| **DOCKETED** |
|-----------------|-----------------|
| **Docket Number:** | 84-AFC-06C |
| **Project Title:** | Compliance - Application for Certification of Sycamore Cogeneration Project |
| **TN #:** | 214822 |
| **Document Title:** | Commission Order (89-0104-05a) Approving Increase in Heat Input Rate and Modify Emission Sampling |
| **Description:** | (PS00-86-014) Order Approving Amendments to Air Quality Conditions of Certification Nos. 4 & 19 Pertaining to KCAPCDâ€¢s Determination of Compliance |
| **Filer:** | Raquel Rodriguez |
| **Organization:** | California Energy Commission |
| **Submitter Role:** | Commission Staff |
| **Submission Date:** | 12/15/2016 3:02:17 PM |
| **Docketed Date:** | 12/15/2016 |
Sycamore Cogeneration Company (SCC) has submitted requests to amend the California Energy Commission (CEC) Decision for the Sycamore Cogeneration Project. The changes involve Air Quality Conditions of Certification Nos. 4 and 19.

Modification of Gas Turbine Heat Input Rates

Project Description A in the DOC indicates each gas turbine is rated at a "maximum" heat input rate of 825 million Btu/hr (MMBtu/hr). SCC is requesting a change in the description which states the maximum heat input rate shall not exceed 1,020 MMBtu/hr for each turbine, when fired on natural gas (SCC is not requesting any increase in the allowable heat input rate for oil firing). The turbine rating of 825 MMBtu/hr is a "nominal" rating. SCC is requesting that the condition be changed to reflect the maximum achievable heat input rate. Test results showed compliance with all permitted gas-fired emission limits. This change was originally requested from KCAPCD on April 27, 1988. The changes were approved by KCAPCD on July 1, 1988.

Modification of Emission Sampling Limits and Alignment of Compliance Testing Requirements with KCAPCD Policy/Procedure E1801

For emission sampling limits and compliance testing requirements in the DOC, SCC is requesting the following:

1. Change the carbon monoxide (CO) emission sampling limits for each Combustion Turbine Generator/Heat Recovery Steam Generator (CTG/HRSG) to match the limits set by KCAPCD for the gas-fired case. CO emission limits were modified by KCAPCD to make provisions for the higher CO emissions during startup and shutdown of the CTG's (392 lbm/day). This change does not result in impacts beyond those mitigation levels set in the original CEC decision. This change was originally requested of KCAPCD on April 27, 1988. The change was approved on July 1, 1988.
2. Align the emission compliance testing requirements with KCAPCD Policy/Procedure E1801. Policy/Procedure E1801 requires that an adequate amount of emission testing (startup and annual) of thermally-enhanced oil recovery operations be conducted to provide proof of compliance with emission sampling limits set by KCAPCD and to develop reliable emission factors. KCAPCD revised its compliance testing requirements as per Policy/Procedure E1801. This change was originally requested of KCAPCD on January 15, 1988. KCAPCD approved the change on February 24, 1988.

STAFF RECOMMENDATION

Staff concludes that the proposed amendments are noncontroversial in nature, and recommends Commission approval for the following reasons:

1. Staff analyzed the requests and concludes there would be no significant new or additional environmental impacts associated with approving the request;

2. Staff requested comments from all interested parties, and did not receive opposing comments from any interested party or agency;

3. The proposed change retains the intent of the Decision adopted by the Commission; and

4. The proposed change is based on information which was not reasonably or readily available to the parties prior to Commission certification.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendation and findings as its own, and Orders that the Sycamore Cogeneration Project Decision, 84-AFC-6, Air Quality Conditions of Certification Nos. 4 and 19 be amended as follows:

Modification of Gas Turbine Heat Input Rates

DOC Project Description A as published in the CEC Decision P800-86-014 should remain as is and Condition "n" should be added to the Operational Conditions to read as follows:

(Note: bold type indicates change)

n. Turbine maximum heat input rate shall not exceed 1,020 MMBtu/hr when fired on natural gas and maximum fuel flow rate shall not exceed 150 bbl/hr when fired on fuel oil without prior District approval. (Rule 210.1)
Modification of Emission Sampling Limits and Alignment of Compliance Testing Requirements with KCAPCD Policy/Procedure E1801

(Note: bold type indicates change)

1. The DOC Emission Sampling Limits should be changed as follows:

**GAS-FIRED:**

- **Particulates** - 5 lbm/hr (Rule 210.1 and 408)
- **Sulfur Compounds** - 0.5 lbm/hr (as SO2) (Rule 210.1 and 408)
- **Oxides of Nitrogen** - 0.6 lbm/hr (as SO4) (Rule 210.1 and 408)
- **Hydrocarbons** - 2.5 lbm/hr (Rule 210.1)
- **Carbon Monoxide** - 392 lbm/day (Rule 210.1)

**OIL-FIRED:**

- **Particulates** - 10 lbm/hr (Rule 210.1 and 408)
- **Sulfur Compounds** - 64.64 lbm/hr (as SO2) (Rule 210.1 and 408)
- **Oxides of Nitrogen** - 5.78 lbm/hr (as SO4) (Rule 210.1 and 408)
- **Hydrocarbons** - 140 lbm/hr (as NO2) (Rule 210.1 and 408)
- **Carbon Monoxide** - 12 lbm/hr (Rule 210.1)
- **Carbon Monoxide** - 21 lbm/hr (10 ppm, d 15% O2) (Rule 210.1)

2. The Compliance Testing Requirements should be changed as follows:

Compliance with emission limits shall be demonstrated in accordance with District policy #E1801 by District-witnessed officer sample collection by independent laboratory within 60 days after startup of this equipment and annually 60 days prior to permit anniversary date, and official test results and field data submitted within 30 days after collection. (Rule 108.1)

Date: January 4, 1989

Energy Resources Conservation and Development Commission

[Signature]

CHARLES R. IMBRECHT, Chairman
Mr. C.O. Myers
Sycamore Cogeneration Company
P.O. Box 80598
Bakersfield, CA 93380

Re: SCC AMENDMENT TO THE CEC DECISION, 84-AFC-6: AIR QUALITY CONDITIONS OF CERTIFICATION NOS. 4 AND 19 - MODIFICATION OF THE KERN COUNTY AIR POLLUTION CONTROL DISTRICT'S DETERMINATION OF COMPLIANCE

Dear Mr. Myers:

Attached you will find a copy of the California Energy Commission's "Order Approving Amendments to Air Quality Conditions of Certification Nos. 4 and 19 pertaining to KCAPCD’s Determination of Compliance". The order approves the following requests from SCC:

• Modification of Project Description A (Gas Turbine Heat Input Rates); and
• Modification of Emission Sampling Limits and Alignment of Compliance Testing Requirements with KCAPCD Policy/Procedure E1801

If you have any questions, please call me at (916)323-8958.

Sincerely,

SANDRA FLEISCHMANN
Compliance Project Manager
Energy Facility Siting and Environmental Protection Division

SF:la:Amendment.SCC

Enclosure

cc: M. Soares, SCC
    POS 84-AFC-6C
    Compliance Project File
POTENTIAL AMENDMENT: Modification of Gas Turbine Heat Input Rates  C/M LOG #: 88-1744 (a-g)

PROJECT: Sycamore  DOCKET DATE: 11/15/88  DATE TO STAFF: 11/17/88  DUE DATE TO CPM: 12/1/88

<table>
<thead>
<tr>
<th>SENIOR (Technical Areas)</th>
<th>DATE COMMENTS RECEIVED</th>
<th>AGREE WITH PROPOSAL</th>
<th>DISAGREE WITH PROPOSAL</th>
<th>ADDITIONAL DATA REQUIRED</th>
<th>COMMENTS/RECOMMENDED ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. Rygg</td>
<td>12/13</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R. Johnson</td>
<td>11/23</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z. Bohrer</td>
<td>12/5</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Brownell</td>
<td>11/23</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. Baker</td>
<td>11/30</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. McCuen</td>
<td>11/22</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Ogata</td>
<td>12/8</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>