

$$\frac{CD}{MWh} \div 3.412 = \frac{CD \text{ heat}}{\text{net gen heat}}$$

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$$\frac{CD \text{ heat}}{\text{net gen heat}} \times TE = \frac{CD \text{ heat}}{\text{fuel heat}}$$

$$1 - TE - \frac{CD \text{ heat}}{\text{fuel heat}} = \% \text{ loss}$$

$$1 + 2\% \text{ hotel load} - \% \text{ loss} = \text{"boiler E"}$$

Which is correct for most ST

For nukes, "boiler efficiency" should be 1
 NGCC " 80%

Back-calculate boiler efficiency for each
 gen type in 156 months

$$\text{"Boiler E"} = 1 + .02 - \left[1 - TE - \left[\frac{CD}{MWh} \div 3.412 \right] \times TE \right]$$

Stack 13 yrs of summary results

Sort by gentype, then time

Break into 9 blocks, plot "Boiler E" trend.

This gives us scope of boiler E issues in model

Then go back to intermediate output and

look at $\frac{\text{steam heat}}{\text{fuel heat}} = \text{Boiler E}$ line by line