

Documentation of ERTAC EGU CONUS 1.7wa
July 29, 2014

The ERTAC EGU committee develops reference runs for the continental United States (CONUS). CONUS 1.7wa is the final reference run for base year 2007. This run was complete in Fall, 2014. The prior reference runs for 2007 were as follows:

- 1.6 – Run in Spring 2013.
- 1.65 – Run in Summer 2013.

The inputs used to develop the CONUS1.7wa runs are shown in the following table:

ERTAC File Name	VERSION	1.7
	CODE:	1.0
NA	Base Year	2007
	Future projection years	2017, 2018, 2020
	Scenarios run by ERTAC EGU leadership	MATS; High gas/Low gas
	Overview of improvements over previous runs	
NA	Regional Scheme	Energy Information Agency (EIA) Electricity Market Module (EMM) regional system.
camd_hourly_base.csv	Hourly CAMD CEM data	
ertac_initial_uaf.csv	Unit Availability File	
ertac_control_emissions.csv	Control File	
ertac_growth_rates.csv	Growth File	
NA	Average Annual Growth Source	AEO 2013 Table 96. Downloaded by Danny Wong on Dec 6, 2012
		2012 NERC Refined Peak Demand Assessment. Schedule 1B. Downloaded by Bob Lopez on Jan 10, 2012. Peak growth increments for 2007-2011 were derived from the NERC 2008, 2009, and 2010 Capacity and Demand Reports. This procedure is documented in the spreadsheet titled "Template_Peaks from Annual Sheet v4b.xls" Individual Unit Data 2010.xls was included in the ES&D zip file and it was used to prepare an ERTAC EMM and NERC crosswalk. This unit level file was joined with the AEO "Aeo11 pttlist.xls" to get the EMM and NERC regions for each unit.
NA	Peak Growth Source	
NA	EMM to NERC Crosswalk	Version1
ertac_input_variables.csv	Input Variables File	
ertac_hourly_noncamd.csv	Hourly CEM data replacing data in CAMD	Not used
group_total_listing.csv	Aggregation scheme for multi-state caps	
state_total_listing.csv	Aggregation scheme for state level caps	
NA	Notes	

- UAF and Controls File Data –The UAF and controls file for 1.7 were also dated July 18, 2013, but these files were based on a BY of 2007.
- Growth Rate Data – 1.7 growth rates were based on AEO2013, in the file named, "2-6-2013 Growth Rates Regional Template ERTAC Round 1_6.xlsx."
- Units with little or no base year data – In the 1.7 input files, some of these units were included in the nonCAMD hourly file, with one line item of "fake" data for each unit that would allow the tool to calculate reasonable heat rates, emission rates, etc for that unit. Others of these units had the additional data supplied in the UAF to allow the program to process these units in the FY, with no additional hourly data supplied in the nonCAMD hourly file.
- Non-EGUs – In the 1.7 UAF, some states included units that were non-EGUs in the UAF, while others omitted those units.
- In the 1.7 UAF, several units were identified as causing the tool to crash (for example, Alma, Paradise #3).