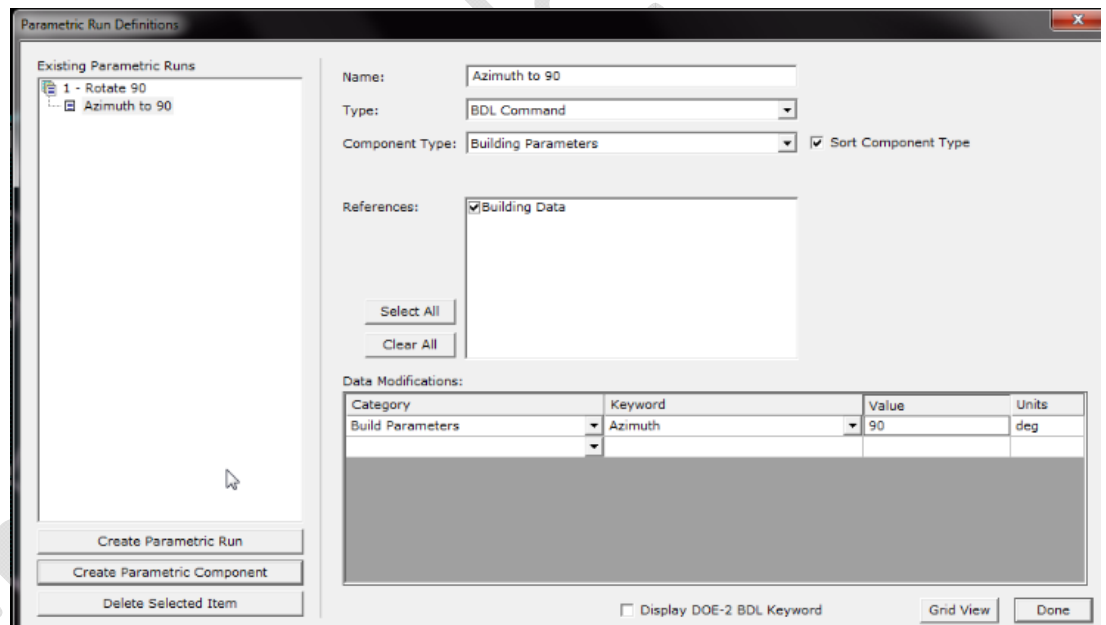


Energy-models.com LEED + eQUEST Case Study

Creating The Baseline Building:

1. Save Baseline file

- a. Create A baseline folder
- b. Save the project as "Baseline..."
- c. Rename the project when prompted by eQUEST
- d. Select Tools - Parametric runs
- e. Create Parametric Run and Name "Rotate 90"
- f. Create Parametric components and name "Azimuth to 90"
 - i. Type - BDL Command
 - ii. Component Type = Building Parameters
 - iii. Reference "Building data" checked
 - iv. Data Modifications:



- v. Repeat for 180 and 270 (3 additional parametric runs)

2. Determine 5 factors

- a. Climate Zone
 - b. Building Square Footage
 - c. Percent Glass (LV-D report)
 - d. Electric Rates?
3. Determine System number and plant types (ie Systems 1-8)
 4. Implement Changes for Baseline
 - a. Envelope (use the imports for walls, windows, roofs)
 - i. Walls, Roofs, Floors U-value
 - ii. Window U Value/SHGC per Table 5.5-
 - iii. Change Percent glass (if greater than 40%)

- iv. Floor F Factor
 - b. LPD (space by space, or whole building method) Table 9.6.1 or 8.5.1
 - c. Airside Systems
 - i. Fan Power (SV-A report)
 - ii. If VAV, use 90.1-2007 unloading curve (import available)
 - iii. VAV also requires Supply Air reset - Set this up for Systems 5-8
 - iv. If >10,000 cfm, use Optimum Start
 - v. Efficiencies/EIR
 - d. Fan Calculations (energy-models.com/fan calculator)
 - e. Waterside Systems
 - i. Boiler/DHW Efficiency
 - ii. # of Boilers (1 if <15,000 sq ft, 2 if >15,000 square feet)
 - 1. Set up boiler staging if 2 boilers
 - iii. If chilled water equipment, set efficiencies
- 5. Submitting Reports
 - a. SV-A
 - b. PV-A
 - c. Last page of LV-D (Hit LV-E and scroll up)
 - d. BEPS
 - e. BEPU
 - f. ES- D (Utility Cost Summary)
 - g. May require other reports (but LESS is MORE)