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PERFORMANCE AUDIT REPORT

INDIA

TECHNICAL ASSISTANCE FOR PRIVATE POWER DEVELOPMENT (LOAN 3630-IN)

January 20, 1999

Operations Evaluation Department
Sector and Thematic Evaluations Group

Currency Equivalents (annual averages)

Currency Unit = Indian Rupee (Rs.)

1992	US$1.00	Rs. 31.20
1993	US$1.00	Rs. 31.46
1994	US$1.00	Rs. 31.37
1995	US$1.00	Rs. 34.50
1996	US$1.00	Rs. 35.72
1997	US$1.00	Rs. 35.87

Weights and Measures

kWh	Kilowatt-hour (1,000 watt-hours)
MW	Megawatt (1,000 kilowatts)
GWh	Gigawatt-hours (million kilowatt-hours)

Abbreviations and Acronyms

GOI	Government of India
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion Report
IPP	Independent power producer
MOF	Ministry of Finance
MOP	Ministry of Power
MOU	Minutes of understanding
MSEB	Maharashtra State Electricity Board
NTPC	National Thermal Power Company
OED	Operations Evaluation Department
PAR	Performance Audit Report
PFC	Power Finance Corporation
PHRD	Policy and Human Resources Development Fund of Japan
PPA	Power purchase agreement
SAR	Staff Appraisal Report
SEB	State electricity board

Fiscal Year

Government: April 1 - March 30

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The World Bank
Washington, D.C. 20433
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Office of the Director-General
Operations Evaluation

January 20, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**SUBJECT: Performance Audit Report on India
Technical Assistance Project for Private Power Development (Loan 3630-IN)**

Attached is the Performance Audit Report prepared by the Operations Evaluation Department (OED) on the above project. The loan, for the amount of US$20 million equivalent to the Power Finance Corporation (PFC), was approved in FY93 and closed in December 1996 after a one-year extension. A total of US$18.8 million was canceled. The Policy and Human Resources Development Fund of Japan provided a parallel grant of US$2 million to the Government of India, which was administered by the Bank.

The primary objective of the project was to facilitate India's 1992 private power development initiative by (a) providing expert foreign assistance in establishing guidelines for the solicitation and evaluation of power generation investment proposals from private firms; (b) advising state governments during their negotiations with project developers; and (c) advising the central government on matters related to establishing internationally owned independent power projects (IPPs) and associated power purchase and fuel supply agreements.

Although PFC received initial technical assistance requests for more than US$20 million, only US$1.2 million was actually disbursed. Another $3.1 million subloan that was being processed by PFC was shifted to Loan 3436 when Loan 3630 was closed. The primary problem with the project design was over optimism about the need for (and interest in obtaining) assistance from high-cost international financial and legal experts with experience in bringing IPPs to a successful financial closure. As time passed without any projects reaching financial closure, many state electricity boards (SEBs) concluded the projects were unlikely to be implemented without strong central government guarantees, which were not forthcoming. Other SEBs preferred using lower-cost assistance from local consulting groups, even when these groups lacked international experience. The grant technical assistance to the GOI under the Japanese PHRD program, and supervised by the Bank, was effectively supplied and highly valued.

OED rates the project's overall outcome as unsatisfactory (as does the ICR) since most of the funds were never disbursed. However, what was disbursed was highly useful, especially the grant funds used by the GOI to establish criteria for evaluating IPP proposals; for this reason, OED rates the project's institutional development impact as modest (instead of negligible in the ICR). Sustainability is rated as unlikely because both the federal government and the states still have a long way to go to establish an adequate framework for inducing IPP development. Bank performance is rated as unsatisfactory (as in the ICR) because the project design did not take into account the desires of the SEBs, who were the ultimate users of the loan. OED rates overall Borrower performance as unsatisfactory (as in the ICR) in light of the Government's and SEBs' fundamental lack of commitment to the basic objectives of the project even though PFC made every effort to sell the loan to the SEBs. It should not have been expected to go out and sell the services that the loan was financing.

The major lessons from this project are:

- Stand alone technical assistance programs are extremely difficult to implement and supervise. The use of financial intermediaries as apex onlending institutions for technical assistance projects is unlikely to work well, because financial institutions are unlikely to have the expertise needed to support, advise and supervise the subloans. Technical assistance is much more likely to succeed if it is tied to the needs of a larger project, or is part of a project preparation facility (PPF) that is expected to lead to a future large project.

- Even a technical assistance project with limited objectives, such as this project, is unlikely to be successful if the institutional structure of the sector is unsound and unsustainable. The Bank should not support efforts to expand electricity generation projects through IPPs unless the power sector institutions, particularly those responsible for distribution of electricity to consumers, are fundamentally sound or, at least, are on the way to becoming fundamentally sound.

Attachment

Contents

This report was prepared by Mr. Richard Berney who audited the project in February 1998. Mr. William Hurlbut edited the report. Ms. Soon-Won Pak provided administrative support.

Principal Ratings

	ICR	Audit*
Outcome	Unsatisfactory	Unsatisfactory
Sustainability	Unlikely	Unlikely
Institutional Development	Negligible	Modest
Borrower Performance	Unsatisfactory	Unsatisfactory
Bank Performance	Unsatisfactory	Unsatisfactory

*Ratings apply to only two components (see preface for explanation)

Key Staff Responsible

	Task Manager	Division Chief	Country Director
Appraisal	Joelle Chassard	Jean-Francois Bauer	Heinz Vergin
Completion	Joelle Chassard	Jean-Francois Bauer	Robert Drysdale

Preface

This is a Performance Audit Report (PAR) on the Technical Assistance Project for Private Power Development (Loan 3630-IN) for which the World Bank approved a loan of US$20 million equivalent on June 24, 1993. The loan closed on December 31, 1996, after an extension of one year. In total, US$1.2 million was disbursed. The remaining US$18.8 million was canceled. A second component, a grant of US$2 million equivalent was financed by the Japanese Policy and Human Resources Development Fund and administered by the Bank. It was fully disbursed.

This report is based on the Implementation Completion Report (ICR) prepared by the South Asia Region and issued on May 27, 1997, the memorandum of the President, loan documents, project files, and discussions with Bank staff. In addition, an Operations Evaluation Department (OED) mission visited India in January 1998 to discuss the effectiveness of the Bank's assistance with the government, the Power Finance Corporation (PFC), which was the borrower and apex financial institution, and with several state electricity boards (SEBs) who were the ultimate borrowers. The cooperation and assistance of government officials and the management and staff of PFC are gratefully acknowledged.

The audit discusses the problems of encouraging independent power generation projects in the absence of reforms in the structure of power distribution enterprises and of using an apex financial institution for technical assistance and.

Following standard OED procedures, the draft PAR was sent to the borrower for comments. Comments received have been incorporated in this final version and attached as Annex B of this report.

1. Background

1.1 The purpose of the project was to facilitate India's 1992 private power development initiative by supporting individual states in their efforts to attract independent power producers (IPPs) on reasonable terms. Its goal was to help create adequate administrative guidelines and processes for soliciting and evaluating power generation investment proposals from private firms, to support state governments during their negotiations with potential project developers by providing internationally experienced legal and financial expertise, and to establish the framework for the introduction of market mechanisms for the sector as a whole.

1.2 In the early 1990s, India began to reconsider its options for financing new investment in the power sector. In the 1980s the growth of power sector generation capacity had been insufficient to meet expanding demand, and by the mid-1980s power shortages had begun to pose a serious constraint on India's economy. The government had nationalized almost all power companies in the decade after independence, and sector development has, since that time, been almost exclusively the responsibility of the central and state governments. The availability and price of electricity had become a highly politicized issue, tariffs, especially for the agricultural sector, but also for domestic consumers had fallen well below costs, and subsidies were absorbing a large portion of the public sector budgets. By the mid 1980s, the financial resources that the central and state governments were able to provide were insufficient to maintain sector growth at planned levels, and India experienced a large and growing gap between energy demand and availability. India's financial crisis of 1991 brought with it a clear recognition that adequate financing for new investment would not be available from the public sector, and that the only alternative was to open the sector to private investment. In late 1991, the major legal obstacles to private investment were removed.

1.3 In the following year, state governments signing more than 30 Memorandum of Understanding (MOUs) with private developers. In this first effort to attract private investors, the states signed on investors on a first-come, first-served basis, before a structure could be defined for establishing a competitive bidding system for specific, well-designed technical alternatives. However, none of the state governments were sufficiently strong, financially, to provide acceptable power purchase payment guarantees for their state electricity boards (SEBs). To move forward on these preliminary agreements, federal guarantees were essential.

1.4 By early 1993, the Ministry of Power (MOP) came to the conclusion that the state governments and their energy boards were entering into the agreements without any basis of comparison between offers and any assurances that they were getting the best offers. It believed that the negotiating authorities at the state level (primarily the SEBs) needed outside expertise to assist them in negotiating with private investors, who used high-powered international teams of technical, legal, and financial experts to assist them at negotiations. It therefore strongly pressed the Bank to find a way to strengthen the negotiating capabilities of the states. The Bank agreed with this assessment. Given the speed at which MOUs were being signed, the lack of precision in GOI guidelines, and the need for the authorities to respond to potential investors in a timely fashion, the Bank agreed that time would be an essential element in project success. The Bank responded by processing the operation in less than three months, without a formal appraisal mission.

1.5 In responding to the urgent request of the MOP, however, the Bank neglected to poll the SEBs, who were to be the ultimate customers for the technical assistance, to assess their interest in, and commitment to the hire of foreign advisers, even though there was a well-known reluctance on the part of all Indian public sector organizations to turn to outsiders. In fact, the Bank even failed to adequately assess the willingness of the Ministry of Finance (MOF) to borrow from the Bank for technical assistance. When the Bank found that it could not persuade the GOI to be the borrower and pass the loans on to apex financial institutions, it agreed to a compromise solution, where the Power Finance Corporation (PFC) would be the apex borrower of record and would establish a new unit to support onlending of these TA funds to the SEBs.

1.6 The Ministry of Finance and the Ministry of Power challenged to establish an effective legislative and institutional framework for supporting the country's efforts to induce foreign private investment in the power sector. They also needed assistance to on how to analyze and respond to draft contracts with independent power producers (IPPs). The Bank resolved the problem of BOI unwillingness to borrow for technical assistance by applying for a US$2 million technical assistance grant from the Japanese Policy and Human Resources Development Fund (PHRD). This grant was supervised by the Bank in parallel with the loan to PFC. Subsequently, the U.S. Agency for International Development (USAID) also financed some specific studies for the GOI on legislative options for efficiently supporting direct foreign investment in the power sector.

2. Project Implementation

2.1 The rapid pace of the signing of MOUs for proposed new IPP projects was followed by a period of little progress in winning GOI approval and obtaining GOI guarantees needed to reach financial closure. The GOI insisted that the draft project agreements and power purchase agreements (PPAs) needed to be restructured before the they could be considered them for GOI support. Because the GOI was uncomfortable with individually negotiated agreements based on single offers, it also issued directives that future IPP proposals should be packaged for competitive bidding. Without strong indications that the IPP process was likely to be a successful route for expanding electricity generation, most SEBs were reluctant to spend large amounts of money in the preparation of such projects. They were especially reluctant to hire high cost international technical expertise to assist them in negotiating contracts when they found that the GOI was not willing to provide the sovereign guarantees that most international lenders required. Only four SEBs were willing to utilize the available loan from for hiring outside expertise. Despite a one year extension of the closing date, only US$1.2 million (about 6 percent of the loan) was utilized.[1]

2.2 The ICR provides the following explanation for the project's failure to meet its objectives:

- *The states lacked a clear policy framework for supporting IPPs in an environment where the SEBs were insolvent.* At the time the GOI and the states were still trying

1. However, one TA contract (for about $900,000), which was under negotiation at the time that Loan 3360 was canceled, was shifted to Loan 3436 (Power Utilities Efficiency Improvement Project).

to solve the sector's problems by strengthening the SEBs in their existing mode of operation. It was not until late in 1993, after a Bank-organized seminar on the power sector, that the GOI began recommending to the states that they pursue a strategy of radical reform of the power sector, centered on putting the SEBs on a sound financial basis and unbundling generation and distribution activities. This concept has only gradually become accepted in a few states.

- *The PFC was an inappropriate financial intermediary.* The project was originally designed with the GOI as the borrower, with PFC plus others as implementing agencies, but during negotiations the GOI confirmed that it was unwilling to borrow directly for technical assistance.
- SEBs were unwilling to seek external assistance, because:
- They were reluctant to hire expensive foreign consultants to assist in evaluating proposed MOUs that they believed had little prospect of proceeding. The were right; for the next five years, none of these MOUs have proceeded to closure without central government guarantees.
- The cost of highly specialized international financial and legal consultant services required for negotiating PPAs was about US$3,000–4,000 per day. This is substantially more than most international consultants in other specialties, and far above the costs associated with Indian consulting firms.
- They preferred to work with local firms, who they felt were competent to provide advice on all but specialized legal issues. However, the Bank would not agree to short-listing local consultants because these consultants lacked experience in negotiating international contracts of this nature. Several SEBs hired local consultants for this work.
- They were reluctant to borrow Bank money through PFC because it was very expensive. PFC's onlending rate was 13.5 percent,[2] and the SEBs had to take the foreign exchange risk, which they were not used to doing.
- Some SEBs had the alternative of using bilateral grant funds or, in Maharashtra, could use the resources of existing World Bank loans.

2.3 The ICR lessons were, first, that more attention should be devoted to assessing the interest of the ultimate beneficiaries; and second that more care needs to be taken in selecting and evaluating the intermediary, since a direct relationship between the Bank and the GOI, or the state governments or the SEBs might have produced better results.

2. It was dropped to 11.5 percent after one year, and further reduced to 10 percent the next year.

3. Issues

Is a Financial Intermediary an Appropriate APEX Institution?

3.1 The project was structured as stand-alone technical assistance project with a financial institution as the apex onlending agency. This structure proved unwieldy. Implementation was extremely complex, especially since the apex institution, the Power Finance Company (PFC) lacked in-depth knowledge about the private sector power projects and the type of assistance that would be requested to negotiate such projects. PFC was expected to sell the loans to the SEBs, to assist with the description of their specific assistance needed by the SEBs, to assist the SEBs to identify their needs and establish appropriate terms of reference and the contractual terms for international bidding, to advise on and review the consultant short list, to review and approve the SEB evaluation processes and resulting awards, and to process the payment applications. Effective implementation of these tasks would have required an in-depth understanding of the specialized project evaluation, project finance, and legal contracting expertise needed for formulating and negotiating power purchase agreements, energy supply contracts, financial guarantee agreements and other documentation needed for implementing independent power production contracts with foreign companies.[3] PFC did not have this specialized expertise during the early years of project implementation, and was therefore unable to adequately advise borrowers on their Technical Assistance needs.[4]

3.2 Few financial institutions are strong in these areas. They are generally expected to be strong in establishing credit risks of potential borrowers and, where loans are project-related, in evaluating whether project management has chosen an adequate technology and is strong enough to implement the project efficiently. For relatively small loans (which have no impact on the borrower's financial condition), financiers should expect the borrower to know what it's needs are and to make its own decisions about how to use its borrowed resources effectively. Financial institutions should not be expected to second-guess their borrowers on the usefulness of a technical assistance service contract that the borrowers are willing to pay for. To do so establish a basic conflict of interest with that of getting the funds disbursed. Without the balancing factor of having to be concerned about whether the money would be repaid if the technical assistance failed to bear fruit, this conflict created a "moral hazard" for PFC. When such a hazard exists in an onlending operation, the Bank needs to expend a disproportionate amount of resources in loan supervision, because it becomes necessary to review all lending and procurement proposals to confirm that the money is being used judiciously. This project was no exception: the cost of

3. The Region notes that this activity was part of the normal procurement review process for consultant services carried out in all Bank-financed projects. OED believes that financial intermediaries are unlikely to have the capacity to undertake *technical* reviews of procurement contracts. The Region also notes that the project suffered from PFC's insufficient understanding of private power issues and from the delays incurred in obtaining training planned under a parallel USAID-financed technical assistance program.

4. PFC takes exception to this view, stating: "It was clearly understood by PFC that TAP was a developmental fund which had been created to promote India's Private Power Initiative and its success depended on creating awareness among SEBs regarding complexity of negotiating PPAs and other related Agreements with IPPs. This responsibility was successfully discharged by PFC."

supervision, in terms of staff resources expended on review of contract proposals, was extremely high.

3.3 PFC's costs were also high for such a small loan. It had to set up a special project implementation unit just for this small loan. Until that time, PFC had had little private sector experience, and no international experience. To support project implementation, it had to learn about what types of services the SEBs were going to need to negotiate successfully with international IPPs. The Bank put a lot of effort into convincing PFC that it needed to strengthen its project implementation unit and sell the loan to potential borrowers. PFC also had to be intermediate in the processing of the loans, and in interpreting the Bank's regulations to the SEBs and the SEBs' requests to the Bank. This was a very time-consuming process, with the average loan processing taking about five months. Thus, in every case where a borrower had the option of directly accessing Bank funds (Maharashtra and Orissa), they avoided the cumbersome and expensive PFC route.

3.4 PFC made a valiant effort to implement the project. It went out and sold the product to reluctant SEBs, and obtained approximately $20 million in applications from the SEBs. However, in the end most of these applications were canceled, as the SEBs dropped out of the program. The reasons for dropping out included: they no longer expected that IPPs were feasible or desirable (West Bengal); they received Bank funds through other loans (Orissa); they were unable to reach agreement with winning bidders (Rajasthan); or they substituted local consultants, such as ICICI, at one tenth the cost of international consultants.

3.5 On the more positive side, PFC did over the course of project implementation, strengthen its ability to assist the SEBs in evaluating their requirements for assistance in negotiating IPP contracts. PFC also put to good use the contracting expertise gained from implementing the TA project: it provides technical support to the Department of Economic Affairs (DEA) for soliciting and procuring technical assistance services used to strengthen GOI legal framework for private sector participation in electricity generation, under two PHRD loans.

3.6 OED concludes that the attempt to make an apex financial intermediary implement the three overlapping functions of promoting special technical assistance loans, providing the borrowers with technical advise, and acting as quality control agent, was unsuccessful on both efficiency and efficacy grounds. Apex financial institutions are best at evaluating proposals that come from the borrower, not helping the borrower identify its needs. It is too time-consuming and too costly to graft this unfamiliar role onto an existing financial institution. The results of this project suggest that because financial intermediaries are unlikely to have the expertise needed to advise their customers about how to use their loans, they are unlikely to be successful apex onlending institutions for technical assistance projects.[5]

5. PFC disagrees with OED. It contends that, " (its) Pre-Investment Unit (PIU) was highly effective in helping the SEBs to formulate bid documents, terms of reference, etc. from the day it started functioning and that the PIU made extra efforts to help SEBs expedite the filing of loan applications, prepare bid documents in line with World Bank guidelines including Terms of Reference (TOR), and develope evaluation criteria, contracting, etc. Officials with sufficiently long experience in this field were deployed in PIU so that the work relating to TA loan could be expedited." The problem, PFC believes, was that the Bank's supervision was unwilling to accommodate the concerns of the SEBs in the hiring of consultant. Moreover, supervision from Washington instead at Delhi caused undue delay in getting the Bank's No objection and other clearance (see Annex B for PFC's full comments).

3.7 The Region believes that it had little choice about the APEX institution. It points out that there was a strong perception within GOI that a government department would not have the budgetary and human resources necessary to effectively handle the project. PFC, as the only GOI-owned financial institution specialized in power financing, was considered better placed and better equipped to execute the project. Having PFC as the Borrower for onlending to the SEBs was seen by the Bank as a second-best alternative to the original design. OED agrees with this assessment. OED concludes, therefore, that since neither the Government nor a financial apex institutions technical assistance programs are likely good candidates for supporting TA projects, TA project that are structured as independent projects (rather than as an integrated part of a larger program to a specific borrower) will be extremely difficult to support. One possible solution to this problem would be to integrate TA projects within larger, related projects, so that the Bank can supervise them in conjunction with the supervision of the larger project.

Could SEBs Effectively Use This Technical Assistance?

3.8 It is difficult to see how lending for technical assistance to SEB that were not financially sound could increase the number of well-negotiated, bankable private power projects. It seems doubtful that a private foreign investor would be willing to sign a power purchase agreement with such an SEB, unless the GOI was willing to provide strong financial guarantees. And if the deal is to be structured so that the federal government is to take all the financial risks, the federal government needs to be represented in the original negotiations, and needs to be assured that its side has access to appropriate international financial and legal advisors. **If, on the other hand, the federal government is unwilling to provide strong guarantees for power purchase agreements of financially weak SEBs, then it made little sense to support these SEBs in their negotiations with international IPPs by hiring expensive technical assistance to complete the negotiations, because the likelihood of their reaching a successful conclusion without central government support was extremely low.**

3.9 Over the past five years the efforts of most SEBs to implement their own IPPs have failed to achieve the desired results. The SEBs have preferred single-source, non-competitive negotiations with independent power producers. But the GOI has had great difficulty judging whether it was in the best interest of the country for them to provide guarantees for contracts prepared in this manner. The GOI agreed in principle to guarantee only eight "fast track" projects; only one of these was under implementation in early 1998. The major problems are, first, whether the negotiated terms are seen as "reasonable," when the approval process did not include a market test of competitive bidding, and second, whether international lenders could accept state guarantees when federal guarantees were unavailable.

3.10 After the new government took office in early 1998, it decided that a new approach was needed to move the IPP process forward. It has assigned to the National Thermal Power Company (NTPC) the responsibility for preparing technical, financial, and environmental analysis of about 20 projects in different regions of the country, which could then be opened for competitive bidding. The centralization of authority for preparation of new projects will greatly facilitate the process of attracting new private sector investment proposals.

3.11 After the conceptual design work is completed, the Powergrid, national transmission company, will take over responsibility for facilitating the projects. This will provide the opportunity for Powergrid to establish a centralized IPP negotiating team, which could help state governments develop a consistent set of agreements. This negotiating team would require the same type of TA as provided in the loan under review. A central group could also provide a comparative analysis of benefits across projects negotiated in all states where the projects are based on a proposal of a single sponsor, rather on a competitively bid proposal for specific well-defined projects. **The Bank has an opportunity to renew its efforts to bring international expertise to India's IPP program. It should consider allowing Powergrid to use funds from current loans to finance international expertise in the design of bidding documents and in the evaluation of proposals received.**

3.12 However, the central issue of who would purchase the power from the IPP has yet to be resolved. Presumably, the ultimate purchaser should take a central role in negotiating the actual IPP contracts, and would also need technical support on the legal issues of international contracts. If several IPPs are to be negotiated, it is important to avoid the problem Gujarat faced. That state, after receiving 23 bids for a project, could find only one consulting firm able to help with the bid evaluations; most of the others were already hired by one of the bidding companies. **OED believes it would be advantageous if the GOI were to establish a uniform procedure, and if possible, use the same consultants for all the projects until local experience is sufficiently developed.**

Can Bank Technical Assistance Projects Effectively Use Local Consultants?

3.13 PFC made a concerted, long-term effort to use this loan to finance the cost of technical advisors from local Indian institutions. PFC presented to Bank requests from the Haryana/ SEB in March 1995 and the Rajasthan SEB in July 1995 for financing the financial advisory service of ICICI. The Bank turned down both requests because ICICI was found not to have the experience in bringing to financial closure a foreign-sponsored independent power generation project. Nevertheless, in April 1996 PFC again requested financing for an ICICI technical assistance contract. This time the Bank took a more proactive position, responding that it could support such a proposal if ICICI were to team up with a foreign consultant with the experience that ICICI lacked.

3.14 OED supports the Bank's position that it was essential for consultants to have experience with the full cycle of negotiating international contracts, up to financial closure.[6] Although the costs of these consultants are high,[7] the stakes are also high: these negotiations involve billions of dollars over the life of the project. OED also supports the Bank's position that the technical assistance program was designed to finance services of high-cost foreign consultants whose expertise was not available in India. Foreign exchange was not needed to hire local consultants, so there was no advantage to borrow Bank funds, which had to be paid back in foreign currency. Furthermore, the use of Bank funds with their high transaction costs was not justified for the relatively small sums needed to hire local consultants, who cost one tenth the amount of the

6. ICICI has, in the past two or three years, worked with several SEBs as a lender and as a provider of advisory services on prequalification and bid preparation for private sector provision of power generation. Its position has been that it can hire international accounting and legal consultants as needed and bill the client for the extra costs. It (along with several other Indian consulting institutions) has found a niche as an umbrella organization providing many of the economic, financial analysis, and technical services themselves, and advising the client when outside services are needed, suggesting which outside experts are capable of providing the required service. In the end this may be a more efficient way to obtain the required know-how than directly hiring a foreign group, especially when foreign exchange is no longer a significant constraint. But SEBs will still need to accept the cost of these international experts.

7. Even the Bank's own procurement staff initially resisted approving such high-cost contracts.

specialized foreign consultants. A contract for 100 person-days of the highly specialized advisory services required for contract negotiations might cost on the order of $500,000 (including travel, per diem, and taxes), if the services were provided by international experts, where the same number of days' assistance could be hired for less than $50,000. Thus, if the required expertise had been available locally, there would have been no need for the technical assistance loan in the first place.

3.15 OED also supports the Bank's position on joint venture technical assistance. The Bank originally proposed that local and foreign consultants form consulting partnership to bid on Bank financed technical assistance. Such partnerships would allow local consultants to gain the critical experience of closing a power generation contract with a foreign sponsor. However, the Bank does not appear to have tried to follow-up their proposal with direct discussions with ICICI about how to meet the Bank's requirements. In the end, such an arrangement was never proposed. **The Bank needs to work more pro-actively with Indian financial institutions to find ways to transfer of know-how in the negotiation of international contracts.**

Has the Project Helped Strengthen IPP Negotiating Teams at the State Level?

3.16 The Bank's technical assistance funds were intended to finance independent advice on the detailed requirements for designing power purchase agreements (PPAs) and supply contracts for primary enrgy requirements for IPP proposals that had already received preliminary approval through negotiated minutes of understanding (MOUs). These reviews were to help the SEBs negotiate contract terms that would pass the scrutiny of both the GOI and international financial institutions. The cost of these consultants was expected to be included in the project's investment cost and be recovered from the IPP. PFC believes the demand was there. As evidence, it cites its approval of initial loan requests totaling more than US$20 million for this consulting work. Most of these requests were eventually withdrawn, however, for reasons described in the ICR. Ultimately only four SEBs used the loan to hire international consultants, who helped optimize the project structures.[8]

3.17 The SEBs that hired consultants found their services valuable. The need for these services continues to grow, as some states, such as Gujarat, Andhra Pradesh, and Maharashtra plan to use IPPs to increase their existing generation capacity by as much as 150 percent over the next decade. PFC believes that the successful consulting assignments are likely to have a demonstration effect on other SEBs and state governments. No recent evidence supports this demonstration effect claim, however. OED found, rather, that Indian firms were quickly filling the gap. Three or four new Indian consulting firms have established themselves over the past few years and are gaining experience negotiating IPP contracts, so that the need for international consultants appears to have been narrowing to mostly specialized legal matters. While the costs of these specialized services are quite high on a per-day basis, they are a small percentage of the total consulting services needed for negotiating an IPP and can be contracted for by the local firms within a broader advisory services contract with these local firms.

8. See footnote 1 (page ii) of the ICR's Evaluation Summary, Report No. 16617.

How Effective was the Support to GOI?

3.18 The objective of providing technical assistance for deciding how to negotiate foreign sponsored IPPs was implemented at both the state and federal level. Bank loan funds were used for technical assistance program for the SEBs and their respective state governments, while grant funds provided through the Japanese PHRD program and the USAID program supported technical assistance for central government activities related to power sector privatization. The PHRD funds were used primarily for establishing fuel purchase agreement guidelines and for reviewing aspects of project proposals submitted to the GOI for loan guarantees, while the USAID funding supported technical assistance for reviewing legislative/institutional proposals; for reviewing and recommending improvements to the guidelines for, and overall policy framework of, private sector power generation investment proposals; and for drafting a model power purchasing agreement.

3.19 The Ministry of Finance and Ministry of Power both believe that the services provided under these grant funds were essential to establishing a well-informed, unbiased basis for deciding what issues they needed to consider in their analysis of proposed power supply contracts. Their view is that they would have been extremely reluctant to take any action approving and guaranteeing contracts had been unable to get technical advice from people who were familiar with such international contracts. There is substantial, although indirect, evidence that this technical assistance was extremely useful. During this period the GOI changed its approach to IPPs, and in early 1995 decided that, in the future, it would only support proposals that had been selected through a competitive bidding process. **OED believes this project component was highly successful in achieving its objectives. Without it, the GOI would have had to make decisions in a vacuum, without an adequate frame of reference for making judgments about which types of project structures it should encourage and which it should discourage.**

Should the Bank Have Accepted the Shift in Borrower from the GOI to PFC?

3.20 The Bank designed the project with GOI as the borrower, even though the government had in the past taken a principled position against borrowing for technical assistance. The Region believed the objection would be waved for this project because the GOI was eager to obtain this assistance for the states. When the GOI decided, at negotiations, that it was still unwilling to borrow for technical assistance, PFC became the direct borrower. The Bank considered the change mostly one of form rather than one of substance, since it had always proposed that PFC would be the primary apex onlending institution. However, in this case the form was extremely important. First, if the GOI had been the borrower, it would have taken the exchange risk, while PFC passed this risk on to the final borrower. Second, the refusal of the GOI to be the borrower gave an implicit signal to the state governments and SEBs that it did not fully support this technical assistance. In effect, the project was undermined from the beginning by the GOI's inconsistent position: the state governments should borrow for technical assistance even if it was not willing to do so itself.

3.21 The GOI's position, that it would only be willing to hire the appropriate consultants if it had access to grant funds for the purpose is also highly questionable on economic grounds. Even when the decision on guaranteeing a single 1,000 megawatt IPP would commit the country to energy payments of hundreds of millions of dollars per year, the GOI was unwilling to borrow a few million dollars for needed technical advice. Nevertheless, the Bank responded effectively to this position by finding and facilitating the use of the needed grant funds. But OED must question the Bank's rationale for expecting the SEBs, most of which were essentially bankrupt, to borrow hard currency at an interest rate of 13.5 percent, for their technical assistance needs. **OED believes that, since the GOI was unwilling to signal the importance that it placed on this assistance, in effect refusing to accept ownership by supporting it directly, the Bank should have accepted this decision, dropped the Bank project, and supported only the Japanese PHRD assistance to the central government.** [9]

Will IPPs Strengthen or Weaken the SEBs?

3.22 At the time the project was being appraised, the GOI had decided that private sector investment in power generation (IPPs) was going to have to be the solution to the country's shortfall in power generation capacity. GOI had initiated a process of calling for private participation, but had yet to design a framework within which IPPs would be approved or would operate. The Region was somewhat more pessimistic. It advised GOI and the states that, in the absence of creditworthy energy off-takers and other requirements (such as GOI guarantees) needed to make the projects "bankable", it was unlikely that any of the projects would reach financial closure. Nevertheless, the Bank was strongly supporting the shift for new power generation facilities from public sector to private sector, and wanted to be seen as supporting its implementation wherever possible. The Region wanted to support the development of a new institutional framework and to maintain the momentum to establish IPPs that were viable and cost-effective. In evaluating its response, it appears to have shared the view of the MOP on the speed with which such agreements could be reached and the urgency of the need for technical assistance advice.

3.23 While optimistically signing memorandum of understanding, states were beginning to realize that, in the absence of a national operational framework for IPPs, detailed contract negotiations would be at best inconclusive, and that, in any event, without guarantees from the central government, IPPs were unlikely to move forward with projects that sold their electricity to SEBs that were financially insolvent. For most states it made little sense to work out the details of a contract, to prepare new generation projects for bidding, or to prepare parts of their systems for privatization before a supportive institutional framework had been established. Most SEBs were unwilling to hire high-cost foreign consultants to review contracts and develop negotiating positions, primarily because they did not think that the projects were likely to reach financial closure. Where an SEB was serious about moving forward, as the Maharashtra SEB was with the ENRON project, it used Bank funding (in the Maharashtra case from an existing loan) for similar technical assistance.

3.24 The major problem of introducing IPPs was, and continues to be, that the SEBs do not have the financial strength to guarantee payment for the electricity generated. This problem is

9. However, it must be noted that Bank management was under pressure to accept the project as a way to strengthen their working relationship with MOP. The Bank needed to show the MOP that it was responsive to requests for assistance to avoid the path taken by Pakistan, and for strengthening efforts to establish economically viable IPPs. If the Bank had refused to act quickly to what was perceived by the GOI as a crisis situation, it could have been accused of doing nothing when it was most needed. The currently available documentation does not support this interpretation, but staff involved in the project at inception believe that it was an important consideration. However, after the project was approved, a great deal of Bank and PFC resources were expended in an effort to make an unviable project work.

particularly acute in states where average tariff levels are substantially below the long-term marginal cost of new power plants. The problem of how to attract bankable IPPs was a central concern of the Bank during its discussions with the GOI. At one point, Bank's proposal was that the financial viability could be enhanced by allowing IPPs to sell power directly to large-scale industrial consumers, thereby improving the likelihood of being paid for the power they generate. This proposal was put forward as a way to reduce the requirement for the GOI to provide payment guarantees in view of the financial weakness, and in some cases insolvency of India's SEBs. However, this approach has both technical and institutional weakness. On the technical side, there is the problem of wheeling power within a transmission system that is often incapable of meeting existing market demand. Large consumers would, no doubt, be willing to pay a premium for a secure power supply, but there can be no security as long as the new plant's output must go through shared transmission lines. Even the NTPC has only limited ability to wheel power among the states. On an institutional basis, this solution could further weaken the SEB's financial condition. Industry pays highest tariffs than any other consumer group, and taking away the SEBs' largest, best paying customers and leaving them with the least profitable customers would make it more difficult for the SEBs to maintain even their current low levels of income. Clearly, a few privileged enterprises could gain by this system, since they would have a guaranteed source of supply at a cost that is lower than the cost of self-generation, but the rest of the system would be greatly weakened. **IPPs can only be viable when the real cost of power generation, transmission and distribution are passed on to consumers through a tariff system that reflects the long run marginal cost (LRMC) of power and this LRMC is, in effect, the cost of power from new IPPs. The region's current views are fully consistent with this position.**

4. Ratings

4.1 The ICR evaluated the project on the results of the technical assistance directly financed by the Bank and downplays the impact of the parallel assistance provided by the Japanese PHRD and USAID. It therefore assessed project outcome as unsatisfactory, institutional development as negligible, sustainability as unlikely, and Bank and Borrower performance as deficient.

4.2 *Like the ICR, OED rates the project outcome as unsatisfactory since most of the assistance encompassed by the project was never carried out.* The project represented a high-reward (but high-risk) effort at what appeared to be a critical juncture for India's power sector institutions. The loan was intended to disburse quickly, over two years, with the possibility of being renewed if the need still existed. The (small) technical assistance component that went to the GOI was effectively used and established a knowledge of issues related to IPPs that had previously not existed, and the Bank loan funds that were used for technical assistance, while limited, were also effectively utilized.

4.3 *OED rates the project's institutional development impact as modest, and its sustainability as unlikely.* There was a substantial transfer of knowledge at the GOI level, but at the state level the project did not significantly contribute improving the ability of the SEBs to structure viable IPPs. Substantially more assistance in this area is needed (along with sector restructuring that establishes financial viable distribution entities), if India's ninth plan target of 17,000 megawatts of new generation facilities by independent power producers is to be achieved at a reasonable cost. It should be noted, however, that throughout the period when this project was being implemented, the Bank was also pursuing an intensive dialogue on power reforms with GOI and with States which appeared interested in strengthening the sector's performance, and was engaged in supporting the preparation of power sector restructuring projects in several states.

4.4 *OED rates Bank performance as unsatisfactory.* The project design was highly risky because it involved persuading Indian institutions to change deeply ingrained attitudes and become willing to pay for high-cost international consultants. The Bank misjudged the likelihood of rapid progress on IPPs in states whose SEBs were financially weak and the impact that this would have on the demand for assistance in negotiating project agreements.

4.5 *OED rates overall Borrower performance as unsatisfactory on account of the Government's and the SEBs' fundamental lack of commitment to the basic objectives of the project.* Although PFC did everything it could to interest the SEBs in implementing the project's technical assistance program, as a lending institution, it did not have, and should not have been expected to develop, the technical know-how needed to sell the program to reluctant clients. The ultimate failure of the SEBs to purchase the products offered should not be attributed to the lack of salesmanship of the intermediate lender (PFC). Those (very limited) resources that were used by the ultimate borrowers and by the GOI were used effectively.

5. Major Lessons and Conclusions

Should the Bank Support the Expansion of IPPs without Power Sector Restructuring?

5.1 Stand alone technical assistance programs are extremely difficult to implement and supervise. The use of financial intermediaries as apex onlending institutions for technical assistance projects is unlikely to work well, because financial institutions are unlikely to have the expertise needed to support, advise and supervise the subloans. Developing this experrtise is a long and costly process. Technical assistance is much more likely to succeed if it is tied to the needs of a larger project, or is part of a project preparation facility (PPF) that is expected to lead to a future large project.

5.2 Even a technical assistance project with limited objectives, such as this project, is unlikely to be successful if the institutional structure of the sector is unsound and unsustainable. The Bank should not support efforts to expand electricity generation projects through IPPs unless the power sector institutions, particularly those responsible for distribution of electricity to consumers, are fundamentally sound or, at least, are on the way to becoming fundamentally sound.

Basic Data Sheet

TECHNICAL ASSISTANCE PROJECT FOR PRIVATE POWER DEVELOPMENT PROJECT (LOAN 3630-IN)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	20.5	N.A.	--
Loan amount	20.0	1.2	6%
Cancellation		18.8	--
Date physical components completed		N.A.	--
Economic rate of return		N.A.	--

Cumulative Estimated and Actual Disbursements

	FY94	*FY95*	*FY96*	*FY97*
Appraisal estimate (US$M)	7.0	17.0	20.0	20.0
Actual (US$M)	0.0	0.0	0.4	1.2
Actual as % of appraisal	0.0	0.0	2.0	6.0
Date of final disbursement: May 21, 1997				

Project Dates

	Original	*Actual*
Preparation		February 15, 1993
Appraisal		No formal mission
Negotiations		May 6, 1993
Board approval		June 24, 1993
Signing		July 7, 1993
Effectiveness	September 15, 1993	August 23, 1993
Closing date	December 31, 1995	December 31, 1996

Staff Inputs (staff weeks)

	Actual	
	Staff Weeks	*US$ thousand*
Through appraisal	15.7	40.2
Appraisal to Board	9.3	31.6
Supervision	66.1	126.5
Completion	3.2	8.7
Total	94.3	207.0

Mission Data

	Date (month/year)	*No. of persons*	*Days in field*	*Specializations represented*	*Implemen-tation Status*	*Develop-ment Impact*	*Types of problems*
Identification/Preparation							
Appraisal							
Supervision	July 1993	3	10	FAs, ES	1	1	
	June 1994	3	10	FAs, EA	S	S	Procurement
	Oct. 1994	3		FAs, ES	*	*	
	June 1995	3		FAs, ES	U	U	Procurement
	Nov. 1995	3	2	FAs, ES	*	*	Procurement
	July 1996	1	2	FA	U	U	Procurement
Completion							

* No Implementation Summary (Form 590) was prepared.
FA: Financial Analyst (from Headquarters and Resident Mission).
ES: Energy Specialist (from Resident Mission).

Other Project Data

Borrower/Executing Agency:

FOLLOW-ON OPERATIONS			
Operation	*Credit no.*	*Amount (US$ million)*	*Board date*
None			

Comments from the Borrower

राजीव रंजन भारद्वाज
उप महाप्रबन्धक (वित्त)
Rajiv Ranjan Bhardwaj
Dy. General Manager (Finance)

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पावर फाइनेंस कारपोरेशन लिमिटेड
POWER FINANCE CORPORATION LTD.
(भारत सरकार का उपक्रम) (A Govt. of India Undertaking)

Fax No.001-202 - 522- 3123

No.9:5:1(3):Vol.VI

December 22, 1998

Dear Mr.Slade

Subject : **India - Technical Assistance Project for Private Power Development (Loan 3630 - IN)**

Please refer to your letter dated November 19, 1998, enclosing therewith the draft Performance - Audit Report (PAR) of the captioned loan.

I am herewith enclosing our comments on the PAR as desired. I request you to excuse us for the delayed response which was largely on account of late receipt of the document here.

If you have any further clarification, please do not hesitate to contact me on 91-11 - 3722312 and fax no. 91-11-3721114.

With regards,

Yours sincerely,

(R.R. BHARDWAJ)

Mr. Roger Slade,
Manager
Sector & Thematic Evaluations Group
Operations Evaluation Deptt.
The World Bank
1818 H Street N.W
Washington, D.C. 20433, USA

Encl : As above

ANNEXURE-I

Sub: Technical Assistance Project for Private Power Development - World Bank Loan No. 3630-IN.- Draft Performance Audit Report (PAR).

This has reference to FGI office note dated 14th December 1998 on the above subject. Our comments on specific paras on the draft PAR are as given below:-

(a) Memorandum To The Executive Directors And The President

The figure \$ .9 million indicted in 2nd line of third para is not correct. The correct figure was US \$ 3.1 million.

(b) Project Implementation

(i) <u>Bullet Point No.7 of Para 2.2</u>

PFC's onlending rate for the above project was initially 13.5% which was reduced to 11.5% and further reduced to 10% . The lending rate was fixed after detailed discussions with World Bank Mission. The onlending rate of interest did at no point of time hinder the SEB's in utilising the loan. It is the SEB's reluctance and sectoral policy issues and the high cost of international consultants that hampered its utilisation.

(ii) <u>Para 2.3 :</u>

Bank's direct lending to the SEBs to meet TA financing requirements would not have made any difference. Rather the Bank was right in choosing PFC as an inter-locator as PFC is the only financial institution totally dedicated to Indian power sector and has the real feel of events taking place therein.

(c) Issues:

<u>Is a Financial Intermediary an Appropriate APEX Institution</u>

(i) <u>Para-3.1:</u>

The last para in Sl.No. 3.1 viz. " Effective implementation of these tasks would have required specialised power sector technical expertise, **project evaluation, project finance and legal issues in Power Purchase Agreement and contract negotiating with foreign companies** which PFC did not have." is not correct.

As per the Executive Project Summary of World Bank prepared for TAP-PPD, it has been stated that PFC would commit a core of professionally qualified staff who would inter-alia manage the TA funds i.e. review requests for technical assistance, provide guidance to the concerned SEBs on the type of services they should engage, monitor the selection of consultants in accordance with World Bank guidelines and ensure an adequate cross fertilisation among beneficiaries. The TAP fund was set up with the objectives for hiring technical/legal/financial consultants to assist SEBs to negotiate Power Purchase Agreements with the Independent Power Producers, in line with the Govt. of India's Private Power Initiatives. As such the activities viz. project evaluation, project finance and legal issues in Power Purchase Agreements and contract negotiating with foreign companies was to be carried out by these consultants and not by PFC.

(ii) <u>Para-3.2</u>:

It was clearly understood by PFC that TAP was a developmental fund which had been created to promote India's Private Power Initiative and its success depended on creating awareness among SEBs regarding complexity of negotiating PPAs and other related Agreements with IPPs. This responsibility was successfully discharged by PFC.

(iii) <u>Para-3.3</u>:

PFC's Pre-Investment Unit (PIU) helped the SEBs in formulation of bid documents, terms of reference, etc. from the day it started functioning. Not only this, extra efforts were made to help SEBs to expedite the filling of loan applications, preparation of bid documents in line with World Bank guidelines including Terms of Reference (TOR), developing evaluation criteria, contracting, etc. Officials with sufficiently long experience in this field were deployed in PIU so that the work relating to TA loan could be expedited. Rather Bank's Supervision was too tight to permit any feasibility to accommodate the concerns of the SEBs while hiring the services of consultant. Moreover, supervision from Washington instead at Delhi caused undue delay in getting the Bank's No Objection and other clearances. It would be relevant to point out that PFC sanctioned sub-loans totaling US $ 20.38 million and processed the proposals of SEBs for hiring the services of consultants. However, due to competition from PPF/other grants made available to SEBs by the multilateral agencies and the undue delay in clearing the bid / other documents by the World Bank that the SEBs got the loans cancelled.

(iv) <u>Para-3.4</u>:

OED well appreciates the efforts made by PFC in helping the Govt. of India in awarding the consultancy contracts for issue of counter guarantee. This substantiates the fact that PFC did have the expertise to advise the SEBs in utilisation of TA funds. However, other factors listed above did not allow it to happen.

(v) Para-3.5:

As explained in replies to Paras 3.1 to 3.3 above and admitted by OED in para3.4 the conclusion drawn in para 3.5 by the OED is not well substantiated. It would well be admissible to have the Financial Institutions involved from the very earnest at the developmental stage of such TA projects and more delegation of authority be given to them in awarding such contracts within the guidelines laid down by the Bank. Bank's role has to be more supportive instead of exercising stringent control.

(d) Major lessons and Conclusions:
Should the Bank support the IPPs Absent Power Sector Restructuring?

(i) **Para 5.1:**

As explained in reply to para 3.3, PFC had sufficient expertise in handling the T.A. Project, which has been accepted by the OED as well in para 3.4. So it would be of interest to the Bank to route TA assistance through Financial Institutions like PFC.