



NRG Texas Power LLC  
Limestone Generating Station, Units 1 & 2

Inflow Design Flood Control System Plan for  
CCR Surface Impoundments

Prepared by



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## 1 INTRODUCTION AND PURPOSE

Pursuant to 40 CFR 257.82(c), this document serves as the written inflow design flood control system plan for coal combustion residual (CCR) surface impoundments at NRG Texas Power LLC's (NRG) Limestone Generating Station. The following existing CCR surface impoundments are addressed herein:

- Unit Bottom Ash Cooling Pond (BACP),
- Unit 019 E Pond,
- Unit 003 Secondary E Pond,
- Unit ST-18, and
- Unit 002 Storm Water Pond.

NRG has evaluated the CCR landfill storm water run-off pond (002) and determined that the subject surface impoundment does not meet the definition of a CCR surface impoundment based on EPA guidance. This determination is based on:

1. the fact that the CCR landfill storm water run-off pond (002) is not designed primarily to hold an accumulation of CCR and liquid
2. the primary function of the landfill storm water run-off pond (002) is not storage or disposal of CCR.

For the aforementioned reasons, NRG will no longer manage the CCR landfill storm water run-off pond (002) as a CCR surface impoundment after October 17, 2016.

## 2 RESULTS AND CONCLUSIONS

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

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)
Unit Bottom Ash Cooling Pond	N/A (Incised)	25-year	5.88	447.68	449.50
Unit 019 E Pond	Low	100-year	5.53	450.50	451.50
Unit 003 Secondary E Pond	Low	100-year	4.13	483.75	484.75
Unit ST-18	Low	100-year	6.77	443.00	444.00
Unit 002 Storm Water Pond	Low	100-year	69.99	433.00	434.00

All CCR surface impoundments are able to collect and control the inflow design flood events specified in the CCR Rule §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 initial inflow design flood control system plan meets the requirements of 40 CFR 257.82.

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 October 14, 2016. Sargent & Lundy LLC Texas Registered Engineering Firm # F-2202.

Certified by: JAMES H. STAEHLIN Date: 10-14-2016

Seal:

