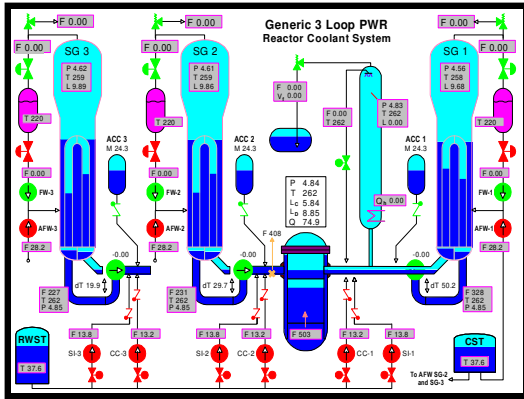
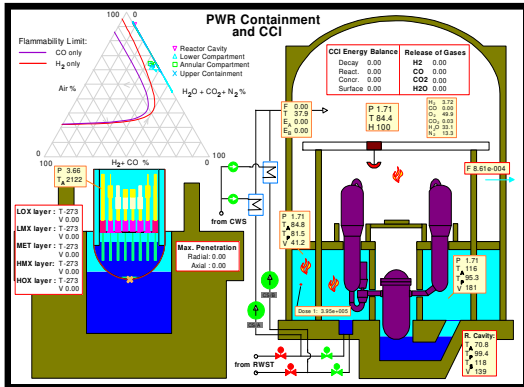


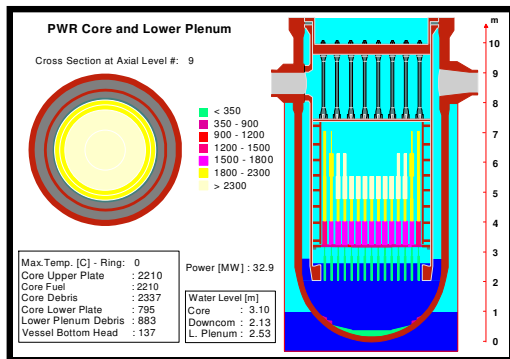
### PWR SYSTEM SCREEN



### PWR CONTAINMENT SCREEN



### VESSEL SCREEN



# SIM Active Charts

SIMULATION AND INTERACTIVE MODELING with EOP/SAMG Charts

FOR

# SAMG DEVELOPMENT, OPTIMIZATION, VALIDATION AND TRAINING

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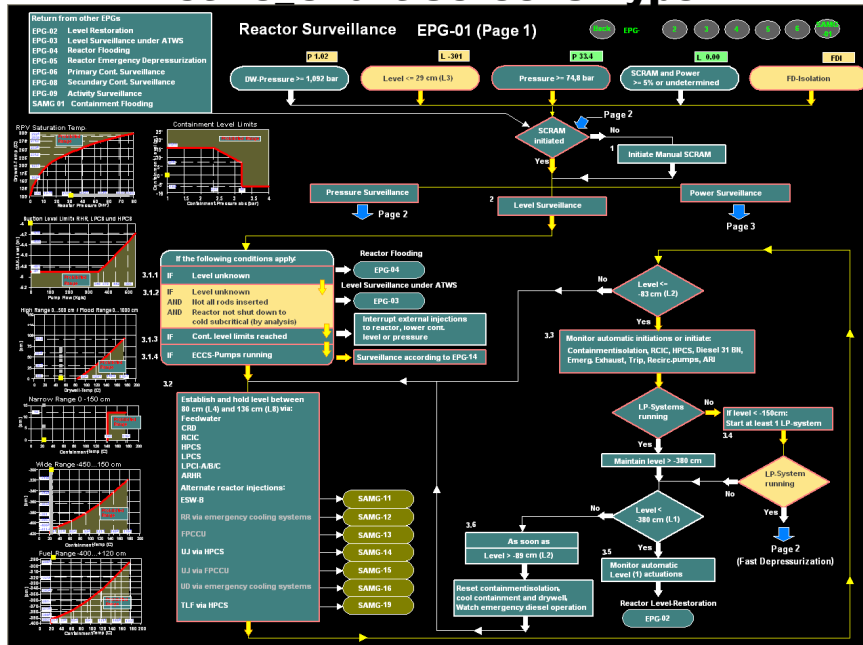
Website: [www.gorma.com](http://www.gorma.com)

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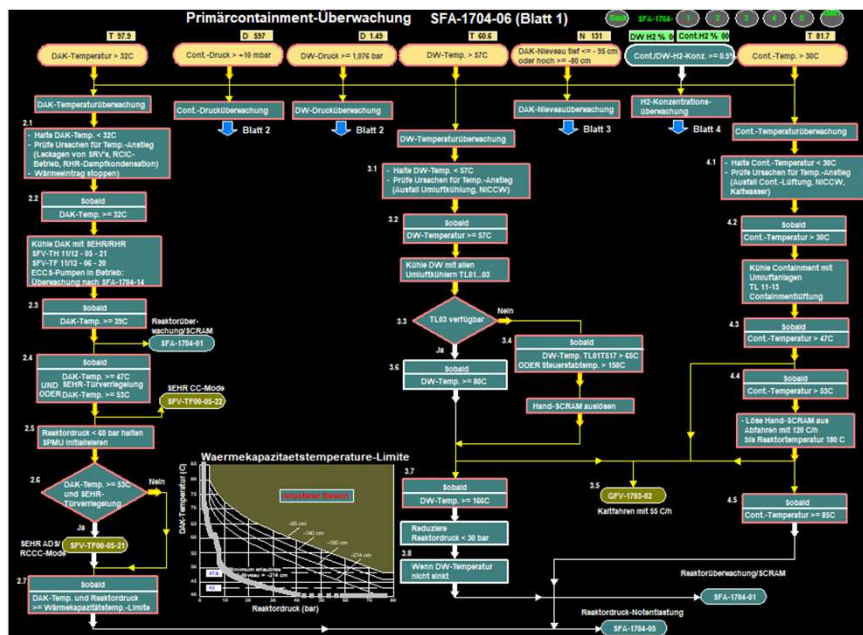


## Active Chart Screens Type 1

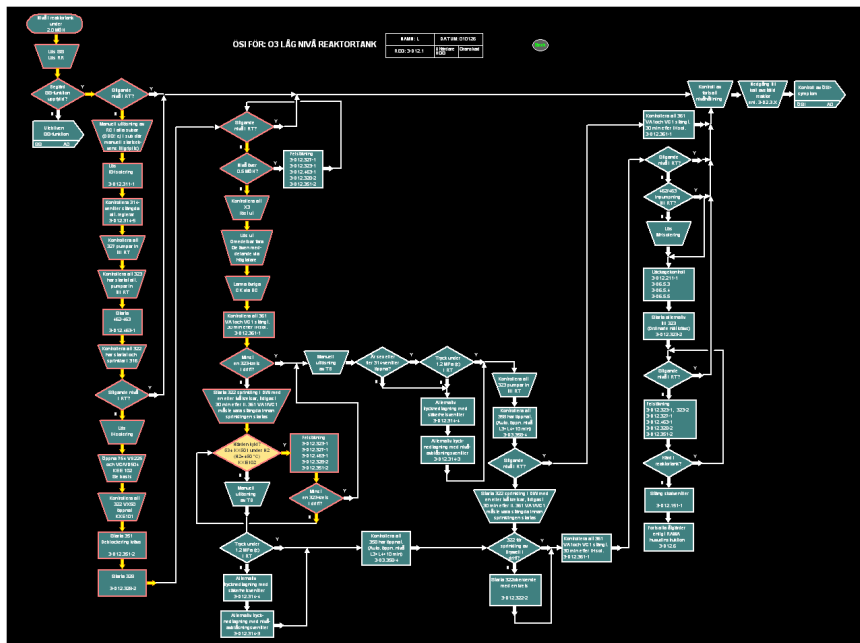
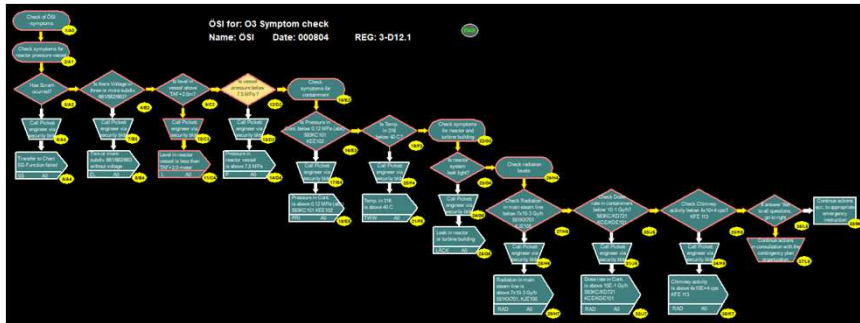


## SIM / TVP Active\_Charts

- SAMGs exist or can be displayed as logic decision charts
- SIM\_Charts models EOPs & SAMGs as dynamic decision charts linked to the running MELCOR or MAAP under SIM
- Develop EOP and SAMG ActiveChart screens with ScreenBuilder
- Link ActiveCharts to running simulation code
- In ActiveChart Module:
  - Decide path branching based on physical condition in the linked simulation
  - Link operator actions in EOP/SAMGs to running simulation code (MELCOR, MAAP)
  - Two modes: Automatic and Manual



## Alternate Style Active\_Chart Screen



**Automatic** mode is for SAMG development and validation:

- Chart actions are executed automatically
- Operator actions are executed after pre-programmed time-delay representing time required to execute each action.
- Time delays for automatic actions are obtained from operator interviews.
- Define multiple sets of time delays for individual sequences, actions outside MCR, seismic sequences, etc.
- Simulates “ideal operator”.

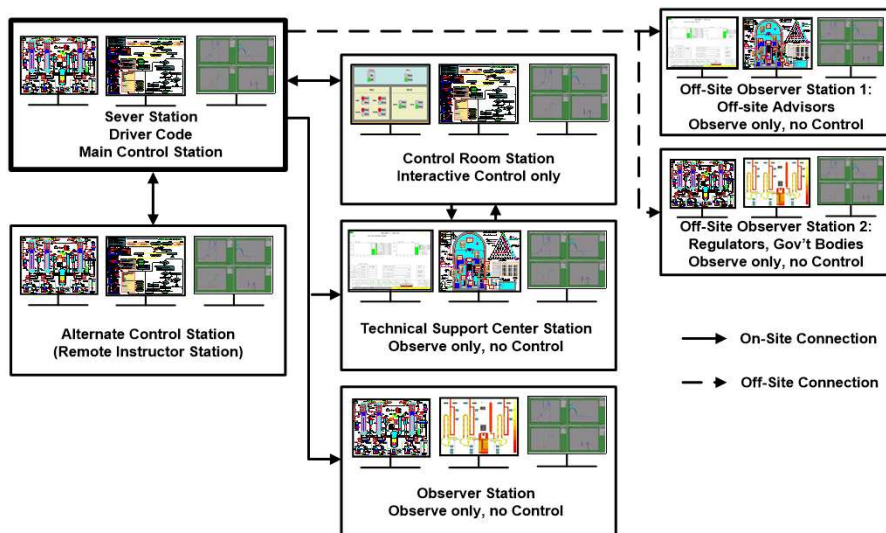
**Manual** mode for SAMG training:

- Chart actions are executed manually by “operator” at keyboard based on SAMG instructions
- Operator actions are executed after pre-programmed time-delay representing time required to execute each action.
- Time delays are developed by plant operating staff

## Chart Objects

- Trigger Boxes – based on physical condition in simulation
- Chart Path - activated path highlighted
- Action Boxes - operator actions
- Yes/No Decision Boxes: chart path splits
- Chart Display Mode - zoom & scroll or chart segments with transfer jumps
- Parameter Windows
- Embedded Graphs and Aids
- Transfer Buttons
- User-defined Colors
- Chart Mode – automatic vs. manual
- Procedure Icon - brings procedure to screen
- Charts could be driven by Plant Instrumentation

## SIM/TVP MULTI-STATION SYSTEM FOR EPG/SAMG TRAINING AND DRILLS



## Charts Coupled with Multi-Station System for Training/Exercises/Drills

- Allows realistic participation of all participants
- Tests procedures, communications and decision making