

04/03/2003 ----- NSR PERMITS IMS- PROJECT RECORD -----

PROJECT#: 96793

PERMIT#: B549

STATUS: P

DISP CODE: C ✓

RECEIVED: 04/01/2003

PROJTYPE: BDRC

RENEWAL:

ISSUED DATE: 9/26/03 ✓

FEE DATE:

FEE AMT: \$ 0

STDX1/SP: 0

SUP-DISP DATE: 9/26/03 ✓

GROUP: EBTP

TEAMLDR: CHISM, RICHARD

Steve Sam ✓

AIR DERC\_101621449-96793\_

CE\_20030926\_Certification\_D1094

ISSUED TO: TXU GENERATION COMPANY LP

CUSTOMER REGISTRY ID: CN601178676

**PRIMARY CONTACT INFORMATION**

CONTACT TYPE: TECHNICAL CONTACT

NAME: MR DICK ROBERTSON

TITLE: AIR QUALITY MANAGER

PHONE: 214-812-8416 ext

FAX: 214-812-4395 ext

STREET: 1601 BRYAN STREET

CITY/STATE, ZIP: DALLAS, TX , 75201-3411

**PROJECT INFORMATION**

UNIT: DERC GENERATION FROM 1/1/02-12/31/02 @ STRYKER CREEK ELECTRIC STATION

SIC: 4911

REGION: 5

ACCOUNT: CJ0026J

REG ENTITY ID:

SITE NAME: STRYKER CREEK ELECTRIC STATION

COUNTY: CHEROKEE

CAPUNITS:

UNITTYPE:

CAPACITY:

CITY: JACKSONVILLE

LOCATION: 0

**PUBLIC NOTICE**

PUBLIC NOTICE REQUIRED?: PN1 ALT LANGUAGE: NO PN2 ALT LANGUAGE: NO

**EMISSION  
RATES**

TONS/YR REDUCTION	NOX	CO	VOC	PM	SO2	OTHER	TOTAL
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**PROJECT NOTES****TECHNICAL ACTIVITY HISTORY**

FA - PROJECT ISSUED :

TR - PROJECT  
RECEIVED :**PROJECT ATTRIBUTES****PROJECT LINK****PROJECTS/PERMITS VOIDANCE**

Robert J. Huston, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
Kathleen Hartnett White, *Commissioner*  
Margaret Hoffman, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

September 26, 2003

Mr. Dick Robertson  
Air Quality Manager  
TXU Generation Company, L.P.  
1601 Bryan Street  
Dallas, Texas 75201-3411

Re: Review of Discrete Emission Reduction Credits (DERCs) Generation  
Stryker Creek Electric Station  
Jacksonville, Cherokee County  
Regulated Entity Number: RN101621449

Dear Mr. Robertson:

This letter is in response to your Form DEC-1, entitled "Notice of Generation and Generator Certification of Discrete Emission Credits," dated March 28, 2003. We have determined that the information contained in your registration is complete. This review verifies that all information needed for credit review has been received and verified.

Enclosed is the DERC Certificate numbered D-1094, issued to TXU Generation Company, L.P., in the amount of 740.1 tons of nitrogen oxide discrete emission credits. This certificate has been deposited in the Texas Commission on Environmental Quality (TCEQ) Discrete Emissions Credit Registry. This certificate may be transferred or sold to another owner per the requirements of Title 30 Texas Administrative Code §§ 101.370 through 101.379. However, the certificate must be submitted to the TCEQ Discrete Emissions Credit Registry when ownership of the credits changes.

Please reference the regulated entity number noted in this letter for all of your future Banking and Trading correspondence.

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 Mr. Steve Sun at (512) 239-3554 or write to the Texas Commission on Environmental Quality, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-163), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in black ink, appearing to read "Dale L. Beebe Farrow".

Dale L. Beebe Farrow, P.E., Director  
Air Permits Division  
Office of Permitting, Remediation & Registration

DBF/SSS/pll

Enclosure

cc: Mr. Charles Murray, Air Section Manager, Region 5 - Tyler

Project Number: 96793

*The State of Texas*  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Certificate Number

D-1094



Number of Credits

740.1 TONS NOx

*Discrete Emission Reduction Credit Certificate*

This certifies that:  
TXU Generation Company, L.P.  
1601 Bryan Street  
Dallas, Texas 75201-3411

is the owner of 740.1 tons of nitrogen oxide (NOx) discrete emission reduction credits established under the laws of the State of Texas, transferable only on the books of the Texas Commission on Environmental Quality, by the holder hereof in person or by duly authorized Attorney, upon surrender of this certificate.

The owner of this certificate is entitled to utilize the discrete emission credits evidenced herein for all purpose authorized by the laws and regulations of the State of Texas and is subject to all limitations prescribed by the laws and regulations of the State of Texas.

Discrete Emission Reduction Generation Period: January 1, 2002-December 31, 2002

Generator Regulated Entity Number: RN101621449  
County of Generation: Cherokee

Generator Certificate: NA  
Generator Account No.: CJ-0026-J

September 26, 2003

Date

A handwritten signature in cursive script, reading "Margaret Hoffman".  
Executive Director  
Texas Commission on Environmental Quality

**DISCRETE EMISSION REDUCTION CREDITS (DERCs) VERIFICATION  
SOURCE ANALYSIS & TECHNICAL REVIEW**

Permit No:	M	Company:	TXU Generation Company LP
Project Type:	BDRC	Facility Name:	Stryker Creek Electric Station
Record No:	96793	City:	Jacksonville
Account No:	CJ-0026-J	County:	Cherokee
Reviewer:	Mr. Steve Sun		

**Project Overview**

TXU Generation company L.P., submitted a DEC-1 on March 28, 2003. The company is seeking to generate DERCs for NOx emission by implementing controls on two utility boilers FIN SC-B1 and SC-B2 at their Stryker Creek Electric Station. A total of 547.1 tons of NOx DERCs are being claimed on the application.

**Discrete Emission Reductions Summary**

TXU is claiming NOx DERCs from two 527 MW utility boiler. The company implemented boiler tuning techniques and installed low-NOx burners and over fire air system (see Generation Method for more details) in order to reduce NOx emissions. The strategy period is from 1/1/02 to 12/31/02. Both boilers were grandfathered facilities that received a SB7 permit in 2001. FIN SC-B2 was also issued a standard permit, Permit No. 43599, in 9/2002. The standard permit limited the boilers emissions to 10 year BACT of 0.100 lb/MMbtu.

The baseline emission period for the two units are 1999-2000 for SC-B1 and 1998-1999 for SC-B2. The site falls under the East and Central Regional State Implementation Plan (SIP) and the EI year used in the SIP demonstration was 1997 for utilities. The baseline emissions cannot exceed the emissions reported in emission inventory used for the SIP demonstration. The baseline emissions the company claimed for both boilers exceeded the SIP EI, so the baseline emissions for both units will be limited to the 1997 emission level.

The company submitted heat input and CEMS data to support baseline and strategy emissions. The level of activity and emission rate were verified with EPA's Acid Rain score card.

The total amount of NOx DERCs that are creditable will be 740.1 tons. This is different from the amount the company claimed in the application. The difference in the amount claimed and the amount creditable is due to an error in the baseline selection. In the application the company claimed a baseline of 2000-2001 for FIN SC-B2, however, the baseline for SC-B2 was already established to be 1998 - 1999 in the DERC application submitted in March 2002. The baseline cannot change for a facility using the same reduction strategy. The strategy for SC-B2 did not change, so the baseline has to remain from 1998 - 1999.

**Applicable Pollutants** ..... NOx

If VOC identify HAPs and Non HAPs

**Most recent year of emissions inventory used for SIP determination:** ..... 1997

**Generation Period:** ..... 2002

**Source:** ..... Mobile ☐ Stationary ☒

**Generation Area** ..... Attainment ☒ Non Attainment ☐

If in Dallas/Fort Worth Nonattainment area, identify ozone and non-ozone season.

**Baseline Period** ..... 1999-2000 for B1  
1998-1999 for B2

**Baseline Emission Factor**

Do Baseline emission factor exceed any applicable Federal, State, or authorized limit?

Yes ☐ No ☒

## Generation of Discrete Emission Credits:

**Generation Method:** The company implemented the following control techniques/technology:

FIN SC-B1

Air registers were automated as part of boiler tuning techniques.

FIN SC-B2

Low-NOx Burner Modification: Redesigning and installing new burner components on the existing burners which enhance low NOx combustion through fuel and air staging at the burner. By lowering the peak flame temperature, thermal NOx creation is reduced.

Over fire air system: An air-biasing technique which diverts a portion of the existing combustion air flow (up to 35%) away from the burners and up to air injection ports located above the top row of burners. The resulting air staging lowers thermal and fuel NOx by delaying the fuel and air mixing on a bulk furnace basis and reduces the peak flame temperature.

### Discrete Emission Reduction Calculation Methods

See attached table for detailed calculations. The DERCs can be calculated using the following example

FIN SC-B1

$$\begin{aligned} &= 3488700 \text{ MMBtu} \times 0.532 \text{ lb/MMBtu} - (3488700 \text{ MMBtu} \times 0.439 \text{ lb/MMBtu}) \div 2000 \text{ lbs} \\ &= 162.23 \text{ tons} \end{aligned}$$

### Control of Pollutant:

Check applicability of all state and federal requirements to verify that reduction is in excess. Note the potentially applicable sections and state reason for nonapplicability or amount of the reduction not surplus. Please identify the applicability/nonapplicability for each FIN.

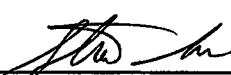
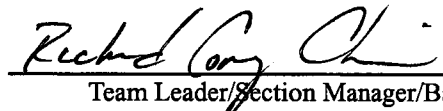
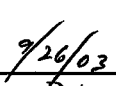
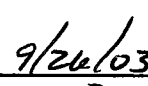
### NOx

FIN SC-B1 and SC-B2

NSPS ..... Exempt from NSPS D series  
30 TAC Chapter 117 ..... 117.135(1)(B)(i) after 5/1/2003

### Conclusion:

TXU Generation Company LP has demonstrated and supported reductions of NOx for the period of January 1, 2002 to December 31, 2002. Certified NOx DERCs in the amounts of 740.1 will be deposited in the TCEQ DERC Registry.

	
Project Reviewer	Team Leader/Section Manager/Backup
	
Date	Date

Account: CI-0026-J

Company: TXU Generation Company - Stryker Creek

If SA > BA then (BER\*BA)-(SER\*SA)

If SA < BA then (BER\*BA)-(SER\*BA)

Pollutant NOx

Facility Name	FIN	EPN	Shutdown (Y/N)	Baseline Year	Baseline Years			Permit Limit		Permit Allowables	Emissions <sup>3</sup>	BE <sup>4</sup>
					Activity	BER <sup>1</sup>	RER <sup>2</sup>	Activity	ER			
	SC-B1	SC-S1A	N	1999	4167444	0.559					1164.80	1164.80
		SC-S1B		2000	5203388	0.599					1558.41	1558.41
	SC-B2	SC-S2A	N	1998	20596421	0.160					1647.71	1647.71
		SC-S2B		1999	22778488	0.148					1685.61	1685.61

1 BER - baseline emission rate

2 RER - most stringent emission rate (regulatory, permit, ..)

3 Actual emissions - (BA) x (lower of BER or RER)

4 BE - The lowest of Actual Emission or permit

5 BE<sub>avg</sub> - The average of the lowest emissions (actual emission or permit) of the two baseline years

6 BE - The lower of BE<sub>avg</sub> or SIP EI

BEavg <sup>5</sup>			SIP EI 1997			BE <sup>6</sup>			Strategic Activity			DERCS (tons)
Activity	ER	Tons	Tons	Activity	ER	Activity	ER	Tons	Activity	SER	BA ~ SA	
		1361.61	928.00	3488700	0.532	3488700	0.532	928.00	750807	0.439	162.23	162.2
		1666.66	1388.00	18410478	0.151	18410478	0.151	1388.00	10547799	0.088	577.94	577.9

740.10

$$? \quad 18,410,478 (0.151 - 0.088) \div 2000 = 579.9$$

**Steve Sun - March 2003 TXU East System DERC Submittal**

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**From:** <crobins4@TXU.COM>  
**To:** <SSun@tceq.state.tx.us>  
**Date:** 9/15/2003 3:39 PM  
**Subject:** March 2003 TXU East System DERC Submittal  
**CC:** <dick\_robertson@txu.com>, <clark.reed@txu.com>

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Steve,

Per your request, additional information is being provided regarding the installation of NOx control techniques supporting TXU's March 2003 East System DERC submittal. It is important to note that TXU continually tunes and optimizes NOx reduction equipment to maintain boiler performance. A single malfunctioning burner can significantly increase the overall boiler NOx emissions. In addition, activities are performed to improve or enhance NOx reduction. These activities include boiler tuning, burners-out-of-service firing, reduced excess air usage, fuel biasing, control system optimization, fuel & air balancing and operational enhancements. Therefore, in addition to control equipment, continual system optimization is performed.

Listed below are your questions and the corresponding TXU response. If you require clarification, please contact me via e-mail or by phone at 214.812.3324.

Thanks for your assistance!

Stryker Creek Unit 1

TCEQ Question: When were the low NOx burners installed? The generation period will be from the time the low NOx burners were implemented to December 2002

TXU Response: The low NOx burner modifications were installed in January of 2003. Prior to this installation, the air register controls were automated in November of 2001. The boiler burner system was later tuned and optimized when the unit became available. Therefore, the generation period should be January 2002 through December 2002.

Valley Unit 1

TCEQ Statement: Since the OFA system was placed into service in February 2002 the generation period will have to be adjusted to February - December 2002.

TXU Response: The Low NOx Burner modifications and OFA were installed in May, 2001. The LNB system was placed in service at that time, however, the OFA system was not placed in service and tuned until February, 2002. Therefore, the generation period should be January 2002 through December 2002.



## Tradinghouse Unit 1.

TCEQ Statement: Since the IFGR was not implemented until May 2002. We will have to adjust the generation period to May - December 2002.

TXU Response: The IFGR, LNB and OFA systems were installed in May, 2001. The LNB and OFA systems were placed in service at that time. However, the IFGR system was not placed in service and tuned until May, 2002. Therefore, the generation period should remain as January 2002 through December 2002.

## Lake Creek Unit 2

TCEQ Question: When was the BOOS firing implemented in 2002? The generation period will be from the time the BOOS was implemented to December

TXU Response: With the approach of deregulation and increased competition, Lake Creek Unit 2 experienced more cyclic duty in 2001. Efforts to improve the unit's operation at low loads were initiated during the later part of 2001. Low load operation requires fewer burners in service and different burner firing patterns were tried. Successful BOOS firing patterns were determined which also resulted in reducing the NOx emissions. Therefore, the generation period should be January 2002 through December 2002. Additional BOOS firing testing was completed with success in August of 2003. Whenever an improved and repeatable BOOS firing pattern is found, it becomes part of the unit's operating procedures. The present operating procedures have incorporated the optimal pattern developed in 2003.

\*\*\*\*\*  
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\*\*\*\*\*

**TXU**

**TXU Business Services**  
1601 Bryan Street  
Dallas, TX 75201-3411  
Tel: 214 812 8416  
Fax: 214 812 4395

**J. R. (Dick) Robertson, P.E.**  
Air Quality Manager

March 28, 2003

Certified Mail# 7000 0600 0024 7111 5699

Mr. Steve Sun  
Texas Commission on Environmental Quality  
Emission Banking and Trading Program, MC-162  
P.O. Box 13087  
Austin, Texas 78711-3087

**RECEIVED**

APR - 1 2003

**Subject: Discrete Emission Reduction Credits for  
TXU East System Units**

**AIR PERMITS DIVISION**

Dear Mr. Sun:


Please find enclosed completed Texas Commission on Environmental Quality (TCEQ) Forms DEC-1 (Notice of Generation and Generator Certification of Discrete Emission Credits) for Discrete Emission Reduction Credits (DERCs) generated during the period from January 1, 2002 through December 31, 2002 for units at the following eight (8) power plants:

Plant Name	Unit No.	TCEQ Account No.
Big Brown SES	1, 2	FI-0020-W
Lake Creek	2	MB-0117-A
Martin Lake SES	2, 3	RL-0020-K
Monticello SES	1, 2, 3	TF-0013-B
Stryker Creek SES	1, 2	CJ-0026-J
Tradinghouse SES	1, 2	MB-0016-C
Trinidad SES	6	HM-0017-H
Valley SES	1	FB-0025-U

In addition to the completed Form DEC-1 for each of the above units, TXU is providing a summary of the DERCs generated for each unit (Attachment 1), monthly data for the calendar year 2002 strategy period (Attachment 2), and monthly data for baseline years 1997 through 2001 (Attachment 3).

If you have any questions regarding the enclosed information, please feel free to contact me at (214) 812-8416.

Sincerely,



James R. Robertson  
Air Quality Manager

Enclosures and Attachments



**Form DEC-1 (Page 1)**  
**Notice of Generation and Generator Certification**  
**of Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.374)**

UPDATE: The TNRCC is now requiring all applications to be accompanied by the new TNRCC CORE Data Form located at: <http://www.tnrcc.state.tx.us/permitting/projects/cr/index.html>.

A notice of generation and generator certification must be submitted to the Texas Natural Resource Conservation Commission (TNRCC) DERC Registry in accordance with the following requirements if the reduction is to be creditable and marketable:

<b>I. COMPANY IDENTIFYING INFORMATION</b>		
A. Company Name: <b>TXU Generation Company LP</b>		
B. Owner or Operator of Generator Source: <b>TXU Generation Company LP</b>		
C. Plant/Site Name: <b>Stryker Creek Electric Station</b>		
D. Street Address: <b>Lake Striker approx. 20 miles east of Jacksonville</b>		
E. Nearest City: <b>Jacksonville</b>	F. Zip Code: <b>75766</b>	
G. County: <b>Cherokee</b>	H. Primary SIC: <b>4911</b>	
I. TNRCC Account No.: <b>CJ-0026-J</b>		
J. Telephone: <b>214-812-8416</b>	K. Fax: <b>214-812-4395</b>	
L. Mailing Address: <b>1601 Bryan Street</b>		
City: <b>Dallas</b>	State: <b>Texas</b>	Zip Code: <b>75201-3411</b>
<b>II. TECHNICAL CONTACT IDENTIFYING INFORMATION</b>		
A. Technical Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) <b>Dick Robertson</b>		
B. Technical Contact Title: <b>Air Quality Manager</b>		
C. Telephone: <b>214-812-8416</b>	D. Fax: <b>214-812-4395</b>	E. Email: <b>dick.robertson@txu.com</b>
F. Mailing Address: <b>1601 Bryan Street</b>		
G. City: <b>Dallas</b>	State: <b>Texas</b>	Zip Code: <b>75201-3411</b>
<b>III. CONTACT FOR SALE OF CERTIFICATE</b>		
A. Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) <b>Dick Robertson</b>		
B. Sale Contact Title: <b>Air Quality Manager</b>		
C. Telephone: <b>214-812-8416</b>	D. Fax: <b>214-812-4395</b>	E. Email: <b>dick.robertson@txu.com</b>
F. Mailing Address: <b>1601 Bryan Street</b>		
G. City: <b>Dallas</b>	State: <b>Texas</b>	Zip Code: <b>75201-3411</b>
<b>IV. Generation Period</b>		
<input checked="" type="checkbox"/> 12 months		Generation Period Start Date <b>01/01/02</b>
<input type="checkbox"/> Other _____ Days/months		Generation Period End Date <b>12/31/02</b>
<b>V. Generation Activity</b>		
<input type="checkbox"/> Shutdown <input checked="" type="checkbox"/> Additional Control <input type="checkbox"/> Other:		
Date of Shutdown: <b>_/_/_</b>		Date of Reduction: <b>_/_/_</b>



**Form DEC-1 (Page 2)**  
**Notice of Generation and Generator Certification**  
**of Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.374)**

**VI. EMISSIONS RATE DATA**

Attach documentation which demonstrates the basis for each value represented in the following table.

If  $SA > BA$ , then:  $(BER \cdot BA) - (SER \cdot SA) = \text{reduction}$

If  $SA < BA$ , then:  $(BER \cdot BA) - (SER \cdot BA) = \text{reduction}$

Emission Point No.	FIN	Air Contaminant	Calculation of DERCs					DERCs (T)
			Baseline Activity (units)	Baseline Emission Rate (units)	Strategy Activity (units)	Strategy Emission Rate (units)	Most stringent emission rate (units)	
SC-S1A SC-S1B	SC-B1	NO <sub>x</sub>	3,488,700 (mmBtu)	0.532 (lb/mmBtu)	3,488,700 (mmBtu)	0.439 (lb/mmBtu)	(lb/mmBtu)	161.7
SC-S2A SC-S2B	SC-B2	NO <sub>x</sub>	21,545,922 (mmBtu)	0.123 (lb/mmBtu)	21,545,922 (mmBtu)	0.088 (lb/mmBtu)	(lb/mmBtu)	385.4

**VII. Shutdown Emission Reduction Strategies**

Has production shifted from the shutdown facility to another facility in the same nonattainment area? ☐ Yes\* ☒ No  
 \*If Yes, DERC can not be claimed.

**VIII. VOC**

List Specific Compounds reduced:

Emission Point No	FIN	Name of Air Contaminant	DERCs (T)

**Form DEC-1 (Page 3)**  
**Notice of Generation and Generator Certification**  
**of Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.374)**

**VIII. Most Stringent Emission Rate**

Describe basis for most stringent emission rate: ☐ Permit \_\_\_\_\_ ☐ RACT \_\_\_\_\_ ☒ Other:

**30 TAC 117.104**

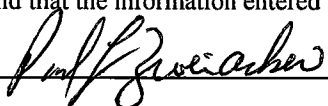
**IX. Protocol**

Protocol used to calculate DERC:

**Continuous Emissions Monitoring (CEM)**

**VIII. CERTIFICATION BY RESPONSIBLE OFFICIAL**

I, **Paul L. Zweiacker**, hereby certify that the emissions reductions claimed on this notice meet the requirements of 30 TAC Chapter 101, Subchapter H, Division 4. The emissions reductions on which the emission credits DERCs are based are real, surplus and not based on an emission reduction strategy that is prohibited by 30 TAC Chapter 101, Subchapter H, Division 4, and that the information entered in this application is correct and to the best of my knowledge and belief.

Signature  Signature Date **3/25/03**

Title **Environmental Permitting Manager**

**ATTACHMENT 1**

**SUMMARY OF DISCRETE EMISSIONS REDUCTION CREDITS (DERCs)  
TXU SYSTEM EAST – 2002 STRATEGY YEAR**

## Attachment 1

Summary of Discrete Emissions Reductions Credits (DERC)  
TXU System East - 2002 Strategy Period

		1997 - Baseline			1998 - Baseline			1999 - Baseline			2000 - Baseline			2001 - Strategy			2002 - Strategy			1997	1997 + 1998	1998 + 1999	1999 + 2000	2000 + 2001	Baseline			Strategy		DERCs (tons)
Plant Name	Unit ID	NOx (Tons)	Heat (mmBtu)	NOx Rate	NOx (Tons)	Heat (mmBtu)	NOx Rate	NOx (Tons)	Heat (mmBtu)	NOx Rate	NOx (Tons)	Heat (mmBtu)	NOx Rate	NOx (Tons)	Heat (mmBtu)	NOx Rate	NOx (Tons)	Heat (mmBtu)	NOx Rate	Tons NO <sub>x</sub>	Baseline years (average NOx Annual Tons)					Baseline Year	activity (mmBtu) average of 2 years	Ave Emission Rate (lb NOx/mmBtu)	activity (mmBtu)	
Big Brown	1	7,817	38,993,471	0.400	6,783	39,199,966	0.345	5,907	34,892,890	0.339	9,646	50,362,256	0.383	5,044	43,403,694	0.232	3,609	50,479,544	0.151	7,617	7,190	6,335	7,777	7,245	2000/2001	46,682,975	0.308	50,479,544	0.151	3405.1
	2	6,584	36,742,718	0.358	6,231	34,477,436	0.361	7,009	39,613,237	0.354	9,525	51,572,760	0.369	7,264	43,326,290	0.334	3,394	40,189,052	0.169	6,584	6,408	6,616	6,265	6,295	1997/1998	35,610,077	0.360	40,189,052	0.169	3014.5
Lake Creek	2	974	6,576,876	0.296	1,324	6,372,082	0.316	1,036	6,174,147	0.338	1,390	7,637,485	0.384	659	5,182,054	0.254	477	3,231,753	0.295	974	1,149	1,180	1,213	1,025	1997	6,576,876	0.296	3,231,753	0.295	3.4
Martin Lake	2	9,049	60,748,884	0.288	9,933	62,127,579	0.320	8,665	66,718,536	0.260	9,014	62,796,107	0.287	5,292	55,503,207	0.191	4,481	56,507,381	0.159	9,049	9,491	9,309	8,849	7,153	1999/2000	64,737,322	0.274	56,507,381	0.159	3729.6
	3	12,039	64,852,652	0.371	10,777	61,195,787	0.352	10,506	66,337,042	0.317	9,641	62,759,223	0.307	8,456	62,169,936	0.272	4,903	54,401,590	0.166	12,639	11,408	10,641	10,074	9,049	1997/1998	63,024,220	0.362	54,401,590	0.166	6182.6
Monticello	1	6,844	44,333,793	0.313	6,217	42,287,506	0.294	7,013	46,414,547	0.302	7,254	47,749,921	0.304	6,468	42,689,947	0.303	4,102	41,514,094	0.198	6,844	6,581	6,615	7,133	6,661	2000/2001	45,219,934	0.303	41,514,094	0.198	2391.7
	2	6,654	41,966,028	0.317	8,127	50,110,865	0.324	6,292	43,796,776	0.287	6,457	41,897,400	0.308	6,804	47,761,922	0.265	6,224	47,261,611	0.263	6,654	7,391	7,210	6,375	6,631	2000/2001	44,839,661	0.297	47,261,611	0.263	423.6
	3	8,290	68,400,090	0.242	6,459	57,565,151	0.224	7,190	64,160,668	0.224	6,614	55,575,333	0.238	5,791	55,997,020	0.207	5,593	60,149,606	0.186	8,290	7,375	6,824	6,902	6,203	1997/1998	62,982,621	0.233	60,149,606	0.186	1493.7
Stryker Creek	1	928	3,488,700	0.532	1,322	4,950,361	0.534	1,164	4,167,444	0.559	1,559	5,203,388	0.599	932	4,033,633	0.462	165	750,807	0.439	928	1,125	1,243	1,362	1,246	1997	3,488,700	0.532	750,807	0.439	161.7
	2	1,388	18,410,478	0.151	1,649	20,596,421	0.160	1,688	22,778,468	0.148	1,000	20,313,355	0.098	697	14,682,668	0.095	462	10,549,799	0.088	1,388	1,518	1,668	1,344	849	1999/2000	21,545,922	0.123	10,549,799	0.088	385.4
Tradinghouse	1	4,013	19,500,254	0.412	5,438	24,207,277	0.449	4,801	21,052,174	0.456	3,756	17,067,668	0.440	2,418	14,637,125	0.330	1,708	15,314,799	0.223	4,013	4,725	5,119	4,260	3,088	2000/2001	15,852,497	0.385	15,314,799	0.223	1286.9
	2	7,889	31,610,175	0.496	9,802	38,703,995	0.507	10,354	37,313,289	0.555	10,269	35,425,197	0.581	9,145	34,665,850	0.525	3,640	15,636,635	0.466	7,889	8,646	10,078	10,322	9,717	1997	31,610,175	0.496	15,636,635	0.466	484.3
Trinidad	6	596	5,066,916	0.196	665	6,064,211	0.219	564	5,080,162	0.222	415	4,409,841	0.188	447	4,603,460	0.194	253	2,519,348	0.201	596	631	614	489	431	1999/2000	4,745,032	0.205	2,519,348	0.201	9.8
Valley	1	579	4,537,681	0.255	770	5,144,344	0.299	682	4,397,127	0.310	915	5,631,686	0.325	604	3,571,605	0.338	256	2,147,845	0.238	579	675	726	799	759	1,997	4,537,681	0.255	2,147,845	0.238	37.9
Total DERCs (Tons): 23011.5																														

## 1997 EDR DATA FROM CEMS DATABASE

Unit	Date By Month	Total mmBtu	Total NOx lbs	lb NOx/MMBtu	NOx APPEN E
SC1	9701	179,783.6	95,438.6	0.53	0.0
SC1	9702	106,133.7	51,521.0	0.49	0.0
SC1	9703	3,246.3	785.4	0.24	0.0
SC1	9704	251,290.1	130,090.7	0.52	0.0
SC1	9705	101,495.6	47,398.7	0.47	0.0
SC1	9706	260,918.7	166,705.5	0.64	0.0
SC1	9707	727,451.0	377,844.7	0.52	0.0
SC1	9708	627,511.4	333,776.0	0.53	0.0
SC1	9709	558,587.2	325,546.0	0.58	0.0
SC1	9710	201,998.8	105,067.4	0.52	0.0
SC1	9711	229,897.4	132,289.5	0.58	0.0
SC1	9712	240,386.5	128,673.7	0.54	0.0
TOTALS		3,488,700.1	947.6		
SC2	9701	1,059,521.3	180,352.5	0.17	0.0
SC2	9702	0.0	0.0	#DIV/0!	0.0
SC2	9703	103,281.2	15,137.0	0.15	0.0
SC2	9704	1,151,005.8	159,440.5	0.14	0.0
SC2	9705	1,760,843.7	236,326.6	0.13	0.0
SC2	9706	1,947,364.0	283,686.2	0.15	0.0
SC2	9707	2,467,455.5	372,585.1	0.15	0.0
SC2	9708	2,302,516.6	350,318.0	0.15	0.0
SC2	9709	2,033,122.4	311,782.5	0.15	0.0
SC2	9710	2,370,214.5	360,615.9	0.15	0.0
SC2	9711	2,130,812.1	340,035.3	0.16	0.0
SC2	9712	1,084,341.2	166,827.5	0.15	0.0
TOTALS		18,410,478.2	1,388.6		



**2003 Monthly Strategy Data  
Stryker Creek Unit 1**

UnitID	Date	NOx lbs	mmBtu	NO <sub>x</sub> Rate
SC01	01 2002	8,720.8	26,755.6	
SC01	02 2002	29,283.4	62,107.7	
SC01	03 2002	55,167.0	86,648.8	
SC01	04 2002	99,988.6	213,673.2	
SC01	05 2002	45,040.4	120,974.0	
SC01	06 2002	69,554.1	178,001.0	
SC01	07 2002	21,856.4	60,129.6	
SC01	08 2002	-	-	
SC01	09 2002	12.5	422.7	
SC01	10 2002	-	-	
SC01	11 2002	177.0	2,094.8	
SC01	12 2002	-	-	
	Annual	<u>329,800.2</u>	<u>750,807.4</u>	<u>0.439</u>

**2003 Monthly Strategy Data  
Stryker Creek Unit 2**

UnitID	Date	NOx lbs	mmBtu	NO <sub>x</sub> Rate
SC02	01 2002	16,029.3	196,617.2	
SC02	02 2002	72,949.2	823,321.6	
SC02	03 2002	106,776.7	1,030,300.1	
SC02	04 2002	90.0	4,386.9	
SC02	05 2002	848.4	15,234.0	
SC02	06 2002	111,675.0	1,307,980.4	
SC02	07 2002	115,400.1	1,417,977.6	
SC02	08 2002	154,472.1	1,787,778.9	
SC02	09 2002	95,936.3	1,110,298.5	
SC02	10 2002	98,006.0	1,193,255.3	
SC02	11 2002	100,570.2	1,179,092.7	
SC02	12 2002	50,780.2	483,555.8	
	Annual	923,533.3	10,549,799.0	0.09

# 1998 EDR DATA FROM CEMS DATABASE

Unit	Date By Month	Total mmBtu	Total NOx lbs	NOx APPEN E
SC1	9801	14,141.7	6,340.6	0.0
SC1	9802	36,221.4	21,777.5	0.0
SC1	9803	341,514.9	185,533.1	0.0
SC1	9804	124,456.6	72,197.9	0.0
SC1	9805	744,838.1	389,619.9	0.0
SC1	9806	810,422.6	411,351.2	0.0
SC1	9807	942,063.0	518,157.8	0.0
SC1	9808	832,717.9	445,408.1	0.0
SC1	9809	740,048.3	395,941.6	0.0
SC1	9810	112,689.8	59,025.9	0.0
SC1	9811	144,975.4	77,847.0	0.0
SC1	9812	106,271.5	61,015.8	0.0
TOTALS		4,950,361.2	1,322.1	
SC2	9801	1,249,683.4	187,997.6	0.0
SC2	9802	47,751.2	4,380.2	0.0
SC2	9803	1,747,657.6	291,225.5	0.0
SC2	9804	0.0	0.0	0.0
SC2	9805	2,223,613.0	364,070.9	0.0
SC2	9806	2,706,748.0	412,032.6	0.0
SC2	9807	2,883,863.8	463,013.2	0.0
SC2	9808	2,796,920.9	429,616.1	0.0
SC2	9809	2,625,284.3	405,296.5	0.0
SC2	9810	2,394,933.2	379,873.9	0.0
SC2	9811	421,861.4	72,528.2	0.0
SC2	9812	1,498,104.4	287,592.9	0.0
TOTALS		20,596,421.2	1,648.8	

# 1999 EDR DATA FROM CEMS DATABASE

Unit	Date By Month	Total mmBtu	Total NOx lbs	NOx APPEN E
SC1	9901	130,117.1	78,693.0	0.0
SC1	9902	6,278.3	3,243.8	0.0
SC1	9903	199,831.9	114,167.9	0.0
SC1	9904	416,442.3	231,760.4	0.0
SC1	9905	323,009.4	194,923.7	0.0
SC1	9906	552,987.8	282,148.5	0.0
SC1	9907	720,055.2	383,463.1	0.0
SC1	9908	869,469.3	467,562.7	0.0
SC1	9909	357,531.0	206,405.2	0.0
SC1	9910	247,325.5	155,135.9	0.0
SC1	9911	247,580.9	153,202.7	0.0
SC1	9912	96,814.5	56,991.2	0.0
TOTALS		4,167,443.2	1,163.8	
SC2	9901	1,047,081.5	174,842.8	0.0
SC2	9902	1,624,460.6	247,158.8	0.0
SC2	9903	2,640,442.2	418,741.9	0.0
SC2	9904	2,501,137.6	360,488.8	0.0
SC2	9905	1,935,067.3	283,685.4	0.0
SC2	9906	2,436,588.0	354,779.0	0.0
SC2	9907	2,714,876.5	391,086.4	0.0
SC2	9908	2,787,823.3	390,173.2	0.0
SC2	9909	2,545,543.7	366,266.2	0.0
SC2	9910	1,752,834.9	264,446.5	0.0
SC2	9911	47,946.4	5,469.1	0.0
SC2	9912	744,686.1	118,435.9	0.0
TOTALS		22,778,488.1	1,687.8	

**Stryker Creek Steam Electric Station**  
**TNRCC Account Number : CJ-0026-J**  
**Baseline Data for 2001**

	Total Heat Input (mmBtu)	Calc. NOx Mass (lb)	Weighted NOx Rate (lb/mmBtu)
<b>SC1</b>			
Jan	890,062	449,686	0.505
Feb	461,456	288,776	0.626
Mar	138,650	108,110	0.780
Apr	307,509	198,920	0.647
May	388,486	255,260	0.657
Jun	219,512	141,225	0.643
Jul	573,461	380,211	0.663
Aug	627,899	392,298	0.625
Sep	201,344	97,033	0.482
Oct	71,490	37,538	0.525
Nov	67,641	23,331	0.345
Dec	86,122	35,258	0.409
Annual Total	<u>4,033,632</u>	<u>2,407,647</u>	<u>0.597</u>
<b>SC2</b>			
Jan	2,011,955	191,297	0.095
Feb	1,186,335	105,134	0.089
Mar	248,111	22,712	0.092
Apr	1,010,878	98,214	0.097
May	1,695,811	157,524	0.093
Jun	2,058,357	176,154	0.086
Jul	2,336,065	222,835	0.095
Aug	2,231,478	235,534	0.106
Sep	1,502,710	149,146	0.099
Oct	-	0	-
Nov	249,799	23,838	0.095
Dec	151,169	10,797	0.071
Annual Total	<u>14,682,668</u>	<u>1,393,186</u>	<u>0.095</u>



**TXU Energy**  
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**Paul L. Zweacker, PH.D.**  
Director of Environmental Services

April 6, 2004

Certified: 7000 0600 0025 0812 7138

**Mr. S. Keller Drozdick**  
Texas Commission on Environmental Quality  
Office of Permitting, Remediation and Registration  
Air Permits Division, MC-163  
P.O. Box 13087  
Austin, Texas 78711-3087

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APR 13 2004

**Subject: Discrete Emission Reduction Credits (DERCs)**  
**April 1, 2002 - March 31, 2003 (REVISED Application)**

AIR PERMITS DIVISION

Dear Mr. Drozdick:

In accordance with your guidance, enclosed are revised Texas Commission on Environmental Quality (TCEQ) Forms DEC-1 (Notice of Generation and Generator Certification of Discrete Emission Credits) for Discrete Emission Reduction Credits (DERCs) generated during the period from April 1, 2002 through March 31, 2003 for the following six (6) power plants:

Plant Name	TCEQ Account No.
Collin SES	CP-0065-C
Eagle Mountain SES	TA-0352-I
Lake Hubbard SES	DB-0249-H
North Lake SES	DB-0251-U
North Main SES	TA-0354-E
Parkdale SES	DB-0253-Q

This submittal is intended to replace the information submitted to the TCEQ in our letter dated June 25, 2003. The main difference in this revised submittal is that the DERCs for each of the above plants were calculated based on the 1998 - 1999 baseline year previously established. This submittal contains Form DEC-1 for each of the above plants (see attachment 1); a summary of the DERCs generated for each unit (see attachment 2) and monthly data for the baseline and strategy periods (see attachments 3 and 4, respectively). In addition, the monthly data have been segregated into ozone and non-ozone season periods for calculation.

If you have questions or require additional information, please contact Dick Robertson at (214) 812-8416.

Sincerely,

Paul L. Zweacker, Ph.D.

**ATTACHMENT 1**

**DERC FORMS**

**ATTACHMENT 2**  
**DERC SUMMARY TABLE**



**ATTACHMENT 3**  
**BASELINE PERIOD DATA**

FILED  
APR 13 2004