1. Project Data:

- **OEDID**: L2845
- **Project ID**: P009925
- **Project Name**: Talcher Thermal Power
- **Country**: India
- **Sector**: Thermal
- **L/C Number**: Loan 2845-IN
- **Prepared by**: Richard L. Berney, OEDST
- **Reviewed by**: Patrick G. Grasso
- **Group Manager**: Roger H. Slade
- **Date Posted**: 05/26/1998

2. Project Objectives, Financing, Costs and Components:

Objectives were to increase generation capacity, and to improve NTPC capabilities by establishing on-line communications between headquarters and plants. The components were (a) two 500 MW coal fired power stations at Talcher, in India's Eastern Region; (b) 230 km transmission lines to evacuate the power within the region; and (c) a satellite based data communications network. The total project cost was US$903 million, including interest during construction. The Bank loan was US$375, of which US$102.2 was canceled. Most savings came from the steep devaluation of the Indian Rupee during the implementation period, which greatly reduced local costs in dollar terms.

3. Achievement of Relevant Objectives:

All physical investments were implemented as planned, although with considerable delay. NTPC has maintained its financial integrity, although there were a few periods where it was unable to meet its financial covenants related to accounts receivables.

4. Significant Achievements:

Successfully introduced the new "tower boiler" technology for efficiently burning high ash Indian coal.

5. Significant Shortcomings:

There were significant problems with length of the procurement process, delays in local manufacturing of equipment, delays in environmental clearances and clearances for land acquisition. Even with these delays in project implementation, two years two years after start-up plant load factor is still below 25 percent. Demand in the Eastern Region did not grow as fast as originally estimated, and the investments needed to transmit electricity to power-deficit regions were not approved and implemented in a timely fashion. It is expected that these transmission lines will be operational early in 1999.

6. Ratings:

<table>
<thead>
<tr>
<th></th>
<th>ICR</th>
<th>OED Review</th>
<th>Reason for Disagreement /Comments</th>
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<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>Satisfactory</td>
<td>Marginally Satisfactory</td>
<td>The project's economic return has been hurt by inability to use the facilities at reasonable levels during the first two years of operation.</td>
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<tr>
<td><strong>Institutional Dev.</strong></td>
<td>Partial</td>
<td>Modest</td>
<td>NTPC improved its financial condition after strong Bank pressure, but did not regularize its commercial contracts with the SEBs under this project.</td>
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<tr>
<td><strong>Sustainability</strong></td>
<td>Likely</td>
<td>Likely</td>
<td></td>
</tr>
<tr>
<td><strong>Bank Performance</strong></td>
<td>Satisfactory</td>
<td>Unsatisfactory</td>
<td>(Marginally) The ICR rates identification, preparation assistance and supervision as satisfactory, but appraisal as</td>
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unsatisfactory, because the project was not ready for Board because major issues, including major bidding contracts, environmental approvals and resettlement were not settled and greatly delayed project. Demand analysis was inadequate: it did not identify potential for need to evacuate power from Eastern Region.

Borrower Perf.: Satisfactory

(Marginally) The appraisal rates implementation and operation as satisfactory, but preparation and covenant compliance as unsatisfactory. Most of the problems were on the side of the GOI, which did not support the project with rapid decisions on environment and timely support for maintaining NTPC's accounts receivable at reasonable levels.

Quality of ICR: Satisfactory

7. Lessons of Broad Applicability:
(a) During Appraisal the Bank needs to make sure that demand projections are based on reasonable scenarios, to minimize the risks that new capacity will be utilized; (b) Contracts for coal supplies need to be designed on a arms-length commercial basis, and not dictated by central government institutions; (c) A complete survey of project affected persons in all areas to be acquired should have been implemented during the project design phase, and the resettlement schemes developed in consultation with the affected parties. The choice of the location for the resettlement colony should be integrated into the environmental assessment process; and (d) allowing oustees to choose their own land and location as a preference over relocation in resettlement colonies should be an option in public consultation and planning stages of resettlement programs.

5. Audit Recommended? ☐ Yes ☟ No

5. Comments on Quality of ICR:
The ICR is of high quality, clearly identifying the weaknesses in project design and implementation.