Model Dependency Tree for ICE Reactor 1
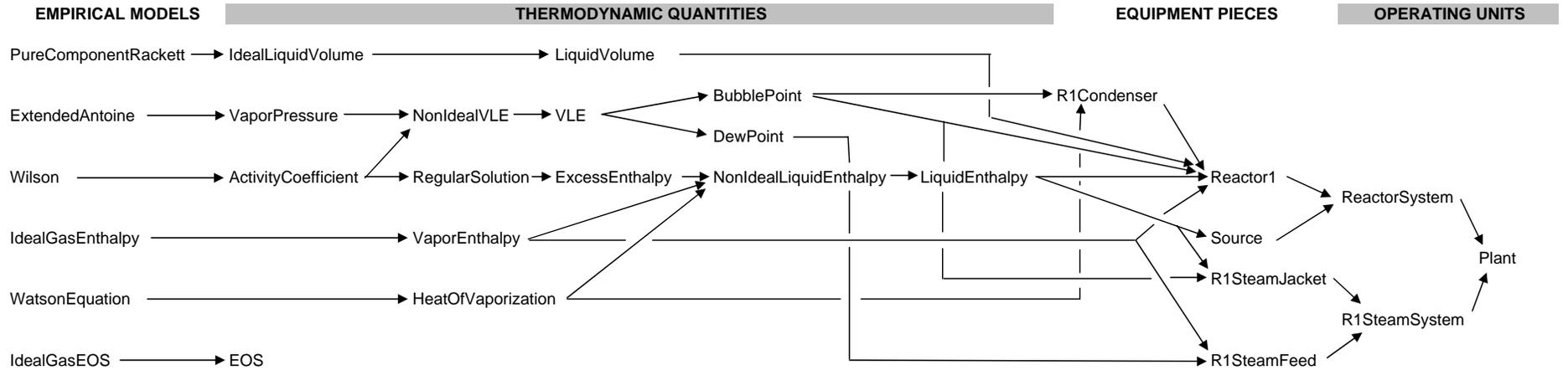comprising MODELs found in the files ICE_Reactor1_Model.ABACUSS and PhysicalProperties.ABACUSS

EMPIRICAL MODELS   **THERMODYNAMIC QUANTITIES**   **EQUIPMENT PIECES**   **OPERATING UNITS**

PureComponentRackett → IdealLiquidVolume → LiquidVolume

ExtendedAntoine → VaporPressure → NonIdealVLE → VLE → BubblePoint → R1Condenser

DewPoint

Wilson → ActivityCoefficient → RegularSolution → ExcessEnthalpy → NonIdealLiquidEnthalpy → LiquidEnthalpy → Reactor1 → ReactorSystem → Plant

IdealGasEnthalpy → VaporEnthalpy → Source

WatsonEquation → HeatOfVaporization → R1SteamJacket

IdealGasEOS → EOS → R1SteamFeed → R1SteamSystem

At this end are defined low-level parameters, such as the coefficients in a model of activity coefficients.

values for parameters and independent variables
FLOW LEFT

computed values for dependent variables
FLOW RIGHT

At this end, the values of low-level parameters are supplied for each chemical component of interest.

In 'production use' of the code, however, we could have a library of physical property model coefficients stored, and merely select chemical components here.