

Project: Greenidge Generation
 Date: 8/12/2022

**Short Environmental Assessment Form
 Part 2 - Impact Assessment**

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:		
a. public / private water supplies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Project: Greenidge GenerationDate: 8/12/2022

Short Environmental Assessment Form Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

[see attached Addendum]

<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
<input checked="" type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.
<u>NYS DEC</u>	<u>8/12/22</u>
Name of Lead Agency	Date
<u>DANIEL WHITEHEAD</u>	<u>Division Director</u>
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
<u><i>Daniel Whitehead</i></u>	<u><i>[Signature]</i></u>
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT FORM

State Environmental Quality Review Negative Declaration

SEQR Short Assessment Form

Part 3- Evaluation of the Magnitude and Importance of Project Impacts (Addendum)

Name of Action: Greenidge Generation Cylindrical Wedge-Wire Screen Installation

Permit: Article 15 Excavation and Fill in Navigable Waters

Project Number: 8-5736-00004/00019 & 8-5736-00004/00020

SEQR Status: Unlisted

Date: August 12, 2022

Preparer's Name: Daniel Whitehead, Division Director
NYSDEC Division of Environmental Permits
625 Broadway, Albany NY 12233

Background and Description of Action

The Greenidge Generating Facility (Facility) is an existing 107-megawatt energy generating facility consisting of one generating unit (Unit 4) located along the eastern shore of Seneca Lake. The cooling water for the operation of Unit 4 is obtained from Seneca Lake through a 7-foot diameter intake pipe. The current intake pipe opens facing downward and is surrounded by a 27-foot by 27-foot steel structure composed of sheet piles supported by I-beam pilings. The structure has openings on the north, east, and south sides which are covered by bar racks of 3/16- inch bars, 6 inches on center.

Best Technology Available

The Department modified the Facility's SPDES permit on October 1, 2017, to include the selection of the "Best Technology Available" (BTA) to reduce the impacts of the cooling water intake system on the aquatic organisms of Seneca Lake. The SPDES modification to include BTA was made in accordance with 6 NYCRR Part 704.5 and Section 316(b) of Clean Water Act. These regulations require that facilities minimize impacts from impingement and entrainment on aquatic organisms. Further discussion of the measures to minimize impacts from the facility's cooling water intake structure is provided below. BTA was selected in accordance with Commissioner Policy 52 – Best technology Available for Cooling Water Intake Structures.

NYSDEC determined that BTA for the Facility cooling water intake structure is the use of cylindrical wedge-wire intake screens (CWWS) with a slot size of 0.5 mm to 1.0 mm, and variable speed drive pumps (VSPs) at Unit 4. The variable speed drive units were installed during the summer of 2019. The current action is associated with the installation of the CWWS in compliance with the Department's determination of BTA for the Facility.

SPDES Modification & June 2016 SEQR

As referenced above, the Department modified the SPDES permit to include BTA on October 1, 2017. In accordance with 6 NYCRR Part 617 (SEQR), an amended negative declaration, dated June 28, 2016, was prepared by the Department to consider the environmental impacts of the SPDES modification to require the installation of BTA. The negative declaration concluded that the installation of BTA would result in the reduction of the impingement and entrainment of aquatic resources and, therefore, impacts to the environment would not be significant. The June 2016 negative declaration addressed the potential environmental impacts from the installation of BTA and the installation of CWWS requiring the disturbance of the lake bottom. The June 2016 negative declaration stated that the installation of the CWSS would require “no significant amount of modification or alteration” of the lakebed. As such, the June 16 negative declaration concluded that the impact to water quality would be temporary in nature and not significant. The following is an additional determination of the potential impacts from the installation of the CWWS based upon the detailed plans provided as part of the permit application submitted pursuant to 6 NYCRR Part 608 (Protection of Waters) and Section 401 of the Clean Water Act (Water quality Certificate).

Current Action

The current action involves the installation of the CWWS in compliance with the Department’s BTA determination for the facility.

The installation of the CWWS will include the removal of the steel walls of the existing intake structure and replacement with precast concrete panels. The excavation area required for the replacement of the intake walls and installation of the CWSS will be approximately 82’ X 95’ and require hydraulic dredging of approximately 1,100 cubic yards of material. Approximately 200 cubic yards of coarse limestone will be placed around the intake box to stabilize the dredged area. The dredged material will be dewatered in an upland area utilizing a filter bag within an enclosed bermed area of approximately 15,000 square feet. Analysis of the sediment around the dredging for the CWWS determined that the material met the criteria of Class A or B sediment pursuant to Department TOGS 5.1.9. Upon completion of the dewatering, the material will be disposed of in accordance with federal, state, and local requirements for Class A or B material. In addition to the installation of the CWWS, the wooden pilings supporting the wooden trestle that holds the 7-foot diameter cooling water intake pipe will be repaired with the addition of new steel pilings attached with cross-ties to the existing wooden piling. The original pilings and trestle will be left in place.

In addition, to provide a continuous supply of cooling water to the condenser, two 48” by-pass intakes will be temporarily installed adjacent to the existing intake pipe (Figure 5). An area approximately 15 ft x 30 ft will be excavated to a depth of 4 ft to accommodate a 30 yd 3 roll-off to be used as a sump for the intakes. A barge-mounted bucket excavator will be used, with spoil

placed into barge-mounted lined roll-offs. Because sediment in this area did not meet NYSDEC TOGS5.1.9 criteria as Class A or B sediment, this material will be dewatered, and further profiled/characterized. The material will be managed and disposed of in accordance with federal, state, and local regulations based on the characterization. Stone ballast will be used to hold the roll-off in place during use. The bypass intakes and roll-off will be removed at conclusion of the project.

Supporting Documentation

For the current action, installation of the CWWS, the applicant submitted a Joint Application, a SEQR short environmental assessment form and supporting documentation, dated March 18, 2022, and July 21, 2022, including:

- a. Project Description
- b. Supporting Narrative for Joint Application Form
- c. Wetlands Analysis
- d. Endangered Species List.
- e. Biological Assessment
- f. Migratory Birds
- g. Sampling Permit Modification & Sampling Plan
- h. Sediment Analysis Report

Reasons Supporting the Negative Declaration

1. Impacts on Surface Water: This project involves the installation of CWWS requiring in water work, including the permanent and temporary disturbance of the bed of Seneca Lake. The permanent disturbance includes the excavation of approximately 1,100 cubic yards of material from an 82' x 95' area to install the CWWS. Approximately 200 cubic yards of coarse limestone will be placed around the intake box to stabilize the dredged area. In addition, a permanent disturbance will occur from the repair of existing wood pilings supporting the wooden trestle that holds the intake pipe with additional new steel pilings. In addition, a temporary disturbance of the lakebed will occur as part to install two temporary bypass intakes from the dredging of a 15' x 30' area to a depth of 4'.

Impacts to surface water will be minimized by the implementation of Best Management Practices. First, the area of disturbance of the lakebed to complete the installation of the CWWS has been minimized to the maximum extent practicable to complete the necessary work to install the CWWS. Further, the Facility will employ turbidity control measures to minimize the area impacted by the suspended sediment created by the disturbance to the lakebed. The placement of the stone around the intake box will stabilize the dredged area and minimize erosion and scour of the lakebed in that area after work is complete. The installation of the steel piling will result in minimal disturbance to the lakebed and water quality impacts.

The disturbance to the lakebed associated with the temporary bypass is limited and temporary in nature. Turbidity control measures will be employed during this work to minimize impacts to water quality from suspended sediment including the installation of turbidity curtains prior to all disturbance activities including dredging, filling, drilling, pile driving, and wedge wire installation areas.

To avoid disturbing any contaminated sediments, dredging depth around the temporary water intake will be limited to 2 feet. This dig depth will avoid disturbing any contaminated sediments and prevent exposure of any contaminants to the surface waters.

The dredged material will be removed from the lake and dewatered. The dredged material will be disposed of in an appropriate upland location in accordance with regulatory requirements. The dredged material will not be returned to the lake. The water from the dewatering operation will be returned to the lake but only after suspended sediment has settled and been filtered. The return water will be discharged back lake and must not cause a visible contrast.

Impacts to the surface waters will be short-term and temporary and will result in no significant adverse impacts on surface waters.

2. Impacts on Air: The installation of the CWWs will require the operation of construction equipment, including the hydraulic dredge, a barge mounted excavator, and truck traffic for the delivery of material and the removal of the dredged sediment. There are potential air impacts from the operation of gas and diesel equipment and trucks. The small amount of dredging required to complete the installation of the CWWs will result in the limited operation of the dredging equipment. Based on the estimated amount of dredged material to be removed from the site (1,200 cubic yards) the number of truck trips is estimated to be approximately 80-100, assuming 10-15 ton dump trucks are utilized to remove the material. This estimated number truck trips plus operation of machinery will not have a significant impact on air quality.

The delivery of material for the installation of the of CWWs will include the precast concrete panels for the intake box, the steel pilings, the sand to create the dewatering berm and the 200 cubic yards of limestone rock for the stabilization of the dredged area. The number of truck trips required to complete these activities will be significantly less than the above referenced truck trips to remove the dredged material. Further, the proposed construction window to complete the work is estimated to be 90-120 days.

Based on the above, the installation of the CWWs will not have a significant adverse air impact.

3. Impacts on Plants and Animals: The installation of the CWWs is primarily in water activities with an approximate water depth of 12 feet. The primary impact from the installation of the CWWs activities on animals will be to fish species present in the water column around the intake. The operation of the construction equipment in the water column and the noise associated with that equipment may temporarily displace the fish from the water column in this area until the work is complete. The installation of the new steel pilings will occur along the entire length of the

existing trestle. As such, the installation of the pilings in the near shore area may have a small impact on submerged aquatic vegetation in the shallow water depths. Each piling is 18" x 18" wide and will result in minimal overall impact to any SAVs in the project area.

There are no state-listed endangered or threatened species in the project area.

For the upland portions of the project, a wetland analysis was conducted for the project area. All project activities will occur outside of the designated wetland areas. The upland construction activities will occur in previously disturbed areas associated with the existing generation facility.

Based on the above, the installation of the CWWS and the activities associated with the installation will not have a significant adverse impact on plants or animals.

4. Impacts to Groundwater: The installation of the CWWS will not require the use of any groundwater. The dredged material will be dewatered in areas that will not allow infiltration of the water into the ground. The dredged material will be disposed of at an appropriate upland location based on the class of the material and in accordance with existing regulations for disposal. If the material is classified as a solid waste or hazardous waste it will be disposed of at an approved facility to accept the waste. Based on the above, the proposed action will not have a significant adverse impact on groundwater.

5. Impact on Historic and Archaeological Resources: Two registered historical resources were identified within the general project area, the Crooked Lake Outlet Historic District (95NR00899), and the Robert Ingersoll birthplace (90NR00017). Both sites are greater than ½ mile from the existing industrial Facility. The project site is also located within an area designated as archaeologically sensitive by the New York State Office of parks, Recreation, and Historic Preservation. However, all proposed work is in-water or in a previously disturbed area.

The proposed action, installation of the CWWS and addition of new steel pilings, will occur below the surface of the water and will not be visible upon completion of work. The original pilings and trestle will be left in place. All upland work (i.e., dewatering structure) will be temporary and removed from the site upon completion of work. As such, there will be no permanent visual impacts on these historical resources. All upland work will occur in areas previously disturbed by the existing industrial activity. Further, the upland construction activities will not require any excavation or disturbance to the ground to complete the installation of the CWWS. As such, the upland construction activities will not result in the impacts to any archaeological resources.

There will be no significant adverse impacts to historic or archaeological resources associated with the installation of the CWWS.

6. Impacts on Traffic: The temporary construction activities will generate an increase in truck and car traffic entering and exiting the site. The primary increase in traffic will be related to the removal of the dewatered dredged material from the site and transported to the disposal location. Based on the amount of dredged material to be disposed of there will be approximately

80-100 total truck trips. The planned construction window for completing the work is approximately 90-120 days, resulting in an average of approximately 1 truck trip per day. Additional truck traffic will also result from the delivery of precast concrete forms for the intake box, the steel sheet pilings, the sand to create the dewatering berm and the limestone rock for the stabilization of the dredged area.

All traffic from the facility enters and exits to County Route 14. This road is adequate to handle the increase in truck traffic associated with the construction activities.

Based on the above, the proposed construction activities and associated increase in vehicle traffic will not result in significant adverse traffic impacts.

7. Impacts on Noise: The proposed action will involve temporary construction activities related to the installation of the CWWS. The operation of the construction equipment will result in the generation of noise during the construction period. As discussed above, the installation of the CWWS and the associated construction activities will occur at an existing energy generation facility.

Consistent with Program Policy DEP 00-1 Assessing and Mitigating Noise Impacts, any short-term noise impacts from the construction activities associated with the installation of the CWWS will be effectively minimized by the application of appropriate Best Management Practices and the following considerations:

- Current Ambient Noise Levels: The proposed construction activities will occur within the project boundary of the existing generation facility. As such, the existing ambient noise levels from the operation of the generation facility are consistent with an industrial setting. The sound levels anticipated from the temporary, short-term operation of the construction equipment is not anticipated to be greater than the existing ambient noise levels. Further, total sound pressure created by multiple sound sources does not create a mathematical additive effect. As such, noise generated by the temporary, short term operation of construction equipment is not anticipated to result in a significant increase in noise levels in the project area.
- The pile driving, the loudest activity during the project, is anticipated to occur during a one to two week period plus the entire project will be completed within a 90-120 day period. In addition, construction work is proposed to occur during day-time hours only, during the work week, no night-time work is proposed

The proposed temporary, short-term construction activities will not have a significant adverse noise impact.