Pursuant to the Energy Facility Site Evaluation Council (EFSEC) regulation for air permit applications (Washington Administrative Code 463-42-385), the Washington Department of Ecology (Ecology) regulations for new source review (Washington Administrative Code 173-400-110 and Chapter 174-460 WAC), the federal Prevention of Significant Deterioration regulations (40 CFR 52.21), the complete Notice of Construction/Prevention of Significant Deterioration Application, the 18 month extension application submitted by Chehalis Power Generating, Limited Partnership (Chehalis Power), the January 10, 2000, Site Certification Agreement amendment application, the March 22, 2001, Administrative Order on Consent between Chehalis Power and US EPA Region 10, and the technical analysis performed by Ecology for EFSEC, EFSEC finds the following:

**FINDINGS**

1. Chehalis Power has applied to construct the Chehalis Generation Facility (CGF) which will be located near Chehalis, Washington. The proposed 520 megawatt (MW) project consists of two (2) 175 MW natural gas and oil-fired combustion gas turbines, (each operating with a heat recovery steam generator (HRSG) in a combined cycle mode), a single steam turbine generator, and two auxiliary boilers to assist in start-up and provide steam when the turbines are down. A steam host (steam customer) may be added in the future. A contract has been signed with General Electric to supply the gas turbine generator equipment.

2. The project is subject to PSD regulations under Title 40 Code of Federal Regulations (CFR) 52.21 because it is one of 28 listed industries that becomes a "major source," when emitting more than 100 tons per year of any regulated pollutant. CGF has the potential to emit significant quantities of nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO2), particulate matter (PM10), volatile organic compounds (VOC), and sulfuric acid mist (H2SO4).

3. The site of the proposed project is within a Class II area that is in attainment with regard to all
pollutants regulated by the National Ambient Air Quality Standards (NAAQS) and state air quality standards. The site is 80 kilometers (km) from the nearest Class I Area, Mt. Rainier National Park.

4. The project is subject to new source review requirements under Chapter 173-400 WAC, Chapter 173-460 WAC, 40 CFR 52.21, 40 CFR 60.40b, 40 CFR 60.330; to emission monitoring requirements under RCW 70.94, Chapter 173-400 WAC, 40 CFR 60 Appendices A, B, and F, and 40 CFR 75; to gas fuel monitoring requirements under 40 CFR 60.334(b)(2), and to oil fuel requirements in 40 CFR 60.49b(r).

5. Chehalis Power’s notice of construction/prevention of significant deterioration (NOC/PSD) application for the proposed project was determined to be complete on August 14, 1995. The 18 month extension application was determined to be complete on August 24, 1998.

6. The project will use natural gas as the primary fuel. No. 2 distillate fuel may be used as a backup and for limited testing purposes, not to exceed 720 hours per calendar year for each combustion turbine generator and auxiliary boiler.

7. Best available control technology (BACT) as required under WAC 173-400-113(2) and toxic best available control technology (T-BACT) as required under WAC 173-460-040(4) will be used for the control of all air pollutants which will be emitted by the proposed project.

8. Turbines using advanced dry low NOx (ADLN) burner technology and selective catalytic reduction (SCR) for NOx control are allowed by this permit.

9. The facility will have the potential to emit up to 129 tons per year of carbon monoxide (CO).

10. The facility will have the potential to emit up to 241 tons per year of nitrogen oxides (NOx); as a result of NOx emission controls, the facility will have the potential to emit up to 226 tons per year of ammonia (NH3).

11. The facility will have the potential to emit up to 164 tons per year of sulfur oxides (SOx).

12. The facility will have the potential to emit up to 152 tons per year of particulate matter smaller than 10 microns (PM10).
13. The facility will have the potential to emit up to 65 tons per year of volatile organic compounds (VOCs).

14. The facility will have the potential to emit up to 30 tons per year of sulfuric acid mist (H₂SO₄).

15. Allowable emissions from the new emissions units will not cause or contribute to air pollution in violation of:
   15.1. Any ambient air quality standard;
   15.2. Any applicable maximum allowable increase over the baseline ambient concentration.

16. Ambient impact analysis indicates that there will be no significant impacts resulting from pollutant deposition on soils and vegetation in either the Mt. Rainier or Olympic National Parks, Mt. Hood Wilderness, Mt. Adams Wilderness, Goat Rock Wilderness, Alpine Lake Wilderness, or the Columbia River Gorge National Scenic Area.

17. Ambient impact analysis indicates that the proposed emissions will cause no significant degradation of regional visibility, or impairment of visibility in any Class I area.

18. No significant effect on industrial, commercial, or residential growth in the Chehalis area is anticipated due to the project.

19. EFSEC finds that all requirements for new source review (NSR) and PSD are satisfied and that as approved below, the new emissions units comply with all applicable federal new source performance standards. Approval of the NOC/PSD application is granted subject to the following conditions.

**APPROVAL CONDITIONS**

1. The combustion turbines and auxiliary boilers shall be fueled only by pipeline quality natural gas except when natural gas is not available and during limited test periods. When natural gas is not available and during limited test periods, the combustion turbines and boilers may be fueled by "on-road specification diesel fuel" (referred to as "oil" in this Approval) containing no more than 0.05 percent sulfur by weight, as specified in 40 CFR 80.29 as amended through July 1, 1992. Oil firing for each combustion turbine and auxiliary boiler is limited to 720 hours per calendar year. Chehalis
Power shall report all oil fired operations to EFSEC in accordance with the reporting requirements in Condition 17.

2. NOX emissions from each HRSG exhaust stack shall not exceed 3.0 parts per million on a dry volumetric basis (ppmdv) over a one hour average when corrected to 15.0 percent oxygen when burning natural gas. NOX emissions from each HRSG exhaust stack shall not exceed 223 kilograms (491 pounds) per day when burning natural gas.

NOX emissions from each boiler shall not exceed 30.2 ppmdv over a one hour average corrected to 3.0 percent oxygen or 4.72 kilograms (10.4 pounds) per hour when burning natural gas.

NOX emissions from each HRSG exhaust stack shall not exceed 14.0 ppmdv over a one hour average, corrected to 15.0 percent oxygen, when burning oil. NOX emission from each HRSG exhaust stack shall not exceed 1,160 kilograms (2,538 pounds) per day when burning oil.

NOX emissions from each boiler shall not exceed 70.0 ppmdv over a one hour average, corrected to 3.0 percent oxygen or 11.4 kilograms (25 pounds) per hour when burning oil.

The total annual NOx emissions of all combustion turbines and boilers shall not exceed 241 tons on a 12 month rolling summation, calculated once per month.

Initial compliance for each turbine shall be determined in accordance with Title 40 CFR Subpart GG and EPA Reference Method 20, except that the instrument span shall be 100 ppm or less. Initial compliance for each boiler shall be determined in accordance with Title 40 CFR Subpart Db and EPA Reference Method 7.

NOX, O2 emissions and exhaust gas flow rate or velocity from each exhaust stack shall be measured and recorded by a continuous emission monitoring system (CEMS) which meets the requirements of Condition 14.2. Exhaust gas flow rate or velocity may be determined using F factor calculation or other method approved by EFSEC in advance instead of using a flow CEM.

3. CO emissions from each HRSG exhaust stack shall not exceed 3.0 ppmdv corrected to 15.0 percent oxygen, or 3.5 kilograms (7.7 pounds) per hour on a one hour average when natural gas is burned.

CO emissions from each HRSG exhaust stack shall not exceed 8.0 ppmdv, corrected to 15 percent
oxygen, on a one hour average, or 11.1 kilograms (24.4 pounds) per hour, when oil is burned.

CO emissions from each boiler shall not exceed 20.0 ppmdv on a one hour average, corrected to 3.0 percent oxygen, or 2.3 kilograms (4.9 pounds) per hour.

Initial compliance for each HRSG and boiler when burning natural gas shall be determined by EPA Reference Method 10 or an equivalent method agreed to in advance by EFSEC. The span and linearity calibration gas concentrations in Method 10 shall be modified to a span gas concentration of 100 ppm or less, with all other calibration gas concentrations similarly reduced.

CO emissions from each of the exhaust stacks shall be measured and recorded by CEMS that meet the requirements of Condition 14.1.

4. **SO\textsubscript{2}** emissions from each HRSG exhaust stack shall not exceed 4.72 kilograms (10.4 pounds) per hour when natural gas is burned.

SO\textsubscript{2} emissions from each HRSG exhaust stack shall not exceed 54.0 kilograms (119 pounds) per hour when oil is burned.

SO\textsubscript{2} emissions from each boiler shall not exceed 0.73 kilograms (1.6 pounds) per hour when natural gas is burned.

SO\textsubscript{2} emissions from each boiler shall not exceed 6.63 kilograms (14.6 pounds) per hour when oil is burned.

Initial compliance for each HRSG and boiler shall be determined by EPA Reference Method 6, or an equivalent method approved in advance by EFSEC. If Method 6C is used, the instrument span shall be at maximums of 3 ppm when natural gas is burned, and 30 ppm when oil is burned, and all span and calibration gases used shall follow in accordance with the method requirements.

Continuous emission monitoring of SO\textsubscript{2} is not required. Continuous compliance with the limit for each of the stacks shall be by means of fuel sulfur content reporting and fuel flow monitoring to each turbine and boiler.

5. Volatile organic compound (VOC) emissions from each HRSG exhaust stack shall not exceed 3.2
kilograms (7.0 pounds) per hour, or 69 kilograms (152 pounds) per day, whichever is more restrictive, when natural gas is burned. VOC emissions from each HRSG exhaust stack shall not exceed 5.22 kilograms (11.5 pounds) per hour, or 115 kilograms (252 pounds) per day, whichever is more restrictive, when oil is burned.

VOC emissions from each boiler shall not exceed 10 ppmdv corrected to 3.0 percent oxygen, or 0.68 kilograms (1.5 pounds) per hour when firing natural gas. VOC emissions from each boiler shall not exceed 20 ppmdv corrected to 3.0 percent oxygen, or 1.3 kilograms (2.8 pounds) per hour when firing oil.

Initial compliance for each HRSG and boiler shall be determined by EPA Reference Methods 25A or 25B, or an equivalent method agreed to in advance by EFSEC.

6. PM$_{10}$ emissions from each HRSG exhaust stack shall not exceed 172 kilograms (379 pounds) per day when natural gas is burned. PM$_{10}$ emissions from each HRSG exhaust stack shall not exceed 218 kilograms (480 pounds) per day when oil is burned.

PM$_{10}$ emissions from each boiler shall not exceed 0.68 kilograms (1.5 pounds) per hour when natural gas is burned. PM$_{10}$ emissions from each boiler shall not exceed 4.5 kilograms (9.8 pounds) per hour when oil is burned.

Initial compliance for the HRSGs and the boiler shall be determined by either EPA Reference Methods 5, 201, or 201A, or an equivalent method agreed to in advance by EFSEC.

7. H$_2$SO$_4$ emissions from each HRSG exhaust stack shall not exceed 0.91 kilograms (2.0 pounds) per hour when natural gas is burned. H$_2$SO$_4$ emissions from each HRSG exhaust stack shall not exceed 8.62 kilograms (19.0 pounds) per hour when oil is burned. H$_2$SO$_4$ emissions from each boiler shall not exceed 0.05 kilograms (0.1 pounds) per hour when natural gas is burned. H$_2$SO$_4$ emissions from each boiler shall not exceed 0.50 kilograms (1.1 pounds) per hour when oil is burned. All limits are on a one hour average.

Initial compliance with the H$_2$SO$_4$ emissions limits shall be determined by EPA Reference Method 8, or an equivalent method approved in advance by EFSEC.
8. Opacity from each exhaust stack of the project shall not exceed 10 percent over a six minute average as measured by EPA Reference Method 9, or an equivalent method approved in advance by EFSEC. A certified opacity reader shall read and record the opacity daily if Method 9 is used.

9. NH$_3$ emissions from each HRSG exhaust stack shall not exceed 10.0 ppmdv on a one hour average corrected to 15.0 percent oxygen when burning natural gas. NH$_3$ emissions from each HRSG exhaust stack shall not exceed 278 kilograms (612 pounds) per day when burning natural gas.

NH$_3$ emissions from each HRSG exhaust stack shall not exceed 10.0 ppmdv over a one hour average corrected to 15.0 percent oxygen when burning oil. NO$_x$ emission from each HRSG exhaust stack shall not exceed 310 kilograms (683 pounds) per day when burning oil.

NH$_3$ emissions from each HRSG exhaust stack shall be measured and recorded by CEMS that meet the requirements of Condition 14.3.

10. All conditions apply except during unit startup and shutdowns. The duration of startup or shutdown periods are limited to 3 hours per occurrence, with a maximum of two startups per 24 hour period, and 200 startups per year, per turbine or boiler. CO emissions during startup and shutdown shall not exceed 120 kilograms (263 pounds) per hour when burning gas, or 190 kilograms (417 pounds) per hour when burning oil, averaged over the occurrence. NO$_x$ emissions during startup and shutdown shall not exceed 132 kilograms (292 pounds) per hour when burning gas, or 185 kilograms (407 pounds) per hour when burning oil, averaged over the occurrence. Also, at least one turbine must be down when both boilers are operating under load conditions.

11. Within 180 days after initial turbine start-up, Chehalis Generation Facility shall conduct performance tests for NO$_x$, SO$_2$, H$_2$SO$_4$, opacity, NH$_3$, CO, VOCs and PM$_{10}$ on each combustion turbine and boiler, to be performed by an independent testing firm. A test plan shall be submitted for EFSEC's approval at least 30 days prior to the testing.

"Initial turbine start-up" means the time that the first electricity from an electric generator is delivered to the electrical power grid.

12. Sampling ports and platforms shall be provided on each stack, after the final pollution control device. The ports shall meet the requirements of 40 CFR, Part 60, Appendix A Method 20.
13. Adequate permanent and safe access to the test ports shall be provided. Other arrangements may be acceptable if approved by EFSEC prior to installation.

14. Continuous Emission Monitoring Systems


14.2 CEMS for NO\textsubscript{x}, O\textsubscript{2}, and (if used) exhaust gas flow rate or velocity compliance shall meet the requirements contained in 40 CFR 75, Emissions Monitoring.

14.3 CEMS for NH\textsubscript{3} shall meet the requirements contained in 40 CFR, Part 60, Appendix B, Performance Specifications and 40 CFR, Part 60, Appendix F, Quality Assurance Procedures, or other EFSEC-approved performance specifications and quality assurance procedures.

15. Compliance testing shall be performed for PM\textsubscript{10}, VOCs, and H\textsubscript{2}SO\textsubscript{4} from each stack once every two calendar years. Source testing for these parameters is to coincide with the Relative Accuracy Test Audit required for each installed CEMS. If the compliance testing for 3 consecutive tests indicates that the source can maintain compliance with a specific pollutant’s (PM\textsubscript{10}, VOCs, or H\textsubscript{2}SO\textsubscript{4}) emission limitations and EFSEC agrees to allow a reduced frequency of compliance testing, then the compliance testing frequency for that pollutant can be reduced to once every 4 years, until a test indicates noncompliance. When a compliance test for a pollutant indicates noncompliance with the emissions limitations, the frequency of testing will return to once every two years until the above criteria are met again.

16. CEMS and process data shall be reported in written (or electronic if permitted by EFSEC) form to the authorized representative of EFSEC and to the EPA Region X Office of Air Quality monthly (unless a different testing and reporting schedule has been approved by EFSEC) within thirty days of the end of each calendar month.

17. The format of the reporting shall match that required by EPA for demonstrating compliance with the Title IV Acid Rain program reporting requirements. Pollutants not covered by that format shall be reported in a format approved by EFSEC which shall include at least the following:

17.1 Process or control equipment operating parameters.

17.2 The hourly maximum and average concentration, in the units of the standard, for each pollutant monitored.
17.3. The duration and nature of any monitor down time.
17.4. Results of any monitor audits or accuracy checks.
17.5. Results of any stack tests.

18. For each occurrence of monitored emissions in excess of the standard, the monthly emissions report 
(per condition 17) shall include the following:
18.1 For parameters subject to monitoring and reporting under the Title IV Acid Rain program, the reporting requirements in that program shall govern excess emissions report content.
18.2 For all other pollutants:
   18.2.1. The time of the occurrence.
   18.2.2. Magnitude of the emission or process parameters excess.
   18.2.3. The duration of the excess.
   18.2.4. The probable cause.
   18.2.5. Corrective actions taken or planned.
   18.2.6. Any other agency contacted.

19. Operating and maintenance manuals for all equipment that has the potential to affect emissions to 
the atmosphere shall be developed and followed. Copies of the manuals shall be available to 
EFSEC or the authorized representative of EFSEC. Emissions that result from a failure to follow 
the requirements of the manuals may be considered proof that the equipment was not properly 
operated and maintained.

20. Operation of the equipment that has the potential to affect emission to the atmosphere must be 
conducted in compliance with all data and specifications submitted as part of the NOC/PSD 
application unless otherwise approved by EFSEC.

21. This approval shall become invalid if construction of the project is not commenced within eighteen 
(18) months after receipt of final approval, or if construction of the facility is discontinued for a 
period of eighteen (18) months, unless EFSEC extends the 18 month period upon a satisfactory 
showing that an extension is justified, pursuant to 40 CFR 52.21(r)(2) and applicable EPA 
guidance.

22. Any activity that is undertaken by the Chehalis Generation Facility or others, in a manner which is 
inconsistent with the application and this determination, shall be subject to EFSEC enforcement
under applicable regulations. Nothing in this determination shall be construed so as to relieve
Chehalis Generation Facility of its obligations under any state, local, or federal laws or regulations.

23. The Chehalis Generation Facility shall notify EFSEC in writing at least thirty days prior to start-up
of the project.

24. Access to the source by EFSEC or the authorized representative of EFSEC shall be permitted upon
request for the purpose of compliance assurance inspections. Failure to allow access is grounds for
revocation of this determination of approval.
Reviewed by:

/s/ Robert C. Burmark, P.E.  Date
Engineering and Technical Services
Washington Department of Ecology

Approved by:

/s/ Barbara McAllister  Date
Director, Office of Air Quality
U.S. Environmental Protection Agency, Region X

/s/ Deborah Ross  Date
Chair
Energy Facility Site Evaluation Council
### APPENDIX A – SUMMARY OF EMISSION LIMITATIONS for PSD EFSEC/95-02 AMENDMENT 1

#### COMBUSTION TURBINE WITH ADVANCED DRY LOW NOX TECHNOLOGY, SCR, AND OXIDATION CATALYST (PER TURBINE)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Natural Gas Fuel</th>
<th>Oil Fuel</th>
<th>Test Method (or equivalent approved by EFSEC)</th>
<th>Stack Testing or Certification Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit</td>
<td>Averaging Time</td>
<td>Limit</td>
<td>Averaging Time</td>
</tr>
<tr>
<td>NOx &lt;sup&gt;1&lt;/sup&gt; @ 15% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td>3 ppmvd 491 lb/day</td>
<td>1 hour daily</td>
<td>14 ppmvd 2538 lb/day</td>
<td>1 hour daily</td>
</tr>
<tr>
<td>CO @ 15% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td>3.0 ppmvd 7.7 lb/hr</td>
<td>1 hour</td>
<td>8.0 ppmvd 24.4 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>SO&lt;sub&gt;2&lt;/sub&gt;</td>
<td>10.4 lb/hr</td>
<td>1 hour</td>
<td>119 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>379 lb/day</td>
<td>daily</td>
<td>480 lb/day</td>
<td>daily</td>
</tr>
<tr>
<td>Sulfuric Acid Mist</td>
<td>2.0 lb/hr</td>
<td>1 hour</td>
<td>19.0 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>NH&lt;sub&gt;3&lt;/sub&gt; @ 15% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td>10 ppmvd 612 lb/day</td>
<td>1 hour daily</td>
<td>10 ppmvd 683 lb/day</td>
<td>1 hour daily</td>
</tr>
<tr>
<td>Opacity</td>
<td>10%</td>
<td>6 minute (one daily reading)</td>
<td>10%</td>
<td>6 minute (one daily reading)</td>
</tr>
</tbody>
</table>

#### AUXILIARY BOILERS WITH OXIDATION CATALYST (PER BOILER)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Natural Gas Fuel</th>
<th>Oil Fuel</th>
<th>Test Method (or equivalent approved by EFSEC)</th>
<th>Stack Testing or Certification Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit</td>
<td>Averaging Time</td>
<td>Limit</td>
<td>Averaging Time</td>
</tr>
<tr>
<td>NOx @ 3.0% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td>30.2 ppmvd 10.4 lb/hr</td>
<td>1 hour</td>
<td>70 ppmvd 25 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>CO @ 3.0% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td>20 ppmvd 4.9 lb/hr</td>
<td>1 hour</td>
<td>20 ppmvd 4.9 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>SO&lt;sub&gt;2&lt;/sub&gt;</td>
<td>1.6 lb/hr</td>
<td>1 hour</td>
<td>14.6 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>1.5 lb/hr</td>
<td>1 hour</td>
<td>9.8 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>VOC @ 3.0% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td>10 ppmvd 1.5 lb/hr</td>
<td>1 hour</td>
<td>20 ppmvd 2.8 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>Sulfuric Acid Mist</td>
<td>0.1 lb/hr</td>
<td>1 hour</td>
<td>1.1 lb/hr</td>
<td>1 hour</td>
</tr>
<tr>
<td>Opacity</td>
<td>10%</td>
<td>6 minute (one daily reading)</td>
<td>10%</td>
<td>6 minute (one daily reading)</td>
</tr>
</tbody>
</table>

1. Plant wide annual NOx limit is 241 tons per year on a 12 month rolling summation.
2. See Condition 15 for reduced frequency of compliance certification testing options.
3. This table is a summary of the permit’s conditions. If there is a conflict between this table and a permit provision, the written permit provision takes precedence.