December 1, 2021

Xcel Energy, Inc.
Sherburne County Generating Station
13999 Industrial Blvd.
Becker, MN, 55308

Re: 2021 Annual Inspection of Bottom Ash Pond No. 2

The Bottom Ash Pond No. 2 (BAP2) inspection was conducted on November 5th, 2021, by Daniel J. Riggs, a professional engineer licensed in the State of Minnesota. BAP2 is a new coal combustion residuals (CCR) surface impoundment at the Xcel Sherco Generation Station (Plant) with an initial CCR receipt date of October 1st, 2020. This is the first annual inspection for the CCR unit.

The following items were evaluated as a part of the inspections pursuant to 40 CFR §257.83:

i) Any changes in geometry of the impounding structure since the previous inspection

This was the initial inspection of BAP2; however, no changes have occurred in the geometry of the impounding structure since initial receipt of CCR and impoundment of water.

ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection

Water level in BAP2 is monitored by pressure sensors located upstream of the motor operated valve (MOV) located in the discharge building north of the pond. Water levels readings are transmitted to the Plant information system where it can be monitored by staff. The maximum water level reading was 982 feet mean sea level (MSL) elevation.

iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection

BAP2 outlets through a 24-inch pipe to the wet well in the discharge building. The wet well outlets via 30-inch pipe to the Recycle Basin located northwest of Bottom Ash Pond No. 1. The MOV is closed and opened to raise and lower water level in BAP2. The minimum impounded water and CCR depth was zero prior to initial receipt of CCR, which corresponds to an elevation of 935 feet MSL. The maximum impounded water depth was 47 feet, which corresponds to a water elevation of 982 feet MSL. The maximum elevation of CCR is 985 feet MSL, and maximum CCR depth is approximately 50 feet. During the inspection, the surface water elevation was 976 feet MSL, which corresponds to a depth of 41 feet.

iv) The storage capacity of the impounding structure at the time of the inspection

During the inspection the water level elevation was 976 feet MSL. The remaining capacity of BAP2 from the water level to the top of liner elevation of 993 feet MSL is approximately 504,000 cubic yards (313 Acre-feet).

v) The approximate volume of the impounded water and CCR at the time of the inspection

There was approximately 595,000 cubic yards (369 Acre-feet) of impounded water and 152,000 cubic yards (94 Acre-feet) of CCR in BAP2 at the time of the inspection. The water level is based on instrument readings while the CCR volume is based off assumed deposition rates.

vi) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures

The exterior of BAP2 was inspected for structural weakness in the form of seepage by walking a traverse at the base, mid-slope, and top of the dike. Signs of seepage would include moss or marshy vegetation at the toe along the base, soft or saturated areas, patches of grass more lush than the surrounding area, or flowing "springs". There were no signs that seepage had previously or is presently occurring on BAP2.

The outlet pipe corridor was inspected for signs of a leakage, such as saturated areas or sinkholes. No signs of leakage were observed along the pipe corridor between BAP2 and the Recycle Basin.

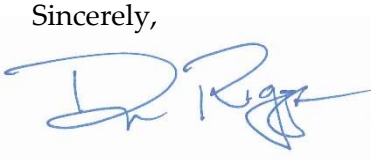
The water level in BAP2 is controlled by the MOV. All changes in water level were intentional and attributed to the opening and closing of the valve.

vii) Any other changes(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection

No signs of distress or malfunction of the CCR unit, appurtenant structures, or hydraulic structures passing through the dike were observed during the inspection.

I have inspected the CCR unit in accordance with 40 CFR §257.83 and found the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards.

Sincerely,



Daniel J. Riggs, PE
License No. 49559
Senior Engineer
Carlson McCain, Inc.

Bottom Ash Pond No. 2 Annual Inspection - 2021

Photo 1 11/5/2021	Bottom ash sluice piping, interior of west dike looking south.

Photo 2 11/5/2021	Interior of north dike, looking east

Photo 3 11/5/2021	Exterior of north dike, looking east.

Photo 4 11/5/2021	Interior of east dike, looking southeast.

Photo 5 11/5/2021	Exterior of east dike, looking northwest.

Photo 6 11/5/2021	BAP2 outfall into Recycle Basin.