FIJI – PREPARATION OF DRAFT NATIONAL ENERGY POLICY & PLAN – WORK PLAN PROPOSAL

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PIEPSAP Project Report 18

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~ Participating Pacific Islands Countries ~
Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu
Fiji Department of Energy

Preparation of Draft National Energy Policy and Plan

Work Plan Proposal

16 November 2004
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Document Purpose

This document contains Terms of Reference for technical assistance provided by PIEPSAP to the Fiji Government (Department of Energy) for the Development of a National Energy Policy and Plan

Description
Technical Proposal, Terms of Reference

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Preparation of Energy Policy Framework Fiji
16-11-2004
Acronyms

ADB  Asian Development Bank
BOO  Build-Own-Operate
BOOT Build-Own-Operate-Transfer
BOT  Build-Operate-Transfer
ECA  Export Credit Agency
EIA  Environmental Impact Assessment
EPC  Engineering, procurement and construction
FEA  Fiji Electricity Authority
IPP  Independent Power Producer
MOU  Memoranda of Understanding
PPA  Power Purchase Agreement
PPI  Private Provision of Infrastructure
PPIAF Public-Private Infrastructure Advisory Facility
QA  Quality Assurance
REE  Rural Electricity Enterprise
REF  Rural Electrification Fund
RFP  Request for Proposals
RFQ  Request for Qualifications
SPP  Small Power Producer
SPPA Standardized PPA for small power projects
TA  Technical Assistance
TOR  Terms of Reference
US$  United States Dollars
WB  World Bank
1.0 Introduction

1.1 Background

The Strategic Development Plan for 2003-2005 of the Fiji Government sets the energy sector goal as “to facilitate the development of a resource efficient, cost effective and environmentally sustainable energy sector.” Specific objectives include:

a) Formulation of “a comprehensive national energy policy to address renewable energy, efficiency and affordability, and environmental sustainability”,

b) Reform of the power sector “through internal restructuring of FEA and the encouragement of private sector participation through Independent Power Producers (IPP’s) and Renewable Energy Service Companies (RESCOS) in electricity generation”, and

c) Increased funding over the next three years for the DoE’s rural electrification programme.

While the framework for a new National Energy Policy is set DoE has now started the development of the new national energy policy. DoE already has a departmental Strategic Development Plan, which summarises DoE’s expected areas of emphasis over the next several years.

1.2 Request for PIEPSAP Support

Against the background described in 1.1 The Acting Director of Energy formally requested PIEPSAP support in developing a national energy policy and plan. The respective letter dated 31 August 2004 is annexed to this document. The document has been subsequently discussed amongst Fiji Government stakeholders and changes have been made in line with inputs received.

1.3 Objectives

The objectives of the assignment are clearly and succinctly stated in the letter requesting PIEPSAP support. They are:

(i) Development of energy policy framework that encompasses petroleum products, power, transport, energy conservation, rural electrification, environmental and social aspects and linkages to other sectors
(ii) Establish consultation with all relevant stakeholder in public and private sectors
(iii) Assist the Government of Fiji in accessing additional funding such as CDM for the implementation of the energy policy and the work programs.

1.4 Scope of Work

The scope of PIEPSAP’s services is stated in this document. It will be finalised after consultations with DoE and serve as TOR for PIEPSAP’s intervention.

- Section 2 comments on the Terms of Reference and includes inputs to be provided by the client.
- Section 3 describes our methodology and work plan in detail and outlines approaches to be taken in undertaking the policy framework.
- Section 4 gives estimates of total staff input for professional and support staff together and allocates tasks and time to the individual members of the team with supporting bar charts and diagrams that show proposed assignment times and reporting dates.
- Section 5 describes the proposed methodology, staffing and monitoring of training.
2.0 Comments on Request for Support

2.1 General Comments

In general, we find the request for PIEPSAP support to be clear, concise and appropriate to the stated objectives of the assignment. They follow a logical progression in requiring the PIEPSAP team to:

- Assist the Government of Fiji (GoF) to formulate a policy to direct future development of Fiji’s energy sector;
- Draft documents such as policy statements, investment plans and funding requirements
- Prepare procedures and documentation for stakeholder consultations at various levels
- Draft project proposals and implementation guidelines for rural electrification projects, with particular emphasis on building on the work already done and developing simplified arrangements for RESCO systems.
- Assist in holding workshops, seminar and working sessions to facilitate consultation and provide a platform to introduce, explain and seek feedback on the documents produced.

We confirm that our proposal complies fully with the request for PIEPSAP assistance.

2.2 Team Composition

The team composition required to perform the tasks set out in this document will have to be discussed with DoE. The DoE request mentions a task force that comprises of decision makers in government the private sector and NGOs/Civil Society. With respect to this task force and the DoE/PIEPSAP team some issues have to be clarified. These issues include:

- Staff requirements to match the tasks laid out,
- Responsibility for recruiting/appointing the task force
- Division of labor and responsibilities between the DoE/PIEPSAP team and the task force,
- Reporting lines and overall management
We are conscious of the need to attune the team to the specific problems that need to be addressed in the policy development exercise and, more particularly, to the scope and scale of interventions that are supposed to be guided by the framework. By way of example:

- **Project size** is a factor in designing an implementation framework. Large power sector projects involve complex risks and financing concerns generally not found in small projects and would be unbankable without sophisticated documentation to account for them. Smaller projects on the other hand cannot bear high transaction costs and an implementation framework based on large projects would stifle rather than encourage investment.

- **Regulation and legislation** suited to some technologies or projects may not suit others. The role of grid connected renewable generation projects (e.g. wind, run-of-river hydro) in a power system differs from the role typically allotted to small-scale rural electrification efforts based on distributed generation or mini grids.

- **Petroleum sector issues** such as pricing fall under the responsibility of non-energy institutions and require policy linkages that are different from those for interventions that are directly controlled by the Department of Energy.

The PIEPSAP team has been briefed to give a collective appreciation of public and private investment in energy projects across the range of sizes and technologies likely to be encountered in Fiji over the coming decade. The problem with landowners encountered at Monasavu stands as a nearby reminder of the consequences of inadequate stakeholder consultation and environmental management.

### 2.3 Initial Workshop

The timing of stakeholder consultation is not yet clear. It is proposed to specify the timing of workshops etc in the Final ToR document. In some ways it would be advantageous to hold an inception event as soon after mobilization of the project team as possible but this runs the risk that contributions would be unstructured, unfocused and off the mark. The advantage of delaying it until after the Inception Report is issued is that the discussions are likely to be more constructive. An alternative would be to hold a shorter start-up meeting with key stakeholders shortly after mobilization and an Initial Workshop after presentation of the inception report.
2.4 Data, Services, Deliverables and Facilities

We note the provisions and requirements of the assignment make the following comments and qualifications that apply to our proposal:

- We assume that the DoE provides the project team with all relevant data, information, reports and texts that are related to energy policy development. Confidential material will be kept confidential by PIEPSAP.
- We assume that Government of Fiji officers will be made available for this joint activity without charge to SOPAC/PIEPSAP.
- Deliverables and Reporting: We have made no allowances in our proposal for the cost of translating documents into Fijian.
- The services in Fiji are submitted on the basis that they will be provided mostly in Suva.
- Seminars and Workshops: All costs of seminars, workshops and working sessions (other than the PIEPSAP’s time and deliverables specified in this document) will be met by the Department of Energy others. We have assumed that DoE will send out all invitations to participants and that we would receive assistance in organizing other aspects of the events.
- We expect that, upon confirmation from the Fiji Government, deliverables developed under the project will be available to other governments in the region as examples for energy policy development.
- It is essential to the success of the project that our team works closely with DoE to ensure effective knowledge transfer and exchange of information. This is very important during the policy preparation phase. For this reason we have assumed that members of the project team (PIEPSAP staff, DoE and task force members) will agree to gather for dedicated work sessions as required and that either SOPAC or the DoE will provide serviced facilities (photocopying) during work periods in Suva.
3.0 General Approach and Methodology

3.1 Background and Setting

The National Energy Policy to be developed will be guided by the visions and guiding principles laid out in the Strategic Development Plan 2003 – 2005. The objective of this plan is to identify and implement policies that take the country forward to a prosperous and peaceful Fiji. The government's mission is to implement the best political, social and economic policies by abiding to the following guiding principles:

- Good governance including the need for consistent and credible policies
- Environmental sustainability
- Respect for Vanua and the cultures and traditions of the indigenous Fijians and Rotumans
- Respect for the cultures and traditions of other communities in Fiji
- Recognition of the paramountcy of indigenous Fijian and Rotuman interests as proclaimed in the constitution
- Respect for legal authority and law and order
- Respect for human and group rights
- Honesty in public life and general standards of conduct which reflect our fundamental beliefs
- Contributes to the promotion of gender equality and empowerment of women

The Fiji government believes that consistent and credible policies that are vigorously implemented in all sectors are essential for the achievement of the vision. There is also a broad consensus among governments and the international community of the importance of good governance, public accountability, and transparency of action.

Whilst Fiji’s socio-economic indicators show a relatively good performance these indicators mask significant disparities between rural and urban areas. Despite an absolute decline in rural population over the last decade, 54% of Fiji’s population still resides in rural areas. Utility services, though available in rural areas, are at higher cost, which adversely affects rural income. There are also marked discrepancies in the quality and level of electricity and energy supply that adversely affect rural business development and employment opportunities.
Like other emerging energy markets Fiji is geared towards restructuring, re-regulating and commercialising her energy sectors. One important difference between Pacific Island economies and other more developed markets is the size of national demand. It is often argued that competition is not possible in small markets where economies of scale mean that one or two companies will dominate supply.

3.2 Problem Analysis

The need to develop a national energy policy together with guidelines for energy sector management and project implementation stems from the existence of problems and constraints that hinder an efficient development of the sector. We are aware that extensive progress has already been made in developing energy sector policy, particularly by DoE in the area of rural electrification and in the framework of the GEF/UNDP project. We appreciate the value of much of this work and would choose to build on it rather than start afresh with models taken from other countries.

While those we consult with respect to problems in the energy sector would guide us we currently see the following problems:

- The lack of a consistent national energy policy that survives changes of government creates an environment of uncertainty for consumers, and public and private sector investors.
- The regulation of energy sector operations is restricted to price controls that are imposed without an energy sector development perspective.
- There is no independent regulator of private and public sector power operations. FEA is still self-regulating in the area of technical standards.
- The policy of a single national tariff for grid-based electrification has constraint private developers to operate rural public grid systems or to develop new ones.
- DoE lacks internal capacity and is unable to internally perform complex tasks such as the preparation of documentation needed for accessing international finance, management of solicitation processes and regulation of private sector activities.
- Although a rural electrification policy is in place in Fiji a long term investment program is not in place and funding of projects remains inadequate.
There are unresolved issues, in part related to recent political instability, regarding long-term secure access to native land for development projects, including development of biomass, large-scale wind or hydropower.

There is insufficient coordination and consultation among the various government agencies involved in energy sector activities.

There is limited understanding of the rural market for energy making it difficult to determine the appropriate technology for use in different areas.

Legislation is needed to provide the legal basis for RESCO operations.

It should be noted that the above problems are often interlinked. They mostly fall into two different categories of core problems: a) the inadequate allocation of resources (human and material) to energy sector development and b) the lack of an institutional and regulatory framework that ensures an efficient management of the energy sector.

3.3 Overview of Methodology

The tasks follow a logical progression in meeting the stated objectives of the assignment; first a policy is to be drawn up in a consultative process. Then bills and/or sub-bills are prepared, then guidelines, procedures and model documents to facilitate implementation of energy sector projects in accordance with the policy and bills. In parallel potential sources of finance for energy projects will be explored and documented.

The nature of the services, namely the formulation of policy, procedures, guidelines and project documentation, demands a close relationship and constant consultation with the DoE and the task force. The deliverables will be ignored if they do not closely reflect the intent of GoF and other key stakeholders.

We will review the existing organization of the energy sector and examine the history of public and private investment to date in both urban and rural areas. Problems such as unbankable deals, harsh contracts, lack of investor interest, obstruction of developers, delays in approvals, disputes, landowner problems etc. will be analyzed and causes will be identified. We will also assess whether there are lessons to be learned from the energy sector policy development of other countries within and outside the region.
The perceived country risks in Fiji are high and one has to be mindful that, despite this, the track record of private investment in the power sector has been creditable, particularly in rural areas. It follows that change should not be pursued for change’s sake; nor should other institutional models be imposed without a clear understanding of how the benefits will accrue.

We would review existing energy-related policies/acts to determine how the new energy policy will compliment/affect the existing ones.

3.4 Stakeholder Consultation

If a policy framework for energy sector development is to be effective, it must reflect of the perspectives of government, consumers, utilities, investors, lender and other stakeholders, and be designed to overcome their concerns and meet expectations. A number of RGC ministries and agencies and other parties are involved with or have an interest in energy sector development in Fiji. Upon mobilization, we would seek to consult with them to ensure an accurate understanding of their priorities, concerns and preferences. Among those with a particular contribution to make to this assignment are:

- Ministry of Works and Energy (MWE)
- Ministry of Finance and National Planning (MFNP)
- Ministry of Regional Development and Fijian Affairs
- Fiji Electricity Authority (FEA)
- Department of Environment
- Ministry of Public Enterprises and Public Sector Reform

As appropriate, and as time and circumstance permit, we would also appreciate the opportunity to discuss the assignment with other parties including:

- Native Land Trust Board (NLTB)
- Land Transport Authority (LTA)
- Multilateral agencies (e.g. ADB, IFC, UNDP, MIGA)
- Bilateral agencies (e.g. AusAid, NZAid etc)
- Private and public developers such as Tropik Woods
- Lenders, ECAs, etc., particularly those involved in the projects
- NGOs and other stakeholders
4.0 Execution of Tasks

4.1 Draft National Policy Paper

A coordinated, rational and effective framework for energy sector development cannot be created in a policy vacuum. A coherent policy is needed to map out an optimum role for the public and private sector players and broadly state the parameters of their participation. It follows that the PIEPSAP team should first develop a general Policy Paper and then draft Sub-bills to give effect to the intent of the policy.

In designing a policy to attract private investment to power projects in Fiji, the sector is best divided into sub-sectors to reflect existing problems and appeal to the different classes of interested investors. We consider the following strategic areas are relevant to the Fiji National Energy policy:

- Energy conservation and efficiency
- Renewable Energy
- Rural Electrification
- Transport
- Energy Research and Development
- Rural and Urban areas connected to the FEA Grid and subsidised by FEA
- Urban areas or high density location connected to FEA grid
- Private power producers for own use

Below are some specific areas which we will be considering when addressing the above strategic areas.

1. Institutional set up, regulation and sector management
2. Petroleum products and substitutes (biofuels). Investments and operations by independent private sector interests based on competitive solicitations, concessions and negotiated contracts;

3. Electricity sector reform and investment by independent power producers (IPPs) in generation and distribution projects;

4. Small scale independent power producers based on a standardized PPA (SPPA) and published tariff;

5. Investment by rural electricity enterprises (RESCOs), with assistance as appropriate from the Government, based on a simple licensing procedure;

6. Incentive framework for the energy sector, and other sub-sectors such as oil, electricity pricing, energy efficiency and conservation, renewable energy, and transport.

7. The commercial implications as a result of any changes in the regulatory framework of the electricity industry particularly the services into non-commercial sectors will need to be addressed.

8. Review of the FEA regulatory role. Reference attached TOR for review of FEA. This task would be contracted under PIEPSAP project.

We propose the following methodology in preparing the Policy Paper:

(i) Prepare First Draft National Energy Policy

On mobilization, we will carry out initial consultations with the above stakeholders, as appropriate. The policy document to be developed belongs to GoF and the PIEPSAP’s role is simply to facilitate the paper’s preparation, provide advice to guide contributions by government agencies and other sources, and to draw the different threads into a coherent policy. The consultations are therefore crucial in ensuring that the contents accurately reflect GoF’s views.

To give balance to the policy, the views of prospective investors and lenders would also be sought. In this regard we would approach foreign investors and the local business community for their views on energy policy statements. The attitudes of local and international lenders and
development agencies are also important in formulating a workable policy that can later source finance from these agencies. The results of our first round of consultation will be summarized in the Inception Report.

Based on the views obtained, our knowledge of the Fijian energy sector and our experience we would prepare a draft of the policy paper encompassing issues such as:

- Reform institutions and institutional structures to clarify responsibilities, strengthen commercial functions and streamline administration
- Allocation of resources to energy sector development
- Legal and regulatory development to align with private investment practices;
- Identification of priority projects for public and private development in urban and rural areas;
- Development of ownership and implementation models to encourage RESCOs
- Environmental and social standards for energy sector projects
- Tariff and pricing policies for towns and rural areas;
- Selection criteria for developers and RESCO operators;
- Public consultation steps;
- Incentives and subsidies for renewable energies and energy efficiency
- Incentives and subsidies for IPPs, SPPs and RESCOs;
- Solicitation models and concession award processes;
- Project evaluation and implementation procedures;
- Participation by GoF in the ownership of projects;
- Conditions to be satisfied for multilateral and bilateral agency support
- Availability of political risk cover.

Following the pattern established in our first consultations with Government agencies, we would support the draft policy paper with a timetable for implementing the policy.

We propose including a first draft the Policy Paper with the Inception Report. This would allow the paper to be reviewed and the comments incorporated in time for the second draft to be issued prior to an Initial Workshop.

(ii) Initial Workshop
The Initial Workshop will be held after submission of the PIEPSAP Inception Report including the draft of the Policy Paper. PIEPSAP would seek approval of the report by DoE before circulating the document. The workshop will be attended by government and private parties with a stake in energy supply and power and will provide an ideal vehicle for soliciting comments and stimulating discussion among participants. To give participants time to order their thoughts, we will distribute the latest draft of the Policy Paper prior to the event.

The feedback received at the Initial Workshop will enable us to fine-tune the policy to more accurately reflect the stakeholders’ intentions.

(iii) Finalize Policy Paper

The process of finalizing policy involves broad input from task force members and senior government officials and our experience of such work is that a number of draft and review cycles may be needed before all parties can sign off on it. The time involved in achieving this could be greater than allowed for in the program outlined in DoE’s request. We cannot plan on the basis of an open-ended review process and we will therefore assume that the Policy Statement updated after the Initial Workshop will provide a sound platform for finalizing the draft bills and for preparing the guidelines, procedures and model documents. It is therefore important that the feedback received in the review cycles and at the Initial Workshop is comprehensive and pertinent.

We emphasize the point that reasonable progress must be made with the Policy Paper in the early stages of the assignment. The drafting of guidelines, procedures and model documents for IPP, SPP and RESCO projects will depend to some extent on the content of the Government’s policy. It provides the foundation for the execution of other tasks and an acceptable level of consensus on policy will be required if the PIEPSAP’s outputs are to be useful.

With the energy related legal framework of Fiji likely to remain fluid for some years to come, there is a general need for flexibility both in policy and in contract documents. We are aware of this and, where practicable, we will draft documents accordingly.

(iv) Development of Strategies and Action Plan
The appropriate strategies and action plans for the policy will be developed through stakeholder consultations. A workshop will be organised to facilitate the consultations.

4.2 Bills and Implementation Guidelines

The National Energy Policy will provide the framework for implementation related Draft Bills and Implementation Guidelines. Scope and details of these secondary documents will have to be discussed with DoE and the task force before PIEPSAP engages in drafting of papers. At this stage we suggest the following elements to be considered:

It is to be noted that the cabinet has to approve the development of the Bill prior to initiating actual work on the Bill.

The Energy Bill can be an all-encompassing bill that also includes rural electrification. Secondly there can be a specific rural electrification bill depending on the government preferences.

(i) Draft Bill Institutional Arrangement
Prepare a bill to define policy role, functions, responsibilities, and procedures of each of the key organizations with respect to the energy sector. This will include:

- The role of GoF and its departments and agencies in managing and overseeing energy sector
- The establishment of an independent Energy Sector regulator
- The role of FEA in project development.
- The role of RESCOs in rural electricity expansion.
- The role and use of financial institutions.
- The role and use of advisors.
- Key principles for selection and evaluation of IPPs and small power projects.

(ii) Sub-Bill Private Power
A Sub-bill could be considered to deal with Private Power. Such a Bill would specify in more detail the role, functions and responsibilities of MWE and MFNP and other government agencies in promoting, approving and licensing private power projects. Approval procedures and steps would be set out in such a Sub-bill. Among the principles to be observed and issues to be addressed in formulating approval procedures are:

- Separate procedures for IPPs, SPPs and REEs;
- Separate IPP procedures for competitive solicitation and direct negotiation;
- Whether there is a need for a single contact point ("one-stop-shop") within GoF;
- Requirements for submission and evaluation of proposals, project studies and business plans;
- Agencies responsible for approving project studies and business plans;
- Timelines for receiving and approving submissions, finalizing project agreements and licenses and obtaining financing approvals.

The Private Power Sub-bill will consider the role of a regulator in the licensing and regulation of private power projects. FEA’s various roles in respect of IPP, SPP and RESCO projects remain to be determined. It is of course the primary generator of electricity in the country and for the moment is responsible for the national grid. As there are currently no plans to unbundle or privatise FEA the utility is the logical “single buyer” of power from IPP and SPP projects. Its role in rural electrification is less obvious but, with consensus on a National Energy Policy Paper, both rural electrification policy and Sub-bill could take a clear position on this.

Related to this are the roles of RESCOs in expanding access to electricity in rural areas. The roles, functions and responsibilities of the RESCOs are still under consideration and the recent studies on rural electrification in Fiji under the ADB REEP project will hopefully provide a sound platform for formalizing a position in the draft Bill. Issues to be addressed include:

- Improve the commercial durability of the RESCOs;
- Stimulate new RESCOs and encourage existing RESCOs to expand;
- Promote improvements in the quality, safety and reliability of service;
- Lower costs and tariffs;
- Provide for cooperation between, and mergers among, RESCOs to improve critical mass.
We will also address the role of RESCO business associations in promoting these objectives and give them due recognition and encouragement in the Sub-bill. The role and use of financing institutions for IPP and SPP projects will also be considered in the policy. Policy issues of some importance will be the conditions under which GoF would provide sovereign guarantees to back the obligations of the Government and its agencies (particularly FEA). This includes GoF willingness to issue counter-guarantees in support of multilateral and bilateral political risk instruments.

Through the nineties a number of governments entered into unfavourable, and in many cases unsustainable, deals with private power developers. This was in large part due to an imbalance in bargaining power across the negotiating table. The Bill will look at the role and use of legal, financial and technical advisors in countering this imbalance and at ways in which their fees can be funded. Existing principles for selecting and evaluating IPP and SPP projects will be reviewed and revised, as necessary. They will be incorporated into the Private Power Policy Paper and Sub-bill by express inclusion or by reference, as appropriate.

(iii) Incentive Program to Enhance Competition
Recommend how a level playing field between private energy sector investors and State-owned projects can be created to provide an investor-friendly environment. This will also include an assessment of FEA's role in grid extension in rural areas and the RESCOs in providing electricity services to the rural areas. It is often alleged that a level playing field between conventional and renewable energies and between state-owned and private projects generally does not exist. A RESCO may face competition from the state through FEA’s grid extension program, through state or donor-sponsored projects or from arbitrary involvement of a state agency such as PWD in its supply area. Investor confidence is probably undermined by this threat and, if not properly managed, investment levels could be affected. The various ways in which the state might threaten businesses will be identified and we would propose initiatives for countering them.

Competition in dispatch between state and private power projects is an area of potential risk but one that is generally covered in bankable project agreements through the inclusion of capacity charges or take-or-pay clauses. Fuel taxes and fuel specifications may discriminate biofuels and favor the incumbent fuel suppliers. We will examine the validity of these
arguments and, where unfair competition is a potential threat, we will recommend a framework for managing it.

The key to introducing effective competition in Fiji's small energy markets lies in recognizing that there are different types of competition that can be established. Competition in the market sometimes takes place where more than one supplier is operating in the same market. Surveys indicate, however, that suppliers coordinating their tariffs and prices frequently and undermine this type of competition. It is vital that the new policy and legislation, which intends to provide for some measure of exclusivity through licensing, allows this form of competition in the market. It is also suggested that contestable markets are allowed where several operators already exist, as long as the minimum supply standards are adhered to. This provides an incentive for new investors to enter the market. In areas where no supplier or ESCO exist, competition for the markets (licenses) should be the rule. Besides competitive procurement for new services, some competitive pressure should be maintained where renewal of concessions is concerned. This is best achieved by matching the licensing periods with the requirements of a financially sound energy sector operation; i.e. a balance needs to be established between long-term contracts that provide exclusivity of supply for long enough to allow a reasonable return to be earned, and the competitive pressure that is created through more frequent re-bidding of concessions.

A considerable incentive for investors can be a transparent process of setting tariffs. Tariff setting should consider benchmark or comparative competition for operators. While less effective than direct competition, such competition would fix benchmarks for different categories of energy supply. It is recommended that both size and location of the operation are distinguished as there are significant cost differences related to scale economies and geographical location. The process of regulating energy suppliers should include maintaining a database that would facilitate monitoring and revision of benchmarks.

The combination of the above-mentioned forms of competition can be quite powerful even in the small and medium size energy markets in Fiji. The key to formulating rules and guidelines that maintain the balance between consumer protection and the need to mobilize private capital will be to consult with existing providers and prospective investors on these issues during the assignment. Although it is expected that competition in the energy sector will lead to more efficient pricing, the level of competition will be limited by cost to monitoring and enforcing the rules.
4.3 Financing Energy Projects

We will carefully examine all potential sources of energy project finance including the options provided under Kyoto Protocol (CDM, Carbon trading). Without access to finance there will be no implementation of energy policy. While larger projects in the power or petroleum sectors will normally easily access local and international financial markets including the multilateral lending agencies, smaller IPPs or RESCOs may encounter serious difficulties. We believe that incentives should mainly involve offering assistance to incumbent and prospective small rural entrepreneurs to address their major problems in a difficult market.

While setting and enforcing certain regulatory standards would perhaps help to improve efficiency of existing operations, a program that does not at the same time provide technical and financial support for upgrading existing systems and invest in new projects risks pushing operators out of the rural energy market. Currently the establishment of a regional renewable energy fund (REF) is being considered as a follow up of the PIREP project. The operation of the REF will be the key to achieving a number of these objectives and our policy paper and Sub-bill will pay particular attention to the way in which the fund is applied to create incentives to ensure appropriate technical and commercial standards. Central to this will be a system of "smart" subsidies to attract investment and mobilize loans from financing institutions.

As the REF-approach to private sector led electrification of rural areas is totally dependent on the ability of the banking sector in Fiji to engage actively in the financing of RE projects we will consult the relevant financial institutions on their ability to provide the required long-term debt-finance. It is however unclear at this stage how the financial sector will be encouraged to participate in the REF. We will examine the possibility to introduce a partial guarantee scheme for RE loans to compensate for weak collateral. We will also search for concepts to minimize government exposure and avoid the moral hazard problem that occurs if the risk of default is taken over by a guarantee scheme. In the case of a default on a covered contractual obligation, it covers the part of the loss incurred by the lender.

As far as the TA part of an incentive program is concerned, it is suggested that the possibility of establishing a pool of local experts is examined as a means of delivering the required technical assistance in a cost effective
way. Such a pool of experts would consist of engineers and financial experts who could be recruited under a type of retainer contract. Specific training might be needed for freelance specialists but the pool should also try to access staff from FEA or other relevant organizations on a part time basis. Standardizing requests and contracts and other procedures could facilitate administration of the expert pool.

4.4 Risk Management and Mitigation Guidelines

Risk management guidelines for commercial, country, force majeure and sovereign risks are essential part of strategic energy sector development. We will analyze energy sector risks and recommend how each risk should be managed. We will endeavor in framing the recommendations to seek to minimize the risks to be assumed by Government.

Risk management is at the heart of private energy sector investment decisions. IPP projects sponsored as currently by sought by FEA and promoted by foreign developers are particularly sensitive to commercial, country, force majeure and sovereign risks as they are more likely to be reliant on limited recourse finance and are exposed to foreign exchange risk. The involvement of commercial lending institutions also introduces an increased level of risk sensitivity.

Our starting point in establishing a policy for managing such risks would be to draw up simplified risk matrices for typical Fiji energy sector projects. This allows a systematic understanding of risks, mitigation strategies and interactions between them. We would undertake analyses for typical IPP and SPP projects. A similar approach would be used for RESCO projects but it would be adapted and simplified to take into account the different character of such projects, e.g. wider diversity of projects, less risk averse lending institutions, smaller capital amounts, different investor perspectives.

A particular challenge is to develop bankable risk management strategies for IPP projects without the support of GoF guarantees. For RESCO and SPP projects, the investments are small, local content is high, and project loans are in local or regional currencies and secured on the assets of the developer (if at all). Risks are therefore more manageable and a sovereign guarantee is less important. For small IPPs, the same holds true. However, growth in demand in the Fiji power system suggests that capacity increments of 10 MW or more will soon be needed and if the
significant capital outlays for such plants are to be sourced from the private sector, country risks must be mitigated. We will examine a number of strategies for managing country risks by means other than sovereign guarantee.

The ADB political risk guarantee, at least nominally, does not require a government counter guarantee although, in practice, it is our experience that one is generally expected. We will pursue this avenue with the ADB in the context of small to medium projects in Fiji. ECAs offer political risk cover for plant and equipment sourced from the ECA’s home country. Other strategies involve a more individual approach to each country risk. Insurance can be taken out for insurable risks and the cost of the cover built into the tariff. Cash reserves can be built into the project’s financial model or a letter of credit facility can be established to protect lenders against payment defaults, etc.

4.5 Implementation Procedures

To give effect to policies in the National Policy Paper regarding project implementation we will assist in developing implementation procedures designed to bring transparency, order, timeliness, evenhandedness and, where practicable, competition to the process of awarding concessions to developers, RESCOs and fuels suppliers. Guidelines and procedures, which will be followed for selection and evaluation of project proposals should be prescribed and would most likely be managed by FEA or by a new independent regulator. The procedures we will analyze would include:

- Two Stage Selection Process comprising a pre-qualification stage and a bidding stage;
- Request for Proposals (RFP) which should be outlined and key elements identified;
- The proposed method of selection and evaluation of bids should be fully documented
- based primarily on price factors incorporating a capacity factor and an energy price
- Special attention should be given to environmental impact and the social consequences of proposed projects
- Proposals for use of selection methods (unstructured or unsolicited) other than competitive bidding should be identified and circumstances
In consultation with DoE we will develop guidelines and procedures to be followed for selection and evaluation of project proposals. In proposing guidelines and procedures we would adopt several criteria:

(i) **Transparency**: A feature of successful implementation models has been transparency. Not only does it allow open demonstration of the project’s consistency with the national interest, but it also encourages participation by the more reputable and serious sponsors. In the absence of transparency participation serious and reputable sponsors is discouraged.

(ii) **Competition vs. Negotiation**: Competitive award of concessions should be the default option. A competitive process ensures transparency and a fair price. It would also serve to discourage less reputable sponsors. The negotiation process tends to have open-ended timelines giving it a high degree of uncertainty for sponsor, purchaser and government. Unstructured negotiations are also time-consuming for all participants and involve often futile expenditure of resources.

In some circumstances competition is not practicable and exceptions may be decided on a case-by-case basis; for instance:

- Some generation technologies may not always lend themselves to competitive solicitation, including those with long preparation periods and site-specific characteristics (e.g. hydropower).
- If the market is quiet, a solicitation may be unlikely to mobilize genuine competition and the bids (or bid) may be inflated as a result;
- If one developer has a distinct advantage over other bidders, e.g. possesses patented fuel production technology or, in the case of a plant extension project, already has a “foot in the door” as the owner of the existing station.

It follows that the guidelines and procedures will also need to specify a process for directly negotiating concessions and these should be designed to ensure that processes are tight, orderly, self-checking and transparent.

### 4.6 Model Documents for Energy Projects

(i) **Model Agreements**

In consultation with all stakeholders we will review existing model documents. We will recommend model agreements that will indicate to
investors the obligations and risks they would be expected to assume if successful in their bid and this enables them to factor them into their proposals and costing. Possible model documents include:

- Draft Bidding Document
- Draft Power Purchase Agreement
- Draft Small Power Purchase Agreement
- Draft Fuel Supply Agreement
- Draft Implementation Agreement
- Draft Land Conveyance Agreement to provide for land usage rights. In practice, the actual lease arrangements will vary according to: (i) land ownership and (ii) the nature of the tenure sought by the company over all or part of the site (e.g. "quiet enjoyment" of power station block, easement over corridors for transmission, cooling water and fuel tanks and pipelines, etc.).

On a per unit basis, small projects are generally more expensive to develop than larger thermal projects but many of them, particularly renewable energy projects, may be associated with non-price economic and environmental benefits that make them attractive. Private developers are interested in financial performance and the key to attracting private capital to small projects is to offer tariff and concession conditions that reflect any economic, social and environmental advantages. To stimulate SPP investment it is important that procedures for identifying, implementing and operating small power projects are simple in structure and consistent in their application. The document has a standardized format, is written in plain language and has a layout designed to add to the simplicity in accessing and understanding clauses. It should be a simple document but a number of legal concepts are involved and our legal team would be involved in its formulation. Our preliminary thoughts on the features of the SPPA include the following:

- The SPPA would be written as a standard non-negotiable document to be made available to SPPs who wish to contract to sell electricity at the published (advertised) tariff. It would strike a balance between the interests of the developer, power purchaser and Government.
- The SPPA would define and allocate between the parties the responsibilities, rights, rewards and risks involved in undertaking SPP projects in Fiji. It will also set out clear legal and contractual remedies available to the parties for certain defined events.
- The SPPA would specify the arrangements between the parties including interconnection arrangements, buy-back provisions,
(ii) Develop Eligibility Criteria for Licensed Operators

Eligibility criteria should ensure minimum standards and enhance competition for licenses. Over-specification will militate against a dynamic market and result in higher supply costs. Another problem with eligibility criteria is that in an application process they are merely promises whose fulfilment can only be verified ex post from operational performance, i.e. after the license has been issued. Together with technical minimum standards, eligibility criteria become perhaps more important as a tool for monitoring performance of operators who have committed themselves to meeting these criteria by accepting the license. Perhaps the most important function of eligibility criteria is their application in pre-qualification processes. In this role, they help to facilitate procurement processes.
5.0 Training

5.1 Overview

Effective energy policy development requires competent management and administration by the government agencies. Private companies are driven by the profit motive and, if there are weaknesses in agreements or their administration, there is potential for exploitation. In a country where the capacity of government is limited, there is a danger that the benefits of private involvement might be negated by disputes, claims, corruption and onerous contracts. A shortage of skills is therefore one problem. Another is the skills mix. Typically, experienced professionals in governments and utilities tend to have a technical background but the shift from public sector to private sector financing is accompanied by a shift in required skills base from technical to financial, regulatory and contractual. As a consequence DoE and other government staff may find that they are ill equipped to negotiate sound agreements and administer them properly.

Various strategies are available to combat this. Fees can be levied on developers to fund government advisors, long term expatriate specialists can be engaged to strengthen the government’s team, and the skills of local staff can be developed by a number of capacity building initiatives ranging from on-the-job training to formal structured courses. Training is therefore an important part of any balanced program of energy sector development.

5.2 Objectives and Training

The training component of PIEPSAP services consists of direct training of staff through workshops, working sessions, seminar and interactive training provided during our consultations and discussions with task force members. Our experience in Fiji suggests that a more extensive training program would be needed than the one we are able to offer within the budget and framework of PIEPSAP. We will nevertheless make a much-needed contribution and scope additional training requirements that might be addressed under a separate activity. We will also assist in sourcing funding for more specialized training.

Our training component is based on planned workshops, seminar and working sessions. Our expectations from these sessions extend beyond
the training benefit of exposing key staff to new energy sector concepts. We envisage a fruitful exchange of ideas and information and therefore see benefit for the Consultant in the opportunity to learn more about the Fiji sector and to test our thoughts and proposals.

5.3 Scope of Training

We propose training comprising the following components:

- **Informal interactive working sessions** to be conducted during our first mobilization. It is difficult to say precisely when these would be held as the planning would be opportunistic to a certain extent based on availability of staff. The format would be loosely structured, taking the form of question and answer sessions, “off the cuff” presentations and ad hoc tutorials. We will base this type of training on a list of preferred subjects that we will solicit from our counterparts.

- **Initial Workshop**, the timing of which is to be determined in the Inception Report. The principal objectives of the Initial Workshop are to discuss the current status of the sector and the draft National Energy Policy together with ideas for attracting and controlling the private sector and receive feedback on the policy and suggestions for improvement.

- **A Seminar** to be held following review of the draft reports will provide an opportunity to present the deliverables and solicit views of MWE, DoE, MFNP and FEA. One problem we anticipate with the proposed seminar is that it covers vastly different projects and interest groups. We are inclined to a partitioning of the event with sessions grouped into distinct periods so that people can attend the presentations of relevance and interest to them.

- **Informal interactive training** will be provided through day-to-day contact with people – in meetings and discussions. The nature of the assignment does not lend itself well to this form of training as there are no specific skills to acquire (such as mastering software, learning investigation and testing techniques or acquiring particular design skills).

We will consult with DoE on specific training requirements and structure our program accordingly.
6.0 Time Schedule and Deliverables

6.1 Program

Our indicative program for delivery of deliverables is outlined below. The program is subject to discussion with DoE and will be transformed in a detailed Schedule.

<table>
<thead>
<tr>
<th>Milestone:</th>
<th>Timing:</th>
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<tr>
<td>Start-off Meeting</td>
<td>January 2005</td>
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<tr>
<td>Start FEA regulatory review</td>
<td>February 2005</td>
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<tr>
<td>Submit Inception Report to DoE</td>
<td>March 2005</td>
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<tr>
<td>Hold Seminar after submission of Draft Outputs</td>
<td>June 2005</td>
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<tr>
<td>Submit Final Outputs – National Energy Policy</td>
<td>July 2005</td>
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<tr>
<td>Hold a stakeholder consultation to fine tune and update draft Strategies and Action Plan</td>
<td>On a date to be agreed</td>
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Note: The above schedule is indicative. Exact dates will be determined during the inception phase of the assignment.
6.2 Reporting/Outputs

The reporting requirements and outputs during the assignment will also be discussed and co-ordinated with DoE. We suggest the following as a basis for discussions:

- Final Agreement (ToR) PIEPSAP for support, before commencement of the assignment (this document)
- Mobilization note to be discussed at Start up Meeting
- Inception Report and Draft National Energy Policy
- Report on inception workshop
- Draft final report on policy development
- Draft Strategies and Action Plan
- Draft report on the review of FEA regulatory role
- Revised Electricity Act
- Draft Energy Bill
## Team Composition and Task Assignments

Our team composition will be discussed with DoE. We recommend a clear definition of task for the assignment as shown below. The positions in the table are also indicative and will be discussed as well.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Tasks (Main Responsibilities)</th>
<th>Time Input Person Days</th>
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<tbody>
<tr>
<td>M. Saturanga</td>
<td>Co-ordinator</td>
<td>Overall co-ordination of national task force (Solicitor General, Environmental Department, Finance and FEA,) organization of workshops and meetings,</td>
<td>30</td>
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<tr>
<td>G. Zieroth</td>
<td>Team Leader Policy and Regulatory Specialist</td>
<td>Assist in developing and drafting policy statements and regulations, facilitate workshops and meetings, co-ordinate inputs from and supervise all PIEPSAP/SOPAC staff and FEA review consultant</td>
<td>40</td>
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<tr>
<td>E. Mckenzie</td>
<td>Economic/Financial Specialist</td>
<td>Analyze macro-economic implications of policy changes, propose competitive procurement models and describe financing opportunities for implementation of policy and plans</td>
<td>15</td>
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<tr>
<td>Solicitor General's Office</td>
<td>Legal Specialist</td>
<td>Input in drafting bills, sub-bills and regulations, check consistency of policy framework with current legal framework Fiji</td>
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<tr>
<td>A. Matakiviti</td>
<td>Training coordinator</td>
<td>Organize and conduct Training as under 5. in cooperation with DoE</td>
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<tr>
<td>Specialist from Environmental Department</td>
<td>Environmental Specialist</td>
<td>Ensure environmental aspects are adequately reflected in policy and guidelines (review function)</td>
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<tr>
<td>To be recruited by PIEPSAP</td>
<td>Consultant FEA Review</td>
<td>Work on the separate review of the FEA regulatory function in close co-ordination with the PIEPSAP team</td>
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7.2 Staff Schedule

We propose mobilizing the team mid January 2005. November December should be used to recruit the review consultant and the staff from the Fiji Crown Office and the Department of Environment.

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<th>Team Member</th>
<th>Dec</th>
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Permanent Assignment

Continuous Involvement