

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

PROJECT 1.1 – PROGRAM PLANNING AND ANALYSIS

REPORT PREPARED BY: COMMONWEALTH ENERGY TEAM

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Contractor Project Director:	Patrick Lilly (360) 906-0616
Contractor Project Manager:	David Hanna (858) 481-0081
Commission Project Manager:	Zhiqin Zhang (916) 654-4063

What we planned to accomplish this period:

During this initial Commonwealth PIER Mini-grid Program reporting period, the Project Team planned to kick-off several project task activities, including 1) the development of the *Initial Study Area* Base Map and some of the related data layers, 2) initiate the review of previous related biogas/PV technical and market potential assessments in California; 3) developing the database structure to be used on the sewage treatment, landfill facilities which could serve as a host site for a bioreactor, and the agricultural facilities databases. We also planned to initiate contacts and other data collection activities that will be needed to populate the mini-grid renewable resource databases.

What we actually accomplished this period:

The Commonwealth PIER Mini-grid Planning and Analysis Project Team kicked-off the Project 1.1 activities along with Zhiqin (Jessica) Zhang of the Energy Commission at RER's San Diego offices on June 26, 2002. Commonwealth Team members present included CH2MHill (Bill Kitto), RER (Pat Lilly, Fred Sebold, Dave Hanna, Bill Wolfgram), ZECO (Hank Zaininger), and REDI (Keith Rutledge – by phone). The Team's initial proposed boundary description and mapping of the Study Area were reviewed and discussed by all team members. The project's activities and schedule were briefly presented and multi-task integration issues, such as resource data collection, market potential and the mini-grid distribution/subtransmission power flow model development were discussed and further clarified. The resulting Project 1.1 activities were completed in this reporting period:

Task 1.1.1- Review Previous Statewide/Southern CA Renewable Resource Technical & Market Potential Assessments and Transmission/Distribution Mini-Grid Definition:

- RER researched and reviewed numerous renewable resource assessment reports for California, focusing on the Program's biogas and PV resources and developed a draft report. A preliminary definition of the mini-grid was developed along with a map illustrating the Study Area. The Study Area centers on the agricultural areas of the Chino Basin where dairy activities are concentrated.

Task 1.1.2- Develop Database of Agricultural Facilities in Southern CA, targeting the Chino Basin:

- REDI had discussions with CH₂M Hill regarding including BIPV in the biomass databases. The field structure was emailed to CH₂M Hill.

Task 1.1.3- Serve as Host for Bioreactor Demonstration Project:

- Developed database structure, with elements common to all three (sewage treatment plants, landfill facilities which could serve as a host for a landfill bioreactor) areas being investigated as part of the biogas program. Team members also coordinated the development of the photovoltaic database.

Task 1.1.4- Collect Information on Sewage Treatment Plants:

- The team initiated the biogas data collection activities in late June. Existing databases were collected in late June.

Task 1.1.6- Collect Information on Transmission/Distribution System:

- Data requirements for modeling the local electric system were discussed amongst RER and ZECO

How we are doing compared to our plan:

The Commonwealth Team's Project 1.1 task activity has progressed according to our work plan through this reporting period.

Significant problems or changes:

No significant problems or changes were encountered during this reporting period. Current project progress and expenditures will result in project being completed on time and within budget.

What we expect to accomplish during the next period:

The team will begin collecting available facility data in the Public sector and the Commercial- Industrial sectors for the Task 1.1.5 BI-PV database that will assist the team in determining the PV resource potential within the mini-grid. Work will continue on populating the database for the sewage treatment plants and landfill facilities. The team anticipates initiating agricultural database activities. Additionally, we plan to start developing information for the associated Task 1.1.3 and 1.1.4 inventory reports.

Status of Milestones and Deliverables:

Table 1 below summarizes the status of Project 1.1 task deliverables as of the end of the current reporting period.

Table 1: Summary of Project Status and Deliverables

Task No.	Description	Start Date		Due Date		Status (%)
		Planned	Actual	Planned	Actual	
1.1.1	Review previous CA technical and market potential assessments.	6/5/02	6/5/02	8/4/02		60%
1.1.1	“Preliminary definition” of Program mini-grid region	6/5/02	6/5/02	8/4/02	7/31/02	40%
1.1.2a	Develop DB of Agricultural Facilities.	6/19/02	6/19/02	9/18/02		5%
1.1.2b	Develop Ag GIS report.	6/19/02		10/18/02		
1.1.3a	Develop Landfill DB.	6/19/02	6/19/02	8/19/02		5%
1.1.4a	Develop WWT facility DB.	6/19/02	6/19/02	8/19/02		10%
1.1.6	Develop T&D System DB	6/5/02	6/26/02	9/19/02		1%

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Figure 1 below presents the Overall Schedule for Project 1.1 through June 2002.

Figure 1: Overall Schedule for Project 1.1



Overview of Fiscal status:

Table 2 below summarizes the fiscal status of Project 1.1 by task as of the end of the current reporting period.

Table 2: Fiscal Status By Task

Task Number	Budget	Invoiced To-Date	Fiscal Status *
1.1.1	\$18,902.00	\$0	OB
1.1.2 a	\$85,562.00	\$0	OT
1.1.2 b	\$85,562.00	\$0	OT
1.1.3 a	\$66,865.00	\$0	OT
1.1.3 b	\$66,865.00	\$0	OT
1.1.4 a	\$93,136.00	\$0	OT
1.1.4 b	\$93,136.00	\$0	OT
1.1.13	\$35,251.00	\$0	OT

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

Project 1.1.1 Overbudget Explanation: More effort was expended than was budgeted on Task 1.1.1 attempting to identify prior studies and reports on technical and market potential

in California. The limited number of reports that were found is believed to be all that are available after an exhaustive search. It was deemed necessary to expend the time to ensure that all available resources were identified. In addition, the definition of the mini-grid was added to this task without additional budget resources for this task.