

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; 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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Objectives

The objectives of this subtask are 1) to implement the comprehensive entrained-bed code developed in Task 3 at AFR and 2) to simulate reactors of interest to METC.

Accomplishments

Work on this subtask is being accomplished under three components: 1) Simulation of demonstration cases on BYU computers, 2) implementation at AFR on a workstation computer, and 3) simulation of demonstration cases on a workstation. This subtask was originally scheduled to begin during the second year. However, due to the overall project being funded at a rate lower than originally planned, this subtask was not initiated. Plans for the next quarter are described below.

Plans

During the next quarter, the demonstration cases to be simulated during Phase I of the program will be selected. Simulation of at least one of these cases will be initiated.

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

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Objectives

The objective of this subtask is to apply the comprehensive fixed-bed code developed in Subtask 3.b. to simulate coal conversion reactors of interest to METC.

Accomplishments

This subtask is not scheduled to start until the third year.

Plans

Plans have been made to initiate this subtask during the third quarter of the third year.

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