

**2018 ANNUAL CCR UNIT INSPECTION REPORT
BIG BROWN STEAM ELECTRIC STATION
BOTTOM ASH PONDS**

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(b)(1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include: (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

SITE INFORMATION	
Site Name / Address	North Bottom Ash Pond (NBAP) Big Brown Steam Electric Station Freestone County, Texas 75804
Operator Name / Address	Luminant Generation Company LLC 6555 Sierra Drive, Irving, TX 75039
CCR unit	CCR Surface Impoundment

INSPECTION REPORT 40 CFR § 257.83(b)(2)	
Date of Inspection 11/01/2018	
(b)(2)(i) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	Not Applicable – No Instrumentation
b)(2)(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	The NBAP has a design operating water surface elevation of 347 feet MSL (plus freeboard). The NBAP is operated to maintain the water surface elevation near the design elevation. At the time of the 2018 annual inspection, the elevation of impounded water and CCR in the NBAP was approximately 346.5 feet MSL.
b)(2)(iv) The storage capacity of the impounding structure at the time of the inspection	Approximately 40,000,000 gallons
(b)(2)(v) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 40,000,000 gallons (Total impounded volume). Estimated 60,000 cubic yards of CCR
(b)(2)(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	No appearances of actual or potential structural weakness of the CCR unit were visually observed during the on-site inspection. A review of weekly inspection reports in the operating record also indicates no existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit. Consistent with generally accepted engineering practices, routine periodic maintenance is performed to address minor erosion and capacity of drainage features to maintain the safe operation of the CCR unit.

INSPECTION REPORT 40 CFR § 257.83(b)(2)

Date of Inspection 11/01/2018

(b)(2)(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.

40 CFR § 257.83(b) - Annual inspection by a qualified professional engineer.

I, Patrick J. Behling, certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards.

Patrick J. Behling, PE
Texas PE No. 79872, Expires: 06/30/2019
Date: 01/016/2019



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(b)(1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include: (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

SITE INFORMATION	
Site Name / Address	South Bottom Ash Pond (SBAP) Big Brown Steam Electric Station Freestone County, Texas 75804
Operator Name / Address	Luminant Generation Company LLC 6555 Sierra Drive, Irving, TX 75039
CCR unit	CCR Surface Impoundment

INSPECTION REPORT 40 CFR § 257.83(b)(2)	
Date of Inspection 11/01/2018	
(b)(2)(i) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	Not Applicable – No Instrumentation
b)(2)(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	The SBAP has a design operating water surface elevation of 347 feet MSL (plus freeboard). The SBAP is operated to maintain the water surface elevation near the design elevation. At the time of the 2018 annual inspection, the elevation of impounded water and CCR in the SBAP was approximately 346.5 feet MSL.
b)(2)(iv) The storage capacity of the impounding structure at the time of the inspection	Approximately 39,700,000 gallons
(b)(2)(v) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 39,700,000 gallons (Total impounded volume). Estimated 60,000 cubic yards of CCR.
(b)(2)(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	No appearances of actual or potential structural weakness of the CCR unit were visually observed during the on-site inspection. A review of weekly inspection reports in the operating record also indicates no existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit. Consistent with generally accepted engineering practices, routine periodic maintenance is performed to address minor erosion and capacity of drainage features to maintain the safe operation of the CCR unit.

INSPECTION REPORT 40 CFR § 257.83(b)(2)

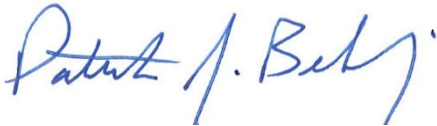
Date of Inspection 11/01/2018

(b)(2)(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.

40 CFR § 257.83(b) - Annual inspection by a qualified professional engineer.

I, Patrick J. Behling, certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards.



Patrick J. Behling, PE
Texas PE No. 79872, Expires: 06/30/2019
Date: 01/16/2019



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