



GARNET ENERGY CENTER

Case No. 20-F-0043

1001.12 Exhibit 12

Construction

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Exhibit 12: Construction

This Exhibit will track the requirements of Final Stipulation 12, dated March 5, 2021, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.12.

This Exhibit contains preliminary quality assurance and quality control (QAQC) procedures demonstrating how the Applicant will implement and monitor conformance of Project installation with the applicable design, engineering, and installation standards and criteria.

The Applicant will have a construction team at the Project Area to handle materials, construction, and quality control during construction of the Project. The Engineering, Procurement, and Construction (EPC) Contractor will manage local subcontractors to complete construction. An example QAQC Plan has been prepared for the Project and is included as Appendix 12-1; however, the EPC Contractor, yet to be selected, will prepare a Final QAQC Plan for the Project that will be submitted to the Secretary of the Siting Board.

Throughout the construction phase, ongoing coordination will occur between the Project development and construction team. The Applicant will maintain a full-time Construction Manager to collaborate daily with the EPC Contractor. The Construction Manager will help to coordinate Project activities, including ongoing communication with local officials, citizen groups, and landowners. The Construction Manager will also have the following responsibilities:

- Project plan of the day;
- Safety and environmental performance;
- Schedule, cost, and quality performance;
- Revenue performance;
- Monthly management meetings;
- Overall Project direction;
- Administration of contracts; and
- EPC contractor guidance and quality control.

The Applicant's Construction Manager will maintain full authority and responsibility for the EPC Contractor, all subcontractors, and the associated quality control measures. A breakdown of responsibilities and quality assurance can be found in Appendix 12-1.

The Construction Manager will also maintain construction site safety under the Applicant's "ZERO Today" philosophy as described in Exhibit 18 of this Application. The Applicant will conform to the requirements of the Occupational Safety and Health Administration (OSHA), the United States Environmental Protection Agency (USEPA), and other applicable New York State regulations to ensure the safety of personnel and the public. The appropriate safety training will be required of all personnel working on the Project.

In addition to the Construction Manager, there will be a number of personnel with various levels of accountability to provide for the timely, safe, and efficient use of resources and labor. Each of these supporting personnel have specific responsibilities related to the Project. Detailed descriptions of roles and responsibilities can be found in Appendices 12-1 and 12-2. Below is a list of support personnel and a brief description of their accountabilities in relation to the Project.

- **Project Engineer** – Provides support and quality control to the engineering team for the Project. Communicates requests for information and engineering change notices to the construction team should there be any questions with field construction. Assures timely resolution of any engineering inquiry that is imperative to drive the Project schedule.
- **Project Controls** – Tracks cost controls, risk, and capital forecasting in relation to the Project. Monitors updates to the Project schedule and reports on effects to the Project and its associated costs.
- **Operations Plant Lead and Start-Up Operations Transition** – Typically brought in near the end of construction. Ensures a quick, safe, and efficient transition from the construction team to the operations team. This ensures the end of construction and transition into commissioning activities are completed smoothly.
- **Civil/Environmental** – Interfaces with permitting to ensure the requirements have been met. Identifies and resolves deficiencies. Oversees compliance with environmental requirements. Maintains daily coordination of the civil construction and activities associated with the installation of the solar panel arrays. Reviews and assures quality of work in accordance with design standards. Monitors safety compliance, implements quality control, performs inspections and assures mechanical completion. An Environmental Monitor, as described in other sections of this Application, will also be retained, will be present onsite, and will perform the duties required by the certificate conditions approved by the Siting Board.

- **Electrical** – Coordinates and monitors electrical contractor’s work, including all electrical and ground testing of the solar panel arrays and inverters. Monitors safety compliance and assesses deficiencies and their associated resolutions.
- **Substation** – Coordinates and monitors substation contractor’s work. Maintains daily coordination of the substation construction. Monitors and coordinates electrical and ground testing of the substation. Monitors safety compliance and assesses deficiencies and their associated resolutions.
- **Logistics and Materials** – Provides for the efficient delivery of Project equipment and materials on Site and in accordance with the Project schedule.
- **Commissioning** – Manages the testing and inspection of the electrical, mechanical, and communication systems associated with the Project.
- **Site Coordinator** – Manages weekly performance metrics and logging or contractor documents and drawings, coordinates with road contractor, and maintains jobsite safety.
- **Site General Support** – Assists and supports various support personnel.
- **Site Administrator** – Manages and transmits Project documents. Assists with the business management and administrative duties of the Project Manager and other associated support staff.

A description of necessary qualifications for the positions listed above along with a copy of a sample EPC Contractor’s Solar Project Construction Quality Program can be found in Appendix 12-1. The EPC Contractor will maintain all requirements or similar requirements to those listed in this document, and will abide by the standard of the Applicant’s development and construction personnel. The EPC Contractor will provide a Quality Program with the requirements or very similar requirements listed in this section and the example document.

Refer to Appendix 12-2 for the Applicant’s Major Duties & Accountability Matrix for Project personnel.

Accountabilities and Oversight

The Applicant and its contractors and subcontractors are required to maintain the highest quality controls during the development, construction, and operation of the Project. The Applicant will have a team of personnel in place as listed above and in Appendix 12-1 to maintain the daily operation and quality of the construction of the Project. Additionally, the EPC Contractor will

maintain documentation, conformance, inspection, and testing of work completed at the Project to ensure that all work has been completed in accordance with Project specifications. The comprehensive QAQC Plan through the EPC Contractor in conjunction with the quality oversight of the Applicant's team of personnel will ensure that work adheres to the highest possible quality and safety metrics throughout the Project development, construction, and operation.

Project Organization

The EPC Contractor will provide an effective organizational structure to ensure a responsible construction team with a commitment to quality and safety. The effective structure will contain appropriate personnel to facilitate the construction of the Project including managers, engineers, superintendents, inspectors, foreman, and quality personnel. Each employee has the responsibility to implement quality processes in every aspect of the construction process. Non-conforming work with the established level of quality and Project specifications will be corrected appropriately.

Process Controls

Process controls are designed so that work is completed in a safe, consistent, and quality manner. An efficient use of Process Controls such as Project meetings, daily planning meetings, and monthly management meetings help to address responsibilities and ensure the timely construction of the Project. The topics of discussion of these meetings may range from daily construction activities to safety and emergency agendas to the resolution of on-site construction challenges.

Design Controls

Plans and drawings shall be thoroughly reviewed for completeness of construction. The engineering team shall clarify instances of construction that require further information for completion. Design deviations must first be accepted and approved by the Engineer of Record prior to construction of that Project Component.

Document Control

Project documents will be collected, stored, transmitted, and submitted in a controlled and defined manner. Project closeout documentation will be provided to the Applicant as a Project deliverable. Specific reporting and timelines will be established between the Applicant and the EPC Contractor prior to the start of construction.

Training

Internal and external training for personnel to provide for the consistency and completeness of job site training efforts. Training records shall be kept for Project personnel for the duration of construction. Employees must have safety training and abide by the regulations as set forth by OSHA and other relevant New York State Safety regulations.

Subcontractor Evaluations

Subcontractors will be assessed on various factors including performance, safety, capability, and quality of work. This continual information gathering can help to assess the subcontractor's suitability for present and future work. Subcontractors are subject to audit and performance review throughout the development and construction process.

Material Management

Materials delivered or supplied for the use of construction of the Project will be in quality compliance with manufacturer and Project specifications. The handling and storage of materials shall be in accordance with manufacturer recommendations so that there is no compromise in the quality of the material.

Inspection and Testing

Inspection and testing shall be completed in a controlled manner in accordance with manufacturer, engineering, and Project specifications. Both internal and external quality checklists will be established and used as well as the potential for third-party testing contractors. Inspection and testing documentation will be generated and stored to assure the quality of all materials, systems, and Project Components.

Calibration

Calibration of construction tools and equipment will be completed so that construction work is performed within the required technical standards. The calibrations will be conducted in accordance with the applicable standards and manufacturer's recommendations. The results from each calibration shall be maintained.

Nonconformance

Project materials, products, and work will be inspected and tested to provide conformance with manufacturer, engineering, and Project specifications. Project Components that are

nonconforming will be subject to rejection, repair, or replacement, as determined collaboratively between the Applicant and the EPC Contractor. Unsatisfactory work completed by the EPC Contractor will be resolved immediately by the Applicant and corrective actions will be taken to avoid future nonconformance.

Auditing

Audits will be performed so that quality standards are being met and adhered to throughout Project development and construction. Results of the quality audits will promote efficiency and quality control, as well as further the quality standards as the Project progresses. Records from each audit shall be maintained by the Applicant.

Project Delivery

The Project shall be constructed in accordance with the plans, engineering standards, manufacturer's recommendations, contractor standards, the Applicant's expectations, and any certificate/permitting conditions. Meetings between the EPC Contractor and the Applicant will be conducted on a regular basis so that all expectations are being met. The inspections and testing of Project Components will verify that Project quality standards are being met. Every precaution shall be taken by the EPC Contractor to provide for the safety of Project employees and the general public throughout the duration of Project construction and operation. Public safety is a high priority to the Application.

Prior to operation of the Project, an Operation and Maintenance (O&M) staff member will be selected and integrated into the Project during the construction phase. The Applicant, Construction Manager, and O&M staff member will be in continuous coordination to provide for a smooth transition from construction of the Project to commissioning and operation.

12(a) Company Official Statement

(1) Protection of Underground Facilities

The Applicant and its contractors will conform to the requirements contained in Public Service Law (PSL) § 119-b, as implemented by 16 NYCRR Part 753, regarding protection of underground facilities in order to assure public safety and prevent damage to public and private property.

(2) Pole Numbering and Marking Requirements

The Applicant and its contractors will conform to the pole numbering and marking requirements as implemented by 16 NYCRR Part 217, if required.

12(b) Preliminary Plans to Avoid Interference with Existing Utility Systems

The Applicant compiled and consolidated utility information within the Project Area. All existing/operating utility systems, both above and below ground, are identified and designated as electric, communication, natural gas, municipal (e.g. water and sewer), etc. Two New York Power Authority (NYPA) electric transmission lines as well as National Fuel's Empire Pipeline cross the Project in the Town of Conquest, as seen on Figure 4-2. The Empire Pipeline is a subsidiary of the National Fuel Gas Company (National Fuel). Collection lines will need to cross the right-of-way (ROW) for both the transmission line and the Empire Pipeline. The transmission line and pipeline easement requirements are detailed below. Coordination with the owners of the transmission line and pipeline will continue during the Project's design. The Applicant and/or EPC Contractor will submit a request for information with Dig Safely New York (DSNY) to receive identification of all documented buried utilities within the Project Area. Safety of all personnel and the prevention of damages to existing/operating utilities is a top priority of the Applicant.

Upon completion of utility identification for all utilities in the Project Area, the Applicant will collaborate with all companies within the Project Area to avoid or minimize any potential interference. Measures to minimize interference where avoidance is not possible include horizontal directional drilling (HDD) instead of trenching, relocation of Project components (e.g., relocating collection lines to avoid interference with a well), and crossing of existing utilities at 90-degree angles. When necessary, the Applicant will establish a crossing agreement for any permanent crossing of Project components with existing utilities. Crossing agreements will be negotiated and established as a last resort to avoid interference with existing/operating utilities.

The Applicant does not expect to have permanent crossings of existing transmission lines, or fiber optic lines with the exception of the NYPA electric transmission lines and the Empire Pipeline. Certain electrical distribution lines and municipal water lines will be crossed, and the Applicant will coordinate with applicable entities concerning the safe methods to be implemented for these crossings. Each permanent crossing would be subject to site-specific engineering and construction requirements. The Applicant will adhere to all requirements set forth by DSNY, all applicable engineering codes and guidelines associated with each permanent utility crossing, and

will work with the utility companies to provide that any interference with existing/operating utilities is avoided or minimized if permanent crossings are required. Refer to the Preliminary Design Drawings in Appendix 11-1 for preliminary plans and details on utility crossings.

(1) Review of publicly recorded easements associated with the pipeline

The Applicant reviewed publicly available, recorded easements associated with the pipeline. Figure 4-2 depicts utility ROW easements that intersect the Project Site and surroundings. Associated details are described below.

(2) Publicly recorded restrictions associated with the easement for crossing and setbacks

The Empire Pipeline ROW may be crossed, under certain conditions, by utility lines. Utility lines are not to be placed parallel to, along, or within Empire Pipeline's ROW. A minimum of 36 inches of cover over any Empire Pipeline is required in a drainage ditch. A minimum of 60 inches of cover over any Empire Pipeline is required at the crest of any road as well as 42 inches at a driveway. No heavy equipment shall be moved across the ROW before notifying the General Foreman and receiving his approval.

Empire Pipeline will be notified in advance through DSNY at least two working days before any construction, excavation, demolition, blasting, pile driving, or vibratory equipment near Empire Pipeline facilities. No permanent plantings will be planted within 10 feet of the pipeline. Empire Pipeline may require a grass or gravel island be left over the pipeline to allow a path for gas to vent in case of leakage.

Any buried metallic structure that is within any Empire ROW will require the installation of an interference test station. Sandbag padding is to be set up between the pipeline and any underground utility crossing.

A perforated agricultural field drain tile line crossing shall be installed, wherever possible, perpendicular to and with a minimum of 12 inches of vertical clearance to any Empire Pipeline.

Refer to the NYPA Crossing Permit Application and Instructions in Appendix 12-5 for additional information regarding permitting to do work on land under control of NYPA.

(3) Consultations with pipeline owners

On May 27, 2021, consultation was initiated with the pipeline owner, National Fuel, in regard to the Empire Pipeline. National Fuel was notified that the proposed Project will include an underground crossing for a collection line as well as an aboveground crossing to interconnect to the NYPA line that parallels the pipeline. Confirmation of the correct version of the encroachment manual was requested as well. As of the time of filing, a response has not yet been received. Results from consultations with pipeline owners that are requesting specific information regarding crossings of Project Component installations nearby the existing utility will be presented. Any crossing of Empire Pipeline's ROW is to be approved only after an encroachment agreement containing an indemnification clause in favor of Empire Pipeline has been signed by both parties.

Construction plans for areas within the ROW will be submitted to National Fuel for review and approval prior to commencement of construction. The Applicant will allow up to four weeks for review of the Project by National Fuel. Refer to the Empire Pipeline Encroachment Manual for the General Foreman's contact information, as well as contact information for DSNY. Preliminary details on the Applicant's proposed pipeline crossings are included on site plan drawings C.318, C.319, C.326, and C.335 in Appendix 11-1.

(4) Utility owner criteria for installations near existing pipelines

Empire Pipeline's ROW is 50 feet wide unless otherwise stipulated. When Empire Pipeline's ROW combines with NYPA's ROW, the ROW width increases to approximately 350 feet wide. No excavations, change of grade, or water impoundment within the ROW are to be made without the written consent of Empire Pipeline. No excavation within 25 feet of any Empire Pipeline with heavy equipment is required. Any excavation within 25 feet shall be used with a small backhoe. No trencher shall be used to excavate over the pipeline. Hand digging is required within 2 feet of the pipeline. An on-site Empire Pipeline employee will determine if machine excavation is permitted within 2 to 5 feet of the pipeline. Excavating will be handled on a site by site basis. No loaded bucket will be allowed to swing over the exposed pipeline.

Underground utilities which cross the Empire Pipeline shall be installed a minimum of 12 inches below the pipeline. Power lines less than 600 volts installed via open trench shall be encased in non-metallic conduit or be covered with treated lumber. Power lines exceeding 600 volts installed via open trench shall be encased in non-metallic conduit covered by a minimum of 3 inches of concrete. Utilities shall be installed at right angles (not parallel) to the pipeline within the pipeline

ROW. Utility crossings shall be approved by National Fuel and the crossings shall be permanently marked within the ROW.

Heavy equipment is not to be moved across the pipeline ROW without notifying the General Foreman at National Fuel.

Grading may be permitted within the ROW, however a minimum of 36 inches of grade, or 48 inches in agricultural areas, must be maintained above the pipeline. The finish grade shall be field-verified by a National Fuel inspector. Grading equipment with ripping blades shall not be permitted to operate within Empire's ROW.

Blasting near the pipelines will be at the Applicant's risk. Empire Pipeline must be notified at least 2 weeks in advance if blasting is to occur within 200 feet of any Empire pipeline. No blasting will be permitted within 200 feet of any Empire pipeline without first submitting a procedural plan in accordance with Empire Pipeline's Blasting Specifications.

Tree clearing and vegetation management is not anticipated within the pipeline ROW; however, should it be deemed necessary, approval must be obtained from National Fuel prior to commencement of the activity and the following requirement would apply:

- National Fuel must be notified at least three days prior to the commencement of tree clearing activities.
- Trees and vegetation plantings exceeding 5 feet in height are not permitted within the pipeline ROW.
- Brushes and vegetation below 5 feet in height may be placed within 10 feet of the pipeline.
- Areas disturbed by tree clearing or planting must be graded, seeded, mulched, and properly restored. Upon completion of restoration within the ROW, a National Fuel representative shall complete a site walkthrough with the Applicant or the Applicant's representative to ensure restoration is satisfactory.

(5) Studies required or recommended by Pipeline Owners

Depending on the results of consultations with Empire Pipeline and their analysis of potential impacts to the pipeline, they may recommend further studies that will be specified at that time.

(6) Separation Requirements or Recommendations

A minimum separation distance of 25 feet must be maintained between the pipeline, cathodic protection, and other permanent facilities and structures. Temporary storage sheds or buildings shall not be located within 25 feet of the pipeline. No vibrating equipment will be permitted within 25 feet of the pipeline without prior submission of a plan for review by Empire Pipeline's Engineering Department.

(7) Protective Feature Requirements or Recommendations

All buried cable crossings shall be permanently marked with signs showing the location of the cable and/or conduit. Sandbag padding shall be installed between the Empire Pipeline and foreign crossings. Each permanent crossing would be subject to site-specific engineering and construction requirements.

(8) Communications and Coordination Requirements

National Fuel has been consulted regarding their pipeline easements, restrictions, setbacks, separation distances, utility crossing and nearby installation requirements, recommended protective measures, and communication and coordination requirements. Refer to Appendix 12-4 for National Fuel's Empire Pipeline Encroachment Manual and Appendix 12-5 NYPA Crossing Permit Application and Instructions that was provided as part of the Applicant's consultation efforts. The Applicant will continue to coordinate with National Fuel regarding potential impacts within the pipeline ROW due to construction of the Project. The Applicant will provide National Fuel with the following information in order to obtain encroachment rights within the pipeline ROW:

- A cover letter detailing the Project and the Applicant's contact information;
- Three sets of drawings for the portion of the Project within the pipeline ROW, which will detail:
 - Existing and proposed grades and the pipeline elevation;
 - Ground profile for grade changes; and
 - Vehicle information for hauling or traveling across the ROW.

12(c) Procedures to Address Public Complaints

A proposed Complaint Resolution Plan has been developed to provide guidance and a specification of commitments for addressing potential public complaints, including noise-specific

complaints, during the construction and operation of the Project. The Complaint Resolution Plan, provided as Appendix 12-3, details the specific procedures for issuing a complaint and the information required to be provided by the complainant in order to properly resolve the complaint. The Complaint Resolution Plan will be easily accessed, tracked to time of resolution and include input from construction managers as appropriate. The Complaint Resolution Plan will identify protocols or procedures that may be unique to each phase of the Project (e.g., construction, operation and decommissioning) or complaint type (e.g., noise, degraded television service) and will clearly define the responsibilities for issue resolution. The complaint process will have assigned personnel to track the resolution of the complaint from the time of receipt, verification, resolution, development, and implementation and confirmation of the resolution. During construction, complaint calls need to be handled locally and quickly. The Complaint Resolution Plan will identify next steps if a complaint remains unresolved after all steps are followed. Also, the Complaint Resolution Plan will indicate whether complaints will be accepted from the toll-free line, as well as electronically through e-mail and the project website. In addition, complaint handling needs to address both written and verbal complaints. Verbal complaints received during construction need to be converted to written documents that can be tracked by the Certificate Holder and contractors and be reported to the New York State Department of Public Service (DPS) staff. A standard complaint form and a sound complaint log sheet are provided in the Complaint Resolution Plan. These forms may be submitted to the Applicant by mail or delivered in person to the temporary construction office at the Project Area.

Reasonable complaint inquiries will be answered by a Project representative within 72 hours of receipt during normal business hours. A record shall be maintained by the Applicant detailing the complaint received and the resolution taken. Records will also be maintained for unresolved complaints received including a description of the reason for no resolution. The complaint resolution process will be limited to reasonable and objectively practical complaints.

The Applicant will retain and maintain a log of each complaint and the associated complaint resolution. The complaint log can be sent to DPS upon request within seven business days.

The Applicant shall publish a summary of the Complaint Resolution Plan in local newspapers, including local community and general circulation newspapers, no fewer than two weeks prior to the commencement of construction activities. Inclusion of the summary in the newspapers will provide notice to the public regarding the Complaint Resolution Plan. A list of newspapers in which the summary will be published are identified in the Applicant's Public Involvement Program (PIP)

Plan. The Complaint Resolution Plan will also be provided to the Town of Conquest, will be posted on the Applicant's website, and will be available at the temporary construction office.

If a complaint resolution cannot be provided within 60 days of receipt of the complaint, a timeline and recommended measures to be taken will be provided to the complainant. The timeline and measures will be developed in accordance with the complaint resolution procedures adopted by the New York Public Service Commission (NYPSA).

The Complaint Resolution Plan is provided as Appendix 12-3 of this Application. The Plan provides additional details regarding addressing and resolving public complaints throughout Project construction and operation.

Should blasting be deemed required for the Project, the Complaint Resolution Plan will address how these types of complaints will be handled for those that are potentially affected by blasting operations.

12(d) Stakeholder Communication

The public shall be notified at least 14 days prior to commencement of construction activities as follows:

- Provide notice by mail to host and adjacent landowners within 2,500 feet of the final layout, and persons who reside on such properties (if different from the landowner);
- Provide notice by mail to owners and operators of water wells within 2,500 feet of the final layout;
- Provide notice to the Town of Conquest and Cayuga County officials and emergency personnel;
- Publish notices in The Citizen and The Wayuga Shopper for dissemination, assuming the publications are still operating;
- Provide notice for display in public places, such as the Town of Conquest Town Hall, the Port Byron Library, Conquest Public Library, the Town of Conquest post office, the Project website, the Project construction trailers/offices; and,
- File notice with the Secretary for posting on the DPS Document Matter Master (DMM) website.

The public will not be notified of tree clearing activities related to testing and surveying, such as geotechnical drilling and meteorological testing.

The notices listed above shall contain the following information:

- A brief description of the Project;
- A map of the Project Area;
- The anticipated construction schedule and transportation routes;
- The name, mailing address, local or toll-free telephone number, and email address of the Project Development Manager and Construction Manager;
- The procedure and contact information for registering a complaint;
- Reference to procedures for dispute resolution;
- All applicable safety and security measures; and
- Contact information for the Secretary to the Board and/or the Commission.

The Conquest Town Board shall be notified prior to construction of all areas where information regarding the Project, construction activities, and Project contact information have been posted.