37
9/25/91

U.S. Department of Energy

DOE/CH/10093--100/1991

DE91 002177

Programs in Utility Technologies

***OCEAN ENERGY
CONTRACT LIST
FISCAL YEAR 1990***

MASTER

EB

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

Contents

FY 1990 Contract List—Argonne National Laboratory	1
FY 1990 Contract List—Solar Energy Research Institute	3
Index of Current Contractors	6

Introduction

The purpose of the federal Ocean Energy Technology (OET) Program is to develop techniques that harness ocean energy (waves, currents, and thermal and salinity gradients) in a cost-effective and environmentally acceptable manner. The OET Program seeks to develop ocean energy technology to a point at which the commercial sector can assess whether applications of the technology are viable energy conversion alternatives or supplements to systems.

Past studies conducted by the U.S. Department of Energy (DOE) have identified ocean thermal energy conversion (OTEC) as the largest potential contributor to U.S. energy supplies from the ocean resource. As a result, the OET Program concentrates on research to advance OTEC technology.

In the past, a summary was prepared each year to provide an overview of the government-funded activities within the federal OET Program. Tasks conducted in-house by participating national laboratories or under contract by industrial, academic, and other research institutes were highlighted.

This year's document is more concise than the summaries of previous years. The FY 1990 contract

overview comprises a list of all subcontracts begun, ongoing, or completed during FY 1990 (October 1, 1989, through September 30, 1990). Under each managing laboratory, projects are listed alphabetically by project area and then by subcontractor name.

For additional information on the federal OET Program, the reader is encouraged to consult the *Ocean Energy Program Overview, Fiscal Years 1990-1991* (DOE/CH10093-99) and the *Federal Ocean Energy Technology Program Multiyear Program Plan, FY 1985-89*. Copies of these documents and this contract list may be obtained by writing the Solar Energy Research Institute, Technical Inquiry Service, 1617 Cole Boulevard, Golden, Colorado 80401-3393.

Organizational Relationships

The federal OET Program is conducted by DOE and is assigned to the Assistant Secretary for Conservation and Renewable Energy. Day-to-day research activities are conducted by Argonne National Laboratory (ANL) in Argonne, Illinois, and the Solar Energy Research Institute (SERI) in Golden, Colorado. The Pacific International Center for High Technology Research (PICHTER) is also actively involved in the program.

FY 1990 Contract List

Argonne National Laboratory

Argonne National Laboratory

Contract No. Contract Period Title	Contractor (Principal Investigator) Contact	Funding \$ (Source)	Selected FY 1991 Milestones (Contact has more information)
Experimental Verification and Testing			
02882401 01/01/91-06/30/91 Experimental Investigation of the Effects of Noncondensable Gases on the Open-Cycle Surface Condenser, Phase II	Florida A&M University Florida State University College of Engineering (J. Telotte) Tallahassee, FL 32316 A. Thomas (ANL)	Total Funding \$130,460 (ANL) FY 90 Funding \$44,969 (ANL)	Complete the final report (July 1991).
Materials and Structures Research			
FWP 49518 10/01/87-09/30/91 OTEC Materials Research: Analysis of Seawater Biofouling and Corrosion of Materials Test Data	Argonne National Laboratory (A. Thomas) 9700 South Cass Avenue Argonne, IL 60439 C. Castellano (DOE)	Total Funding \$204,000 (DOE) FY 90 Funding -0-	Complete the final report (June 1991).
Thermodynamics Research and Analysis			
FWP 49518 01/03/87-09/30/91 Open Cycle Heat- and Mass-Transfer Feasibility: Design of Surface Condensers—Net Power-Producing Experiment	Argonne National Laboratory (A. Thomas) 9700 South Cass Avenue Argonne, IL 60439 C. Castellano (DOE)	Total Funding \$690,000 (DOE) FY 90 Funding -0-	Complete the technical report on Surface Condenser Rating Program; the program will be available through the National Energy Software Center (June 1991).

FY 1990 Contract List

Solar Energy Research Institute

Solar Energy Research Institute

Contract No. Contract Period Title	Contractor (Principal Investigator) Contact	Funding \$ (Source)	Selected FY 1991 Milestones (Contact has more information)
Experimental Verification and Testing			
XC-0-10077-1 07/16/90-12/31/91 Open-Cycle OTEC Net Power-Producing Experiment	Pacific International Center for High Technology Research (A. Trenka) 711 Kapiolani Boulevard, Suite 200 Honolulu, HI 96813 H.J. Green (SERI)	Total Funding \$2,048,000 (DOE) FY 90 Funding \$2,048,000 (DOE)	None.
FWP CEWOE01 10/01/88-09/30/90 Ocean Energy Systems	Solar Energy Research Institute (H.J. Green) 1617 Cole Boulevard Golden, CO 80401 L. Lewis (DOE)	Total Funding \$755,000 (DOE) FY 90 Funding \$755,000 (DOE)	Conduct initial testing of innovative turbine (October 1990). Model transient response of Net Power-Producing Experiment components (November 1990). Complete draft report on innovative turbine design and testing (May 1991).
FWP CEWOE02 10/01/88-09/30/90 Open-Cycle OTEC Research/PICHTR	Solar Energy Research Institute (H.J. Green) 1617 Cole Boulevard Golden, CO 80401 L. Lewis (DOE)	Total Funding \$1,337,000 (DOE) FY 90 Funding \$1,337,000 (DOE)	Order vacuum compressor for the Net Power-Producing Experiment (November 1990).
Thermodynamics Research and Analysis			
XX-8-07206-1 01/15/88-09/30/91 Advanced OTEC Support Research	Pacific International Center for High Technology Research (A. Trenka) 711 Kapiolani Boulevard, Suite 200 Honolulu, HI 96813 H.J. Green (SERI)	Total Funding \$2,982,717 (DOE) FY 90 Funding -0-	Provide as-built engineering drawings of seawater disposal trench at the Seacoast Test Facility (March 1991).
FWP CEWOE01 10/01/88-09/30/90 Ocean Energy Systems	Solar Energy Research Institute (H.J. Green) 1617 Cole Boulevard Golden, CO 80401 L. Lewis (DOE)	Total Funding \$108,000 (DOE) FY 90 Funding \$108,000 (DOE)	Provide support for system integration of Net Power-Producing Experiment design (November 1990).

Solar Energy Research Institute

Contract No. Contract Period Title	Contractor (Principal Investigator) Contact	Funding \$ (Source)	Selected FY 1991 Milestones (Contact has more information)
FWP CEWOE02 10/01/88-09/30/90 Open-Cycle OTEC Research/PICHTR	Solar Energy Research Institute (H.J. Green) 1617 Cole Boulevard Golden, CO 80401 L. Lewis (DOE)	Total Funding \$711,000 (DOE) FY 90 Funding \$711,000 (DOE)	None.

Index of Current Contractors

Argonne National Laboratory	2
Florida A&M University	2
Pacific International Center for High Technology Research	4
Solar Energy Research Institute	4, 5

END

**DATE
FILMED**

10/1/71

11