

VIA EMAIL

September 1, 2020

Mr. Ray Burger, Director of Planning
Town of Dryden
Planning and Zoning Department
93 East Main Street
Dryden, NY 13053
Email: rburger@dryden.ny.us

RE: Borger Replacement Project - Special Use Permit Application

Dear Mr. Burger:

On August 20, 2020, the Town of Dryden Town Board opened a public hearing on the Special Use Permit Application by Dominion Energy Transmission, Inc (DETI) for the proposed Borger Replacement Project, a maintenance project, located at 219 Ellis Hollow Creek Road in the Town of Dryden, Tompkins County, New York. This correspondence is in response to public comments received to date and provides additional supplementary information regarding the genesis and primary intent of the proposed Borger Replacement Project.

Project Narrative

At the request of the Town of Dryden, DETI proposes to replace two (2) existing early 1980's turbines with more modern and efficient, similarly sized, Solar Centaur 50LS turbines equipped with oxidation catalysts and low nitrogen oxide (NO_x) combustion technology that will significantly reduce criteria pollutants air emissions at its Borger Station in the Town of Dryden. DETI will also install an oxidation catalyst on the one (1) remaining model year 2011 Solar turbine to further reduce air emissions. In addition, DETI will install three (3) new microturbines for onsite power, install heat recovery for 6 microturbines to reduce boiler runtime hours, replace blowdown silencers/vents to allow for capped emergency shutdowns to further reduce air emissions, replace an aging boiler system with an EPA-certified boiler lower in regulated emissions, and install other minor station piping and updates, including replacing the existing fencing with a new dark-green vinyl-coated chain link fence as well as enhancing landscaping along the front of the property. Three (3) new buildings will be installed including two (2) Compressor Buildings and one Local Equipment Room (LER).

The two (2) existing turbines will be disconnected and removed from service after the replacement turbines are brought in-service. Once completed, the existing turbine building will be used for storage or auxiliary equipment. All work will occur within DETI owned property which includes two (2) contiguous parcels of land (Tax Map #66.-1-18 and #66.-1-22) which collectively total approximately 83.64 acres in the Town of Dryden.

DETI is purchasing prefabricated steel buildings designed specifically for the new Solar Centaur units. These buildings will be constructed with specially designed sound attenuating materials. As a result, the

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station is designed to operate quieter than it does currently. The new buildings will use flat, non-glare paints on the exterior surfaces to best comply with Town of Dryden's Commercial Building Guidelines.

As stated, this is a maintenance project with replacement of similar, like-sized equipment. This project is not a capacity project for additional customers, nor is it designed to increase flows or capacity in the pipeline.

This project originated from a request from the Town of Dryden that DETI consider implementing the suggestions contained in the June 4, 2017 document "**Borger Station Equipment, Savings, Public Health and Safety Proposal**" (see attached) that specifically addressed local public health improvements with the installation of the proposed equipment.

New York State Department of Environmental Conservation Air Permit

Following the Town of Dryden's October 9, 2018 request to replace equipment at Borger Station (see attached), DETI submitted an air permit renewal and modification request for the Borger Replacement Project to New York State Department of Environmental Conservation (NYSDEC) Region 7 on May 2, 2019 (with supplemental data provided on April 15, 2020).

In the air permit application to the NYSDEC, DETI stated the following:

"DETI proposes to replace two existing aging Dresser DC990 centrifugal compressor units (Borger Units 2 and 3) of approximately 11,600 horsepower (hp) International Organization of Standardization (ISO) rating with two new Solar Centaur 50LS centrifugal compressor units with oxidation catalysts (Borger Units 5 and 6) at the Borger Compressor Station (Borger Station).

Due to market availability, the two new compressor units that are proposed have a slightly higher horsepower rating (total of approximately 12,404 hp at 0 degrees F) than the compressor units they will replace.

DETI will maintain current subscribed deliverability without exceeding the current volumetric capacity (emphasis added). The maximum site hp rating of each new Centaur 50LS unit (at 0 degrees F) will be 6,202 hp."

In response, NYSDEC issued a Draft Air Permit on November 27, 2019, making the SEQRA determination that the proposed Borger Replacement Project is a Type II Action. Type II Actions are statutorily exempt from further SEQRA review.

Issuance of the Draft Air Permit started the public comment period in December of 2019, which has since closed. We thank the Town of Dryden for its letter of support for the air permit for the requested project at Borger Station (see attached).

NYSDEC has not yet issued a Final Air Permit for the Borger Replacement Project. Once issued, a copy will be provided to the Town of Dryden. The draft air permit is included with this letter (see attached).

Improving Community Health by Reducing Criteria Pollutants

This is a community-driven project to further improve the health of area residents and the environment beyond the current protections supported by the Title V permit. The project will result in reduced exposure to federally regulated Clean Air Act criteria pollutants, which are governed by health-based standards set by the U.S. EPA, and include oxides of nitrogen (NO_x) and carbon monoxide (CO). Permit limits established by the U.S. EPA and the NYSDEC reflect health-based air emission standards for the entire spectrum of emissions from this facility.

Currently, Borger Station is governed by a Title V air permit triggered by its annual NO_x potential to emit (PTE). NO_x emissions are a precursor to the formation of Tropospheric, or ground-level, ozone. People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. Ozone also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas.¹ With the proposed project and associated significant reductions in NO_x, and by association ground level ozone, the residents of Dryden will benefit from the immediate and long-term reduction of exposure to this criteria pollutants.

Additionally, this project greatly reduces exposure to carbon monoxide, a criteria pollutant which can cause dizziness, confusion, unconsciousness, and chest pain in those with heart disease.²

Other criteria pollutants that will be greatly reduced as a result of this project, and in turn, improve the quality of life of the residents of Dryden include:

- Volatile Organic Compounds, another precursor of ground-level ozone discussed above, and
- Hazardous Air Pollutants including Formaldehyde, which can cause irritation of the eyes, skin, nose, or throat and may contribute to an increased chance of cancer or adverse environmental effects from exposure at high concentrations.³

With the promise of reducing these pollutants beyond the levels of protection required in the current Title V permit, DETI believes this project offers significant benefits to local community members and the environment.

Potential to Emit

Much discussion has been centered around the Potential to Emit (PTE) for the proposed equipment with this application. Borger Station is a relay station, designed to move gas along the pipeline during peak demand seasons. When demand is low, such as summertime months, Borger Station typically has minimal

¹ Ground-Level Ozone Pollution, United States Environmental Protection Agency (USEPA), 8/31/2020, <https://www.epa.gov/ground-level-ozone-pollution>

² Carbon Monoxide Pollution in Outdoor Air, USEPA, 8/31/2020, <https://www.epa.gov/co-pollution>

³ Facts About Formaldehyde, USEPA, 8/31/20, <https://www.epa.gov/formaldehyde/facts-about-formaldehyde#whatare>

to no operations. Historic operating records, submitted to NYSDEC annually, demonstrate this trend and confirm it is not unusual for Borger Station to not operate for multiple months in a row during the summer. The reduced air emissions associated with the proposed equipment are summarized in attached graphs based on the annual “potential to emit,” (PTE) which assumes continuous 24/7 operation of the compressor station, every day of the year, or a total of 26,280 hours annually for all 3 turbines combined. Due to the purpose and design of the station discussed above, this assumption of PTE (a theoretical worst-case scenario), is an entirely unrealistic condition, and not indicative of actual operations, historically or in the future.

In practice, the Borger facility has had a low annual utilization rate. Actual annual emissions have been and are anticipated to continue to be approximately 20% of the theoretical worst-case scenario for the station, or PTE”. It is worth noting here that DETI has never achieved an operational level close to a 100% PTE for the existing equipment at Borger Station. Furthermore, based on projections of future natural gas utilization trends under the State of New York’s ambitious 2019 Climate Leadership and Community Protection Act’s (CLCPA) mandates, it is highly unlikely that this will change.

This community-driven project is not designed to serve additional customers with the proposed like-sized replacement equipment, nor provide additional capacity to the DETI interstate natural gas system. Rather, the project’s driving goal is to reduce reportable air emissions.

To illustrate the anticipated actual emissions from the proposed equipment (see attached), DETI used a very conservative 25% capacity utilization factor (25% is higher than the approximate 20% capacity utilization peak from the five-year period of 2015 to 2019).

Net Benefits

Due to combustion dynamics and the components that are necessary to reduce emissions of criteria pollutants requested by the Town of Dryden, the replacement turbines will emit greater levels of carbon dioxide (and to a lesser degree methane and nitrous oxide). These pollutants (carbon dioxide, methane, nitrous oxide) are all considered greenhouse gases (GHG’s) and their collective impact is measured in carbon dioxide equivalents (CO₂e).

Criteria pollutants, which are the focus of this project, each have individual health-based standards for concentrations in ambient air that are established by the USEPA and NYSDEC. Each standard is reviewed by USEPA once every five years through a process that includes workshops to gather input from the public and scientific community, integrated science and risk exposure assessments, and complete policy and rulemaking procedures. This process has been established to ensure the established standards continue to adequately protect human health and the environment. Health-based standards for acceptable concentrations of GHG’s in ambient air have not been established. Due to the lack of health-based standards for GHGs, Dominion Energy is unable to provide a side-by-side comparison of net benefit between the two categories of pollutants for this project.

Dominion Energy can state with great certainty that the degree of potential benefit to the Town of Dryden’s local air quality resulting from the reduced criteria emissions associated with this project are measurable

and quantifiable when compared to USEPA's established health-based standards. This reduction in emissions demonstrates the project's significant net benefit to the residents of Dryden.

Proposed Equipment is Properly Sized for this Pipeline System

We have heard comments that the PTE for CO₂ with the proposed replacement equipment (not the corresponding benefits of the reduced PTE of criteria pollutants the replacement equipment provides), is confirmation that this project is meant to serve additional customers and provide for additional, increased capacity. As stated above, and to the NYSDEC in the Air Permit Application, this is simply not the case.

We have also heard that because DETI has proposed the similar sized, community-requested Solar Centaur 50 turbines, which do not have runtime limits in the Draft Air Permit, DETI's intent is to operate these replacement turbines more frequently and that such operation will actually achieve the PTE, the worse-case scenario for air permitting purposes.

Absent a change in historic weather conditions, operating the proposed equipment in that manner, under current constraints of the pipeline system to which Borger Station is connected, would require a large increase in capacity to meet new customer demand. This hypothetical scenario would have necessitated a robust Federal Energy Regulatory Commission (FERC) 7c application process with a NEPA review, open houses, and public comment.

This is simply not the case with this replacement project that includes similar sized turbines, which are properly sized to serve DETI's existing customer demand on this system.

The replacement and maintenance of similar sized equipment requires a 2.55b notification to the FERC. FERC's regulations on replacement facilities are very clear, and state that "*the replacement facilities will have a substantially equivalent designed delivery capacity, will be located in the same right-of-way or on the same site as the facilities being replaced.*"

SEQR and Conditions of Approval of the Special Use Permit

As previously discussed, NYSDEC has issued a draft renewal air permit, along with the determination that the project is not subject to SEQRA. In cases such as this, where the Department issues a renewal permit to an existing facility, NYSDEC recognizes the renewal process to be a Type II action not subject to SEQRA.

The reasoning behind NYSDEC's determination is that permit renewals do not represent a new potential environmental impact. This determination is further supported by the fact that Dominion Energy is seeking to install like-kind replacement equipment that will result in a significant reduction of criteria pollutants.

Notwithstanding the multiple above-described project benefits, DETI has consented to proposed conditions of approval for the Special Use Permit which include the following:

1. DETI will comply with emissions requirements applicable to the Borger Station as determined by the New York State Department of Environmental Conservation, including the integration of the following industry leading commercially available methane mitigation technology and equipment to capture and monitor planned and fugitive methane emissions during operation and maintenance activities at Borger Station:
 - “Pressurized hold” accomplished through the installation of electric-driven seal gas booster pumps on Units 4, 5, &6. This will eliminate methane emissions during start up and shutdown of each unit.
 - Portable compression which will be utilized to reduce the volume of methane vented to atmosphere during planned station and pipeline maintenance, including the pigging of pipelines associated with Borger Station.
 - Leak Detection and Repair (LDAR) conducted at Borger Station to identify and mitigate sources of fugitive methane emissions.
 - Utilization of continuous methane monitoring devices (combustible gas indicators) inside each compressor station pumphouse at Borger Station

DETI agrees to install this new equipment and incorporate these best practices into its operations contemporaneously with the other proposed equipment included in this application.

2. DETI will report, annually in April or as directed by the town of Dryden, to the town of Dryden in a public setting on the operational run-hours and emissions, including CO₂e, at Borger Station, as well as the technology and practices used to reduce planned and fugitive methane emissions.

It is worth noting here that Dominion Energy will comply with all New York State regulations as they pertain to the operations of Borger Station, including but not limited to regulations to be promulgated under the Climate Leadership & Community Protection Act.

DETI has undertaken this project in direct response to the requests made by the community and public officials for reducing regulated air emissions at Borger Station. We appreciate the ongoing relationship that has been built between DETI, the community, and town officials as we worked together to design and submit this plan for approval.

The Borger Station has operated safely for many years and with this project we demonstrate our commitment to operating safely and reducing harmful emissions for the surrounding community, our neighbors in the vicinity of the station, and for our employees.

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We appreciate the opportunity to submit these additional comments. Should you have any additional questions or comments on this Special Use Permit Application for the Borger Replacement Project, please contact myself or Don Houser at (717) 580-3915 or via email at donald.e.houser@dominonenergy.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Gangle', is positioned above the typed name.

Richard B. Gangle, Director
Environmental Services
Dominion Energy

ENCLOSURES

- 1 – “Borger Station Equipment, Savings, Public Health and Safety Proposal” by Berg, et al.
- 2 – Dryden October 9, 2018 letter to Dominion Energy
- 3 – Dryden December 16, 2019 Letter to NYSEC
- 4 – Emissions Comparisons
- 5 – NYSDEC Draft Air Permit