

## APPLICATION TO MODIFY TITLE V PERMIT

### I. FACILITY IDENTIFICATION

1. Facility Name: SCA Cogen II
2. Parent Company: Sacramento Cogeneration Authority (SCA)  
(if different from Facility name)
3. Mailing Address: P.O. Box 15830, Mail Stop B355, Sacramento CA 95852-1830
4. Facility Location: 5000 83rd Street, Sacramento CA 95826
5. Type of Organization:  
 Corporation     Sole Ownership     Government     Partnership     Utility Company
6. Responsible Official: James Shetler Phone No.: (916) 732-6757  
Title: SCA Representative
7. Plant Site Contact: Jeff White Phone No.: (916) 379-2041  
Title: Plant Manager, Carson Energy Group

### II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input checked="" type="checkbox"/> Significant Permit Modification	97-12-01	June 5, 2008
<input type="checkbox"/> Minor Permit Modification		
<input type="checkbox"/> Administrative Amendment		

## APPLICATION TO MODIFY TITLE V PERMIT

### III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?:  Temporary Source  Voluntary Emissions Caps  
 Acid Rain Source  Alternative Operating Scenarios  
 MACT Requirements
2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.

SCA plans to modify gas turbine units 1A, 1B, and 1C by upgrading each gas turbine with LM6000PC Sprint/EFS technology. The equipment modifications will increase nominal power output of the facility by approximately 22 MW with corresponding improvements to efficiency, lower NOx emissions, and lower greenhouse gas (GhG) emissions intensity. Maximum rated heat input capacity of each gas turbine will increase from 450 to 500 MMBtu/hr higher heating value. The permit modification involves revisions to hourly, daily, and quarterly mass emission limits for NOx, CO, and SOx emissions. NOx concentration limits will decrease from 5 ppm to 2.5 ppm. ROC and PM10 emission limits remain unchanged. The permit modification also includes conditions that apply only during commissioning of each modified gas turbine.

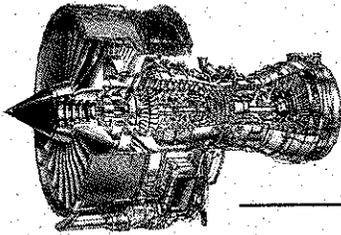
SCA requests that the modification of Title V Permit to Operate 97-12-01 incorporate Authority to Construct Nos. 20734 - 20736, issued February 8, 2008 by the SMAQMD. A copy of the Authority to Construct permits and associated Evaluation, dated January 25, 2008, are attached to this application. SCA further requests that the subject modifications to Title V Permit to Operate 97-12-01 become effective no later than April 30, 2008 to meet the schedule for commencing operation of upgraded gas turbine Unit 1A.

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.

  
\_\_\_\_\_  
Signature of Responsible Official

2/12/08  
\_\_\_\_\_  
Date

James Shetler, SCA Representative  
\_\_\_\_\_  
Print Name of Responsible Official

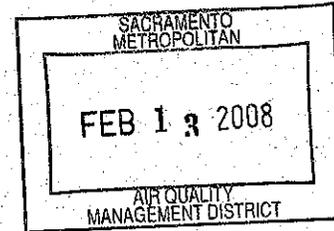


# Sacramento Cogeneration Authority

P.O.Box 15830, Sacramento, CA 95852-1830

SCA Cogeneration Project

February 13, 2008  
SCA 08-007



Jorge DeGuzman  
Program Supervisor, Permitting  
Stationary Source Division  
Sacramento Metropolitan Air Quality Management District  
777 12<sup>th</sup> Street, 3<sup>rd</sup> Floor  
Sacramento, CA 95814-1908

**Re: Sacramento Cogeneration Authority  
LM6000 Turbine Upgrade Project  
Application to Modify Title V Permit No. 97-12-01**

Dear Mr. DeGuzman:

The Sacramento Cogeneration Authority (SCA) operates two combined cycle gas turbines and one simple cycle gas turbine at its Sacramento facility pursuant to Title V Permit to Operate No. 97-12-01 issued by the Sacramento Metropolitan Air Quality Management District (SMAQMD). Each gas turbine is a General Electric LM6000, rated for permitting purposes at 450 MMBtu/hr heat input, and fueled exclusively with pipeline natural gas. The facility generates electrical power for the Sacramento Municipal Utility District and process steam for the neighboring Procter & Gamble manufacturing facility.

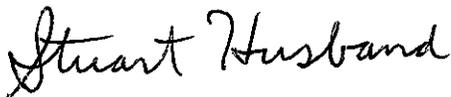
SCA proposes to upgrade the LM6000 gas turbines and make related facility improvements, which will increase the nominal electrical generating capacity of the facility by approximately 22 megawatts (MW). For permitting purposes, the rated heat input capacity of each gas turbine will increase to 500 MMBtu/hr, but the modifications will result in improvements to unit efficiency and heat rate. SCA proposes to modify several of the current equipment and facility air emission permit limits. Of note is a proposed decrease in the gas turbine oxides of nitrogen (NO<sub>x</sub>) emissions limit to 2.5 ppmvd compared to the current 5 ppmvd limit. These changes have already been incorporated into Authority to Construct Permit Nos. 20734-20736, issued to SCA by the SMAQMD on February 8, 2008.

In accordance with SMAQMD Rule 207, Title V – Federal Operating Permit Program, SCA submits the enclosed application to modify SCA's current Title V Permit No. 97-12-01. Furthermore, SCA requests that SMAQMD staff process the enclosed application with a target of no later than April 30, 2008 for SMAQMD staff to take final action issuing a

revised Title V permit to SCA. This schedule provides SCA with the opportunity to meet its goal of having Unit 1A gas turbine upgraded and operational by June 1, 2008. SCA understands that SMAQMD will invoice for actual staff time expended pursuant to Rule 301, Stationary Source Permit Fees.

Thank you for your attention to this matter. Please contact me at 732-6246 or Kevin Hudson, Senior Project Manager, at 732-7101 with questions and comments associated with the enclosed application.

Sincerely,



Stuart Husband  
Regulatory Compliance Coordinator  
Power Generation Department

Enclosure: Application to Modify Title V Permit No. 97-12-01

Cc: Bruce Nixon, SMAQMD  
Kevin Hudson  
Ross Gould  
Jeff Adkins, Sierra Research  
Jeff White, Carson Energy Group  
SCA Project Files 1600.03A  
SMUD Corporate Files