# FIJI ELECTRICITY AUTHORITY (FEA) REGULATORY REVIEW – Executive Summary

Maunsell Limited

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~ Participating Pacific Islands Countries ~

*Cook Islands, Federated States of Micronesia, <u>Fiji</u>, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu* 



Regulatory Review Fiji Electricity Authority

**Executive Summary** 



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## Prepared for Secretariat of the Pacific Applied Geoscience Commission

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# **Executive Summary**

## **Study Objectives**

The objectives of this review of FEA's regulatory functions as stated in the TOR are to:

- (i) Provide inputs for a government decision on restructuring the regulatory functions in the electricity industry
- (ii) Facilitate consultation between stakeholders on the issue of electricity sector regulation
- (iii) Propose a regulatory framework that provides a conducive enabling environment for private sector participation in the electricity industry.

The aim of the regulatory review is therefore to review the existing framework, identify issues, facilitate discussion, propose a framework that reflects stakeholder views and describe a model for transitioning from the present to the proposed framework. It paves the way for downstream work in preparing and implementing specific regulatory changes according to the needs of stakeholders in the Fiji power sector.

An important feature of the TOR is that it seeks a consensus position on regulation rather than an imposed solution. In pursuing a consultative approach, the Consultant had discussions with representatives of a number of the industry's stakeholders and participated in the stakeholder consultation meetings held on 22<sup>nd</sup> March and 6<sup>th</sup> July. The views expressed at these meetings were influential in shaping the proposals presented in this Final Report.

## **Electricity Sector Regulation – Present Regime**

The electricity sector in Fiji is following some of the global trends in utility reform and the changes are testing the regulatory framework. For many years spare capacity at the Monasavu hydroelectric power station held FEA's costs in check but this has been absorbed by rising demand, increasing FEA's dependence on more expensive sources of generation. New generating capacity is needed but public capital is scarce and private sector capital is plugging the gap. Regulatory strengthening is needed to maintain the tariff at cost-recovery levels and to manage the increased role of the private sector.

From an examination of current regulation of the FEA system it is clear that an appropriate legal and institutional framework substantially exists already. Existing legislation, particularly the Commerce Act and Public Enterprise Act, gives GoF agencies broad regulatory mandates to scrutinise FEA's planning, operations and transactions. These regulatory powers tend to be discretionary and the regulatory agencies lack the staff and resources to act. The situation is not uncommon. Legal and institutional changes can be made relatively quickly, but implementation of the new arrangements requires resources and the responsible agencies are often under-resources and unable to discharge their new regulatory duties.

## **Retail Tariff Setting**

The FEA tariff was increased recently for the first time in 13 years. This stability was underpinned by spare capacity and stable production costs at the Monasavu scheme. With Monasavu now fully utilised, thermally generated electricity in the FEA system is increasing and, with it, the sensitivity of FEA's production costs to global energy prices increases. The clear intention of the Electricity Act and Public Enterprise Act is for FEA to operate commercially; i.e. to charge prices that allow it to recover its costs. This presupposes that FEA's retail tariff is responsive to changes in its reasonable costs of production and effective tariff review procedures are needed to facilitate this.

The Commerce Commission was established in the late nineties and is empowered under the Commerce Act (1998) to determine price adjustments for regulated goods and services, including electricity. However, price reviews for electricity are infrequent and customers have come to accept constant prices as the norm.

For price regulation to be effective, the tariff adjustment process must enjoy the confidence of stakeholders, but views expressed during the consultative phase of the assignment suggest that the basis of the Commission's recent tariff decision was not well understood. Stakeholder confidence is built on transparency and improvements in the tariff adjustment process could be introduced to promote greater transparency.

The following proposals are made to strengthen tariff regulation:

- Increase the frequency of tariff adjustments to better track FEA's supply costs and to condition customers to the reality that these costs change.
- Introduce clear and verifiable procedures for managing each tariff review. Tariff adjustments could be calculated periodically by a specialist consultant with interim adjustments determined transparently by the Commission using an objective template approach based on an appropriate pricing model that allows FEA to recover its costs (cost-based or performance-based).
- Provide the Commerce Commission with the resources, independence and autonomy it needs to conduct tariff reviews in accordance with the requirements of relevant legislation.
- Agree a procedure for annually quantifying and reimbursing FEA's social obligation costs. The procedure should include a transparent calculation methodology.

## **Technical Regulation**

The FEA Regulatory Unit responsible for inspecting, testing and licensing electrical installations and equipment is conflicted in situations where the installations and equipment concerned are owned by FEA. To date, the arrangement has worked well and no situation was brought to the Consultant's attention where the Unit's independence was called into question.

No fundamental relocations or transfers of the Unit's functions to another agency are proposed at this stage but the Unit's independence could be reinforced by strengthening the "ring-fencing" measures that establish its independence of FEA management (e.g. separate cost centre, outside reporting line, assured budgets).

As a long term objective, technical regulation could be transferred to the Commerce Commission as part of a coordinated transfer of similar responsibilities from other sectors to create an independent multi-sectoral technical regulator.

#### **Licensing Electricity Enterprises**

Under the Electricity Act, FEA may license others to generate electricity for grid supply, to build and operate transmission lines, and to distribute and sell electricity. FEA could be perceived by prospective licensees as a competitor in these areas and may be concerned about potential conflicts in FEA's licensing role. In practice, this has not been a problem to date.

Any conflicts, perceived or real, could be resolved by transferring the licensing function to either DoE or the Commerce Commission. Of these options, the Commerce Commission holds more advantage. As an independent multi-sectoral regulator, the Commission could absorb the licensing role for infrastructure service providers across a number of sectors. The Commission may not be in a position to manage a coordinated transfer of licensing responsibilities for a while and, until that time arrives, FEA remains the agency best equipped to consider licence applications.

#### **Regulation of PPP Projects:**

GoF and FEA appear to be at common purpose in their desire to harness private investment. Private sector involvement in owning and operating power infrastructure is already established in the FEA system through cogeneration purchases. Private greenfield projects, though, are relatively new.

The legal system, political institutions and language inherited from the British provide a sound platform for private sector involvement, but recent political instability and a non-convertible currency are potential concerns for prospective investors. Investments in generation can be large, with macroeconomic implications, and stakeholders have a legitimate interest in the effective regulation of FEA's public-private partnerships (PPPs).

The existing legislative framework, though not specific in its treatment of PPPs, provides generally for the regulation of all stages of commercial transactions such as PPPs from project selection through to the negotiation and administration of project agreements. Regulatory powers are contained primarily in the Commerce Act (Part 3, Access Agreements) and the Public Enterprise Act, but they are discretionary and tend not to be invoked because of institutional weaknesses in capacity and resources.

FEA has internal procedures for reviewing its PPP investment proposals but these should be complemented with external mandatory procedures for regulating procurement processes and providing for routine reporting and GoF approvals. For regulation to be effective and transparent, procedures should be drafted in clear and verifiable terms to define the processes and stipulate the documentation and information to be provided at each stage of the process. The procedures should be drafted in a legal style for possible incorporation into a PPP law or regulation.

With respect to institutional responsibilities for PPP implementation, FEA is the agency best equipped to costeffectively and efficiently manage PPP procurement in the electricity sector and should remain the lead agency for such activities. Responsibility for licensing PPPs, though, should be transferred to the Commerce Commission as soon as it is expedient.

Where large PPPs of national importance are concerned, procurement is more complex and negotiations more intense. Higher levels of skills and resources must be brought to bear and these might be assembled and coordinated by forming multidisciplinary project teams staffed by specialists drawn from GoF agencies and private firms, according to the dictates of the situation. The project teams could be located within the a central GoF ministry to improve coordination between agencies in the implementation processes (reviewing studies, arranging permits, negotiating project agreements, monitoring construction, etc.).

## **Regulation of FEA**

Regulation of FEA's performance is discussed separately under: (i) power system reliability, (ii) commercial performance, and (iii) consumer protection

- (i) <u>Power system reliability</u>: FEA's function is to provide and maintain a power supply that is financially viable, economically sound and consistent with the required standards of safety, security and quality. The statistics routinely provided by FEA in its Annual Report provide feedback on FEA's system reliability in the preceding year. A more proactive role by GoF in its overview of FEA's technical performance might be facilitated through an involvement in the specification of reliability criteria for FEA's power system expansion planning.
- (ii) <u>Commercial performance</u>: Financial scrutiny of FEA's affairs is authorised under the Electricity Act and Public Enterprise Act. This includes the requirement to audit its accounts annually. The Public Enterprise Act goes further, empowering the Minister to look at the institutional efficiency of FEA. The powers provided under existing legislation are adequate for overseeing FEA's commercial performance, but they are largely discretionary.
- (iii) <u>Consumer protection</u>: The Fair Trading Decree (1992) and the Commerce Act define the consumer rights of FEA's customers. FEA staff provides a first line of defence for consumer protection. With the transfer of the regulatory aspects of the Department of Fair Trading to the Commerce Commission, final recourse for customers with complaints is through the Commission. The legal and institutional framework provides adequate protection of FEA's customers.

## **Power System Expansion Planning**

A power utility's focus is its customers and its commercial position; consistent with this, it will strive to supply electricity at minimum price and, accordingly, will plan system expansion on least-cost principles. A government, having a national perspective, will take a broader interest in the integrated planning of the country's resources to achieve its goal of economic efficiency. A regulatory regime must reconcile any differences in the perspectives of utility and government; i.e. it must ensure system expansion is least-cost subject to any constraints imposed by government to take account of wider economic factors.

Power system planning requires specialized skills. Though small, the Viti Levu power system, with its reliance on hydropower, is a complex system to simulate for the purposes of least-cost expansion planning. The Major Projects and Strategy Group of FEA conducts load forecasting, generation expansion simulations and power system planning, and, at present, no other GoF agency has the expertise or software to do this work.

Current planning processes allow GoF several opportunities to interpose its views on FEA to influence the objectives and direction of planning. These include the requirement under the Public Enterprise Act for FEA to submit to GoF the annual FEA Corporate Plan and Statement of Corporate Intent. Planning must conform to these documents. Opportunities for GoF to steer the planning process also arise through a stakeholder consultation process at the start of a planning cycle.

That GoF does not always take advantage of these opportunities could be attributable to a lack of formal structure in the planning procedures. Power planning in many countries is divided between strategic planning conducted by the government, and tactical planning conducted by the utility. This ensures an integration of national and utility objectives. To introduce this approach in Fiji would involve the setting up of a new planning group in DoE which would divide and duplicate the country's already thin power planning expertise, risking possible degradation of its competence and increase in overall costs.

The preferred remedy is therefore to leave the planning function with FEA, but to establish clear and verifiable procedures to stipulate consultation processes before and during the planning cycle to ensure national priorities of GoF are formally reflected in the planning criteria and parameters used by FEA in the preparation of its least-cost expansion plans.

#### **Environmental Regulation**

With environmental effects only partly built into the pricing of electricity, the market is a poor regulator of environmental responsibility. Regulation is needed to direct behaviour in project selection and development, system dispatch and electricity consumption.

The recently enacted Environment Management Act (2004) provides an effective framework for regulating environmental and social impacts of FEA activities in operating and extending its system. The Act is strongest in assessing and controlling impacts from capital works but is not designed to regulate the environmental effects of power system operation.

The application of the provisions of the Environment Management Act will be overseen by the National Environment Council and the Department of the Environment. Powers may also be delegated to environmental units within line ministries and to FEA.

Though the legal framework properly addresses regulation of environmental effects of FEA, effective legislation is only one element of effective regulation. A number of countries have adequate environmental legislation but are unable to regulate behaviour because of a combination of factors including lack of institutional capacity and resources (and sometimes a lack of political will). Environmental regulation is only as effective as the institutions implementing it.

The question of independence also arises in connection with environmental regulation. Those charged with administering the Act should be able to carry out their duties independently. The Department of Environment is a GoF agency and potential conflicts arise where it is required to monitor and enforce conditions on priority government projects. The same conflict exists in other countries but the arrangement works satisfactorily in many cases. The alternative is to duplicate environmental capacities under an independent regulatory agency, an approach of doubtful merit for Fiji. It is therefore proposed that environmental regulation remains with the Department of Environment and line ministries.

#### Labour Regulation

The labour market in Fiji is unionised and regulated by legislation. Employees can be employed pursuant to an industrial award or under an employment contract.

When FEA becomes a Government Commercial Company under the Public Enterprise Act, FEA must prepare an Employment and Industrial Relations Plan which must specify FEA's major employment and industrial relations issues.

A new Industrial Relations Bill is before Parliament. The Ministry of Labour, Industrial Relations and Productivity is reviewing the Bill which consolidates amendments from workers' and employers' organisations with existing employment and industrial relations legislation. The Bill's provisions bring labour legislation into line with Fiji's 1997 Constitution and with international agreements ratified by Fiji such as the UN and ILO Conventions.

On the basis of the documents studied and the Consultant's consultations, the industrial relations legislation and labour institutions provide an adequate framework for regulating employment and staff issues in the sector.

#### **Regulatory Framework Development**

Development of "best practice" regulation is a long-term and ongoing process. Strategies for improving regulation in Fiji should have two facets:

- 1. Long term objective of building transparency and independence into the regulatory framework as well as other best practice principles applicable to small systems;
- 2. In the interim, introducing short term enhancements to address particular areas needing immediate attention.

GoF has already introduced a number of major reforms with the creation of a multi-sectoral model of regulation with the Commerce Commission as the focal agency. The multi-sector model recognises the constraints of a small market and commonalities between network industries.

In general, the existing legal and institutional framework provides an effective basis for regulating the sector, but problems in application exist, caused in the main by insufficient resourcing of the regulating agencies and

lack of formal procedures to specify and mandate regulatory processes. Relatively minor adaptations could be introduced at little cost to ease perceived and actual shortcomings. These steps should be considered to be transitional – designed to work within the existing legal and institutional framework to avoid the cost, disruption, risks and delays associated with revolutionary reform involving the division or relocation of successful units. With time, other options will become more realistic and the further development of the regulatory framework based around an expanded Commerce Commission should be considered.

Proposed adaptations that could be introduced within a short timeframe are summarised below:

#### (i) <u>Retail Tariff Setting</u>

- Increase the frequency of tariff adjustments so FEA's revenue base more closely tracks its reasonable production and system development costs.
- Introduce clear and verifiable procedures for managing each tariff review, specifying the timing and methodology of tariff reviews, the pricing model or template to be used to determine a fair price.
- Provide the Commerce Commission with the resources and autonomy it needs to conduct tariff reviews in accordance with the requirements of relevant legislation.
- Agree an objective procedure for annually quantifying and reimbursing FEA's "social obligation" costs associated with GoF's commitment to non-commercial rural electrification.

#### (ii) <u>Technical Regulation</u>

• Strengthen perceptions of independence of the FEA Regulatory Unit by reinforcing "ringfencing" measures to further insulate it from management influence in matters relating to the licensing of FEA plant and equipment.

#### (iii) Licensing Electricity Enterprises

- Transfer responsibility for the licensing of electricity enterprises (including PPPs) from FEA to the Commerce Commission as soon as practicable. This should be done as part of a coordinated transfer of similar licensing functions in other sectors. The transfer should occur only when an institutional capacity for multi-sectoral licensing has been developed within the Commission.
- In the meantime, strengthen procedures for licensing of electricity enterprises to provide transparency of process and provide stakeholders with adequate and timely information;

#### (iv) <u>PPP Procurement</u>

• As the agency best equipped to manage PPP procurement, FEA should retain responsibility for the procurement process. Responsibility for formal PPP licensing and

monitoring of compliance with licence conditions should be assumed by the Commerce Commission as soon as practicable.

- Clear and verifiable procedures drafted in legal style should be introduced to bind all parties to a systematic and transparent PPP procurement process, and to specify the agencies responsible for procurement activities and approvals.
- Where large PPPs of macroeconomic significance are concerned, wider support from Government may be needed to assemble the skills needed to manage complex projects and negotiate on equal terms with experienced developers and their advisors.

#### (v) System Expansion and Resource Planning

• Introduce formal procedures governing GoF input into FEA power system planning criteria to reconcile national and utility objectives in the expansion of the FEA system.

The faith of investors, customers and other participants in the power sector is promoted by a system of regulation that is independent, transparent and efficient, and longer term regulatory objectives should be aimed at reinforcing these features. The Commerce Commission provides a natural focus for progressive strengthening of the regulatory regime over a period of time. Regulatory functions currently carried out by FEA and other GoF agencies could be transferred to the Commission as its capacity to absorb the new responsibilities is developed. In keeping with its multi-sectoral charter, the broadening of the Commission's role should be coordinated across sectors, as appropriate, to take advantage of any scale effects. Institutional weakness has been an obstacle to effective regulation and sustained capacity building programs to strengthen the key regulatory agencies should be a part of any long-term development plan for the sector. The Commerce Commission, in particular, should receive on-going assistance to prepare it for its expanding role. Technical assistance from multilateral and bilateral agencies could be enlisted to support such programs.

## Next Steps

At the Second Stakeholder Consultation Workshop it was agreed that the planning of regulatory reform should take account of the resources available to GoF and should concentrate of several priority issues rather than attempt reform across a broad front. Priority issues are:

- Tariff reviews and tariff adjustments
- PPP procurement
- Power system planning

The planning and resourcing of these initial reforms are explored in the full report.