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September 2, 2010

Mr. Scott M. Sheplak, P.E.
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, FL 32301

Via FedEx
Airbill No. 7962 1079 5788

Re: **Request for Additional Information, File Number 0570039-045-AV**
Big Bend Power Station
Simple Cycle Combustion Turbine (SCCT) 4A and SCCT 4B Project
Railcar Unloading System Project

Dear Mr. Sheplak:

This letter serves as a response to the Department's request for additional information (RAI) received June 11, 2010, related to Tampa Electric Company's (TEC) Title V Air operation permit revision application for the Simple Cycle Combustion Turbine (SCCT) 4A and SCCT 4B Project (Aero Project) and the Railcar Unloading System Project (Railcar Project) at Big Bend Power Station. Please find below TEC's clarification of the areas identified by the Department.

Department Request #1

Are you requesting that both of the subject permit application projects be processed together? Simple Cycle Combustion Turbine (SCCT) 4A and SCCT 4B a.k.a "Aeroderivative CT-Generator Unit" Project, Permit No. 0570039-040-AC, Emissions Unit Identification Numbers (E.U. ID Nos.) -041 and -042

TEC Response #1

Tampa Electric is requesting that the Aero Project and the Railcar Project be processed together.

Department Request #2

What was the date this unit commenced operations?

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

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TEC Response #2

The Aero Project Unit 4A and 4B commenced operation on August 3, 2010, respectively. The Railcar Project commenced operation on December 15, 2010.

Department Request #3

Has the Combustion Turbine (CT) No. 1 been shutdown and removed from the site? If yes, what were the dates?

TEC Response #3

Combustion Turbine (CT) No. 1 was last fired during the month of July 2007. The electrical was disconnected on 10/26/2009 disabling CT No #1.

Department Request #4

Are specific condition numbers III. 37 and 38 of Permit No. 0570039-043-AC (amendment to Permit No. 0570039-040-AC), issued 08/20/2009, now obsolete?

TEC Response #4

Yes, On May 17, 2010, Tampa Electric had received the third consecutive monthly sample confirming that the actual sulfur content of the fuel oil is less than 0.0015% by weight. Attachment A contains a table of samples and results.

Department Request #5

Permit No. 0570039-040-AC, specific condition number III. 7 required the manufacturer's performance curves to be submitted, I was unable to locate them on file with the Department; please provide.

TEC Response #5

The performance curves were submitted on November 18, 2009, to the local compliance authority. Please find the performance curves in Attachment B.

Department Request #6

In the permit revision application it was indicated that the "Procedures for Startup and Shutdown" had been previously submitted on 08/21/2008. I was unable to locate them on file with the Department; please provide. {In the EPSAP, see Section III. Emissions Unit Information, J. Emissions Unit Additional Information, Field 4, Procedures for Startup and Shutdown (Required ...).

Note: I found the initial Clean Air Interstate Rule (CAIR) and initial Acid Rain part permit applications on file with the Department. They both had been received on August 22, 2008 with the air construction permit application for Project No. 0570039-040-AC. Railcar Unloading System Project. Permit No. 0570039-041-AC E.U. ID No. -010

TEC Response #6

The "Procedure for Startup and Shutdown" were not submitted with the initial application. They are included in Attachment C.

Department Request #7

Have the required compliance tests been completed? The EPSAP field was blank. {In the EPSAP, see Section III. Emissions Unit Information, I. Emissions Unit Additional Information, Field 6., Compliance Demonstration Reports/Records Compliance Report}.

TEC Response #7

The initial compliance test for the Aero Project Unit 4A and 4B were submitted on October 13, 2009, on natural gas and October 20, 2009, on oil showing compliance. The initial compliance test for the Railcar Project was submitted on March 5, 2010, showing compliance.

Department Request #8

The specific requirements applicable to the emissions units under this project need to be identified. Specific condition number III.1. of Permit No. 0570039-041-AC cites NSPS 40 CFR Subpart Y, Coal Preparation Plants. On page 7 of 8 of the permit, the permitting note also cites NSPS 40 CFR Subpart Y. The EPSAP field was blank. {In the EPSAP, see Section III. Emissions Unit Information, I. Emissions Unit Additional Information, Field I., Identification of Applicable Requirements. The instructions to the form on this item should be helpful.}.

TEC Response #8

The Railcar Unloading System Project is subject to the following applicable requirements:

Federal

40 CFR Part 60 Subpart Y—Standards of Performance for Coal Preparation Plants

State

62-296.320(4)(c)., F.A.C.: Unconfined Emissions of Particulate Matter

62-296.711 Materials Handling, Sizing, Screening, Crushing and Grinding Operations.

Power Plant Siting Certification PA 79-12

PSD Permit PSD-FL-040

In further communication with the agency the maximum air flow rate for the combustion turbines has been requested. The volumetric air flow rate is 430,737 acfm. Furthermore, TEC would like to take this opportunity to request the ability to exclude potential excess emissions for troubleshooting and/or tuning. TEC requests the following language be included in the Title V permit regarding SCCTA and SCCTB.

Tuning: "Tuning" means adjusting the combustors in accordance with the manufacturer's recommendations (or industry standards) or modifying the water-to-fuel ratio to affect a change in the post-combustion air emissions. Such tuning sessions are infrequent. Excess CEMS emissions data collected during tuning may be excluded from the compliance averages.

Excess CO Emissions Allowed – SIP: If excess CO emissions occur due to startup, shutdown, malfunction or tuning, CEMS data collected during such periods may be excluded from the compliance averages in accordance with the following requirements provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. All periods of excluded data shall be consecutive for each such episode and only data obtained during the described episodes (startup, shutdown, malfunction and tuning) may be excluded.

Tampa Electric Company appreciates the Department's consideration during this permitting process. If you have any questions, please contact me at (813) 228-4740.

Sincerely,

Byron T Burrows, P.E.
Manager - Air Programs
Environmental, Health & Safety

C/enc: Andrew Bass (FDEP)
Mara. Nasca (FDEP – SW)
Jerry Campbell (EPCHC)

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Attachment A

Big Bend 4.5 Million Gallon Tank	
Low Level Sulfur in Petroleum Products	
ASTM D-5453-00	
Date of Sample	% Sulfur
08/07/2009	0.0034
09/04/2009	0.0026
10/01/2009	0.0028
11/03/2009	0.0024
12/01/2010	0.0020
01/05/2010	0.0024
02/01/2010	0.0014
03/02/2010	0.0014
04/06/2010	0.0011
05/04/2010	0.0010

Limit = 0.0015 % Sulfur

Attachment B

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BIG BEND POWER STATION
HEAT INPUT FROM PIPELINE NATURAL GAS

SIMPLE CYCLE COMBUSTION TURBINES
SCCT 4 A&B

	Temp	MMBtu/hr
	0	326.9479
	20	331.4151
	32	333.7689
	40	335.0164
	55.4	338.1
	59	335.937
	80	321.3363
	95	310.8268
	100	307.5235
	120	293.349
Slope		-0.30654
Intercept		341.8572

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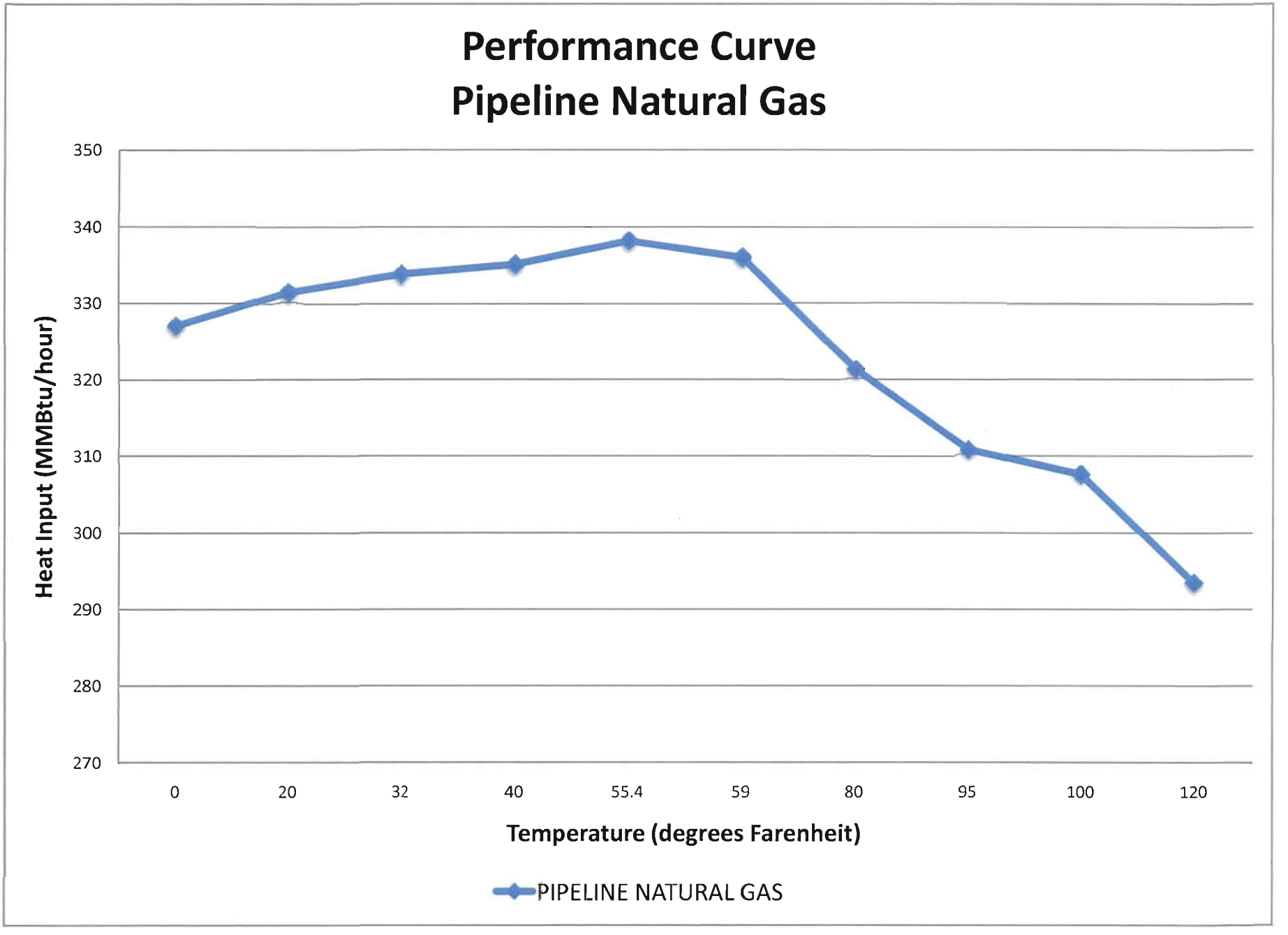
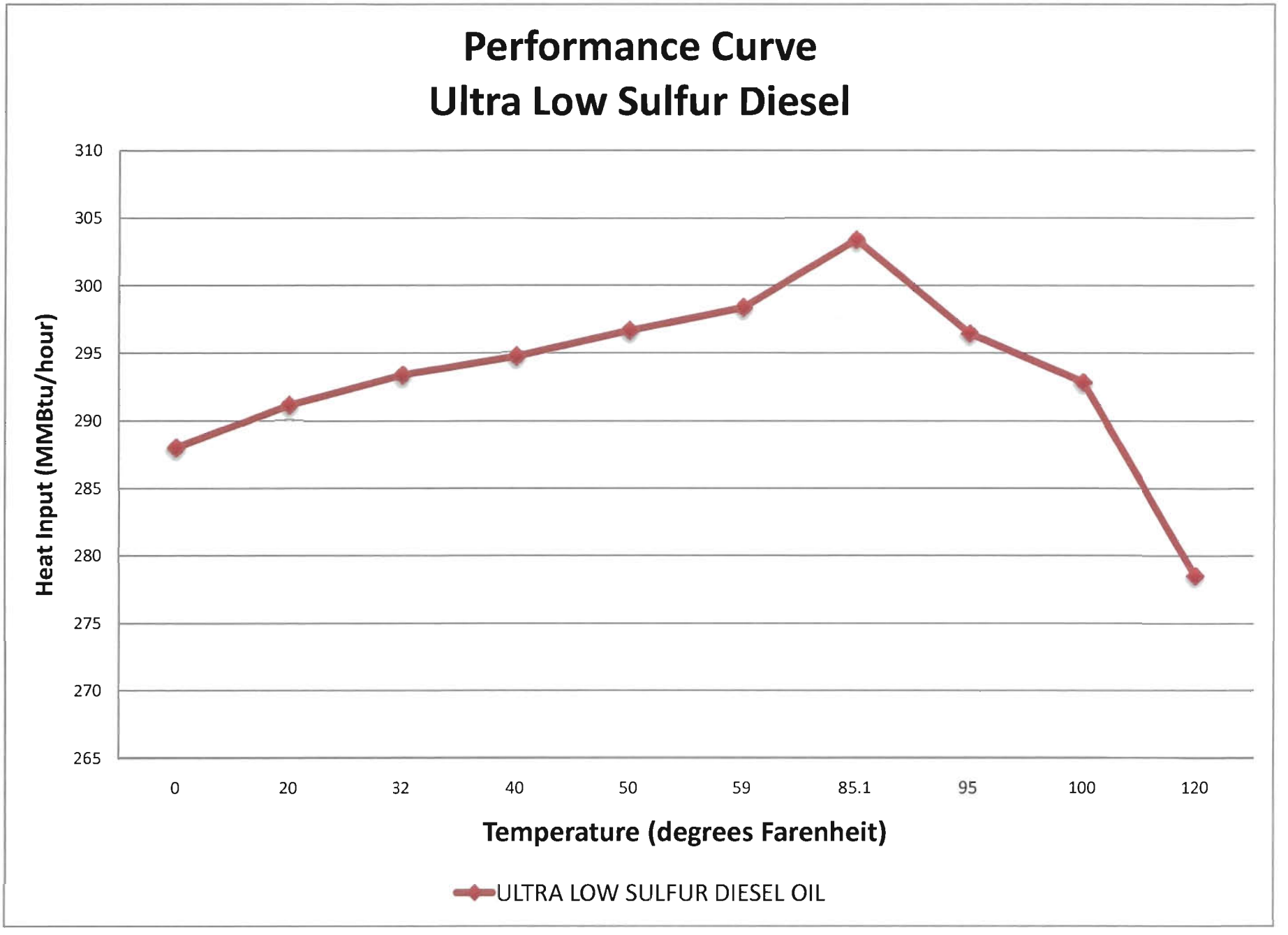
BIG BEND POWER STATION
HEAT INPUT FROM ULTRA LOW SULFUR DIESEL OIL

SIMPLE CYCLE COMBUSTION TURBINE
SCCT - 4

Temp	MMBtu/hr		
0	287.9		
20	291.1		
32	293.3		
40	294.7		
50	296.6		
59	298.3		
85.1	303.3		
95	296.4		
100	292.8		
120	278.5	0-85.1	85.1 - 120
Slope	-0.32149	0.18193	-0.71165
Intercept	294.1889	287.5928	363.9332
Correlation	-0.08693	0.999294	-0.99998

Because of the nature of operations on oil, two curves are used
One covers from 0 - 85.1 degrees, and one from 85.1 to 120 degrees.


Performance Curve
Pipeline Natural Gas
Heat Input (MMBtu/hour)
350
340
330
320
310
300
290
280
270
0
20
32
40
55.4
59
80
95
100
120
Temperature (degrees Farenheit)
PIPELINE NATURAL GAS


Performance Curve
Ultra Low Sulfur Diesel
Heat Input (MMBtu/hour)
310
305
300
295
290
285
280
275
270
265
0
20
32
40
50
59
85.1
95
100
120
Temperature (degrees Farenheit)
ULTRA LOW SULFUR DIESEL OIL

Attachment C

Start up Shutdown Procedures
Big Bend SCCT 4A and 4B

The following is a listing of procedures pertaining to the big Bend SCCT 4A and 4B (Aeros).

Pollution Control Equipment
In order to reduce Excess Emissions the Water Injection Pumps are programmed to start with the start of an AERO, this will require that at least 1 of the pumps remain in AUTO.

Once per shift (every 12 hrs) a pre-start inspection will be performed. This is a visual inspection to ensure equipment is ready to start as well as no issues developed during previous run.

Dispatch will contact the Big Bend Control Room Operator and request the start of an AERO Unit.

NOTE: Dispatch will tell the Big Bend Operator what the estimated MW need will be, this will allow the Big Bend operator to determine the number of engines to start.

NOTE: When the requested load requires both engines to be started begin a Dual Start for the first engine (A) and begin a Engine Staggered Start.

Big Bend Operations will maintain in control of the running units through the start process; operating within the following parameters:

1) Minimum Load (MW): 10 MW Single Engine
16 MW Dual Engine

2) Ramp Rate (MW): 12 MW per minute (5 MW ramping down)

3) Load (MW): Base Loaded, unless a specific MW is requested by Dispatch

4) Single Engine Operation: 10 - 22 MW
Dual Engine operation: > 22MW

5) Minimum run time 1 hour

6) Minimum off time 1 hour