Operations and Maintenance Plan

Wilson Hill Solar, LLC
August 2023

Submitted by:
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Overview

As an owner-operator of solar systems nationwide, Nexamp has cultivated an in-house operations and maintenance team on par with the best in the industry. Nexamp's veteran team of power and solar professionals understands what it takes to manage, maintain and deliver ongoing performance and reliability from our solar plants. We provide full spectrum operations and maintenance services for our own, as well as third party systems.

Our team actively monitors and provides preventative, corrective, and condition-based maintenance for over Hundreds of MWs at commercial, residential and government owned plants in NY and across the Country. This wide range of managed assets gives our team unprecedented knowledge that helps us keep facilities on-line and delivering clean, renewable energy to our customers consistently, with little downtime.

Our integrated O&M team should give the Town of Hoosick the confidence it needs to know that the 5 MW facility we're seeking to permit will remain operational, and not prove to be a burden on the Town or its residence at any point during the facilities operation.

This Operations and Maintenance plan serves as an outline for the maintenance services and schedules that will be employed at the project site, either by Wilson Hill Solar, LLC's staff, or by its Contracted Operations Manager. This plan will be filed with the Town codes office for reference and use during inspections.

The project owner and operator; Wilson Hill Solar shall be known as the Project Company herein. Nexamp Inc is the sole owner and operator of Wilson Hill Solar, LLC and Nexamp Asset Management Services, the project's Asset Operations Manager. Should ownership of the facility change at any time to an entity not controlled by Nexamp, Inc or its affiliates, a new Operations and Maintenance Plan shall be filed with the Town. The Project Company's will be held responsible to adherence of this plan, and shall notify the town if changes are made to the plan within 30 days of modification.

Site Description and Access

Wilson Hill Solar, LLC (Project Company) is a 5MWac Community Solar Facility located at 469 Wilson Hill Road in the Town of Hoosick, , owned by Larry Bugbee. Access Roads and utility infrastructure occur on a parcel owned by Mike Mattison. The parcel is North of Wilson Hill Road, .58 miles East of the intersection of Fog Hill Rd and Wilson Hill Rd.

The site includes a solar array, mounted using Fixed-Tilt Racking on ±20 acres of the parcel. The system is accessed via an access road, and is encompassed by an 8ft tall farm fence for security and wildlife management. The system includes centrally located inverters, and no energy storage facilities.

The Project Company is responsible for the entire leased area of the facility, including all easement areas and storm water control maintenance and improvements. The facility will be actively monitored 7 days a week, 365 days a year.

Access to the site will be through keyed entry and knox boxes will be located at the facility entrance for emergency response purposes. Site access for vendors and/or town inspection officials will be coordinated by Nexamp Asset Management Services.

Parking during construction will be restricted to the temporary construction laydown area as shown in the Site Plan Designs submitted in August 2023. Parking for maintenance personnel during the operations period will be restricted to the areas shown in Appendix A to maintain emergency access where necessary.

Site plan designs have been included on this plan as an appendix for reference.

Stakeholders and Responsibilities

	Role	Contact Information
Wilson Hill Solar, LLC	System Owner (Project Company)	Attn: Wilson Hill Solar 101 Summer St, Flr 2 Boston, MA 02110 Phone: 617.431.1440 Email: Legal@Nexamp.com
Nexamp Asset Management Services	System Operations Manager	Attn: Wilson Hill Solar Attn: Skip Provost 101 Summer St, Flr 2 Boston, MA 02110 Phone: 978.910.1503 Email: sprovost@nexamp.com
Town of Hoosick – Codes Office	Town Code Enforcement and Site Inspection	Town of Hoosick P.O. Box 17 Hoosick Falls, NY 12090 Email: Bldginspector@townofhoosick.org Phone: 518. 686. 4571
Town of Hoosick – Zoning Board	Site Plan Jurisdiction	Town of Hoosick P.O. Box 17 Hoosick Falls, NY 12090 Email: HoosickTownClerk@townofhoosick.org Phone: 518. 686.5304
National Grid	Utility Operator	Distributed Generation Office 300 Erie Boulevard West, Syracuse, NY, 13202 Phone: 1-800-642-4272

Services & Schedule

As one of the largest operators of Solar Farm facilities in New York State, Nexamp manages O&M activities on dozens of facilities across the state. The Project Company's has prepared a standard annual service schedule as well as site-specific service items pertaining to the nuances of the Project site.

ANNUAL SCHEDULED MAINTENANCE

The Project Company's annual service schedules are intended to identify needs to preventative maintenance, and ensure our plants are physically and fiscally productive for 25 years or more. All facilities owned and/or managed by The Project Company's are subject to the following annual maintenance schedule.

- Visually inspect all feeder terminations for corrosion.
- Visually check power terminations/connections including DC combiner boxes, DC and AC disconnects, inverters and PV modules and re-torque as necessary.
- Test ground continuity and correct any unsafe or abnormal issues.
- Check all fuses in inverters, combiner boxes, and disconnects (AC&DC).
- Test and record voltage and amperage of the arrays at the string level and provide data values in summary report.
- Inspect combiner boxes, disconnects (AC&DC), and inverters with an infrared camera to detect damage, hotspots, loose connections, etc.
- Check mechanical and structural integrity of the system.
- Inspect and clean inverter heat sinks and replace inverter air filters where applicable as necessary.
- Check and replace unserviceable or missing system labeling as necessary.
- Remove accumulated trash and debris. Check arrays for shading, including such shading caused by vegetation.
- Check modules for excessive dirt and debris.
- Module washing in accordance with manufacturer requirements
- Warranty and spare parts management
- Third party commissioning and performance testing
- Aerial infrared inspections, photography and analysis
- Provide documentation to include summary report of findings including actions taken and recommendations for additional maintenance or repairs.

REPAIR SERVICES

- Respond to alarms, alerts, and service requests pertaining to the Facility within 24 hours of such alarm, alert, or service request, as personnel safety and weather conditions permit.

- *Please note this does not pertain to emergency services, which are to be notified immediately in the case of an emergency. An emergency contact sign and knox box is located at the entrance of the facility.*

- Provide all warranty, spare parts and other repair or maintenance related activities on a time and materials basis.

SITE SPECIFIC ACTIVITIES

Site storm water controls maintenance and improvements – Quarterly or As Needed
As needed activities include following Town of landowner notification, or following significant weather events that merit site inspection for equipment of stormwater control damage.

- Swale Management and Maintenance
  - Swales will be inspected during every vegetation management visit, and quarterly by The Project Company's Operation Management employees or contractors.
  - Mowing of swales will occur quarterly, or on an as needed basis. Vegetation in swales shall not exceed 16 inches in height.
  - Eroded swale boundaries or areas where sediment has accumulated as to render the swale ineffective will be repaired within 30-days of report or observation.
- Siltation and Bioretention Area Management & Maintenance
  - Features will be inspected during every vegetation management visit, and quarterly by Operations and Management employees.
  - Eroded Feature boundaries or areas where sediment has accumulated as to render the garden ineffective will be repaired within 30-days of report or observation.
  - Should installed vegetation die, and inhibit effective drainage, vegetation will be replaced at the earliest feasible time, accounting for soil saturation and weather.
- Erosion Prevention and Soil Stabilization
  - The facility will be seeded prior to construction start, and immediately following the conclusion of construction. If during the following growing season, areas of bare earth are identified they will be seeded and stabilized within 30 days of identification or report.
  - Should areas of erosion occur between panel rows, or in areas of frequent runoff exposure, fissures will be filled, seeded and stabilized within 30 days of identification or report.
- Drain and Outlet Management and Maintenance
  - Drains, outlets and other sections of pipe such as culverts or yard drains will be routinely inspected and cleared of any vegetation or debris that could inhibit functionality.

        - In areas where drains occur on land with higher than 5% slopes, stone will be routinely applied to drain outlets when areas of bare soil are present.
    - Level Spreader Maintenance
        - Level spreaders are proposed as flow diffusers throughout steeper grades within the project area.
        - Damage, including washouts of diffusers will be replaced with a similar stone grade and volume
        - Vegetation management will occur in and around diffuser features to maintain their effectiveness.

    - Inspections and Maintenance
        - Inspection of the stormwater management system, including installed vegetated features will take place throughout the growing season.
        - Inspectors shall follow documentation and remediation protocols as outlined in NYSDEC Stormwater Management Design Manual inspection sheets included as an exhibit to this agreement.

Access Management and Repair – Quarterly or as needed
As needed activities include following Town of landowner notification, or following significant weather events that merit site inspection for road damage.

- Road inspections will occur with every visit by Operations personnel, or third-party vendors.
- The access road, will be always kept in physical condition conducive to access by large scale emergency vehicles.
- Areas of erosion or wear that effect the consistency of the road surface or areas of ingress and egress to Wilson Hill Road that occur will be repaired within 30-days of identification or report.
- Full-scale Road resurfacing will be conducted as necessary, as indicated by annual reporting and inspection.
- Vegetation management of the road surface will occur quarterly or as needed, manual removal of vegetation will be applied in areas not conducive to grazing or machine removal.
- Broken equipment will be removed from the property as soon as mechanically possible in case of replacement. When broken equipment must remain on site, it shall not stay on the property for more than six months, and shall not be stored in such a manner as to produce any risks for contamination of soils and groundwater.

Vegetation Management – Quarterly or As Needed
As needed activities include following Town of landowner notification, or visual evidence from on-site cameras indicating vegetation has exceeded its recommended height of no more than 3' in height.

Vegetation Management activities will be flexibly scheduled and performed to adjust for growth conditions. For the first three years, visits to the site will occur no less than 5-6 times during the Spring and summer months. After the first three years, landscaping maintenance will reduce to no less than 3-4 visits during the spring and summer months depending on vegetation growth. Inspection and maintenance of screening features shall take place by a licensed arborist.

- Ground-Level Vegetation
  - Ground level vegetation management will commence following the commercial operation date
  - Ground cover will be left for 3-6 months of its first growing season to promote root growth and coverage. During this time, areas of stunted growth will be supplemented with further seeding and stabilization.
  - Ground-level vegetation management will be achieved using manual machine-operation by vendors, or through grazing operations managed by The Project Company's partners. Grazing will be entertained following the first full growing season on the property. Grazing plans will be filed as an amendment to this plan upon commencement.
  - No Herbicide use will be conducted on site.

- Screening Management and Replacement
  - Inspection of screening will occur at every site visit by Operations staff or Maintenance vendors.
  - Maintenance of screening and onsite vegetation will be performed by a company with a licensed arborist on staff.
  - Pest-resistant species have been utilized, and physical protection of vegetation will be installed when necessary.
  - Should vegetation show consistent signs of disease, drought or malnourishment following 3 months of identification and maintenance, plantings will be replaced at the earliest viable time, adjusting for soil saturation and seasonality.

- Rain Garden Management & Maintenance
  - Prairie vegetation and wetland grasses present within the rain garden will remain untouched to promote soil health.

- Should garden vegetation die, and inhibit effective drainage, vegetation will be replaced at the earliest feasible time, accounting for soil saturation and weather.

Plowing and Snow Removal – Seasonally or As Needed

As needed activities include following Town of landowner notification, or following significant weather events that merit site inspection or inhibit safe passage to the facility.

- The access road, through utility disconnect poles, will be always kept in conditions conducive to access by large scale emergency vehicles.
- Plowing will occur following snow events of 10 inches or more during the winter season.

Reporting Procedures

Should town officials, residents or representatives find the Project Company's management of the facility unsatisfactory, the Project Company requests standardized notification of the conditions present, and a 30-day window to remedy the conditions to the town's standards. The Project Company proposes execution of items on an as needed, or as requested basis in addition to its scheduled maintenance procedures.

Should this plan change in any material way, including the addition of new activities or the cessation of activities listed, the project company must notify the Town of proposed changes.

Notifications shall be delivered digitally and in writing to all the following locations;

Nexamp Inc	Attn: Wilson Hill Solar 101 Summer St, Flr 2 Boston, MA 02110 Phone: 617.431.1440 Email: Legal@Nexamp.com
Nexamp Asset Management Services	Attn: Wilson Hill Solar Attn: Skip Provost 101 Summer St, Flr 2 Boston, MA 02110 Phone: 978.910.1503 Email: sprovost@nexamp.com
Town of Hoosick – Codes Office	Town of Hoosick P.O. Box 17 Hoosick Falls, NY 12090 Email: Bldginspector@townofhoosick.org Phone: 518. 686. 4571

All Notifications and Maintenance requests should be accompanied by descriptions of conditions and locations, photo documentation of items of concern, name, title, company, and contact information for the filing party, as well as the date and time of both observation and filing.

Wilson Hill Solar , LLC, as the owner and operator of the solar facility, hereby agrees to adhere to the included Operations and Maintenance Plan for the duration of the systems operation.

Wilson Hill Solar , LLC

By: _____

Name: _____

Title: _____

Date: _____

Town of Hoosick

By: _____

Name: _____

Title: _____

Date: _____

Company Contacts

Nexamp Inc (Project Company Owner)	Attn: Wilson Hill Solar, LLC 101 Summer St, Flr 2 Boston, MA 02110 Phone: 617.431.1440 Email: Legal@Nexamp.com
Nexamp Asset Management Services	Attn: Wilson Hill Solar Attn: Skip Provost 101 Summer St, Flr 2 Boston, MA 02110 Phone: 978.910.1503 Email: sprovost@nexamp.com

CHANGE LOG

08/23/2023	Initial Submittal to Town	RMM

Appendix B: NYSDEC Stormwater Inspection Checklist

Bioretention Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility area cleared		
If designed as exfilter, soil testing for permeability		
Facility location staked out		
2. Excavation		
Size and location		
Lateral slopes completely level		
If designed as exfilter, ensure that excavation does not compact susoils.		
Longitudinal slopes within design range		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
3. Structural Components		
Stone diaphragm installed correctly		
Outlets installed correctly		
Underdrain		
Pretreatment devices installed		
Soil bed composition and texture		
4. Vegetation		
Complies with planting specs		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
5. Final Inspection		
Dimensions		
Proper stone diaphragm		
Proper outlet		
Soil/ filter bed permeability testing		
Effective stand of vegetation and stabilization		
Construction generated sediments removed		
Contributing watershed stabilized before flow is diverted to the practice		

Comments:

Actions to be Taken:

Open Channel System Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility location staked out		
2. Excavation		
Size and location		
Side slope stable		
Soil permeability		
Groundwater / bedrock		
Lateral slopes completely level		
Longitudinal slopes within design range		
Excavation does not compact subsoils		
3. Check dams		
Dimensions		
Spacing		
Materials		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
4. Structural Components		
Underdrain installed correctly		
Inflow installed correctly		
Pretreatment devices installed		
5. Vegetation		
Complies with planting specifications		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
6. Final inspection		
Dimensions		
Check dams		
Proper outlet		
Effective stand of vegetation and stabilization		
Contributing watershed stabilized before flow is routed to the factility		

Comments:

Actions to be Taken:

Stormwater/Wetland Pond Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
2. Subgrade Preparation		
Area beneath embankment stripped of all vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under “haunches” of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		
4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		
Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for “honeycomb” prior to backfilling; parge if necessary		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		
Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel constructed to design grades and elevations		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for "honeycomb" prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly place at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil amendments		
Excelsior mat or other stabilization, as per plan		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place Reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken: