

## SECTION IV. TASK 4. APPLICATION OF INTEGRATED CODES

### Objective

The objective of this task are to evaluate the integrated comprehensive codes for pulverized coal and fixed-bed reactors and to apply the codes to selected cases of interest to METC.

### Task Outline

This task will be accomplished in two subtasks, one for the entrained-bed lasting 45 months and one for the fixed-bed lasting 36 months. Each of these subtasks will consists of three components: 1) Simulation of demonstration cases on BYU computers; 2) Implementation on a work station at AFR (the Sun workstation has been chosen); and 3) Simulation of demonstration cases on the workstation.

IV.A. SUBTASK 4.a. - APPLICATION OF GENERALIZED PULVERIZED COAL  
COMPREHENSIVE CODE

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Objective

Implement the comprehensive entrained-bed code developed in Task 3 at AFR.  
Simulate reactors of interest to METC.

Accomplishments

Work was completed on preparing a version of the FG-DVC model for transfer  
from AFR to EYU. The time for the combined programs to run varied from 4.5 to 5.5  
hours depending on the coal and conditions.

Plans

Continue work on improving the integrated model. For the near term, this work  
will be done primarily at BYU under Subtask 3.a.

**IV.B. SUBTASK 4.b. - APPLICATION OF FIXED-BED CODE**

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**Objective**

Simulate coal conversion reactors of interest to METC.

**Accomplishments**

No work scheduled.