

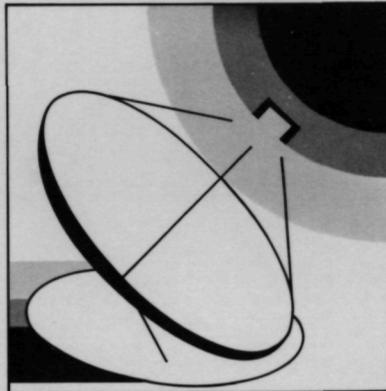
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Solar Thermal Power Systems Project  
Parabolic Dish Systems Development

DOE/JPL-1060-87  
Distribution Category UC-62

# Publications of the JPL Solar Thermal Power Systems Project 1976 through 1985

Compiled by:

P. Panda  
V. Gray  
C. Marsh



September 1, 1985

Prepared for  
U.S. Department of Energy  
Through an Agreement with  
National Aeronautics and Space Administration  
by  
Jet Propulsion Laboratory  
California Institute of Technology  
Pasadena, California

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ABSTRACT

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## SECTION I

### INTRODUCTION

In 1976, the Jet Propulsion Laboratory (JPL) was given responsibility for solar thermal parabolic dish technology development by the Energy Research and Development Administration (predecessor agency to the current U.S. Department of Energy). Initial comparative assessment studies conducted by the JPL Solar Thermal Power Systems (TPS) Project showed that, in addition to central receivers, distributed receivers (such as dishes having power conversion units at their focal points) had potential for cost-effective production of electricity.

This bibliography of JPL-related efforts in solar thermal parabolic dish/dish-electric technology development is a comprehensive list of reports published by JPL and its contractors during the period from 1976 through 1985. It was assembled to help facilitate an orderly transition of work on this technology from JPL to Sandia National Laboratories-Albuquerque (SNLA) during 1984. Compilation of the listings was made through reference to records kept by the TPS Project and the JPL library and through a survey of documents used as sources for TPS work. Material was also contributed by individuals who were involved in the TPS Project during the eight-year period.

An objective in assembling the bibliography was to include those publications deemed most central to the work of the project and those for which complete reference background is available. Not included are status reports that were prepared periodically for specific events and would be less useful from a technological perspective. The bibliography, which covers the full range of the TPS effort from the standpoints of time, subject matter, and participants, is divided into seven parts:

- (1) Conference and Journal Papers
- (2) External Reports
- (3) Internal Reports
- (4) Contractor Reports
- (5) Author Index
- (6) Topical Index
- (7) Contents of Annual Review Proceedings

Papers in the first four categories are arranged alphabetically by title to aid in identification of subject material. The topical index provides more specific guidance for locating a particular area in which the TPS Project was involved. Because many papers by JPL personnel as well as contractors were presented at the TPS annual reviews, the contents of five review proceedings (covering activities from January 1979 through December 1983) are listed in Section VIII.

The majority of the publications are included in a library of JPL documents managed by the DOE Solar Thermal Division's Technical Program Integrator's Office at Sandia National Laboratories in Livermore, California. Copies of external publications listed can be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161.

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