

MONTHLY PROGRESS REPORT FOR CONTRACT NO. 500-00-036

PROJECT 2.2 – ENHANCED ENERGY RECOVERY THROUGH OPTIMIZATION OF
ANAEROBIC DIGESTION AND MICROTURBINES PROJECT

REPORT PREPARED BY: COMMONWEALTH ENERGY TEAM

July 2003

Contractor Project Director:	Patrick Lilly (360) 906-0616
Contractor Project Manager:	Bill Kitto (503) 235-5022
Commission Project Manager:	Zhiqin Zhang (916) 654-4063

What we planned to accomplish this period:

Information collection and analysis activities were planned to continue as related to process selection. Activity related to enhanced energy production, gas cleaning and advanced energy recovery also continued. It was anticipated that a planning meeting would be held involving IEUA, Ingersoll Rand and the Commonwealth Team staff to more fully identify and evaluate gas cleaning options for this project. It was also planned that a site visit will be conducted to allow the design team to become familiar with the project and its characteristics.

What we actually accomplished this period:

Task 2.2.1 Process Selection:

- Data collection and analysis activities continued in July. Information was assembled on different processes that are being analyzed as part of the Process Selection task. Activities related to refining process concepts for enhanced anaerobic digestion continued. Meetings were held involving Ingersoll Rand and IEUA to review Ingersoll Rand's new fuel conditioning system and its possible use on this project. At the first of these meeting options the Team identified potential projects, which would involve cleaning digester gas for use in microturbines. Data were collected in order to develop preliminary engineering estimates of the potential project characteristics. At the second meeting options were presented for installing new systems based on the site visit conducted previously. Ingersoll Rand's design concepts were reviewed with IEUA staff.
- Work on the process selection report continued. Data were collected from ultrasound and thermal hydrolysis system providers for potential use at the Riverside plant. Preliminary analysis suggest that ultrasound technology offers considerable potential and several vendors were contacted, in addition to the one

anticipated to be used when the Commonwealth proposal was prepared. This new information was analyzed for presentation in the draft process selection report that is expected to be submitted in September.

How we are doing compared to our plan:

Process selection work is proceeding as anticipated. However, as stated previously, the uncertainty regarding the project recommended for funding, may push the deliverable due date for the Process Selection Report back in time.

Significant problems or changes:

There are no significant fiscal problems to report during this period and work is proceeding within budget. Progress and expenditures will result in project being completed on revised schedule and within budget.

What we expect to accomplish during the next period:

Information collection and analysis activities will continue as related to process selection. Activity related to enhanced energy production, gas cleaning and advanced energy recovery will continue. It is anticipated that in early September a draft of the process selection report will be completed for review within the Commonwealth Team. This information would then be available to Commission staff and the RPAC prior to the CPR meeting scheduled for September.

Status of Milestones and Deliverables:

Table 1 below summarizes the status of Project 2.2 task deliverables as of the end of the current reporting period.

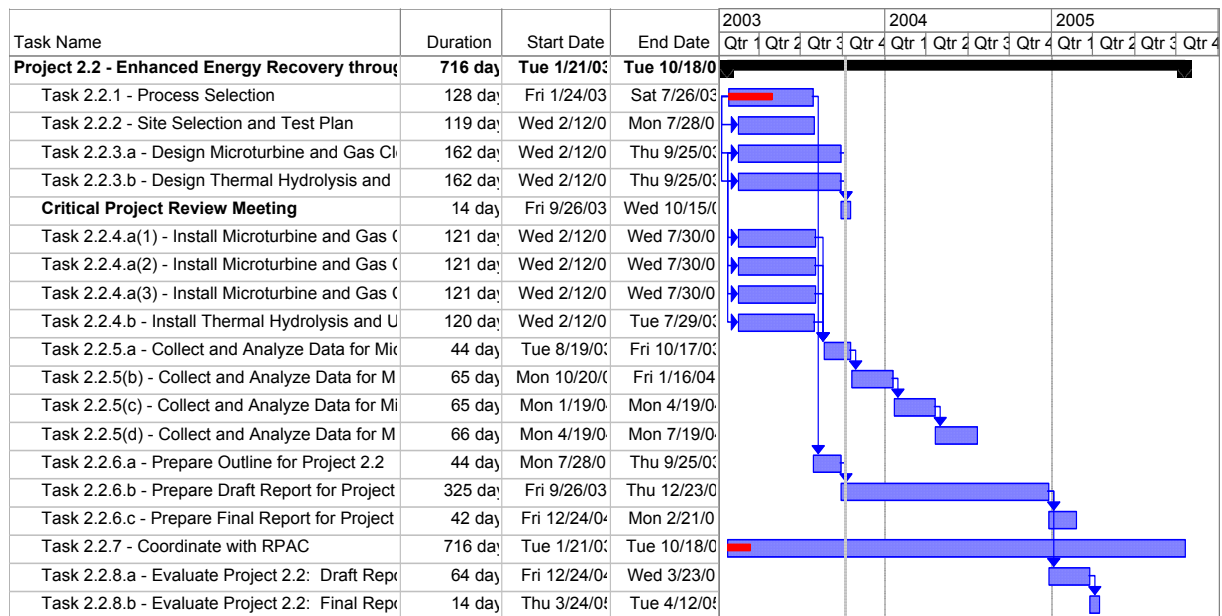
Table 1: Summary of Project Status and Deliverables – Project 2.2

Task No.	Description	Start Date		Due Date		Status (%)
		Planned	Actual	Planned	Actual	
2.2.1	Process Selection	01/21/03	01/24/03	09/04/03		50%
2.2.2	Site Selection and Test Plan	02/12/03		10/26/03		
2.2.3.a	Design Microturbine and Gas Cleaning System	02/12/03		11/24/03		
2.2.3.b	Design Thermal Hydrolysis and Ultrasound System	02/12/03		11/24/03		
2.2.7	Coordinate with RPAC	01/21/03		01/16/06		5%

Explanation of any Difference(s) in Schedule

Work is currently proceeding as anticipated, however it is possible that Task 2.2.1’s deliverable date may be revised.

Overall Schedule for Project 2.2:



Overview of Fiscal Status:

Table 2 below summarizes the fiscal status of Project 2.2 by task as of the end of the current reporting period.

Table 2: Fiscal Status by Task – Project 2.2

Task Number	Budget	Invoiced To-Date	Fiscal Status *
2.2.1	\$236,563	\$0	OT
2.2.2	\$182,543	\$0	OT
2.2.3.a	\$242,995	\$0	OT
2.2.3.b	\$215,842	\$0	OT
2.2.7	\$0	\$0	OT

*Fiscal Status – Please indicate if you are “On Track” (OT), OverBudget (OB), or UnderBudget (UB)