Session 2: Part 2

Results of the preliminary power sources optimization study

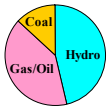
Study Objectives

- To establish a basic model of PDPAT
- To understand changes in demand-and-supply operations
- To understand impacts of changing load curve and power sources composition
- To identify issues and countermeasures for detailed study

Assumptions

- Power system structure: a single system
- Target year: 2015
- Power demand: 5th Master Plan (Base Case)
- Development scenario: ditto
- Output of conventional hydropower:
  min. output = 45% of the installed capacity
- Peak duration time of PSPP: 7 hours

Study Cases

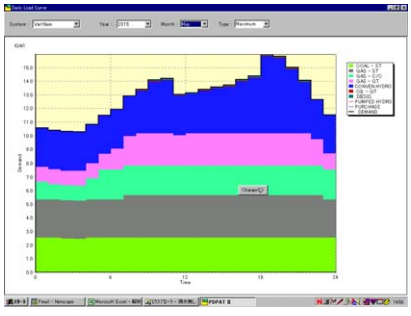
Item	Case 1	Case 2	Case 3
Annual Load factor	70 %	60 %	60 %
Power Sources Composition			

Study Process

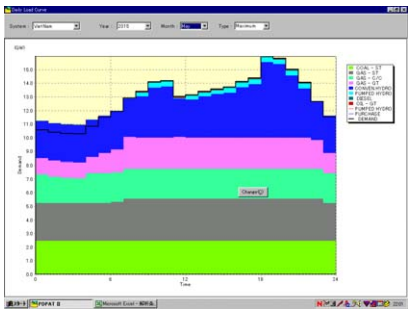
- System operations are simulated by replacing Conventional Hydropower with PSPP.
- Changes in operations and annual costs are identified.

Results: Daily Operation

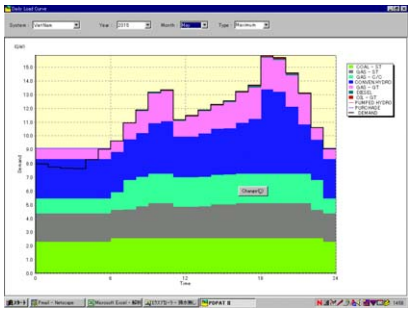
Case-1 (w/o PSPP)



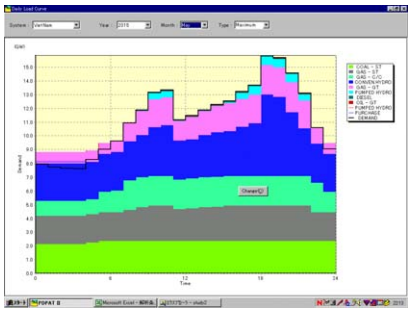
Results: Daily Operation
Case-1 (with PSPP)



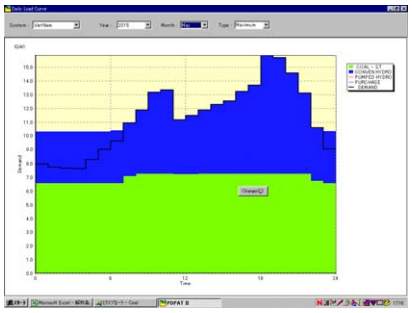
Results: Daily Operation
Case-2 (w/o PSPP)



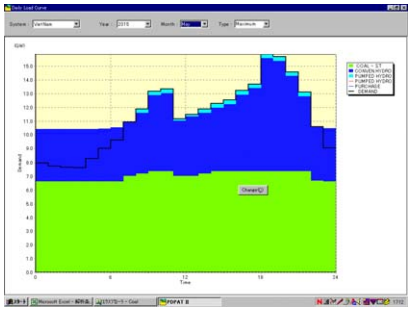
Results: Daily Operation
Case-2 (with PSPP)



Results: Daily Operation
Case-3 (w/o PSPP)



Results: Daily Operation
Case-3 (with PSPP)



Results: Weekly Operation
Case-2 (w/o PSPP)