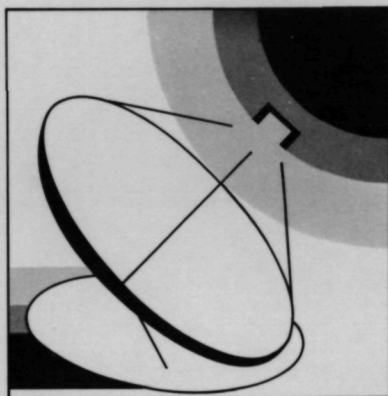


5105-160
Solar Thermal Power Systems Project
Parabolic Dish Systems Development

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
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Jet Propulsion Laboratory
California Institute of Technology
Pasadena, California

JPL Publication 85-52

(NASA-CR-176533) PUBLICATIONS OF THE JPB N86-18777
SOLAR THERMAL POWER SYSTEMS PROJECT 1976
THROUGH 1985 (Jet Propulsion Lab.) 93 p
HC A05/MF A01 CACL 10B Unclas
G3/44 05454

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The JPL Solar Thermal Power Systems Project is sponsored by the U.S. Department of Energy and is part of the Solar Thermal Program to develop low-cost solar thermal and electric power plants.

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TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No. 85-52	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Publications of the JPL Solar Thermal Power Systems Project 1976 through 1985		5. Report Date September 1, 1985	
		6. Performing Organization Code	
7. Author(s) P. Panda		8. Performing Organization Report No.	
9. Performing Organization Name and Address JET PROPULSION LABORATORY California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91109		10. Work Unit No.	
		11. Contract or Grant No. NAS7-918	
		13. Type of Report and Period Covered JPL Publication	
12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes Sponsored by the U.S. Department of Energy through Interagency Agreement DE-AMo4-80AL13137 with NASA; also identified as DOE/JPL-1060-87 and as JPL Project No. 5105-160 (RTOP or Customer Code 776-81-62).			
16. Abstract The bibliographical listings in this publication are documentation products associated with the Solar Thermal Power Systems Project carried out by the Jet Propulsion Laboratory from 1976 to 1986. Documents listed herein are categorized as conference and journal papers, JPL external reports, JPL internal reports, or contractor reports (i.e., deliverable documents produced under contract to JPL). Alphabetical listings by titles were used in the bibliography itself to facilitate location of the document by subject. Two indexes are included for ease of reference: one, an author index; the other, a topical index.			
17. Key Words (Selected by Author(s)) Energy Conversion Energy Production Solar Cells		18. Distribution Statement Unclassified-Unlimited	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 94	22. Price

ABSTRACT

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ACKNOWLEDGMENTS

The Solar Thermal Power Systems Project Office and Leuann Burrus of the Solar Data Library provided valuable assistance in locating documents for this bibliography. Appreciation is also expressed to Leonard Jaffe who prepared the topical index and to Justine Weiher and Arlene Rush of the JPL Document Review Group who helped prepare the contractor report section.

This report was compiled by the Jet Propulsion Laboratory, California Institute of Technology, for the U.S. Department of Energy Solar Thermal Division Technical Program Integrator at Sandia National Laboratories-Livermore through an agreement with the National Aeronautics and Space Administration (NASA Task RE-152, Amendment 342, Change 7; SNL(L)/DOE/NASA Interagency Agreement No. 92-9458).

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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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