

# ERTAC Input Files

## Julie McDill - MARAMA

# ERTAC EGU Projection Input Files

- Unit Availability File
- Controls File
- Growth File
- Input Variables

# Unit Availability File

- Scope: Continental United States (CONUS)
- Contains Electric Generation Unit (EGU) Data that report to CAMD
- Assembled from a variety of sources:
  - USEPA Clean Air Markets Division (CAMD) NEEDS Database
  - EIA Form 860
  - North American Energy Reliability Corporation (NERC) datasets
  - Input from Industry Partners
  - Input from State Air Quality Staff
- Allows edits to unit-specific factors that may change between the base year and the future year
  - Examples: utilization fractions, unit efficiency, capacity, fuels used

# Controls File

- Allows user to update emission factors/controls that may change between base year and future year
- Only future controls are included
- SO<sub>2</sub>/NO<sub>x</sub>, lbs/mmbtu and control efficiency
- Allows user to input emission rates for new units with no base year data
- Information provided by State AQ Staff
- Can be used to apply seasonal controls

# Regional/Fuel-Unit Type Flexibility: Growth Rates File

- Annual and peak growth rates
- Application of transition hours
  - peak to transition hours
  - transition hours to nonpeak
  - example: coal is set at 200 and 2000. May be changed to mitigate the annual affect of peak growth rates

# Input Variables File

- Allows user to specify parameters on a region and fuel-unit type basis
- New unit sizes for generation deficit units
  - Sizes vary by area of the country; NE much smaller than SE, for example
  - Allows a range (min and max)
- New unit profiles
  - Adjust the mimic profile-best guess at what new unit profile may look like
  - Adjust the controlled emission rates

# Input Variables File (Continued)

- New unit locations
  - User may allow ERTAC EGU projection tool to choose
  - OR: User may use the input variables file to specify locations
    - Avoids placing new units in sensitive areas
- Existing unit parameters
  - Maximum utilization fractions
  - Optimal load thresholds
- Other (not a complete list):
  - Demand Cushion
  - Deficit Review Hour
  - Ozone Season

# In Summary

- The ERTAC Input Files drive the model
- Input files were built from a wide variety of existing data and quality assured by state AQ staff.
- The Input Files provide lots of knobs that can be adjusted to make the tool work better.
- These can be adjusted globally, regionally, or in some cases on a unit level