

## **APPENDIX D**

### **DISPERSION MODELING FILES**

**(Electronic copies of the dispersion modeling files  
have been provided to the Florida Department of Environmen-  
tal Protection, Bureau of Air Regulation)**

## Gainesville Renewable Energy Center Class I Area Dispersion Modeling Files

| Directory Name                                            | No. of Files | File Name                  | File Description                                             |
|-----------------------------------------------------------|--------------|----------------------------|--------------------------------------------------------------|
| <b>A. Gainesville Renewable Energy Center (GREC) Runs</b> |              |                            |                                                              |
| CLASS I/PUFF-INP                                          | 3            | GRECYY.INP<br>YY = 01 - 03 | CALPUFF input files<br>Year of meteorology                   |
| CLASS I/PUFF-OUT                                          | 3            | GRECYY.CON                 | CALPUFF output concentration files                           |
|                                                           | 3            | GRECYY.LST                 | CALPUFF output concentration list files                      |
|                                                           |              | YY = 01 - 03               | Year of meteorology                                          |
| Subtotal Files                                            | 6            |                            |                                                              |
| CLASS I/POST-INP                                          | 3            | GRECYYNCHA.POI             | CALPOST input NO <sub>2</sub> files - Chassahowitzka NWA     |
|                                                           | 3            | GRECYYPCHA.POI             | CALPOST input PM <sub>10</sub> files - - Chassahowitzka NWA  |
|                                                           | 3            | GRECYYSCHA.POI             | CALPOST input SO <sub>2</sub> files - - Chassahowitzka NWA   |
|                                                           | 3            | GRECYYNOKE.POI             | CALPOST input NO <sub>2</sub> files - Okefenokee NWA         |
|                                                           | 3            | GRECYYPOKE.POI             | CALPOST input PM <sub>10</sub> files - - Okefenokee NWA      |
|                                                           | 3            | GRECYYSOKE.POI             | CALPOST input SO <sub>2</sub> files - - Okefenokee NWA       |
|                                                           |              | YY = 01 - 03               | Year of meteorology                                          |
| Subtotal Files                                            | 18           |                            |                                                              |
| CLASS I/POST-OUT                                          | 3            | GRECYYNO2CHA.POL           | CALPOST output NO <sub>2</sub> files - Chassahowitzka NWA    |
|                                                           | 3            | GRECYYPM10CHA.POL          | CALPOST output PM <sub>10</sub> files - - Chassahowitzka NWA |
|                                                           | 3            | GRECYYSO2CHA.POL           | CALPOST output SO <sub>2</sub> files - - Chassahowitzka NWA  |
|                                                           | 3            | GRECYYNO2OKE.POL           | CALPOST output NO <sub>2</sub> files - Okefenokee NWA        |
|                                                           | 3            | GRECYYPM10OKE.POL          | CALPOST output PM <sub>10</sub> files - - Okefenokee NWA     |
|                                                           | 3            | GRECYYSO2OKE.POL           | CALPOST output SO <sub>2</sub> files - - Okefenokee NWA      |
|                                                           |              | YY = 01 - 03               | Year of meteorology                                          |
| Subtotal Files                                            | 18           |                            |                                                              |
| Total Files                                               | 45           |                            |                                                              |

Source: ECT, 2009.

**Gainesville Renewable Energy Center**  
**Class II Area Dispersion Modeling Files - Significant Impact Level (SIL) Analysis**

| Directory Name | No. of Files | File Name            | File Description                                                                                  |
|----------------|--------------|----------------------|---------------------------------------------------------------------------------------------------|
| MET/GNV        | 1            | GNV2_AERSURFACE.INP  | AERSURFACE input file; Gainesville Airport                                                        |
|                | 1            | GNV2_AERSURFACE.OUT  | AERSURFACE output file; Gainesville Airport                                                       |
|                | 1            | GNV2.RP1             | AERMOD report file; Stage 1                                                                       |
|                | 1            | GNV2.RP2             | AERMOD report file; Stage 2                                                                       |
|                | 1            | GNV2.RP3             | AERMOD report file; Stage 3                                                                       |
|                | 5            | 2GNVYY.PFL           | Meteorological Data - Gainesville/Jacksonville profile files; Gainesville Airport characteristics |
|                | 5            | 2GNVYY.SFC           | Meteorological Data - Gainesville/Jacksonville surface files; Gainesville Airport characteristics |
| MET/GREC SITE  | 1            | SITE2_AERSURFACE.INP | AERSURFACE input file; GREC Site                                                                  |
|                | 1            | SITE2_AERSURFACE.OUT | AERSURFACE output file; GREC Site                                                                 |
|                | 1            | SITE2.RP1            | AERMOD report file; Stage 1                                                                       |
|                | 1            | SITE2.RP2            | AERMOD report file; Stage 2                                                                       |
|                | 1            | SITE2.RP3            | AERMOD report file; Stage 3                                                                       |
|                | 5            | 2SITEYY.PFL          | Meteorological Data - Gainesville/Jacksonville profile files; GREC Site characteristics           |
|                | 5            | 2SITEYY.SFC          | Meteorological Data - Gainesville/Jacksonville surface files; GREC Site characteristics           |
|                |              | YY = 01 - 05         | Year of meteorology                                                                               |
| Subtotal Files | 30           |                      |                                                                                                   |
| GEP            | 1            | GREC2.BPI            | Building Profile Input Program (BPIP) input file                                                  |
|                | 1            | GREC2.PRO            | Building Profile Input Program (BPIP) output file                                                 |
| Subtotal Files | 2            |                      |                                                                                                   |
| RECEPTOR       | 1            | GREC2FULL.ROU        | 15 km receptor grid                                                                               |
|                | 1            | 5KMGREC2.ROU         | 5 km receptor grid                                                                                |
|                | 1            | 2KMGREC2.ROU         | 2 km receptor grid                                                                                |
| Subtotal Files | 3            |                      |                                                                                                   |
| BFBSIL         | 10           | BFBSILYYMZ.INP       | BFB Boiler SIL input files                                                                        |
|                | 10           | BFBSILYYMZ.OUT       | BFB Boiler SIL output files                                                                       |
|                |              | YY = 01 - 05         | Year of meteorology                                                                               |
|                |              | Z = 1 or 2           | 1 = Gainesville Airport characteristics, 2 = GREC Site characteristics                            |
| Subtotal Files | 20           |                      |                                                                                                   |
| COSIL          | 10           | COSILYYMZ.INP        | GREC CO SIL input files                                                                           |
|                | 10           | COSILYYMZ.OUT        | GREC CO SIL output files                                                                          |
|                |              | YY = 01 - 05         | Year of meteorology                                                                               |
|                |              | Z = 1 or 2           | 1 = Gainesville Airport characteristics, 2 = GREC Site characteristics                            |
| Subtotal Files | 20           |                      |                                                                                                   |
| PMSIL          | 10           | PMSILYYMZ.INP        | GREC PM <sub>10</sub> SIL input files                                                             |
|                | 10           | PMSILYYMZ.OUT        | GREC PM <sub>10</sub> SIL output files                                                            |
|                |              | YY = 01 - 05         | Year of meteorology                                                                               |
|                |              | Z = 1 or 2           | 1 = Gainesville Airport characteristics, 2 = GREC Site characteristics                            |
| Subtotal Files | 20           |                      |                                                                                                   |
| Total Files    | 95           |                      |                                                                                                   |

Source: ECT, 2009.

**Gainesville Renewable Energy Center**  
**Class II Area Dispersion Modeling Files - Cumulative PM<sub>10</sub> Impact Analysis**

| Directory Name | No. of Files | File Name     | File Description                                                          |
|----------------|--------------|---------------|---------------------------------------------------------------------------|
| RECEPTOR       | 1            | PM10SIL.ROU   | PM <sub>10</sub> SIL receptor grid                                        |
| Subtotal Files | 1            |               |                                                                           |
| NAAQS          | 10           | PMNAQYYMZ.INP | PM <sub>10</sub> Cumulative Impacts input files - NAAQS                   |
|                | 10           | PMNAQYYMZ.OUT | PM <sub>10</sub> Cumulative Impacts output files - NAAQS                  |
|                |              | YY = 01 - 05  | Year of meteorology                                                       |
|                |              | Z = 1 or 2    | 1 = Gainesville Airport characteristics, 2 = GREC Site characteristics    |
| Subtotal Files | 20           |               |                                                                           |
| PSD            | 10           | PMPSDYVMZ.INP | PM <sub>10</sub> Cumulative Impacts input files - PSD Class II Increment  |
|                | 10           | PMPSDYVMZ.OUT | PM <sub>10</sub> Cumulative Impacts output files - PSD Class II Increment |
|                |              | YY = 01 - 05  | Year of meteorology                                                       |
|                |              | Z = 1 or 2    | 1 = Gainesville Airport characteristics, 2 = GREC Site characteristics    |
| Subtotal Files | 20           |               |                                                                           |
| Total Files    | 41           |               |                                                                           |

Source: ECT, 2009.