AEP's Conversion of Mainframe Models to PC

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AEP's Conversion of Mainframe PEPSE Models to PC

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PEPSE Heat Balance Conversion Project

- 34 PEPSE heat balance models were converted from Mainframe to PC from March 1996 through May 1997
- PEPSE models were updated as necessary after being converted to PC
- Heat Balance drawings were developed using PEPSE graphics for all models

PEPSE Heat Balance Conversion Project (continued)

- PEPSE Demonstrations (2 to 4 hours) were given to all plants
- Formal PEPSE training is being offered to plant engineers
- AEP PEPSE Working Group Meetings are planned (tentative)

Process for Converting MF Models to PC

1. Build PEPSE schematic on PC to match MF model
2. Download mainframe PEPSE input file to PC
3. Convert PEPSE input file to EASEPLUS format
4. Import EASEPLUS file into PEPSE for Widows model file (schematic)
5. Test model (results must be identical to MF results)

Heat Balance Drawings

- Previous heat balance drawings were developed using AutoCAD
- New heat balance drawings were developed using PEPSE graphics
  - Simplifies the process of revising drawings
  - Eliminates having to maintain CAD files in addition to model files
- New drawings were sized to fit on 8.5" x 11" paper to simplify filing and distribution

Plant PEPSE Demonstrations

- PEPSE Demonstrations (2 to 4 hours) were provided to all plants
- Demonstrations were site specific
- Hands-on participation was encouraged
- Agenda included: overview of software, typical applications, site specific case studies
- Plant feedback has been varied

PEPSE Training

- Formal PEPSE training (one week course) is being offered to plant engineers
- Course will cover introduction to PEPSE and basic modeling techniques as well as some advanced topics such as guidelines for building a Test Model and use of Special Option 6
- Course will emphasize using and modifying existing models

Conclusions / Benefits

- Model geometry and results are displayed graphically
- PEPSE models are easier to use than MF version (user friendly)
- Does not require knowledge of ROSCOE and JCL to run PEPSE
- Immediate running of jobs
- Able to provide access to plant and AEPSC personnel without MF access
- Plant engineers are more willing to use PEPSE as a tool for HR improvement