

VIA EMAIL

April 12, 2018

Mr. Jeffrey Maxted
Alliant Energy – Lead Environmental Specialist
4902 North Biltmore Lane
Madison, WI 53718-2148

**Re: Hazard Potential Classification Assessment - §257.73(a)(2) and §257.100(a)
Alliant Energy – Wisconsin Power and Light Company
WPL – Nelson Dewey Generating Station
Cassville, Wisconsin**

Dear Mr. Maxted;

Hard Hat Services (HHS) completed the hazard potential classification assessment for the inactive coal combustion residuals (CCR) surface impoundment located at the Nelson Dewey Generating Station in Cassville, Wisconsin.

Background Information

In accordance with the requirements set forth in §257.73(a)(2) and §257.100(a) of the CCR Rule, an owner or operator of an existing or inactive CCR surface impoundment must conduct initial and periodic hazard potential classification assessments of their CCR surface impoundments, except for those CCR surface impoundments that are incised. The owner or operator must determine each CCR surface impoundments hazard potential classification through a hazard potential classification assessment.

FEMA (FEMA Publication 333, Federal Guidelines for Dam Safety, Hazard Potential Classification System for Dams, April 2004) developed a “hazard potential” classification to classify surface impoundments based on the probable loss of human life, and the impacts on economic, environmental, and lifeline interests in the event of an unintentional release from a surface impoundment. Three hazard potential classification levels are used, as follows:

1. High Hazard Potential – Assigned to surface impoundments where failure or mis-operation will probably cause loss of human life.
2. Significant Hazard Potential – Assigned to surface impoundments where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, or disruption of lifeline facilities or can impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or

agricultural areas but could be located in areas with population and significant infrastructure.

3. Low Hazard Potential – Assigned to surface impoundments where failure or mis-operation has no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the owner’s property.

Facility Specific Information

NED is located north of the Village of Cassville, Wisconsin on the eastern shore of the Mississippi River in Grant County, at 11999 County Highway VV, Cassville, Wisconsin. Figure 1 provides both a topographic map and an aerial of the NED facility location, with the approximate property boundary of the facility identified. NED ceased burning coal in December 2015. At that time the generating station was decommissioned and permanently closed. As of December 2017, NED has been demolished.

NED has one remaining inactive CCR surface impoundment, which is identified as the NED WPDES Pond. As of December 2017, the CCR within the NED WPDES Pond has been removed, and the CCR unit is completing groundwater monitoring in accordance with the closure requirements of 40 CFR 257.102(c) of the CCR Rule.

NED WPDES Pond

The NED WPDES Pond is located north of the former generating plant and north of the former coal pile storage area. The NED WPDES Pond, prior to NED ceasing coal burning operations in December 2015, received influent flow of non-chemical boiler cleaning during maintenance activities on the facility’s boilers, which occurred a few times a year. Other influent flows included surface water runoff that drained into the NED WPDES Pond via the former coal pile storage area and part of the former generating plant area located to the south of the NED WPDES Pond. The NED WPDES Pond typically operated as a zero-discharge pond system, with infiltration and evaporation being the only forms of release. Occasionally, if the water elevation rose above the operating elevation in the surface impoundment, the water would be pumped to the former NED Slag Pond.

The NED WPDES Pond has been dredged of CCR and only receives storm water runoff from the former coal pile storage area located to the southwest and from a portion of the closed CCR landfill located to the northwest. The storm water runoff that drains into the NED WPDES Pond either infiltrates or evaporates as there is no longer a discharge associated with the inactive CCR surface impoundment. Under normal conditions the NED WPDES Pond is dry.

According to the U.S. Fish and Wildlife Service National Wetlands Inventory, there are no wetlands identified downstream of the NED WPDES Pond, see Figure 2.

Hazard Potential Classification

Each non-incised CCR surface impoundment has been assigned a hazard potential classification, as identified below.



NED WPDES Pond

NED WPDES Pond has been assigned a **Low Hazard Potential** classification. The CCR within the surface impoundment has been removed to meet the requirements of 40 CFR 257.102(c). Under normal conditions the NED WPDES Pond is dry as water either infiltrates or evaporates. Therefore, mis-operation or failure will likely not result in loss of life. There are no public roads or highways located in the immediate vicinity of the inactive CCR surface impoundment. The northwest and southwest sides of the inactive CCR surface impoundment are incised. A release from the southeast would be principally contained within the adjacent field which WPL owns. A release to the northeast would be principally contained between the inactive CCR surface impoundment and the railroad tracks that run parallel with the northeast side of the surface impoundment. In all cases, a release from the inactive CCR surface impoundment would principally be limited to the facility property with low economic losses and environmental damages.

Qualified Professional Engineer Certification

To meet the requirements of 40 CFR 257.73(a)(2)(ii) and 40 CFR 257.100(a), I Mark W. Loerop hereby certify that I am a licensed Professional Engineer in the State of Wisconsin; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in 40 CFR 257.73(a)(2) and 40 CFR 257.100(a).



By: _____

Name: _____

Date: _____

cc: Tony Morse, Alliant Energy

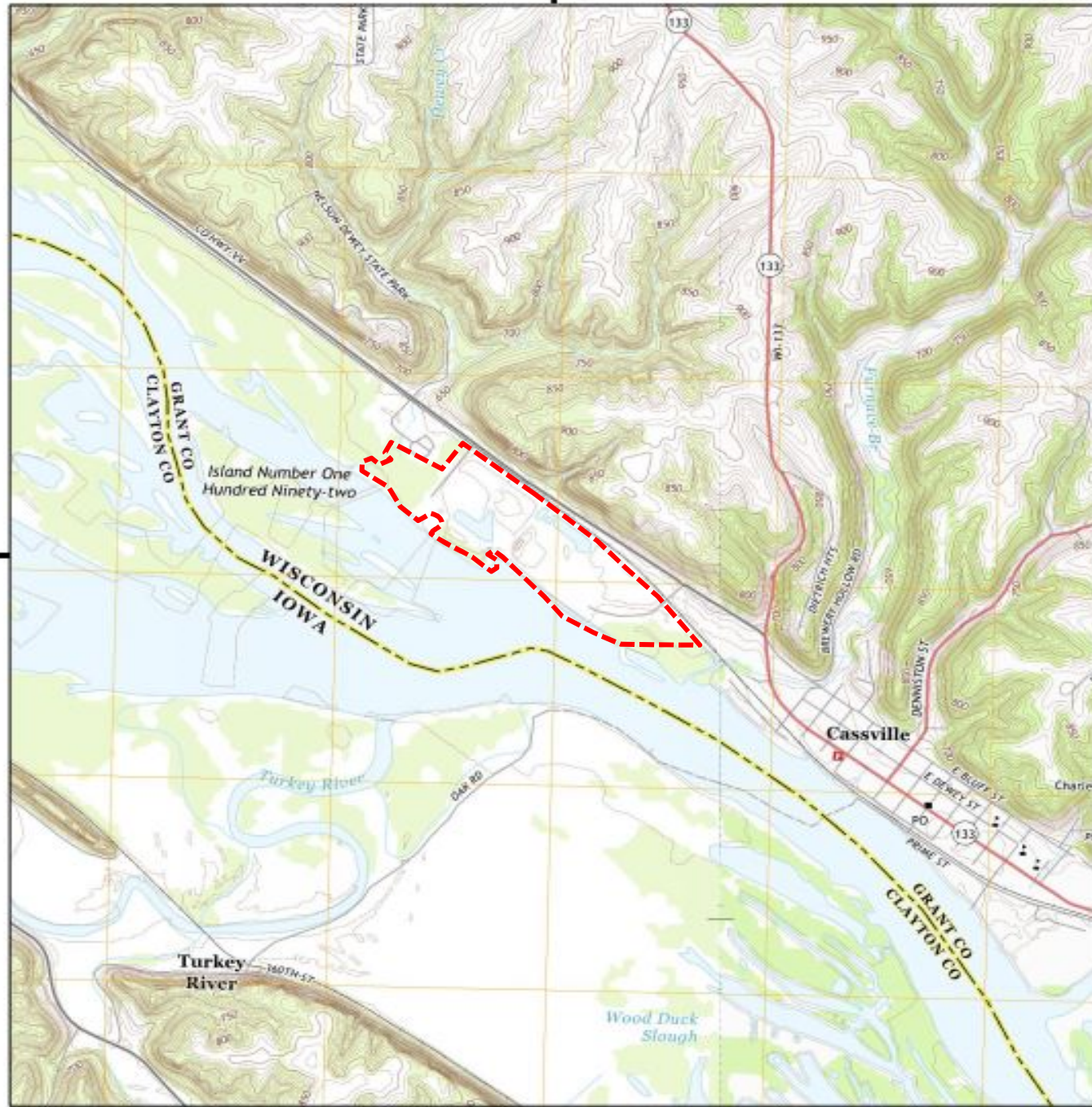
att: Figure 1 – Facility Location Map
Figure 2 – Wetland Location Map

MWL/mwl/CTS
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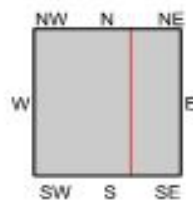
Historical Topo Map

2013

Historical Aerial Photo 5/30/2015



This report includes information from the following map sheet(s).



TP, Turkey River, 2013, 7.5-minute
SE, Cassville, 2013, 7.5-minute

SITE NAME: Nelson Dewey Generating Station
ADDRESS: 11999 County Highway VV
Cassville, WI 53806
CLIENT: Environmental Site Assessors



----- Approximate Property Boundary



HARD HAT SERVICESTM
Engineering, Construction and Management Solutions

Site Location
Nelson Dewey Generating Station
Wisconsin Power and Light Company

Drawing
Figure 1
Date
7/13/2016



- - - - - Approximate Property Boundary
- · - · - Former NED Slag Pond
- · - · - NED WPDES Pond (Inactive CCR Surface Impoundment)