ICR Review

Operations Evaluation Department

Report Number: ICRR10954

1. Project Data:		Date Posted: 07/09/2001		
PROJ ID:	P010450		Appraisal	Actual
Project Name:	Private Sector Energy Development II	Project Costs (US$M)	2388	3106
Country:	Pakistan	Loan/Credit (US$M)	246	234
Sector(s):	Board: EMT - Power (95%), Central government administration (5%)	Cofinancing (US$M)	372	282
L/C Number:	L3812			
		Board Approval (FY)		95
Partners involved:	The Export Import Bank of Japan, Government of Italy, Government of France and US Eximbank	Closing Date	12/31/1999	06/30/2000

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2. Project Objectives and Components

a. Objectives

Note: The Private Sector Energy Development Project (PSEDP) was extended to be co-terminous with PSEDP II, and the loan agreements and implementation programs were amended to be consistent with each other. Therefore the evaluation summaries for the two projects are identical, except for project header details (section 1), and project cost, finance and dates (section 2c). This was done to achieve consistency with the ICRs for the two projects where the main text is identical but the Annexes are specific to the individual project.

Objectives: The Projects' objectives were to:

1. Assist Pakistan in mobilizing, from the private sector, the resources required to meet the anticipated deficit in power supply;
2. Establish incentives to encourage private sector participation;
3. Establish an institutional framework required to facilitate private sector transactions in energy on a sustainable basis.

b. Components

PSEDP and PSEDP II each consisted of two components -- (i) investment sub-projects and (ii) institution building. They provided for the financing of subordinated debt to private energy companies, together with technical assistance to government entities implementing the private power policy. PSEDP focused mainly on one very large sub-project -- the 1292 MW Hub Power Project. Five sub-projects were collectively financed under the PSEDP and PSEDP II. Institution-building included: (a) provision for the government and its agencies to formulate and adapt policies to enable private sector transactions in power; (b) creation of three new entities -- (the Private Power and Infrastructure Board {PPIB} in charge of negotiating the contractual framework; Water and Power Development Authority (WAPDA)'s Private Power Organization (WPPO) in charge of negotiating the power purchase agreements (PPA); and the Private Energy Division (PED) of the National Development Finance Corporation (NDFC) in charge of administering the funds under the Bank Loan) and (c) provision for the power utility, WAPDA, to abandon its virtual monopoly on power generation, and adjust its activities to include purchasing power from plants it did not own.

c. Comments on Project Cost, Financing and Dates

Project Costs and Financing: For PSEDP, total project cost was estimated at US$1,893 million, comprised of US$415 million from a Bank loan of US$150 million and loans from bilaterals, and US$1328 million from the private sector (US$470 million equity and US$858 million local and foreign commercial loans and credits).
Estimated PSEDP II project cost was US$2,388 million including US$11 million for TA and US$2,377 million for subprojects. Of this, the Hub project accounted for US$1,832 million, Asia Pipleline (APL) project US$100 million and the remaining US$445 million for power subprojects.
Comparisons of appraisal estimates of project cost and financing with actual costs are not very meaningful. This is because the Long Term Credit Fund (LTCF) created under the project was intended to catalyze financing for private sector sub-projects which, for most part, were not identified in detail at the time of appraisal.

The projects ultimately financed five private energy investments for a total cost of US$ 3 billion. The Hub and Asia Pipeline (APL) projects were completed within budget while the other three subprojects exceeded projections by 20-30 percent.
The capital costs per kW for the four power projects were very high at US$ 1200 - US$1245 (as broadly compared to US$510 per kW for a combined cycle power plant in Bangladesh) mainly due to a high (17-30%) of "soft" costs -- sponsor/project development costs, interest during construction and other financing fees.
At appraisal, the ERR for Hub and Uch projects was calculated at 18.3 and 20 percent respectively. Although revised estimates could not be made for lack of data, the ERR and FRR have almost certainly decreased since appraisal given the extended delays in commissioning the plants, increase in project costs and the reduction in negotiated tariffs during 1998-2000.
Dates: The original closing date of PSEDP I, which was 12/31/94, was extended to match that of PSEDP II (12/31/99) when the latter was approved. PSEDP I was eventually closed on 11/30/98, and the remaining funds cancelled once it was clear that no additional subprojects would be approved. PSEDP II was extended by six months to allow for the financial restructuring of two subprojects. The first subproject -- the Hub project -- under PSEDP I was delayed by several years due to the following factors:
External Factors: The Gulf War suspended development activities for almost fourteen months in 1991-92;
Internal Factors: There was a loss of continuity due to changes in government which sometimes led to renegotiation. Rulings on loan interest by the Shariah court took time to resolve.
Commercial factors: Withdrawal of two key contractors led to reconstitution of the construction consortium.

3. Achievement of Relevant Objectives:

1. The projects achieved their physical targets, and load shedding due to insufficient generation was largely eliminated.
2. The objective of establishing incentives to encourage private sector participation was achieved. However, the private power policy -- which was successful in attracting private investment, but ended up supporting many projects that were too small and not suitably located to system requirements -- led to substantial overcapacity that greatly strained WAPDA's financial situation.
3. The objective of establishing an institutional framework to facilitate private sector transactions in energy was achieved partially and unsustainably The Bank helped create three agencies: Private Power and Infrastructure Board (PPIB); Private Energy Division (PED), a unit of the National Development Finance Corporation (NDFC) in charge of administering the LTCF; and the WAPDA Private Power Organization (WPPO). Lack of managerial autonomy, heavy political interference, lack of transparency, and the turnover of key staff meant that the institutional objectives of the project were only partially attained.

4. Significant Outcomes/Impacts:

- The financial and institutional framework that evolved under the projects enabled the construction of an additional 4,400 MW generating capacity (which was consistent with the targets set for Pakistan's seventh five-year plan) with a total investment of US$5 billion.
- The Hub subproject paved the way for private power projects internationally, and the complex documentation that it generated has become a reference for similar projects. New Bank instruments like the Partial Risk Guarantee were tried out successfully for the first time.

5. Significant Shortcomings (including non-compliance with safeguard policies):

Macroceonomic: The IPP program put pressure on the already narrow fiscal base of Pakistan, adversely impacting the balance of payment position and ability to deal with large contingent liabilities.
Financial: 1) Generous incentives were provided to project promoters through the price of electricity and Government's guarantees; 2) There was a lack of incentives for project promoters to reduce costs; 3) The terms of Power Purchase Agreements (PPAs) allowed IPPs to pass through fuel costs while WAPDA was unable to pass on the escalated costs to retail consumers. 4) As the project progressed, the financial condition of NDFC deteriorated and lack of agreement over the future management and ownership of the LTCF affected it adversely. 5) WAPDA deteriorated financially due to front-loaded IPP tariffs indexed to the US dollar, decline in demand for electricity, poor collection rates and widening tariff cross-subsidies.
Institutional and Governance: 1) Allegations of corruption within Pakistan and the investors' perception of heavy-handedness of the government, destroyed investor confidence in Pakistan; 2) The pace of the private power program was faster than creation of a suitable regulatory system and restructuring of WAPDA.
Implementation: Too many subprojects were given letters of intent despite the Bank's caution to cap the amount at 2000 MW.
Policy: 1) The Government's private power policy was not adequately reviewed, monitored and amended by the government as originally intended. This should have revealed the need to limit new capacity; 2) The impact of IPPs on WAPDA's finances was not adequately analyzed; 3) Implementation of many sub-projects was not consistent with the least-cost expansion program in terms of capacity, fuel selection, and technology.
Social: There was not enough emphasis on social consequences and affordability of private power generation.
Planning: There was no technical specialist on the team to focus on the location of IPPs and choice of technology; 2) The QAG panel failed to notice the substantial asset/liability mismatches of the LTCF and therefore failed to recommend remedial action.

Given the significant shortcomings of the projects in many areas, the sustainability of the physical achievements as well as the institutional and policy structure created by the projects is unlikely, unless the government takes drastic measures on the financial, institutional and policy fronts.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Unsatisfactory	Unsatisfactory	1. Even though the physical targets were achieved the outcome of both projects is considered unsatisfactory as the related economic, financial, institutional and technical aspects fell short of expectations.
Institutional Dev.:	Negligible	Negligible	
Sustainability:	Unlikely	Unlikely	
Bank Performance:	Unsatisfactory	Unsatisfactory	
Borrower Perf.:	Unsatisfactory	Unsatisfactory	
Quality of ICR:		Satisfactory	

NOTE: ICR rating values flagged with '*' don't comply with OP/BP 13.55, but are listed for completeness.

7. Lessons of Broad Applicability:

Sector Reforms and IPPs: Private investment does not substitute for reform, and should not be attempted without at least the basic reform elements in place.

Benchmark Pricing vs. Competitive Bidding: Competitive bidding for IPPs combined with incentives for providing least cost power could have resulted in lower trariffs, prevented too many and suboptimal projects being developed, and promoted transparency.

Important Issues in Managing Large IPPs: These include: tailoring public financial support and guarantees to facilitate an efficient investment program; having an efficient fuel supply policy; allowing IPPs to procure fuels in competitive markets, both foreign and domestic; creating capacity to manage IPP contracts; and ensuring efficient plant dispatch. An option for gaining valuable experience without much risk is to begin with a small IPP.

Due Diligence by Other Lenders: Risk mitigation measures provided in the security package may not be sufficient when the underlying economics are compromised by an unsound macroeconomic situation in the country.

Procurement: International competitive bidding -- for IPP concession on basis of price -- leads to greater transparency, reduces the risk of corruption, and allows more flexibility for Bank financing.

Contingent Liabilities: Where contingent liabilities are likely to be an important issue, a monitoring system -- perhaps at the Central Bank -- ought to be put in place.

Covenants: Material covenants that may be difficult to enforce through measures such as suspension of disbursements could be designed as conditions of loan effectiveness, or other remedies designed according to the needs of the situation. At the same time, threat of suspension is not practical when it is applied to a private sector transaction i.e. the Bank cannot penalize the private sector for inaction by the government on an unrelated matter. On another count, the Bank should not encourage essentially commercial provisions such return on equity as part of the covenants.

Corruption Allegations: It is difficult for the Bank to maintain an "honest broker" role in a complex project when different parts of the Bank Group often play conflicting roles -- IFC as a lender to IPPs seeking to mitigate its reputational risk; the Bank's Project Finance Group trying to mitigate calls to the Partial Risk Guarantee; and the Bank's macroeconomic team advising on the macroeconomic agenda. In dealing with corruption, the Bank should encourage the government and its agencies to pursue matters strictly according to law and internationally recognized due process, while honoring contractual conditions.

Renegotiations: Renegotiations (or indeed any negotiations) will more likely result in prompt and mutually acceptable solutions when they occur in a commercial atmosphere, free of coercion.

Mitigating Foreign Exchange Exposure: Financial stresses generated due to currency mismatch between liabilities and ultimate source of revenue (in this case domestic consumers) can be mitigated if the ultimate revenue source is linked wherever possible to foreign currency such as for electricity sales to export -oriented industries.

8. Assessment Recommended? ● Yes ○ No

Why? PSEDP and PSEDP II were pioneering projects for PSD in the power sector in a developing country situation. The projects encountered complex financial, economic, political and institutional issues at every stage from design to closure. There is scope for finer lessons to be drawn from this experience.

9. Comments on Quality of ICR:

This Intensive Learning ICR is rated as Satisfactory (bordering on Exemplary), given its depth of analysis and objectivity, which compensates for the paucity of detailed data due to heightened sensitivites from all quarters.