Cost Effective Detailed-3D Visualization of Technical Information

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Site Equipment and Process Familiarization – Content Overview

- Site Overview for Introduction
- System Overview for Familiarity with Each System
- System Specific Explanations with Emphasis on Flowpaths and Design
- Equipment Specific Familiarization - CT, HRSG, ST, BOP
  • Includes integration of control screens with 3D Process Animation

■ Plant Operation
  - Equipment Control Screen Familiarization – such as Mark VI for 7FA
  - Complete site Start-up Review using control screens with walk down sheets and checklists

■ Site Excursions
  - Explain known site issues and past occurrences
  - Examples include
    • Differential Expansion Issue
    • Boiler Cycle Chemistry Excursion
    • Drum Level Control
Effective Progression of Information

- Detailed 3D Modeling
- Book 1 – Design and Flowpaths
- Book 2 – Control Screen Overview
- Book 3 – startup and operation
- Book 4 – Excursions and Troubleshooting
- Book 5 – Detailed 3D Manuals
- Current Course Catalog
Coal Plant Content Overview Demo Video

- Plants that were built after 1975 or newer generally have a site 3D model that can be leverage

- TTP has completed 2 Entire Coal Fired Plant Training Programs in detailed 3D presented through Computer Based Training (CBT).

- The first two TTP Coal Plant Training Development Projects, were very challenging due to sites being 40 years or more in age and no Site or equipment 3D models available

- Link – Coal Plant
Detailed 3D Maintenance Training

- Complete Disassembly, Inspection and Repair and Reassembly
  - 7FA Hot Gas Path – 100 3D illustrated Steps
    - Install Lower Half First Stage Nozzle Support Ring
    - Retake and Record Turbine Clearances on Lower Half 2nd and 3rd Stage Components
  - 2 Pressure Boiler Feed Pump
    - Sample 1
  - Hydraulic Actuators
    - Sample 1
Thank You.