



Using the Model Catalog Feature in GT MASTER and THERMOFLEX

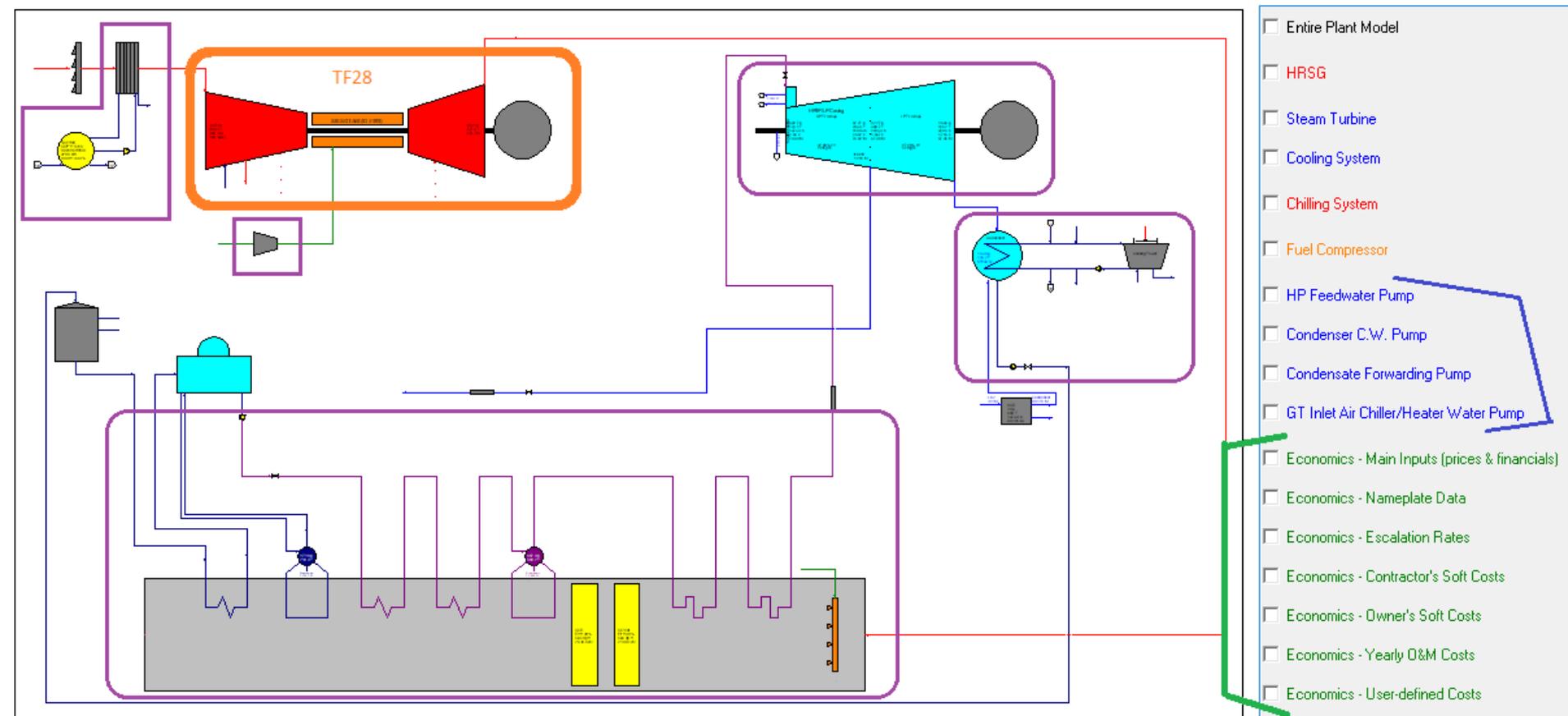
Model Catalogs (the 5 W's)

- **Who:** Users of GT MASTER & THERMOFLEX (with or without PEACE)
- **What:** Method to store model components in a catalog (repository) so they may be reused in other models, and shared with other users.
- **Where:** GT MASTER – off-design simulation partner to GT PRO.
THERMOFLEX – fully flexible modeling environment with > 220 standard built-in components handling 7 fluid types
- **When:** GT MASTER v26.1, THERMOFLEX v27
- **Why?**
 - Provides engineers a convenient system to organize work product (time, effort, \$) for reuse in other situations.
 - Provides OEMs a simple way to publish reference plants and/or tuned component models for use in Thermodflow programs by thousands of power engineers, customers, and would-be customers.

Catalog Mechanics

- Catalog Files
 - Located by default in the [Catalog] folder under your “MYFILES” folder
 - Files may be stored in shared location for multi-user access
- GT MASTER
 - Store items in a catalog from VIEW OUTPUTS (computed)
 - Retrieve items from catalog from EDIT INPUTS
- THERMOFLEX
 - Store items in a catalog from VIEW OUTPUTS (computed)
 - Retrieve model items from catalog in EDIT DRAWING
 - Retrieve model data from catalog in EDIT INPUTS
- Manage Catalogs
 - from any view since catalogs unconnected from current model

GT MASTER – What can be cataloged?



GT MASTER Import Rules

- Can swap with “compatible” components
 - HRSGs (*e.g. Type 2 & Type 6 are “compatible”*)
 - STs (*same cycle type & shaft arrangement SS-MS*)
 - Condensing systems (*types interchangeable impact on ST design up to you*)
 - Pumps, Fuel Compressors, Economics – flexible
 - Cataloged model version \leq Current model’s version
- Can import chilling system into plant without one
- Import messages used to indicate if items seem too dissimilar
 - e.g. ST group nozzle areas $\pm 35\%$
 - e.g. Condenser areas $\pm 50\%$ (same type)
 - e.g. Condenser nominal steam flow $\pm 25\%$ (dissimilar types)
 - e.g. Chiller compares nominal GT airflow $\pm 25\%$
- Ultimately, pay attention to GT MASTER outputs & capacity messages, shown after computation is complete, to help decide if imported items are truly incompatible, or if other modifications are needed

THERMOFLEX – What can be cataloged?

