

Note: modeling
files available
on request

steag

Power LLC

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February 22, 2004

By Hand Delivery

Gerardo C. Rios, P.E.
Chief, Air Permits Office
Air Division
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

RE: Desert Rock Power Plant: Submittal of a PSD Permit Application pursuant to 40
CFR Part 51.
Applicant: Steag Power LLC

Dear Mr. Rios,

Attached is STEAG Power LLC's Prevention of Significant Deterioration (PSD) Air Permit Application for the Desert Rock Power Project. As we have previously discussed, the Desert Rock Project is being developed by STEAG Power LLC and Diné Power Authority (DPA) of the Navajo Nation. We have provided you with two copies and will send additional copies to Don Shepherd, National Parks Service – Air Resources Division, Jeff Sorkin, USDA Forest Service and Debbie Potter, USDA Forest Service – Southwestern Region.

Jointly, DPA and STEAG have been working diligently on the Desert Rock power project since June 2003. STEAG and DPA are very committed to a shared vision of an environmentally friendly Project that makes efficient use of Navajo resources and brings substantial economic and social benefits to the Navajo Nation and the local communities. After more than eight months of development, substantial progress on the Project has been made to date:

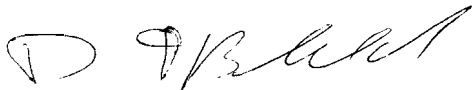
- Activities relating to compliance with the National Environmental Policy Act (NEPA) have been initiated. BIA is the lead agency for preparing NEPA's record of Decision. A meeting with BIA is scheduled for February 25, 2004 to discuss the project's work plan.
- A Generation Interconnection Request has been submitted and accepted by Arizona Public Service.

- A transmission plan for the Project has been discussed with all the major utilities in the region. A study plan is in progress.
- Letters of Interest for power purchases for a substantial amount of the output of the Plant has been received from regional utilities.
- The Project conceptual design has been completed. The selection process for the Engineering, Procurement and Construction (EPC) contractor has started.
- Ten community meetings with Navajo Chapters located in the area of the Project have been held in the last 90 days. As a result of this community outreach program, the Project has recently received a resolution of support from the Nenahnezad Chapter of the Navajo Nation. The Nenahnezad Chapter is one of the two Chapters that directly border the Project site.
- The first public meeting on the Project is scheduled for February 24 at McGee Park in Farmington, New Mexico.

We are looking forward to working with you and your team on the air permit. If you have any questions please feel free to contact me at 713-499-1156 or Gus Eghneim, Director of Environmental Affairs, at (713) 499-1132.

Sincerely

STEAG Power LLC

A handwritten signature in black ink, appearing to read "D. Straussfeld".

Dirk Straussfeld
President

Application for Prevention of Significant Deterioration Permit for the Desert Rock Energy Facility

KEY TO FILES ON CD-ROM (Disk 1) CALMET, CALPUFF, POSTUTIL, and CALPOST for PSD Class I Areas

February 23, 2004

The following document summarizes the content of the CALMET, CALPOST, CALPUFF, and POSTUTIL modeling archive. The content of these folders is described below.

CALMET folder contains CALMET files.

“CALMET Stations Availability.xls” is a spreadsheet that summarizes all surface, upper air, and precipitation stations used in CALMET for 2001-2003.

Input&List Files folder consists of CALMET input “.inp” and list files “.lst” (two input files for each month) for three years (2001-2003).

For example: APR1_01.INP stands for 2001 CALMET input file for the first half of April.

CALMETX.EXE is the CALMET executable file.

MAKEGEO folder consists of files needed to produce the geophysical data file that is used in CALMET.

MAKEGEO.EXE – program that merges the landuse/landcover (output from CTGPROC – LULC.DAT) and terrain data (output from TERREL – TERRAIN.OUT) to create the geophysical data file (GEO.DAT) that is used as input to CALMET.

TERREL.EXE – program that uses DEM files (after DD_DEM.EXE) as input and creates the TERRAIN.OUT file that is used as input to MAKEGEO.EXE.

GEO.DAT – CALMET ready geophysical file that contains land use / land cover and terrain data that is the output from MAKEGEO.EXE and input to CALMET.

LULC.DAT – land use / land cover data file that is the output from CTGPROC.EXE and input to MAKEGEO.EXE.

MAKEGEO.INP– input file for MAKEGEO.EXE.

MAKEGEO.LST – MAKEGEO list file.

TERREL.INP – input file for TERREL.

TERRAIN.LST – terrain list file that are output from TERREL.EXE.

TERRAIN.OUT – terrain output file that is output from TERREL.EXE and input to MAKEGEO.EXE.

CTGCOMP Files.ZIP – CTGCOMP.EXE program compresses the land use / land cover data files (after DD_CTG.EXE) before they are used as input to CTGPROC.EXE.

CTGPROC Files.ZIP – CTGPROC program merges all land use / land cover data files (after CTGCOMP.EXE) into one file that is used as input to MAKEGEO.EXE.

DEM DMO.ZIP – DD_DEM.EXE ran on DEM files to produce DMO files that are used as input to TERREL.EXE

LULC_Files.ZIP – contains land use / land cover files. Used for running DD_CTG.EXE and are used as input CTGCOMP.EXE.

Precip Data folder contains all precipitation files needed for input to three years of CALMET.

For example: PRECIP01.dat is the output of PMERGE.EXE for 2001 that is used as input to CALMET.

PXTRACT.ZIP – contains files that were extracted from precipYY.dat (yy stands for year) file with PXTRACT.EXE. PrecipYY.dat is the file that contains TD-3240 variable length precipitation data that was used to produce the input to CALMET.

PMERGE.ZIP – contains files that are used to merge extracted precipitation files with PMERGE.EXE.

Executables folder contains executable files used to process precipitation data.

PEXTRACT.EXE – program that extracts precipitation data.

PMERGE.EXE – program that merges precipitation data into CALMET ready file.

Surface Data folder contains all surface data files needed for input to three years of CALMET.

DATSAV.ZIP – contains files that were used to convert hourly surface data from the Integrated Surface Hourly format to CD144.

DATSAV.ZIP for 2002 is slightly different from other two years. First sixteen hours were extracted from DATSAV02.dat file. Then hours 17-23 were extracted from DATSAV03.dat file. The files that contain 17-23 hours were named as *WMO#a.144*. Then these two sets of files were merged with a Copy.bat batch file to produce complete 24-hour files.

METSCAN.ZIP – contains METSCAN input and list files.

SMERGE.ZIP – contains files that are used to merge CD144 files with SMERGE.EXE.

After running SMERGE.EXE, we found that some missing observations (mostly cloud cover) were still present for a few scattered hours. Albuquerque International Airport (WMO 723650) observations were filled for the missing hours using interpolation and meteorological judgement. The “723650 Fill In.xls” spreadsheet lists the hours with missing observations and it lists the observations that have been filled for those hours. “Original 23650.144” file is a raw file. “23650.144” file is the file that has been filled.

Executables folder contains executables that was used to extract, perform QA, and merge the hourly CD144 surface data files.

DATSAV_0102.EXE –program that extracts and convert 2001-2002 hourly surface data from Integrated Surface Hourly to CD144.

DATSAV_03.EXE –program that extracts and convert 2003 hourly surface data from Integrated Surface Hourly to CD144.

METSCAN.EXE –program that performs QA on CD144 files.

SMERGE.EXE – program that merges all hourly CD144 surface data files into one CALMET ready surface data file.

Upper Air Data folder contains upper air files for 2001-2003 that were formatted for CALMET input.

STEP1 READ62.ZIP contains FSL formatted upper air files along with READ62 input “*.inp” and list “*.lst” files.

STEP 2 R62CLEAN5.ZIP contains the files that were used to repair missing sounding data. R62clean5 is a licensed Lakes Environmental software product that replaces the missing data in a temporal (first choice) or spatial manner (second choice) from a substitute file assigned by the operator. After these processes were complete any remaining flagged errors have been manually corrected.

Executables folder contains executable programs, which were used to preprocess upper air data.

READ62.EXE – is the program that reformats FSL formatted data into TD6201 formatted data.

Note that RD62CLEAN5.EXE is a licensed product and ENSR cannot provide this file directly. If required, ENSR can make arrangements with Lakes Environmental to provide the software for review purposes.

CALPUFF folder contains CALPUFF input and list files along with hourly ozone data files.

Input&List Files folder consists of CALPUFF input “.inp” and list files “.lst”. CALPUFF binary output files are not provided because of their large size and possibly non-portability. They can be recreated with the input files and software that is otherwise provided.

CALPUFFX.EXE – is the CALPUFF executable.

Ozone folder contains hourly ozone data files used in the CALPUFF modeling analysis. The data in these files was obtained from the AIRS

(<http://www.epa.gov/ttn/airs/airsaqs/archived%20data/downloadaqdata.htm>)

and the CASTNET database (<http://www.epa.gov/castnet/ozone.html>).

“ozone01.dat” – hourly ozone data for input to 2001 CALPUFF modeling,

“ozone02.dat” – hourly ozone data for input to 2002 CALPUFF modeling,

“ozone03.dat” – hourly ozone data for input to 2003 CALPUFF modeling.

“Ozone Stations.xls” lists the ozone stations used in CALPUFF modeling.

POSTUTIL folder contains POSTUTIL input “.inp” and list files “.lst”

POSTUTIL program processes CALPUFF concentration and wet/dry flux files, creates new species as weighted combinations of modeled species; repartitions nitric acid/nitrate based on total available sulfate and ammonia.

DEP_yy files compute Nitrogen and Sulfur deposition due to NO_x, HNO₃, NO₃, SO₂, SO₄.

PM10T_yy files compute total PM-10 concentration, which includes primary filterable and condensable as well as secondary particulates (ammonium sulfate and ammonium nitrate).

VISIB_yy file recomputes HNO₃ / NO₃ partition for regional haze calculations.

POSTUTIL.EXE – is the POSTUTIL executable program.

CALPOST folder consists of CALPOST input “.inp” and output files “.out”.

Deposition folder consists of files that were used to produce Acidic Deposition modeling results from the CALPUFF binary output. The nomenclature used to name the CALPOST files is as follows:

The first letter stands for either Sulfur (S) or Nitrogen (N).

The next 3 letters (DEP) denotes deposition.

The next two numbers represent the year of the meteorological data (01 stands for 2001, etc.)

The last two letters stand for the name of the Class I Area:

AR – Arches NP
BA – Bandelier NM
BC – Black Canyon of the Gunnison NM
CL – Canyonlands NP
CR – Capitol Reef NP
GC – Grand Canyon NP
GS – Great Sand Dunes NM
LG – La Garita Wilderness
MV – Mesa Verde NP
PE – Pecos Wilderness
PF – Petrified Forest NP
SP – San Pedro Parks Wilderness
WE – West Elk Wilderness –
WM – Weminuche Wilderness
WP – Wheeler Peak Wilderness

Increment folder consists of files that were used to produce PSD Increment modeling results from the CALPUFF and POSTUTIL outputs. The nomenclature used to name the CALPOST files is similar to the one described above.

The first three letters denote the pollutant that is being processed:

NO_x – NO_x
PM – PM₁₀
SO₂ – SO₂

Regional Haze folder consists of files that were used to produce Regional Haze modeling results from the CALPUFF and POSTUTIL output files. The nomenclature used to name the CALPOST files is similar to the one described above. CALPOST was run for six cases. They are:

Step 1: FLAG f(RH) Values, MVISBK=2, RHMAX=98%
Step 2: FLAG f(RH) Values, MVISBK=2, RHMAX=95%
Step 3: EPA f(RH) Values, MVISBK=2, RHMAX=95%
Step 4: EPA f(RH) Values, MVISBK=2, RHMAX=95%, Includes Salt Aerosol
Step 5: EPA f(RH) Values, MVISBK=3, RHMAX=89.9%, Includes Salt Aerosol
Step 6: EPA f(RH) Values, MVISBK=6, Monthly RHFAC, Includes Salt Aerosol

CALPOSTX.EXE is a postprocessor for CALPUFF

CALPOSTX_NAS.EXE is the same as CALPOSTX, except that the code was recompiled with new EPA f(RH) values.

Application for Prevention of Significant Deterioration Permit for the Desert Rock Energy Facility

KEY TO FILES ON CD-ROM (Disk 2) CALMET, CALPUFF, CALSUM, CALPOST, GEP, and SCREEN3 for PSD Class II Areas

February 23, 2004

The following document summarizes the content of the CALMET, CALPUFF, CALSUM, CALPOST, GEP, and SCREEN3 modeling archive. The content of these folders is described below.

CALMET folder contains CALMET files.

"CALMET Stations Availability.xls" is a spreadsheet that summarizes all surface, upper air, and precipitation stations used in CALMET for 2001-2003.

Input&List Files folder consists of CALMET input ".inp" and list files ".lst" (two input files for each month) for three years (2001-2003).

For example: APR1_01.INP stands for 2001 CALMET input file for the first half of April.

CALMETX.EXE is the CALMET executable file.

MAKEGEO folder consists of files needed to produce the geophysical data file that is used in CALMET.

MAKEGEO.EXE – program that merges the land use / land cover (output from CTGPROC – LULC.DAT) and terrain data (output from TERREL – TERRAIN.OUT) to create the geophysical data file (GEO.DAT) that is used as input to CALMET.

TERREL.EXE – program that uses DEM files (after DD_DEM.EXE) as input and creates the TERRAIN.OUT file that is used as input to MAKEGEO.EXE.

GEO.DAT – CALMET ready geophysical file that contains land use / land cover and terrain data that is the output from MAKEGEO.EXE and input to CALMET.

LULC.DAT – land use / land cover data file that is the output form CTGPROC.EXE and input to MAKEGEO.EXE.

MAKEGEO.INP– input file for MAKEGEO.EXE.

MAKEGEO.LST – MAKEGEO list file.

TERREL.INP – input file for TERREL.

TERRAIN.LST – terrain list file that are output from TERREL.EXE.

TERRAIN.OUT – terrain output file that is output from TERREL.EXE and input to MAKEGEO.EXE.

CTGCOMP Files.ZIP – CTGCOMP.EXE program compresses the land use / land cover data files (after DD_CTG.EXE) before they are used as input to CTGPROC.EXE.

CTGPROC Files.ZIP – CTGPROC program merges all land use / land cover data files (after CTGCOMP.EXE) into one file that is used as input to MAKEGEO.EXE.

DEM DMO.ZIP – DD_DEM.EXE ran on DEM files to produce DMO files that are used as input to TERREL.EXE

LULC_Files.ZIP – contains land use / land cover files. Used for running DD_CTG.EXE and are used as input CTGCOMP.EXE.

Precip Data folder contains all precipitation files needed for input to three years of CALMET.

NOTE: Precipitation, surface, and upper air folders contain only files that were used to create CALMET ready files. Disk 1 (Modeling Archive for Class I Areas) contains all preprocessing steps.

PMERGEyy.ZIP – contains files that are used to merge extracted precipitation files with PMERGE.EXE (yy stands for year).

For example: PRECIP01.dat is the output of PMERGE.EXE for 2001 that is used as input to CALMET.

PMERGE.EXE – program that merges precipitation data into CALMET ready file.

Surface Data folder contains all surface data files needed for input to three years of CALMET.

SMERGEyy.ZIP – contains files that are used to merge CD144 files with SMERGE.EXE.

After running SMERGE.EXE, we found that some missing observations (mostly cloud cover) were still present for a few scattered hours. Albuquerque International Airport (WMO 723650) observations were filled for the missing hours using interpolation and meteorological judgement. The “723650 Fill In.xls” spreadsheet lists the hours with missing observations and it lists the observations that have been filled for those hours. “Original 23650.144” file is a raw file. “23650.144” file is the file that has been filled.

SMERGE.EXE – program that merges all hourly CD144 surface data files into one CALMET ready surface data file.

Upper Air Data folder contains CALMET ready upper air files for 2001-2003.

CALPUFF folder contains CALPUFF files.

Input&List Files folder consists of CALPUFF input ".inp" and list files ".lst". CALPUFF binary output files are not provided because of their large size and possibly non-portability. They can be recreated with the input files and software that is otherwise provided

DSLS_01.INP – CALPUFF input file for 2001. Used to assess impacts associated with auxiliary boilers, diesel generators, and diesel fire pumps. For annual averaging periods, the impacts for associated with these sources were scaled by 2000 hours per year of operation (or 0.2283) using CALSUM. 2000 hour per year is the limitation placed on the auxiliary boilers, the diesel generators and diesel fire pumps are limited to only 500 hours per year. This approach would yield a conservative annual average impact.

MS100_01.INP – CALPUFF input file for 2001. Used to assess impacts associated with the main stack at 100% load. The SO₂ emission rate in the input file is based on 0.06 lbs/MMBtu. For 3-hour, or less, averaging periods, the SO₂ impacts associated with the main stacks were multiplied by 0.09/0.06 lbs/MMBtu (or 1.5) using CALSUM.

MS40_01.INP – CALPUFF input file for 2001. Used to assess impacts associated with the main stack at 40% load. The SO₂ emission rate in the input file is based on 0.06 lbs/MMBtu. For 3-hour, or less, averaging periods, the SO₂ impacts associated with the main stacks were multiplied by 0.09/0.06 lbs/MMBtu (or 1.5) using CALSUM.

MTHN_01.INP – CALPUFF input file for 2001. Used to assess impacts associated with the material handling sources.

PVRD_01.INP – CALPUFF input file for 2001. Used to assess impacts associated with the paved haul roads.

Nomenclature used for 2002 and 2003 is the same as described above.

GALPUFFX.EXE – is the CALPUFF executable.

CALSUM folder consists of CALSUM input ".inp" and list files ".lst".

1003hr01.INP – CALSUM input file for 2001. Used to sum impacts associated with the main stack at 100% load, the auxiliary boilers, diesel generators, diesel fire pumps, material handling sources, and paved roads and scale SO₂ concentrations to account for higher 3-hour emission rate, as noted above.

1003an01.INP – CALSUM input file for 2001. Used to sum impacts associated with the main stack at 100% load, the auxiliary boilers, diesel generators, diesel fire pumps, material handling sources, and paved roads. The impacts associated with the auxiliary boilers, diesels generators, and fire pumps were scaled by 2000/8760 to conservatively estimate annual impacts.

100Pb_01.INP – CALSUM input file for 2001. Used to estimate concentrations of Pb 24-hour (quarterly) associated with the main stack at 100% load. To do this the SO₂ impacts were scaled by 0.0002/0.06 lbs/MMBtu (or 0.0033).

100st01.INP – CALSUM input file for 2001. Used to sum impacts associated with the main stack at 100% load, the auxiliary boilers, diesel generators, diesel fire pumps, material handling sources, and paved roads.

403hr01.INP – CALSUM input file for 2001. Used to sum impacts associated with the main stack at 40% load, the auxiliary boilers, diesel generators, diesel fire pumps, material handling sources, and paved roads and scale SO₂ concentrations to account for higher 3-hour emission rate, as noted above.

403an01.INP – CALSUM input file for 2001. Used to sum impacts associated with the main stack at 40% load, the auxiliary boilers, diesel generators, diesel fire pumps, material handling sources, and paved roads. The impacts associated with the auxiliary boilers, diesels generators, and fire pumps were scaled by 2000/8760 to conservatively estimate annual impacts.

40Pb_01.INP – CALSUM input file for 2001. Used to estimate concentrations of Pb 24-hour (quarterly) associated with the main stack at 40% load. To do this the SO₂ impacts were scaled by 0.0002/0.06 lbs/MMBtu (or 0.0033).

40st01.INP – CALSUM input file for 2001. Used to sum impacts associated with the main stack at 40% load, the auxiliary boilers, diesel generators, diesel fire pumps, material handling sources, and paved roads.

Nomenclature used for 2002 and 2003 is the same as described above.

CALSUMX.EXE – is the CALSUM posprocessor for CALPUFF.

CALPOST folder consists of CALPOST input “.inp” and output files “.out”.

Navajo Receptors folder consists of files that were used to process only Navajo receptors and produce modeling results from the CALPUFF/CALSUM binary output.

100Cst01.INP – CALPOST input file for 2001. Used to assess CO 1-hour and 3-hour (8-hour) concentrations with the main stacks at 100% load.

100Nan01.INP – CALPOST input file for 2001. Used to assess NO_x annual concentrations with the main stacks at 100% load.

100Nst01.INP – CALPOST input file for 2001. Used to assess NO_x 24-hour concentrations with the main stacks at 100% load.

100Pan01.INP – CALPOST input file for 2001. Used to assess PM₁₀ annual concentrations with the main stacks at 100% load.

100Pst01.INP – CALPOST input file for 2001. Used to assess PM₁₀ 24-hour concentrations with the main stack at 100% load.

100Pb_01.INP – CALPOST input file for 2001. Used to assess Pb 24-hour concentrations with the main stack at 100% load.

100S3hr01.INP – CALPOST input file for 2001. Used to assess SO₂ 3-hour concentrations with the main stack at 100% load.

100San01.INP – CALPOST input file for 2001. Used to assess SO₂ annual concentrations with the main stack at 100% load.

100Sst01.INP – CALPOST input file for 2001. Used to assess SO₂ 24-hour concentrations with the main stack at 100% load.

40Cst01.INP – CALPOST input file for 2001. Used to assess CO 1-hour and 3-hour (8-hour) concentrations with the main stacks at 40% load.

40Nan01.INP – CALPOST input file for 2001. Used to assess NO_x annual concentrations with the main stacks at 40% load.

40Nst01.INP – CALPOST input file for 2001. Used to assess NO_x 24-hour concentrations with the main stacks at 40% load.

40Pan01.INP – CALPOST input file for 2001. Used to assess PM₁₀ annual concentrations with the main stacks at 40% load.

40Pst01.INP – CALPOST input file for 2001. Used to assess PM₁₀ 24-hour concentrations with the main stack at 40% load.

40Pb_01.INP – CALPOST input file for 2001. Used to assess Pb 24-hour concentrations with the main stack at 40% load.

40S3hr01.INP – CALPOST input file for 2001. Used to assess SO₂ 3-hour concentrations with the main stack at 40% load.

40San01.INP – CALPOST input file for 2001. Used to assess SO₂ annual concentrations with the main stack at 40% load.

40Sst01.INP – CALPOST input file for 2001. Used to assess SO₂ 24-hour concentrations with the main stack at 40% load.

New Mexico Receptors folder consists of files that were used to process New Mexico receptors and produce modeling results from the CALPUFF/CALSUM binary output.

Nomenclature of the input files is the same as described above.

CALPOSTX.EXE is a postprocessor for CALPUFF.

DEMs folder contains 10-meter and 30-meter Digital Elevation Model (DEM) files used to calculate the elevations of the Class II Cartesian receptor grid.

GEP folder contains BPIP input (*.bpi) and output (*.bpo) files associated with the project's GEP analysis. This folder also contains the BPIP modeling executable (BPIP.EXE)

SCREEN3 folder contains SCREEN3 output files (*.out) from the worst-case load determination runs. For example, 100_Load.out is the output file for the 100% load operating scenario.

Application for Prevention of Significant Deterioration Permit for the Desert Rock Energy Facility

KEY TO FILES ON CD-ROM (Disk 3) CALMET, CALPUFF, POSTUTIL, and CALPOST for Distant PSD Class II Areas

February 23, 2004

The following document summarizes the content of the CALPOST, CALPUFF, and POSTUTIL modeling archive. The content of these folders is described below.

NOTE: CALMET files for Distant PDS Class II Areas are the same as for PDS Class I Areas and therefor they can be found on the Disk 1:

CALPUFF folder contains CALPUFF input and list files along with hourly ozone data files.

Input&List Files folder consists of CALPUFF input ".inp" and list files ".lst". CALPUFF binary output files are not provided because of their large size and possibly non-portability. They can be recreated with the input files and software that is otherwise provided.

CALPUFFX.EXE – is the CALPUFF executable.

Ozone folder contains hourly ozone data files used in the CALPUFF modeling analysis. The ozone files for PSD Distant Class II Areas are the same as for PSD Class Areas and therefore preprocessing of ozone data can be found on the Disk 1.

"ozone01.dat" – hourly ozone data for input to 2001 CALPUFF modeling,

"ozone02.dat" – hourly ozone data for input to 2002 CALPUFF modeling,

"ozone03.dat" – hourly ozone data for input to 2003 CALPUFF modeling.

POSTUTIL folder contains POSTUTIL input ".inp" and list files ".lst"

POSTUTIL program processes CALPUFF concentration and wet/dry flux files, creates new species as weighted combinations of modeled species; repartitions nitric acid/nitrate based on total available sulfate and ammonia.

DEP_yy files compute Nitrogen and Sulfur deposition due to NO_x, HNO₃, NO₃, SO₂, SO₄.

PM10T_yy files compute total PM-10 concentration, which includes primary filterable and condensable as well as secondary particulates (ammonium sulfate and ammonium nitrate).

VISIB_yy file recomputes HNO₃ / NO₃ partition for regional haze calculations.

POSTUTIL.EXE – is the POSTUTIL executable program.

CALPOST folder consists of CALPOST input “.inp” and output files “.out”.

Deposition folder consists of files that were used to produce Acidic Deposition modeling results from the CALPUFF binary output. The nomenclature used to name the CALPOST files is as follows:

The first letter stands for either Sulfur (S) or Nitrogen (N).

The next 3 letters (DEP) denotes deposition.

The next two numbers represent the year of the meteorological data (01 stands for 2001, etc.)

The last two letters stand for the name of the Distant Class II Area:

AZ - Aztec Ruins Nat. Mon.
CA - Canyon de Chelly Nat. Mon.
CH - Chaco Culture NHP
CO - Colorado Nat. Mon.*
CR - Cruces Basin NWA
CU - Curecanti NRA
EM - El Malpais Nat. Mon.
EO - El Morro Nat. Mon.
GL - Glen Canyon NRA
HO - Hovenweep Nat. Mon.
HU - Hubbel Trading Post NHS
LI - Lizard Head NWA
MS - Mount Sneffels NWA
NA - Natural Bridges Nat. Mon.
NB - Navajo Nat. Mon.
PC - Pecos NHP
PE - Petroglyph Nat. Mon.
RA - Rainbow Bridge Nat. Mon.
SA - Salinas Pueblo Missions Nat. Mon.
SO - South San Juan NWA
SU - Sunset Crater Nat. Mon.
UN - Uncompahgre NWA*
WI - Wilson Mountain Primitive Area*
WU - Wupatki Nat. Mon.
YU - Yucca House Nat. Mon.
ZU - Zuni-Cibola NHP

Increment folder consists of files that were used to produce PSD Increment modeling results from the CALPUFF and POSTUTIL outputs. The nomenclature used to name the CALPOST files is similar to the one described above.

The first three letters denote the pollutant that is being processed:

NO_x – NO_x

PM – PM₁₀

SO₂ – SO₂

Regional Haze folder consists of files that were used to produce Regional Haze modeling results from the CALPUFF and POSTUTIL output files. The nomenclature used to name the CALPOST files is similar to the one described above. CALPOST was run for six cases. They are:

Step 1: FLAG f(RH) Values, MVISBK=2, RHMAX=95%, Non-Hygro (BKSOIL) and Hygro/3 (BKSO₄) pre-FLAG background values from the closest Class I Area.

Step 2: EPA f(RH) Values, MVISBK=2, RHMAX=95%, Non-Hygro (BKSOIL) and Hygro/3 (BKSO₄) pre-FLAG background values from the closest Class I Area.

CALPOSTX.EXE is a postprocessor for CALPUFF

CALPOSTX_NAS.EXE is the same as CALPOSTX, except that the code was recompiled with new EPA f(RH) values.