NRG Energy
121 Champion Way, STE 300
Canonsburg, PA 15317
Phone: 724-597-8310

April 30, 2014

Transmitted via E-mail

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: **Action Plan to Address Recommendations**
Dam Safety Assessment of CCW Impoundments
NRG Power Midwest LP - Cheswick Generating Station
Springdale, Pennsylvania

Dear Mr. Hoffman:

As requested in your April 1, 2014 Letter, NRG Power Midwest LP (NRG) - Cheswick Generating Station (Cheswick) is providing a comment regarding the hazard potential rating and a summary of our action plan for measures to address recommendations associated with the Coal Combustion Waste (CCW) management units. Our response includes our plans and schedules for implementing each of the recommendations outlined in Enclosure 1 of the April 1st Letter.

Hazard Potential Rating Comment

We do not agree with the Hazard Potential Rating of Significant. According to the Report, the significant hazard potential was recommended primarily due to the potential for release of CCW into Tawney Run and the environmental impacts associated with such a potential release. NRG believes a Low hazard potential is appropriate for the following reasons:

- The potential for release of bottom ash water into Tawney Run is not sufficient rationale. Using this as the sole criteria would result in a rating of Significant for almost all CCW impoundments in the industry due to the close proximity to waterways. In addition, the discharge of bottom ash water is authorized under our NPDES permit to discharge to the Allegheny River.

- Both ponds are relatively small compared to most ash ponds in the industry, and the bottom ash is removed at least annually. The Bottom Ash Recycle Pond has a maximum capacity of approximately 1,025,579 gallons. The Bottom Ash Emergency Pond has a maximum capacity of approximately 936,187 gallons. Only one pond is in service at a time. Both ponds are interconnected by two 14 inch diameter overflow pipes providing additional capacity from the out of service pond. The Recycle Pond is also equipped with an emergency overflow riser that discharges to Tawney Run minimizing the potential for over topping the embankments. Therefore, in the unlikely case of an embankment breach, the quantity of water released to the ground and/or stream would be limited.

- Because heavier ash particles are removed from the transport water in the hydrobins before entering the ponds, the water contains substantially less ash than the sluiced transport water. Therefore, in the unlikely case of a release from the ponds, the water would contain less ash and cause minimal environmental losses to Tawney Run.

- The Bottom Ash Emergency and Recycle Ponds are located more than 750 and 1,000 feet, respectively, from Pittsburgh Street. The ponds are also located in a valley. The land surrounding and topographically downhill from the ponds is on secure NRG property and is approximately 250 feet wide at its narrowest point. In the unlikely case of an embankment breach, the water would spread out across the area south of the ponds, enter Tawney Run, and flow through the culvert under Pittsburgh Street. Homes along Duquesne Court and North Duquesne Avenue are topographically higher than the flow path along Tawney Run and would not be impacted. In addition, the NRG property is fenced to limit public access. Therefore, a release would result in no probable loss of human life and low economic losses. All losses would be contained within the station.

Conclusions and Recommendations

According to the assessment, acceptable performance is expected under all loading conditions, but some minor deficiencies were identified that require repair/maintenance. O'Brien & Gere identified the following maintenance and improvement measures that should be addressed in the near future:

- Supplementing vegetation cover on the outboard and inboard slopes to reduce erosion.

- Filling low areas in the crest to reduce stormwater ponding.
- Moving or replacing Jersey barriers along the Emergency Ash Pond's western inboard slope to prevent possible erosion from concentrated flow.
- Construction or maintenance of perimeter berms to prevent stormwater runoff from upgradient areas entering the ponds.

O'Brien & Gere recommended that additional maintenance of the embankments be performed to correct the erosion, drainage, and other miscellaneous deficiencies identified above. In addition, it was recommended that the facility establish new or augment existing perimeter ponds to divert stormwater runoff, as no analysis was available to demonstrate that stormwater runoff does not enter the pond or can be contained by the pond during an appropriate design storm.

Cheswick has developed the following action plan to address the above maintenance and improvement measures:

<u>Bottom Ash Recycle Pond</u>

- Repair and install seed blanket along the road berm and on the inboard and outboard embankments of the pond where necessary to enhance vegetative growth and reduce erosion.
- Grade road to slope away from pond and back to the hillside. Place a couple inches of gravel to fill low spots in the road/crest, provide a more stable road and reduce erosion.
- Regrade the drainage ditch to provide positive drainage around the pond to the north. Seed blankets will also be placed in the regraded drainage ditches where necessary to enhance vegetative growth and reduce erosion.

<u>Emergency Ash Pond</u>

- Repair and install seed blankets on the road berm and on the inboard and outboard embankments of the pond where necessary to enhance vegetative growth and reduce erosion.
- Fill low areas on the crest to reduce ponding and grade perimeter berms/roadway to slope to the hillside where the existing ditch will convey surface runoff away from the pond. Gravel will also be added to provide a more stable surface and reduce erosion.
- Relocate jersey barriers, add 6" of clay to better define the berm to better ensure stormwater is diverted away from the jersey barriers and pond, and then reset the barriers.

The above maintenance and improvement measures will be implemented in conjunction with the annual cleaning of each impoundment in the 2nd or 3rd quarter of 2014. Cheswick will continue to address the above issues in a proactive manner as necessary during the annual pond cleanings.

Monitoring and Future Inspection

O'Brien & Gere recommended continued internal inspections by personnel trained in dam safety and periodic inspections by independent licensed dam safety engineers on at least a biennial basis until the ponds are formally closed.

Cheswick has implemented regular visual inspections for perimeter embankment seeps, cracks, holes, and freeboard. Cheswick's inspections and regular monitoring are performed with the goal of identifying, documenting, and repairing any new deficiencies so that they do not develop into more serious problems.

Professional Engineers with Geosyntec Consultants conducted a detailed evaluation of the condition of the ponds at Cheswick in November 2012. Cheswick will contract with a Pennsylvania professional engineer trained in dam safety in the future if any evidence of structural deficiencies are identified as part of the routine visual inspections, but does not plan to have independent inspections conducted on a biennial basis at this time. In addition, if the Pennsylvania Department of Environmental Protection determines that these impoundments are regulated under Title 25 Pennsylvania Code Chapter 105 (Dam Safety and Waterway Management), Cheswick will inspect the impoundments in accordance with these requirements.

Please do not hesitate to contact me at (724) 597-8310 if you have any questions or require additional information.

Respectfully Submitted,

Stephen M. Frank, P.E.
Senior Environmental Specialist

cc: Charles Mason, General Manager, Cheswick Generating Station