**TCEQ IDA - Production** 

# AIR DERC\_100542885-410373\_ USE\_20160127\_Use\_D3221

## 01/27/2016 ------ EBTP IMS- PROJECT RECORD ------

PROJECT#: 410373 RECEIVED: 11/16/2015 STATUS: P PROJTYPE: BDIU DISP CODE: \_\_\_\_\_ ISSUED DT: SUP-DISP DATE: 1/27/2016

## STAFF ASSIGNED TO PROJECT:

THOMAS, JOSEPH

#### **PROJECT NOTES:**

PROJECT HOLD BECAUSE DERC TO BE USED IS CURRENTLY SET ASIDE FOR SAME USE IN 2014. IN E-MAIL ON 12/30/2015, COMPANY REMINDED THAT THIS PROJECT CANNOT BE DONE UNLESS THERE IS NO USE IN 2015 AND UNTIL USE PROJECT FOR 2015 IS CLOSED.

#### **PROJECT TRANSACTIONS**

#### COMPANY DATA

COMPANY NAME: NRG TEXAS POWER LLC CUSTOMER REGISTRY ID: CN603207218

## PORTFOLIO DATA

NUMBER: P3100 NAME: TH WHARTON RN100542885

#### SITE DATA

ACCOUNT: HG0357S REG ENTITY ID: RN100542885 SITE NAME: T H WHARTON ELECTRIC GENERATING STATION COUNTY: HARRIS NEAREST CITY: HOUSTON LOCATION: 16301 STATE HWY 249

## CONTACT DATA

NAME: ELIZABETH KASHITITLE: ENVIRONMENTAL SPECIALISTSTREET: 1201 FANNIN STREET CITY/STATE,ZIP: HOUSTON, TX , 77002-0PHONE: 832-357-5292 ext 0Email: liz.kashi@nrg.com**TRANSACTION DATA**TRANSACTION TYPE: DERC\_INTENDATE ENTERED: 2015-11-19 00:00:00.0DELETED DATE:CONTAMINATE: NOXALLOWANCE0CERTIFICATE NO: D3221 COUNTY : HARRIS

## TRACKING ACTIVITES

PROJECT 11/12/2015 PROJECT HOLD : SUBMITTED : PROJECT COMPLETED :

11/19/2015 01/18/2016 PM RECEIVED DATE : 11/19/2015

DERC D-3221

# DISCRETE EMISSION CREDITS USE TECHNICAL REVIEW

Project No.:	410373	Customer Reference No.:	CN603207218
Project Type:	BDIU	Regulated Entity Reference No.:	RN100542885
Company:	NRG Texas Power, LLC	Facility Name:	T.H. Wharton Electric Generating Station
City:	Houston	County:	Harris
Project Manager:	Mr. Joseph Thomas	Portfolio Name:	P3100

# **Project Overview**

NRG Texas Power, LLC, submitted a Form DEC-2, Notice of Intent to Use Discrete Emission Credits, received on November 16, 2015. The company requested to use nitrogen oxides  $(NO_X)$  Discrete Emission Reduction Credits (DERC) under 30 Texas Administrative Code (TAC) §101.376(b)(1)(A) for potential emissions above the level authorized in permit O-00077 for the T.H. Wharton Electric Generating Station during the period of January 1, 2016 through December 31, 2016. However, permit O-00077 is pending at this time, while permit 2094 appears to cover the electric generating units (will be appended to the new permit). A copy of the Maximum Allowable Emission Rate Table for permit 2094 is appended to this project. Additionally, the requested use period could not be approved because the company wanted to use the same DERCs that were set aside for the 2015 use period. Because the use period could not begin before the DERC use project for 2015 was closed (occurred on January 25, 2016) and this project was processed (finished on January 27, 2016).

During the review of the Form DEC-2 for the 2015 use period, the company provided a demonstration of no adverse impacts to comply with the requirements of §101.376(b)(1)(A), regarding the use of DERCs to temporarily exceed permit allowable emissions. The company provided the required demonstration via e-mail on January 23, 2015, which is appended to project 409470. The demonstration was reviewed by Sean O'Brien with the Air Permits Division, who stated via e-mail on January 30, 2015, that the demonstration was acceptable. Because the requested use is the same for the 2016 use period and there have been changes to the permit, the modeling from 2015 is sufficient for this project.

The company estimated that 10.0 tons of DERCs may be needed for exceeding permit limits during the use period and asked that 11.0 tons of DERCs (including the 10% environmental contribution of 1.0 ton) be set aside from certificate D-3221. This certificate was retained by the company when project 409470 was closed because there was no use of DERCs by the site under §101.376(b)(1)(A) during the 2015 use period.

# **Discrete Emission Credit Use**

The company requested that the full annual limit in 101.376(b)(1)(A) for the site be set aside for the use period. The company intends to cover any potential excess emissions under permit 2094 through the use of up to 11.0 tons of NO<sub>x</sub> DERCs (including the 10% environmental contribution of 1.0 ton) during the use period.

Certificate to be set aside	D-3221
Pollutant	
Amount	
Regulation	§101.376(b)(1)(A)
Use period	1/27/2016 – 12/31/2016

DISCRETE EMISSION CR **TS USE TECHNICAL REVIEW** Page 2 Project No. 410373

## **Credit Use Calculation Methods**

The company requested that the maximum amount allowed under §101.376(b)(1)(A) be set aside. No other calculations were involved in determining the use amount.

## Conclusion

NRG Texas Power, LLC, has requested that 10.0 tons of NO<sub>x</sub> DERCs be set aside to cover potential emissions in excess of permit limits for NO<sub>x</sub>, as allowed under §101.376(b)(1)(A), during the use period of January 27, 2016 through December 31, 2016, for the T.H. Wharton Electric Generating Station. Based on the request, a total of 11.0 tons of DERCs (including the required 10% environmental contribution of 1.0 ton) are being set aside from certificate D-3221.

Date

iect Manager

# Form DEC-2 (Page 1)

Ro VION

Notice of Intent to Use Discrete Emission Credits NOV 16 205 (Title 30 Texas Administrative Code § 101.370 - § 101.379)

I. Company Identifying Inform	ation 410	373					
A. Company Name: NRG Texas P	ower LLC						
Mailing Address: 1201 Fannin	Mailing Address: 1201 Fannin						
City: Houston	State: TX		Zip Code: 77002				
Telephone: 832-357-5293			Fax:				
B. TCEQ Customer Number (CN)	: CN603207218		<u></u>				
C. Site Name: T.H. Wharton Elect	tric Generating Station						
Street Address (If no street add	ress, give driving direction	ns to site) 16301 \$	State Hwy 249				
Nearest City: Houston	Zip Code: 770		County: Harris				
D. TCEQ Regulated Entity Number	er (RN): RN100542885	P3100					
E. TCEQ Air Account Number: (i	fapplicable) HG-0357-S		· · · · · · · · · · · · · · · · · · ·				
F. Primary SIC: 4911			Air Permit Number: 209	94, 21592			
II. Technical Contact Identifyin	g Information						
A. Technical Contact Name: (	Mr. 🛛 Mrs. 🗌 Ms. 🗌 I	Dr.) : Liz Kashi					
Technical Contact Title: Envir	onmental Specialist						
Mailing Address: 1201 Fannin							
City: Houston		State: TX	Zip Code: 7'	7002			
Telephone: 832-357-5292	Fax:	E-ma	ail: liz.kashi@nrg.com				
III. Company Contact Identifyin	g Information (If differen	t from Technical	Contact)				
A. Company Contact Name: (	Mr. 🛛 Mrs. 🗌 Ms. 🗌 D	Dr.) : Lindsay W.	Little				
Company Contact Title: Air P	rogram Manager, Gulf Coa	ast					
Mailing Address: 1201 Fannin	l						
City: Houston		State: TX	Zip Code: 7	7002			
Telephone: 832-357-5293	Fax:	E-ma	ail: Lindsay.little@nrg.com	n			
IV. Mass Emission Cap and Tra	de Program (MECT)						
Is the DERC use for compliance w Year DERC Generated: Note: If DERC use is to comply with	Year of Use:	Ratio of		⊠ NO _to			
V. Intended Use Period							
Intended Use Start Date: <u>1/01/20</u>	16 Intended	Use End Date: 1	12 / <u>31/ 2016</u>				



# Form DEC-2 (Page 2) Notice of Intent to Use Discrete Emission Credits (Title 30 Texas Administrative Code § 101.370 - § 101.379)

VI. State and Federal Requirements					
Applicable State and Federal requirements that the DERCs will be used for compliance: 30 TAC 101.376(b)(1)(A), 30 TAC 101.376(b)(1)(B), 30 TAC 116.115(b)(2)(F)					
VII. Most Stringent Emission Rate					
Describe basis for most stringent allowable emission rate:					
☐ Permit <u>2094, 21592</u> ☐ RACT ☐ Other:					
VIII. Protocol					
Protocol used to calculate DERC:					
Note: Attach the actual calculations that were used to determine the amounts of DERCs needed to this form					

Continue to Section IX (next page)



# Form DEC-2 (Page 3) Notice of Intent to Use Discrete Emission Credits (Title 30 Texas Administrative Code § 101.370 - § 101.379)

Emission F Point No.			Calculation of DERCs						
	FIN	N Air Contaminant	Expected Activity (units)	Expected Emission Rate (units)	Expected Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (units)	Regulated Total Emissions (tons)	DERCs (tons)
THW (see attached)	THW (see attached)	NO <sub>x</sub>							10.0
				<u> </u>					<u></u>



# Form DEC-2 (Page 4) Notice of Intent to Use Discrete Emission Credits (Title 30 Texas Administrative Code § 101.370 - § 101.379)

X. Total DERCS Re	X. Total DERCS Required for Use (round up to the nearest tenth of a ton)						
Tons of DERCs required (from Sect. VII.)	CO:	NO <sub>x</sub> : <u>10.0</u>	PM <sub>10</sub> :	SO <sub>2</sub> :	VOC:		
Offset Ratio (if required)	CO:	NO <sub>x</sub> :	PM <sub>10</sub> :	SO <sub>2</sub> :	VOC:		
Environmental Contribution (+ 10%)	CO:	NO <sub>x</sub> :1.0	PM <sub>10</sub> :	SO <sub>2</sub> :	VOC:		
Compliance Margin (+ 5%) (If DERC use requires >10 tons)	1						
>10 10115)	CO:	NO <sub>x</sub> :	PM <sub>10</sub> :	SO <sub>2</sub> :	VOC:		
Total DERCs	CO:	NO <sub>x</sub> : <u>11.0</u>	PM <sub>10</sub> :	SO <sub>2</sub> :	VOC:		
XI. DERC Informati	ion						
Name of the DERC G DERC Generator Reg Certificate number of Date on which the DE Note: The certificate	gulated Entity Nur f the DERCs acqui CRCs were acquire	mber: <u>RN1008883</u> ired or to be acquir ed or will be acquire	12 red: <u>D-3156</u>				
XII. Certification by	Responsible Offi	icial					
Note: The certification by Responsible Official         I.       Lindsay W. Little, hereby certify, to the best of my knowledge and belief, that this application is correct and the use strategy claimed on this notice has met the requirements of all applicable state and federal rules and regulations. I further state that to the best of my knowledge and belief the information in this certification is not in any way in violation of 30 TAC, Subchapter H, Division 4, §101.370-101.379 or any applicable air quality rule or regulation of the Texas Commission on Environmental Quality and that intentionally or knowingly making or causing to be made false material statements or representations in this certification is a CRIMINAL OFFENSE subject to criminal penalties. I hereby also waive the Federal statute of limitations defense in regards to the generation and use of discrete emission credits.         Signature       Mathematical statements         Title       Air Program Manager, Gulf Coast							

## **Calculation Description**

The Notice of Intent to Use DERCs is requesting the use of up to 10 DERCs (plus the additional 10 percent environmental contribution) for the period beginning January 1, 2016 through December 31, 2016.

 $(\overline{\phantom{x}})$ 

## **Facility Information**

The following provides the TCEQ Account Number, RN, CN, and Title V Permit Number for the facility affected by this notification.

Site Name	TCEQ Account	Regulated Entity	TCEQ Customer	Permit
	No.	No.	No.	#
T.H. Wharton Electric Generating Station	HG-0357-S	RN100542885	CN603207218	O-00077

Facility	EPN	FIN
	THWGT31	GT 31
	THWGT32	GT 32
	THWGT33	GT 33
	THWGT34	GT 34
	THWGT41	GT 41
	THWGT42	GT 42
T.H. Wharton	THWGT43	GT 43
(HG-0357-S)	THWGT44	GT 44
	THWGT51	GT 51
	THWGT52	GT 52
	THWGT53	GT 53
	THWGT54	GT 54
	THWGT55	GT 55
	THWGT56	GT 56

# T.H. Wharton - Emission Point Nos. and FINs

.



NRG Texas Power LLC 1201 Fannin Street Houston, TX 77002

## **CERTIFIED MAIL -- RETURN RECEIPT REQUESTED**

November 12, 2015

Ms. Lindley Anderson Texas Commission on Environmental Quality Emission Banking and Trading Program, MC-206 P.O. Box 13087 Austin, TX 78711-3087

## RE: Notice of Intent to Use Discrete Emission Credits (Form DEC-2) T.H. Wharton Electric Generating Station NRG Texas Power LLC Customer Reference No.: CN603207218 Regulated Entity No.: RN100542885

Dear Ms. Anderson:

NRG Texas Power LLC (NRG Texas) provides the enclosed information providing notice of intent to use Discrete Emission Credits (DERCs) for the T.H. Wharton Electric Generating Station.

NRG Texas would like to use the flexibility provided in 30 TAC 101.376(b)(1)(A) and 30 TAC 101.376(b)(1)(B) to set aside 10 tons from DERC certificate D-3156 for use pursuant to 30 TAC 116.115(b)(2)(F).

Note that DERC certificate D-3156 was set aside for the intended use period of 1/1/2015 - 12/31/2015.

The potential use of the additional 10 tons of NO<sub>x</sub> credits to cover any unexpected events would have no adverse impacts on the environment as the total increase would be less than 1% of the total annual NO<sub>x</sub> emissions for the T.H. Wharton Electric Generating Station.

If you have any questions, please contact Ms. Liz Kashi at (832) 357-5292 or by email at <u>liz.kashi@nrg.com</u>.

Sincerely,

Lindsay W. Little Air Program Manager, Gulf Coast

cc: Mr. Andy Goodridge, Air Section Manager, TCEQ Region 12, Houston (w/ attachments) Austin Field Operations Support Central Office, MC174, Austin (w/ attachments) NRG Energy, Inc. 1000 Main St. Houston, TX 77002 Attn: Liz Kashi

nrg



7012 3050 0000 9639 9897

neopost<sup>#</sup> FIRST-CLASS MAIL 11/12/2015 USTROST//CEI \$07.45⁰



ZIP 77002 041L11250335



TCEQ P.O. Box 13087 MC-206 Austin, TX 78711-3087 Attn: Ms. Lindley Anderson



## **Joe Thomas**

From:	Joe Thomas
Sent:	Wednesday, December 30, 2015 11:47 AM
То:	'lindsay.little@nrg.com'
Cc:	Lindley Anderson; Deric Patton
Subject:	FW: DERC intent to use projects for Greens Bayou and TH Wharton EGSs
Subject:	FW. DERC Intent to use projects for Greens bayou and fit whatton EGSS

**Importance:** 

High

Lindsay,

Liz Kashi's e-mail response indicates that you are acting for her while she is out of the office until March, so I am forwarding the e-mail below to you. Please contact me if you need additional information on the issues below.

Thanks Joseph Thomas Emission Banking and Trading Program Air Quality Division (512) 239-0012

## From: Joe Thomas

Sent: Wednesday, December 30, 2015 11:27 AM
To: 'Kashi, Liz'
Cc: Lindley Anderson; Deric Patton
Subject: DERC intent to use projects for Greens Bayou and TH Wharton EGSs
Importance: High

Liz,

I will be processing your intent projects to use DERCs for exceeding permit limits during 2016 for these two sites. However, I cannot process the new projects using the DERC certificates requested because those are currently set aside in the two intent-to-use projects for 2015. From our discussions for the 2015 intent-to-use projects, I recall that you intend to use the same certificates again, so I have been waiting for the 2015 use projects (Form DEC-3) to be filed. If you want the new projects done earlier, please let me know which alternate certificate you want to use for each site, but be advised that I cannot complete the latest Forms DEC-2 until after the Forms DEC-3 for 2015 have been received.

Please also remember that the rules for this type of use (at 30 TAC §101.376(b)(1)(A)) specify that DERCs cannot be used again for this purpose in the year following the a use for the same purpose. Therefore, if either site is actually using DERCs for NOx emissions exceeding permit limits during 2015, TCEQ will not be able to set aside DERCs again for this purpose until 2017.

Please let me know if you have any questions or concerns about my processing the latest Forms DEC-2 until after the pending Forms DEC-3 are processed and closed. If possible, please also let me know approximately when the Forms DEC-3 for 2015 might be filed.

Thanks Joseph Thomas Emission Banking and Trading Program Air Quality Division (512) 239-0012 ( )



## Joe Thomas

From:	Joe Thomas
Sent:	Wednesday, December 30, 2015 12:29 PM
То:	'Little, Lindsay'
Cc:	Lindley Anderson; Deric Patton
Subject:	RE: DERC intent to use projects for Greens Bayou and TH Wharton EGSs (re-sent because I left out one point)

## Lindsay,

You understanding is correct of what Liz and I discussed. As long as the 2015 use (on Form DEC-3) is zero, the 2016 intent (From DEC-2) can be approved. You can file the 2015 Form DEC-3 for a site up until March 30, 2016 (i.e., 90 days after 12/31/2015) but filing earlier will allow us to process the 2016 intent project faster. I have both projects on hold until 1/18/2016 to allow time for the Forms DEC-3 to be received and processed (I cannot set aside the DERCs again until they are released for the 2015 period) and will extend the hold if needed. If I remember correctly, the "no adverse impacts" modeling does not need to be redone for 2016 as long as there have been no permit changes since that modeling was done for 2015, but I need to confirm this with Air Permits (the reviewer is out of the office right now). I will let you know if there is any issue for the modeling as soon as I hear. If there has been a permit amendment or alteration for either site, please let me know at your earliest convenience.

Please also note that DERCs cannot be used until the Form DEC-2 for 2016 is processed and approved. My recollection was that Liz did not consider this to be a problem because any exceedance of permit limits should not occur until later in the year. However, this issue was the main reason that Liz indicated that the Forms DEC-3 would be submitted quickly, just in case the use occurred earlier than expected.

Happy holidays to you also, and if you speak to Liz, please give her my best wishes.

Thanks Joseph Thomas Emission Banking and Trading Program Air Quality Division (512) 239-0012

From: Little, Lindsay [mailto:Lindsay.Little@nrg.com]
Sent: Wednesday, December 30, 2015 11:53 AM
To: Joe Thomas
Cc: Lindley Anderson; Deric Patton
Subject: RE: DERC intent to use projects for Greens Bayou and TH Wharton EGSs

Thanks Joe. Yes, I will handle these programs in Liz's absence. I have the 2015 Use filings ready to be filed on or around January 4<sup>th</sup>, as there will have been no DERCs used for these sites in 2015. In conversations that Liz had, I presume with you, she had the understanding that as long as we file the Use filing as quickly as possible in 2016 (and no DERCs were used), these certificates could be held over for the 2016 Intent to Use filings. Please let me know if this is not correct. Otherwise, we'll get those filings in at the beginning of the year.

Thanks! And Happy New Years to all! Lindsay

#### Joe Thomas

From:	Little, Lindsay <lindsay.little@nrg.com></lindsay.little@nrg.com>
Sent:	Wednesday, December 30, 2015 12:32 PM
То:	Joe Thomas
Cc:	Lindley Anderson; Deric Patton
Subject:	RE: DERC intent to use projects for Greens Bayou and TH Wharton EGSs (re-sent because I left out one point)

Hi Joe,

Thanks for the additional information. I agree with Liz that it's unlikely that DERCs would be needed until later in the year. Regardless, we will file as soon as practicable next week. Also, I can provide confirmation that there were no permit changes that would have impacted the previously conducted modeling. If additional analyses are required, let me know.

Thanks so much! Lindsay



Lindsay W. Little Air Program Manager, Gulf Coast 1000 Main St., Houston, TX 77002 (p) 832.357.5293 (c) 281.796.9507

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From: Joe Thomas [mailto:joe.thomas@tceq.texas.gov]
Sent: Wednesday, December 30, 2015 12:29 PM
To: Little, Lindsay
Cc: Lindley Anderson; Deric Patton
Subject: RE: DERC intent to use projects for Greens Bayou and TH Wharton EGSs (re-sent because I left out one point)

Lindsay,

You understanding is correct of what Liz and I discussed. As long as the 2015 use (on Form DEC-3) is zero, the 2016 intent (From DEC-2) can be approved. You can file the 2015 Form DEC-3 for a site up until March 30, 2016 (i.e., 90 days after 12/31/2015) but filing earlier will allow us to process the 2016 intent project faster. I have both projects on hold until 1/18/2016 to allow time for the Forms DEC-3 to be received and processed (I cannot set aside the DERCs again until they are released for the 2015 period) and will extend the hold if needed. If I remember correctly, the "no adverse impacts" modeling does not need to be redone for 2016 as long as there have been no permit changes since that modeling was done for 2015, but I need to confirm this with Air Permits (the reviewer is out of the office right now). I will let you know if there is any issue for the modeling as soon as I hear. If there has been a permit amendment or alteration for either site, please let me know at your earliest convenience.

Please also note that DERCs cannot be used until the Form DEC-2 for 2016 is processed and approved. My recollection was that Liz did not consider this to be a problem because any exceedance of permit limits should not occur until later in the year. However, this issue was the main reason that Liz indicated that the Forms DEC-3 would be submitted quickly, just in case the use occurred earlier than expected.

Happy holidays to you also, and if you speak to Liz, please give her my best wishes.

### Joe Thomas

From: Sent: To: Cc: Subject: Attachments: Little, Lindsay <Lindsay.Little@nrg.com> Monday, January 18, 2016 3:17 PM Joe Thomas Lindley Anderson RE: DERC Use Projects for TH Wharton EGS and Greens Bayou EGS 1.18.16 TCEQ AAR Registration Form.pdf

Hi Joe,

Please note that the attached AAR registration form will be submitted to Lindley's attention via certified mail tomorrow (since today is a post office holiday). My understanding is that all open NRG Texas Emissions Banking and Trading filings can now be processed. Please let me know if you need any additional information from me.

Thanks! Lindsav



Lindsay W. Little Air Program Manager, Gulf Coast 1000 Main St., Houston, TX 77002 (p) 832.357.5293 (c) 281.796.9507

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From: Joe Thomas [mailto:joe.thomas@tceq.texas.gov]
Sent: Thursday, January 14, 2016 10:26 AM
To: Little, Lindsay
Subject: RE: DERC Use Projects for TH Wharton EGS and Greens Bayou EGS

Lindsay,

Just in case you don't know, you can use one AAR form to designate Craig to multiple portfolios by using the extension page (link just below the form on the web page).

Joseph Thomas Emission Banking and Trading Program Air Quality Division (512) 239-0012

From: Little, Lindsay [mailto:Lindsay.Little@nrg.com]
Sent: Thursday, January 14, 2016 10:09 AM
To: Joe Thomas
Subject: RE: DERC Use Projects for TH Wharton EGS and Greens Bayou EGS

Hi Joe,

# Emission Sources - Maximum Allowable Emission Rates

## Permit Number 2094

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Emission Point No.	Source Name (2)	Air Contaminant Name (3)	Emission	Rates
(1)		An containinant Name (3)	lbs/hour	TPY (4)
THWGT-51	GE MS7001C 85MW Gas Turbine Generator Natural Gas Firing	NO <sub>x</sub>	217.4	952.0
		СО	125.0	547.4
	(5), (6), (8)	SO <sub>2</sub>	17.4	76.2
		РМ	15.2	66.6
		PM10	15.2	66.6
		PM <sub>2.5</sub>	15.2	66.6
		VOC	45.6	200.0
		NO <sub>x</sub> (7)	760.9	
THWGT-51	GE MS7001C 85MW Gas Turbine Generator Fuel Oil Firing	NO <sub>x</sub>	284.9	102.6
		СО	104.5	37.6
	(5), (6), (8)	SO₂	284.9 102	102.6
		РМ	38.0	13.7
		PM <sub>10</sub>	38.0	13.7
		PM <sub>2.5</sub>	38.0	13.7
		VOC	38.0	13.7
		NO <sub>x</sub> (7)	1304.4	

Air Contaminants Data

Emission Point No.	Source Name (2)		Emission Rates		
(1)		Air Contaminant Name (3)	lbs/hour	TPY (4)	
THWGT-52 GE MS7001C 85M Gas Turbine Generator Natural Gas Firing (5), (6), (8)	GE MS7001C 85MW	NO <sub>x</sub>	217.4	952.0	
	Generator	СО	125.0	547.4	
		SO <sub>2</sub>	17.4	76.2	
		РМ	15.2	66.6	
		PM <sub>10</sub>	15.2	66.6	
		PM <sub>2.5</sub>	15.2	66.6	
		VOC	45.6	200.0	
		NO <sub>x</sub> (7)	760.9		
THWGT-52	GE MS7001C 85MW Gas Turbine	NO <sub>x</sub>	284.9	102.6	
	Generator Fuel Oil Firing	СО	104.5	37.6	
	(5), (6), (8)	SO <sub>2</sub>	284.9	102.6	
		РМ	38.0	13.7	
		PM <sub>10</sub>	38.0	13.7	
		PM <sub>2.5</sub>	38.0	13.7	
		VOC	38.0	13.7	
		NO <sub>x</sub> (7)	1304.4		

# Emission Sources - Maximum Allowable Emission Rates

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# Permit Number 2094 Page 3

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<b>Emission Sources - Maximum</b>	Allowable Emission Rates
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Emission Point No.			Emissior	i Rates
(1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)
THWGT-53 GE MS7001C 85MW Gas Turbine Generator Natural Cas Firing	NO <sub>x</sub>	217.4	952.0	
		СО	125.0	547.4
	(5), (6), (8)	SO <sub>2</sub>	17.4	76.2
		РМ	15.2	66.6
		PM <sub>10</sub>	15.2	66.6
		PM <sub>2.5</sub>	15.2	66.6
		VOC	45.6	200.0
		NO <sub>x</sub> (7)	760.9	
THWGT-53	GE MS7001C 85MW Gas Turbine	NO <sub>x</sub>	284.9	102.6
	Generator Fuel Oil Firing	СО	104.5	37.6
	(5), (6), (8)		284.9	102.6
			38.0	13.7
		PM <sub>10</sub>	38.0	13.7
	PM <sub>2.5</sub> VOC NO <sub>x</sub> (7)	PM <sub>2.5</sub>	38.0	13.7
		VOC	38.0	13.7
		NO <sub>x</sub> (7)	1304.4	

Emission Point No.	Server a Marrie (a)		Emissio	n Rates
(1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)
	GE MS7001C 85MW Gas Turbine	NO <sub>x</sub>	217.4	952.0
	Generator Natural Gas Firing	со	125.0	547.4
	(5), (6), (8)	SO₂	17.4	76.2
		РМ	15.2	66.6
		PM <sub>10</sub>	15.2	66.6
		PM <sub>2.5</sub>	15.2	66.6
		VOC	45.6	200.0
		NO <sub>x</sub> (7)	760.9	
THWGT-54	GE MS7001C 85MW Gas Turbine	NO <sub>x</sub>	284.9	102.6
	Generator Fuel Oil Firing	СО	104.5	37.6
	(5), (6), (8) $SO_2$	SO <sub>2</sub>	284.9	102.6
		PM 38.0	13.7	
		PM <sub>10</sub>	38.0	13.7
	voo	PM <sub>2.5</sub>	38.0	13.7
		VOC	38.0	13.7
		NO <sub>x</sub> (7)	1304.4	

# Emission Sources - Maximum Allowable Emission Rates

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# Emission Sources - Maximum Allowable Emission Rates

Emission Point No.	Service Manager (c)		Emission	Rates
(1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)
THWGT-55 GE MS7001C 85MW Gas Turbine	NO <sub>x</sub>	217.4	952.0	
	СО	125.0	547.4	
	(5), (6), (8)	SO <sub>2</sub>	17.4	76.2
		РМ	15.2	66.6
		PM <sub>10</sub>	15.2	66.6
		PM <sub>2.5</sub>	15.2	66.6
		VOC	45.6	200.0
		NO <sub>x</sub> (7)	760.9	
THWGT-55	GE MS7001C 85MW Gas Turbine	NO <sub>x</sub>	284.9	102.6
	Generator Fuel Oil Firing	СО	104.5	37.6
	(5), (6), (8)	SO <sub>2</sub>	284.9	102.6
		РМ	38.0	13.7
		PM <sub>10</sub>	38.0	13.7
		PM <sub>2.5</sub>	38.0	13.7
		VOC	38.0	13.7
		NO <sub>x</sub> (7)	1304.4	

<b>Emission Sources -</b>	Maximum Allowable	e Emission Rates
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Emission Point No.			Emissior	ı Rates
(1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)
G G N	GE MS7001C 85MW Gas Turbine	NOx	217.4	952.0
	Generator Natural Gas Firing	СО	125.0	547.4
	(5), (6), (8)	SO <sub>2</sub>	17.4	76.2
		РМ	15.2	66.6
		PM <sub>10</sub>	15.2	66.6
		PM <sub>2.5</sub>	15.2	66.6
		VOC	45.6	200.0
		NO <sub>x</sub> (7)	760.9	
THWGT-56	GE MS7001C 85MW Gas Turbine Generator Fuel Oil Firing (5), (6), (8)	NO <sub>x</sub>	284.9	102.6
		СО	104.5	37.6
		SO2	284.9	102.6
		PM	38.0	13.7
		PM <sub>10</sub>	38.0	13.7
		PM <sub>2.5</sub>	38.0	13.7
		VOC	38.0	13.7
		NO <sub>x</sub> (7)	1304.4	
MSSFUG	Miscellaneous Maintenance	РМ	1.06	0.51
	Activities	PM <sub>10</sub>	1.06	0.51
	PM <sub>2.5</sub> VOC	PM <sub>2.5</sub>	1.06	0.51
NGFUG		VOC	280.69	2.38
	Natural Gas Piping Fugitives (9)	VOC	0.19	0.83

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
 (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

\_ NO<sub>x</sub> total oxides of nitrogen

Project Numbers: 188473 and 188475

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Permit Number 2094 Page 7

Emission Sources - Maximum Allowable Emission Rates

- $SO_2$  sulfur dioxide
- PM total particulate matter, suspended in the atmosphere, including  $PM_{10}$  and  $PM_{2.5}$
- $PM_{10}$  total particulate matter equal to or less than 10 microns in diameter, including  $PM_{2.5}$
- PM<sub>2.5</sub> particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Unless otherwise noted, the tpy emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.
- (6) Unless otherwise noted, the lb/hr emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.
- (7) This short term emission rate applies during periods of turbine MSS operations.
- (8) Emission rates when firing natural gas are based on and the facilities are limited to <u>8,760</u> hours per year per turbine. Emission rates when firing No. 2 fuel oil are based on and the facilities are limited to <u>720</u> hours per year per turbine.
- (9) Represents site-wide natural gas piping fugitives.

Date: <u>October 23, 2013</u>

Bryan W. Shaw, Ph.D., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



# **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Protecting Texas by Reducing and Preventing Pollution

January 27, 2016

Mr. Craig Eckberg Director, Environmental Services NRG Texas Power, LLC 1201 Fannin Street Houston, Texas 77002

Re: Notice of Intent to Use Discrete Emission Reduction Credits (DERC) T.H. Wharton Electric Generating Station Houston, Harris County Regulated Entity Number: RN100542885 Customer Reference Number: CN603207218 Portfolio Number: P3100

Dear Mr. Eckberg:

This letter is in response to NRG Texas Power, LLC's Form DEC-2 (Notice of Intent to Use Discrete Emission Credits) received on November 16, 2015 regarding the use of DERCs under 30 Texas Administrative Code (TAC) 101.376(b)(1)(A) for exceeding the nitrogen oxides (NO<sub>X</sub>) emission limits in permit 2094 for the period of January 27, 2016 through December 31, 2016. Please note that under the rule, the use period cannot begin until the intent to use the DERCs is approved, which could not be done until the use project for the 2015 control period (project 410440) was processed.

Upon review, we find that the notice and the credits to be used meet the requirements of 30 TAC \$\$101.370 through 101.379. For the above purpose in the use period, the use of up to 11.0 tons of NO<sub>X</sub> DERCs (including the required 10% environmental contribution of 1.0 ton) has been approved and set-aside. The DERCs required for this intent are set aside from DERC certificate D-3221.

Please remember that a Notice of Use of Discrete Emission Credits (Form DEC-3) must be submitted within 90 days of December 31, 2016, and that the start of the next use period may be delayed for the processing of this form if you want to use the same DERCs for this purpose during 2017. Please also remember that if there is any use of DERCs during 2016 under 30 TAC §101.376(b)(1)(A), no further use of DERCs at this site is allowed under the rule until 2018.

Thank you for your cooperation in this matter. If you have questions concerning this review or need further assistance regarding the banking program, please contact Joseph Thomas at (512) 239-0012 or write to the Texas Commission on Environmental Quality, Office of Air, Air Quality Division (MC-206), PO Box 13087, Austin, Texas 78711-3087.

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • www.tceq.texas.gov

Mr. Craig Eckberg Page 2 January 27, 2016

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

and Bym

David Brymer, Director Air Quality Division

DB/JT/dp

cc: Air Section Manager, Region 12 – Houston

Mr. Bob Allen, Director, Harris County Pollution Control Services Department, Pasadena Bureau Chief of Pollution Control and Prevention, Environmental Health Division, City of Houston

Ms. Liz Kashi, Environmental Specialist, NRG Texas Power, LLC, Houston

Project Number: 410373

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