

PD-ABQ-905

99138

**NEPAL POWER DEVELOPMENT FUND
BORROWER'S IMPLEMENTATION PLAN
(Recommendations and Guidelines for Fund Implementation)**

Prepared for

His Majesty's Government of Nepal
Ministry of Water Resources
Electricity Development Center

Under the

USAID/Nepal Private Electricity Project
Contract No 367-C-00-95-05117-00
Project No 367-1073-3

Final Draft Report

May 1998

Prepared by

Randolph S Lintz
Technical Support Services, Inc
Washington, D C



Acres International
140 John James Audubon Parkway
Amherst NY 14228 1180
Telephone 716 689 3737
Facsimile 716 689 3749
E mail amh@acres.com

Engineering a Better World™ ■ ■ ■ ■

Table of Contents

List of Figures

Terms

Abbreviations and Acronyms

1	Power Development Fund Objectives, Design and Organization	1-1
1 1	Objectives	1-1
1 2	Design	1-1
1 3	Design Options Considered for the Power Development Fund	1-1
1 4	Structure and Governance of the Power Development Fund	1-2
1 5	Operating Procedures of the Power Development Fund	1-3
1 6	Project Cycle	1-3
1 6 1	Project Proposals	1-4
1 7	Lessons Learned from the Pakistan Private Sector Energy Development Fund and Reflected in the Nepal Power Development Fund's Design	1-4
1 8	Benefits	1-5
1 8 1	Capital Market Development	1-5
1 9	Risks	1-7
1 9 1	Financial Risk	1-7
1 9 2	Project Completion Risk	1-7
1 9 3	Operating Risk	1-7
1 9 4	Demand Risk	1-7
1 9 5	Political Risk	1-8
1 9 6	Country Risk Premium	1-8
2	Options for Financial Products and Services to be Offered by the Nepal Power Development Fund	2-1
2 1	Debt Products	2-1
2 1 1	Senior Loans	2-1
2 1 2	Subordinated Loans	2-2
2 1 3	Convertible Debt	2-2
2 2	Liquidity/Maturity Management Products	2-2
2 2 1	Take Out Finance	2-2
2 2 2	Standby Finance	2-3
2 2 3	Refinance	2-3
2 3	Fee Based Services	2-3
2 3 1	Loan Syndication	2-3
2 3 2	Partial Guaranty Mechanisms	2-4
2 4	Equity Investments	2-5
3	Organizational Structure and Management of the Power Development Fund	3-1
3 1	Choice of a Financial Institution as Manager of the Power Development Fund	3-1
3 2	The Fund Administrator's Fee Structure	3-2

Table of Contents (Cont'd)

3 3	The Power Development Fund's Accounts	3-2
3 3 1	Power Sector Account	3-2
3 3 2	Power Development Fund Operating Account	3-3
3 4	Administration Agreement	3-3
3 5	Investment Policy	3-3
3 6	Lending Terms	3-5
3 6 1	The Power Development Fund Fee Structure	3-8
3 7	Spread Income	3-9
3 8	Asset Management	3-9
3 8 1	Float Management	3-9
4	Administration of the Power Development Fund	4-1
4 1	Power Development Fund Investment Committee	4-1
4 1 1	Duties and Powers of the Investment Committee	4-1
4 1 2	Loan Approval Process	4-2
4 1 3	Membership Terms	4-2
4 1 4	Qualifications for Members of the Investment Committee	4-2
4 1 5	Compensation of Investment Committee Members	4-2
4 1 6	Removal of Members	4-2
4 2	The Fund Administrator	4-2
4 2 1	Duties and Powers of the Fund Administrator and the Power Sector Account Administrative Unit	4-3
4 2 2	Functions of the Power Sector Account Administrative Unit	4-4
4 2 3	Manager of the Power Sector Account Administrative Unit	4-5
4 2 4	Accounting and Auditing	4-7
4 2 5	Project/Loan Monitoring	4-8
4 2 6	Fund Administrator Conflict of Interest Issues	4-8
5	Eligibility Criteria for Power Development Fund Financing	5-1
5 1	Loan Approval Procedures	5-2
5 2	Participating Credit Institutions	5-4
5 2 1	Rationale for Local Financial Institutions' Access to the Power Development Fund	5-4
5 2 2	Potential Participating Credit Institutions	5-4
5 2 3	Eligibility Criteria for the Participating Credit Institutions	5-6
5 2 4	Financing Modalities for Participating Credit Institutions	5-10
5 2 5	Equal Access to the Power Development Fund	5-10
5 2 6	Power Development Fund Utilization Strategy	5-11
5 2 7	Participating Credit Institutions' Lending Unit	5-11
5 2 8	Compliance with Nepal Rastra Bank Guidelines	5-11
5 2 9	Forfeiture of Eligibility	5-12

Table of Contents (Cont'd)

6	Terms of Repayment to the Power Development Fund	6-1
6 1	Borrowers' Terms of Repayment to the Power Development Fund	6-1
6 2	The Power Sector Account and Repayment of the International Development Association Credit	6-1
7	Evaluation and Negotiation of the Security Package	7-1
7 1	Project (Implementation) Agreement	7-2
7 2	Power Purchase Agreement	7-2
7 3	Land Conveyance Agreement	7-3
7 4	Ownership Structure and Agreements	7-4
7 5	Engineering, Procurement and Construction Contract	7-4
7 6	Operations and Maintenance Agreement	7-5
7 7	Irrevocable Letter of Credit	7-5
7 8	Escrow Agreement	7-6
7 9	Trust Deed	7-7
7 10	Insurance	7-7
8	Procurement and Disbursement	8-1
8 1	Procurement	8-1
8 2	Disbursement	8-1

Appendices

Appendix A	Financial Projections of Loan Placement, Servicing and Repayments
Appendix B	Revenue Coverage in the Escrow Account
Appendix C	Guidelines for Project/Loan Monitoring During the Construction Phase
Appendix D	Guidelines for Project/Loan Monitoring During the Operations Phase
Appendix E	Guidelines for Insurance
Appendix F	Guidelines on the Content of Project Companies' Monthly Progress Report
Appendix G	G1 Guidelines for Accounting Requirements
	G2 Guidelines for Fund Administrator Overhead Charges and Suggested Apportionment Bases
	G3 Suggested Chart of Accounts for the PDF
Appendix H	Audit Guidelines
Appendix I	Typical Commitments Contained in the Project (Implementation) Agreement
Appendix J	Key Provisions of the Power Purchase Agreement
Appendix K	Key Provisions of Construction Contracts
Appendix L	Loan Assessment Checklist

List of Figures

Figures

1	Proposed Flow of Funds, Information and Decision Making	3-4
2	Loan Approval Cycle	5-5

4

Terms

Applicant The private party (individual, corporation, partnership, or consortium) submitting a proposal to develop a private power project

Basis Point The smallest measure in quoting yields on bonds and notes, equal to one one-hundredth of one percent, or 0.01 percent

Borrower His Majesty's Government of Nepal

Build-Own-Operate or Build-Own-Operate-Transfer Two schemes used to formulate private power projects. These arrangements involve the formation of a private company or joint venture being set up to plan, finance on a limited recourse basis, design, construct, operate power developments, and, at the end of a specified point in time, transfer the asset to the public sector.

Debt Service Periodic payment of principal and interest on loans, bonds, or fixed/floating rate notes

Devaluation A government action to reduce the purchasing power or value of local currency against convertible currencies

Dollars Mean dollars in the currency of the United States of America

Due Diligence Entails the responsibility of an individual to act in a prudent manner in evaluating credit applications, in essence, using the same degree of care that an ordinary person would use in making the same analysis. Due diligence would be conducted by either the Fund Administrator itself or by specialists and would look into the Project Company's background, its financial reliability and the intended use of the proceeds of the loan to be received from the Power Development Fund to ensure, to the best degree possible, that recommended investment does not go sour.

Fiduciary A person, company, or association holding assets in trust for a beneficiary. The fiduciary is charged with the responsibility of investment money wisely for the beneficiary's benefit.

Financial Closing Occurs when all the conditions of lenders and investors have been met, and financing disbursements can take place.

Fund Account Refers to the account established by the Borrower with the Nepal Rastra Bank. The Fund Account will serve as the instrument of custody for donor funds received from HMG/N for the power sector and their management.

Funding Agencies Refer to the International Development Association and such other international funding agencies parties to the Power Development Fund.

Funding Agreements The agreements between the Borrower and the Funding Agencies.

Host Country The country in which the private power project is taking place.

Implementation Agreements Project-specific agreements that provide government assurances and guarantees to private power producers required for successful project development and allocation of risk

Independent Power Producers Private power producers who have developed power plants, typically on a project finance basis, to sell power to an existing utility or directly to distributors or large consumers

Indexed Tariff An adjusted tariff, based on a variable such as interest rates (local or foreign), exchange rate

Interest Rate Swap Interest rate swaps are contracts that allow a debt issuer to "swap" the interest rate it currently pays on an outstanding debt issue. For instance, an issuer with variable rate debt outstanding may want to lock in a fixed rate of interest. To do this, the issuer enters into a floating-to-fixed swap whereby the issuers will now pay a fixed interest rate. The counterparty to this swap is then obligated to pay a floating rate of interest as determined by a benchmark such as LIBOR. Neither the principal nor the actual interest payments change hands. Instead, the net difference between the two interest rates is determined – monthly, semiannually, or annually – and is paid by the party whose payment obligation exceeds that of the other.

Investment Committee The committee appointed by the Borrower and constituted by virtue of Annex A of the Administration Agreement

Investment Enterprise A legal entity established in accordance with the laws of Nepal having not less than majority private ownership of its voting stock and with effective private control of the entity

Investment Project A specific development project to be carried out by an Investment Enterprise utilizing the proceeds of a sub loan

Investors Individuals, groups, or companies that invest cash in a private power developer, group, or company

Lenders Commercial banks or other lending institutions that provide loans for investors or directly to a private power developer company for the purposes of developing and building a power plant

Lending Policies The policies set out in Annex B of the Administration Agreement, as amended from time to time by agreement between the Borrower and the International Development Association

LIBOR Key rate in international bank lending. LIBOR is the rate at which major banks in London are willing to lend Eurodollars to each other. It is used to determine the interest rate charged to creditworthy borrowers. LIBOR rates, based on daily quotes at 11 AM (London time) from five major London banks, are fixed rates quoted for specific maturities. The lending rate in the Euro-markets (LIBOR) is quoted for the U S dollar and other Eurocurrencies, generally for fixed-term borrowings, such as three months, six months, and so on.

Limited Recourse Financing A lending arrangement under which repayment of a loan and recourse in the event of a default relies mainly on the project's cash flow

Liquidated Damages Provisions Specific amounts, with a cap, a construction contractor is obligated to pay the project company in case of nonperformance or schedule delays

Loan Documentation Means in respect of any sub loan agreements between the Borrower and the Investment Enterprise or between the Borrower and a Participating Credit Institution or between the Borrower and any other person concerning the terms and conditions on which the sub loan is made, including any agreement for granting of security or the issuance of a guarantee or other form of credit enhancement

Operating Account The account funded out of PDF fees and service charges and a pre-determined share of the interest spread income. These resources will be used for meeting the cost of setting up the PDF including management expenses, legal, technical, environmental and financial appraisal of project, negotiations of placement agreements, and other work related to project promotion and development activities

Pari Pasu From the Latin meaning with equal pace, speed or progress. Such a clause in a loan agreement precludes subordination of the loan to other debt

Participating Credit Institution A financial institution carrying on business in Nepal and approved to access PDF funds by the Investment Committee to be used for the co-financing of Investment Projects in order to leverage local resources

Performance Bonds Guarantees purchased by the project developer issued by commercial banks or insurance companies for an entity to guarantee full and successful implementation of a contract according to prespecified performance guidelines

Power Purchase Agreement (PPA) Established the power sales obligations between the private producer and the power purchaser and identifies the type of transaction (e.g., BOO or BOOT)

Power Development Fund (PDF) The component of the World Bank's Power Development Project for Nepal which will provide long-term debt financing for power projects to overcome (i) the lack of sufficient debt financing for power projects, (ii) the inadequate maturity of available debt financing, and (iii) the need to provide comfort to private investors wishing to become involved in "first time" projects. The PD component will be funded by contributions from the International Development Association and other official financing sources. These funds, together with reflows of debt service payments made by borrowers will form the PD. The funds will be held in an account established with the Nepal Rastra Bank. The PD will at all times be owned by His Majesty's Government of Nepal and operated by a PD Administrator under an Administration Agreement. The PD will be available for partially financing eligible projects which have fulfilled the necessary licensing requirements of the Electricity Development Center in the Ministry of Water Development, including a clearance from the Ministry of Population and Environment. The PD will not be a major provider of funds for any one project, but it will co-finance projects with international and domestic lenders, including commercial banks, investment funds, export credit agencies and other official sources. The aim will be to maximize the inflow of private capital.

Power Purchaser The entity purchasing power from a private power developer. Usually, the public utility of the host country is the power purchaser.

Private Power Developer An individual, group, or company that develops power plants on a private basis to own, operate, lease, and/or transfer.

Project Company The special-purpose entity that assumes legal and financial responsibility for construction and operation of the project. Recourse is limited to the project company. (See Investment Enterprise)

Project Proposal A proposal made to the Fund Administrator for an Investment Project

Proposal A written offer, based on the covenants, terms, and conditions as contained in the RFP

Rate of Return Percentage of return on equity that developers expect from a project

Request for Proposal (RFP) Issued by a utility or government to solicit bids for a project. It contains, collectively, covenants, terms, and conditions including information for applicants, instructions to applicants, performance specification, draft Implementation Agreement, and draft Power Purchase Agreement

Special Drawing Rights (SDR) This accounting entry, though not backed by paper money or precious metal, serves as an international reserve asset. The SDR is made up from a basket of major currencies, the U.S. dollar value of SDRs is computed daily by multiplying these currencies by their U.S. dollar exchange rate in London, and adding US\$0.54

Sub-Loan A loan made or proposed to be made by the Borrower out of the proceeds of the IDA credit for an Investment Project

Tariff Rates charged for the energy, capacity, and miscellaneous services included in the PPA

Tax Holidays Exemptions from some or all taxes for a specified period

Turnkey Contract A contract given by the project developer to a prime contractor who will be responsible for the design and implementation of a project from start to finish, and who will provide a completed, operational project on a stipulated date, on a lump-sum basis

Abbreviations and Acronyms

PDF	Power Development Fund
HMGN	His Majesty's Government of Nepal
IDA	International Development Association
IBRD	International Bank for Reconstruction and Development (World Bank)
EDC	Electricity Development Center
MOWR	Ministry of Water Resources
MOPE	Ministry of Population and Environment
BOO	Build-Own-Operate
BOOT	Build-Own-Operate-Transfer
LIBOR	London Interbank Offered Rate
SDR	Special Drawing Rights
FI	Financial Institution
PCI	Participating Credit Institution
PSAAU	Power Sector Account Administrative Unit
M/PSAAU	Manager, Power Sector Account Administrative Unit
SP	Security Package
LOI	Letter of Intent
PAL	Preliminary Acceptance Letter
PA	Project (Implementation) Agreement
EPC	Engineering, Procurement, Construction Contract
PPA	Power Purchase Agreement
O&MA	Operation and Maintenance Agreement
LC	Letter of Credit
EA	Escrow Agreement
LCA	Land Conveyance Agreement

1 Power Development Fund Objectives, Design and Organization

1.1 Objectives

The International Development Association (IDA), part of the World Bank Group, will provide a credit to His Majesty's Government of Nepal (HMGN) which will comprise the initial capitalization for a Power Development Fund (PDF) to be owned by HMGN. The PDF will supplement private and other public financing available for the development of Nepal's power sector to meet the domestic demand for electricity and to export power where possible and justified. It will provide long-term debt financing for power projects and contribute to the acceleration of the hydroelectric power development in the country by (i) supplementing the existing debt financing for power projects, (ii) enhancing the overall maturity of available debt financing, and (iii) providing additional comfort to private investors wishing to become involved in "first time" power projects. Given the thinness of the commercial debt market in Nepal which impedes the development of private projects financed on a limited recourse basis, the PDF will allow potential investors to access long-term financing thereby offering the private sector the opportunity to invest in and own, operate and maintain new power facilities. Only projects which have fulfilled the necessary licensing requirements of the Electricity Development Center (EDC) within the Ministry of Water Resources (MOWR), and which have received clearances from the Ministry of Population and Environment, will be allowed to make financing proposals to the PDF.

The PDF will initially be a pooled fund contributed to by IDA with the ability to solicit official financing sources, together with reflows of debt service payments made by borrowers. It will comprise balances held in an account established with the Nepal Rastra Bank and loans made under this facility. The PDF will not be a major provider of funds for any project, rather it will co-finance projects with international and domestic lenders, including commercial banks, investment funds, export credit agencies, the International Finance Corporation, and other multilateral institutions. The aim of the PDF will be to act as a catalyst to maximize the inflow of private capital.

1.2 Design

The basic rationale for the design of the PDF as delineated below stems from the need to make sound investment decisions once the PDF begins to receive financing proposals from sponsors of commercially viable power projects to fill their financing gaps. As such, it is imperative that the executing entity charged with making these decisions (i) has the necessary mandate to make loans to eligible borrowers, (ii) operates on a commercial basis, (iii) is perceived as efficient, fair and transparent, and (iv) encourages international standards and competition. The proposed organizational arrangements for the PDF contained herein have evolved in line with these principles. The administration and management of the PDF would be organized so as to make placement decisions in an autonomous and transparent manner with adequate information and on the basis of sound evaluation criteria.

1.3 Design Options Considered for the Power Development Fund

The PDF design process initially examined the viability of creating various new institutions, including a "Power Development Company" and a "Power Development Board", to administer the Power Development Fund. Three options were considered for creating such an institution by means of the Companies Act, by way of the

Development Board Act, and through a statutory act of parliament. After considerable internal discussions within HMGN, it was decided that government policy precludes the establishment of a Power Development Company as yet another government-owned company with certain special privileges under the new Companies Act. The formation of a new Power Development Board under the Development Board Act to administer the PDF outside of the framework of the private financial sector was also rejected due to the critical requirement that the institution charged with PDF management, and responsible for making loan decisions, operates on commercial principles and be perceived as fair and transparent. The idea of creating an entity to administer the PDF by a statutory act of Parliament was also dismissed due to the long time horizon required for the passage of such an act.

The PDF must be tailored to support a selected program of private sector investment that would, *inter alia*, act as a catalyst for mobilizing long-term resources in the capital markets. The PDF is being initiated at the beginning of a transition period when private sector operations are being introduced into a heretofore public sector managed and controlled activity. Thus, the PDF, through the entity charged with its management, would be able to influence the process of private investment. Therefore, administration of the fund by a public entity would not provide the confidence sought by the international financial community regarding the transparency of the PDF lending process in general, and the competence of the team engaged in project evaluation and financial risk assessment in particular. Furthermore, two key lessons learned from Pakistan's experience with its Private Sector Energy Development Fund support the appointment of a private institution to administer the PDF: first, the financing agency needs to be independent and apply sound commercial criteria, and secondly, it is essential to engage high caliber financial, legal and technical talent for the evaluation and negotiation of the projects to be funded.

The design process also examined the viability of placing the financing facility in an existing financial institution, but its sheer size and impact were seen as potential problems. The size of the facility and the average loan size envisaged would have meant that the repository financial institution would violate single borrowing and capital adequacy requirements. For this reason, it was determined that the Fund Administrator's functions would be carried out by an internal, but independent, unit established within an existing financial institution.

1.4 Structure and Governance of the Power Development Fund

In light of the aforementioned factors, the optimal operational structure for the PDF should be one based on a privately run, autonomous institution model. A Fund Administrator, chosen by competitive bidding from local financial institutions (FI), would serve in an advisory role to a PDF Investment Committee. The final decision regarding project funding would be vested with the Investment Committee and will be made in accordance with a strict set of PDF policies and operating criteria following IDA guidelines. The Investment Committee would have the mandate to (i) review and approve PDF involvement in solicited or unsolicited bids, (ii) certify local financial institutions as Participating Credit Institutions, (iii) review and approve proposals for loans in accordance with the recommendation of the Fund Administrator, (iv) monitor the performance of the Fund Administrator to ensure compliance at all times with the PDF's Investment Policy, (v) review and approve quarterly and other reports submitted by the Fund Administrator, (vi) review the books and records of the PDF maintained by the Fund Administrator, and (vii) keep HMGN apprised as to the operations of the PDF and make recommendations to HMGN concerning the renewal or termination of the Administration Agreement.

The Fund Administrator would have the mandate to (i) negotiate the terms of loans approved by the PDF Investment Committee, (ii) operate the PDF account, (iii) monitor borrower performance under loans from the PDF, (iv) handle debt service collections, (v) maintain the books of account of the PDF, and (vi) provide periodic

reports to the Investment Committee, HMGN and IDA. Following approval by the Investment Committee, it would enter into a project loan agreement with, and make funds available to Investment Enterprises and local financial institutions (see Section 5.2). Funds designated for use as financial instruments for the power sector and their repayments would be maintained in an account with the Nepal Rastra Bank styled as the "Power Sector Account". This account will be separate and distinct from the Investment Committee's and the Fund Administrator's "Power Development Fund Operating Account" which would be established only for meeting day-to-day operating requirements.

1.5 Operating Procedures of the Power Development Fund

The Fund Administrator's functions would be carried out by an internal, but independent, unit established within an existing financial institution, styled as the "Power Sector Account Administrative Unit" (PSAAU). The PSAAU would be staffed largely by existing personnel from within the chosen financial institution. These personnel would be managed by a part-time Senior Project Finance Specialist and supported by short-term investment advisors and consultants deemed necessary to assist in economic, financial, legal and technical aspects of project evaluation and financial risk assessment. Loan disbursements, accounting and debt service collections would be handled by the accounting and financial management expertise within the PSAAU's financial institution. Loan processing would be carried out by the PSAAU manager and his/her staff under the overall direction and control of the PDF Investment Committee. The Investment Committee would approve projects for financing only after ensuring that they are economically, financially and technically viable and environmentally acceptable. It would therefore be incumbent upon the PSAAU to thoroughly conduct these viability tests while screening potential projects to enable the Investment Committee to issue Letters of Intent (LOI) which, besides forming the basis for project financing, implies conformity with all official Nepalese and IDA criteria. The financial structure and operations of the Power Development Fund, the Investment Committee and the Power Sector Account Administrative Unit are described below in Section 4.

The duties of the Fund Administrator would be set forth in an Administration Agreement between HMGN and the Administrator. This agreement will define the rights and obligations of both parties and the lending policies of the PDF and would be renewable every five (5) years by mutual agreement (see Section 3.4).

1.6 Project Cycle

Projects eligible for PDF funding would initially focus on hydropower generation facilities to be implemented by Investment Enterprises (i.e., project companies or sponsors) through limited recourse financing. The general stages through which such projects will typically progress and iterate include the following. A more detailed listing of these stages is delineated in Section 5.1.

- ▶ Investment Enterprise submits loan application to Fund Administrator
- ▶ Fund Administrator issues Letter of Intent (LOI) to the Investment Enterprise
- ▶ Project appraisal conducted by Fund Administrator to determine economic feasibility
- ▶ Fund Administrator submits recommendations to Investment Committee
- ▶ Investment Committee issues Preliminary Acceptance Letter (PAL)
- ▶ Investment Enterprise accepts PAL, loan documentation fee paid
- ▶ Preliminary license issued by EDC
- ▶ Security package negotiations initiated with Investment Enterprises
- ▶ Review of engineering and construction contracts by Fund Administrator

- ▶ Fund Administrator sends loan application to Investment Committee for approval
- ▶ Upon approval, Fund Administrator completes loan documentation
- ▶ Fund Administrator undertakes final negotiations of the Loan Agreement and Security Package with the Investment Enterprise
- ▶ Financial closing with Investment Enterprise and Fund Administrator

1 6 1 Project Proposals

Project proposals might arise from an initiative by HMGN to invite bids for a specific project, i.e., solicited proposals. Alternatively, unsolicited proposals might be put forward on the initiative of project sponsors. However, HMGN policy is generally to solicit proposals. Projects would be undertaken largely utilizing the build-own-operate (BOO) or build-own-operate-transfer (BOOT) model financed on a limited recourse basis in order to promote private investment in Nepal.

1 7 Lessons Learned from the Pakistan Private Sector Energy Development Fund and Reflected in the Nepal Power Development Fund's Design

The Pakistan Private Sector Energy Development Fund (PSEDF) was designed to address a fundamental constraint to greater private sector participation in Pakistan's energy sector. Established in 1988, the PSEDF was then, and continues to be, a means of successfully addressing the lack of long-term financing for power and energy-related infrastructure projects with relatively long periods of gestation and economic life.

The PSEDF has clearly demonstrated the effectiveness of a public-private approach at the beginning of the transitional period from public sector monopoly to widespread private sector participation in the power sector. PSEDF gave the International Bank for Reconstruction and Development (the World Bank) and other international lending agencies and bilateral donors the ability to influence the process of private investment in the sector early on. The background work and technical assistance provided under the PSEDF provided the foundation for Pakistan's policies supporting private power and infrastructure investments. Lessons learned from Pakistan's experience with its PSEDF which are relevant to the design of the Nepal PDF can be summarized as follows:

- ▶ The financing agency needs to be independent and apply sound commercial criteria
- ▶ The fund management should not provide senior loans and/or equity in order to avoid possible conflict of interest situations
- ▶ It is essential to employ high caliber international legal, financial and technical consultants for the evaluation and negotiation of the projects to be funded
- ▶ The mere existence of a fund can provide a strong incentive for private sponsors to make the necessary investments in project development
- ▶ Initial projects should not be too large in order to facilitate the mobilization of external financing
- ▶ In low income countries with limited creditworthiness, commercial lenders require the additional protection provided by the subordination of the financing provided by donor agencies
- ▶ The availability of subordinated debt is useful and in some instances, essential for mobilizing commercial debt, particularly for projects whose revenues are denominated in local currencies and dependent on the performance of a small number of public enterprises and agencies

The organizational structure and operating procedures of the Nepal Power Development Fund delineated below incorporates these lessons and is tailored to support a selected program of private sector investment that would (i) leverage IDA's (and future donor's) resources, (ii) act as a catalyst for further investment in the power sector, and (iii) improve the operational efficiency of electric power generation through introduction of the private sector

1 8 Benefits

The PDF would obviously serve to facilitate the development of the power sector. It should also provide value added in a number of areas. The PDF should (i) act as a catalyst for mobilizing long-term resources in the capital markets, (ii) create an investment climate in Nepal for infrastructure projects, (iii) transplant relevant international and, more importantly, regional experience to Nepal, (iv) build HMGN's capacity to prepare and globally market large hydropower projects, promote private sector participation as a complementary feature of the country's reform program in the power sector, (v) assist the country to build capacity and skills in the emerging area of international project finance, and (vi) facilitate the preparation and conduct of competitive solicitation processes.

Given the fact that additional investments in electric power are essential to the Nepalese economy in order to realize the benefits of its potential growth, the removal of bottlenecks in the power sector would facilitate the growth of the country's commercial and industrial activities, particularly those oriented toward exports. Considerable benefits are expected to accrue through expanded investment in power including a reduction in the high economic cost of power shortages. In the social sector, improvements in the availability of power would have a beneficial impact on households, of which less than fourteen (14) percent currently have access to electricity.

Additional benefits are likely to be derived from the involvement of private sector managerial and technical expertise. In addition, savings would be achieved by raising the efficiency of operation of the power sector. Worldwide experience suggests that private sector participation in the electric power generation can result in lower costs, higher output, and higher reliability of service. Although there appears to be some interest on behalf of the local private sector in power sector investment, at present, the inability to finance long-term commercial debt is an impediment to the implementation of new power projects. The PDF would help to address this financing gap and act as a catalyst to encourage both domestic and foreign private investment in the power sector.

Stemming from the fiscal relief derived from a decrease in public sector expenditures in the power sector, the PDF would also have a positive impact on Nepal's macroeconomy. The PDF would allow the mobilization of a large portion of the investment cost outside the budget, as the PDF would contribute up to twenty-five (25) percent of the investment cost with the balance provided by the private sector through long-term debt and equity. The ability of the PDF to retain its spread income would ensure that it becomes supportable through its own resources.

1 8 1 Capital Market Development

To provide additional capacity in Nepal's power sector to meet domestic demand for electricity, hundreds of millions of dollars are required in the medium-term¹. However, the magnitude of the resources required is unlikely to come from multilateral lending agencies, bilateral donors or other public

¹ According to the Supply Constrained Load Forecast for the domestic market the energy required by the year 2010 will be 1 002 megawatts of peak demand compared to peak demand of 281 megawatts on average for 1996

agencies. This money can only be raised by making these projects attractive to private capital. But at present, nonrecourse or limited recourse financing for private sector energy projects in Nepal is lacking and the country's weak and inefficient capital and stock exchange markets constrain the availability of adequate financial resources particularly for medium-term project financing.

The PDF would help to fill this gap and establish a vehicle to channel long-term financing to private sector projects. Additionally, by making PDF resources available to local financial institutions ("Participating Credit Institutions" or PCIs as defined in Section 5.2), the PDF can also play a significant role in mobilizing local resources from these institutions to provide additional term financing for eligible projects, particularly those of 10 megawatt capacity and below (see Section 3.6). By requiring loan funding in a ratio of 1:2 (i.e., US\$1 lent by the PDF for every US\$2, or rupee equivalent), that the PCI places in a power project from its internal funds), PDF resources will be leveraged with capital from PCIs. A PDF/PCI partnership would therefore contribute to the creation of a sustainable commercial marketplace for power project development and financing.

By encouraging both the structuring of BOOT power projects, and the participation of local financial institutions in the co-financing these projects, one of the PDF's implicit objectives is to develop the country's capital market. Thus, BOOT power projects should be viewed as part of an initial strategy to develop this market. However, setting up successful BOOT power facilities does not overcome the inherent weakness and inefficiency of Nepal's capital market unless there is follow through in developing that market rather than in attracting more and more foreign resources. Nepal is going to have to meet much of its power sector investment requirements locally, and BOOT schemes are one way of developing that capital market.

In the envisaged power generation expansion plan to be supported by the PDF, a typical BOOT approach will be followed whereby an Investment Enterprise will bring in private capital (largely private international capital) together with supplier credits and assorted other types of monies including PDF resources and local co-financing. The Investment Enterprise would then operate the facility for a finite period of time and then transfer the assets to the host country's public sector. The benefit to capital market development from this specific scenario is, however, only temporary. A more consequential and long-term benefit to capital market development could be brought about if, at the end of the operating company's concession, rather than transferring a plant to a public monopoly, the foreign shareholders in the plant would be expected to divest themselves of their equity, up to some negotiated proportion. Ownership could then be transferred in the form of paper, certificates or other instruments for investment in the local market. Thus, there would be a transfer of ownership of the plant rather than the transfer of the assets of the plant.

There is little question of whether this "transfer" alternative would be practicable. Everywhere in the developing world – and Nepal is no exception – there is a scarcity of good paper assets for investment and every time a good investment scheme comes along, it tends to be oversubscribed almost immediately. Starting to issue shares in power plants and encouraging the dealing in shares is the only way to begin to replicate the BOOT process of mobilizing private capital on a scale that is relevant to the capital mobilization problem facing Nepal.

1 9 Risks

1 9 1 Financial Risk

Implications of foreign exchange risk at the project level arise from the envisaged transactions between the PDF and its borrowers. Project revenue streams would most likely be in local currency whereas the debt service to the PDF would be in U S dollars (rupee dollar equivalent). Typically, an Investment Enterprise would be able to mitigate part of the foreign exchange risk by passing through currency depreciation in its offtake agreements with the purchaser, in this case, the Nepal Electricity Authority (NEA). It is expected that Investment Enterprises would further mitigate foreign exchange risk, especially during the construction phase of the project, through hedging and/or exchange rate insurance which would be included in the tariff base negotiated with NEA. Thus, movements in the Nepalese rupee/U S dollar exchange rate would be assumed by the project sponsor, the cost of which would be reflected in the sale price of power, through an indexation provision, and passed on to consumers.

In addition to exchange rate risk at the project level, there are exchange rate risk implications for HMGN and IDA. Both the lending and repayment currency for the PDF and the currency of repayment to HMGN is U S dollars. However, HMGN's obligations to IDA of HMGN are denominated in Special Drawing Rights (SDR)² and repaid in dollars by HMGN. Risks arising from an adverse movement of the U S dollar against the SDR are normally borne by the borrowing government. However, given the wide spread between lending rates to borrowers and the IDA lending rate, HMGN would have ample reserves to compensate for this rather modest risk.

1 9 2 Project Completion Risk

This risk stems from the long set up time, large gestation period (anywhere from between 3 to 8 years) and the various legal and environmental clearances required for execution of a power project. These features pose serious risks in terms of time and cost overruns in the execution of the project which need to be shared to a large extent by the sponsor/developer and by the lending institutions to a lesser extent.

1 9 3 Operating Risk

This risk emanates from various technical and operating factors like the ability of the operation and maintenance contractor to keep the power generating facility running at full and agreed capacity, under estimation of operating costs or over estimation of output. Operating risk would impact the ability of the developer to achieve the promised level of performance/services and are normally borne principally by the developer.

1 9 4 Demand Risk

Demand risk may arise as a result of an incorrect estimation/price sensitivity of demand, subsequent development of new alternatives or the inability of the buyer to partake of or pay for originally committed quantities.

² This neutral unit of account fluctuates relative to a basket of major currencies. The U S dollar value of the SDR is computed daily by multiplying these currencies by their dollar exchange rate in London and adding US\$0.54.

1 9 5 Political Risk

Frequent changes in government policy, lack of well documented procedures and absence of a track record in implementing similar projects make power projects politically sensitive

1 9 6 Country Risk Premium

To manage a financial institution's exposure to various types of risks associated with a particular hydropower project loan, a country risk premium is added to the loan's base index or floor, i e , U S dollar debt pegged to costs of funds such as the U S dollar six (6) month London Interbank Offered Rate or LIBOR³. The determination of a country risk premium entails consideration of the economic and financial aspects of country risk assessment together with project-specific policy risks and political risks. Generally, economic and financial risk can be determined by reviewing the historical fluctuation in (i) interest rates, (ii) local inflation and home country inflation, (iii) currency availability and convertibility, and (iv) movements in international prices of raw materials and energy inputs (i e , fuels, in the case of thermal projects)

Country risk assessment focuses on analysis of fundamental macroeconomic factors including

- balance of payments
- domestic savings rate
- rate of internal growth as a proportion of gross domestic product
- fiscal policies and central bank policies
- foreign reserve account fluctuations
- capital market development including capitalization, liquidity, and availability of long-term investments

In theory, the country risk premium itself – derived from the risk analysis of the above items – mitigates the risk of fluctuations in these factors and resulting impact on the project. In reality, however, risk assessment and mitigation of these factors is not a one-to-one relationship. By definition, the economic and financial factors which make up country risk are not attributable to one actor or entity which can mitigate that risk. In addition, the final interpretation of country risk may be based in part on subjective analysis of “soft” or non-commercial factors

Non-commercial risks are associated with any political and regulatory changes that have an impact on the project and any failure of entities operating under the jurisdiction of the host government (i e , state-owned utilities) to meet financial obligations. In effect, these risks are economic risks, but are categorized as “non-commercial” because they are risks associated with the public sector of the host country environment. These “soft” factors of country risk analysis – open to subjective interpretation – which will also contribute to the country risk premium

³ LIBOR is the key rate in international bank lending. LIBOR is the rate at which major banks in London are willing to lend Eurodollars to each other. It is used to determine the interest rate charged to creditworthy borrowers. LIBOR rates based on daily quotes at 11 AM London time from five major London banks are fixed rates quoted for specific maturities. The lending rate in the Euro-markets (LIBOR) is quoted for the U S dollar and other Eurocurrencies generally for fixed-term borrowings such as three months, six months and so on.

Project specific policy risks include (i) changes in regulation, and (ii) economic failure of public sector counterparts. Changes in regulations need to be assessed and mitigated through negotiation. Economic failure of public sector counterparts (i.e., state-owned utilities) to meet contractual obligations is one of the greatest concerns to project sponsors and lenders.

Finally, as described above, political risk entails expropriation or other action by government or a government entity which would force the project into default.

This combination of risks – economic, financial, non-commercial, project specific and political – will be assessed during the due diligence phase of PDF loan appraisal. The experts engaged in the due diligence process will, through a series of analyses and assessments, arrive at an appropriate risk premium to add to six month U.S. dollar LIBOR floor.

2 Options for Financial Products and Services to be Offered by the Nepal Power Development Fund

The traditional sources of project funding comprising long-term loans from financial institutions and equity offerings in the capital market are inadequate to match the risk-return profile and pay back periods of infrastructure projects. The little term lending that currently exists in Nepal typically extend loans for five (5) years (matching their tenure of funds), while power projects require tenures of up to twenty years or more. The long tenure of funds required coupled with significant risks involved and sensitivity to financing costs make traditional financing approaches less suitable for such projects.

Thus, power project financing must not only meet the capital requirements of the project in a cost effective manner but also attempt to share the risks among all participants concerned. The inability of traditional sources of financing in achieving both these objectives necessitates structured financing as a more viable source of funding both from a risk sharing and cost point of view.

The intent of the PDF is to extend loans and related services to private project sponsors for investment in and major upgrade of power facilities as well as other long-term, capital intensive power-related projects. To meet the needs of project sponsors, the PDF's product range should seek to address the specific needs of power project financing.

Broadly, the PDF's potential product range could be classified as

- ▶ Debt products
- ▶ Liquidity/maturity management products
- ▶ Fee-based services including credit enhancements
- ▶ Equity investments

A brief description of potential products under each category follows. Many of these products are not currently offered in Nepal or in countries in similar stages of development, and are relatively new even by international standards. It should therefore be noted that specific products and services could be phased in over time as the technical capacity of the Fund Administrator increases and in line with demand for more sophisticated products and services.

2.1 Debt Products

2.1.1 Senior Loans

Senior debt includes all short- and long-term debt that have claim prior to junior obligations and equity on an Investment Enterprise's assets in the event of liquidation. Senior debt commonly includes funds borrowed from banks, insurance companies, or other financial institutions, as well as notes, bonds or debentures not expressly defined as junior or subordinated.

In addition to direct loans to Investment Enterprises, the PDF would solicit applications from qualified Nepalese commercial banks to participate in the co-financing of power projects (see Section 5.2). The PDF would encourage these "Participating Credit Institutions" to share PDF risk by matching PDF resources with their internal funds.

2 1 2 Subordinated Loans

This refers to all short- and long-term debt that is subordinated by agreement to senior debt. These loans are generally senior to equity but junior in claim on assets to senior and secured debt, that is, repayable only after other debts with higher claim have been satisfied. Subordinated loans can be generally or specifically subordinated. A general subordination is a blanket subordination. A specific subordination details as to the type of debt which is subordinated. In the event of liquidation, subordinated debt has claims on assets after unsubordinated debt. Some subordinated debt may have less claim on assets than other subordinated debt. For example, junior subordinated debt ranks below a subordinated debenture.

The subordination language of each PDF project loan agreement would determine the precise extent and circumstances of the subordination including the repayment of principal, payment of interest, term of the subordination and a description of the lenders and creditors to which the PDF loan is subordinated.

The flow of private capital for power projects is currently constrained by country risk perceptions and the lack of project financing track record. The provision of PDF financing in the form of subordinated debt and the presence of the PDF as a stakeholder in the power sector will give the necessary comfort to private developers and quality commercial lenders to participate in power project financing in Nepal.

2 1 3 Convertible Debt

This refers to debt that is exchangeable into equity at the option of the holder and under specified terms and conditions. Convertible debt offers various advantages. For example, an Investment Enterprise can sell debt with lower interest rates and less restrictive covenants by giving investors a chance to share in potential capital gains. Convertibles offer this possibility. A more important advantage from the standpoint of the issuer is that a convertible issue can be used as a temporary financing device. By using convertible debentures, which provide for a time lag before they are convertible into common stock, an Investment Enterprise can minimize the cost of money during the construction period. After the time lag has elapsed and the power generation facility is producing revenue, convertibles can be exchanged for equity in the project.

2 2 Liquidity/Maturity Management Products

A key constraint in the development of an infrastructure financing market in Nepal is the absence of long-term financing, especially for construction. Broadly, this group of products would make available long tenure funds for power projects and help existing lenders get around their maturity constraints in lending to the power sector by giving them an exit route after a pre-specified period. They will also encourage new lenders to enter the market and increase the bankability of projects.

2 2 1 Take Out Finance

“Take out” financing refers to debt financing in the form of pre-arranged or contingent financial commitments agreed at financial closure whereby a borrower’s creditor is paid off and the original short-term loan is replaced with a longer maturity loan. Take out forms include the following:

- take out of a construction finance lender at the satisfactory completion of construction and plant commissioning, and the expiration of general and specific warranty periods.

- take out of a medium-term finance lender (who is a lender to the project for a period including and longer than construction but shorter than the period necessary for the project to repay its lenders from its generated cash flows) at any time between the satisfactory completion of construction and plant commissioning and the expiration of general and specific warranty periods and the time of the final repayment of principal due to that lender
- take out of medium- or long-term lender at any time between the satisfactory completion of construction and plant commissioning and the expiration of general and specific warranty periods and the time of the final repayment of principal due to that lender

2 2 2 Standby Finance

This refers to a commitment to loan money up to a specified amount for a specific period, to be used only in a certain contingency. Under limited recourse financing as is envisaged by the PDF, lenders generally insist that Investment Enterprises have access to standby financing to meet any unanticipated financial obligations which is available for deployment as needed rather than being tied to specific procurement packages. Standby commitments are provided by the major equity holders and both senior and subordinated lenders. They are drawn down on a *pari pasu*¹ basis regardless of the cause of the cost overrun².

2 2 3 Refinance

Through this product, the PDF could provide refinancing services to both private commercial lenders as well as other financial institutions. This product could provide additional liquidity for other financial institutions, making more funds available for lending to power projects.

2 3 Fee Based Services

2 3 1 Loan Syndication

A project financing practice whereby a group of commercial bankers and investment bankers each agrees to advance a portion of the financing. Typically, the financing is arranged by a single bank at narrow interest rate spreads above the lender's cost of funds. The syndicator acts as investment manager, collecting a loan origination fee or commitment fee from the borrower, and arranging for the sale of promissory notes to other banks in the group.

¹ From the Latin meaning with equal pace, speed or progress. A *pari pasu* clause in a loan agreement precludes subordination of the loan to other debt.

² This has a strong economic rationale. If the standby commitments of different lenders were earmarked for different project components, the total amount of standbys would have to be increased to provide risk protection which would increase overall project financing. If cost overruns occurred and the PDF did not participate equally in the standby facilities, the commercial lenders would have to finance a higher proportion of the project. Lenders would increase the risk premium incorporated into their interest rate. Thus, the overall cost of the project would go up and its viability would decrease. As such, the provision of standby facilities and the *pari pasu* draw down of these facilities are essential to ensure the overall economy of the project. Failure to do so would invariably lead to greater difficulties in mobilizing the total financing and in incurring a higher cost of the projects financed by the PDF.

2 3 2 Partial Guaranty Mechanisms³

The perception of significant repayment risk associated with the provision of long-term capital for power projects potentially offers at least two types of partial guaranty mechanisms to encourage long-term flows of private capital to the power sector. A partial credit guarantee would cover a portion of the financing provided by private financiers. A partial risk guarantee, on the other hand, could be provided to cover performance of certain contractual obligations which are critical to the sustained viability of projects.

The partial credit guarantee could be used where long-term funds are required for a project to be financially viable. Commercial lenders tend not to be willing to extend long-term loans due to their reluctance to assume risk over a long maturity. A partial credit guarantee could be structured to help transform medium-term funding into longer terms. There are a number of ways in which this may be achieved: (i) guarantees for longer-dated maturities, (ii) liquidity guarantees in the form of put options⁴ and take-out financing (post-construction, for example), and (iii) rolling guarantees that cover a fixed number of scheduled payments. The principal objective in offering such guarantees in the domestic market would be to encourage a lengthening of the terms of finance to provide a better match between loan maturities and a project's financial requirements.

A partial credit guarantee should extend only to project lenders, and only be done when essential. Operating procedures can be developed to determine the appropriate level of enhancement in a given situation to ensure that guarantees are provided only to the extent necessary. Credit enhancement should not be considered for projects that can reasonably be expected to go forward with funding from private or official sources with the security provided through appropriate project structuring without the guarantee. It would necessarily be a matter of technical and professional judgment to assess what is possible for private financiers to undertake without enhancement. It would be essential to systematically assess all guarantee transactions and the extent of coverage and pricing would be foremost considerations.

Partial risk guarantees could be provided to cover performance of certain contractual obligations which are critical to the sustained viability of projects. In most private sector, limited recourse financings, the government typically must offer to undertake certain activities essential for the project, which are under the direct control of government, government-owned public utilities or other government entities. In addition, the government may agree to provide financial support for risks which cannot be insured at a reasonable cost. Failure by the government to meet one or more of these specific commitments can have an adverse impact on project viability and its ability to generate sufficient revenues for timely debt

³ Although central government guarantees virtually eliminate lender's risk in commercial borrowing, from a development viewpoint **government guarantees generally create perverse efficiency incentives**. They encourage lenders to dispense with project review and even to ignore local financial conditions. As long as a loan is adequately covered by a central government guarantee commitment, the lender has no reason to limit its lending to commercially viable projects. On the contrary there is every incentive for heedless lending and for inefficient local spending. As a result one of the primary rationales for encouraging private sector lending – instilling financial discipline in project design and operation – is defeated. Government guarantees should thus not be considered as an option under the PDF.

⁴ A put option is a contract giving the holder the right, but not the obligation, to sell a security or financial instrument for a specified period of time at a specified price. Puts are bought by investors who believe the price of the underlying security or financial instrument will go down and they will be able to sell the security or instrument at a higher price.

service. A major risk to investors and lenders in such projects could arise from excessive delays caused by the government's action or failure to act, by adverse changes in laws and regulations, and by a general deterioration in macroeconomic conditions which adversely affects the project. A partial risk guarantee strengthens the credibility of government contractual undertakings. The value of this type of partial guaranty lies in overcoming investor caution regarding political and policy risk.

2.4 Equity Investments

At some point during the life of the PDF, local equity could be offered to investors only if a means could be devised to secure a listing on the local stock exchange. This would, of course, require the contracting of specialized expertise to support the local issue. In order to overcome the current weakness in the absorptive capacity of the equity market in Nepal, a project sponsor's lead investment bank could pre-place a specific amount of equity with a third party. The latter could sub-underwrite the equity and hold it during the construction period of a particular project, then would gradually divest itself of it. Small local investors could then acquire this equity. Such a scenario would broaden the ownership base of the power plant and provide local investors with the opportunity to hold equity.

It should be noted that the placement of local equity requires a great deal of work. It includes finding outside underwriters for a large stock flotation, who will slowly release the stock into the market as both the project and market absorptive capacity develop. Similarly, the issue of convertible bonds, a new development for the local capital market, would also require an enormous amount of work. However, given the current status of the local stock exchange, these scenarios would be very difficult to implement without reforms aimed at strengthening the current market.

3 Organizational Structure and Management of the Power Development Fund

HMGN would own the PDF, appoint an Investment Committee to approve PDF funding proposals, and engage a Fund Administrator to oversee the process of recommending project investments and managing the day-to-day administration of the PDF. Based on the recommendations of the Fund Administrator, the Investment Committee would only approve loans to selected power sector projects which have fulfilled the necessary licensing requirements of the Electricity Development Center, including a clearance from the Ministry of Population and Environment. The PDF would not be a major provider of funds for any one project. However, the PDF would have US dollars available for long maturities that would match the needs of new power project investment. Other than the earmarking of funds for smaller scale projects, PDF funds would not be earmarked for specific projects, thus allowing the PDF to respond flexibly to market demands and to allow for the analysis of each project on its own merit. Nepal's commercial banking sector will be encouraged to participate in financing these projects, particularly those of ten (10) megawatts and below.

3.1 Choice of a Financial Institution as Manager of the Power Development Fund

The success of the Power Development Fund will depend largely on the quality of its implementation. This, in turn, depends on which FI is chosen as the Fund Administrator and the nature of the agreement that is reached regarding the management of IDA and other donors' credits for the power sector. The selection of a financial institution for the Fund Administrator will be approached as a systematic process to seek out an institution that understands the fiscal reality that the era of sovereign lending is passing. Given the dearth of experience within Nepal's local financial institutions in the area of project finance, a teaming (or partnership) agreement with either the FI's parent bank or a regional or international investment or merchant bank¹ specializing in infrastructure project finance to provide requisite advisory services for project evaluation, loan appraisal and risk assessment will be a prerequisite for bidding for the Fund Administrator contract.

Not only will the Fund Administrator play a crucial role in the successful implementation of the PDF from the standpoint of technical and administrative capacity, success will also be a function of the chosen institutions' ability to provide leadership in promoting private sector participation in the power sector through the mobilization of long-term private investment to complement IDA's and other donors' scarce resources for this key sector. The PDF seeks a Fund Administrator with the vision to venture beyond the bounds of traditional lending in Nepal and employ market-determined incentives to successfully assist private investors to invest in the power sector so that they may earn a competitive return from their long-term investments in the sector while simultaneously contributing to the development of the sector.

Due to the long-term nature of the investments envisaged, the choice of Fund Administrator will require an evaluation of elements of financial soundness, professional management capability, and experience in

¹ Investment banking involves the sale and distribution of a new offering of securities by a financial intermediary (an investment banker) who buys securities and instruments from the issuer as principal and assumes the risk of distributing the securities to investors. The process of purchasing and distributing securities is known as underwriting. Merchant banking on the other hand is a form of banking where the bank arranges credit financing but does not hold the loans in its investment portfolio to maturity. Merchant banks also provide counselling and negotiation services.

24

infrastructure project finance. At least six considerations should govern the choice of a financial institution to serve as Fund Administrator: (i) whether it meets eligibility criteria for delinquency and loan loss rates, adequacy of the bank's capital, and its liquidity position, (ii) its track record with regard to lending in Nepal, (iii) the experience of the parent bank, investment bank or merchant bank with which the local FI has teamed, particularly with respect to project finance on a limited recourse basis in the infrastructure sector both worldwide and in South Asia, (iv) the qualifications and experience of the Project Finance Specialist recruited to direct the process of advising on PDF investments and managing the day-to-day administration of the PDF, (v) the qualifications and experience of the advisors and/or consultants deemed necessary to help administer the fund in the efficient and effective manner expected of the Fund Administrator, and (vi) the investment advisory fee sought by the Fund Administrator. Assessment of various local bidders' overall financial condition will be conducted with rigor as will the evaluation of the local FI's partner institution, key personnel and the reasonableness of the institutions' proposed investment advisory fee.

In order to ensure fairness and transparency in the choice of the Fund Administrator, selection will be made on the basis of competitive bidding. Evaluation criteria for the bids should include the six elements specified above with emphasis placed on institutional capabilities, personnel and the magnitude of the proposed management fee. Bid review and selection of the Fund Administrator will be carried out by the Electricity Development Center in collaboration with IDA and should include representatives of the Ministry of Finance, Ministry of Water Resources, Ministry of Law and Justice and the Rastra Bank.

3.2 The Fund Administrator's Fee Structure

The Fund Administrator would be reimbursed for its costs and expenses to administer the PDF and be paid an investment advisory fee. Eligible reimbursement items would include expenses and salaries related to staffing, office space, telecommunications, travel, accommodations and third-party costs (including the fees of subcontractors and taxes and other governmental charges) incurred in the carrying out of its duties. As an incentive to effectively carry out the duties delineated in Section 4.2.1, the Fund Administrator shall also receive an annual investment advisory fee from the PDF. Each financial institution that participates in the bidding process for Fund Administrator will be asked to rationalize the magnitude of its proposed advisory fee. As a guideline, the fee should not exceed one-half of one (1/2) percent of the amount of principal disbursed and outstanding and not in default. The rate should be subject to periodic review and adjustment, if necessary.

3.3 The Power Development Fund's Accounts

3.3.1 Power Sector Account

All credits designated for the sector from IDA and other donors would flow through a "Power Sector Account" and would ultimately be disbursed directly to or for the account of the Investment Enterprise against eligible expenditures for equipment, material, civil works and services. Conversely, all fees, principal repayments and loan interest will flow into the Power Sector Account for repayment of the IDA credit. The Power Sector Account Administrative Unit described in Section 1.4 would be established within the Fund Administrator's financial institution to maintain the Power Sector Account in addition to other duties described in Section 4.2.

3 3 2 Power Development Fund Operating Account

A "Power Development Fund Operating Account" would also be administered by the Power Sector Account Administrative Unit on behalf of HMGN

3 4 Administration Agreement

The Fund Administrator will manage the PDF under an Administration Agreement with HMGN. This agreement will specify the duties and authority of the Fund Administrator and delineate PDF policies and operational guidelines to be followed by the Fund Administrator. The Administration Agreement should, *inter alia*, specify the objectives of the PDF, define the duties and powers of both the Fund Administrator and the Investment Committee, define the PDF's investment policy, delineate the loan approval process and lending terms, specify collection and monitoring requirements, prescribe fees and eligible expenses, specify the duration of the agreement and conditions for its termination, specify indemnity clauses, and define overriding effects of the agreement. The draft agreement will require IDA approval.

Figure 1 illustrates the relationships between the International Development Association, His Majesty's Government of Nepal, the Power Sector Account, the Fund Administrator, Participating Credit Institutions, and Project Companies (Investment Enterprises).

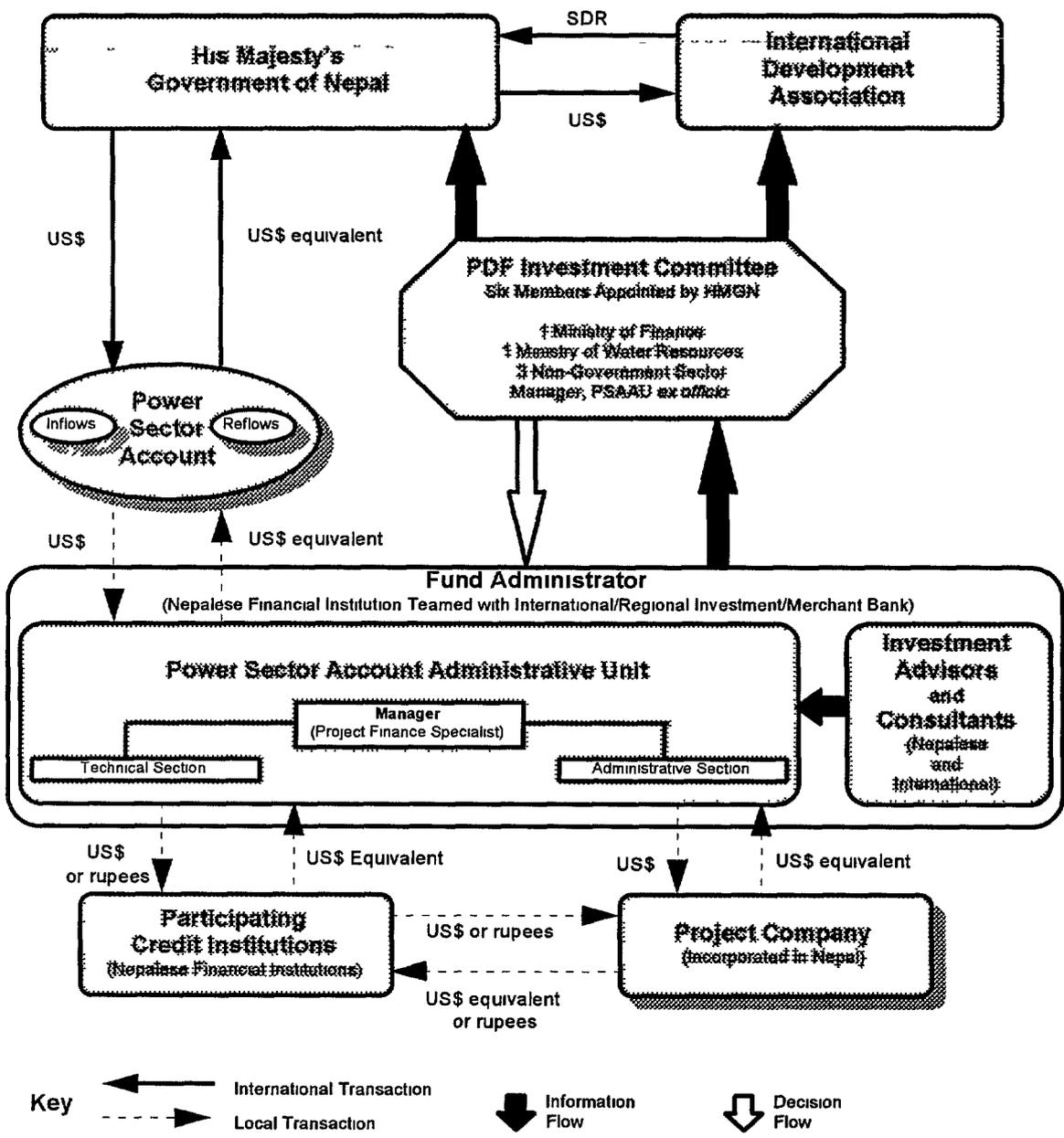
3 5 Investment Policy

Besides providing long-term financing to overcome a number of financial constraints to power sector development, another objective of the PDF would be to earn significant long-term returns in the form of recurrent income through an initial portfolio of subordinated debt in privately managed power generation operations, either existing or under development (collectively referred to as "investment projects"). These returns would contribute to cash surpluses over time which should be used to support future lending for power projects and cover the cost and fees associated with PDF administration.

The PDF will seek to attain this objective through direct investments in the following

- ▶ Hydro power generation projects
- ▶ Transmission and distribution investments related to qualifying generation projects
- ▶ Isolated rural power system projects
- ▶ Other activities which, in the opinion of the Investment Committee, relate to the development of the country's power sector

Figure 1
NEPAL POWER DEVELOPMENT FUND
 Proposed Flow of Funds, Information and Decision Making



To achieve these objectives, the Fund Administrator would help to identify and research potential investments and present recommended investments to the Investment Committee for approval. In each and every case, the Investment Committee would make financing decisions only after a full evaluation of each project has been carried out by the Fund Administrator to establish that it is technically, economically, financially viable and environmentally acceptable, including an appraisal of the project's risks and its potential for uninterrupted debt service perceived in the investment opportunities presented. The due diligence thus performed by the Fund Administrator during the loan appraisal process will determine the level of risk associated with a particular loan and therefore the magnitude of the safety margin (i.e., debt service coverage) required.

It is intended that during the early stages of PDF operation, the focus would be on financing new hydro power generation projects although the PDF will retain the flexibility to invest in existing projects selected by the Investment Committee for their fit with HMGN's generation expansion plan and their potential earnings.

The PDF may finance (i) individual investments not exceeding twenty-five (25) percent of total project cost (defined to include interest and fees during construction, sponsor's costs and initial working capital), (ii) projects utilizing proven technologies posing low risks of obsolescence, and (iii) projects respecting the environmental guidelines and resettlement policies of both HMGN and the World Bank Group.

The PDF may not (i) fund projects which are not or cannot be licensed by MOWR's EDC, (ii) take management control over any investment, (iii) make any investment which exposes the PDF to unlimited liability, (iv) invest in any single project more than one-third (1/3) of its capitalization allocated to the first PDF window, (v) invest in any single project more than one-fifth (1/5) of its capitalization allocated to the second PDF window, (vi) invest in any single project which does not have a debt service coverage ratio of at least 1.2 times, or (vii) invest in projects with less than an eighty to twenty (80/20) percent debt to equity ratio.

The PDF will primarily seek (i) individual investments not exceeding twenty-five (25) percent of total project cost (defined to include interest and fees during construction, sponsor's costs and initial working capital), (ii) projects with operating lives in excess of fifteen (15) years, (iii) projects utilizing proven technologies posing low risks of obsolescence, and (iv) projects respecting HMGN and World Bank Group environmental guidelines and resettlement policies.

3.6 Lending Terms

HMGN's application for a US\$100 million IDA credit would be comprised of two "windows". The "first window" would be for projects which involve generating facilities greater than ten (10) megawatts. Under the first window, loans would be provided with maturities ranging up to 23 years reflecting the repayment capacity of the project to be financed, with a maximum grace periods, from loan approval by the Investment Committee through project commissioning, of up to eight (8) years. Funding would be made available in foreign currency by IDA at the request of the Fund Administrator and would be paid directly to or for the account of the project borrower.

Under the "second window", the PDF would enter into co-financing relationships with qualifying Nepalese financial institutions in order to address local financing barriers to private power development. Such an approach will provide incremental financial support as needed to induce participation of Participating Credit Institutions to onlend to private companies promoting projects involving grid connected generating stations of ten (10) megawatts and below or isolated rural power systems licensed by the Electricity Development Center. Loans to Investment Enterprises for these smaller projects would be in either local or foreign currency at maturities

justified by the economic life of the project. However, it is unlikely that maturities of more than fifteen (15) years could be justified by smaller projects. It is the intent of HMGN to earmark twenty (20) percent of the total amount of the IDA credit for the second window.

Given the need to ensure the PDF's financial integrity throughout its term of operation, it is imperative that all projects, regardless of their size or value, be subject to the same stages through which such projects will typically progress and iterate.

During the first two years of operation of the PDF, the PDF would offer long-term subordinated loans. However, consideration will be given to providing take-out financings, standby financing and other financial products and services on a case by case basis for investment projects sponsored by qualified Investment Enterprises² and for PCI participation. A review of the PDF's operation after year two would determine whether demand warrants expansion of the PDF's financial products and services.

The Fund Administrator, in consultation with the PDF Investment Committee, shall have full autonomy to price loans to borrowers, i.e., project sponsors and PCIs, according to perceived risk and maturity, and to cover the PDF's intermediation costs. Although the option of both fixed and variable rate loans would be offered by the PDF, at present, Nepal's very limited market for long-term lending offers no benchmarks for the placement of long-term debt with private sector developers and/or PCIs. Nevertheless, the experience of other countries in similar conditions as Nepal can suggest some useful parameters.

The Jamaica Private Infrastructure Financing Facility, for example, utilizes a variable lending rate for U.S. dollar debt pegged to its costs of funds, one of which is the U.S. dollar six (6) month London Interbank Offered Rate (LIBOR)³, another being the prevailing World Bank Lending Rate. To this is added a premium depending on the type of financial products and services offered.

- ▶ Senior Debt: four hundred (400) basis points⁴
- ▶ Subordinated Debt: six hundred (600) basis points
- ▶ Standby Finance: six hundred (600) basis points
- ▶ Convertible Debt: four hundred (400) basis points

The lending terms for U.S. dollar loans under the Pakistan Private Sector Energy Development Fund is as follows:

- ▶ During construction: a fixed rate equal to the greater of 1) the sum of the prevailing Five-Year U.S. Treasury Note⁵ rate plus a spread of 200 basis points, and 2) the sum of the prevailing World Bank Lending Rate plus a spread of 150 basis points.

² Lessons from countries in the region indicate that for long gestation private sector energy projects the necessary financing can probably be mobilized only with significant support provided by multilateral and bilateral agencies. The proposed subordination of long-term debt would give added comfort to prospective lenders particularly at the initiation of a program of private sector transactions in the power sector.

³ The six month U.S. dollar LIBOR was quoted at 5.6875 percent on May 22, 1998.

⁴ The smallest measure in quoting yields: equal to one one-hundredth of one percent, or .01 percent.

⁵ The yield on the Five-Year U.S. Treasury Note was quoted at 5.64 percent on May 22, 1998.

- ▶ After completion of construction but before all loans other than the loans for the investment project which are senior to these loans have been repaid a variable rate, to be reviewed annually, equal to the greater of 1) the sum of the prevailing One-Year U S Treasury Note rate plus a spread of 300 basis points, and 2) the sum of the prevailing World Bank Lending Rate plus a spread of 250 basis points
- ▶ After repayment of such senior loans and until the loans for the investment project have been fully repaid a variable rate, to be reviewed annually, equal to the greater of 1) the sum of the prevailing One-Year U S Treasury Note rate plus a spread of 400 basis points, and 2) the sum of the prevailing World Bank Lending Rate plus a spread of 350 basis points

Based upon these models, it is envisaged that Investment Enterprises seeking financing under the PDF's first window could choose between a variable rate equal to the six month United States dollar LIBOR plus an appropriate risk premium or a fixed rate based on the maturity of the loan and the market swap rate between variable and fixed interest rates for United States dollar debt⁶ at the time the loan is negotiated plus an appropriate risk premium. Maturities would range from twelve (12) up to twenty-three (23) years, with a maximum grace period of eight (8) years depending upon the construction period and the economic life of the project.

Risk premiums will be recommended by the PDF Administrator on the basis of due diligence. The experts engaged in the due diligence process will, through a series of analyses and assessments of the combination of risks extant in Nepal – economic, financial, non-commercial, project specific and political – arrive at an appropriate risk premium to add to six month U S dollar LIBOR floor.

⁶ Interest rate swaps are contracts that allow a debt issuer to swap the interest rate it currently pays on an outstanding debt issue. For instance, an issuer with variable rate debt outstanding may want to lock in a fixed rate of interest. To do this, the issuer enters into a floating-to-fixed swap whereby the issuer will now pay a fixed interest rate. The counterparty to this swap is then obligated to pay a floating rate of interest as determined by a benchmark such as LIBOR. Neither the principal nor the actual interest payments change hands. Instead, the net difference between the two interest rates is determined – monthly, semiannually or annually – and is paid by the party whose payment obligation exceeds that of the other.

Advantages of interest rate swaps

- ▶ A floating-to-fixed swap increases the certainty of an issuer's future obligations
- ▶ Swapping from fixed-to-floating rate may save the issuer money if interest rates decline
- ▶ Swapping allows issuers to revise their debt profile to take advantage of current or expected future market conditions or to better match the structure of their investment portfolio

Disadvantages of interest rate swaps

- ▶ A party to a swap must pay fees to a swap dealer that arranges the swap
- ▶ The swapper is exposed to the risk that the counterparty will default on the contract
- ▶ In a floating-to-fixed swap, the original issuer of the variable rate debt may be exposed to basis point risk, i.e. the index that determines the variable rate interest that the counterparty pays may be lower than the actual interest rate on the issuer's variable rate debt
- ▶ In a floating-to-fixed swap, the original issuer of the variable rate debt usually still has to pay the remarketing and liquidity provision fees associated with the variable rate debt
- ▶ If unfavorable interest rates develop, the swapper must pay to unwind or assign the swap which places additional costs on the swapper

For projects to be financed under the PDF's second window, it is envisaged that the interest rate would be the average weighted deposit rate of all interest bearing deposits of commercial banks. Maturities for second window loans would range up to fifteen (15) years with a maximum grace period of up to five (5) years.

There is a constraint in setting a variable lending rate for the PDF during the construction period of the projects to be financed, as larger standby facilities to cover both the risk of fluctuation in the index to which the variable rate is pegged and the risk of cost overruns are normally required. This would increase the rupee funding requirement of the envisaged projects which could burden on the local financial market. Therefore, for each project to be financed by the PDF, the lending rate should be rolled over and capitalized, and be fixed for the construction period equal to a rate to be determined by the Fund Administrator and the PCI.

Interest due from borrowers to the PDF shall accrue on a day to day basis based on a three hundred-sixty (360) day year and shall be calculated on the loan account or each separate interest period. The interest period shall be a period of six (6) months. The first interest period shall commence from the date of first disbursement and shall end six (6) months from that date. The interest period for all disbursements, other than the first disbursement, shall commence from the date of such disbursement and end on the date the current interest period ends. At the end of an interest period, all disbursements (attracting separate interest rates) shall be merged together and shall be rolled over as one amount for the next interest period.

3.6.1 The Power Development Fund Fee Structure

The PDF's proposed fees and charges for its "first window" shall be fixed for each loan and will generally be based on the following structure:

- One-Time Application Fee US\$5,000 (or dollar equivalent) non-refundable to be submitted at application
- Documentation Fee one-quarter of one (1/4) percent of the loan amount, non-refundable
- all cost/fees and out-of-pocket costs of travel for the investment advisors/consultants appointed by the Fund Administrator and/or PDF Investment Committee for appraisal and due diligence⁷
- cost incurred in connection with Fund Administrator's personnel's official visits in relation to negotiations, meetings, monitoring, etc
- Commitment Fee⁸ three quarters of one (3/4) percent per annum of the unutilized loan amount
- Project Monitoring Fee three quarters of one (3/4) of the yearly outstanding balance, provided that the annual fee not exceed US\$50,000
- Standby Financing Facility Fee one (1) percent
- Take Out Finance Facility Fee one quarter of one (1/4) percent

This structure is in line with fees and charges by infrastructure lending programs. In the event that the fees charged to borrowers, as per the proposed fee structure above, do not totally cover the costs and expenses of the Investment Committee and the Fund Administrator, particularly during the initial years

⁷ Due diligence entails the responsibility of the Fund Administrator to act in a prudent manner in evaluating credit applications in essence, using the same degree of care that an ordinary person would use in making the same analysis. Due diligence would be conducted by either the Fund Administrator itself or by specialists and would look into the Investment Enterprise's background, its financial reliability and the intended use of the proceeds of the PDF loan in order to ensure to the best degree possible, that the recommended investment does not go sour.

⁸ The lender's charge for holding credit available.

of PDF operation, part of the IDA credit should be used to cover these costs subject to a ceiling to be negotiated with IDA. However, in order to be self-sustaining, the PDF should earmark a portion of its future interest income to cover operating costs.

The fee structure for the PDF's "second window" would be assessed on a case-by-case basis. Fees and charges for the "second window" could, for example, be absorbed in the interest rate charged by Participating Credit Institutions.

3.7 Spread Income

As described above, HMGN shall receive the IDA credit at concessionary terms. However, it is envisaged that the Fund Administrator would place debt at market rates for maturities varying between twelve (12) and twenty-three (23) years with a maximum grace period of eight (8) years. Therefore, the difference between the PDF's funding and placement terms would result in a significant cash surplus accruing to the PDF over time. In addition to interest spread, the difference in the maturity and grace periods of loans placed by the Fund Administrator would also lead to cash accumulations for the PDF. The income resulting from interest spread would be partly deployed to cover the operating expenses of the Fund Administrator and the PDF Investment Committee after an initial period covered by principal from the IDA credit and for the financing of new projects.

3.8 Asset Management

The cash accumulations accruing to the PDF, net of principal payments after the expiration of each loan's grace period, will require prudent management. It is envisaged that an Asset Management contract would be competitively bid after year five of the PDF's operation in order to engage a fiduciary⁹ for the PDF to act, with discretion and intelligence, to seek reasonable income, preserve the capital of the PDF, and, in general, avoid speculative investments. The benefit of engaging a fiduciary separate from the Fund Administrator is to ensure that the management of the PDF's loan resources is kept entirely separate from the management of the PDF's interest earnings. Rather than allowing the Asset Manager to freely make investment decisions, it is recommended that more formal investment rules be adopted. For example, a legal list of approved investments should be defined to include only high quality debt and equity securities at the time the contract is put out for bid.

3.8.1 Float Management

The Fund Administrator shall also be responsible for management of the float¹⁰ arising from Power Development Fund transactions. All proceeds from the float shall accrue to the PDF, not the Fund Administrator.

⁹ A fiduciary is a person, company, or association holding assets in trust for a beneficiary, in this case the PDF. The fiduciary is charged with the responsibility of investing the money wisely for the beneficiary's benefit.

¹⁰ The interest accruing to cash balances created by the time lag in processing payments.

32

4 Administration of the Power Development Fund

4.1 Power Development Fund Investment Committee

The Investment Committee will be established by HMGN under appropriate provisions of Nepalese law. The part-time PDF Investment Committee which would be responsible for determining the overall policy, direction and supervision of the PDF. In addition, the Investment Committee would ensure that the Fund Administrator is undertaking its duties in accordance with the established policy framework and the conditions agreed to in the Administration Agreement between HMGN and the Fund Administrator. The Investment Committee would also have the mandate to approve proposals for loans in accordance with a recommendation of the Fund Administrator.

The PDF Investment Committee will be comprised six (6) members, one of who will be an *ex officio* member without voting rights appointed by the PDF Administrator. The remaining members will be appointed by HMGN from a list of candidates agreed to with IDA. Two members of the Investment Committee shall be appointed from the public sector, one from the Ministry of Finance and the other from the Ministry of Water Resources. The remaining members shall be appointed from the non-government sector¹ and will have relevant backgrounds and experience. A Chairman of the Investment Committee from the non-government sector would be appointed by HMGN and serve a two (2) year term. This policy of a majority of non-government sector directors over the life of the PDF would help to ensure the autonomy and credibility of PDF administration when dealing with domestic and international private investors and lenders. This would send the proper signal to the international financial community that the PDF (i) is being administered in an efficient, fair, clean and transparent manner, and (ii) encourages international standards and competition. This is a must for sustained private investment and efficient project development.

4.1.1 Duties and Powers of the Investment Committee

The Investment Committee's duties and powers would include, *inter alia* (i) review and approve PDF involvement in solicited or unsolicited bids, (ii) certify local financial institutions as Participating Credit Institutions, and (iii) review and approve proposals for loans in accordance with the recommendation of the Fund Administrator, (iv) monitor the performance of the Fund Administrator to ensure compliance at all times with the PDF's Investment Policy, (v) review and approve quarterly and other reports submitted by the Fund Administrator, (vi) review the books and records of the PDF maintained by the Fund Administrator, and (vii) keep HMGN apprised as to the operations of the PDF and make recommendations to HMGN concerning the renewal or termination of the Administration Agreement.

The Investment Committee would meet at least quarterly to undertake these duties with the ultimate intent and purpose of making funds received by HMGN from IDA and other sources available for commercially viable power projects. Following approval of a loan proposal by the Investment

¹ There is a strong rationale for minority government participation. The PDF is tailored to support a selected program of largely private sector investment that will 1) leverage IDA's reduced lending involvement with private sector resources, 2) improve the operating efficiency in infrastructure through involvement of the private sector, and 3) act as a catalyst for mobilizing long-term resources in the capital markets. Initiated at the beginning of the transition period when private sector operations would be introduced into public sector managed and controlled activities, the PDF would be able to influence the process of private investment. Thus, the presence of an all private Investment Committee would provide confidence to the international financial community regarding the transparency of the loan approval process.

Committee, the Chairman of the Committee, or his/her designated power of attorney on the Committee, would have the authority, as HMGN's designee, to sign the loan agreement with a private company or a qualified Participating Credit Institution for the co-financing of projects

4 1 2 Loan Approval Process

Each Investment Committee member would be responsible for evaluating his/her specific area of expertise and decisions regarding financing would be made on the basis of a three-quarters (¾) majority

4 1 3 Membership Terms

Members of the PDF Investment Committee would be appointed by HMGN for staggered terms of up to three (3) years. Terms would be staggered to ensure continuity within the Investment Committee

4 1 4 Qualifications for Members of the Investment Committee

Non-government members of the Investment Committee shall have broad backgrounds and practical experience in the areas of power generation, commerce, finance and/or law. The members appointed from the Ministry of Finance and Ministry of Water Resources, for example, shall not be less than "Class One" officers. The Manager of the Power Sector Account Administrative Unit, who would serve as *ex officio* Secretary of the Investment Committee, shall have at least ten (10) years of experience in developing, appraising, financing and negotiating transactions in the infrastructure sector

4 1 5 Compensation of Investment Committee Members

Investment Committee members would be contracted on a part-time basis and would be paid on a daily rate basis (including reimbursement for eligible expenses) for activities specifically related to the duties described in Section 4 1 1. The terms and conditions of each Committee member's contract and the amount of his/her compensation would be determined by HMGN. For the first several years of PDF operation, compensation received by Committee members would be paid out of resources provided by IDA. Thereafter, compensation for Committee members would be paid from PDF-generated revenue (i.e., fees and interest income)

4 1 6 Removal of Members

Investment Committee members can be removed at any time by HMGN if a member has (i) failed to attend two consecutive meetings, (ii) been grossly negligent in the conduct of his/her duties, and/or, (iii) failed to perform under the terms of his/her contract

4 2 The Fund Administrator

The overall responsibility for establishing operational and financial policies for the use of the IDA credit would be determined by HMGN in close consultation with the World Bank. A Power Sector Account Administrative Unit (PSAAU) shall be established within the Fund Administrator's financial institution and assume responsibility for implementation of these policies and for monitoring compliance of these policies by Investment Enterprises and PCIs

34

The Fund Administrator shall at all times be an independent contractor with respect to its dealings with the PDF and nothing in the agreement to be signed between the Fund Administrator and HMGN shall be construed to create the relationship of joint venturer and/or partner between the Fund Administrator, on the one hand, and the PDF, on the other

4 2 1 Duties and Powers of the Fund Administrator and the Power Sector Account Administrative Unit

The Fund Administrator shall exercise its powers and discharge its duties as delineated below in the best interests of the PDF and shall exercise the degree of care, diligence and skill that a prudent investment advisor acting as an investment advisor to the PDF and familiar with the kinds of project investments to be made by the PDF under its Investment Policy would exercise under the circumstances in light of prevailing industry practices and the quality of information available

In carrying out its duties delineated below, the Fund Administrator shall at all times comply with any written instructions of the Investment Committee, provided that such instructions are not in contradiction of the Investment Policy set forth in Section 3 5

The Fund Administrator shall advise the Investment Committee on the PDF's project investments and perform day-to-day administration of such investments including the following

- carry out an international program of focussed public relations on behalf of the PDF, publicizing its purposes and capabilities and its potential investment projects
- advise the Investment Committee on the investment business of the PDF, including the identification and consideration of potential project investments for the PDF which comply with the Investment Policy and have received licenses from EDC, report findings regarding project investments to the Investment Committee and seek investment approval from the Investment Committee
- conduct all appropriate analyses and due diligence investigations of potential project investments and propose appropriate structures for such investments
- prepare loan and other financing documentation in connection with approved projects
- monitor and administer the PDF's portfolio of project investments as well as the performance of such investments and seek ways of enhancing the value of such investments
- maintain safe custody of the PDF's assets from project investments and handle all funds paid or received by the PDF with respect to, or in connection with, the project investments of the PDF
- submit monthly and quarterly reports to the Investment Committee regarding the administration and debt service collections of the PDF's project investments and other matters as the Investment Committee may require from time to time in connection with the PDF's project investments
- maintain all books and records of the PDF with respect to its project investments and receive and make all correspondence on behalf of, and in accordance with, the instructions of the Investment Committee provided that for the avoidance of doubt all such books and records and correspondence shall remain at all times the lawful property of the PDF
- at the request and on behalf of the PDF, monitor, liaise with, and attend shareholders and directors meetings with respect to, and otherwise oversee, the PDF's investment projects
- monitor and administer the PDF's investments and ensure compliance at all times with the PDF's Investment Policy described above and report to the Investment Committee in respect thereof on a monthly basis

To the extent required in order to comply with written instructions of the Investment Committee and otherwise to perform its duties specified above, the Fund Administrator shall have the authority, power and right for the account and in the name of the PDF

- to issue orders and instructions with respect to the disposition of project investments, monies and other assets of the PDF
- to enter into, make and perform contracts, agreements and other undertakings

The PDF Administrator, while maintaining its responsibilities, shall be entitled to delegate any of its duties to qualified persons (subadvisors) and shall be entitled to pay fees to any such persons provided that such fees are paid from the PDF Administrator's internal account and are not charged to the PDF

The PDF Administrator, while maintaining its responsibilities, shall also be entitled to engage and rely on advice given by accountants, attorneys, consulting engineers, financial advisors, insurance brokers, tax advisors, valuers and/or any other advisors and/or consultants (subcontractors) engaged by it as it may deem necessary or advisable in relation to the performance of all or any of its activities set forth in Section 4.2.1. The costs of any subcontractor other than those qualified persons (subadvisors) referenced above shall be paid or reimbursed by the PDF to the extent provided in Section 3.2

Notwithstanding any of the foregoing, the sole and exclusive discretion as to the disposition of PDF resources with respect to any and all project investments to be made by the PDF shall rest with the Investment Committee

The PDF Administrator shall exercise the aforementioned powers and discharge its duties in the best interests of the PDF and shall exercise the degree of care, diligence and skill that a prudent investment advisor acting as an investment advisor to the PDF and familiar with the kinds of project investments to be made by the PDF under its Investment Policy would exercise under the circumstances in light of prevailing industry practices and the quality of information available

The PDF Administrator shall act in good faith and exercise due care in selecting, instructing and supervising any subcontractors in relation to the performance of all or any of its duties set forth in Section 4.2.1

4.2.2 Functions of the Power Sector Account Administrative Unit

It is envisaged that the Fund Administrator's PSAAU would be staffed by a part-time manager, financial specialists, accountants and clerical personnel. This core of the PSAAU would be supported by short-term consultants, drawn from either the Fund Administrator's local financial institution or its investment/merchant bank partner, to assist in economic, financial, legal, and technical aspects as needed. To assist the Fund Administrator in its duties to provide well-informed recommendations to the Investment Committee on a number of issues, specialized personnel, independent from the Fund Administrator's own institutions, may be periodically retained to review loan requests from project

sponsors on an "as needed" basis for limited periods of time based on specific economic, financial, legal and technical requirements. These private consultants would be competitively selected for economic, financial and legal inputs²

It is suggested that the PSAAU be organized into two sections to ensure the effective management of the PDF. A Technical Section would, *inter alia*, carry out preliminary assessments of loan applications to ascertain whether a particular project is likely to meet eligibility criteria, prepare appraisal reports, be involved in detailed discussions of the borrowers' security package, and submit recommendations to the PDF Investment Committee. To assist with these due diligence processes, the PSAAU would draw upon the in-house expertise of the Fund Administrator and specialized consultants from outside the Fund Administrator's organization as required.

An Administrative Section would monitor PDF borrowers and prepare periodic reports on loan collection performance. It would also disburse finance, collect repayments and maintain accounts. Of particular importance for the success of the Power Sector Account would be the Fund Administrator's emphasis on the development of procedures for the review of borrower applications and upgrading project appraisal standards through training. A detailed description of the activities that both the Technical and Administrative Sections of the PSAAU would be involved in during the loan appraisal and negotiation phase, the detailed design phase, the construction phase, and the operations phase of a PDF-funded project are delineated below.

A Power Development Fund Operations Manual would establish the framework for the administration of the PDF including loan pricing, appraisal and processing, as well as project/loan monitoring by the Fund Administrator's staff and advisors.

4.2.3 Manager of the Power Sector Account Administrative Unit

A part-time Project Finance Specialist would serve as manager of the Power Sector Account Administrative Unit (M/PSAAU). He/she must have at least ten (10) years of experience in developing, appraising, financing and negotiating transactions in the infrastructure sector. The M/PSAAU's background must include experience with limited recourse financing including the preparation of bidding documents, negotiation of security package documents and bringing projects to financial closure. Taking into account the specialized nature of M/PSAAU position, it may be necessary to recruit this individual from abroad.

The M/PSAAU would be responsible for managing the consultancy resources at his/her disposal in order to advise the Investment Committee on the PDF's project investments and perform day-to-day administration of such investments. Although the M/PSAAU would represent HMG in loan negotiations, he/she would be accountable to the Investment Committee. Specifically the M/PSAAU will have the following responsibilities:

² These inputs would include *inter alia*: a review of 1) the adequacy of the financing package; 2) the financial viability of the project under various tariff scenarios; 3) the adequacy and appropriateness of the Security Package; 4) the corporate structure of the Investment Enterprises; 5) appropriateness of and proven experience with the technology offered; 6) cost aspects of the construction strategy; and 7) other cost issues including those relating to operation and maintenance.

Account Establishment Phase

- (1) Appointment of the professional staff for the Power Sector Account Administrative Unit, hiring of support staff and operationalization of the Unit

Loan Appraisal and Negotiation Phase

- (2) Review of loan applications received from borrowers (Investment Enterprises and PCIs) for PDF financing in order to ascertain the eligibility of the sponsors' application under the PDF's criteria. Assess the need for hiring outside consultants whenever necessary
- (3) For those project sponsors which seek a direct loan under the PDF, review the creditworthiness, financial standing and resource availability of the project sponsor to raise equity and to package, construct and operate the project in a satisfactory manner
- (4) Appraise the project from a financial, economic, technical and legal viewpoint in accordance with PDF guidelines and prepare and furnish to the Investment Committee and IDA a consolidated assessment report
- (5) Review the financial structure and procurement plans of the Investment Enterprises to assess compliance with IDA guidelines
- (6) Participate in the negotiation of the Security Package
- (7) Recommend the approval or disapproval of loan applications on the basis of such appraisals
- (8) Undertake due diligence of the projects to assess that all agreements, concessions, and permits required by the project from various public and private entities have, in fact, been obtained
- (9) Prepare credit review reports for the Investment Committee and IDA
- (10) Draft, negotiate and execute loan documentation with all relevant parties
- (11) Approve or disapprove drawdown notices under the PDF loan agreement, and disburse or procure or authorize disbursement of PDF funds to or as required by the Investment Enterprises or PCI
- (12) Coordinate with IDA, prepare quarterly performance reports, and ensure compliance with covenants

Detailed Design Phase

- (13) To the extent that the M/PSAAU feels it necessary in the performance of his/her loan monitoring function, monitor the performance of design and preparation of specifications and drawings

Construction Phase

- (14) Monitor the performance of the Investment Enterprises³ during the construction phase to ensure whether (i) progress on construction and procurement of major plant is proceeding in accordance with the implementation plan, (ii) project costs are in line with the financing plan in order to minimize cost and time over runs, and (iii) loans are utilized in accordance with the conditions set out in the loan agreement. Project/loan monitoring guidelines for the construction phase are contained in Appendix C
- (15) Coordinate with senior lenders and project sponsors to ensure *pari pasu* disbursement of all the debt and equity financing facility to the project
- (16) Ensure that the Investment Enterprises obtains and maintains the necessary insurance to cover all construction phase risks

Operations Phase

- (17) Monitor the performance of the Investment Enterprises to review the operation and maintenance of project assets, protect the financial interests of the PDF, and protect the interests of HMGN. These objectives would be achieved by the PSAAU through monitoring of (i) the project's technical performance criteria, such as technical tolerances, actual energy output against planned output and plant capacity, (ii) the financial performance of the Investment Enterprises, in particular its ability to meet future expenditure requirements, and (iii) compliance with contractual arrangements made with the PDF, particular loan repayments and liquidity obligations. Project/loan monitoring guidelines for the operations phase are contained in Appendix D
- (18) Receive and collect payment installments of the PDF loan, and take steps for the recovery of overdue installments or, where appropriate, the whole of the PDF loan and the enforcement of (or of security under) the loan documentation
- (19) Ensure regular interest and principal payments to HMGN on behalf of the PDF in accordance with the agreed schedule
- (20) Ensure that the Investment Enterprises obtains and maintains the necessary insurance to cover all operations phase risks

4 2 4 Accounting and Auditing

The Fund Administrator would conduct its business in accordance with international standards and the accounts of the PDF shall be subject to generally accepted accounting and auditing procedures which are considered acceptable to both HMGN and IDA. The Fund Administrator must ensure that (i) accounts and financial statements for each fiscal year would be prepared and audited by independent auditors

³ The Fund Administrator's main objectives in monitoring the progress of a project are to 1) protect the PDF's investment in the project 2) confirm that the Investment Enterprises is continuing to meet its obligations under the PDF loan agreement and 3) meet its obligations under its Administration Agreement with HMGN to provide reports on both the PDF and the progress of approved projects

acceptable to both HMGN and IDA, (i) statements of expenditure would be maintained in accordance with sound accounting practices, be maintained at least one year after the completion of the audit for the fiscal year in which the last withdrawal was made, and a separate opinion on Statements of Expenditures be included in the annual audit, and (ii) certified copies of audited accounts and financial statements for each fiscal year, together with the auditor's report would be furnished to IDA as soon as available but not more than three months after the end of each fiscal year starting with audit reports for the first fiscal year after the signing of the loan agreement between HMGN and IDA

4 2 5 Project/Loan Monitoring

The PSAAU's main objective in monitoring the progress of a project are to (i) protect the PDF's investment in the project, (ii) confirm that the Investment Enterprises is continuing to meet its obligations under the PDF loan agreement, and (iii) meet its obligations under the Administration Agreement to provide requisite financial reports

The PSAAU would be responsible for monitoring all projects receiving PDF financing and would charge the Investment Enterprises a monitoring fee based on actual costs to the PSAAU. The PSAAU would monitor a project through the initiation and construction phases of the project covering all activities from the signing of the loan agreement to the commissioning of the facility. The PSAAU's monitoring role during the subsequent operational phase of a project would be less detailed than during initiation and construction. For each project, PSAAU staff and consultants must maintain a separate file which covers procurement, disbursements and PDF drawdowns. The PSAAU's monitoring activities during the operational phase would include verifying that the work specified in the construction contract has been carried out as planned, that the procurement has been competitively bid in IDA-eligible countries, and that the overall cost is within budget. This monitoring role would continue until the loan from the PDF has been repaid. Guidelines for project/loan monitoring during the construction phase of the project are contained in Appendix C. Those for monitoring during the operations phase are contained in Appendix D.

4 2 6 Fund Administrator Conflict of Interest Issues

In the event that the Fund Administrator, any third party under contractual obligation to the Fund Administrator or any affiliate, director, officer or shareholder of the Fund Administrator (a "Related Person") is involved in any financial, investment or other professional activity which causes a conflict of interest with the obligations of the Fund Administrator to the PDF, the Fund Administrator shall have regard to its obligations to the PDF and shall act, or shall use its reasonable endeavors to cause such third party or Related Person, as the case may be, to act, in the best interests of the PDF, so far as is practicable having regard to its obligations to other clients.

In the event that the Fund Administrator, any third party under contractual obligation to the Fund Administrator or any Related Person is providing or has provided financial services to or has, proposes to have, any financial or other interest in any company or project in which the PDF is considering a proposed investment (a "Conflict of Interest"), the Fund Administrator shall (i) promptly inform the Investment Committee of the nature and extent of such services or financial or other interest on a timely basis (but in any event prior to making a related investment proposal to the Investment Committee), and (ii) make available any reasonable information which the Investment Committee may require to evaluate the relationship between such party and such company or project. For the avoidance of doubt, the Fund

Administrator shall be deemed to have a financial or other interest in any such company if it is providing services to, or otherwise representing or advising any third party having an interest in, any such company or project

The Fund Administrator shall not be liable for any failure to make an investment on the basis of any information known to the Fund Administrator or any of its shareholders or other affiliates where the utilization of such information would, in the Fund Administrator's reasonable opinion, constitute a violation of any applicable legislation or a breach of any fiduciary or contractual relationship between the Fund Administrator and any other person

5 Eligibility Criteria for Power Development Fund Financing

Loan appraisal and processing would be carried out by the Power Sector Account Administrative Unit under the overall direction and control of the PDF Investment Committee. The Investment Committee would approve investment projects for financing only after ensuring that these projects meet economic, financial and technical viability criteria and HMGN and/or World Bank Group environmental standards (including criteria for involuntary resettlement, should it arise). Eligibility criteria for accessing PDF financing are set forth below:

(a) *Type of Project*

The project should be either (i) a generation project greater than 10 MW and ranging up to 300 MW identified through the screening and ranking exercise under the Medium Hydro Power Study¹ or by NEA or private promoters using screening criteria acceptable to IDA, or (ii) a generation project of 10 MW or less identified by NEA or private promoters using screening criteria acceptable to IDA, or (iii) an isolated rural power system project, or (iv) a transmission and distribution project related to a qualifying generation project.

(b) *Competitiveness*

Competitiveness would be ensured by considering proposals that offer prices for electricity which would be less than the unit cost of generation that the Nepal Electricity Authority would have incurred for the same generation, adjusted for financing available to the private sector.

(c) *Economic Rate of Return*

The economic rate of return of all proposed investment projects² must be sufficient to encourage private investment flows to fund needed power plants so that Nepal can remain competitive with other countries that are offering equivalent or higher returns. Where applicable, the projects would form part of a least-tariff expansion plan³.

(d) *Environmental and Social Assessment Criteria*

All projects would necessarily meet HMGN's environmental and social assessment criteria as laid out in the country's 1993 Environmental Impact Assessment Guidelines, the 1997 Environmental Protection Act as well as the World Bank Group's environmental and social assessment guidelines.

¹ Canadian Water and Energy Consultants. Medium Hydropower Study Project. Main Report, Phase I, Fine Screening and Ranking Report, 1997.

² The economic analysis of potential investment projects would be carried out on a case-by-case basis. The methodology that would need to be followed to prepare the economic analysis for potential projects would be set out in the PDF's Operating Manual. It should be noted that high discount rates tend to reduce the competitiveness of hydroelectric projects because these projects justify their existence through fuel and operating cost savings in future years. The higher the discount rate, the less those future savings are worth in present value terms. Higher discount rates justify higher levels of investment in thermal generation (thereby increasing concern about reliability of fuel supply).

³ Projects eligible for PDF financing would be prioritized on the basis of their fit with the country's generation expansion program.

- (e) **Licensing**
Only projects which have been issued a Generation License or Transmission License by the Ministry of Water Resources would be eligible for PDF funding
- (f) **Limited Recourse Financing**
Private investors and lenders should not require direct sovereign guarantees. Lenders should rely on the security package (see below), future revenue streams from the project, and the value of the assets for comfort. The debt financing must include some portion of non-recourse commercial senior debt. The PDF's exposure in any project will not exceed twenty-five (25) percent of the total project cost. The minimum debt service coverage ratio would be 1.2
- (g) **Use of Proven Technologies**
The technologies proposed by private investors should be proven, that is, they should have a successful track record in countries at a similar level of technological development and support infrastructure as in Nepal
- (h) **Viability**
Project sponsors should possess a proven capability to develop, finance and operate the power project(s) proposed in countries at a similar level of development as Nepal. To ensure commitment, sponsors' equity would need to represent at least twenty (20) percent of the project cost for the life of the PDF loan

5.1 Loan Approval Procedures

In the case of unsolicited bids, the Investment Enterprise would submit sufficient information in order to enable the Fund Administrator to assess the project and prepare an appraisal report. This information would cover, *inter alia*, site availability and its sustainability, availability of inputs, appropriateness of, and proven experience with the technology offered, project design, engineering, construction strategy, cost estimates, implementation arrangements, specifications of equipment and goods, a financing plan, prices, financial projections, proposed arrangement for the supply of essential commodities, services, and sales of output, proposed arrangements for project operation and maintenance, and the proposed structure of the Security Package. The Investment Enterprise would also be required to submit an environmental impact assessment, including resettlement plans where applicable, in accordance with HMG/N and IDA guidelines.

Again in the case of unsolicited bids, the Fund Administrator would also review adequacy of the financing package, financial viability of the project under various scenarios, economic soundness including the calculation of an economic rate of return, adequacy and appropriateness of the Security Package, and the corporate structure of the project's entities.

In both cases described above, prior to the PDF Administrator initiating a loan appraisal process, the Investment Enterprise or the Participating Credit Institution, as the case may be, shall submit a loan application together with its completed feasibility study and other relevant documentation, such as information regarding the sponsors, the environmental and social assessments, license (where applicable) and proposed financing plan to the PDF Administrator together with a loan application fee. This initiating document will be styled as the "Project Information Memorandum" (PIM). The PIM will be prepared by the Investment Enterprise based on instructions provided by the PDF Administrator.

Y3

Based on the PIM, the PDF Administrator will seek the Investment Committee's approval in principle to proceed with either (i) an issuing letter of indicative terms and conditions to prequalified bidders (for solicited projects) or (ii) a preliminary letter setting out the eligibility criteria and appraisal process (for unsolicited projects). The PDF Administrator then reviews the proposal, ascertains the eligibility of the project for PDF financing, prepares an appraisal report and formulates a recommendation for the Investment Committee.

For each loan proposal, the Fund Administrator would prepare an appraisal report on the basis of economic, financial and technical viability and environmental acceptability. The appraisal report, along with a recommendation to make a loan, would be forwarded to the PDF Investment Committee. Once the loan recommendation is accepted, the Fund Administrator would be responsible for loan documentation preparation and negotiation, executing the loan documentation, loan supervision and monitoring, and fulfilling reporting and auditing requirements.

The loan documentation and negotiation process would then proceed as follows:

- ▶ The Investment Enterprises submit a loan application together with its completed feasibility study to PDF together with a loan application fee.
- ▶ PDF Investment Committee issues a Letter of Intent (LOI) to the selected Investment Enterprises.
- ▶ The M/PSAAU, supported by consultants if necessary, carries out an appraisal of the project, supported by consultants if necessary, based on information received in order to ascertain the eligibility of the project for PDF financing.
- ▶ The M/PSAAU submits a recommendation to the Investment Committee to accept the loan application and for authorization to commence negotiations.
- ▶ If the Investment Committee accepts the recommendation, the M/PSAAU issues a Preliminary Acceptance Letter (PAL) to the Investment Enterprise including a draft term sheet and loan agreement.
- ▶ The Investment Enterprise conveys its acceptance of the PAL and deposits a loan documentation fee.
- ▶ Generation License or Transmission License is issued by the Ministry of Water Resources.
- ▶ The M/PSAAU, supported by consultants if necessary, participates in the negotiation of the Security Package with the Investment Enterprise.
- ▶ Simultaneously, preliminary negotiations of the Loan Agreement would take place and be evaluated by M/PSAAU, supported by consultants if necessary.
- ▶ The M/PSAAU, supported by consultants if necessary, reviews Engineering, Procurement and Construction Contract.
- ▶ The M/PSAAU, supported by consultants if necessary, prepares an Appraisal Report which includes due diligence and a Draft Loan Agreement for submission to the PDF Investment Committee.
- ▶ The M/PSAAU seeks approval of the loan by the PDF Investment Committee.
- ▶ The M/PSAAU, supported by consultants if necessary, finalizes negotiations of the Loan Agreement and the Security Package with the Investment Enterprise.
- ▶ The Chairman of the PDF Investment Committee signs the Loan Agreement with the Investment Enterprise.

A detailed methodology of the financial, technical, economic and environmental (including resettlement) parameters that cover loan documentation for the Fund Administrator would be set forth in the Power Development Fund's Operating Manual. A loan approval process flow chart is presented as Figure 2 on Page 5-5.

5 2 Participating Credit Institutions

5 2 1 Rationale for Local Financial Institutions' Access to the Power Development Fund

By making medium- and long-term resources available to eligible local financial institutions (styled as "Participating Credit Institutions") for onlending to private sponsors of small projects involving grid connected generating stations below ten (10) megawatts or isolated rural power systems, the PDF can also play a significant role in mobilizing local resources from these institutions to provide additional medium- and long-term financing for eligible projects. **The objective of involving PCIs is to leverage PDF resources.** By requiring loan funding in a ratio of 1:2, for example (US\$1 lent by the PDF for every US\$2, or rupee equivalent, that the PCI places in the project from its internal funds), PDF resources would be leveraged with capital from PCIs, opening the way for these resources to be used for power project financing on a fully sustainable, commercial basis over the medium- to long-term. Although the PDF's initial level of potential support to each PCI would be capped at a *pro rata* share of US\$2 million, this would be reviewed bi-annually. An individual PCI would not be able to exceed its *pro rata* share without approval of the Investment Committee.

The PDF/PCI partnership would contribute to the creation of a sustainable commercial marketplace for power project development and financing. However, some changes in the Nepal Rastra Bank's monetary policy, particularly with regard to priority sector/deprived sector lending may be required to induce PCI participation. For example, if PCI participation in power project financing were excluded from the base of outstanding credit against which commercial banks are mandatorily required to invest designated proportions in the priority/deprived sectors, entry of PCIs into the power project financing market would probably be more assured. This, in turn, would generate expertise in project finance. The experience gained and the increase in local financial institution participation in the power sector would reduce transactions costs for and encourage development of subsequent projects. Entry of additional financing sources into the power sector would encourage competition, lower rates and promote greater marketing efforts and market penetration.

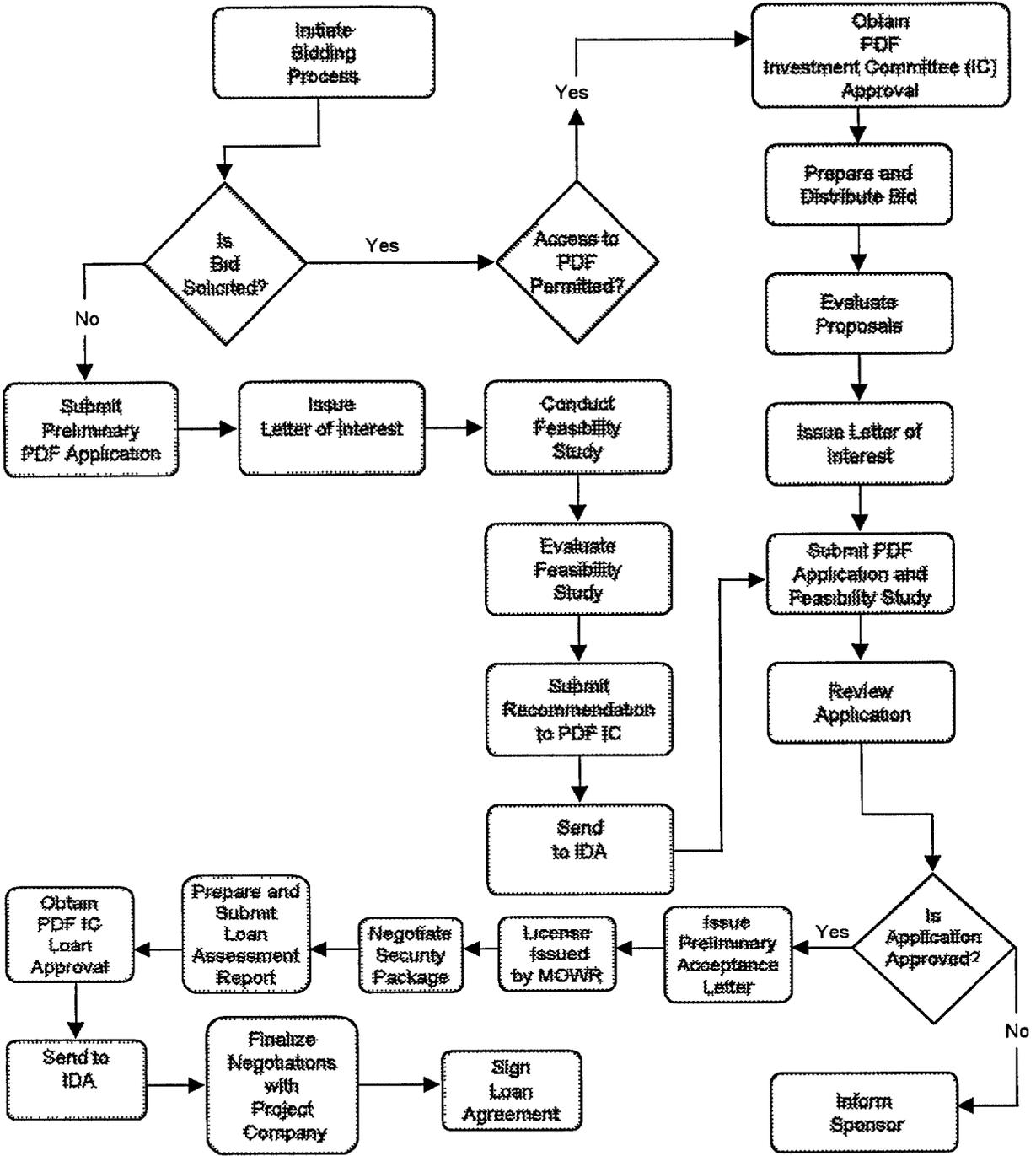
The local debt that would be raised in Nepal's capital market could finance base costs as well as being available for standby financing. It is envisaged that a lead bank with some experience in raising financing for projects in the local market would manage consortiums to raise the facility amount for projects brought forward by project sponsors.

5 2 2 Potential Participating Credit Institutions

It is reasonable to assume that many Nepalese financial institutions would express interest in becoming PCIs, particularly if the Nepal Rastra Bank modified its priority/deprived sector lending policies. However, the PDF would initially focus on teaming with the privately owned joint-venture commercial banks and, perhaps, the industrial development bank, as the state-owned commercial banks are currently in financial distress.

Figure 2

NEPAL POWER DEVELOPMENT FUND
Loan Approval Cycle



46

Applications would be solicited from these FIs and would be evaluated according to the criteria set forth in Section 5.2.3 to determine the eligibility of such institutions to function as co-financiers with the PDF. The PDF Investment Committee would appraise all applicants in the context of these criteria. The results of this assessment would be organized in a PCI Assessment Report and submitted to IDA.

5.2.3 Eligibility Criteria for the Participating Credit Institutions

Eligibility criteria for PCI participation in the PDF would take into account the overall financial viability of the PCI together with the strength of its operating structures. Each PCI shall sign a Participation Agreement with the Fund Administrator in which it certifies that it would at all times comply with specific management and financial performance eligibility criteria which would be reviewed on a biannual basis.

In order to become an accredited PCI, FIs must provide the PDF Investment Committee with a satisfactory report from external auditors licensed by the Auditor General of HMGN confirming that audits of the FI have been carried out in accordance with internationally accepted accounting and auditing standards for the past three (3) consecutive years. The FI shall further submit a confirmation from the external auditors that at the end of its most recent fiscal year the FI has met criteria set forth below for delinquency and loan loss rates, adequacy of the banks' capital, and their liquidity position. Note that no norms are applied to these ratios – of more significance is the trend.

<p><u>Asset Quality Ratios. Past Due (Non-Performing) Loans</u></p>	<p>A past due ratio that is increasing is obviously adverse. Such a trend is especially worrisome if it is not due to worsening economic conditions or other factors beyond management's control. A past due ratio of five (5) percent or more is considered high although for development finance entities with higher risk loan portfolios, higher ratio would be expected, and more emphasis placed on net loan losses.</p>
<p><u>Asset Quality Ratios. General Provisions</u></p>	<p>Based on the assumption that the general provision is a true cushion for future loss, a steady ratio with increases reflecting growth in the loan portfolio is favorable. The level of such provisions may be mandated either by statute or internal policy as a fixed percentage of total loans or risk assets. Given normal banking conditions, general provisions would tend to range between one to two percent of total loans. A lower ratio might indicate a bank with a long history of minimal losses or a new bank which has yet to build up such a reserve. A high ratio may indicate a very cautious policy, but often a large general provision, especially if due to recent and large transfers, indicates recognition of asset quality problems. Overall, a consistent ratio and steady levels of transfers to a general provision are positive, while sharp changes indicate problems may exist.</p>

47

<p><u>Asset Quality Ratios. Specific Provisions</u></p>	<p>A sharp rise in specific provisions shows management's recognition of problem loans that existed at the time. In theory, gross loans less specific provisions equals viable, i.e., collectible, loans. Only an on-site examination of the loan portfolio can determine if more specific provisions are needed. If the bank only uses specific provisions, the year-to-year increase can be viewed as net loan losses, and a percentage higher than one percent is usually considered high.</p>
<p><u>Asset Quality Ratios. Net Loan Losses</u></p>	<p>Clearly an increase in net loan losses to average total loans indicates the bank has experienced deteriorating asset quality. While this ratio does not predict future asset quality problems, a combination of high past due percentage plus high levels and an adverse trend of net loan losses is worrisome. In commercial banks, a high level of past due is often followed by substantial loan losses. A very broad benchmark for net loan losses to average gross loans is one (1) percent. A ratio much above that probably indicates asset quality has been a problem.</p>
<p><u>Asset Quality Ratios. Earnings Coverage of Net Loan Losses</u></p>	<p>The earnings coverage ratio is a multiple and shows the bank's historical capacity to absorb the impact of loan losses. The higher the multiple the better. In effect, a highly profitable bank is far better able to withstand the impact of a high level of loan losses than a bank with mediocre or poor earnings. A multiple of three (3) times or higher would normally be considered good and indicates the bank has the earnings capacity to easily offset its level of loan losses.</p>
<p><u>Capital Adequacy Ratios. Base Capital Ratio</u></p>	<p>The trend of the basic capital ratio is clear-cut and important. An upward trend shows an improved capital position as capital growth is more than keeping pace with asset growth. A downward trend should be viewed as adverse regardless of the reasons behind it. While it is essential to learn the capital requirement the financial institution operates under and how its capital ratio compares to its peers, a very broad benchmark for the basic capital ratio is six (6) percent for commercial banks and eight (8) percent for other types of financial institutions.</p>

<p><u>Capital Adequacy Ratios Total Capital to Total Assets</u></p>	<p>As with the basic capital ratio, an increasing trend is favorable. A broad benchmark for total capital to total assets would be eight percent for commercial banks. The key element regarding supplementary capital is that it only provides a partial reassurance to a mediocre or weak core capital position. A bank with a marginal basic capital ratio should not be viewed as adequately capitalized due to large amounts of supplementary capital.</p>
<p><u>Capital Adequacy Ratios Dividend Payout Ratio</u></p>	<p>The dividend payout ratio shows what portion of profits are being paid out to shareholders instead of being retained by build up capital. Except for very unusual of extraordinary items (such as a direct withdrawal of capital), the inverse of the dividend payout ratio is earnings retention. Thus a downward trend in the dividend payout ratio results in higher earnings retention and is favorable. Setting even a broad benchmark for a dividend payout ratio is difficult since it largely depends on capital. For example, a well capitalized bank with low growth in assets can afford to pay out a higher portion of profits in dividends. In turn, a high dividend payout ratio is a significant indicator in a profitable bank with a low capital ratio. If a bank is not well capitalized and is paying out more than fifty (50) percent of its net income in dividends, its dividend policy would appear to be hampering its capital growth.</p>

<p><u>Profitability Ratio Return on Average Assets</u></p>	<p>The return on average assets is now widely accepted as the best overall measurement for earnings performance. It is a better measurement than return on capital (equity) which rewards banks that are highly leveraged. The use of return on average assets as a measure of performance has encouraged banks to seek ways of enhancing profits off the balance sheet, often referred to as non-interest income. An upward trend is, of course, considered positive. In general, banks in developing countries show higher profit ratios than banks in industrial countries. This is primarily due to lack of stiff and/or genuine competition. While emphasis should be placed on profit levels within the particular country and among peer institutions, general benchmarks do exist. A one (1) percent return on average assets is satisfactory, and many, if not most, major banks in industrial countries are well below this level. A two (2) percent level or higher is very good in any banking system, while three (3) percent or more is likely to be excessive due to extraordinary factors or negligible competition.</p>
<p><u>International Risk Based Capital Adequacy Standards</u></p>	<p>Risk weighted core capital and total capital ratio were developed by the Basic Committee on Banking Regulations and Supervisory Practices, or Basel Committee, to serve as international capital adequacy standards. The international agreement that followed regrading capital adequacy has become known as capital convergence. Once calculated, both core capital and total capital (core plus supplementary) are compared to on and off balance sheet items each of which has been assigned a risk factor from zero (0) percent for cash and balances with the central bank to one-hundred (100) percent for private sector loans. The capital ratio is this based on capital as a percentage of the weighted risk of both on and off balance sheet items. Thus, banks with large amounts of lower risk items will seek higher capital ratios. In addition to the risk weighing concept, capital convergence draws a distinction between core (equity) capital and other forms deemed to have lower value. The appropriate benchmarks established by the agreement – if core capital alone equals four (4) percent of the weighted risk total and if total capital equals eight (8) percent of the same total, the bank should not be considered undercapitalized. However, if these ratios are barely met, the capital rating should probably be only fair.</p>

5 2 4 Financing Modalities for Participating Credit Institutions

The PDF would enter into co-financing relationships with qualifying Nepalese FIs. The PDF will be designed to address the local financing barriers to private power development by providing incremental financial support as needed to induce participation of PCIs and end-users. Development of PDF/PCI financing modalities would occur as the credit and finance needs, and the structure and analysis of individual projects are reviewed by the Fund Administrator and the PDF Investment Committee.

The financing modality would entail loan funding on a long-term basis with extended grace (interest only) periods. By requiring that every US\$1 lent by the PDF for every US\$2, or rupee equivalent, that the PCI places in the project from its internal funds, PDF resources would be leveraged with capital from PCIs, opening the way for these resources to be used for power project financing on a fully sustainable, commercial basis.

The Fund Administrator would have review and approval rights on all transactions undertaken. PCIs would have primary responsibility to originate, structure and perform due diligence and credit analysis on transactions for support by the PDF. To originate a transaction, the PCI, following appropriate initial commitments from the project sponsor, would conduct its credit analysis. The financing requirements of the project – total credit amount, term, cost of funds – would then be matched against what the PCI, based on its credit analysis, can offer. The difference – in terms of needed longer term monies – would constitute the financing “gap” which the PCI would submit for PDF support. The Investment Committee must then concur with the credit and financing analysis. The structure and amount of financial support would be the subject of negotiation. The majority of project financing would derive from the PCI's capital (in a ratio of 2:1 to that of the PDF), giving it clear incentives to make prudent recommendations.

The PCIs shall be free to charge borrowers a market-determined rate of interest on resources on-lent to the PCI by the PDF. PCIs shall also be free to make loans on either a fixed rate or variable basis, and shall also be free to link the variable rate to any index acceptable to the PCI and its borrower.

5 2 5 Equal Access to the Power Development Fund

To minimize potential concern that the Fund Administrator might deny other financial institutions equal access to financing available through the PDF, the Fund Administrator shall certify in its Administration Agreement with HMG/N that the proceeds of the IDA credit would be made available to all eligible Nepalese PCIs (including the Fund Administrator's home institution) on a *pro rata* basis. For example, if five (5) PCIs (including the Fund Administrator's home institution) were to qualify for access to PDF resources, each PCI could each be allocated a *pro rata* share of the total amount earmarked for the PDF's “second window” provided that each can originate, structure and perform due diligence and credit analysis on transactions for support by the PDF⁴. The amount of PDF resources set aside for PCIs would be determined biannually by the PDF Investment Committee based on the competing demands for first and second window resources, and the capital adequacy and single borrower limits of the eligible PCI.

⁴ To originate a transaction the PCI following appropriate initial commitments from the project developer would conduct its credit analysis. The financing requirements of the project – total credit amount, term, cost of funds – would then be matched against what the PCI, based on its credit analysis, can offer. The difference – in terms of needed long-term resources – would constitute the financing “gap” which the PCI would submit for PDF support.

The question of whether to allow the financial institution housing the Fund Administrator to also act as a PCI presents a potential conflict of interest. Although neither the Fund Administrator or its home institution would be a custodian of public funds, it may, nevertheless, have access to "inside" information regarding the spectrum of projects and Investment Enterprises expected to approach the PDF for financing. However, by precluding the Fund Administrator's home institution from also acting as a PCI, the PDF may forego two potential benefits: first and foremost, the best local financial institution may not bid on the contract for administration and management of the PDF, desiring only to act as a PCI, and secondly, leverage would be reduced if the chosen Fund Administrator's financial institution were precluded from participating in the co-financing of projects.

The potential conflict of interest issue can be resolved if, as discussed above, all qualifying PCIs are given access to the PDF on an equal allocation basis. Allocating each qualifying PCI a *pro rata* share of the amount of the PDF earmarked for the second window, including the Fund Administrator's home institution, would allay any fears that the Fund Administrator could deny other financial institutions equal access to financing available through the PDF.

5 2 6 Power Development Fund Utilization Strategy

Each PCI shall submit to the Investment Committee a proposal as to how it plans to utilize resources from the PDF including anticipated exposure, proposed evaluation criteria to be employed in the project appraisal review process and proposed procedures for monitoring loan performance.

Participation Agreements between the PDF and PCIs would require these financial institutions to (i) ensure that financing provided is applied fully and exclusively for the purpose agreed when the loan was made, and (ii) provide such information on the progress of the projects financed to the PSAAU as the Investment Committee may reasonably request.

5 2 7 Participating Credit Institutions' Lending Unit

Each PCI shall have an appropriate unit (e.g., a loan department or corporate finance division) at its headquarters to deal with loans to qualified borrowers available under the PDF. Each PCI shall appoint a senior officer to be in charge of this internal Unit together with appropriate staff with responsibilities including, but not limited to, the following:

- oversight of power project review, appraisal, lending and supervision
- reporting and other procedures
- maintenance of disbursement and repayment documentation
- liaison with Power Sector Account Administrative Unit's management team and other appropriate entities

5 2 8 Compliance with Nepal Rastra Bank Guidelines

On an annual basis, each PCI shall provide the PDF Investment Committee with certification that it is in compliance with the Nepal Rastra Bank guidelines regarding prudential regulations, capital adequacy, liquidity, and disclosure and reporting requirements and other banking standards spelled out in the Commercial Bank Act, 2031 (1974) as amended.

5 2 9 Forfeiture of Eligibility

A review of a particular PCI's eligibility to continue to participate in the PDF would be triggered if it fails to produce the certification specified in Section 5 2 8. If the failure is on account of collection ratios, the review would concentrate on establishing whether the PCI meets the minimum specified profitability ratios after fully providing for the troubled loans which are causing the collection ratios to fall below the minimum required. Unless a case can be made for a waiver supported by quantitative justification, the PCI shall be suspended from participation in the PDF until such time as it demonstrates to the PDF Investment Committee that it can achieve and sustain the requisite threshold ratios.

6 Terms of Repayment to the Power Development Fund

6.1 Borrowers' Terms of Repayment to the Power Development Fund

Extended grace periods are required to match the development and construction periods of power generation projects, and extended repayment periods allow the cost of the projects to be spread over a longer period and hence result in a more acceptable tariff profile by reducing high tariff levels in the initial years, as shorter repayment periods result in higher debt service obligations in the early years. Thus, borrowers (Investment Enterprises and PCIs) would be allowed to repay the PDF on a semi-annual composite amortization schedule – aggregated from individual loans – up to a maximum of twenty-three (23) years, including a maximum (to be reviewed on a case-by-case basis) eight (8) year grace period.

PCIs shall be responsible for repaying loan amounts to the PDF according to the amortization schedule described above, regardless of whether the credit institution has received repayment from the sub-project to which the loan was made.

Either Investment Enterprises or PCIs may voluntarily prepay loans from the PDF in full or in part (in agreed minimum amount and multiples thereof) on any repayment date.

6.2 The Power Sector Account and Repayment of the International Development Association Credit

HMGN may draw against the Power Sector Account for the purpose of making payments to IDA. Debt service to IDA would be in U.S. dollars (rupee dollar equivalent) at IDA terms.

7 Evaluation and Negotiation of the Security Package

Projects financed by the PDF would be undertaken following the build-own-operate (BOO) or build-own-operate-transfer (BOOT) model and are to be financed on a limited recourse basis in order to promote private investment in the Nepalese power sector. Under this arrangement, the investors (or their contractors) would assume full completion and operational risks, but the lenders (including the PDF) should look primarily to the expected revenue stream of the projects for security. The revenue stream, in turn, is dependent upon the strength of the various contractual arrangements comprising the Security Package (SP). These seek to reduce lenders' and investors' risk by establishing legally binding obligations, financial structures, and operational procedures. Before loan funds can be disbursed, the lenders would wish to be satisfied that all the main agreements meet their requirements and have been executed.

Lenders may want legal opinions, independent engineering reports, and copies of government approvals. In addition, they would want to confirm that the parties to each agreement are creditworthy and capable of performing under the terms of their respective contracts. Lenders look to the SP to provide security for the loan, and in the event of a breach of any of the agreements they may seek the right to take over the company and install their own managers within the framework of the agreements. Thus, the preparation of the various agreements must be coordinated so that there is no conflict between them.

The following would be parties to the agreements and other documents comprising the SP described below: (i) His Majesty's Government of Nepal, (ii) the Investment Enterprise (i.e., the project sponsors), (iii) the Nepal Electricity Authority (NEA) or other purchaser, (iv) the operator, (v) the lenders, (vi) the contractors, (vii) the trustee, (viii) the escrow agent, and (ix) the insurer.

It would be the responsibility of the Fund Administrator to evaluate and negotiate the SP to assess the possible adverse financial outcomes in respect of the identified risks. It is important that the agreements which make up the SP comply with IDA criteria and be acceptable to both the Fund Administrator and the PDF Investment Committee. To this end, the Fund Administrator would invite the project sponsor to discuss the various agreements contained in the SP and would also conduct discussions with co-lenders concerning joint security arrangements, if required.

The Fund Administrator would work through each of the project's potential key risks (capital cost overrun, delay in project completion, higher than expected cost of finance, and reduced revenue streams) and assess their potential impact on the project.

This evaluation would be undertaken in three steps:

- ▶ Establishment of the impact of major adverse outcomes under the Project (Implementation) Agreement and Power Purchase Agreement
- ▶ Identification of the contractual relief remedies available under the other contracts and agreements comprising the SP
- ▶ Assessment of the quantitative net financial impact on the project of key risks, to the extent that the exposure of the Project (Implementation) Agreement and the Power Purchase Agreement is not matched by other contractual reliefs and remedies

The ability to finance a private power project on a limited recourse basis depends largely on the credit quality of the power purchaser. Most of the projects that have gone through the Ministry of Water Resources' fine screening and ranking exercise involve projects that would largely be financed by the private sector and that would sell

power to NEA, at least for the foreseeable future. Under this structure, where NEA is the sole purchaser of the power, NEA's credit quality is one of the most important factors in a project's ability to secure financing. As such, it is envisioned that the Project (Implementation) Agreement between HMGN and the Investment Enterprise would covenant a guarantee of NEA's payment obligations to the Investment Enterprise under the Power Purchase Agreement. *If HMGN does not wish to offer such a guarantee*, then both an irrevocable letter of credit and an escrow account of sequestered NEA revenues would form part of the Security Package. The Investment Enterprise's first recourse in the case of non-payment by NEA would be the letter of credit and then the escrow account.

7.1 Project (Implementation) Agreement

The Project (Implementation) Agreement (PA) is between the Investment Enterprise and the government agencies that have the authority to provide the assurances and support necessary for the development of a power project by the Investment Enterprise. The PA may contain a variety of commitments, inducements, and guarantees that can be given only by the recognized governmental authority. Issues range from authorization to do business to granting of certain tax benefits or exemptions from customs duty. If government policy has not been established in areas that could affect the Investment Enterprise, lenders would require that the government make appropriate commitments.

Often, the PA will contain terms and conditions necessary to ensure the effectiveness of other key project agreements, such as the Power Purchase Agreement. In effect, the PA seeks to guarantee the performance of government entities involved in the project. All of these agreements have interlocking terms and conditions and need to be supported by the PA, since lenders are particularly concerned about government actions that might jeopardize their loans or investments. Moreover, in projects with long payback periods, this concern is compounded in host countries that lack a record of strong support for political, regulatory, economic and financial reforms. Appendix I contains a listing of typical commitments contained in the Project (Implementation) Agreement.

7.2 Power Purchase Agreement

The Power Purchase Agreement (PPA) defines the terms of the sale of power which is the principle source of revenue to the Investment Enterprise and identifies the type of transaction (e.g., BOO or BOOT). This agreement would be signed by the purchaser, either the Nepal Electricity Authority or a future purchaser, and the Investment Enterprise for a negotiable term, and may be renewed upon agreement of both parties. Although the terms and conditions are often complex, the PPA commits the producer to specific conditions (e.g., maximum output, total electrical generation in kilowatt hours, etc.) over a defined period and commits the purchaser to compensate the producer by an established amount and tariff rates whenever the facility is available and capable of generating power.

Because the PPA provides the only revenue stream for repayment of debt and return to investors, it is important to the lender. Consequently, the terms and conditions of this agreement would be heavily influenced by the lender's desire to enhance potential revenue and minimize risk. In this case, the risk to be avoided is the reduction or termination of the revenue stream, regardless of the cause. The greater the real or perceived risk to the power producer, the higher the price the purchaser can expect to pay.

In reality, the purchaser can reduce or even terminate the revenue stream under some conditions. For example, if the purchaser has fulfilled all obligations and power is not being provided, the purchaser has the right to

decrease (through penalties) or suspend payment until the situation is remedied. However, depending on the insurance carried by the producer (as mandated by the lenders), debt service may be maintained for some period. The PPA often provides for the producer to compensate the purchaser should power production cease or fall below a specified level.

Producers may want a PPA with an extended duration for a BOOT-type project that provides for a revenue stream beyond the point of debt repayment, thus enhancing return to investors. For BOO projects, the producer may seek a PPA that extends to the point where the costs of maintenance and capital improvements are covered. The BOO approach should be preferred, so that the producer is committed to adequately maintain the plant after the debt has been repaid.

The task of establishing specific performance guarantees, future adjustments to the tariff, and penalties or bonuses for exceeding or failing to meet performance guarantees are the heart of the PPA and usually require lengthy discussions. These include not only the purchaser, producer, and lending institutions but also the construction contractor, equipment suppliers, and operation and maintenance entities. Each participant that can affect the facility's performance must prove an acceptable undertaking with regard to its respective obligations. For example, the construction contractor may offer a turnkey project. The price and construction period effort would be fixed and the contractor's performance guaranteed. Each of these items affects the cost of production and the purchase price. Even though the producer may have obtained certain preliminary commitments and guarantees from the contractor, modifications may be required based on negotiations between the producer and the purchaser. The contractor's offer may have been modified to include certain contingencies. Each participant has a respective "bottom line" that established the maximum risk-and-reward scenario it is willing to accept. Appendix J contains key provisions of the Power Purchase Agreement.

7.3 Land Conveyance Agreement

The Land Conveyance Agreement (LCA) transfers land ownership to the Investment Enterprise, which purchases the land or executes a long-term lease. The LCA covers the land required for the power plant and for the adjacent switchyard, which interconnects it with the purchaser's transmission lines.

Land use must be exclusive to project purposes and must be assignable to the lenders so that they can take over the facility in case of default by the power producer. The LCA term commences no later than the start of construction, and the duration should be at least commensurate with the term of the PPA. Under certain circumstances, it is desirable and usually more financeable to have a LCA term greater than the term of the PPA to provide for construction delays or *force majeure*¹ events that typically extend the PPA on a day-to-day basis. Without this extension, the terms of the LCA and the PPA may not match and that could mean that the term of the PPA could be terminated prematurely.

The LCA (or PPA) generally divides the responsibility for the installation of water, sewer, gas, electricity services, etc. Existing or newly required covenants, easements, or other restrictions are identified, along with the responsibility to conform to applicable zoning laws, building codes, regulations, and other requirements (or to

¹ *Force majeure* is defined as an event that is beyond the reasonable control of the party and is not caused by the party's negligence or lack of due diligence. However, equipment breakdown resulting from deficiencies in design, construction, operation, maintenance, or otherwise that occur within the project facility do not qualify as events of *force majeure*.

obtain necessary variances) In addition, the parameters and procedures for access to the site by personnel other than the project owner and operator are agreed upon

The LCA also identifies the party responsible for payment of government charges or taxes levied on the site, equipment, structures, or other personal property Responsibilities for existing and future conditions at the site (suitability of soil conditions, environmental contamination, etc) Are also agreed upon In addition, governing laws, regulations, and methods of dispute resolution are defined Finally, arrangements for disposition, at the termination of the LCA, of the land, power generation facilities, and other related construction are outlined

7 4 Ownership Structure and Agreements

Ownership agreements describe the structure and obligations among the owners comprising an entity, often referred to as the "Investment Enterprise" This company is separate from its sponsor so that liability and risk of the project are limited Project ownership can be structured in a number of ways, depending on host- and home-country tax laws, customs duties, and liability environments

The Investment Enterprise incorporates the liabilities of associated project risks When a project is financed against the balance sheet of its sponsor (i e , "recourse finance" or "corporate finance"), all the project risks run directly to the sponsor, which is therefore the final resource in the event of default by lenders and other investors

In a typical limited or nonrecourse financing structure, the entity formed by the ownership agreement is the central point to which all project documents connect and is where the ultimate recourse to the lenders and other parties lies Consequently, the entity is limited in all matters relating to its business and is referred to as "single purpose" The Investment Enterprise is obligated to cause all other parties to perform under the project agreements, limit other parties' indebtedness and investments, and furnish documentation required by the company or the lenders Similarly, the operational limitations imposed on the company, on its financial, tax, and liability structure, and on its ability to continue its obligations under the project documents are designed to protect assets from the actions of any of the project parties For example, the Investment Enterprise cannot create liens on collateralized assets or sell project assets It is limited in its ability to make certain investments or amend the project documents

Equity investment in a project can be protected (although in all cases subordinate to creditors) using appropriate all-risk, machinery breakdown, general liability, and political insurance in the market All-risk and machinery breakdown coverage should be slightly more than the value of the asset to account for legal and other indirect expenses related to the adjustment of a claim General liability coverage depends on the size of the project but is generally between US\$10 million and US\$20 million Political risk insurance usually covers less than the full value of assets to provide a parallel incentive for project parties to prevent insurable events and commit to their resolution

The unique advantages of a project finance structure are not without substantial risk in allocation and mitigation, all of which are embodied in the structure and obligations of the Investment Enterprise to protect the assets and the resulting cash flow

7 5 Engineering, Procurement and Construction Contract

If the Investment Enterprise so desires, it would enter into an Engineering, Procurement and Construction (EPC) contract with a reputable contractor for design, equipment procurement, and construction in accordance with the

power supply requirements of the PPA. This is usually written as a turnkey contract for complete design, supply, erection, and commissioning. The turnkey contract provides a single source for all responsibilities and guarantees associated with plant performance, project schedule, plant warranty, and project completion. Depending on the financing arrangements, schedule, and technical specifications, larger projects may require a construction consortium or award of a number of separate contracts with contractors and equipment suppliers.

The terms, conditions, and obligations of the EPC contract support those contained in the PPA unless the Investment Enterprise has other means to limit risk. Consequently, although discussions between the Investment Enterprise and EPC contractor establish cost, schedule, performance, and other standards and criteria, the construction contract cannot be finalized until after the PPA has been negotiated. The EPC contractor would try to limit risk by obtaining favorable terms and passing along as much risk as possible to material and equipment suppliers and subcontractors. Generally, for a project to be financeable, the EPC contractor would need a fixed-price contract with a specified completion date and a guarantee of performance. Failure of the contractor to meet obligations would result in substantial financial penalties. Appendix K contains key provisions of Construction Contracts.

7.6 Operations and Maintenance Agreement

The Investment Enterprise may choose to enter into an Operations and Maintenance (O&M) agreement with a reputable O&M contractor to run and maintain the facility. This arrangement has the advantages of a single source of responsibility, professional personnel, and experience with required spare parts and consumables. Because of the importance of operations management and maintenance practices to the long-term performance of the facility, the power purchaser also has a keen interest in the ability of the O&M contractor.

Whether the O&M contractor is affiliated with the developer or Investment Enterprise, the agreement should, *inter alia*

- ▶ Reflect the obligations of the developer under the PA and the PPA
- ▶ Specify price components tied to the tariff under the PPA and provide an explanation and adequate information for future adjustments
- ▶ Be specific with regard to spare parts and consumables, responsibilities, and requirements
- ▶ Establish commitments necessary to commission and operate the plant
- ▶ Address future improvements and additions
- ▶ Provide for operations during emergencies
- ▶ Specify that operations and maintenance will be consistent with the standards set forth in the PPA. In the event of failure to do so, the O&M contractor would be required to pay damages sufficient to cover a proportion of the liquidated damages assessed under the PPA.
- ▶ Establish standards for plant availability and performance efficiency
- ▶ Establish standards for maintenance, outage management, and necessary equipment overhaul
- ▶ Clarify whether the O&M contractor's performance should be guaranteed by a performance bond or whether a corporate guarantee is sufficient
- ▶ Reflect lines of communications with the power purchaser for plant dispatch and operation

7.7 Irrevocable Letter of Credit

The irrevocable letter of credit is an instrument issued by a bank guaranteeing payments on behalf of its customer to a beneficiary for a stated period of time and when certain conditions are met. In the context of private power projects, NEA would open the letter of credit (LC). Although Investment Enterprises would like to have long-

term LCS, banks have been reluctant to offer these and LCs would most likely be one-year and irrevocable (i.e., non-cancelable). NEA would be required to open a LC for a value equal to a specified period of average Investment Enterprise billing. The payment made under these LCS would be immediate if NEA failed to make a payment to the Investment Enterprise for any reason. The Investment Enterprise would, in turn, make payments to PDF *pari pasu* to other lenders. The bank would either issue the LC under the working capital limits already approved for NEA or it would issue a new credit for this specific LC. Once there is a draw under the LC, NEA would be required to reimburse the bank within three days. In the event that NEA does not reimburse the bank, the bank can refuse to revalidate the LC, thus the bank is limiting its exposure. The LC as described here is useful primarily for short-term liquidity purposes. By itself, however, it would not likely be considered as acceptable security for a Investment Enterprise, and therefore a special escrow account should be required as well.

7.8 Escrow Agreement

A number of entities, including the Investment Enterprise, the lenders, the contractors, and the purchaser (NEA or other purchaser) would all execute a project Escrow Agreement (EA). The EA would establish various escrow accounts within Nepal into which all project revenues would be deposited and from which all project revenues can be distributed. Escrow accounts could be established for an operation and maintenance reserve, for a debt service reserve, and, most importantly, an escrow account backed by NEA customer receivables².

In the case of the latter, an escrow account would be opened by NEA for the benefit of the Investment Enterprise. The escrow account would be administered by an independent escrow agent (normally a bank). A three-party agreement would be entered into among the Investment Enterprise, NEA, and the escrow agent, who would act as an agent of the Investment Enterprise. The cash flows (receivables) of NEA from selected customers would be deposited directly into the escrow account instead of being paid to NEA. If no event of default has occurred and there are no outstanding draws under the LC, the agent bank would transfer the funds from the escrow account to NEA, and NEA would meet its Investment Enterprise and other payment obligations. In the event of default, the flow of funds from the escrow account to NEA would be stopped and payments would be made by the escrow agent from the escrow account directly to the Investment Enterprise. The Investment Enterprise would, in turn, make payments to the PDF *pari pasu* to other lenders. Transfers from the escrow account to NEA would only resume when all outstanding payment obligations to the Investment Enterprise had been met.

The funding for this type of escrow account would be set at a multiple of one month of Investment Enterprise billing. The amount of the multiple is discussed further in Appendix B. Because an escrow account needs to be in place during the duration of the Power Purchase Agreement, a structure that allows for the continual and reliable replenishment of the escrow account needs to be in place at all times. To meet this requirement, NEA could instruct groups of creditworthy industrial customers to pay all amounts due NEA directly into the escrow account.

² There are variations on the type of escrow account that can be established. The variations relate primarily to the selection of cash flows for the account. One type of account can opt for NEA's high-tension customers while another type may opt for NEA's accounting regions or distribution circles. There are also variations on the letter of credit amount and the amount of cash required to fund the escrow account. Alternatively, the escrow account could be structured so that a fixed amount, or a reserve, be kept in the account at all times for the duration of the PPA. The reserve amount would be negotiable, but would be likely be based on six months to one year of debt service obligations. To a large extent variations would depend on limitations on NEA's ability to earmark its receivables, the negotiation skills of the parties involved and the level of comfort desired by the lenders.

7.9 Trust Deed

It is expected that the Security Package would be held by a Trustee on behalf of the lenders. All security to be made available to the lenders would be vested in this Trustee under the terms of a Trust Deed to be entered into between the Investment Enterprise, an agent bank acting on behalf of the lenders (if more than one lender) to coordinate administration of the project's loans, and the Trustee. The Trustee may be the same party as the Escrow Agent.

7.10 Insurance

An overall project insurance program, embracing the major areas of exposure both during construction and during the operating life of the project would be arranged by the Investment Enterprise in consultation with the construction contractor, the project operator (if different than Investment Enterprise), and the lenders. To obtain the lowest possible price, insurance should be procured through limited international bidding from firms having the highest rating³.

Guidelines on insurance are set out in Appendix E.

³ Insurance companies should have a Best's Insurance Report rating of at least "A" or equivalent, have an Insurance Solvency International Limited rating of at least "A" or equivalent, or receive the highest financial condition rating of any other independent insurer rating organization that issues ratings on not less than five hundred (500) insurers.

8 Procurement and Disbursement

8.1 Procurement

If the PDF is financing the cost of a project procured under a BOO or BOT arrangement, two procurement procedures could be used. In the case of a solicited proposal, the Investment Enterprise would be selected under international competitive bidding or limited competitive bidding procedures in accordance with the World Bank's procurement procedures. This procurement would review several factors in order to arrive at the optimal combination of evaluation criteria such as the cost and magnitude of the financing offered, the performance specifications of the facility offered, the cost charged to the user or purchaser, other income generated by the borrower, and the period of the facility's depreciation. The Investment Enterprise selected in this manner shall then be free to procure the goods, works, and services required for the facility, using their own procurement procedures meeting the requirements of economy and efficiency.

In the case of unsolicited proposals, when the Investment Enterprise have not been selected on a competitive basis, the goods, works or services required for the project and to be financed by the PDF shall be procured in through a competitive process meeting the requirements of economy and efficiency.

8.2 Disbursement

Prior to any disbursement of PDF resources, IDA would review and approve the following documents:

- ▶ The appraisal report prepared by the Fund Administrator and accepted by the PDF Investment Committee to ensure that each project is technically sound, and economically and financially viable
- ▶ The procurement documentation to ensure that IDA's guidelines have been followed
- ▶ The environmental assessment, and its applicability to the resettlement action plan (if any)
- ▶ The key documents in the Security Package with special attention to the Fund Administrator's loan agreement

The PDF would serve as the lender who provides the ultimate source of credit to each of the power projects envisaged. Depending on the availability of other financing, the PDF's contribution would vary on a case-by-case basis. As such, disbursement proportions would also vary, depending on a particular project's contract packaging and the PDF's share of the financing.

Appendices

Appendix A

Financial Projections of Loan Placement, Servicing and Repayments

From an accounting perspective, the PDF will account for capital funds and administrative funds separately. The PDF Account would serve as the instrument of custody for donor funds received from HMGN and their management. The Operating Account for PDF administration will deal with its administrative functions, such as receipts on account of fees, routine management expenditures, etc. The PDF Account will be placed in the Nepal Rastra Bank for reasons of transparency, as the Rastra Bank has no trustee or oversight responsibility.

Funding and Execution of the PDF Fund Account The account would be initially funded from resources received from IDA. The IDA portion of the funding will carry a service charge (interest rate) of 0.75 percent per annum and a 40 year term, including a grace period of 10 years. IDA funds placed in the Fund Account would be placed in as debt in eligible private sector companies for specific projects. The initial corpus of available funds for placement is anticipated to be US\$100 million from IDA.

Loans made by the PDF would be repaid by borrows in US dollars. The spread resulting from interest rate differentials between those on HMGN borrowing and on loans made by the PDF, as well as the capital accumulation resulting from different maturities on borrowings and lending will be retained in the Fund Account. These accumulated proceeds can serve as funds for further placement in future projects. A specified portion of the spread income, together with PDF fee income, would be deployed to defray operating expenses of the Investment Committee and the Fund Administrator once the three year IDA contribution for such expenses is exhausted.

Funding and Execution of the Operating Account The Operating Account would be funded out of fees and service charges and a share of the interest spread income. IDA resources would enable the Investment Committee and the Fund Administrator to meet its initial fixed costs and the costs of hiring professional staff and consultants during the first three years of PDF operation. The Investment Committee and the Fund Administrator are expected to be self-sustaining thereafter. The PDF envisages that an initial US\$1.9 million over three years will be required for meeting the costs of setting up the Investment Committee and Fund Administrator, management expenses, technical, environmental, legal and financial appraisal of projects, negotiations of placement agreements, and other preparatory work related to project promotion and development activities.

The indicative expenditures on these items are detailed in the spreadsheet below. Recurrent management expenses such as the costs of staffing the Investment Committee, hiring a resident technical advisor for the PDF, local professional and clerical staff salaries, short-term consultancy services for specific project evaluation work, transport, premises and office expenses and staff development are expected to cost US\$400,000 per annum. The expenses for the first three years would be fully covered by the IDA credit (yet repayable by HMGN).

Fee Structure Following the initial three year period, it is envisaged that the recurrent management costs of the PDF Administrator and the expenses incurred by the Investment Committee shall be partially covered by fees charges from borrowers with the remainder made up by the accumulated proceeds from interest rate differentials.

Fee proposed fee structure is as follows The PDF's proposed fees and charges for its "first window" shall be fixed for each loan and will generally be based on the following structure

- ▶ One-Time Application Fee US\$5,000 (or dollar equivalent) non-refundable to be submitted at application
- ▶ Documentation Fee one-quarter of one (¼) percent of the loan amount, non-refundable
- ▶ All cost/fees and out-of-pocket costs of travel for the investment advisors/consultants appointed by the Fund Administrator and/or PDF Investment Committee for appraisal and due diligence
- ▶ Cost incurred in connection with Fund Administrator's personnel's official visits in relation to negotiations, meetings, monitoring, etc
- ▶ Commitment Fee three quarters of one (¾) percent per annum of the unutilized loan amount
- ▶ Project Monitoring Fee three quarters of one (¾) of the yearly outstanding balance, provided that the annual fee not exceed US\$50,000
- ▶ Standby Financing Facility Fee one (1) percent
- ▶ Take Out Finance Facility Fee one quarter of one (¼) percent

This structure is in line with fees and charges by infrastructure lending programs In the event that the fees charged to borrowers, as per the proposed fee structure above, do not totally cover the costs and expenses of the Investment Committee and the Fund Administrator, particularly during the initial years of PDF operation, part of the IDA credit should be use to cover these costs subject to a ceiling to be negotiated with IDA However, in order to be self-sustaining, the PDF should earmark a portion of its future interest income to cover operating costs

The fee structure for the PDF's "second window" would be assessed on a case by case basis Fees and charges for the "second window" could, for example, be absorbed in the interest rate charged by Participating Credit Institutions

Financial Projections The financial projections for the PDF, covering a period of 15 years, has been prepared on the basis of 8 indicative hydropower project of varying sizes for a total cost of US\$992 million The subordinate debt financing for these projects from IDA funding has been assumed to be in the 20-25 percent range, amounting to about US\$94 million, or nearly the initial size of the PDF The key assumptions underlying the financial forecasts include

- ▶ Interest rates and maturities for resources at the disposal of the PDF are similar to IDA terms, i e , 40 years, including 10 years grace and a service fee of 0.75 percent per annum
- ▶ For project financing, interest rates are based on six month U S dollar LIBOR plus a risk premium to be recommended by the PDF Administrator Maturities for the indicative loans vary from 13 to 23 years, with a grace period ranging from 3 to 8 years Interest during construction is not capitalized
- ▶ Cash surplus with the PDF's Fund Account resulting from the interest spread and PDF fee income is retained in the Fund Account

Nature and Extent of Spread Income and its Deployment The IDA credit to HMGN carries a service charge of 0.75 percent per annum and a term of 40 years with ten years grace These terms are passed on to the PDF However, the PDF places debt at significantly higher rates, for maturities varying up to 23 years and a maximum grace period of 8 years The difference between the funding and the placement terms to the PDF will result in cash surplus in the Fund Account over time In addition to interest spread, the difference in the maturity and grace periods of loans placed by the PDF and the credit from IDA to HMGN and the fees charged by the PDF for loan placement also lead to cash retention in the Fund Account The principal repayments on indicative project loans placed by the PDF commence from years 3 onward Indicative financial projections show that, with an initial capitalization of US\$100 million, accumulated interest spread are US\$10.9 million by the end of year

65

8, increasing to US\$41.4 million at the end of the twelfth year. It is envisaged that these accumulated surpluses would be principally deployed for financing other new projects, with a small share being used to cover operating expenses of the PDF. Since the PDF finances up to 25 percent of total project cost, additional projects in excess of US\$165 million could be financed by the PDF by the end of the twelfth year of PDF operation. The spread deployment would thus enhance the PDF's ability to leverage more private investment.

Foreign Exchange Implications Foreign exchange risk implications arise from (i) the transactions occurring between the PDF and the project borrower, and (ii) the PDF and HMGN, with its obligations to IDA. In the placement transaction, between the PDF and the project borrower, loans from the PDF (and debt service repayment) are denominated in U.S. dollars, whereas project revenues will most likely be in local currency. As in typical project finance transactions, the project borrower may be able to mitigate a part of the risk through currency depreciation pass throughs in the purchase agreements, or hedging and/or exchange rate insurance.

There are exchange rate risk implications for IDA and the PDF also. Although the placement and repayment currency for the PDF are U.S. dollars, as is its currency of repayment to HMGN, the obligations of HMGN to IDA are denominated in SDRs and repaid in dollars by HMGN. Risks arising from and adverse movement of the dollar against the SDR are normally borne by the borrowing government.

Financial Management, Accounting, Monitoring and Oversight Arrangements The PDF would conduct its business in accordance with international standards and its accounts would be audited by a firm acceptable to IDA. IDA oversight arrangements in respect of proposal evaluation, project appraisal and lending decisions would apply to all loans. IDA would ensure that the project qualifying for PDF loans satisfy World Bank Group guidelines with respect to the environment, resettlement and procurement and meet the test of consistency with agreed sector policies and objectives.

Financial Projections for the PDF The following pages contain (i) Financial Projections Summary of Terms and Indicative Disbursements, and (ii) PDF Sources and Applications of Funds.

Nepal Power Development Fund

Financial Projections (Current U.S. Dollars)

Basic Data

1 Terms from IDA to HMGN

	US\$	IDA \$100 000 000	Other 1	Other 2
In that Capitalization				
Maturities	Years	40		
Grace Periods	Years	10		
Interest Rates	% per annum	0.75		
Commitment Fees	/ on undisburse credit balances	0.05		

2 Terms from HMGN to PDF

Drawdowns Based on Actual Project Disbursements

Maturities (maximum)	Years	23
Grace Periods (maximum)	Years	8
Interest Rate	% per annum	0.75

3 PDF Services Fees

PDF First Window

a) Application Fee	Per Submission	\$5 000
b) Documentation Fee	% Per Loan	0.25
c) Commitment Fee	% of Commitment	0.75
d) Monitoring Fee	% of Outstanding	0.75

PDF Second Window

a) Application Fee	Per Submission	\$2 500
b) Documentation Fee	% Per Loan	0.125
c) Commitment Fee	% of Commitment	0.375
d) Monitoring Fee	% of Outstanding	0.375

4 PDF Investment Advisory Fee

% of Outstanding and Performing Loans per annum	0.005
---	-------

5 Interest Rates

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
Average Annual Interest (1st window)	US\$ LIBOR + 6%	11.69	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75
Average Annual Interest (2nd window)	AAWDR	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05

6 PDF Drawdowns

Illustrative Projects	Estimated Cost US\$	Maturity (Years)	First Year Disbursed	Total Financed US\$	Grace (Years)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Project 1 (1st window) 300MW Dudh Koshi	\$675 000 000	23	2005	\$28 666 667	8										
Project 2 83MW Tamur Mewa	\$192 000 000	20	2004	\$28 666 667	6									\$1 333 333	\$1 333 333
Project 3 35MW Kabeli A	\$75 000 000	20	2003	\$28 666 667	5								\$2 666 667	\$4 000 000	\$5 333 333
Project 4 (2nd window) 8MW	\$16 800 000	15	2002	\$4 000 000	3								\$2 666 667	\$6 666 667	\$8 000 000
Project 5 7MW	\$14 000 000	15	2001	\$3 500 000	3					\$700 000	\$1 575 000	\$1 225 000	\$1 400 000		
Project 6 6MW	\$11 400 000	15	2000	\$2 850 000	3					\$570 000	\$1 282 500	\$997 500			
Project 7 5MW	\$9 000 000	15	1999	\$2 250 000	3	\$450 000	\$1 012 500	\$787 500							
Project 8 4MW	\$6 800 000	13	1999	\$1 700 000	3	\$340 000	\$765 000	\$595 000							

Total Yearly Drawdowns (Including for PDF Administration)

(1st Window)	\$1 193 950	\$2 763 188	\$3 811 763	\$3 372 500	\$5 691 667	\$10 733 333	\$13 333 333	\$13 333 333	\$13 333 333	\$13 333 333	\$12 000 000	\$10 666 667			
(2nd Window)	\$0	\$0	\$0	\$0	\$2 666 667	\$9 333 333	\$13 333 333	\$13 333 333	\$13 333 333	\$12 000 000	\$10 666 667				
Cumulative Drawdowns (Including for PDF Administration)	\$1 193 950	\$2 763 188	\$3 811 763	\$3 372 500	\$8 358 333	\$18 091 667	\$31 425 000	\$44 758 333	\$58 091 667	\$71 425 000	\$83 425 000	\$95 425 000	\$107 425 000	\$119 425 000	\$131 425 000
(1st Window)	\$0	\$0	\$0	\$0	\$2 666 667	\$9 333 333	\$13 333 333	\$13 333 333	\$13 333 333	\$12 000 000	\$10 666 667				
(2nd Window)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Nepal Power Development Fund

Financial Projections
(Current U S Dollars)

PDF Sources and Applications of Funds

Sources of Funds	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Fund Account															
HMGH Drawdowns	\$790 000	\$2 347 500	\$3 365 000	\$3 372 500	\$5 691 667	\$10 733 333	\$13 333 333	\$13 333 333	\$12 000 000	\$10 666 667	\$9 333 333	\$5 333 333	\$2 666 667	\$1 333 333	\$0
(1st Window)	\$0	\$0	\$0	\$0	\$2 666 667	\$9 333 333	\$13 333 333	\$13 333 333	\$12 000 000	\$10 666 667	\$9 333 333	\$5 333 333	\$2 666 667	\$1 333 333	\$0
(2nd Window)	\$790 000	\$2 347 500	\$3 365 000	\$3 372 500	\$3 025 000	\$1 400 000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repayments Principal	\$0	\$0	\$27 935	\$111 471	\$232 168	\$359 693	\$455 251	\$521 991	\$621 639	\$836 110	\$1 041 927	\$1 308 704	\$1 556 940	\$1 798 446	\$0
Repayments Interest	\$82 389	\$318 452	\$648 502	\$963 600	\$1 542 472	\$2 725 435	\$4 213 002	\$5 647 785	\$6 600 852	\$7 924 700	\$8 900 092	\$9 278 915	\$9 310 730	\$9 151 511	\$8 803 769
Reflows from Interest Rate Spread	(\$624 861)	(\$373 571)	(\$28 180)	\$302 375	\$896 819	\$2 095 472	\$3 598 845	\$5 049 554	\$6 018 666	\$7 358 679	\$8 350 357	\$8 745 589	\$8 793 935	\$8 651 372	\$8 320 411
Cumulative Reflows from Interest Rate Spread	(\$624 861)	(\$998 432)	(\$1 026 612)	(\$724 237)	\$172 582	\$2 268 054	\$5 866 899	\$10 916 453	\$16 935 118	\$24 293 797	\$32 644 155	\$41 389 743	\$50 183 679	\$56 835 051	\$67 155 461
Sub Total Fund Account Sources	\$247 527	\$2 292 381	\$3 985 322	\$4 666 409	\$8 242 429	\$15 786 407	\$21 504 873	\$24 485 923	\$25 141 508	\$26 571 684	\$27 419 892	\$24 399 764	\$22 080 035	\$20 693 156	\$18 922 627
Operating Account															
Drawdown for PDF Administration (First 3 Years)	\$403 950	\$415 688	\$446 763	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PDF Service Fees	\$11 000	\$18 465	\$29 903	\$45 395	\$60 602	\$323 898	\$652 667	\$761 065	\$737 454	\$805 702	\$763 457	\$708 780	\$659 627	\$651 440	\$651 878
(1st Window)	\$0	\$0	\$0	\$0	\$0	\$271 667	\$601 667	\$711 667	\$690 000	\$759 714	\$718 681	\$666 383	\$619 834	\$614 496	\$617 835
(2nd Window)	\$11 000	\$18 465	\$29 903	\$45 395	\$60 602	\$52 232	\$51 000	\$49 399	\$47 454	\$45 988	\$44 777	\$42 397	\$39 794	\$36 944	\$34 043
Sub Total Operating Account Sources	\$414 950	\$434 152	\$476 666	\$45 395	\$60 602	\$323 898	\$652 667	\$761 065	\$737 454	\$805 702	\$763 457	\$708 780	\$659 627	\$651 440	\$651 878
Total Sources	\$662 477	\$2 726 534	\$4 461 987	\$4 711 805	\$8 303 031	\$16 110 306	\$22 157 540	\$25 246 988	\$25 878 963	\$27 377 386	\$28 183 349	\$25 108 543	\$22 739 663	\$21 344 596	\$19 574 505
Applications of Funds															
Fund Account															
Loan Disbursements	\$790 000	\$2 347 500	\$3 365 000	\$3 372 500	\$5 691 667	\$10 733 333	\$13 333 333	\$13 333 333	\$12 000 000	\$10 666 667	\$9 333 333	\$5 333 333	\$2 666 667	\$1 333 333	\$0
Debt Service to HMGH (Including for PDF Administration)	\$707 250	\$692 023	\$676 681	\$661 225	\$645 653	\$629 963	\$614 156	\$598 231	\$582 186	\$566 021	\$2 580 028	\$2 578 847	\$2 577 657	\$2 517 742	\$2 516 094
Principal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2 030 294	\$2 045 521	\$2 060 862	\$2 017 604	\$2 032 736
Interest	\$707 250	\$692 023	\$676 681	\$661 225	\$645 653	\$629 963	\$614 156	\$598 231	\$582 186	\$566 021	\$549 735	\$533 326	\$516 794	\$500 139	\$483 358
Commitment Fee on Undrawn IDA Credit	\$49 403	\$48 021	\$46 116	\$44 429	\$41 583	\$36 217	\$29 550	\$22 883	\$16 883	\$11 550	\$6 883	\$4 217	\$2 883	\$2 217	\$2 217
Sub Total Fund Account Applications	\$1 546 653	\$3 087 544	\$4 087 797	\$4 078 154	\$6 378 903	\$11 399 513	\$13 977 040	\$13 954 448	\$12 599 070	\$11 244 238	\$11 920 245	\$7 918 397	\$5 247 207	\$3 853 292	\$2 518 311
Operating Account															
Investment Committee Salaries and Expenses (5)	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000
PDF Premises Office Expenses and Transport	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000	\$50 000
PDF Management Costs															
Salary Expatnate Resident Advisor (1)	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000	\$250 000
Salaries Technical Staff (3)	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000	\$45 000
Salaries Secretarial/Support Staff (3)	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000	\$15 000
Short Term Consultants (Legal/Financial/Technical/Accounting/Other)	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000	\$125 000
Contingencies	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000	\$25 000
PDF Investment Advisory Fee	\$3 950	\$15 688	\$46 763	\$63 396	\$77 664	\$83 174	\$81 013	\$78 306	\$75 085	\$73 124	\$70 553	\$66 327	\$61 698	\$56 624	\$43 745
(1st Window)	\$0	\$0	\$0	\$0	\$13 333	\$60 000	\$133 333	\$180 000	\$206 667	\$206 476	\$205 787	\$204 255	\$200 365	\$197 530	\$194 373
(2nd Window)	\$3 950	\$15 688	\$46 763	\$63 396	\$77 664	\$83 174	\$81 013	\$78 306	\$75 085	\$73 124	\$70 553	\$66 327	\$61 698	\$56 624	\$43 745
Sub Total Operating Account Applications	\$403 950	\$415 688	\$446 763	\$463 396	\$477 664	\$483 174	\$481 013	\$478 306	\$475 085	\$473 124	\$470 553	\$468 327	\$461 698	\$456 624	\$443 745
Total Applications	\$1 950 603	\$3 503 232	\$4 534 559	\$4 541 550	\$6 856 567	\$11 882 687	\$14 458 053	\$14 432 754	\$13 074 155	\$11 717 362	\$12 390 798	\$8 382 725	\$5 708 905	\$4 309 917	\$2 962 056
Cash Flow for Period	(\$1 288 126)	(\$776 698)	(\$72 572)	\$170 255	\$1 446 464	\$4 227 618	\$7 699 488	\$10 814 234	\$12 804 808	\$15 660 025	\$15 792 552	\$16 725 819	\$17 030 758	\$17 034 679	\$16 612 449

6 Month US\$ LIBOR at 5/22/98 5.6875%
Average Annual Weighted Deposit
Rate at Nepalese Commercial
Banks 8/97 through 11/97 (estimate)

Appendix B

Revenue Coverage in the Escrow Account

The amount of funds to be placed in the escrow account can be determined by estimating the expected revenues of the Investment Enterprise per megawatt (MW) and increasing the revenues by a factor to reflect the variances and uncertainties regarding whether or not these monies would be actually placed into the account. Mathematically, this can be expressed as follows:

$(Rs \times /kWh \cdot 8760 \text{ hours/year} \cdot \text{plant load factor } y\%)/1,000 = \text{estimated average Investment Enterprise revenues per MW}$

Many private power project developers and lenders have indicated that they would not be satisfied with a 1:1 ratio of revenue coverage in the escrow account. These project sponsors seek a "safety margin" equivalent to an additional ten (10) to fifty (50) percent of revenues into the escrow account. The reasons cited for needing this safety margin are purchasers' lack of experience in funding escrow accounts and the variances in revenues that are anticipated to occur over the period of the Power Purchase Agreement. These variances could occur because of fluctuations in electricity sales due to purchaser performance, or economic cycles/demand fluctuations at the user end. Thus:

$\text{escrow amount/MW} = \text{Investment Enterprise revenue/MW} \cdot \text{safety margin}$

Appendix C

Guidelines for Project/Loan Monitoring During the Construction Phase

C1 Responsibility

The Fund Administrator is responsible for monitoring all projects receiving PDF financing. The Fund Administrator would assess the Investment Enterprise a Project Monitoring Fee equivalent to three quarters of one (¾) of its yearly outstanding balance, provided that the annual fee not exceed US\$50,000.

C2 Scope

The Fund Administrator would monitor a project through the initiation, construction and operational phases until repayment of the loan.

The Fund Administrator's monitoring role during the initiation and construction phases of the project covers all activities from the signing of the loan agreement to the commissioning of the facility. These phases of the project may be expected to last for two (2) to five (5) years.

C3 Approach

The Fund Administrator would require the Investment Enterprise to prepare and submit to the Fund Administrator regular reports on the progress of the project. Reports should be prepared by the Investment Enterprise on a monthly, quarterly and annual basis. In addition, the Fund Administrator or its consultants would visit the site monthly during construction.

In addition to the above, the Fund Administrator should maintain informal, regular and frequent contact with the Investment Enterprise and relevant HMGN entities involved in the project. This contact is necessary in order to identify any potential problems at an early stage and to develop good working relationships with all persons and organizations involved in the project. The Fund Administrator's project monitoring reports would be made available as required.

C4 Monitoring During the Construction Phase

The main objectives of project monitoring during the construction phase are to assess whether

- ▶ Progress on construction is proceeding in accordance with the implementation plan
- ▶ Project costs are in line with the financing plan
- ▶ Loans are utilized in accordance with the conditions set out in the Loan Agreement

Following the review of the above information, the Fund Administrator would, if required, evaluate the impact of any construction delays, cost overruns or breaches in loan conditions. The Fund Administrator would

determine actions that should be taken to mitigate the impact of any implementation problems. In the case of loan related breaches, the Fund Administrator would instruct the Investment Enterprise on the actions to be taken to rectify the situation. In other cases, the Fund Administrator would, if required, and in consultation with other lenders, agree with the Investment Enterprise on steps required for the project to fulfill its objectives.

Monitoring activities during the construction phase would be carried out monthly, quarterly, annually, and periodically.

C5 Monthly Monitoring

The main monitoring activities to be undertaken by the Fund Administrator on a monthly basis include

- ▶ Review of the report submitted by the Investment Enterprise, summarizing physical progress and detailing expenditures
- ▶ Review of the physical progress report on the basis of the site visit
- ▶ Review of the expenditure report and verification of the supporting documentation provided. The Fund Administrator should reserve the right to require external auditors to carry out this function.
- ▶ Discussions with the Investment Enterprise and sponsors to identify solutions to any identified problems without a major financial impact
- ▶ Preparation of studies of the potential impact of any identified problems with a major financial impact

The scope and content of the reports submitted by the Investment Enterprise would be determined by the Fund Administrator. Appendix E presents guidelines for the type of information the Investment Enterprise should provide in its monthly report.

The Fund Administrator would undertake monthly site visits and review the project's physical progress. If satisfied, the Fund Administrator would endorse the Investment Enterprise's monthly report. If not satisfied, the Fund Administrator would prepare a report identifying the perceived problems and recommend remedial action.

C6 Quarterly Monitoring

For each project, the Fund Administrator would prepare a quarterly report for submission to the PDF Investment Committee and IDA. This report would serve as the principal formal documentation of implementation progress and would be used

- ▶ By the Fund Administrator as part of its longer term financial planning
- ▶ By HMG, IDA and other interested parties as a source of project information

Although the form and content of these quarterly reports would be determined by the Fund Administrator, at a minimum they should include four sectors: (1) an assessment of physical progress, (2) an estimate of future progress, (3) a summary of project expenditures, and (4) an overall project review.

The assessment of physical progress would summarize the results of the monthly progress reviews, incorporating any special studies of the impact of specific delays and overruns. This section of the quarterly report would include, *inter alia*

- ▶ A review of the Investment Enterprise's assessment of progress against plans
- ▶ An identification of key target dates achieved or missed
- ▶ A review of the certification of the work of subcontractors
- ▶ Comments on the quality of work completed

- ▶ A review of the impact of any changes to physical construction plans
- ▶ If applicable, suggestions regarding the resolution of outstanding problems

The estimate of future progress would take into account any delays already experienced and their likely cumulative effect. In addition, the results of any impact studies undertaken, and of consequent discussions with the Investment Enterprise and sponsors would be summarized. Where necessary, a revised implementation plan, with actions for resolving existing delays, if any, would be specified.

The summary of project expenditures (together with a schedule of financing disbursements) would be based on the reviewed monthly reports. This summary would distinguish between direct payments to local manufacturers and contractors and foreign exchange payments. Cost overruns would be identified and implications for project viability assessed. Finally, proposals for remedial action, should any be required, would be examined.

C7 Annual Monitoring

The Investment Enterprise should submit a detailed annual report to the Fund Administrator. This report would contain consolidated information from the monthly submissions, and audited financial statements for the Investment Enterprise.

The Fund Administrator would use the Investment Enterprise's annual report together with its own quarterly project reports to prepare an annual report on each project. The Fund Administrator's annual report would contain:

- ▶ A statement of disbursement, expenditure, and physical progress during the year
- ▶ An analysis of variances from plans and remedial action taken
- ▶ Audited financial statements for the Investment Enterprise

C8 Periodic Monitoring

The Fund Administrator would undertake a periodic review of the Investment Enterprise's reports and supporting documentation. This review would include:

- ▶ The Investment Enterprise's accounting reports, using external auditors if appropriate
- ▶ The consistency of project expenditure and physical progress
- ▶ Compliance with loan agreements and other contractual obligations such as procurement procedures
- ▶ Project expenditure against the financial projections
- ▶ Future cash requirements and the arrangements for ensuring that these are met

This periodic review would identify areas of actual or potential cost overrun. In the absence of such overruns or if they are both minor and legitimate, the monthly report would be endorsed by the Fund Administrator. If any such cost overrun appears likely to have a significant effect on the project, the Fund Administrator would prepare a report assessing its potential impact on project cash flows and the total financing requirements.

Minor problems, i.e., those considered unlikely to have a significant financial effect on the project, identified in physical implementation of financing would be raised by the Fund Administrator with the Investment Enterprise and, if necessary, the sponsors, in order to assess the potential impact on the project and to identify possible solutions. These minor problems, and the selected remedial action taken, would be specifically monitored by the Fund Administrator in subsequent months.

Problems which are likely to have a significant financial effect on the project would be the subject of special reports prepared by the Fund Administrator for the PDF Investment Committee, and would also be fully discussed between the Fund Administrator, the Investment Enterprise and its sponsors. The sponsors would be required to prepare plans for remedial action which would include a recalculation of the project's viability, financing arrangements, and implementation plans. The Fund Administrator would then subject the revised plans to a detailed reevaluation. Appropriate remedial action would be taken in accordance with the Loan Agreement.

Appendix D

Guidelines for Project/Loan Monitoring During the Operations Phase

D1 Responsibility

The Fund Administrator is responsible for monitoring all projects receiving PDF financing. Accordingly, the Fund Administrator would assess the Investment Enterprise a Project Monitoring Fee equivalent to three quarters of one (¾) of its yearly outstanding balance, provided that the annual fee not exceed US\$50,000.

D2 Scope

The Fund Administrator's role during the subsequent operational phase of a project is less detailed than during initiation and construction. For each project, the Fund Administrator's staff must maintain a separate file which covers procurement, disbursements and drawdowns from PDF sources. The Fund Administrator's monitoring activities during the operational phase would include verifying that the specified in the construction contract has been carried out as planned, that the procurement has been competitively bid through World Bank-eligible countries, and that the overall cost is within budget. The monitoring role would continue until the PDF loan has been repaid.

D3 Approach

The Fund Administrator would require the Investment Enterprise to prepare and submit to the Fund Administrator regular reports on the progress of the project. Reports should be prepared by the Investment Enterprise on a monthly, quarterly and annual basis. In addition, the Fund Administrator or its consultants would visit the site at least twice a year, or more frequently if required, after completion of construction.

In addition to the above, the Fund Administrator should maintain informal, regular and frequent contact with the Investment Enterprise and relevant HMGN entities involved in the project. This contact is necessary in order to identify any potential problems at an early stage and to develop good working relationships with all persons and organizations involved in the project. The Fund Administrator's project monitoring reports would be made available as required.

D4 Monitoring During the Operations Phase

The main objectives of project monitoring during the operations phase are

- ▶ To review the operation and maintenance of project assets
- ▶ To protect the financial interests of the PDF
- ▶ To protect the interests of HMGN

These objectives would be achieved by the Fund Administrator through monitoring of

- ▶ The project's technical performance criteria, such as technical tolerances, actual energy output against planned output and plant capacity
- ▶ The financial performance of the Investment Enterprise, in particular its ability to meet future expenditure requirements
- ▶ Compliance with contractual arrangements made with the PDF Investment Committee, particularly loan repayments and liquidity obligations

Monitoring activities in the operations phase involving both technical and financial reviews would be carried out monthly, quarterly, annually, and periodically

D5 Monthly Monitoring

Monthly reports on individual projects would be provided to the Fund Administrator as follows

- ▶ The Fund Administrator's "Finance and Disbursement Section" would provide a monthly report on loan account transactions
- ▶ The Investment Enterprise would provide monthly information on energy demanded and supplied, and any penalties imposed or bonuses paid. In addition, the Investment Enterprise would confirm that there have been no breaches of any agreements or repayment defaults

In the event that the Fund Administrator reports any repayment default or the Fund Administrator receives a notification of any breach of agreements, the Fund Administrator would arrange for an investigation of the causes and, through discussions with the Investment Enterprise and sponsors, initiate appropriate action on these monthly reports

Special reports on major issues may be prepared by the Fund Administrator for the PDF Investment Committee of Directors and would be discussed in full between the Fund Administrator, the Investment Enterprise and its sponsors

D6 Quarterly Monitoring

The Investment Enterprise would submit a quarterly report to the Fund Administrator which would include the following information

- ▶ Output for the quarter
- ▶ Output available but not utilized
- ▶ Major maintenance work undertaken
- ▶ Revenue for the quarter
- ▶ Operating and maintenance expenditures relative to annual budgets
- ▶ Actual capital expenditure relative to plans
- ▶ Management accounts for the quarter, including
 - the balance sheet
 - the profit and loss account
 - the cash flow statement
 - any other matters which should be brought to the attention of the Fund Administrator

Upon receipt of the quarterly report, the Fund Administrator would undertake the following

- ▶ Review actual output, outages and maintenance activities relative to the plan
- ▶ Check revenue calculations and assess whether the contractual obligations to the PDF Investment Committee are being adhered to
- ▶ Review operating and maintenance expenditures relative to annual budgets and relative to any technical assessment of requirements
- ▶ Review capital expenditures relative to plans
- ▶ Review the management accounts relative to annual budgets and financial projections

The Fund Administrator would then prepare a summary quarterly report for distribution to the PDF Investment Committee and IDA. This report would include the results of the analysis of the information supplied by the Investment Enterprise, together with a statement of the current status of the project's PDF loan and other loans

D7 Annual Monitoring

A formal site visit (in addition to any other visit which might prove necessary from time to time) would be undertaken by the Fund Administrator on an annual basis. This visit would include a technical review of the physical condition of the project's plant and equipment to ascertain

- ▶ Whether all appropriate repairs and maintenance work have been undertaken
- ▶ That the capacity of the plant is unimpaired
- ▶ A financial review of the Investment Enterprise's audited financial statements, annual budgets, and cash flow projections to determine
 - whether the Investment Enterprise can continue to meet its contractual commitments
 - whether the Investment Enterprise can meet future loan repayments and retain adequate forward liquidity

Within six (6) months of the annual site visit, the Fund Administrator would prepare and send to the PDF Investment Committee and IDA a report which should contain

- ▶ The Investment Enterprise's audited financial statements
- ▶ A review of operating and financial performance, including a discussion of major occurrences during the year and their potential impact
- ▶ A statement of all debt service and dividend payment transactions

Appendix E

Guidelines for Insurance

E1 General

The PDF Administrator would have no liability to insure project assets. However, the Fund Administrator must ensure that each Investment Enterprise maintains adequate insurance to protect the financial involvement of the PDF during the life of the loan.

The PDF Administrator must ensure that all requirements of insurance are complied with. Failure by the Investment Enterprise to obtain the insurance or certificates of insurance required does not relieve the company of the insurance requirements. If the Investment Enterprise should fail to procure or maintain any insurance required, then the Fund Administrator shall have the right to procure such insurance and be reimbursed through the Escrow Account for all costs incurred by the Fund Administrator.

It should be a condition of the loan agreement that adequate insurance be provided by the Investment Enterprise. Adequate insurance coverage includes coverage in the following areas:

- ▶ Assets in transit during the construction phase
- ▶ Assets in progress during the construction phase
- ▶ Assets once construction is completed
- ▶ Liability insurance during construction and operation

The Investment Enterprise's name on the insurance document(s) must be the same as that appearing on all loan agreements. Evidence of insurance must be submitted to the Fund Administrator and proof of continued insurance must be submitted annually. Loss-payee on the insurance policy should be both the Investment Enterprise and the lenders' Trustee.

The Fund Administrator must approve of the insurance coverage required to protect the financial involvement of the PDF during the life of the loan and would base its requirements on those of the loan agreement.

The Fund Administrator would advise the Investment Enterprise regarding the insurance requirements early in the loan negotiations in order to give the Investment Enterprise adequate time to arrange coverage before any part of the loan is drawn.

The Investment Enterprise shall take out and maintain with responsible insurers such insurance, against such risk and in such amounts, as shall be consistent with sound business practices. Without limitation, such insurance shall cover hazards incident to the acquisition, transport, delivery, and installation of goods financed out of the proceeds of the PDF loan in addition to lost profits which may accrue.

The Investment Enterprise shall be given the opportunity to obtain the insurance from insurance companies of its choice provided that the proposed insurance company is acceptable to the Fund Administrator. The Fund Administrator reserves the right to insist on insurance from a company acceptable to it as a condition of the PDF loan.

For each loan agreement, the Fund Administrator would develop a checklist which would be used to confirm that all required insurance has been obtained before any loan disbursement is made and to ensure that adequate insurance coverage is maintained throughout the life of the loan

The Fund Administrator may participate directly in the negotiations between the Investment Enterprise and the insurance broker(s) in drawing up the specifications of the insurance policies during the loan negotiation phase

The Fund Administrator shall maintain a diary system which would serve as a reminder of when renewal of particular insurance and inform the Investment Enterprise of the due date thereby allowing the Investment Enterprise sufficient time to conduct renewal negotiations with the insurers and maintain adequate coverage

E2 Insurance for Assets in Transit During the Construction Phase

The Fund Administrator should advise the Investment Enterprise that all shipments of purchased equipment are to be made via CIF or FOB and that in every case insurance must be arranged by the Investment Enterprise with an insurance company acceptable to the Fund Administrator. Proof of insurance would be required in the form of an insurance policy or insurance certificate

The Fund Administrator should verify that each set of documents accompanying a letter of credit contains an insurance certificate or insurance policy with the sum insured at least equivalent to the full replacement cost of the goods in transit

“All Risks Marine Cargo” insurance should cover all plant and equipment, shipped to and destined to become part of the project, on a warehouse to warehouse basis, from physical loss or damage while in transit and including delivery at the project site. The amount to be insured should be no less than the full replacement cost

E3 Insurance for Assets in Progress During the Construction Phase

The Fund Administrator should require the Investment Enterprise to maintain adequate insurance coverage of all assets on site during construction. Insurance required would be “Contractors All Risk” insurance. The amount of loss covered should be the contract value and at least equal to the total replacement cost of the asset, including installation

The Investment Enterprise must also maintain “Public Liability” insurance to cover against legal liability to third parties for bodily injury or damage to property. The amount of coverage shall be at least US\$[] per occurrence and US\$[] in the aggregate covering legal liability for bodily injury, death and property damage caused by the project, the Investment Enterprise’s vehicles, tools, equipment or personnel including those of its sub-contractors

The Investment Enterprise must also maintain a loss of profit insurance to provide against the loss of revenue following delay in the start of commercial operations as a direct result of physical loss or damage during the manufacture, delivery, construction or operational testing to the extent that such loss is covered under “All Risks Marine Cargo” or “Contractors All Risk” insurance. The amount of coverage shall be sufficient to cover the debt service costs, other fixed costs, and any and all penalty payments to the purchaser of the services and others as a result of the delayed completion of the project

Any risks which are specifically excluded from the policy proposed by the Investment Enterprise or imposed by the insurer must be identified. The Fund Administrator would need to consider whether or not specific cover is required for these areas (for example, earthquake, flooding, terrorism or civil disturbance) and may require the Investment Enterprise to obtain cover through an insurance company. The Fund Administrator may wish to seek specialized advice from a risk management company in order to achieve the maximum possible cover.

The Fund Administrator should require the Investment Enterprise to maintain adequate insurance coverage of the plant assets, once the plant is completed and commissioned. "All Risk" insurance is required with a limit in an amount not less than the replacement cost of the complex. The policy should include transit coverage for plant assets purchased within Nepal and not subject to the "All Risks Marine Cargo" coverage. The policy shall include coverage of the Investment Enterprise's construction equipment.

Insurance must also be provided to cover loss of revenue, all penalty payments to the purchaser and any other penalties associated with interruption of plant operation.

The Investment Enterprise must also maintain "Fixed Asset – Fire and Perils" insurance which shall cover all buildings, contents, machinery stocks, fixtures, spare parts, fittings, and all other personal property. The insured amount should be the replacement value of the fixed assets at commissioning date.

The Investment Enterprise must maintain machinery breakdown insurance in the amount of the full replacement value of all machinery, plant, boilers, transformers and ancillary equipment.

The Investment Enterprise must maintain "Public Liability" insurance to cover against legal liability to third parties for bodily injury or damage arising out of the ownership, operation and maintenance of the project. The insurance should provide adequate coverage for any one occurrence.

The Investment Enterprise must maintain "Loss of Profit" insurance to provide against the loss of revenue from a reduction in power sales and/or capacity payments as a result of (1) loss or damage to the project caused by a fire or peril covered under the "Fixed Assets – Fire and Peril" insurance policy, or (2) loss or damage due to machinery breakdown. The insurance should cover all expected losses and all penalty payments to purchaser and others as a result of the reduced operation of the project.

E4 Liability Insurance

The Investment Enterprise must provide adequate liability insurance for injury on site. In particular, "Workmens' Compensation" insurance applicable to industrial illness or injury to cover all employees in accordance with the laws of Nepal.

The Investment Enterprise must maintain adequate comprehensive insurance for the use of all vehicles owned, hired or used by the Investment Enterprise with bodily injury and property damage combined single limits of at least US\$[] per occurrence.

The Investment Enterprise must maintain excess "Umbrella Liability" insurance with single limit of at least US\$[] per occurrence in excess of the limits provided for in "Workmens' Compensation" insurance, comprehensive "Third Party Liability" insurance, and comprehensive "Automobile Liability" insurance.

Subcontractors must maintain adequate "Workmens' Compensation" insurance for their employees in the name of the subcontractor

Appendix F

Guidelines on the Content of Project Companies' Monthly Progress Report

The Investment Enterprise's monthly submission should provide the following information for each implementation activity

- ▶ Physical progress, including
 - planned progress to date
 - actual progress to date
 - achievement of key target dates
 - reasons for delays experienced
 - forecast progress in the next period
 - likelihood of achieving future key target dates

- ▶ Actual expenditures (local and foreign), including
 - planned disbursement of project finance
 - actual disbursement of project finance
 - planned capital expenditure
 - planned payments to contractors
 - actual payments to contractors
 - reasons for cost overruns experienced

- ▶ Forecast of expenditures in the next period, including
 - forecast of project finance disbursement
 - forecast of capital expenditures
 - forecast of local currency requirements
 - forecast of foreign currency requirements

- ▶ Overall project status, including
 - planned disbursement of project finance to date
 - total disbursement of project finance to date
 - planned project expenditures to date
 - total project expenditures to date
 - Investment Enterprise's bank statements
 - reconciliations of project accounts

In addition to the above, each monthly progress report by the Investment Enterprise should include

- ▶ A statement of conformity with loan conditions during the month
- ▶ Confirmation that valid insurance coverage has been maintained in compliance with the loan agreement
- ▶ Confirmation that there have been no breaches in agreements

Appendix G

Guidelines for Accounting Requirements; Guidelines for Fund Administrator Overhead Charges and Suggested Apportionment Bases, and Suggested Chart of Accounts for the PDF

82

Appendix G1

Guidelines for Accounting Requirements

G1 1 Introduction

The Administration Agreement between HMGN and the Fund Administrator requires the latter to provide HMGN with

- ▶ Audited accounts, in respect of each financial year, for the PDF (the Credit Agreement, on the other hand, will require the Fund Administrator to provide audited accounts, in respect of each financial year, for the PSAAU)
- ▶ Such other information as HMGN may from time to time concerning (i) the PDF, (ii) the implementation of the Administration Agreement, and (iii) any project or PDF loan

In addition to the above, the Administration Agreement requires the Fund Administrator, on behalf of HMGN, to provide IDA with the records and accounts required under the relevant agreements

The Funding Agreement between HMGN and IDA requires HMGN to provide to IDA

- ▶ Within six (6) months of the end of each fiscal year, copies of the audited accounts of the PDF
- ▶ Within thirty (30) days of the end of each quarter, a report on the progress of the PDF during the quarter
- ▶ Such other information concerning the PDF as IDA shall require from time to time

In addition to the above, IDA requires that detailed records and accounts be maintained concerning the transactions of the PDF and that these accounts and records be maintained in accordance with internationally accepted accounting principles

The Fund Administrator's accounting procedures for the PDF and the PSAAU must be capable of meeting (i) the reporting and accounting requirements of the Administration Agreement, (ii) internationally accepted accounting principles, and (iii) management information requirements

The Fund Administrator would maintain the books and records required to reflect the indebtedness of HMGN to IDA. The accounting principles, practices and procedures described below are based on this assumption

The main books and records required to satisfy the above requirements would be maintained by the PSAAU's "Finance and Disbursement Section" on behalf of the Fund Administrator and the PDF. A charge for this service would be made by the Fund Administrator to HMGN for subsequent reimbursement

G1 2 Financial Reporting Guidelines

In order to meet the requirements described above, the books and records maintained by the Fund Administrator should be maintained in accordance with the following guidelines

- ▶ The accounts of the PDF and those of the PSAAU should be maintained separately. Similarly, the accounts of the PDF and PSAAU should be maintained separately from those of the Fund Administrator's home institution

- ▶ The accounts of the PDF and those of the PSAAU should be maintained on an accrual basis
- ▶ The accounts must be maintained in U S dollars

In accordance with these guidelines, certain accounting practices would be followed by the Fund Administrator These are described below

The income and expenditure statements of the PDF and the PSAAU shall disclose the sources of income and expenditure In the case of the PDF, the surplus arising in the income and expenditure statement shall be transferred to the retained earnings of the PDF pending disposition instructions from HMGN In the case of the PSAAU, the income and expenditure statement shall be prepared on a “no profit/no loss” basis

The Balance Sheet shall show, arranged under convenient headings, the assets and liabilities of the PDF and the PSAAU as at the close of the accounting year

The Finance and Disbursement Section of the PSAAU would follow the Chart of Accounts for the PDF and PSAAU as suggested in Appendix G3

Business expenditures would be recorded in the books through the use of vouchers These vouchers would be prepared by one person and verified by an independent person before submission to the authorized signatory of the Finance and Disbursement Section for authorization After posting, these vouchers and support documents would be properly filed for future reference purposes

A flow chart for posting into the accounts would be as follows Voucher, General Ledger, General Subsidiary Ledger, and Detailed Subsidiary Ledgers/Registers

The main books and records that the Fund Administrator would need to maintain on behalf of the PDF and the PSAAU are General Ledger, General Subsidiary Ledger, Loans Receivable Ledger, Loans Payable Ledger, and Fixed Assets Register In addition to the above, the Fund Administrator would need to set up and maintain various subsidiary and memorandum accounts to support the transactions recorded in the main ledgers described below

G1 3 Main Accounting Records

General Ledger The general ledger would contain summarized control accounts of the PDF and the PSAAU

General Subsidiary Ledger The general subsidiary ledger would be maintained for recording details of entries to earnings, expense, accrual and other accounts for which separate ledgers/registers are not maintained

G1 4 Loans Receivable Leger

Loans receivable relate to loans made from the PDF to Project Companies and PCIs The loans receivable ledger would detail, *inter alia*, the following information on each loan

- ▶ Standing Information
 - name and address of principal borrower (Investment Enterprise or PCI)
 - type of loan and amount
 - interest rate and method of calculation

- commitment fee rate and method of calculation
 - description of fees and other charges
 - repayment structure for interest and principal
- ▶ Transaction Data
- commitment charges in U S dollars
 - fees and charges
 - amount of drawdown in U S dollars, fixed at the exchange rate at the time of repayment. If disbursements are made in a different currency, the exchange rate sell rate at the time of disbursement would prevail
 - amount repaid in Nepalese rupees
 - interest charges in Nepalese rupees

An account would be established in the loans receivable ledger when a duly authorized copy of the loan agreement is sent to the PSAAU's Finance and Disbursement Section. The accounts for the loan would be maintained in U S dollars. In the case of any changes in the terms and conditions and/or agreement, a duly authorized copy of the revised/supplemental agreement would be passed to the manager of the PSAAU to update the ledger. One member of the PSAAU accounting staff would enter loan details and a second would independently verify that the entry is correct.

Drawdowns requested by Project Companies should be recorded in U S dollars. Interest due would be calculated in U S dollars on the U S dollar balance in accordance with the terms of the loan but paid in the Nepalese rupee equivalent based on the exchange rate on the date of repayment.

The PSAAU's Finance and Disbursement Section would submit bills to the escrow agent responsible for the management of the escrow account. These bills must be received by the escrow agent not less than fifteen (15) days prior to the due date. Each month the ledger would be reviewed and a report of overdues prepared. The PSAAU's Finance and Disbursement Section would send appropriate reminders to the borrowers.

On receipt of repayments, checks would be paid into the PDF's account maintained by a multinational bank or the Nepal Rastra Bank which would ensure that (i) all checks are recorded immediately, (ii) all checks are paid into the PDF account promptly, and all checks are credited to the correct borrower's account.

G1.5 Loans Payable Ledger

Loans payable relates to loans to the PDF by IDA through HMGN. The loans payable ledger would detail, *inter alia*, the following information on each loan, as appropriate:

- ▶ Standing Information
- name of lender (HMGN, but with details of each funding agency, i.e., IDA and future cofinanciers)
 - loan amount
 - interest rate and method of calculation
 - other charges
 - repayment structure for interest and principal

- ▶ Transaction Data
 - amount drawn down in U S dollars
 - loan repayment in Nepalese rupee equivalent to HMGN
 - interest accrued but not paid
 - other charges payable

Accounts would be created in the loans payable ledger on the signing of the Administration Agreement between HMGN and the Fund Administrator. At the same time all standing data would be drawn from the Administration Agreement and any supplemental agreement between the Fund Administrator and HMGN. A duly authorized copy of the Administration Agreement is required to open accounts. One member of the PSAAU's accounting staff would enter the loan details and a second would independently verify that the entry is correct.

The Fund Administrator would request drawdowns through the establishment of letters of credit from IDA in accordance with its disbursement procedures. Once the disbursement is made, IDA would notify the Fund Administrator which would fix the PDF's U S dollar liability. The Fund Administrator would also inform HMGN of the amount of the foreign currency loan disbursed.

Upon receipt of notification of a drawdown, the PSAAU's Finance and Disbursement Section would enter the transaction in the IDA account in the loans payable ledger. The entry would show both the date of the transaction and the amount in U S dollars (for memorandum purposes).

Interest would be calculated on the U S dollar principal amount. On repayment to HMGN, the account would be credited with the Nepalese rupee value.

Each month the ledger would be reviewed and a report prepared of any repayments due to HMGN. The Fund Administrator would arrange the transfer from the PDF account to the debt service account of HMGN maintained with Citibank.

G1 6 Fixed Assets Register

The Fixed Assets Register would contain the details of each type of fixed asset of the PSAAU. The register would contain such information as date of purchase, cost price, accumulated depreciation, etc. All fixed assets of PSAAU would be depreciated in accordance with the Fund Administrator's home institution's current practices.

G1 7 Charging Arrangements

An important requirement of the Administration Agreement is for the Fund Administrator to provide HMGN with information regarding the PSAAU's activities. Although the PSAAU is a part of the Fund Administrator's home institution, it is important that PSAAU activities and transactions be maintained separately from those of the Fund Administrator's home institution. As detailed in the Administration Agreement between HMGN and the Fund Administrator, the remuneration recoverable by the PSAAU is as follows:

- ▶ The negotiated administration/management fee
- ▶ Capital expenditures including office equipment, computers and other equipment
- ▶ General and administrative expenses
- ▶ Salaries and benefits of the PSAAU's employees
- ▶ Consulting services

The Fund Administrator shall submit invoices to HMGN on a quarterly basis. These invoices would describe in reasonable detail all reimbursable costs incurred, including man-hours worked and types of services. For the first two (2) years of PDF operation, reimbursable expenses would be paid by resources provided by IDA. Thereafter, the Fund Administrator would be permitted to recover its reimbursable expenses from reflows to the PDF.

Administration Fees For administration and management of the PDF, HMGN shall pay the Fund Administrator a fee of not more than one-half of one (1/2) percent per annum of the cumulative amounts disbursed and outstanding and not in default at the end of every calendar year. This fee would be paid within thirty (30) days from end-month of the year in which the Administration Agreement is signed.

The PDF's proposed fees and charges for its "first window" shall be fixed for each loan and will generally be based on the following structure:

- ▶ A loan application fee equivalent to US\$5,000. This fee is paid only once and is non-refundable.
- ▶ A loan documentation fee: one-quarter of one (1/4) percent of the loan amount, non-refundable, plus out-of-pocket costs of travel and fees for consultants and legal specialists employed for the due diligence process. This one-time, non-refundable fee is payable by the Investment Enterprise at financial closure.
- ▶ Commitment charges of three quarters of one (3/4) percent per annum. The first charge would be calculated on the undisbursed amount of the PDF loan from the date of the PDF loan agreement. For subsequent years, the charges would be calculated on the undisbursed amounts at the same day as determined for the first year.
- ▶ A project monitoring fee: three quarters of one (3/4) of the yearly outstanding balance, provided that the annual fee not exceed US\$50,000.
- ▶ A standby financing facility fee: one (1) percent.
- ▶ A take out finance facility fee: one quarter of one (1/4) percent.

This structure is in line with fees and charges by infrastructure lending programs. In the event that the fees charged to borrowers, as per the proposed fee structure above, do not totally cover the costs and expenses of the Investment Committee and the Fund Administrator, particularly during the initial years of PDF operation, part of the IDA credit should be used to cover these costs subject to a ceiling to be negotiated with IDA. However, in order to be self-sustaining, the PDF should earmark a portion of its future interest income to cover operating costs.

The fee structure for the PDF's "second window" would be assessed on a case by case basis. Fees and charges for the "second window" could, for example, be absorbed in the interest rate charged by Participating Credit Institutions.

These charges and fees, including the ceilings, would be subject to escalation at U.S. inflation rates. The adjustment mechanism would be detailed in the PDF loan agreement.

Employee Salaries and Benefits Separate and complete records must be maintained for each PSAAU employee detailing man-hours worked.

General and Administrative Expenses The PSAAU's Finance and Disbursement Section would maintain separate records of actual expenses incurred on behalf of the Fund Administrator. Accordingly, prior approval of the PSAAU manager would be obtained before making any payment on behalf of PSAAU to consultants and other suppliers of services directly obtained by the Fund Administrator. Costs related to the conduct of external audits and internal control reviews of the Fund Administrator and the PDF are included in this category.

Overhead Charges Overhead charges would be reimbursed by HMGN according to determined apportionment bases Appendix F provides guidance regarding the types of overheads the Fund Administrator could incur

Other Internal Services Rendered by the Fund Administrator For other internal services such as legal, accountancy, administration and personnel, the manager of the PSAAU and the Fund Administrator's home institution would mutually devise procedures for charging a fixed amount on a monthly basis

88

Appendix G2

Guidelines for Fund Administrator Overhead Charges and Suggested Apportionment Bases

<u>Expenses</u>	<u>Apportionment Base</u>
Building expenses	Area basis
Stationary and supplies	Staff numbers
Postage	Actual costs
Telecommunications	Specific telephones allocated to PSAAU
Auditors and legal fees	Actual costs
Travel expense	Actual costs
Vehicle expenses	Actual costs
Employees activities	Staff numbers
Consultancy charges	Actual costs
Insurance (benefits)	Staff numbers
Sundries	Staff numbers
Computer software	Actual costs
Repairs and maintenance	Staff numbers
Office equipment	Actual costs
Installation	Actual costs
Insurance (equipment)	Actual costs
Depreciation	On fixed assets (if any)
Training	Staff Numbers

Appendix G3

Suggested Chart of Accounts for the PDF

Nepal Power Development Fund

Type of Accounts		Reporting Classification	
General Leger Account	General Subsidiary Ledger Account	Balance Sheet	Income & Expenditure Statement
Debit Accounts			
1 Loans Receivable	Type of Loan	•	
2 Interest Earned Not Received	Type of Loan	•	
3 Current Account with Multinational Bank or Nepal Rastra Bank		•	
4 Fees Received	Type of Fees	•	
5 Interest Charges	Borrowing Account		•
Credit Accounts			
6 Loans Payable	Borrowing Account	•	
7 Interest Accrued	Borrowing Account		
8 Checks under Clearance	Name of Investment Enterprise	•	
9 Interest Income	Type of Loan		
10 Fee Income	Application Fee Documentation Fee Commitment Fee Project Monitoring Fee Standby Facility Fee Take-Out Finance Facility Fee		• •
11 Retained Earnings		•	

Appendix H

Audit Guidelines

H1 Introduction

Audits of the Power Development Fund (PDF) are necessary in order to provide assurance to the International Development Association (IDA) investing in the PDF that its investment is being properly managed and that those who have been made responsible for managing the PDF are carrying out their stewardship role efficiently and effectively. The greater the auditor's independence from those responsible for managing the PDF, the greater the investors' confidence in the management of the PDF and in the information being provided with regard to the PDF's income, expenditures, assets and liabilities.

H2 Background

It is a requirement of the Administration Agreement that the financial statements and reports that must be produced to record income, expenditure, assets and liabilities of the PDF, together with the underlying books and records for the PDF upon which the statements have been prepared, must be subject to an external audit each fiscal year. This is also required by the Loan Agreement between IDA and His Majesty's Government of Nepal (HMGN).

In compliance with the obligations of the Loan Agreement between IDA and HMGN and future co-financiers of the PDF, the audit must be carried out in accordance with internationally accepted auditing standards consistently applied by independent auditors that are acceptable to IDA. Within six (6) months of the end of each fiscal year, a copy of the auditors' report must be furnished to IDA together with certified copies of these statements.

In addition to the above, HMGN may from time to time and in order to meet a request from IDA or future co-financiers, request other information concerning the records, accounts and statements of the PDF. This information must also be subjected to an independent audit. HMGN's Auditor General is also entitled to audit the accounts of the PDF.

H3 Approach

To discharge its responsibility, the Fund Administrator must establish procedures for the efficient and effective internal control of the PDF and the Private Sector Account Administrative Unit's (PSAAU) activities. The objectives of those procedures are to

- ▶ Provide assurance to IDA and future co-financiers that their investment is properly managed
- ▶ Identify when the various covenants and agreements that govern the operation and management of the PDF have not been followed
- ▶ Identify improvements that can be made in the management of the PDF and the execution of PSAAU's activities
- ▶ Provide assurance to the senior management of the Fund Administrator's home institution that the PSAAU is being managed efficiently and effectively

The most effective approach to the achievement of the above objectives is for the Fund Administrator to establish internal control procedures that provide for the audit of both its and the PSAAU's systems and activities on an on-going basis and to contract a firm of independent auditors, external from those of the Fund Administrator's home institution, to carry out the annual audit each fiscal year

The advantages of having internal audit as well as external audit are

- ▶ To identify weaknesses in, and non-compliance with, the Fund Administrator's and PSAAU's procedures during the course of the year thereby facilitating remedial action at an early opportunity
- ▶ To reduce the scale and cost of the annual audit by providing assurances to the external auditors that the Fund Administrator and PSAAU, through their internal audit function, has established procedures and practices to identify the weaknesses and non-compliance referred to above

H4 Objectives of Internal and External Audits

Internal and external audit would carry out complementary activities which, if properly coordinated, would assist in achieving the objectives of audit. The degree to which internal and external audit activities are complementary would depend on the extent to which the external auditors are satisfied with the work carried out by the internal audit.

The main objective of internal audit would be to provide assurance to the PDF Investment Committee and the senior management of the Fund Administrator's home institution as to the probity of PSAAU activities. However, it would also have a wider role in promoting the efficient operation of the PDF and the PSAAU. It should work in cooperation with the Fund Administrator's staff to implement efficient operating systems for the PSAAU and to identify areas where efficiency and effectiveness may be increased. The main objective of the external audit is to provide assurance to IDA and future co-financiers that the accounts of the PDF have been prepared in accordance with internationally accepted accounting principles and that they reflect a true and fair representation of the PDF and the Fund Administrator's activities.

Internal audit should be functionally independent of the operations of the PDF and the PSAAU. However, it cannot achieve the same degree of perceived independence as that of external auditors. The work of appropriate external auditors provides all parties, particularly those external to the Fund Administrator's home institution, with confidence as to the strength of internal systems and the reliability of published financial results.

The procedures for internal and external audit are discussed below under the headings of Audit Committee, Internal Audit, and External Audit.

H5 Audit Committee

To provide the independence of the internal and external audit, an Audit Committee should be formed by the PDF Investment Committee with the following roles and responsibilities:

- ▶ Selection of external auditors
- ▶ Agreeing on the work plan for internal auditors and determination of the terms of reference for external auditors
- ▶ Coordination of the work of internal and external auditors and ensuring there is proper liaison
- ▶ Receipt and review of the comments and reports of internal and external auditors
- ▶ Discussion of key issues with senior Fund Administrator staff to identify possible improvements to systems

92

- ▶ Acting as a functional supervisor of the chief internal auditor independent of PSAAU staff whose work the chief internal auditor would be reviewing
- ▶ Evaluation of the performance of the internal audit

The Audit Committee would include the manager of PSAAU and others proposed by the PDF Investment Committee. The committee would meet at least twice per year.

H6 Internal Audit

The objectives of internal audit should be

- (1) To evaluate the operating systems within PSAAU and to ensure that they are adequate for the purpose of
 - safeguarding the assets of the PDF
 - ensuring the accuracy, reliability and timeliness of accounting reports and records
 - ensuring that the actions and decisions of PSAAU staff are in accordance with PDF policies and guidelines
 - assessing the performance of the PSAAU
- (2) To undertake whatever work is necessary to establish that existing systems are being complied with and to ensure that they are achieving the purposes set out in (1) above
- (3) In consultation with the manager of the PSAAU and his operational staff, to propose changes and additions to internal systems to enable them to better meet the purposes set out in (1) above
- (4) To consider whether the PSAAU is attaining its objectives in the most efficient and effective way and to propose and discuss PSAAU management ways in which the activities of PSAAU could be made more efficient and effective

H7 External Audit

The Audit Committee would make a recommendation to the PDF Investment Committee on the appointment of external auditors. Although it would be possible for PSAAU to have separate auditors from the Fund Administrator's home institution, it is more prudent and efficient to use the same external auditors.

Since the funds administered by PSAAU do not form part of the funds of the Fund Administrator's home institution and since a specific audit is required for the PDF and PSAAU, audit work would be additional to that carried out in the auditing of Fund Administrator's home institution. Therefore, it would be necessary to include a specific additional section in the terms of reference of the external auditor.

This section should include

- ▶ Specific references to the PDF and PSAAU as distinct from the Fund Administrator's home institution
- ▶ Time and place of delivery of the audit report
- ▶ A clear description of material to be provided for the audit and the timing of the provision
- ▶ A statement of the scope of the audit
- ▶ A statement that the audit should be undertaken in accordance with international auditing practices
- ▶ Management letter requirements

- ▶ A statement of the need for liaison with internal audit
- ▶ Independence requirements
- ▶ Requirements that the auditors should submit a proposal and work plan

94

Appendix I

Typical Commitments Contained in the Project (Implementation) Agreement

The list of commitments presented here are provided as examples only and are intended to facilitate evaluation of the Investment Enterprise's Security Package

I1 Public/Government Commitments

- ▶ Authorization to do business in the country is a basic provision that recognizes and authorizes the Investment Enterprise to implement a private power generating facility
- ▶ Authorization to generate, transmit and/or distribute electrical energy, which provides for the Investment Enterprise to generate and possibly transmit and distribute electrical energy under certain controlled conditions
- ▶ Authority to obtain permits allows Investment Enterprise to secure construction permits and operating permits if in compliance with related laws and regulations
- ▶ Guarantee of performance of the Investment Enterprise and public sector entity who are party to the implementation and operation of the project means that the government, via a sovereign guarantee compensates the Investment Enterprise
- ▶ Currency protection to the power supplier for a variety of currency issues, including convertibility, availability of foreign exchange, devaluation, and repatriation
- ▶ Tax and duty incentives can be provided by creating decreases and/or total exemption from tax and duty obligation
- ▶ Legislative protection against changes in the law and regulations which would adversely effect or potentially effect the participants in the project
- ▶ Financial protection against certain *force majeure* events such as war, insurrection, and general strikes
- ▶ Work permits authorize import and use of specified foreign work force

I2 Power Provider Commitments

- ▶ Comply with laws and regulations
- ▶ Undertake project development
- ▶ Obtain project financing and achieve financial close within specified parameters including time

- ▶ Describes form of company, ownership, registration, terms of ownership
- ▶ Project insurance to be obtained

I3 Mutual Obligation/Commitments

- ▶ Termination defines under what conditions one party or the other can terminate the Project (Implementation) Agreement and recourse should termination occur
- ▶ Penalties define type, form, value of penalties imposed should a party fail to perform
- ▶ Governing law and arbitration
- ▶ The government and Investment Enterprise would mutually secure the other party against loss and damage arising from the performance of contractual obligations within certain limitations

Appendix J

Key Provisions of the Power Purchase Agreement

The list of provisions presented here are provided as examples only and are intended to facilitate evaluation of the Investment Enterprise's Security Package

J1 Summary of Key Provisions

Definitions — Provides the meaning of significant words or word groups used in the document

Sale and Purchase of Energy and Capacity — Contains statements a Investment Enterprise agrees to purchase per terms and conditions of the agreement, and that purchaser agrees to the terms and conditions. The Investment Enterprise is obligated to provide a number of documents that verify and certify characteristics of the generating facility

Pre-Operation Period — Contains the responsibilities of the Investment Enterprise and the purchaser during the permit, construction, testing, and start-up period. Terminates at commercial operation date

Term and Termination — Identifies the effective start and end date of the agreement, conditions under which it can be extended and/or terminated, and process and remedy for termination

Representations, Warranties and Covenants — Conveys agreement of the Investment Enterprise to operate the plant as designed within the laws and regulations of the host country. Certifies that Investment Enterprise is a valid legal entity, would use acceptable business practices, and provide information (as mutually agreed upon) to the power purchaser

Control and Operation of Facilities — Describes how the facility would be operated and maintained, how power would be dispatched, and the types of documents and records to be maintained

Interconnection — Defines the responsibility of the Investment Enterprise and purchaser for the facilities used to transmit power from generating facility to transmission grid. Describes the interconnection point at which responsibility transfers from the producer to purchaser

Metering — Describes how power generation would be measured, metering responsibilities, and other interface responsibilities between the Investment Enterprise and purchaser

Compensation, Payment and Billing — Describes the price of power to be paid by the purchaser to the Investment Enterprise for the duration of the agreement, which is stated on a unit rate basis (such as U S cents per kilowatt hour) to include both energy and capacity charges or broken down into its components. Pricing formulas are often complex and are comprised of a number of components that reflect fixed and variable costs of power generation, including debt service, fuel cost, and operating and maintenance costs. These components in turn are based on actual costs, cost indices, or other methods

Testing and Capacity Rating — Establishes a program for determining the maximum reliable electrical power generating capabilities of the facility under various conditions. If test results are acceptable the facility would be placed in operation.

Insurance — Delineates the type and limits of insurance to be obtained by the Investment Enterprise.

Liability, Noncompliance and Guarantees — This includes indemnification obligations between the power producer and the purchaser, form and limits of facility completion guarantee, form and limits on facility performance guarantee, and limits and conditions on transfer of facility from Investment Enterprise to other organizations.

Force Majeure — Defines what events constitute a *force majeure*, the actions required, and who bears the risk.

Taxes and Claims — Contains obligations of Investment Enterprise for local, regional, and national taxes and levies, and claims for payment for work and/or materials provided by others that might result in legal action.

Choice of Law and Resolution of Disputes — Identifies under which laws the agreement would be governed, and the process and method to be used to resolve disputes.

Notices — Provides for method, language, process, and distribution of notices among parties.

Changes in Law — Provides for protection of the Investment Enterprise should the law change to adversely affect the cost of construction or operation.

Options to Purchase — Depending on the type of agreement, defines how the Investment Enterprise can exercise the option to purchase the facility.

Entirety — Designates the agreement as the final expression of the intent of the parties and abrogates all prior written or oral understandings.

Miscellaneous Provisions — Includes a variety of other general terms and conditions considered necessary but not warranting a separate section.

J2 Explanatory Notes

Term of Agreement — The term of agreement is stated in years. The effective date is the date of commission of the complex. The agreement should be in effect as long as there is outstanding debt. An option to extend the term of the agreement may be included here. Disposition of project assets at the termination of the agreement is specified.

Facility Operation — Operation and dispatch of the power complex allows for a base load or fully dispatchable plant (if required by the system), in accordance with the principles of economic dispatch. It provides the right of the owner to suspend purchase of power without penalty during emergencies. It obligates the purchaser to operate the complex in accordance with recognized practices and the owner's requirements.

Performance Testing — The article on testing and capacity rating details procedures for testing the project facilities based on international codes and standards and project specifications. The producer is required to pass certain performance and reliability tests before the project goes into commercial operation and capacity payment begins. A one-time adjustment at a specified price per kilowatt is made if power tests do not meet guarantee, which is usually reflected in the negotiated capacity charge. In addition to the performance tests prior to operation, the power purchase agreement may call for periodic tests of dependable capacity. A failure to satisfy those performance tests could result in a reduction in capacity payments.

Energy Purchase — The article on sale and purchase of energy and capacity requires that the producer would make available and sell to the purchaser, and the purchaser would purchase from the producer for an agreed on compensation a specified maximum dependable capacity and an associated energy output of the plant after its commercial operation date.

Tariff Structure — The article on compensation, payment, and billing describes the tariff compensation to the power producer for plant capacity and energy payments based on actual operation.

Project Insurance — The insurance article requires the power producer to obtain and maintain minimum levels of insurance, including business interruption.

Interconnection — The article on interconnection describes the responsibilities of the developer and owner in planning, design, construction, commission, operation, and maintenance of the interconnecting facilities.

Metering and Communications — Metering and communications facilities establish the responsibilities of the developer and owner for installation, operation, and maintenance of communications equipment, as well as for the measurement of energy output and dependable capacity using the plant metering system. Typically, the power purchaser would control the measurement of the energy output and dependable capacity.

Guarantees, Warranties, Indemnification and Liabilities — Contained within the power purchase agreement are specific obligations of one party to the other should there be plant equipment failure, property damage, and/or failure to provide electrical power as specified.

Force Majeure — This article must define *force majeure* such as acts of God, war, riots, nonculpable labor strikes, and their consequences to each of the parties during the ownership and operation of the project.

Taxes, Duties, and Levies — The article defines all taxes, duties, levies, and other impositions applicable to the producer during construction and operation of the project, part of which may be passed on to the purchaser.

Defaults and Termination — Defaults and termination include material breach of obligations not cured within a reasonable time, insolvency of developer, and failure to produce a certain minimum amount of energy or achieve a certain availability of plant over an extended period of time. Remedies for default should include the right of the owner to operate the project.

Dispute Resolution — This article defines the process by which the Investment Enterprise can settle disputes about the interpretation of agreements and performance of various commitments. This process may include a mutually appointed operating committee, discussions, referral to an expert and arbitration in a predesignated location.

Transfer of Ownership — Transfer of ownership of the assets addresses the final disposition of the project facilities at the end of the agreement period. This may include physical transfer or purchase of the facility, continuation of the agreement, or liquidation of salvageable assets.

Appendix K

Key Provisions of Construction Contracts

The list of provisions presented here are provided as examples only and are intended to facilitate evaluation of the Investment Enterprise's Security Package

Technical Scope and Specifications — Describes plant design criteria and specifications, provides summary layout and process drawings, and identifies major pieces of equipment

Contractor's Responsibilities — Describes the services, staffing requirement, security measures, plant acceptance methods, bonding requirements, personnel conduct, reporting requirements and other contractor obligations

Owner Responsibilities — Describes the obligations of the Investment Enterprise, including approval process and authority, availability and conditions of the project site, access to site, permits, and other items

Compensation and Payment — Describes the value of the contract and payment schedule based on construction progress and testing milestones

Acceptance Testing — Describes performance testing requirements, performance guarantees, testing schedule, testing review and approval which are included as an attachment to the contract

Changes — Provides a mechanism for changing the terms and conditions of the contract This could include changes in the scope of services, price and/or time for project execution

Rejections — Should the plant or portions of the plant be rejected by the owner during the construction to testing phase, remedy by contractor is described

Warranties — The contractor represents that the project meets design and construction standards, has been engineered with prudent and recognized specifications, that the contractor is experienced in providing such services, can meet production schedules, and that the material and equipment would perform as specified Should the work prove defective and/or fail, it would be replaced by the contractor at no cost to the owner

Title to Work — Conveys all work, supplies, and equipment to the owner

Remedies — Defines the consequences and/or penalties for failure by the contractor to perform as specified, including schedule delay and/or failure to achieve performance guarantees Damages include monetary compensation to the Investment Enterprise for delay in achieving completion milestones and failure to achieve performance guarantees Damages are to be assessed on a day-by-day slip in schedule or failure to meet electrical output guarantees Damages are tied to financial obligations of the produces as dictated by financing institutions

Performance and Warranty Bonds — Provided by the contractor in support of potential failure to meet contractual obligations

Insurance — Project insurance is provided by the contractor and owner, including comprehensive general liability insurance, automobile insurance, and builder's risk insurance

Dispute Resolution — Defines how, where, and by whom disputes would be resolved

Indemnification — The contractor and owner mutually assume responsibility for actions or inactions of their employees and/or others that cause damage to the other party

Assignment — Defines under what conditions this contract, in whole or part, might be assigned to a third party

Suspension and Termination — Contains conditions under which the owner can suspend or terminate work, including default by the contractor. Describes obligations of parties in such an event

Force Majeure — Defines a *force majeure* and actions and remedies to be taken as a result

Confidentiality — Defines what information should be treated as confidential and how it should be protected

102

Appendix L

Loan Assessment Checklist

This annex contains an illustrative list of the information which should be provided by the project sponsors for purposes of the financial and technical loan assessments. It is expected that this checklist would be supplemented by lists provided by technical consultants hired by the Fund Administrator to provide assistance in the appraisal of specific projects. The annex also provides guidance as to how selected information should be reviewed by the company.

L1 The Sponsors

It is assumed that project sponsors would include corporate bodies limited by shares, joint ventures, partnerships and sole proprietorships. If a project sponsor is an individual, s/he must furnish his/her name and address and provide a statement disclosing all offices, employments, positions and business or professional activities being undertaken currently and during the past five years, and full details of the assets and liabilities of such individual whether singly, jointly with other persons, as trustee or otherwise. The information should conform as far as possible with that requested below.

The following information would be requested, as appropriate, from each project sponsor

- ▶ Name
- ▶ Country under whose laws incorporated
- ▶ Date and place of incorporation
- ▶ Registered office or seat
- ▶ Principal place of business
- ▶ Address for correspondence (including telephone, facsimile and e-mail) and name and position of contact for the project
- ▶ Nature of business or activities
- ▶ Names, nationalities and addresses of all directors or equivalent officers (both boards in case of two-tier boards) and secretary
- ▶ Nature of organizational documents (memorandum and articles of association, articles of incorporation, etc.)
- ▶ Number and nature of issued shares of each class
- ▶ Amounts paid up in respect of issued shares of each class
- ▶ Details of all stock exchanges (if any) on which any share capital is listed, quoted or dealt in
- ▶ If a subsidiary, name of ultimate holding company
- ▶ If a partnership, joint venture or consortium, names of partners or joint venture or consortium members
- ▶ Details of bankers
- ▶ Any interest, other than a shareholder in the Investment Enterprise, that each sponsor (or related company) has in the project
- ▶ Audited financial statements/annual reports for the past three (3) years

L2 Project Description

Summary description covering, for example

- ▶ Technology, station type, etc
- ▶ Number and size of units
- ▶ Location

L3 Investment Enterprise and its Management

The following information would be requested

- ▶ Proposed name
- ▶ Proposed registered office
- ▶ Proposed share capital of each class, both authorized and (as of financial closure) to be issued
- ▶ Proposed holdings (as of financial closure) of each project sponsor or each class of share capital
- ▶ Names and addresses of proposed directors Where a proposed director is not an officer or employee of a project sponsor, evidence must be provided to the Fund Administrator of such director's awareness of the proposal and willingness to act as a director
- ▶ Name and address of the proposed company secretary
- ▶ Organizational chart
- ▶ Identification of whom would be responsible for principal project management activities (i.e., Officers of the company – if so, whom? Consultants – if so, whom?)
- ▶ Relevant experience of individuals or consultants identified above
- ▶ Reference enabling the Fund Administrator to make independent enquiries of these individuals' or consultants' previous performance

L4 Appropriateness of the Technology

- ▶ Is the technology proven internationally? If so, references should be provided
- ▶ Has the technology been employed in Nepal or similar country?
- ▶ Are there any features of the technology which would make implementation in Nepal particularly difficult?

L5 Site Suitability and Infrastructure Development

- ▶ Site location
- ▶ Topographical data
- ▶ Geological data and soil conditions
- ▶ Meteorological data
- ▶ Site plan
- ▶ Site access including new infrastructure requirements
- ▶ Distance and terrain for transmission line to grid
- ▶ Availability of construction materials such as aggregates and sand

L6 Project Design

Plant/facility (including equipment description, sourcing and specifications) should be detailed, along with plant/facility layout

L7 Arrangements for Detailed Engineering

The Fund Administrator should ensure that arrangements for detailed engineering are satisfactory

L8 Cost Estimates

- ▶ Capital Cost The capital costs should be broken down by item and by the year in which they would be incurred. A summary table should be prepared, setting out the capital cost in U S dollars by year for each of the cost items, together with a timetable indicating the related physical progress with construction of the plant from commencement through to commissioning
- ▶ Foreign and local costs should be separately identified
- ▶ Where appropriate, the cost should be presented in the following format
 - FOB price
 - insurance, freight
 - erection, commissioning
 - total sum
- ▶ Cost Categories The costs should typically be broken down into the following categories
 - land
 - buildings and civil works
 - machinery and equipment
 - construction equipment
 - cost of erection and installation of plant and equipment
 - consultancy costs (technical, legal, financial, etc)
 - feasibility studies and other engineering activity
 - vehicles
 - furniture, fixtures and fittings
 - preliminary expenses
 - trial run expenses
- ▶ Cost of Land
 - land and acquisition
 - area of land
 - rate/unit (basis of estimation to be provided)
 - total cost
 - land area demarcation on the map
 - minimum spare land requirement for the project
 - leasing/documentation
 - development of land (basis of each cost item to be provided)
 - registration
 - surveys
 - leveling and grading, landscaping
 - any other

105

- internal and access roads (basis of each cost item to be provided)
 - length and width
 - cost per unit
 - easements
 - total cost
- ▶ Buildings and Civil Works
 - main building
 - type of construction
 - number of floors
 - covered area of each floor by section
 - total covered area
 - rate/unit area (basis to be provided)
 - total cost
 - administration/office block
 - type of construction
 - number of floors
 - covered area of each floor by section
 - total covered area
 - rate/unit area (basis to be provided)
 - total cost
 - ancillary building/civil works
 - warehouse
 - workshop
 - control rooms, instrumentation
 - substation
 - gate office
- ▶ Import Costs
 - ocean freight
 - letter of credit charges
 - import license fee
 - bank commission
 - marine insurance
 - customs duty
 - import and surcharges
 - clearing/forwarding agent charges
 - internal freight
 - others
- ▶ Cost Escalation Assumptions (During Construction), if Applicable
 - exchange rate used and date
 - items that would be indexed in the purchase agreements (including the timing of adjustments) and proposed adjustment formula

- those items which would be covered in the purchase agreements through flow-throughs (e.g., insurance, profit participation, etc.)

L9 Operating Cost

The operating costs identified below should be supplied by each proposer in both local and foreign currency with appropriate supporting evidence. These items should also be categorized into fixed and variable costs.

- ▶ Staff costs with manpower details
- ▶ Insurance
- ▶ Interest payments
- ▶ Leases and rents
- ▶ Waste disposal
- ▶ Spares and maintenance
- ▶ Other supplies

Staff costs would include the cost of expatriate staff as well as of local staff. The Fund Administrator would request a manpower plan for the operating phase, broken down according to job specification and according to whether employees are local or from overseas. Assumptions made about the amount of time which foreign experts would be spending in-country should be made clear.

The Fund Administrator should also request a summary table, indicating operating costs (in U.S. dollars) by year for each of the categories set forth above. This should include both the construction and operating (post commissioning) phases of the plant.

Information regarding financing costs is detailed below in the Section entitled Financing Plan.

L10 Procurement Plan

For each procurement package, provide the following information:

- ▶ Summary description of the item being procured
- ▶ U.S. dollar value of the procurement
- ▶ Nationality of the supplier(s)
- ▶ Currency of procurement

For those elements of the project being funded by IDA resources, ensure that equipment is procured from World Bank eligible countries.

U.S. dollar value should be the U.S. dollar equivalent at bid opening.

L11 Construction Management Arrangements

For construction contractor, specify:

- ▶ Name of contractor
- ▶ Experience in construction of similar projects
- ▶ References

- ▶ Construction contract
 - organization plan with key members and responsibilities defined
 - contract and sub-contract administration
 - organization of the site

L12 Environmental and Social Impact Assessment

The Fund Administrator should ensure that the environmental assessment has been updated to include, but not be limited to, the following

- ▶ The analysis of potential socioeconomic impacts of the proposed project, especially with regard to infrastructure and labor force requirements
- ▶ The analysis of potential impact on rural communities, including those relating to traditional land or water rights
- ▶ The preparation of a site-specific survey of potential impacts on rare or endangered plant and animal species and their critical habitat
- ▶ The preparation of a site-specific survey of potential impacts on archaeological and/or historical sites
- ▶ A review of the handling of hazardous materials during construction and operation (note that no PCBs can be used)
- ▶ A review of the emergency prevention, response planning, and management procedures which would be adopted
- ▶ A mitigation plan that should be prepared identifying actions which can be adopted in the project design and implementation to eliminate or reduce potential negative environmental and social impacts. Where resettlement is involved, this must include a resettlement plan that is prepared in accordance with World Bank Group guidelines. All mitigating measures should be evaluated with regard to their cost, duration, implementation, organization, institutional development and training requirements, and reliability under local conditions

The Fund Administrator should ensure that the environmental impact mitigation plan includes

- ▶ Measures to minimize adverse environmental impact
- ▶ Identification of responsibility for measures
- ▶ Timetables for implementation
- ▶ Cost estimates for plan (to be included in project costs)
- ▶ Arrangements for monitoring both the plan and the actual environmental impact

L13 Implementation Plan

The Fund Administrator would request the sponsor(s) to set out the program for financial closure and construction of the project

L14 Financial Closure

The Fund Administrator would request the sponsor(s) to set out a timetable for financial closure, addressing such issues as

- ▶ Establishment of Investment Enterprise
- ▶ Further investigations required
- ▶ Preparation of the environmental and social soundness assessment, mitigation plan and monitoring plan

108

- ▶ Indicative financing plan (see below)
- ▶ Application for, and obtaining of, all necessary consents and approvals
- ▶ Negotiation of all agreements and contracts

L15 Project Construction

The Fund Administrator would request the sponsor(s) to present PERT and summary bar charts clearly indicating the following types of activity

- ▶ Engineering
- ▶ Manufacturing
- ▶ Transportation
- ▶ Construction of site offices, workshops
- ▶ Civil work
- ▶ Facility/plant erection
- ▶ Commissioning
- ▶ Performance trials
- ▶ Reliability run
- ▶ Commercial operation

The Fund Administrator should identify key dates for events such as

- ▶ Award of construction contract
- ▶ Start of detailed design/drawings
- ▶ Detailed site investigation/report
- ▶ Start of civil works/mobilization
- ▶ Completion of all design/drawings
- ▶ Completion of civil works
- ▶ Arrival on site of major plant items
- ▶ Completion of plant erection
- ▶ Commercial operation

L16 Operation and Maintenance Arrangements

The Fund Administrator should review

- ▶ Name of operation and maintenance (O&M) contractor
- ▶ Qualifications of O&M contractor and its principal staff
- ▶ References
- ▶ O&M contract
- ▶ Operations staffing
- ▶ Maintenance staffing
- ▶ Spares policy

L17 Purchase Arrangements

The Fund Administrator should review

- ▶ Purchase contract
- ▶ Basis for projecting indices used for price indexation

L18 Insurance

The Fund Administrator should require an assessment of risks not covered by insurance and a schedule of intended insurance policies showing for each

- ▶ Whether held by Investment Enterprise or a contractor/supplier (if contractor/supplier, who holds the policy)
- ▶ Value of intended insurance cover
- ▶ Estimated cost of insurance cover
- ▶ Basis

L19 Financing Plan

The sponsor(s) indicative financing plan should include, *inter alia*

- ▶ An equity mobilization plan
- ▶ Financial statements/annual reports
- ▶ Indicative terms of debt financing detailing assumptions concerning
 - likely sources, e.g., export credits, bank loans, etc
 - interest rates
 - commitment fees
 - intended use of Power Development Fund debt
 - schedules describing anticipated drawdowns for each type of finance
 - arrangements to mobilize standby financing

In addition to firming up the indicative financing plan above, the Investment Enterprise should provide information regarding the following

- ▶ Schedule of equity investors
- ▶ Schedule of sources of other finance (split if several from the same source) showing for each
 - currency
 - drawdown schedule
 - interest rates
 - commitment fees
 - seniority
 - letters of commitment
 - evidence of the financial capacity of the institution(s), in cases where the Fund Administrator has doubt about the sponsor's ability to provide the funds in question
 - escrow arrangements for servicing debt

L20 Financial Analysis

The Fund Administrator should review and analyze the following

- ▶ Financial model of Investment Enterprise (audited)
- ▶ Schedule of accounting policies to be followed
- ▶ Dividend policy
- ▶ Analysis of tax circumstances for the Investment Enterprise and sponsor(s) (e.g., if Investment Enterprise tax relief would be utilized outside the Investment Enterprise)
- ▶ Financial projections (profit and loss account, balance sheet, sources and application of funds) for each year of the project's life

L21 Economic Analysis

In order to determine the ability of the project to generate benefits to the overall economy, the Fund Administrator shall calculate the economic internal rate of return of the project by

- ▶ Adjusting financial values of project inputs that are "traded" goods
- ▶ Adjusting financial value of project inputs that are "non-traded" goods by applying the Standard Conversion Factor for Nepal
- ▶ Adjusting the financial value of any "sunk costs"
- ▶ Adjusting the financial value of project outputs
- ▶ Calculating economic cash flows

L22 Risk Analysis/Evaluation of Security Package

The Fund Administrator shall analyze

- ▶ Material risks to the performance of the project. The Fund Administrator may find it useful to solicit the sponsor's views on this subject
- ▶ Agreements which include, but are not limited to, the security package

The security package's agreements to be reviewed would consist of

- ▶ The Project (Implementation) Agreement, defining the relationship between HMG/N and the Investment Enterprise
- ▶ The Power Purchase Agreement, which defines revenue generation
- ▶ The Investment Enterprise's construction contract with its main contractor
- ▶ Where relevant, the Investment Enterprise's operation and maintenance (O&M) contract with the O&M contractor
- ▶ Loan agreements and other financing documents (including insurance policies)

The Fund Administrator should work through each of the key risks identified during the course of the loan assessment and assess their potential impact on the project. This evaluation should be undertaken in three steps

- ▶ Establishment of the impact of major adverse outcomes under the Project (Implementation) Agreement and Power Purchase Agreement
- ▶ Identification of the contractual relief remedies available under the other contracts comprising the security package

- ▶ Assessment of the quantitative net financial impact on the project of key risks, to the extent that the Project (Implementation) Agreement/Power Purchase Agreement exposure is not matched by other contractual reliefs and remedies