LIMESTONE GENERATING STATION
UNITS 1&2

CCR FUGITIVE DUST CONTROL PLAN

Prepared for

NRG Energy, Inc.

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Prepared by

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ISSUE SUMMARY PAGE

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LIMESTONE UNITS 1 & 2

FOR

NRG ENERGY, INC.

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LIMESTONE, UNITS 1 & 2

FOR

NRG ENERGY, INC.

CERTIFICATION PAGE

Sargent & Lundy, L.L.C. registered engineering firm F-2202.

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

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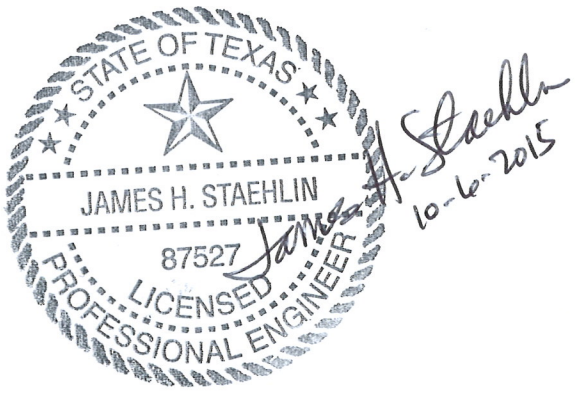

TABLE OF CONTENTS

EXECUTIVE SUMMARY

NRG Energy, Inc. (NRG) is committed to protecting the quality of the environment through feasible and effective measures. As one of these measures, NRG has prepared this Coal Combustion Residuals (CCR) Fugitive Dust Control Plan to minimize fugitive dust generated through its operations. This Fugitive Dust Control Plan was developed to meet the requirements of 40 CFR 257.80.

This CCR Fugitive Dust Control Plan is intended to apply to all employees and to all CCR operations activities which create fugitive dust at the Limestone Station (LMS). Employees shall minimize fugitive dust generated on site and shall implement and follow this plan. Operations activities shall also be conducted in accordance with this plan.

1. INTRODUCTION

1.1 PURPOSE OF THIS PLAN

The purpose of this plan is to minimize Coal Combustion Residuals (CCR) from becoming airborne at the Limestone facility. The primary sources of fugitive dust are listed in this plan. This Fugitive Dust Control Plan was developed to meet the requirements of 40 CFR 257.80.

1.2 STATION DESCRIPTION

The Limestone Generating Station (LMS) is located in Jewett, TX in Leon County, TX. The generating station consists of two (2) lignite-fired units, Unit 1 (890 MW) and Unit 2 (913 MW). The units are designed to fire a blend of Texas lignite and Powder River Basin (PRB) coal. The units are equipped with a wet flue gas desulfurization (FGD) system for SO_2 control. The FGD system uses limestone to react with SO_2 and produce gypsum. An Electrostatic Precipitator (ESP) is used to control PM emissions. LMS utilizes an on-site 417-acre landfill for CCR disposal.

The byproducts of lignite combustion are bottom ash, fly ash, and gypsum from the FGD control system. Bottom ash is sluiced with water and carried through pipes to dewatering bins. Decanted bottom ash is discharged from the dewatering bins into trucks for transport and disposal in the on-site landfill.

Fly ash is conveyed from the boilers to storage silos via an enclosed pneumatic system. Fly ash is loaded into enclosed trucks or enclosed railcars and sold for beneficial use. Fly ash may also be conditioned with water, or combined with FGD waste before being loaded onto trucks for transportation to the landfill for disposal. Washdown from CCR truck loading operations is discharged to a small pond on site.

The wet FGD system uses limestone to reduce SO_2 emissions and produces gypsum slurry as a byproduct. The slurry is pumped to dewatering equipment where it is dried. Dried gypsum is sold to third parties for manufacturing wallboard. The gypsum may also be trucked to the landfill for disposal, or combined with fly ash, as noted above, and trucked to the on-site landfill for disposal.

1.3 SOURCES OF CCR FUGITIVE DUST

Primary sources of fugitive CCR dust at LMS are:

a. Small spills of fly and bottom ash around pipes and other equipment
b. Equipment malfunction
c. Small amounts of fly ash generated by emptying fly ash from the silos into trucks or railcars
d. Waste trucks (fly ash, bottom ash and FGD waste) travelling on plant roads
e. Waste trucks (fly ash, bottom ash and FGD waste) dumping material into the landfill
f. Active portions of the CCR landfill
g. Dried portions of ponds containing water from CCR decanting operations and washdown from CCR truck loading operations

2. MONITORING

2.1 FREQUENCY OF MONITORING

Fugitive dust is monitored as part of normal plant operations.

2.2 MONITORING METHODS

For purposes of this fugitive dust control plan, fugitive dust is monitored visually. Indicators that fugitive dust is being minimized may include, as applicable:

a. Clearly visible fugitive dust from haul roads that does not rise above the top of the vehicle

b. Clearly visible fugitive dust does not rise above the height of the equipment that is pushing, moving, or loading material

c. Fugitive dust does not exceed the dust from similar natural terrain in adjacent areas as determined from a visual assessment of the dust source

2.3 CONTROL MEASURES

The CCR handling equipment at LMS is designed to minimize CCR dust. The equipment handles boiler bottom ash, fly ash and FGD waste.

Bottom ash is sluiced with water and carried through pipes to dewatering bins. Decanted bottom ash is discharged from the dewatering bins into trucks for transport and disposal in an on-site landfill. The sluice water facilitates bottom ash handling and reduces the amount of dust that may be generated.

Fly ash is conveyed from the boilers to storage silos via an enclosed pneumatic system. This enclosed system reduces the amount of dust that may enter the air. Fly ash in the silos is conditioned with water and/or FGD waste and loaded onto trucks for transportation to the landfill. Conditioning facilitates ash handling and reduces dust generation. Fly ash may also be loaded into enclosed trucks or enclosed railcars and sold for beneficial use. The enclosed trucks and railcars are designed to reduce the amount of CCR dust that may be generated. Fly ash sold for beneficial use also reduces the volume of waste stored in the landfill.

The wet FGD system uses limestone to reduce SO_2 emissions and produces gypsum as a byproduct. The gypsum is in slurry form which reduces the amount of dust that may be generated. The slurry is pumped to dewatering equipment and then conveyed to a stack out area. The dewatered gypsum may be sold to third parties for beneficial use. Gypsum sold to third parties reduces the amount of waste stored in the on-site landfill.

Water spray is used at the landfill and on plant roads as needed to reduce the amount of airborne fugitive dust. Water sprays are suitable for a range of climate conditions, including warm humid conditions like those of east-central Texas where LMS is located. Other control measures at the landfill involve compaction of the material with trucks and bulldozers, relocating activity, or reducing activity as needed. If necessary, vehicles will be washed to prevent tracking of sediment on plant and public roads.

Other control measures include reduced speed limits at the plant. Regular inspections of piping and other CCR handling equipment at the plant and routine preventive maintenance help to minimize CCR fugitive dust.

Table 1 lists control measures that are considered applicable to the respective potential dust source. Some sources have multiple means of controlling dust, while other sources are controlled most effectively by a single method. In practice, some activities may require multiple measures at the same time. For example, CCR dust control at a landfill may require emplacement with water and compaction.

Plant personnel will insure that the appropriate control measures are taken to meet the visual monitoring indicators described above. Appropriate actions taken to implement this Fugitive Dust Control Plan will be logged in the "Fugitive Dust Monitoring Report" in Appendix A.

Table 1: Control Measures		
Sources	**Control Measure**	**Description**
Small spills of fly or bottom ash around pipes or other equipment	1	Remove small spill
	2	Apply water as needed
Equipment malfunction (examples: excess fly ash emission from vacuum / pressure relief valves on top of the fly ash silos or bin vent filters; leaking fly ash, bottom ash, or FGD slurry pipes)	1	Repair equipment
	2	Reduce flows
Emptying fly ash from silos into trucks or rail cars	1	Repair silo discharge dust collection equipment
Waste hauling trucks (fly ash, bottom ash, FGD waste) travelling on plant roads	1	Wash trucks before they leave the loading area
	2	Apply water as needed
	3	Reduce vehicle speed
Fly ash, bottom ash and FGD waste dumping into the landfill	1	Apply water as needed
	2	Compact material as needed
	3	Reduce equipment speed
	4	Relocate activity on landfill
	5	Minimize activity on landfill
Active landfills (areas that have dried out)	1	Compact material as needed
	2	Apply water as needed
	3	Reduce equipment speed
	4	Relocate activity on landfill
	5	Minimize activity on landfill
Dried portions of ponds containing water from CCR decanting and equipment washdown	1	Apply water as needed

Application of these control measures is considered NRG's best effort to minimize fugitive dust at LMS.

However, NRG recognizes that there may be periods of unusual weather conditions when the above measures to control fugitive dust may be less than successful. In such cases, NRG may take other feasible and economically reasonable measures to minimize fugitive dust. Sources in Table 1 that involve CCR dust emissions from landfills may use water to emplace the CCR material into the landfill, per Final CCR Rule 257.80(b)(2).

3. RECORDKEEPING

3.1 CONTENT OF RECORDS

The CCR Fugitive Dust Monitoring Report form (Appendix A) shall be completed when an action is taken to reduce CCR fugitive dust. The completed reports shall serve as a record of visual monitoring and any control measures taken (to satisfy Final CCR Rule 257.80(b)(1)). It shall also serve as a means to assess the effectiveness of the dust control plan (Final CCR Rule 257.80(b)(4)). The report shall include:

a. The date and local time of monitoring.
b. Description of the fugitive dust source.
c. The observer.
d. Numerical control measure applied for dust control (Table 1).
e. Corrective actions taken and results of those actions. Depending upon the dust source, it may be necessary to apply multiple control measures.

Appendix B contains a blank Log of Citizen Complaints form for logging citizen complaints. The form contains entries for recording the following information, per Final CCR Rule 257.80(c):

a. The date and local time of the complaint.
b. The name of the complainant.
c. Description of the fugitive dust source.
d. Corrective actions taken and the results of those actions.

Each year the completed form will be placed in the annual CCR fugitive dust control report (Section 4.3).

3.2 RECORD STORING AND RETENTION

This plan is complete when it is placed in the station's operating record (Final CCR Rule 257.105(g)(1)). Within 30 days of placing the control plan in the station's operating record, it must be posted to the NRG CCR website (Final CCR Rule 257.107(d) and (g)(1)).

NRG will amend this written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit (Final CCR Rule 257.80(b)(6)). The amended plan, when placed in the station's operating record, is considered the most recent control plan. Only the most recent control plan must be maintained in the station's operating record (Final CCR Rule 257.105(g)(1)). Similarly, the most recent dust control plan must also be maintained on the NRG CCR website (Final CCR Rule 257.107(g)(1)).

The completed CCR Fugitive Dust Monitoring Report forms will be kept for use in the annual CCR fugitive dust control report but are not required to be individually placed in the station's operating record or CCR website.

The Log of Citizen Complaints forms will be kept for use in the annual CCR fugitive dust control report but is not required to be individually placed in the station's operating record or CCR website.

4. REPORTING

4.1 NOTIFICATION REQUIREMENTS

Within 30 days of placing this CCR fugitive dust control plan or future amendment and annual updates in the station's operating record and on the NRG CCR website, NRG will notify the Texas Commission on Environmental Quality (TCEQ) that the document is available (Final CCR Rule 257.106(d) and (g)(1)).

4.2 CITIZEN COMPLAINTS

The Log of Citizen Complaints form (Appendix B) will be used to log citizen complaints received by NRG involving CCR fugitive dust events at the station (Final CCR Rule 257.80(b)(3)). The Log of Citizen Complaints will be kept for use in the annual CCR fugitive dust control report but is not required to be individually placed in the station's operating record or CCR website.

4.3 ANNUAL CCR FUGITIVE DUST CONTROL REPORT

NRG will prepare an annual CCR fugitive dust control report that includes the following:

a. A description of the actions taken to control CCR fugitive dust.
b. A record of all citizen complaints and a summary of corrective actions taken.

NRG will complete the initial annual report no later than 14 months after placing the initial CCR fugitive dust control plan in the LMS operating record. The deadline for completing each subsequent report is one year after the date of completing the previous report. Each report will be deemed complete when NRG has entered the report into the LMS operating record (Final CCR Rule 257.80(7)(c)).

5. QUALITY CONTROL

5.1 EVALUATING FUGITIVE DUST CONTROL PLAN EFFECTIVENESS

NRG will review and evaluate the effectiveness of this Fugitive Dust Control Plan (Final CCR Rule 257.80 (b)(4)). NRG will evaluate this plan by reviewing the CCR Fugitive Dust Monitoring Report forms at least quarterly. Revisions to this plan will only be made with approval of NRG environmental staff.

5.2 FUGITIVE DUST CONTROL PLAN COMPLETION

The Final CCR Rule requires preparation of an initial CCR fugitive dust control plan by October 19, 2015. Per Final CCR Rule 257.80 (b)(5), NRG will place a copy of this plan into the LMS operating record and the initial plan will be deemed complete.

5.3 FUGITIVE DUST CONTROL PLAN AMMENDMENTS

NRG will revise this Fugitive Dust Control Plan when there is a significant change in operating conditions that would substantially affect this Plan (Final CCR Rule 257.80 (b)(6)). The changes in operating conditions include, but are not limited to, construction and operation of a new CCR unit.

5.4 PROFESSIONAL ENGINEER (PE) CERTIFICATION

NRG will obtain a certification from a qualified professional engineer that the Fugitive Dust Control Plan and subsequent amendments meet the air criteria requirements of Final CCR Rule (Final CCR Rule 257.80 (b)(7)).

APPENDIX A

Fugitive Dust Monitoring Report

Fugitive Dust Monitoring Report					
Date	**Local time**	**Description of fugitive dust source**	**Observer**	**Control measure applied (1-5 from table below)**	**Corrective actions and results of the action**

Sources	Control Measure	Description
Small spills of fly or bottom ash around pipes or other equipment	1	Remove small spill
	2	Apply water as needed
Equipment malfunction	1	Repair equipment
	2	Reduce flows
Emptying fly ash from silos into trucks or rail cars	1	Repair silo discharge dust collection equipment
Waste hauling trucks (fly ash, bottom ash, FGD waste) travelling on plant roads	1	Wash trucks before they leave the loading area
	2	Apply water as needed
	3	Reduce vehicle speed
Fly ash, bottom ash and FGD waste dumping into the landfill	1	Apply water as needed
	2	Compact material as needed
	3	Reduce equipment speed
	4	Relocate activity on landfill
	5	Minimize activity on landfill
Active landfills (areas that have dried out)	1	Compact material as needed
	2	Apply water as needed
	3	Reduce equipment speed
	4	Relocate activity on landfill
	5	Minimize activity on landfill
Dried portions of ponds containing water from CCR decanting and equipment washdown	1	Apply water as needed

APPENDIX B

Log of Citizen Complaints

Log of Citizen Complaints

Date	Local time	Name of complainant	Description of the fugitive dust source	Corrective action taken and results of the action