Preliminary Spill Prevention, Control and Countermeasure Plan

March 2016

Cassadaga Wind Project

Towns of Charlotte, Cherry Creek, Arkwright, and Stockton, Chautauqua County, New York

Prepared for:

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1.0 PROFESSIONAL ENGINEER CERTIFICATION (§112.3(d))

I hereby attest that: I am familiar with the requirements of 40 CFR Part 112; that I or my agent has visited and examined the Cassadaga Wind Project facility; that the Spill Prevention Control and Counter Measures (SPCC) Plan has been prepared in accordance with good engineering practice, including the consideration of applicable industry standards, and with the requirements of 40 CFR Part 112; that procedures for required inspections and testing have been established; and that the plan is adequate for the facility.

_____
Signature of Licensed Professional Engineer

_____	_____	NY
Date	Registration No.	State

2.0 MANAGEMENT
APPROVAL AND COMMITMENT (§112.7(k)(2)(ii)(B))

Cassadaga Wind LLC, a subsidiary of EverPower Wind Holdings, Inc. (Owner) is committed to the prevention of discharges of oil to navigable waters and the environment. This SPCC Plan has the full approval of management with authority to commit the necessary resources to fully implement the SPCC Plan, including the Oil Spill Contingency Plan per 40 CFR 109. All personnel with responsibilities covered by this plan will be expected to become familiar and act in accordance with its provisions

In accordance with the requirements of 40 CFR Part 112.7(k)(2)(ii)(B), Cassadaga Wind is committed to provide the manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Name	Title
Signature	Date

3.0 PLAN REVIEW AND AMMENDMENT (§112.5(a-b))

In accordance with 40 CFR 112.5(a), the SPCC Plan will be amended when there is a change to the design, construction, operation, or maintenance that materially affects Cassadaga Wind Project's potential for a discharge. Examples of changes that may require amendment of the SPCC Plan include, but are not limited to: the installation or removal of wind turbine generator(s) or other oil storage; modifications to secondary containment methods; or the revision of standard operations and maintenance procedures.

In accordance with 40 CFR 112.5(b), a review and evaluation of the SPCC Plan is completed at least once every five years. As a result of this review and evaluation, Cassadaga Wind LLC, a subsidiary of EverPower Wind Holdings, Inc., will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if such technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge from the facility.

Any technical amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil as defined in 40 CFR 112.1(b) from the facility. Any amendment must be implemented as soon as possible, but not later than six months following the preparation of any amendment.

I have completed review and evaluation of the SPCC Plan for the Cassadaga Wind Project on the date noted. The SPCC Plan will or will not be amended as indicated below.

Date of Review	Name and Title of Reviewer	Signature of Reviewer	Will or Will Not Amend SPCC Plan
			☐ Will Amend ☐ Will Not Amend
			☐ Will Amend ☐ Will Not Amend
			☐ Will Amend ☐ Will Not Amend
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			☐ Will Amend ☐ Will Not Amend
			☐ Will Amend ☐ Will Not Amend
			☐ Will Amend ☐ Will Not Amend

4.0 INTRODUCTION & PLAN ORGANIZATION

This Spill Prevention Control and Countermeasures Plan (Plan) describes the procedures, methods, and equipment used at Cassadaga Wind LLC, a subsidiary of EverPower Wind Holdings, Inc. (Owner) Cassadaga Wind Project (Project) to prevent the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines or to any other location that may affect other natural water resources of the United States. Along with describing the counter measures used within the Project, the Plan establishes inspection, reporting, training, and record keeping requirements for the aboveground oil storage.

This Plan is organized to follow the requirements of 40 CFR 112.7.

5.0 CONFORMANCE WITH 40 CFR 112 (§112.7(a)(1-2))

The Project will conform to the requirements of 40 CFR 112. Oil filled electrical equipment at the site are expected to include: pad mounted transformers adjacent to each Wind Turbine Generator (WTG), various WTG components typically including the gear boxes, hydraulic unit, yaw gear motor, and pitch gear motor, do not have sufficient secondary containment. Therefore the exemption for qualified oil-filled operational equipment under §112.7(k) is used as discussed in Section 16.0. All other containers at the site have sufficient secondary containment. Inspection, operation and maintenance, training and spill response procedures and other requirements of the 40 CFR 112 are described in this document.

6.0 DESCRIPTION OF THE PROJECT (§112.7(a)(3))

The Owner will construct a wind-powered generating facility in the Town of Charlotte, Cherry Creek, Arkwright, and Stockton, in Chautauqua County (See Regional Project Location Map in Appendix A). The project is roughly bound by Bard Road and State Route 83 to the north, State Route 83 to the east, State Route 64 to the south, and the State Route 60 to the west.

The Project will consist of up to 58 turbines, and will have a total nameplate generating capacity of up to 126 megawatts (MW). The wind turbine proposed for the Project is the [WTG MODEL TBD]. Each wind turbine consists of three major mechanical components: the tower, nacelle, and rotor. In addition to the turbines, the Project will include construction and operation of a two permanent meteorological tower, a system of gravel access roads, electrical collection lines, and Operations and Maintenance Building, and a substation.

6.1 Oil Storage (§112.7(a)(3)(i))

In general, the oil containers or oil-filled operational equipment subject to 40 CFR Part 112 and anticipated by this Plan are as follows:

- Operation equipment located inside the wind turbine structures;
- Electrical transformers at each turbine location and the substation; and
- Storage of oil products at the O&M Facility.

Each oil storage area is described in more detail below and summarized in Table 1. The Oil Storage and Drainage Maps will be developed for inclusion in Appendix A following the development of construction level drawings. These maps will identify the locations of oil storage, transfer areas and direction of flow if an oil discharge were to occur.

6.1.1 Wind Turbine Generators

Several types of oil-filled operational equipment are expected to be located at each of the (58) WTGs:

- Gear Box: Gear boxes and ancillary lubrication system contains approximately [TBD] gallons of lubricating/gear/turbine oil and is located in a turbine tower enclosure (nacelle).
- Hydraulic Unit: The hydraulic unit contains approximately [TBD] gallons of oil and is located in the nacelle.
- Yaw Gear Motor: The yaw gear motor is located in the nacelle and contains multiple gear boxes, each with [TBD] gallons of lubricating oil, for a total of [TBD] gallons per WTG.
- Pitch Motor: The pitch motor, located in the nose cone, contains multiple gear boxes, each with [TBD] gallons of oil, for a total of [TBD] gallons of lubricating oil per WTG.
- Each WTG installation includes an external pad mounted step-up transformer and each contains approximately [TBD] gallons of mineral oil.

6.1.2 O&M Facility

The O&M Building for the Project is anticipated to store [TBD] 55 gallon drums at a location to be determined.

6.1.3 Substation

The substation is expected to include a transformer.

Table 1. Summary of Oil Containers and Equipment

Storage Item	Number of Units	Unit Capacity (Gallons)	Total Capacity (Gallons)	Anticipated Oil Product Stored
Oil-Filled Equipment				
Substation Transformer	TBD	TBD	TBD	Mineral Oil
Pad Mounted Transformers	58	TBD	TBD	Mineral Oil
WTG Gear Boxes	58	TBD	TBD	Lubricating Oils
WTG Hydraulic Unit	58	TBD	TBD	Hydraulic Oil
WTG Yaw Gear Motor	TBD	TBD	TBD	Lubricating Oils
WTG Pitch Gear Motor	TBD	TBD	TBD	Lubricating Oils
Oil Storage Containers				
55-gallon drums	TBD	55	TBD	Hydraulic and Lubricating Oils
Total Project Storage Capacity: Approximately TBD Gallons				

6.2 Drainage and Water Bodies

The Project site is located in the Conewango and the Chautauqua-Conneaut drainage basins (USGS Hydrologic Units 05010002 and 04120101) of the Allegheny River and Niagara River-Lake Erie watersheds (USGS, 2014). The divide between these two watersheds goes through a portion of the northwest section of the Project site. Portions of the Project site located in the Niagara River-Lake Erie watershed are between Tarbox Road and Overland Trail and north of Housington Road.

The Project Site contains a various minor drainage ways. During the permitting for construction of the Project several wetlands will be delineated. These wetlands will be shown on the Site and Water Resources Maps to be included in Appendix A.

Project oil-filled containers at the Project are not expected to be located immediately adjacent to wetlands or other water bodies. The WTG and associated pad mounted transformers that are within [TBD] feet of a delineated wetland are identified in Table 2. The remaining WTG, pad mounted transformers, substation and O&M Facility are greater than [TBD] feet from a delineated wetland. All of the oil filled containers are greater than [TBD] feet from a stream. (See Site and Water Resources Maps in Appendix A).

Table 2. WTG and Pad Mounted Transformers within 300 feet of a Wetland

WTG & Pad Mounted Transformer	Distance to Delineated Wetland (feet)	Direction of Wetland from WTG
TBD	TBD	TBD

6.3 Loading, Unloading and Transfers of Oil (§112.7(a)(3)(ii))

It is expected that loading and unloading of 55 gallon drums at the O&M Building will be done using a pallet and fork lift. The delivery vehicle will park in the driveway outside of the storage location. A drain cover will be placed over the floor drain as applicable. Typically, a fork lift will remove the pallet from the delivery vehicles and take the pallet to the storage location where the drums are manually transferred to the spill containment pallets.

It is expected that oils from the drums are transferred to the transformers and turbines by using a hand pump to transfer oil from the 55 gallon drum into a smaller container. The container will be placed in a vehicle and driven to transformer or turbine site. If the oil is for use in the nacelle or nose cone the container will be carried up the tower in a covered bag that would contain any leaks from the container.

When oil from the oil filled equipment in the WTG or transformers needs to be replaced a company with appropriate training and certifications in oil handling is contracted to complete this task.

6.4 Discharge or Drainage Controls (§112.7(a)(3)(iii))

Secondary containment and procedures to control a discharge for each part of the Project is described in the following sections.

6.4.1 WTG Oil Filled Equipment

As described in Section 6.1, there is a gear box, hydraulic unit, yaw gear motor and pitch gear motor at each of the 58 WTG sites. All of these components are contained within the nacelle of the WTG.

A nacelle is an enclosed component that is connected to the turbine tower. An oil discharge from the gear box or hydraulic unit would take place inside the nacelle and would be contained by the oil spill deck and/or within in the nacelle. Typically, the spilled material would be drained from the nacelle and be contained on the yaw deck. The oil spill deck and yaw deck are enclosed areas and are not subject to precipitation.

There is no oil storage anticipated to be within the tower of the WTG, however if an oil discharge were to occur in the tower, such as a spill from an oil container being transferred up the tower for maintenance, the oil would be contained inside the tower.

The nose cone of each WTG will contain a pitch gear motor that contains multiple gear boxes that will contain oil. Typically, a discharge within the nose cone could get to the lip of the nose cone and ultimately reach the ground; therefore the nose cone is not considered to provide secondary containment.

The components of the WTG are expected to be equipped with monitoring devices that continuously track the pressure/vacuum level and temperature of the equipment. The Facility Response Coordinator is automatically notified via email and phone if the monitoring devices detect any change in the equipment that could indicate a possible oil discharge.

6.4.2 Pad Mounted Transformers

Typically, there are no passive secondary containment measures at pad mounted transformers. The exemption for oil fill operation equipment is used as discussed in Section 16.0

Each of the pad mounted transformers are expected to be equipped with a monitoring device that will continuously track the pressure/vacuum level and temperature of the oil container. The Facility Response Coordinator is automatically notified if the monitoring devices detect any change in the equipment that could indicate a possible oil discharge.

6.4.3 Substation Transformer

It is anticipated that each substation transformer will be surrounded by a containment vault filled with stone that will provide sufficient containment capacity. Discharge from a vault is typically controlled by an Oil Stop Valve, which is further discussed in Section 17.0.

The Facility Response Coordinator is automatically notified if the monitoring devices detect any change in the equipment that could indicate a possible oil discharge.

6.4.4 Storage Drums

Storage drums that are kept at the O&M Building are anticipated to be stored on spill containment pallets. When the storage drums need to be moved and will temporarily not be located on secondary containment, a drain cover will be placed on the floor drain as applicable.

Table 3. Summary of Secondary Containment

Storage Item	Maximum Potential Discharge (gallons/unit)	Description of Secondary Containment Measures
Oil-filled Equipment		
WTG Oil-Filled Equipment Gear Boxes Hydraulic Unit Yaw Gear Motor Pitch Gear Motor	 TBD TBD TBD TBD	Gear boxes, Hydraulic unit and Yaw gear motor – Some secondary containment typically provided by spill deck and inside of the nacelle (depending on location of leak or spill) – assumed to not be sufficient to contain a maximum potential spill. Pitch gear motor - located within the nose cone which is not expected to provide secondary containment. See Section 16.0 for exception for Oil-Fill Electrical Equipment.
Pad Mounted Transformers	TBD	No passive secondary containment is expected to be provided – exception for Oil-Fill Electrical Equipment See Section 16.0.
Substation Transformer	TBD	Secondary containment is provided by a Containment Vault that is controlled by an Oil Stop Valve.
Oil Storage Containers		
55-Gallon Drum	55	Located in the O&M Building on [TBD] gallon secondary containment units that are connected to provide [TBD] gallons of secondary containment.

6.5 Counter Measures (§112.7(a)(3)(iv)

Discharge discovery, response and cleanup methods are described in the following sections.

6.5.1 Discharge Discovery

A discharge from at WTG, pad mounted transformer or substation transformer would be discovered after the receiving automatic notification of a change in the pressure/vacuum level or temperature of the equipment.

A discharge from a 55 gallon drum would be discovered during monthly inspections of the secondary containment.

A discharge during oil transfer or use would be discovered immediately by the personnel working with the oil.

6.5.2 Discharge Response Procedures

Minor Discharges

For minor discharges (less than 5 gallons and is under the control of the spiller) immediately report leaks, spills, or other oil discharges to the Facility Response Coordinator, as identified in Section 6.7. Project personnel will then promptly contain the discharge. Cleanup of the oil and any contaminated material will be completed by Project personnel or a spill response contractor as determined by the Facility Response Coordinator. The Facility Response Coordinator will then complete internal notification procedures as per Cassadaga Wind procedure and complete a spill

report form. The form will be used to report the spill to the applicable Federal and State agencies as detailed in Section 7.0. The oil and contaminated material will be immediately disposed of by the spill response contractor as required by state and federal regulations.

Major Discharges

For major discharges (greater than 5 gallons and/or not under the control of the spiller), it is anticipated that the response actions would begin with the typical initial control procedures listed below. Notification and response measures beyond this list will be per the project's Emergency Action Plan (EAP). The EAP will be located at the project site and will be reviewed by all Project personnel as part of standard operating procedures.

1. Make an immediate assessment of the incident, with particular consideration to human safety in the vicinity of the incident.
2. If the incident does not pose an immediate threat to human safety, stop the source of the spill immediately or take steps to reduce the severity of the incident. If conditions are hazardous (for example, fire or potential explosion), do not approach. Then contact the Facility Response Coordinator.
3. If human safety is an immediate threat, contact the Facility Response Coordinator and other nearby employees to inform them of the incident.
4. Facility Response Coordinator will contact the spill response contractor and local emergency response.
5. Insure that all nearby devices that could act as ignition sources are off, if safe to do so.
6. Confine the release to the smallest area possible, if safe to do so.
    - Use booms or sandbags, dig small trenches, or place absorbent pads to stop migration of the release.
    - Take immediate action to prevent the spill from reaching off-site or on-site surface waters.
    - Place booms or absorbent mats, dig a diversion ditch, or use soil to form a berm.
    - If the release reaches water, attempt to place booms to contain the release, or, if necessary, block drainage downstream of spill to prevent further discharge.
7. Spill response contractor or local emergency response teams will take the appropriate actions to ensure the area is safe prior to containment, as necessary, and cleanup of the incident.
8. Facility Response Coordinator complete the spill response form and will perform the external notifications as detailed in Section 7.0.
9. The spill response contractor will complete spill cleanup.
10. The oil and contaminated material will be immediately disposed of by the spill response contractor as required by state and federal regulations.

6.5.3 Spill Response Equipment

Table 4 identifies typical spill response equipment expected to be maintained on-site. Sufficient materials will be maintained at the site to provide respond to a minor discharge and to initiate containment of a major discharge.

Table 4. Spill Response Equipment

Typical Equipment	Anticipated Location
Communications	
Mobile Phones	With Personnel
Personal Protective Equipment	
Gloves	O&M Building
Hard Hats	O&M Building
Safety Glasses	O&M Building
Spill Response Equipment/Active Secondary Containment	
Fire Extinguisher	O&M Building
Drum Oil-Only Overpak Spill Kit(s) - Various Absorbent Mats/Pillows - Oil Containment Booms/Socks - Disposable bags - Drum can be used to store spill/contaminated material	O&M Building
Drum Spill Kit(s) - Various Absorbent Mats/Pillows - Oil Containment Booms/Socks - Granular Absorbents - Drum can be used to store spill/contaminated material	O&M Building
Shovel(s)	Vehicle and O&M Building
Drain Cover(s)	O&M Building
First Aid	
First Aid Kits	Vehicle, O&M Building and Substation
Eyewash Bottles	O&M Building and Substation

6.6 Methods of Disposal (§112.7(a)(3)(v))

In the event of a discharge, all oil and contaminated material will be disposed of as required by state and federal law/regulations or by the manufactures recommendations. This will be accomplished by the Facility Response Coordinator, as identified in Section 6.7, contacting the spill response contractor.

6.7 Contact List (§112.7(a)(3)(vi))

Facility Response Coordinator – Primary: [Site Manager] (TBD)

Facility Response Coordinator – Secondary: [Assistant Site Manager] (TBD)

Spill Response Contractor: [Contractor] (TBD)

Local Emergency Response – 911

Chautauqua County Sheriff
15 E Chautauqua St, Mayville, NY 14757
Non-emergency Phone: (716) 753-4900

New York State Police
3081 N Main Street Ext, Jamestown, NY 14701
Non-emergency Phone: 607-324-6038

WCA Hospital
207 Foote Ave, Jamestown, NY 14702
Non-emergency Phone: (844) 221-2276

7.0 SPILL REPORTING INFORMATION (§112.7(a)(4-5))

As the date this Plan was prepared, the Project has not had any spills. The Project will record all oil spills that are over 1 gallon and/or are reportable. A spill log and spill reporting form is provided in Appendix C.

National Response Center Reporting Requirements
In the event of a discharge of oil to navigable waters or adjoining shorelines, the National Response Center (NRC) must be immediately notified by calling 1-800-424-8802.

The report must include the following information:

- The exact address or location and phone number for the Project;
- Date and time of discharge;
- Type of material discharged;
- Estimate of the total quantity discharged to navigable waters;
- Source of the discharge;
- Cause of the discharge;
- Description of the affected media;
- Any damages or injuries caused by the discharge;
- Actives being used to stop, remove, and mitigate the effects of the discharge;
- Where any evacuation may be needed; and
- Names of individuals and/or organizations who have also been contacted.

Environmental Protection Agency Reporting Requirements
In the event of a discharge meeting the following criteria, submit the report found in Appendix C and additional documentation as necessary to the Environmental Protection Agency (EPA) Regional Administrator and the New York State Department of Environmental Conservation (NYSDEC) within 60 days:

1. A single discharge of more than 1,000 gallons of oil into or upon navigable waters or adjoining shorelines; or
2. Two discharges, each more than 42 gallons of oil, to navigable waters or adjoining shorelines occurring within any twelve-month period.

The report must include the following information:

- Name of the Project;

- Name(s) of the owner/operator of the Project;
- Name of the person reporting the discharge(s);
- Location of the Project;
- Maximum storage or handling capacity of the Project and normally daily throughput;
- The corrective actions and/or countermeasures taken, including a description of the equipment, repairs and/or replacements;
- An adequate description of the Project, including maps, flow diagrams, and topographical maps, as necessary;
- The cause(s) of the reportable discharge, including a failure analysis of system or subsystem in which the failure occurred;
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and
- Other information as the EPA Regional Administrator may reasonably require pertinent to the Plan or spill.

New York State Reporting Requirements
An oil spill must be reported to the New York State (NYS) Spill Hotline at 1-800-457-7358 within 2 hours of discovery, unless the spill meets all of the following criteria:

1. The quantity is known to be less than 5 gallons; and
2. The spill is contained and under control of the spiller; and
3. The spill has not and will not reach the State's water or any land; and
4. The spill is cleaned up within 2 hours of discovery.

Note that a spill is considered to not have impacted land if it occurs on a paved surface such as asphalt or concrete; however a spill onto a dirt or gravel parking lot is considered to have impacted land and is reportable.

8.0 PREDICTION OF DISCHARGES (§112.7(b))

A prediction of a discharge rate of flow and total quantity of oil which could be discharged from the facility as a result of each type of major equipment or storage failure are described below. The direction of flow for the discharge is dependent on the location of the incident. There parameters will be better defined following the further development of the project. At that time, general directions of flow will be identified on the Oil Storage and Drainage Maps in Appendix A.

8.1 Drum Storage

An accidental drop and rupture of drum could result in up to 55 gallons being discharged instantaneously. A drum with a minor leak could result in a discharge rate of 1 gallon/hour with a maximum anticipated discharge of 55 gallons.

8.2 WTG and Pad Mounted Transformers

It is anticipated that the failure of or damage to gear boxes or hydraulic units in WTG would cause oil to flow into nacelle. Typically the failure of a gear box or hydraulic unit will result in an instantaneous discharge of the full oil storage volume.

It is anticipated that the failure of or damage to gear boxes in the pitch gear motor in WTG would cause oil flow into pitch gear motor. Typically if the enclosure of the pitch gear motor were to fail the discharge would flow into the nose cone and could ultimately follow the natural flow paths of the site. The failure of a gear box would result in the discharge of the full oil storage capacity volume instantaneously.

Catastrophic failure of WTG could result in the rupture of all components. A discharge in this scenario would follow the natural flow paths of the site.

It is expected that major failure of or damage to a pad mounted transformer could result in the instantaneous release the full volume of oil stored. Typically, a minor failure or damage to a transformer could result in a slow leak with a possible discharge rate 10 gallons/hour with a maximum estimated discharge of 20 gallons. Any discharge from a pad mounted transformer would follow the natural flow path.

It is expected that a discharge at transfer area for a transformer or WTG during normal maintenance could result in an instantaneous discharge of up to a full 5 gallon oil container. Any discharge from the transfer area would follow the natural flow path.

8.3 Substation Transformers

It is expected that a major failure of or damage to a substation transformer could result in the instantaneous release of the full volume of oil stored. Typically, a minor failure or damage to a transformer could result in a slow leak with a possible discharge rate 100 gallons/hour with a maximum estimated discharge of 200 gallons. It is expected that any discharge from the substation transformer would be contained in the secondary containment vault.

A discharge at transfer area for the substation transformer during normal maintenance could result in an instantaneous discharge of up to a full [TBD] gallon oil container. Any discharge from the transfer area would follow the natural flow path.

9.0 SECONDARY CONTAINMENT AND/OR DIVERSIONARY STRUCTURE (§112.7(c-d))

Anticipated passive secondary containment is discussed and described in Section 6.4. The spill response equipment described in Section 6.5.3 will be maintained at the site and used to provide active secondary containment during oil transfer procedures and to respond to discharges. Typically, active secondary containment is not considered feasible for the pad mounted transformers and WTG due to the distance and travel time between the O&M Building and the pad mounted transformers. Therefore the exemption for oil fill operation equipment is used as discussed in Section 16.0

10.0 INSPECTIONS, TESTS AND RECORDS (§112.7(e))

Project personnel will continuously monitor the WTG and transformers. Typically, the majority of this monitoring is conducted through various sensors that relay information to the O&M Building. These systems will alert Project personnel of changes in oil pressure/vacuum levels or temperature increases. These changes would prompt Project personnel to go to the WTG or transformer and check the system for leaks among other potential issues.

In addition to the monitoring systems, visual inspections will occur on a regular basis. Typically, monthly ground level visual inspections, or Site Sweep Inspections, are completed. During the monthly visual inspection, the base of each WTG and pad mounted transformer will be inspected for security and signs of damage. If an oil leak had reached the ground it would be identified at this time. An inspection of the substation transformer will also be completed at that time. An Electrical Substation Inspection Checklist is completed at this time and includes a visual check for leaks.

It is expected that, twice annually each WTG will be inspected to insure it is operating properly. At this time the Turbine Inspection Report will be completed. During these inspections the oil-filled components WTG are checked for functionality and signs of leaks.

It is expected that visual inspection of drum secondary containment pallets at the O&M Building will occur monthly as part of the O&M Building Audit Checklist. In addition to the secondary containment systems, visual observations of deterioration or integrity of containment systems will be made.

All inspections will be documented on the applicable inspection checklists and signed by the appropriate supervisor or inspector. Sample copies of these checklists are included in Appendix B. Oil leaks will be noted on the inspection checklist and promptly corrected. The inspection records will be maintained for a minimum of 3 years and stored at the project site.

11.0 PERSONNEL, TRAINING, AND DISCHARGE PREVENTION PROCEDURES (§112.7(f))

All oil handling personnel will be trained on:

- General Project operations;
- The contents of the SPCC Plan;
- Prevention of oil discharges;
- Oil discharge response protocol; and
- Applicable pollution control laws, rules and regulations;

The Facility Response Coordinator, as identified in Section 6.7, will be accountable for discharge prevention and reports to facility management. The Facility Response Coordinator is also responsible for scheduling and conducting discharge prevention briefings for oil handling personnel at least once per year. Briefings must highlight and describe any discharges that have occurred, failures or malfunctions of any oil storing containers or operational equipment, and any recently developed discharge prevention or maintenance procedures.

After each training session the names of personnel in attendance and subject matter will be recorded. A training log form is located in Appendix D. Training records will be maintained for a minimum of 3 years at the project site.

12.0 SECURITY (§112.7(g))

Sufficient lighting and security will be provided throughout the Project to allow for spill detection and the prevention and discovery of vandalism. Typical security measures expected to be used include:

- The O&M Building will be locked when Project staff is not present.
- Fencing will be provided around the substation and gates will be locked.
- The access roads to all turbine locations will be gated.
- Turbine towers and external valves will be locked.
- Access doors to pad mounted transformers will be locked.
- Lights will be equipped with motion sensors to the extent practical to meet security and environmental concerns.

13.0 LOADING AND UNLOADING RACK (§112.7(h))

There is no loading and unloading rack proposed for the Project.

14.0 FIELD CONSTRUCTED ABOVEGROUND (§112.7(i))

There are no field constructed aboveground containers proposed for the Project.

15.0 COMPLIANCE WITH STATE RULES, REGULATIONS, AND GUIDELINES (§112.7(j))

It is not anticipated that the oil storage at the Project site will be subject to New York State Regulations. The requirements to report an oil discharge to NYS DEC is outlined in Section 7.0.

16.0 OIL FILLED OPERATIONAL EQUIPMENT (§112.7(k))

Pad mounted transformers and the pitch gear motors, located in the WTG nose cone, are typically oil filled operational equipment without secondary containment. As described in Section 6.4, the oil filled operation equipment contained in the nacelle (Gear Boxes, Hydraulic Unit and yaw gear motor) are expected to have some passive secondary containment as described in Section 6.4, however, it is assumed to not be sufficient to contain the maximum potential discharge. Substation transformers typically have sufficient secondary containment. The Project has not had any reportable spills therefore meets the requirements of §112.7(k)(1) and can meet the requirements of §112.7(k)(2) in lieu of providing secondary containment for the pad mounted transformers. In accordance with this requirement the facility will:

1. Establish and document the Project's procedures to for inspections and monitoring of the equipment to detect failure and/or a discharge as described in Section 10.0.
2. Prepared an Oil Spill Contingency Plan per 40 CRF Part 109. This plan is located in Section 19.0.
3. Made a written commitment of manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharge that may be harmful (see Section 2.0).

17.0 DRAINAGE FROM THE SUBSTATION TRANSFORMER CONTAINMENT VAULTS (§112.8(b))

It is common for drainage from the substation transformer containment vault is controlled by an oil stop valve. In this scenario the valve is automated to drain whenever water is present but will close to prevent drainage if oil is detected. This or equivalent is expected to be employed by the project.

18.0 BULK STORAGE CONTAINERS AND PIPING (§112.8(c-d))

It is expected that the the bulk storage containers maintained at the site will be the 55 gallon drums stored in the O&M Building. The oil will be stored in their original containers and under pressure and temperature conditions as recommended by the manufacture. The drums will be provided with secondary containment as discussed in Section 6.4.4. The drum storage area is not expected to be subject to precipitation, therefore storage in excess of the largest container or periodic drainage of the secondary containment is not required.

Testing and inspection of all oil storage is completed in accordance with industry standard, as described in Section 10.0.

There are no completely or partially buried or bunkered metallic tanks planned for the project site.

There is no piping planned for the project site.

19.0 OIL SPILL CONTINGENCY PLAN (§109.5)

An Oil Spill Contingency Plan will be prepared as part of this SPCC Plan because the exemption for the oil filled electrical equipment is expected to be used for the pad mounted transformers at the site. See Section 16.0 for additional information on the use of this exemption.

19.1 Authorities, Responsibilities and Duties (§109.5(a))

All Project personnel will be responsible for notifying the Facility Response Coordinator, as identified in Section 6.7, of any oil spill at the site, as detailed in Section 6.5.2.

The Facility Response Coordinator will be responsible for the initial response to an oil spill at the Project. The Facility Response Coordinate will respond to the notification of a spill as detailed in Section 6.5.2.

19.2 Notification Procedures (§109.5(b))

Notification procedures in the case of a spill are outlined in Section 6.5.2. Spill reporting requirements are identified in Section 7.0.

19.2.1 Critical Water Use Areas

Water resources within the Project boundaries will be identified on the Site and Water Resources Maps in Appendix A. There are no Class A or AA waterbodies within the Project Boundary. Section 6.2 will discuss the distance between oil storage and a water resource.

19.2.2 Contact Information for Responsible Persons

A contact list for the Project is included in Section 6.7.

19.2.3 Communication System

The Project site is expected to have suitable mobile phone coverage. The O&M Building will be equipped with landline telephones that could be used for notifications in case of a mobile service outage.

19.2.4 Major Disaster Response Procedure

In the event of a major disaster at the Project, the Facility Response Coordinator will contact the spill response contractor as described in Section 6.5.2. The need for addition assistance is not anticipated as the contractor will be selected based on having sufficient capabilities to respond to the maximum anticipated oil discharge (see Section 19.3).

19.3 Capabilities (§109.5(c))

The project will have the resources available to respond a discharge as necessary as discussed in the following sections.

19.3.2 Locally and Regionally Available Assistance

A contractor with close proximity to the Project will be selected to allow them to respond quickly to a spill. The selected contractor will also have a variety of heavy equipment including excavators, bulldozers, vacuum trucks, roll-off containers, etc. They will also have sufficient booms, absorbent materials, etc. to respond to a spill at the Project. They will have experience responding to various types of oil, chemical and hazardous material spills including discharges from transformers at other WTG projects.

19.3.3 Response to Maximum Oil Discharge

The maximum anticipated oil discharge from a pad mounted transformer is the entire oil container. Pad mounted transformers commonly fail due electrical back feeding. This can result in oil floating on water within the transformer fiber glass enclosures and minimal oil is discharged on the ground. This failure typically causes flammable gases that require the use of a grounded vacuum truck or other extraction technique that would not cause a fire hazard. If the full volume of oil where to reach the ground surrounding the transformer the anticipated materials and equipment necessary to respond include:

- 50 feet of 6" diameter, or larger, booms to temporarily contain the spill.
- A backhoe or bulldozer to create a berm to contain the spill and to remove contaminated materials and absorbent materials.
- 10 cubic-yards of granular absorbent material to absorb the spill for cleanup or a vacuum truck, depending on the spill location.
- Truck for transport of oil and contaminated materials to disposal facility.

These materials will be supplied by the spill response contractor.

19.3.4 Advanced Arrangements

The Project will have an agreement with the spill response contractor listed in Section 6.7. This agreement will allow the Facility Response Coordinator to contact the spill response contractor for services on an as needed basis.

19.4 Additional Response Actions (§109.5(d))

The procedures discussed in this section shall be used after the discharge has been discovered and the notifications procedures in Section 6.5.2 are completed.

19.4.1 Discharge Response Team

The Response Coordinator for the Project is the Facility Response Coordinator, as identified in Section 6.7.

The Discharge Response Team will include oil handling Project personnel who will provide the initial response and containment as they are able and the spill response contractor who will complete the remaining discharge response procedures. The procedures outlined in Section 6.5.2 will be followed.

19.4.2 Discharge Response Operations Center

The discharge response operations center is anticipated to be the O&M Building for the Project. Communications systems are available at this location as discussed in Section 19.2.3.

19.4.3 Response Efforts

Varying degrees of responses are outline in Sections 6.5.2 and 19.3.2.

19.4.4 Priority of Water Uses

Based on the locations of and distances anticipated between the pad mounted transformers, it is not anticipated that more than one water resource would be affected at any time. Therefore, it is not expected that a prioritization of water uses would be necessary.

19.5 Recovery of Damages and Enforcement (§109.5(e))

In the event that a discharge from the Project causes damage to a natural resource, the Owner would meet with Local, State and Federal regulators, as applicable, to determine the necessary remediation steps. An appropriately qualified consultant would be contracted to work with the spill response team to restore the affected natural resources.

APPENDIX A

Project Mapping
(Detailed mapping to be provided following project construction)

APPENDIX B

Inspection Checklists

Preliminary Cassadaga Wind O&M Building Inspection

Date: _____

Inspected By: _____

	Yes	No	N/A	Comments or Follow-up
Required documents available at site office				
Site Safety Plan				
Emergency Action Plan				
Lockout/Tagout Policy				
Confined Space Entry Policy				
Hot Work Policy				
Spill Prevention, Control, and Countermeasure (SPCC) Plan				
Visitor Release and Waiver of Liability				
SARA Title III / MSDS forms				
OSHA 300 log posted				
Required documents on file				
LOTO forms				
Attendance record of safety meetings/topics discussed				
MSDS forms				
Job Safety Analysis forms (JSAs)				
PPE inspection records				
Near miss reports				
Vehicle safety inpsection / maintenance records				
Visitor log				
Housekeeping				
No trip, slip, or fall hazards				
Parking lots in good condition				
Tools and equipment stored in their proper location				
Exits and aisles not blocked				
Eye wash stations, fire extinguishers, pull boxes, and electrical panels not blocked				
Security / fire alarm system operational (if applicable)				
Materials stored in a manner to prevent them from falling				
Oil, chemical and waste management				
All oil, chemicals and waste stored in properly labeled containers				
Oil, chemical and waste containers are in good condition				
Flammable liquids stored in approved flammable storage cabinets				
Secondary containment provided for bulk oils, chemicals and wastes				
Secondary containment is free of spilled material and debris				
Compressed gas cylinders labeled, secured upright, flammables and oxygen separated				
MSDS forms on file for all chemicals used or stored on site				
Emergency				
Emergency exits marked				
Evacuation routes posted and assembly points identified				
Emergency phone numbers posted				
Fire extinguishers in place, tamper seals intact, fully charged, inspection tags current				
Spill kits available				
Eye wash stations in place and with current monthly inspections				
First aid kits in place and with current monthly inspections				
AED in place with current monthly inspection				
All EverPower personnel current on tower rescue, CPR and AED				
Drill performed with local emergency responders within the last 12 months				
Rescue helicopter landing sites identified				

Preliminary Cassadaga Wind O&M Building Inspection

Date: _____

Inspected By: _____

	Yes	No	N/A	Comments or Follow-up
Tools				
Defective tools properly tagged and taken out of service				
All required equipment guards in place				
Ladders Inspected and Secure: (8' Step, 10' Step & 20' Extension)				
Electrical safety				
Grounded circuits or GFI protection provided for all circuits for portable electric tools				
Electrical panel boxes labeled with voltage and circuits identified				
Wiring not damaged (improper splices, frayed cords, or exposed wiring)				
Electrical outlets/circuits not overloaded				
Extension cords checked for continuity and properly marked (Quarterly)				
Sanitation				
Adequate sanitation facilities available to personnel at all times				
Running water and soap or anti-bacterial hand sanitizer available				
Vehicles				
Current inspection permit displayed (where required)				
Current registration permit displayed				
Fire extinguisher/first aid kit in vehicle with current inspections				
Materials stored properly in truck beds (no loose materials that could blow or fall out)				
Tires in good condition, including tread wear within limits, properly inflated				
Communications				
All field personnel equipped with cell phones and/or radios				
Contractors/Visitors				
Visitor/contractor checklist performed and on file				
All personnel provided with site map and emergency contact telephone numbers				

Signature:_____

Preliminary Cassadaga Wind LLC, Turbine Inspection Report

Date of Inspection

Start Time

End Time

ID Number of WTG

Job Preparation			
	Verify Weather		**Complete JSA**
	Inspect PPE		**Call PMS -**
REguard Control			
	Logged In		**Logged Out**
Job Conclusion			
	Lock Tower Door		**Call PMS -**

SAP-Job Number (from Kay)	Notification Number (from PMS)	mPulse W.O. Number	Operation Hours (REguard)	MWH (REguard)

ITEM	Description of Inspection	APPROVED	REJECTED	Comments	Photo
1	Verify there are no faults or warnings listed on the REguard Screen.				
2	Inspect the basement for debris / water.				
3	Verify proper operation of the Lift, and inspect for any defects.				
4	Verify each platform for cleanliness and free of debris.				
5	Inspect the Buss bar system and verify there are no apparent burned covers.				
6	Inspect the Twist loop against chaffing, and condition of the cables.				
7	Verify the spill deck is clean and free from gear oil and hydraulic oil.				
8	Verify the condition of the Yaw brake pads.				
9	Verify the Hydraulic unit is free from oil leaks.				
10	Verify the area under the gearbox and generator is free from oil and debris.				
11	Verify all safety covers are properly installed.				
12	Verify that there is no loose debris in the hub or spinner area.				
13	Verify that all covers in the hub are installed and secured.				
14	Verify the top box is closed and secured.				
15	Verify all accelerometers are secure and cables connected.				
16	Verify the weather mast equipment is secured and the roof is free of debris.				
17	Verify the roof hatches are closed and secured.				
18					
19					
20					
21					

INSPECTED BY DATE

INSPECTED BY DATE

Cassadaga Wind LLC
Preliminary

Site Sweep Inspection

Access Road	Gate	Road	Ditch	Comments

WTG/PMT	Secure	Damage	Comment
Met Tower			
	Gates Secure	Building Secure	Comments
Sub-station 1			
Sub-station 2			

Inspected By: _____ Date: _____

Preliminary Electrical Substation Inspection Checklist

Inspection performed by:

Component	Status		
	Yes	No	Comments
Yard			
Is the substation fencing in good repair (no holes in fence/excavations under fence)?			
Are all gate locks secured and in good working order?			
Are all grounding mats covered (i.e. no wire protruding)?			
Yard lighting function properly (no lights out)?			
Are ladders inspected and stored properly (40' Extension & 4' Step)?			
Is there any unused equipment or material stored in the yard?			
Is there any garbage / refuse etc. on the ground?			
Are there clear warning / hazard signs posted in appropriate places (fences, buildings)?			
Yard (Bus, Switches and Transformers)			
Are all switches and cabinets (in good repair, secure and locked/tagged where appropriate)?			
Are all equipment labels legible and in good repair (e.g. switches, OCBs)?			
Does an overhead visual check of the substation bus reveal any problems (broken insulators, cracked lightning arrestors, loose hardware, etc.)?			
Are there any oil leaks visible from the transformers or metering tanks?			
Does a visual inspection of the transformers reveal any problems?			
Do the radiator cooling fans spin freely?			
Are all gauges reading within range?			
Main Transformer: (Record Highest and Reset) Oil Temp.: Winding Temp.:			
Building			
Is the metal clad building in good repair, no visible damage to building (leaks, holes, tears)?			
Is the metal clad building entrance securely locked?			
Is the building exterior lighting function properly (no lights out)?			
Are there any issues within the building (lights out, hvac, communications)?			
Is the building in compliance with housekeeping standards?			
Safety Equipment			
Are the grounding sticks and high voltage gloves in good repair and inspection?			
Are the Arc Flash suits in good repair and clean?			
Are the proper LOTO tags/locks and LOTO log available?			
Are the ground cables & high voltage detector in good repair and function?			
Is all safety equipment secured and stored properly?			
Are the First-aid kit, Fire Extinguisher's & Eye Wash station ready for use and inspected?			
Critical Equipment			
Are any alarms showing on the transformer (i.e. gas)?			
Have all history/fault logs been recorded?			
Are there any issues with the battery back-up system?			
Overall Assessment			
Does the overall condition of the substation facilities and yard meet standards?			

Signed:	Date:

APPENDIX C

Spill Log and Reporting Forms

Preliminary SPILL LOG

everpower

Cassadaga Wind Project

Date	Time	Logged By	Source of Spill (Container/ Equipment)	Quantity Removed	Method of Removal	Was Spill Reportable?	What Agencies was Spill Reported to?

Preliminary SPILL REPORT FORM

everpower

SPILL REPORTED BY:	**DATE:**
PHONE NUMBER:	**TIME:**
PROJECT MANAGERS:	

LOCATION: HOWARD WIND POWER PROJECT

SPILL DESCRIPTION:

Discharge/Discovery Date & Time:

Material Spilled:

Amount Spilled:

Media Affected (Soil, Water, Other with specifics):

Source of the Spill:

CAUSE OF THE SPILL:

DAMAGES OR INJURIES (SPECIFY):

EVACUATION NEEDED:

RESPONSE ACTIONS TAKEN:

OTHER ORGANIZATIONS AND INDIVIDUALS CONTACTED:

- ☐ **National Response Center Time:**
- ☐ **Cleanup Contractor (Specify)& Time:**
- ☐ **Facility Personnel (Specify) & Time:**
- ☐ **NYS DEC Spill Hotline Time:**
- ☐ **Other (Specify) & Time:**

APPENDIX D

Training Log

Preliminary TRAINING LOG

Cassadaga Wind Project

Date of Training:

Description of Training:

Personnel Trained

Name	Signature

APPENDIX E

Material Safety Data Sheets (MSDS)
(To be provided following project construction)