



NRG Texas Power LLC  
W. A. Parish Station, Units 5, 6, 7, & 8

## Analysis of Hydrologic and Hydraulic Capacity for CCR Surface Impoundments

Prepared by



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## 1 PURPOSE

Pursuant to 40 CFR 257.82(c), this document serves as the initial written inflow design flood control system plan for the existing coal combustion residual (CCR) surface impoundments at NRG Texas Power LLC's (NRG) W. A. Parish Station. Based on the applicability criteria of 40 CFR 257.82(a), the following CCR surface impoundments are addressed herein:

- FGD Emergency Pond, and
- Air Preheater Pond.

## 2 RESULTS AND CONCLUSIONS

The inflow design flood control system was analyzed for each surface impoundment to assess how the inflow design flood was collected and managed in each CCR unit. The results from this analysis are summarized below for each CCR surface impoundment.

CCR Unit	Hazard Potential Classification	Design Flood Event	Total Storm Water Inflow (ac-ft)	Estimated Maximum Water Level (ft)	Top of Surface Impoundment Dike Elevation (ft)
FGD Emergency Pond	N/A (Incised)	25-year	1.23	70.0	71.0
Air Preheater Pond	Low	100-year	1.21	69.65	77.8

Both CCR surface impoundments are able to collect and control the inflow design flood events specified by 40 CFR 257.82(a)(3). The dikes of each surface impoundment are not overtopped since the estimated maximum water level from the inflow design flood remains lower than the top of dike elevation.

### 3 CERTIFICATIONS

This inflow design flood control system plan meets the requirements of 40 CFR 257.82(c).

I certify that this document was prepared by me or under my supervision and that I am a registered professional engineer under the laws of the State of Texas.

This document is released for use under the authority of James H. Staehlin, Texas PE #87527 on September 30, 2016. Sargent & Lundy LLC Texas Registered Engineering Firm #F-2202.

Certified by: JAMES H. STAEHLIN Date: 9-30-2016

Seal:

