SRP AFGS Hard Panel Emulation

Agua Fria Hard Panel Emulation

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Agua Fria Plant Overview

Unit 2: 100 MW
Built: 1956
A&E: Bechtel
Boiler: Riley Stoker
Turbine: GE

Peaking Unit
Agua Fria Plant Overview

Staff Training objectives

◊ Hot, warm, cold starts
◊ Normal shutdowns
◊ Trip points match unit
◊ Displays match unit
◊ Hard panel
Agua Fria Controls

Controls

BOP: Foxboro I/A
Turbine: GE Mechanical
Agua Fria Plant Hard Panel

- Turbine Controls
- Stop Valve (5 positions)
- Governor
- Load Limiter
- Pneumatic Relief Valve

Feedbacks
- Solenoid Trip
- MFT
Agua Fria Plant Hard Panel

- Turbine Operation
- Warming Steam Chest
- Roll up and Sync
- Load Control (initial)
- Swap Arcs
Hardware or Software?
Agua Fria Plant and Simulator
Agua Fria Simulator Overview

Trainee Perspective
Alarm Screen
DCS HMI screens
Hard Panel
Agua Fria Simulator Training

Trainee Actions
Steam Chest Warming
Roll-up and Sync
Load Control (initial)
Swap Arcs
Trainee Responses

Simulator switches behave very similar to those on the unit
Thanks for your time and attention

Q & A