



TRELINA SOLAR ENERGY CENTER

Case No. 19-F-0366

1001.12 Exhibit 12

Construction

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Exhibit 12: Construction

This Exhibit will track the requirements of proposed Stipulation 12, dated June 19, 2020, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.12.

12(a) Quality Assurance and Quality Control Plan

This Exhibit contains preliminary quality assurance and quality control (QAQC) procedures demonstrating how the Applicant will monitor and assure conformance of Project installation with all 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 is included at 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 or the Siting Board.

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

- Safety and environmental performance;
- Schedule, cost, and quality performance;
- Project Plan of the Day;
- 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 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 (EPA), and other applicable regulations in New York State to ensure the safety of personnel and the public. 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 ensure timely, safe, and efficient use of resources and labor. Each supporting personnel has 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. Timely resolution of any engineering inquiry 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 to ensure 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** – Interfacing with permitting to ensure the requirements have been met. Identification and resolution of deficiencies. Oversight of compliance with environmental requirements. Maintaining daily coordination of the civil construction and activities associated with the installation of the solar panel arrays. Review and quality assurance of work in accordance with design standards, including any permitting conditions. Monitor safety compliance, implement quality control, perform inspections and

assurance of mechanical completion. An Environmental Monitor, as described in other sections of this application, will also be retained and present onsite.

- **Electrical** – Coordination and monitoring of electrical contractor’s work. Monitoring and coordination of all electrical and ground testing of the solar panel arrays and inverters. Monitor safety compliance, assessment of deficiencies and their associated resolutions.
- **Substation** – Coordination and monitoring of substation contractor’s work. Maintain daily coordination of the substation construction. Monitoring and coordination of electrical and ground testing of the substation. Monitor safety compliance, assessment of deficiencies and their associated resolutions.
- **Logistics and Materials** – Ensure the efficient delivery of Project equipment and materials on site and in accordance with the Project schedule.
- **Commissioning** – Manage the testing and inspection of the electrical, mechanical, and communication systems associated with the Project.
- **Site Coordinator** – Management of weekly performance metrics, logging or contractor documents and drawings, coordination with road contractor, and maintaining jobsite safety.
- **Site General Support** – Assist and support various support personnel.
- **Site Administrator** – Management and transmittal of Project documents. Assistance 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, as well as abiding by the standards 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.

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.

Project Organization

The EPC Contractor will provide an effective organizational structure to ensure a responsible construction team with a commitment to quality and safety. This effective structure will contain appropriate personnel to facilitate the construction of the Project including managers, engineers, superintendents, inspectors, foremen, 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 ensure that work is completed in a safe, consistent, and high-quality manner. An efficient use of Project 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 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 to ensure 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.

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.

Training

Internal and external trainings for personnel to ensure the consistency and completeness of job site training efforts. Training records shall be kept for Project employees. 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 to ensure 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

The accuracy of tooling and equipment is absolutely necessary to ensure that work is performed within technical requirements. Calibrations will be completed in accordance with applicable standards and shall be documented to maintain a record of calibration results.

Nonconformance

Materials, work, and products are subject to inspection and testing to determine the level of conformance with manufacturer, engineering, and Project specifications. All non-conforming Project Components shall be subject to rejection, repair, reworking, and replacement. When

required, an evaluation of the resolution will be decided collaboratively with the EPC Contractor and the Applicant.

Auditing

Quality audits should be performed to measure the effective application of the quality program and to drive continuous improvement efforts. Findings in the audit process shall be used to drive efficiency and further quality control efforts as the Project progresses.

Project Delivery

The Project shall be constructed according to the provided plans, designs, manufacturer specifications, engineering standards, contract standards, expectations, and any permitting conditions. Constant alignment meetings with the Applicant and the EPC Contractor shall take place to assure that all expectations are being met. Additionally, testing and inspections will assure that quality standards and expectations are being met. The EPC Contractor shall deliver the Project Components taking every precaution to ensure that employees and the general public stay safe throughout construction. Public safety remains a high priority for the Applicant.

Before the Project becomes fully operational, the Operation and Maintenance (O&M) staff will be integrated into the construction phase. The construction manager and the O&M staff manager will work together continuously to ensure a smooth transition from construction through solar farm commissioning and, finally, operation.

12(b) Company Official Statement

(1) Protection of Underground Facilities

The Applicant and its contractor(s) will conform to the requirements for protection of underground facilities contained in Public Service Law (PSL) §119-b, as implemented by 16 NYCRR Part 753.

(2) Pole Numbering and Marking Requirements

The Applicant will comply with pole numbering and marking requirements, as implemented by 16 NYCRR Part 217 (if determined to be required).

12(c) 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. One refined product

pipeline crosses the Project south of Packwood Road, as seen on Figure 4-2. The Applicant and/or EPC Contractor will submit a request for information with Dig Safely New York 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 ensure minimal 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 with distribution lines or fiber optic lines. An oil pipeline will be crossed at two locations via HDD, totaling 455 feet. If deemed necessary, each permanent crossing would be subject to site-specific engineering and construction requirements. The Applicant will adhere to all requirements set forth by Dig Safely New York, all applicable engineering codes and guidelines associated with each permanent utility crossing and will work with the utility companies to ensure 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.

Buckeye's Refined Product Pipeline

General Guidelines

Before any construction begins in the vicinity of Buckeye's pipeline, the exact location and elevation of the pipeline shall be determined through coordination with the appropriate Buckeye Partners, L.P. and Affiliates (Buckeye) Field Operations Manager. Line markers shall be placed at intervals determined by "line of sight". A Buckeye Inspector shall be present on-site when any construction activity is conducted in or around the pipeline right-of-way (ROW).

Drawings and plans for the Project shall be submitted to Buckeye's ROW Department for review to determine to what extent, if any, the pipeline or ROW will be affected by the proposed construction and/or development. These drawings/plans shall be compliant with Buckeye's "Requirements for Submission of Design Plans." Refer to the Buckeye ROW Use Restrictions Specification Revision 6 for the Field Operations Manager's contact information, as well as contact information for Dig Safely New York. Depending on the results of consultations with Buckeye and their analysis of potential impacts to the pipeline, they may recommend further studies that will be specified at that time.

Excavation and Construction Restrictions

No excavation, crossing, backfilling, or construction operations will be performed until Buckeye's On-Site Inspector has reviewed the proposed work on site and given approval for work to proceed. No equipment shall work directly over the pipeline. Temporary fencing shall be installed along Buckeye's ROW boundaries so that equipment will not inadvertently pass over the pipeline at locations other than those established for crossing. No excavations shall be made on land adjacent to the pipeline that will in any way impair, withdraw lateral support, cause subsidence, create the accumulation of water, or cause damage to the pipeline or ROW. Backfill and compaction shall be performed to the satisfaction and in the presence of Buckeye's On-Site Inspector. Within 5 feet of the pipeline crossing location, at least 12 inches of sand with no sharp gravel, rock, hard clods, vegetation, or other debris shall be placed on all sides of any pipeline, and remaining backfill shall be placed so as not to disturb this padding material or damage the pipeline. Backfill over the pipe shall be compacted by hand until 18 inches of cover is achieved. The disturbed ground shall be compacted to the same degree of compaction of surrounding areas. The disturbed areas shall be restored to original condition except for items that are part of the Buckeye approved change.

Cover, Grading, and Drainage

The existing cover over the pipeline shall not be modified without Buckeye's written approval. The final grading shall net a minimum cover of 36 inches over the pipeline. The maximum allowable constructed cross-slope within the ROW shall be 5H:1V and shall never be greater than the existing cross-slope. The maximum allowable cover/soil shall not exceed six feet without Buckeye's written approval. Use of vibratory equipment larger than walk-behind units are not permitted within 25 feet of the pipeline. Detention ponds, lakes, structures, or any type of

impoundment of water, temporary or permanent, are prohibited within the ROW. Culverts are not permitted within the ROW. Any modifications to an existing drainage pattern shall be designed such that the erosion of the pipeline cover is controlled. For streams, drainage channels, and ditches, a minimum of cover of 60 inches is required between the pipeline and the bottom of the drainage canal or ditch.

Structures

Buildings or other structures, including, but without limitation, overhanging balconies, patios, decks, swimming pools, wells, walls, septic systems, propane tanks, transformer pads, manholes, valve boxes, storm drain inlets, utility poles, the storage of materials, or any other item which will create an obstruction or prevent the inspection of the ROW by air or foot, shall not be erected within the ROW. No retaining walls, drive piling or sheeting, or engineered structure will be developed or built that develops or controls overburden loads that will impact the pipeline. Deep foundations which include piers, caissons, drilled shafts, bored piles, and cast-in-situ piles located within 500 feet of the pipeline shall be installed/drilled using an auger.

Trees, shrubs and bushes are not permitted within the ROW. Trees planted outside of the ROW should be placed so branches and limbs will not overhang the pipeline ROW as the tree matures. Buckeye may trim/remove overhanging branches and limbs that encroach into the ROW. Privacy fences or fences that prevent access to the ROW are not permitted. All other fence installations within the ROW will be reviewed for approval by Buckeye on a case-by-case basis. Upon Buckeye's written approval, fences shall be constructed with a 14-foot gate or removable sections across the ROW. Fence posts shall not be installed within 5 feet of the pipeline and shall be equidistant if crossing the pipeline. No fence shall cross the ROW at less than a 60-degree angle. Fences that run parallel to the pipeline shall be installed outside the ROW. Masonry, brick, or stone walls are not permitted on the ROW.

Roads, Driveways, Sidewalks, and Parking Areas

Upon Buckeye's written approval, roads, driveways, and sidewalks shall cross perpendicular to the pipeline. The maximum allowable cover shall not exceed six feet without Buckeye's written approval. Roads or driveways shall not be installed longitudinally within the ROW. For roads and driveways, a minimum cover of 48 inches with a net cover of 36 inches of undisturbed soil is required above the pipeline. A minimum cover of 36 inches over the pipeline is required at road

drainage ditches. Upon Buckeye's approval, this cover can be reduced to 24 inches if ditch is rock/rip-rap lined and 12 inches if ditch is concrete lined. Stockpiling of materials on the ROW is not permitted. These materials include, but are not limited to soil, snow, stone, boulders, trees, brush, grass clippings, leaves, etc.

Foreign Utility Crossings

Utilities shall cross perpendicular to the pipeline. Utilities are required to cross beneath the pipeline with a minimum clearance of 24 inches. Exceptions to Buckeye's clearance requirements for underground service entrances to single family dwellings will be reviewed on a case-by-case basis. Sand or select fill shall be placed between the pipeline and utility (see Section 2.8). Utilities installed parallel to the pipeline shall be reviewed by Buckeye on a case-by-case basis. If approved, the utility shall be no closer than 15 feet from the pipeline. Warning tape, in accordance with A.P.W.A. Uniform Color Code, shall be placed above utility, 12 inches below ground, for a distance of 25 feet on either side of crossing. Signage shall be placed at crossing as determined appropriate by Buckeye. Splice boxes, service risers, energized equipment, etc., are not permitted within the ROW.

Utilities installed by a trenchless excavation method (directional drilling, jacking, slick boring, etc.) shall be reviewed by Buckeye on a case-by-case basis. Buckeye reserves the right to select the method of crossing for the proposed utility. A minimum clearance of 60 inches (5 feet) below the pipeline is required. For directional drilling operations, a tracking system is required to verify the exact location of the drill head. For perpendicular crossings, a 4 feet by 4 feet excavation window, 24 inches below the pipeline is required for visual inspection of the pipeline to ensure the drill (or bore) does not impact the pipeline. Blind boring is not permitted within Buckeye's ROW. When trenchless excavations are authorized by Buckeye parallel to and within 10 feet of an existing pipeline, observation holes shall be excavated at 25-foot intervals to monitor the progress and horizontal/vertical location of the drill head. Buckeye shall be provided with an advance copy of the HDD plan for the trenchless excavation which specifies how the HDD will be tracked, monitored, and controlled at least two weeks before work is to commence.

Electrical conductors/cable installations shall meet minimum requirements of National Electric Code for buried conductors and be adequately shielded and be impervious to hydrocarbon liquids. Cables are required to cross beneath the pipeline with a minimum clearance of 24 inches.

A minimum of 20 feet of above-grade clearance for a distance of 25 feet on each side of the pipeline is required. Mechanical supports and service drops including poles, towers, guy wires, ground rods, anchors, etc., are not permitted within 25 feet of the pipeline.

Temporary Access Roads and Heavy/Construction Vehicle Crossings

The Encroaching Party shall provide Buckeye information as to the type, model, size, and axle weight of construction equipment that will be used over or in the vicinity of the pipeline(s). Trucks carrying a maximum axle load up to 15,000 pounds may cross the ROW after Buckeye has confirmed a minimum cover of 48 inches over the pipeline. For all other cases, earthen ramps (see Attachment 6), swamp mats, air bridges, reinforced-concrete slabs (see Attachment 5), or steel plates may be required. Loading conditions and protection measures will be evaluated and dictated by Buckeye's Right of Way Department. When temporary fill must be added, colored sheets of plastic shall be placed under the temporary fill at original grade so that the original grade will not be disturbed when the temporary fill is removed. At all crossing locations, 12 inches of clean American Association of State Highway Transportation Officials (AASHTO) 1 stone shall be installed over the pipeline ROW. During the use of an approved temporary construction road, Buckeye may require that the Applicant provide additional protective measures deemed necessary to prevent damage to the pipeline. Buckeye will limit the number of temporary construction roads constructed by the Applicant.

Construction-Induced Vibrations

Construction activities that generate ground vibrations, including, but without limitation, pile driving, sheet driving, soil compaction work, jackhammering, or ramming, shall be reviewed by Buckeye on a case-by-case basis. If such an activity is anticipated within 10 feet of the pipeline, then continuous testing monitored by a seismograph located directly over the pipeline at its closest point to the activity shall be conducted. The Crossing Party shall provide, at their expense, the monitoring service which must be approved by Buckeye. The particle velocity of any one component of a three-component seismograph must not exceed 2.0 inches per second as recorded on the seismograph placed directly over the pipeline.

12(d) Procedures to Address Public Complaints

The Applicant has proposed a formal Complaint Resolution Plan (Appendix 12-3) that will address potential public complaints, as well as any procedures and protocols that may be unique to each phase of the Project (e.g. construction, operation, decommissioning) or complaint type (e.g. noise). The Complaint Resolution Plan lists specific procedures for where to submit a complaint and the information required to properly resolve the complaint. The Complaint Resolution Plan includes a general complaint form as well as a noise-specific complaint form, both of which can be submitted by mail to the Applicant or delivered in person to the temporary construction office. The Applicant will keep a thorough log of each complaint and its associated resolution during construction and operation of the Project. The complaint log will be maintained by the Applicant and, upon request, can be sent to the New York State Department of Public Service (NYS DPS) within seven business days.

A Project Representative will make efforts to respond to reasonable inquiries within 72 hours (during normal business hours) of the receipt of an inquiry. A record of the steps taken to resolve each complaint shall be kept by the Applicant. This record will include complaints received, resolutions of said complaints, and unresolved complaints.

No fewer than two weeks prior to the commencement of construction, the Applicant will publish a summary of the Complaint Resolution Plan in newspapers, including local community and general circulation newspapers, as will serve substantially to inform the public of such Complaint Resolution Plan. A list of these newspapers has been established and identified in the Applicant's Public Involvement Program (PIP) Plan. The Complaint Resolution Plan will be provided to the Town of Waterloo. The Complaint Resolution Plan will also be posted on the Applicant's website and will be available to the public at the temporary construction office.

In the case that a resolution cannot be delivered within 60 days, a timeline and measures that could be taken will be provided to the complainant including using the complaint resolution procedures adopted by the New York Public Service Commission (NYPSC). The complaint resolution process is limited to reasonable and objectively practical complaints.

A copy of the Complaint Resolution Plan can be found in Appendix 12-3 of this Application. The plan and protocol provide further details in addressing and resolving public complaints throughout the construction and operation of the Project.

12(e) Stakeholder Communication

At least 14 days prior to the commencement of the Project construction date, defined as the anticipated beginning of unlimited and continuous construction of the Facility, but not including tree-clearing activities relating to testing or surveying (such as geotechnical drilling and meteorological testing), the stakeholders shall be notified 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 Waterloo and Seneca County officials and emergency personnel;
- Publish notices in the Finger Lakes Times, The Seneca County Area Shopper, and the SLT Extra for dissemination;
- Provide notice for display in public places, which will include but are not limited to the Town of Waterloo Town Hall, Waterloo Library and Historical Society, at the Geneva Public Library, the Project website, the Project construction trailers/offices; and
- File notice with the Secretary for posting on the NYSDPS Document and Matter Management website.

Notices listed above will contain the following information:

- A map of the Project Site;
- A brief description of the Project;
- The construction activities, schedule, and transportation routes;
- Project safety and security measures;
- 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; and,
- Contact information for the Secretary to the NYPSC staff and Commission.

12(f) Subsurface Drain Tile Precautions

The Applicant is committed to minimizing impacts to agricultural operations and will work with landowners/farm operators to address unanticipated post-construction impacts. Existing drain

tiles will be identified and located before construction as much as is reasonably possible based primarily on consultation with the landowner. During and after construction operations, any existing drain tiles within the area of disturbance will be checked for damage, and damaged drain tiles will be repaired or replaced as specified in landowner lease agreements. The Applicant will coordinate with the landowner, as necessary, to address any relevant post-construction repairs.