and $5.4 million, respectively, through the first twenty years of the Project's operation.

All construction activities in New York will be performed in accordance with Article VII provisions and permit requirements and coordinated with local building and highway departments. Construction related noise and traffic disruptions will be controlled and will be temporary. Once construction is complete, operation of the Project will pose negligible, if any, adverse impacts on the public.

6.2.3 General Economic Impacts

The Applicant has prepared a study using software provided by Regional Economic Models, Inc. ("REMI") to estimate the impact of the Project's construction and operation on the local economy. While the Overall Project will provide significant economic benefits to New York and the North Country, it will not significantly affect housing, roads, community services or schools in the local area.

Direct Construction Jobs

During the projected construction period of 2017-2019, the Applicant is expected to hire or cause to be hired an average of approximately 175 jobs in direct construction. The average numbers of jobs to be created are 125 and 50, in Vermont and New York, respectively. The estimated peak numbers of direct construction jobs are 177 and 70, in Vermont and New York, respectively. Most of these jobs are expected to be created by local businesses directly employed by the Applicant's contractors. Direct construction jobs resulting from the Overall Project are expected to create approximately $33.8 million in personal income or about $66,500/person-year during the construction period. From that, approximately $1.62 million in state income tax revenue is expected to be generated.

Indirect Jobs During Construction

During the projected construction period of 2017-2019, the Overall Project is expected to result in the hiring of an average of approximately 670 indirect jobs in manufacturing services, transportation, professional services, wholesale and retail trade. The average numbers of jobs to be created are 400 and 270, in Vermont and New York, respectively. The estimated peak numbers of indirect jobs are 587 and 384 in Vermont and New York, respectively. Most of these jobs are expected to be created by local businesses indirectly through increases in commercial activity. Indirect jobs resulting from the Overall Project are expected to create approximately $112.4 million in personal income or about $56,000/person-year during the construction period. From that, approximately $11.9 million in state income tax revenue is expected to be generated.

Jobs During Overall Project Operation

The Overall Project is expected to create between 11 and 14 full-time-equivalent positions ("FTEs"). Approximately 11-14 FTEs are expected to be created to operate and maintain the assets, including 24/7 operation support and on-site electro-mechanical technician support, to administer supporting contracts, and to provide engineering, accounting, regulatory and legal support. It is expected that the average annual salary with overtime will be approximately $100,000.

6.2.4 Local Economic Benefits of NY Wind Generation Enabled by Project

Another type of benefit to New York and the North Country will be the local economic benefits they will receive as a result of the development of wind generation enabled by the Project. As mentioned above, the Project will allow for the development of 400 MW of New York wind generation for export to the New England marketplace. The municipalities where this energy is produced will receive substantial economic benefits.

These benefits would likely include the creation of direct permanent jobs for 10 to 15 full-time employees with total annual payroll of approximately $1 million, about 200 temporary on-site construction jobs with estimated wages of $15 to $20 million, $3 to $5 million in development spending for contractors performing various environmental studies and engineering tasks required to obtain necessary permits, and $10 to $15 million of spending for materials and hiring of contractors for various services which would indirectly create approximately 500 additional jobs.

Developers of 400 MW of wind generation capacity can also be expected to pay significant, long term, direct benefits to the host communities in the form of taxes, tax-related payments, and payments for real property rights. These are likely to include PILOT payments, host community agreement payments, payments to acquire property rights, and payments to purchase goods and services locally during project development and construction.