<table>
<thead>
<tr>
<th><strong>Docket Number:</strong></th>
<th>00-AFC-14C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>El Segundo Power Redevelopment Project Compliance</td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
<td>203415</td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
<td>South Coast Air Quality Management District Title V Administrative Permit Revision</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
<td>Dee Hutchinson</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>Locke Lord LLP</td>
</tr>
<tr>
<td><strong>Submitter Role:</strong></td>
<td>Applicant Representative</td>
</tr>
<tr>
<td><strong>Submission Date:</strong></td>
<td>12/8/2014 2:51:06 PM</td>
</tr>
<tr>
<td><strong>Docketed Date:</strong></td>
<td>12/8/2014</td>
</tr>
</tbody>
</table>
November 25, 2014

Mr. George Piantka  
Director of Environmental Business  
NRG West  
5790 Fleet Street, Suite 200  
Carlsbad, CA 92008  

SUBJECT: El Segundo Power, LLC (SCAQMD ID No. 115663) – Title V Administrative Permit Revision

Dear Mr. Piantka:

Please find attached the revised Title Page, Table of Contents, Section D and Section H of your Title V Facility Permit. The revised sections reflect the approval of the administrative permit revision for issuing Permits to Operate for the following equipment that were previously issued Permits to Construct, and the inclusion of such equipment in Section D of your Facility Permit:

<table>
<thead>
<tr>
<th>A/N</th>
<th>Action</th>
<th>P/O No.</th>
<th>Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>470652</td>
<td>P/O</td>
<td>G33559</td>
<td>Gas Turbine No. 5</td>
</tr>
<tr>
<td>470656</td>
<td>P/O</td>
<td>G33558</td>
<td>Gas Turbine No. 7</td>
</tr>
<tr>
<td>470653</td>
<td>P/O</td>
<td>G33557</td>
<td>SCR/CO Catalyst No. 5</td>
</tr>
<tr>
<td>470654</td>
<td>P/O</td>
<td>G33556</td>
<td>SCR/CO Catalyst No. 7</td>
</tr>
</tbody>
</table>

Please review the attached sections carefully. Insert the enclosed sections into your Title V Facility Permit and discard the earlier versions. Questions concerning changes to your permit should be directed to Mr. Kenneth L. Laird at (909) 396-2527.

Sincerely,

Andrew Lee, P.E.  
Senior AQ Engineering Manager  
Energy/Public Services/Waste Management/Terminals Engineering and Compliance

Attachment

cc: Ed Pupka, SCAQMD Compliance  
Wenjun Qian, California Energy Commission
FACILITY PERMIT TO OPERATE

EL SEGUNDO POWER, LLC
301 VISTA DEL MAR
EL SEGUNDO, CA 90245

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By
Moheen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Revision #</th>
<th>Date Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Facility Information</td>
<td>9</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>B</td>
<td>RECLAIM Annual Emission Allocation</td>
<td>22</td>
<td>01/01/2014</td>
</tr>
<tr>
<td>C</td>
<td>Facility Plot Plan</td>
<td>TO BE DEVELOPED</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Facility Description and Equipment Specific Conditions</td>
<td>20</td>
<td>11/25/2014</td>
</tr>
<tr>
<td>E</td>
<td>Administrative Conditions</td>
<td>15</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>F</td>
<td>RECLAIM Monitoring and Source Testing Requirements</td>
<td>12</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>G</td>
<td>Recordkeeping and Reporting Requirements for RECLAIM Sources</td>
<td>13</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>H</td>
<td>Permit To Construct and Temporary Permit to Operate</td>
<td>23</td>
<td>11/25/2014</td>
</tr>
<tr>
<td>I</td>
<td>Compliance Plans &amp; Schedules</td>
<td>10</td>
<td>07/15/2011</td>
</tr>
<tr>
<td>J</td>
<td>Air Toxics</td>
<td>7</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>K</td>
<td>Title V Administration</td>
<td>8</td>
<td>01/18/2008</td>
</tr>
</tbody>
</table>

**Appendix**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Revision #</th>
<th>Date Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219</td>
<td>10</td>
<td>01/18/2008</td>
</tr>
<tr>
<td>B</td>
<td>Rule Emission Limits</td>
<td>7</td>
<td>01/18/2008</td>
</tr>
</tbody>
</table>
FACILITY PERMIT TO OPERATE
EL SEGUNDO POWER, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>ID No.</th>
<th>Connected To</th>
<th>RECLAIM Source Type/ Monitoring Unit</th>
<th>Emissions* And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process 1: INTERNAL COMBUSTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 2: GAS TURBINE POWER GENERATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>ID No.</th>
<th>Connected To</th>
<th>RECLAIM Source Type/ Monitoring Unit</th>
<th>Emissions* And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process 1: INTERNAL COMBUSTION</strong></td>
<td></td>
<td>C75</td>
<td>NOX: MAJOR SOURCE**</td>
<td>CO: 2 PPMV NATURAL GAS (4) (RULE 1703(a)(2)) - PSD-BACT, 10-7-1988; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(1)-BACT, 10-7-1988]; NOX: 15 PPMV NATURAL GAS (8) [40 CFR 60 Subpart KKKK, 7-6-2006]; PM: 0.01</td>
<td>A63.2, A99.7, A99.8, A99.9, A195.8, A195.9, A195.10, A327.1, A433.1, B61.2, D12.10, D29.8, D29.9, DR2.4, DR2.5, E193.2, K40.4, K67.5</td>
</tr>
<tr>
<td>GAS TURBINE, UNIT NO.5, NATURAL GAS, SIEMENS, MODEL SGT6-5000F RAPID-RESPONSE, COMBINED CYCLE, 2,096 MMBTU/HR AT 78 DEGREES F, WITH DRY LOW-NOX COMBUSTORS WITH A/N: 470652</td>
<td>D67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENERATOR, HEAT RECOVERY STEAM, UNFIRED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURBINE, STEAM, 67.7 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
## SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>ID No.</th>
<th>Connected To</th>
<th>RECLAIM Source Type/ Monitoring Unit</th>
<th>Emissions And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process 1: INTERNAL COMBUSTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GENERATOR, 219 MW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO OXIDATION CATALYST, UNIT NO. 5, BASF, 290 CUBIC FEET OF TOTAL CATALYST VOLUME</td>
<td>C75</td>
<td>D67 C76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/N: 470653</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A195.11,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D12.11,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D12.12,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D12.13,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E179.5,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E179.6,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E193.2</td>
</tr>
<tr>
<td>SELECTIVE CATALYTIC REDUCTION, UNIT NO. 5, CORMETECH, MODEL CM21HT, WITH 2,050</td>
<td>C76</td>
<td>C75 S78</td>
<td></td>
<td>NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]</td>
<td></td>
</tr>
<tr>
<td>CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT ; HEIGHT: 70 FT ; LENGTH: 24 FT 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN WITH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/N: AMMONIA INJECTION, GRID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STACK, NO. 5, HEIGHT: 210 FT ; DIAMETER: 20 FT 11 IN  A/N: 470652</td>
<td>S78</td>
<td>C76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

* (1) (1A) (1B) Denotes RECLAIM emission factor  
(2) (2A) (2B) Denotes RECLAIM emission rate  
(3) Denotes RECLAIM concentration limit  
(4) Denotes BACT emission limit  
(5) (5A) (5B) Denotes command and control emission limit  
(6) Denotes air toxic control rule limit  
(7) Denotes NSR applicability limit  
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
(9) See App B for Emission Limits  
(10) See section J for NESHAP/MACT requirements  

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
## FACILITY PERMIT TO OPERATE
EL SEGUNDO POWER, LLC

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>ID No.</th>
<th>Connected To</th>
<th>RECLAIM Source Type/ Monitoring Unit</th>
<th>Emissions* And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process 1: INTERNAL COMBUSTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAS TURBINE, UNIT NO. 7, NATURAL GAS, SIEMENS, MODEL SG76-5000F RAPID-RESPONSE, COMBINED CYCLE, 2,096 MMBTU/HR AT 78 DEGREES F, WITH DRY LOW-NOX COMBUSTORS WITH A/N: 470656</td>
<td>D68</td>
<td>C79</td>
<td>NOX: MAJOR SOURCE**</td>
<td>CO: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; PM: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5A) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; VOC: 2 PPMV/NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]</td>
<td>A63.2, A99.7, A99.8, A99.9, A195.8, A195.9, A195.10, A327.1, A433.1, B61.2, D12.10, D29.8, D29.9, D82.4, D82.5, E193.2, K40.4, K67.5</td>
</tr>
<tr>
<td>GENERATOR, HEAT RECOVERY STEAM, UNFIRED</td>
<td>TURBINE, STEAM, 67.7 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*  (1) (1A) (1B) Denotes RECLAIM emission factor
(3) Denotes RECLAIM concentration limit
(5A) (5B) Denotes command and control emission limit
(7) Denotes NSR applicability limit
(9) See App B for Emission Limits

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
## SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Equipment ID</th>
<th>Connected To</th>
<th>RECLAIM Source Type/Monitoring Unit</th>
<th>Emissions* And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERATOR, 219 MW</td>
<td>C79</td>
<td>D68 C80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO OXIDATION CATALYST, UNIT NO. 7, BASF, 290 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 470654</td>
<td>C80</td>
<td>C79 S82</td>
<td>NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]</td>
<td>A195.11, D12.11, D12.12, D12.13, E179.5, E179.6, E193.2</td>
<td></td>
</tr>
<tr>
<td>SELECTIVE CATALYTIC REDUCTION, UNIT NO. 7, CORMETECH, MODEL CM21HT, WITH 2,050 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT ; HEIGHT: 70 FT ; LENGTH: 24 FT 3 IN WITH A/N: AMMONIA INJECTION, GRID</td>
<td>S82</td>
<td>C80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STACK, NO. 7, HEIGHT: 210 FT ; DIAMETER: 20 FT 11 IN A/N: 470656</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Process 2:** EXTERNAL COMBUSTION

**System 2:** BOILER, POWER GENERATION

---

* (1) (1A) (1B) Denotes RECLAIM emission factor  
(2) (2A) (2B) Denotes RECLAIM emission rate  
(3) Denotes RECLAIM concentration limit  
(4) Denotes BACT emission limit  
(5) (5A) (5B) Denotes command and control emission limit  
(6) Denotes air toxic control rule limit  
(7) Denotes NSR applicability limit  
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
(9) See App B for Emission Limits  
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>ID No.</th>
<th>Connected To</th>
<th>RECLAIM Source Type/ Monitoring Unit</th>
<th>Emissions* And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process 2: EXTERNAL COMBUSTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEAM TURBINE, STEAM GENERATOR, 335 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMMONIA INJECTION, GRID, WITH 300 NOZZLES</td>
<td>C32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Process 5: INORGANIC CHEMICAL STORAGE**

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>ID No.</th>
<th>Connected To</th>
<th>RECLAIM Source Type/ Monitoring Unit</th>
<th>Emissions And Requirements</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process 5: INORGANIC CHEMICAL STORAGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CI57.1, EI44.1</td>
</tr>
<tr>
<td>STORAGE TANK, UNDERGROUND, TK-001, AQUEOUS AMMONIA, CARBON STEEL, DOUBLE WALLED, WITH 3 TRANSFER PUMPS AND A PRV SET AT 50 PSIG, 20000 GALS; DIAMETER: 10 FT 2 IN; LENGTH: 37 FT 10 IN</td>
<td>D30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process 6: R219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K67.2</td>
</tr>
<tr>
<td>RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS</td>
<td>E38</td>
<td></td>
<td>ROG: (9) [RULE 1113, 9-6-2013; RULE 1171, 2-1-2008; RULE 1171, 5-1-2009]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (1) (1A) (1B) Denotes RECLAIM emission factor  
(2) (2A) (2B) Denotes RECLAIM emission rate  
(3) Denotes RECLAIM concentration limit  
(4) Denotes BACT emission limit  
(5) (5A) (5B) Denotes command and control emission limit  
(6) Denotes air toxic control rule limit  
(7) Denotes NSR applicability limit  
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPs, etc.)  
(9) See App B for Emission Limits  
(10) See section J for NESHAP/MACT requirements  

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.
FACILITY PERMIT TO OPERATE
EL SEGUNDO POWER, LLC

SECTION D: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.
## SECTION D: DEVICE ID INDEX

### Device Index For Section D

<table>
<thead>
<tr>
<th>Device ID</th>
<th>Section D Page No.</th>
<th>Process</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>D13</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>D30</td>
<td>7</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>C31</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C32</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>E38</td>
<td>7</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>D67</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>D68</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C75</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C76</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>S78</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C79</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C80</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>S82</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F2.1 The operator shall limit emissions from this facility as follows:

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>EMISSIONS LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>Less than 100 TONS IN ANY ONE YEAR</td>
</tr>
</tbody>
</table>

For the purpose of this condition, the PM emission limit shall be applicable to particulate matter with an aerodynamic diameter less than 2.5 microns.

For the purpose of this condition any one year shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new twelve month period beginning on the first day of each calendar month. The operator shall calculate the emissions using the calendar monthly fuel use data and the following emission factors: PM2.5: 4.66 lb/mmmscf for Gas Turbines No. 5 and No. 7 and 5.15 lb/mmmscf for Boiler No. 4.

[RULE 1325, 6-3-2011; 40CFR 51 Subpart S, 3-8-2007]

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

F18.1 Acid Rain SO2 Allowance Allocation for affected units are as follows:

<table>
<thead>
<tr>
<th>Device ID</th>
<th>Boiler ID</th>
<th>Contaminant</th>
<th>Tons in any year</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Boiler No. 4</td>
<td>SO2</td>
<td>363</td>
</tr>
</tbody>
</table>

a). The allowance allocation(s) shall apply to calendar years 2010 and beyond.

b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40 CFR 72.84)

[40CFR 73 Subpart B, 1-11-1993]

F21.1 Acid Rain SO2 Allowance Allocation for retired units are as follows:

<table>
<thead>
<tr>
<th>Boiler ID</th>
<th>Contaminant</th>
<th>Tons in year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler No. 1</td>
<td>SO2</td>
<td>357</td>
</tr>
<tr>
<td>Boiler No. 2</td>
<td>SO2</td>
<td>62</td>
</tr>
<tr>
<td>Boiler No. 3</td>
<td>SO2</td>
<td>171</td>
</tr>
</tbody>
</table>
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

a). The allowance allocation(s) shall apply to calendar years 2010 and beyond.

b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40 CFR 72.84).

c). A unit exempted under 40CFR72.8 shall not emit any sulfur dioxide starting on the date it is exempted.

d). The owners and operators of a unit exempted under 40CFR72.8 shall comply with monitoring requirements in accordance with part 75 and will be allocated allowances in accordance with 40CFR73.

e). A unit exempted under 40CFR73 shall not resume operation unless the designated representative of the source that includes the unit submits an Acid Rain permit application for the unit not less than 24 months prior to the later of January 1, 2000, or the date the unit is to resume operation. On the earlier of the date the written exemption expires or the date an Acid Rain permit application is submitted or is required to be submitted under this paragraph, the unit shall no longer be exempted and shall be subject to all requirements of 40CFR72.

[40CFR 73 Subpart B, 1-11-1993]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

DEVICE CONDITIONS

A. Emission Limits

A63.2 The operator shall limit emissions from this equipment as follows:

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>EMISSIONS LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM10</td>
<td>Less than or equal to 6935 LBS IN ANY ONE MONTH</td>
</tr>
<tr>
<td>SOX</td>
<td>Less than or equal to 1065 LBS IN ANY ONE MONTH</td>
</tr>
<tr>
<td>VOC</td>
<td>Less than or equal to 4930 LBS IN ANY ONE MONTH</td>
</tr>
</tbody>
</table>
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall calculate the monthly emissions for VOC, PM10, and SOx, using the equation below and the following emission factors: VOC 2.93 lb/mmcf; PM10 4.66 lb/mmcf; and SOx 0.71 lb/mmcf

Monthly Emissions, lb/month = X * (EF)

where X = monthly fuel usage, mmcf/month; and EF = emission factor indicated above

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D67, D68]

A99.7 The 2.0 PPM NOX emission limit(s) shall not apply during start-up and shutdown periods. Start-up periods shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 200 start-ups per year. Written records of start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

For the purposes of this condition, the beginning of start-up occurs at initial fire in the combustor and the end of start-up occurs when the BACT levels are achieved. If during start-up the process is aborted and the turbine is restarted, then the start-up and restart will count as one start-up, provided the total time for the start-up does not exceed 60 minutes. The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D67, D68]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A99.8 The 2.0 PPM CO emission limit(s) shall not apply during start-up and shutdown periods. Start-up periods shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 200 start-ups per year. Written records of start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

For the purposes of this condition, the beginning of start-up occurs at initial fire in the combustor and the end of start-up occurs when the BACT levels are achieved. If during start-up the process is aborted and the turbine is restarted, then the start-up and restart will count as one start-up, provided the total time for the start-up does not exceed 60 minutes. The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

A99.9 The 2.0 PPM VOC emission limit(s) shall not apply during start-up and shutdown periods. Start-up periods shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 200 start-ups per year. Written records of start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

For the purposes of this condition, the beginning of start-up occurs at initial fire in the combustor and the end of start-up occurs when the BACT levels are achieved. If during start-up the process is aborted and the turbine is restarted, then the start-up and restart will count as one start-up, provided the total time for the start-up does not exceed 60 minutes. The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D67, D68]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A195.4 The 20 PPMV NH3 emission limit(s) is averaged over 60 minutes at 3 percent oxygen, dry. This limit shall be determined and measured in the combined exhaust from the North and South ducts.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C31]

A195.7 The 7 PPMV NOX emission limit(s) is averaged over 720 operating hours and is a heat input weighted average with consecutive, non-overlapping averaging periods, as detailed below.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A data acquisition system shall be installed and maintained to continuously record the raw data necessary to calculate the heat input weighted average NOx concentration (ppmv) and to calculate and record the heat input weighted average NOx concentration for each averaging period.

The average shall be calculated based on emissions during all boiler operating hours, except start-up's, shutdowns, CEMS calibration and maintenance periods, Part 75 linearity testing, RATA testing, equipment breakdown periods as defined in Rule 2004, and periods of zero fuel flow.

Start-ups are defined as whenever the unit is being brought up to normal operating temperature from an inactive status, and the exhaust temperature entering the SCR catalyst is less than 500 degrees F.

Shutdowns are defined as whenever the unit is allowed to cool from a normal operating temperature to inactive status and the exhaust temperature entering the SCR catalyst is less than 500 degrees F.

The heat input weighted NOx concentration shall be calculated using the following equation, or other equivalent equation:

$$\text{PPMV (3\%O2)} = (\text{Et/Qt}) \times K;$$

where PPMV(3\%O2) = the concentration of NOx in PPMV corrected to 3\% O2; K = a conversion factor from lbs/MMBTU to ppm, which can be determined using EPA 40CFR60 Method 19 (the default value of K is 819); Et = total reported NOx emissions during the averaging period including emissions reported as a result of missing data procedures pursuant to Rule 2012; and Qt = total heat input during the averaging period.

[RULE 2009, 5-11-2001]

[Devices subject to this condition : D13]

A195.8 The 2.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

A195.9 The 2.0 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

A195.10 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002]

[Devices subject to this condition : D67, D68]

A195.11 The 5 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis. The operator shall calculate and continuously record the NH3 slip concentration using the following:
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

\[ \text{NH3 (ppmv)} = \left[ a - b \frac{c}{\text{1EE}+06} \right] \times \text{1EE}+06/b; \text{ where} \]

\[ a = \text{NH3 injection rate (lb/hr)/17 lb/lb-mol} \]

\[ b = \text{dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol} \]

\[ c = \text{change in measured NOx across the SCR, (ppmvd at 15 percent O2)} \]

The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months.

The NOx analyzer shall be installed and operated within 90 days of initial start-up.

The operator shall use the above described method or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition: C76, C80]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition: D67, D68]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A433.1 The operator shall comply at all times with the 2.0 ppm 1-hour BACT limit for NOx, except as defined in condition A99.7 and for the following scenario:

<table>
<thead>
<tr>
<th>Operating Scenario</th>
<th>Maximum Hourly Emission Limit</th>
<th>Operational Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>112 lb/hr</td>
<td>NOx emissions not to exceed 112 lbs total per start-up per turbine. Each turbine shall be limited to 200 start-ups per year, with each start-up not to exceed 60 minutes</td>
</tr>
</tbody>
</table>

For the purposes of this condition, the beginning of start-up occurs at initial fire in the combustor and the end of start-up occurs when the BACT levels are achieved. If during start-up the process is aborted and the turbine is restarted, then the start-up and restart will count as one start-up, provided the total time for the start-up does not exceed 60 minutes. The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D67, D68]

B. Material/Fuel Type Limits

B61.2 The operator shall not use natural gas containing the following specified compounds:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Range</th>
<th>grain per 100 scf</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2S</td>
<td>greater than</td>
<td>0.25</td>
</tr>
</tbody>
</table>
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

This concentration limit is an annual average based on monthly samples of natural gas composition or gas supplier documentation. The gaseous fuel sample shall be tested using District Method 307-91 for total sulfur calculated as H2S

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D67, D68]

C. Throughput or Operating Parameter Limits

C157.1 The operator shall install and maintain a pressure relief valve with a minimum pressure set at 50 psig.

[RULE 402, 5-7-1976]

[Devices subject to this condition : D30]

D. Monitoring/Testing Requirements

D12.2 The operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature at the inlet to the SCR reactor.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : C31]

D12.3 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH3).
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : C31]

D12.10 The operator shall install and maintain a(n) flow meter to accurately indicate the fuel usage of the turbine.

The operator shall also install and maintain a device to continuously record the parameter being measured.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition : D67, D68]

D12.11 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The ammonia injection rate shall remain between 1 gallon per hour and 75 gallons per hour.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : C76, C80]

D12.12 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The temperature shall remain between 400 degrees F and 750 degrees F.

The catalyst temperature shall not exceed 750 degrees F during the start-up period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : C76, C80]

D12.13 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The pressure drop across the catalyst shall remain between 1 inch of water column and 4 inches of water column.

The pressure drop across the catalyst shall not exceed 4 inches of water during the start-up period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : C76, C80]

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted at least annually.

The test shall be conducted to determine the NH3 emissions at the outlet.

The test shall be conducted to determine the NH3 emissions using District method 207.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C31]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D28.2 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted at least annually.

The test shall be conducted to determine the CO emissions at the outlet.

The test shall be conducted to demonstrate compliance with Rule 1303 concentration limit.

The test shall be conducted when the equipment is operating under normal conditions. No test shall be required in any one year for which the equipment is not in operation.

The test shall be conducted to determine compliance with the CO emissions by either: (a) conducting a source test using District method 100.1 measured over a 30 minute averaging time, or (b) using a portable analyzer and a District-approved test method.

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D13]

D29.8 The operator shall conduct source test(s) for the pollutant(s) identified below.

<table>
<thead>
<tr>
<th>Pollutant(s) to be tested</th>
<th>Required Test Method(s)</th>
<th>Averaging Time</th>
<th>Test Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH3 emissions</td>
<td>District method 207.1 and 5.3 or EPA method 17</td>
<td>1 hour</td>
<td>Outlet of the SCR serving this equipment</td>
</tr>
</tbody>
</table>
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted and the results submitted to the AQMD within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted annually. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to determine compliance with the Rule 1303 BACT concentration limit.

If the equipment is not operated in any given quarter, the operator may elect to defer the required testing to a quarter in which the equipment is operated.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D67, D68]

D29.9 The operator shall conduct source test(s) for the pollutant(s) identified below.

<table>
<thead>
<tr>
<th>Pollutant(s) to be tested</th>
<th>Required Test Method(s)</th>
<th>Averaging Time</th>
<th>Test Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOX emissions</td>
<td>AQMD Laboratory Method 307-91</td>
<td>Not Applicable</td>
<td>Fuel sample</td>
</tr>
<tr>
<td>VOC emissions</td>
<td>District Method 25.3</td>
<td>1 hour</td>
<td>Outlet of the SCR serving this equipment</td>
</tr>
<tr>
<td>PM10 emissions</td>
<td>District Method 5</td>
<td>4 hours</td>
<td>Outlet of the SCR serving this equipment</td>
</tr>
<tr>
<td>PM2.5</td>
<td>EPA Method 201A and 202</td>
<td>District-approved averaging time</td>
<td>Outlet of the SCR serving this equipment</td>
</tr>
</tbody>
</table>
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test(s) shall be conducted at least once every three years for SOx, PM2.5, and PM10, and yearly for VOC.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output in megawatts (MW).

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at 100 percent load.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.

For natural gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of canisters is done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA method TO-12 (with preconcentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than AQMD method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The test results shall be reported with two significant digits.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, alternative test methods may be allowed for each of the above pollutants upon concurrence of AQMD and EPA

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition: D67, D68]

D82.4 The operator shall install and maintain a CEMS to measure the following parameters:
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated to measure the CO concentration over a 15 minute averaging time period.

The CEMS shall convert the actual CO concentrations to mass emission rates (lb/hr) using the equation below and record the hourly emission rates on a continuous basis.

\[ \text{CO Emission Rate, (lb/hr)} = K \times C_{co} \times F_d \times \frac{20.9}{(20.9 - \%O_2)} \times \frac{(Q_g \times \text{HHV})}{1000000}, \]

where

\[ K = 7.267 \times 10^{-8} \text{ (lb/scf)/ppm} \]

\[ C_{co} = \text{Average of four consecutive 15 min avg CO concentrations, ppm} \]

\[ F_d = 8710 \text{ scf/MMBTU natural gas} \]

\[ \%O_2 = \text{Hourly avg } \% \text{ by volume O}_2, \text{ dry basis, corresponding to } C_{co} \]

\[ Q_g = \text{Fuel gas usage during the hour, scf/hr} \]

\[ \text{HHV} = \text{Gross high heating value of fuel gas, BTU/scf} \]

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 218, 5-14-1999]

[Devices subject to this condition : D67, D68]

D82.5 The operator shall install and maintain a CEMS to measure the following parameters:
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

NOx concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and shall comply with the requirements of Rule 2012.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005; RULE 2012, 5-6-2005]

[Devices subject to this condition: D67, D68]

E. Equipment Operation/Construction Requirements

E73.2 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

the inlet exhaust temperature to the SCR reactor is 500 Deg F or less

[RULE 2012, 5-6-2005]

[Devices subject to this condition: C31]

E144.1 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 402, 5-7-1976]

[Devices subject to this condition: D30]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E179.1 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number 12-3

[RULE 2012, 5-6-2005]

[Devices subject to this condition : C31]

E179.5 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number D 12-11

Condition Number D 12-12

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : C76, C80]

E179.6 For the purpose of the following condition number(s), continuously record shall be defined as measuring at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

Condition Number D 12-13

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : C76, C80]

E193.2 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In accordance with all air quality mitigation measures stipulated in the final California Energy Commission decision for the 00-AFC-14C project

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D67, D68, C76, C80]

K. Record Keeping/Reporting

K40.4 The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : D67, D68]

**K48.2** The operator shall maintain records in a manner approved by the District, to demonstrate compliance with the following condition number(s):

Condition no. 12-2

Condition no. 12-3

[RULE 2012, 5-6-2005]

[Devices subject to this condition : C31]

**K67.2** The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.
SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E38]

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):
   the total hourly amount of injected ammonia

[RULE 2012, 5-6-2005]

[Devices subject to this condition : C31]

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):
   Natural gas fuel use after CEMS certification

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D67, D68]
SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

NONE