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

PROJECT#: 96796 PERMIT#: **B552** STATUS: **P** DISP CODE: C ✓

RECEIVED: **04/01/2003** PROJTYPE: **BDRC** RENEWAL: ISSUED DATE: 10/8/03 ✓

FEE DATE: FEE AMT: $ 0 STDX1/SP: 0 SUP-DISP DATE: 10/8/03 ✓

GROUP: EBTP

TEAMLDR : ~~CHISM, RICHARD~~ Steve Sun ✓

AIR DERC_102285855-96796_CE_20031008_Certification_D1099

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 @ VALLEY ELECTRIC STATION

SIC: 4911 REGION: 4 ACCOUNT: **FB0025U** REG ENTITY ID: **RN102285855**

SITE NAME: VALLEY STEAM ELECTRIC STATION STATION

COUNTY: FANNIN CAPUNITS: UNITTYPE:

CAPACITY: CITY: SAVOY

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

PROJECT NOTES

TECHNICAL ACTIVITY HISTORY

FA - PROJECT ISSUED : TR - PROJECT RECEIVED :

PROJECT ATTRIBUTES

PROJECT LINK

PROJECTS/PERMITS VOIDANCE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 8 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
Valley Steam Electric Station
Savoy, Fanin County
Regulated Entity Number: RN102285855

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-1099, issued to TXU Generation Company, L.P., in the amount of 39.0 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,

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

DBF/SSS/pll

Enclosure

cc: Mr. Tony L. Walker, Air Section Manager, Region 4 - Fort Worth
Mr. Cedric Robinson, TXU Energy, Dallas

Project Number: 96796

The State of Texas

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Certificate Number

D-1099

Number of Credits

39.0 TONS NOx

Discrete Emission Reduction Credit Certificate

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

is the owner of 39.0 tons of nitrogen oxide (NOx) discrete emission 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 No.: RN102285855
County of Generation: Fannin

Generator Certificate: NA

October 8, 2003

Date

Margaret Hoffman

Executive Director
Texas Commission on Environmental Quality

DISCRETE EMISSION REDUCTION CREDITS (DERCs) VERIFICATION TECHNICAL REVIEW

Permit No:	B552	Company:	TXU Generation Company LP
Project Type:	BDRC	Facility Name:	Valley Electric Station
Record No:	96796	City:	Savoy
Account No:	FB-0025-U	County:	Fannin
Reviewer:	Mr. Steve Sun		

Project Overview

TXU Generation company L.P., submitted a DEC-1 on March 27, 2003. The company is seeking to generate DERCs for NOx emission by implementing controls on a utility boiler FIN VA-B1 at their Valley Electric Station. A total of 37.9 tons of NOx DERCs are being claimed on the application.

Discrete Emission Reductions Summary

TXU is claiming NOx DERCs from a 199 MW gas utility boiler. The company implemented combustion optimization techniques prior to 2001 in order to reduce NOx emissions. The strategy period is from 1/1/02 to 12/31/02. The boiler is a grandfathered facility that received a SB7 Permit in 2001.

The baseline emission period is 1999 and 2000. 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 FIN VA-B1 exceeded the SIP EI so the baseline emissions for that unit will be limited to the 1997 emission level. The company submitted heat input and CEMS data to support the 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 39.0 tons. This is different from the amount the company claimed in the application. The difference is due to the calculation and rounding.

Applicable Pollutants ..... NOx

If VOC identify HAPs and Non HAPs

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

Generation Period: ..... 1/1/2002 - 12/31/2002

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 VA-B1

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 VA-B1

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 VA-B1

= 4537681 MMBtu x 0.255 lb/MMBtu - (4537681 MMBtu x 0.238 lb/MMBtu) ÷ 2000 lbs
= 39.02 tons
= **39.0 tons**

Control Requirements:

NOx

FIN VA-B1

NSPS ..... Exempt from NSPS D series
30 TAC Chapter 117 ..... 117.134(c) - 0.7 lb/MMbtu
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 39.0 will be deposited in the TCEQ Discrete Emissions Credits Registry.

	10/6/03		10/8/03
Project Reviewer	Date	Team Leader/Section Manager/Backup	Date

Account: FB-0025-U
Company: TXU Generation Company - Valley House Station

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	BE[4]
					Activity	BER[1]	RER[2]	Activity	ER			
	VA-B1	VA-B1SA	N	1999	4397127	0.310					681.55	681.55
		VA-B1SB		2000	5631686	0.325					915.15	915.15

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_{avg} - The average of the lowest emissions (actual emission or permit) of the two baseline years
6 BE - The lower of BE_{avg} or SIP EI

BEavg[5]			SIP EI (1997)			BE[6]			Strategic Activity			DERCS (tons)
Activity	ER	Tons	Tons	Activity	ER	Activity	ER	Tons	Activity	SER	BA ~ SA	
5014406.5	0.3175	798.35	579.00	4537681	0.255	4537681	0.255	579.00	2147845	0.238	39.02	39.00

39.00

Steve Sun - March 2003 TXU East System DERC Submittal

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>

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 aetivities 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.

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

Subject: Discrete Emission Reduction Credits for TXU East System Units

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:

I. COMPANY IDENTIFYING INFORMATION		
A. Company Name: **TXU Generation Company LP**		
B. Owner or Operator of Generator Source: **TXU Generation Company LP**		
C. Plant/Site Name: **Valley Electric Station**		
D. Street Address: **2 mi. North of Savoy on FM 1752**		
E. Nearest City: **Savoy**	F. Zip Code: **75479**	
G. County: **Fammin**	H. Primary SIC: **4911**	
I. TNRCC Account No.: **FB-0025-U**		
J. Telephone: **214-812-8416**	K. Fax: **214-812-4395**	
L. Mailing Address: **1601 Bryan Street**		
City: **Dallas**	State: **Texas**	Zip Code: **75201-3411**

II. TECHNICAL CONTACT IDENTIFYING INFORMATION		
A. Technical Contact Name: (X Mr. __Mrs. __Ms. __Dr.) **Dick Robertson**		
B. Technical Contact Title: **Air Quality Manager**		
C. Telephone: **214-812-8416**	D. Fax: **214-812-4395**	E. Email: **dick.robertson@txu.com**
F. Mailing Address: **1601 Bryan Street**		
G. City: **Dallas**	State: **Texas**	Zip Code: **75201-3411**

III. CONTACT FOR SALE OF CERTIFICATE		
A. Contact Name: (X Mr. __Mrs. __Ms. __Dr.) **Dick Robertson**		
B. Sale Contact Title: **Air Quality Manager**		
C. Telephone: **214-812-8416**	D. Fax: **214-812-4395**	E. Email: **dick.robertson@txu.com**
F. Mailing Address: **1601 Bryan Street**		
G. City: **Dallas**	State: **Texas**	Zip Code: **75201-3411**

IV. Generation Period	
__X__ 12 months _____ Other _____ Days/months	Generation Period Start Date **01/01/02** Generation Period End Date **12/31/02**

V. Generation Activity	
☐ **Shutdown** ☒ **Additional Control** ☐ **Other:**	
Date of Shutdown: __/__/__	**Date of Reduction:** __/__/__

TNRCC

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*BA) - (SER*SA) = reduction

If SA < BA, then: (BER*BA) - (SER*BA) = reduction

Emission Point No.	FIN	Air Contaminant	Calculation of DERCs					
			Baseline Activity (units)	Baseline Emission Rate (units)	Strategy Activity (units)	Strategy Emission Rate (units)	Most stringent emission rate (units)	DERCs (T)
VA-B1SA VA-B1SB	VA-B1 VA-B1	NO_X	4,537,681 (mmBtu)	0.255 (lb/mmBtu)	4,537,681 (mmBtu)	0.238 (lb/mmBtu)	(lb/mmBtu)	37.9

VII. Shutdown Emission Reduction Strategies

Has production shifted from the shutdown facility to another facility in the same nonattainment area? ☐ Yes* **X** No

*If Yes, DERC can not be claimed.

VIII. VOC

List Specific Compounds reduced:

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

TNRCC

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 Strigent Emission Rate

Describe basis for most stringent emission rate: ☐ Permit_____ ☐ RACT_____ **X** 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 Paul L Zweiacker Signature Date 3/26/03

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		
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_x	Baseline years (*average* NOx Annual Tons)					Baseline Year	activity (mmBtu) average of 2 years	Ave Emission Rate (lb NOx/mmBtu)	activity (mmBtu)	Emission Rate (lb NOx/mmBtu)	DERCs (tons)
Big Brown	1	7,617	36,093,471	0.400	6,763	39,195,966	0.345	5,907	34,892,890	0.339	9,646	50,362,256	0.383	5,044	43,403,694	0.232	3,509	50,479,544	0.151	7,617	7,190	6,335	7,777	7,345	2000/2001	46,882,975	0.308	50,479,544	0.151	3405.1
	2	6,584	36,742,718	0.358	6,231	34,477,436	0.361	7,005	39,613,237	0.354	9,525	51,572,760	0.369	7,264	43,526,290	0.334	3,394	40,189,052	0.169	6,584	6,408	6,618	8,265	8,395	1997/1998	35,810,077	0.380	40,189,052	0.169	3014.5
Lake Creek	2	974	6,576,876	0.296	1,324	8,372,082	0.316	1,036	6,174,147	0.336	1,390	7,637,485	0.364	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	60,748,584	0.293	9,933	62,127,579	0.320	8,665	56,718,536	0.260	9,014	52,756,107	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	4,503	54,401,590	0.166	12,039	11,408	10,641	10,074	9,049	1997/1998	63,024,220	0.362	54,401,590	0.166	6182.6
Monticello	1	6,944	44,333,793	0.313	6,217	42,267,506	0.294	7,013	46,414,547	0.302	7,254	47,749,921	0.304	6,468	42,669,947	0.303	4,102	41,514,094	0.198	6,944	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	50,110,665	0.324	6,292	43,796,776	0.287	8,457	41,697,400	0.308	6,604	47,781,922	0.265	6,224	47,261,811	0.263	6,654	7,391	7,210	6,375	6,631	2000/2001	44,839,861	0.297	47,261,811	0.263	423.8
	3	8,290	68,400,090	0.242	8,459	57,565,151	0.224	7,190	64,160,668	0.224	8,614	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	1,386	18,410,478	0.151	1,649	20,596,421	0.160	1,668	22,778,488	0.148	1,000	20,313,355	0.098	697	14,582,668	0.095	462	10,549,799	0.088	1,386	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	4,601	21,052,174	0.456	3,758	17,067,868	0.440	2,418	14,637,125	0.330	1,708	15,314,799	0.223	4,013	4,725	5,119	4,280	3,088	2000/2001	15,852,497	0.385	15,314,799	0.223	1288.9
	2	7,889	31,810,175	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	0.528	3,649	15,636,635	0.466	7,889	8,846	10,078	10,322	9,717	1997	31,810,175	0.496	15,636,635	0.466	484.3
Trinidad	6	596	6,068,916	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

2003 Monthly Strategy Data
Valley Unit 1

UnitID	Date	NOx lbs	mmBtu	NO_X Rate
VA01	01 2002	28875.60	125518.90	
VA01	02 2002	64847.60	258208.20	
VA01	03 2002	56514.50	221891.70	
VA01	04 2002	94675.40	377029.80	
VA01	05 2002	40518.30	182867.20	
VA01	06 2002	62320.30	263077.30	
VA01	07 2002	46026.90	197709.50	
VA01	08 2002	46720.00	201499.10	
VA01	09 2002	41896.50	176264.10	
VA01	10 2002	20198.50	98147.30	
VA01	11 2002	2609.70	16725.40	
VA01	12 2002	6970.40	28906.00	
	Annual	512,173.70	2,147,844.50	0.238

1997 EDR DATA FROM CEMS DATABASE

Unit	Date By Month	Total mmBtu	Total NOx lbs	lb NOX/MMBtu	NOx APPEN E
VA1	9701	359,854.1	78,562.5	0.22	0.0
VA1	9702	78,920.6	16,720.6	0.21	0.0
VA1	9703	134,068.0	29,195.7	0.22	0.0
VA1	9704	333,356.7	73,136.6	0.22	0.0
VA1	9705	255,241.0	62,642.1	0.25	0.0
VA1	9706	385,134.9	94,988.4	0.25	0.0
VA1	9707	743,978.9	197,748.7	0.27	0.0
VA1	9708	699,417.5	183,665.0	0.26	0.0
VA1	9709	555,786.4	160,042.3	0.29	0.0
VA1	9710	423,260.7	107,691.0	0.25	0.0
VA1	9711	332,288.4	99,047.7	0.30	0.0
VA1	9712	236,374.0	57,734.1	0.24	0.0
TOTALS		4,537,681.1	580.6		

1998 EDR DATA FROM CEMS DATABASE

Unit	Date By Month	Total mmBtu	Total NOx lbs	NOx APPEN E
VA1	9801	128,681.7	27,615.9	0.0
VA1	9802	251,150.7	55,307.0	0.0
VA1	9803	425,142.4	105,408.6	0.0
VA1	9804	27,731.7	7,131.1	0.0
VA1	9805	627,624.1	181,342.6	0.0
VA1	9806	742,087.0	254,588.5	0.0
VA1	9807	886,740.6	302,033.4	0.0
VA1	9808	766,315.8	221,436.7	0.0
VA1	9809	575,779.1	187,043.2	0.0
VA1	9810	302,231.2	90,097.5	0.0
VA1	9811	187,048.9	49,957.8	0.0
VA1	9812	223,810.2	58,494.5	0.0
TOTALS		5,144,343.5	770.2	

1999 EDR DATA FROM CEMS DATABASE

Unit	Date By Month	Total mmBtu	Total NOx lbs	NOx APPEN E
VA1	9901	259,708.5	67,207.7	0.0
VA1	9902	182,951.9	47,344.0	0.0
VA1	9903	268,037.5	84,645.0	0.0
VA1	9904	208,602.1	61,167.9	0.0
VA1	9905	297,798.3	88,239.8	0.0
VA1	9906	476,717.1	138,070.3	0.0
VA1	9907	729,954.1	244,150.1	0.0
VA1	9908	769,051.2	258,066.5	0.0
VA1	9909	454,905.1	155,065.5	0.0
VA1	9910	340,619.0	109,560.9	0.0
VA1	9911	179,973.4	50,664.9	0.0
VA1	9912	228,809.5	59,810.2	0.0
TOTALS		4,397,127.7	682.0	

Valley Steam Electric Station
TNRCC Account Number : FB-0025-U
Baseline Data for 2001

	Total Heat Input (mmBtu)	Calc. NOx Mass (lb)	Weighted NOx Rate (lb/mmBtu)
		VA1	
Jan	310,779	102,506	0.330
Feb	225,805	75,283	0.333
Mar	204,544	71,982	0.352
Apr	287,838	101,259	0.352
May	231,963	78,975	0.340
Jun	341,321	121,535	0.356
Jul	572,563	215,080	0.376
Aug	534,354	194,471	0.364
Sep	280,437	96,742	0.345
Oct	130,735	36,505	0.279
Nov	216,215	53,943	0.249
Dec	235,054	59,418	0.253
Annual Total	3,571,608	1,207,698	0.338