Office of Utilities Regulation

Regulatory Policy for the Electricity Sector

Guidelines for the Addition of Generating Capacity to the Public Electricity Supply System

OFFICE OF UTILITIES REGULATION

June 2006

DOCUMENT TITLE AND APPROVAL PAGE

DOCUMENT NUMBER: **Ele 2005/08.1**

1. DOCUMENT TITLE:

Regulatory Policy for the Addition of New Generating Capacity to the Public Electricity Supply System.

2. PURPOSE OF DOCUMENT

To set out the regulatory policy to guide the process for the addition of new generating capacity to the Jamaican electricity grid.

3. RECORD OF REVISION

Revision No.	Description	Date
1	The revision responds to and incorporates comments made by interested parties to draft Policy published in February 2006	June 5, 2006

APPROVAL

This document is approved by the Office of Utilities regulation and becomes effective on July 1, 2006

By Order of the Office:

…….
J. Paul Morgan
Director General

Date: June 5, 2006

Abstract

The All Island Electric Licence (2001) (the Licence) establishes the framework for the planning and implementation of incremental addition of generation capacity to the national electricity grid. While the Jamaica Public Service Company (JPS) has the exclusive right to under the Licence "to transmit, distribute and supply electricity throughout Jamaica" until 2021, effective April 2004 the Licence provides for the addition of generating capacity through a competitive process.

It is in this context, that the Office of Utilities Regulation (OUR) is obliged to set out the regulatory framework, which will provide the rules for the addition of capacity.

In February 2006, the OUR published the draft Regulatory Policy for the Addition of New Capacity to the Public Electricity Supply System and invited comments from interested parties. Two (2) responses were received, over a three (3) month period. One from JPS and the other from Wigton Windfarm.

Part 1 of the document delineates the rules for capacity addition. The rules reflect revisions made to the draft based on the comments received. In Part 2 of this document the Office addresses pertinent issues raised in the feedback from these entities.

These guidelines are required to facilitate the long term expansion of generation at the least economic cost whilst having regard to the relevant government policies and all applicable legislation.

This document sets out the Regulatory Policy to guide the process for the orderly addition of new generating capacity to the public electricity supply system and is complemented by accompanying Schedules which provide specific details of the procedures to be adopted in respect of the several modalities by which capacity can be added to the system.

GLOSSARY

Act	-	The Office of Utilities Regulation Act
Corrupt Practise	-	The offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.
Fraudulent Practise	-	a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of anyone and includes collusive practices among bidders (prior to or after submission of tenders) designed to establish prices at artificial, non-competitive levels and to deprive anyone of the benefits of free and open competition.
GOJ	-	Government of Jamaica
IPP	-	Independent Power Producer
JPS	-	Jamaica Public Service Company Ltd.
kWh	-	Kilowatt-hours
LCEP	-	Least Cost Expansion Plan
Licence	-	The All Island Electric Licence 2001
MOU	-	Memorandum of Understanding
Minister	-	Government Minister with portfolio responsibility for the energy sector.
MW	-	Megawatt
NEPA	-	National Environmental Planning Agency
Office/OUR	-	Office of Utilities Regulation
O&M	-	Operating and Maintenance
PPA	-	Power Purchase Agreement
RFP	-	Request for Proposal
T&D	-	Transmission and Distribution

Table of Contents

Table of Contents

Table of Contents

APPENDIX

PART 1

1.0 Introduction

The ***All Island Electric Licence 2001*** (the Licence) provides a framework for the planning process required to identify the long term needs for the addition of generation capacity. In this respect the Licence establishes the basis for securing for the country the timely addition of capacity to meet the demand for electricity at the least cost.

Condition 2.4 of the License provides for the addition of generation capacity to the public supply system on the basis of a competition after April 2004. The condition gives JPS *"the right together with other outside person(s) to compete for the right to develop new generating capacity."*

Condition 18 of the Licence also sets out the framework of principles that governs the competitive process.

The Office, pursuant to its statutory function, is obliged to set out the regulatory framework, which will provide the rules for the addition of capacity and in so doing must have due regard to government's energy policy, industrial policy and any other policy that impacts the electricity sector, whilst ensuring that the rules and established processes are consistent with applicable legislation and that the rights of all stake holders are not compromised. The legal framework places upon the Office the responsibility to take such action as it may deem necessary to ensure the availability, security and reliability of supply to consumers at the least cost.

This Part sets out the Regulatory Policy to guide the process for the addition of new generating capacity to the public electricity supply system and is complemented by accompanying Schedules which provide specific details of the procedures to be adopted in respect of the several modalities by which capacity can be added to the system. The Office expects that while its policy will change as government policy changes, the schedules will be periodically reviewed and amended as technology and operating conditions change from time to time.

This policy, which under no circumstances should be construed to be applicable retroactively, therefore sets out the normal processes and the associated conditions for the addition of new generating capacity of all sizes and types going forward.

2.0 Government's Policy Framework

The features of Government's energy policy which have important implications for the addition of new generating capacity are captured in the following objectives which seek to:

- Introduce diversity in the sources of primary energy used for power generation and thereby reduce Jamaica's dependence on imported oil;
- Protect the economy from the volatility in energy prices which has been experienced with petroleum fuels and which will continue as oil supplies become more limited;
- Reduce the pressure on the foreign exchange market which result from high oil prices;
- Increase utilization of indigenous resources for energy production;
- Make electricity services more widely available throughout the island, especially in deep rural areas;
- Encourage more efficient usage of energy;
- Reduce the cost of electricity to the end consumer;
- Reduce the deleterious impact of power generation on the environment.
- Keep abreast of the development of power supply technologies and facilitate introduction of those likely to provide cost advantages with reduced environmental impact.

3.0 Legal and Regulatory Framework

There are a number of primary and secondary legislations that guide the Office in the regulation of the Electricity sector. Foremost among them are:

- The Office of Utilities Regulation Act (amended 2000)
- The Electric Lighting Act (1893) – this is to be replaced by a new Act
- The Natural Resources Conservation Act.
- The All Island Electricity License 2001

The OUR Act in Section 4. (1) (d) requires the Office to *"advise the responsible Minister on such matters relating to the prescribed service as it thinks fit or as may be requested by the Minister"*

The Act further, in Section 4 (3), stipulates that *"the Office shall undertake such measures as it considers necessary or desirable to –*

(a) encourage competition in the provision of prescribed utility services;
(b) protect the interests of consumers in relation to the supply of a prescribed utility service;
(c) encourage the development and use of indigenous resources; and
(d) *promote and encourage the development of modern and efficient utility services.*

The Licence, however, provides the regulatory framework within which Jamaica Public Service Company Limited ("JPS") operates. It also outlines the approach to be used for the addition of generating capacity. The Licence Condition provides as follows:

(i) 18.1 *"Save to the extent the Office agrees, or as provided for in this Licence, the Licensee shall not contract for new capacity*[1] *other than pursuant to a competitive tendering procedure…",*

(ii) 18.4(a) that the Licensee shall be obliged *"to conduct the tender process in accordance with its report once approved by the Office."*

(iii) 18.4 (d) that the Licensee shall be obliged *"to pay for an independent evaluator from fees collected from bidders to conduct the tender process, in accordance with a procedure approved by the Office . . . where the Licensee is one of the tenderers for the provision of new capacity."*

(iv) 18.6 *"for capacity additions under 15MW the Office may, after consultations with the Licensee, approve a simpler procurement methodology, on a case by case basis".*

(v) 21.2 *"The Licensee shall submit the Least Cost Expansion Plan . . . to the Office for review. The Office when satisfied that the plan represents the least economic costs for system expansion consistent with internationally accepted best industry practice, will recommend the*

[1] Clause 5 of the Licence defines **"new capacity"** to "include contracts for the purchase of electricity from existing or new generation sets; contracts for the construction of new generating sets or the extension or repowering of existing sets to meet demand for electricity above 15 MW".

plan to the Minister for his approval. On receipt of the recommendation from the Office, the Minister shall:

(a) approve the plan; or
(b) refer the recommendation back to the Office for further consideration."

The legal and regulatory framework applicable to the electricity sector establishes the context within which the timely addition of generation capacity can take place, at the minimum cost, consistent with the country's long term national development. It also explicitly places a duty on the Office to act in a manner to ensure the adequacy of generation capacity.

4.0 Regulatory Policy

In general the Office is guided by its statutory mandate. In this respect the addition of capacity via the competitive or non-competitive route is no exception. The central principles guiding regulation in the sector are:

- Fairness
- Transparency
- Energy efficiency
- Fuel diversification
- Affordable prices to customers
- Promotion of the use of indigenous resources
- Preservation of the environment

In practice it may be difficult to arrive at regulatory decisions which give equal weight to all of the principles designated above. For instance giving priority to indigenous energy resources may result in higher prices to the consumers or the decision to add generating capacity of increments less than 15MW, via a non-competitive approach, may not be considered objectively fair. Potential conflicts of principles may be resolved in part by stakeholder consultations centred on the balancing of consumers' interest, environmental protection and the investors' viability. However, the Office is obliged to take the relevant government policies into account in arriving at its decisions.

All providers of a prescribed utility service are required to have a licence issued by the Minister on the recommendation of the Office. The provision of electricity to the national grid is a prescribed utility service.

5.0 The Least Cost Expansion Plan

Investments to expand the generating capacity of an electric utility is (or ought to be) informed by preparation of a plan identifying the resource requirements and the approximate timing of these requirements to assure a defined level of reliability of power supply to the consumer at the lowest economic cost. Because of the high capital cost and long lead time required for generation expansions the plan must be prepared years ahead of the implementation deadline. Normally, expansion plans encompass periods of 20 years and more, of which the investments for the first five to seven years are firm and projects identified for later periods will be subject to regular reviews to reflect the effects of changing relevant conditions

Condition 21 of the Licence imposes a duty on the Office to approve the long term planning procedures proposed by JPS.

In developing least cost expansion plans consideration is given to, inter alia:

- Realistic assumptions of increases in demand and energy consumption, influenced in turn by projections of growth in the national economy;
- Historic demand and consumption patterns;
- Fixed and variable costs (including relevant externalities) of the various alternative projects being evaluated;
- The performance of existing units and the appropriate date for the economic retirement of each;
- The economic value of supply reliability and its appropriate level

In order to determine the extent of capacity requirement, the LCEP ought to reflect the impact of the following on the investment decisions that are made to expand the utility's generation capacity:

- projected growth assumptions;
- the performance of the existing units and their economic retirement, and
- the reliability criteria to be used to judge the adequacy of supply.

The LCEP is a generation simulation model which evaluates the technical and economic performance of all feasible generation alternatives and provides information to facilitate selection of the optimal generation investment path. It also includes the transmission and distribution configuration and investment required to support the generation expansion identified.

The LCEP is the starting point for the addition of new capacity. Under the prevailing regulatory framework, JPS has the responsibility of developing the LCEP and the Office, once satisfied with it, shall submit its recommendation to the Minister for approval of the Plan. After approval by the Minister, the plan sets in motion a whole series of activities and commitments for new generation spanning several years. Typically the investments projected for the first 5 to 7 years will be regarded as firm and the investments will proceed as planned. However, over time the factors influencing the demand and supply of electricity, such as economic developments, technological advances and the relative price of competing fuel sources will change, causing the demand and costs to deviate from the original projections. As a result it is necessary for the plan to be re-evaluated at regular intervals.

As a matter of policy the Office will treat with the Least Cost Planning Process in the following manner:

1) The Office will from time to time Issue a Directive to JPS to prepare a Demand Forecast and LCEP consistent with the planning procedures approved by the Office pursuant to Condition 21 of the Licence. Generally, this Directive will be issued every 5 years but the Office reserves the right to issue such a Directive as and when circumstances dictate.

2) On receipt of the proposed plan from JPS, the Office will conduct its own review and in so doing carry out its own modelling of the power system and develop its own scenarios to test the rigour and scope of JPS' proposals in order to satisfy itself that the plan reflects the least cost solution for the expansion of the power system. The Office will consult with JPS on the matter and following such consultations; the Office will publish the draft plan and solicit the views of other interested parties on the proposed plan. After, the consultation is completed, the Office, will finalize its recommendations and submit the plan to the Minister for approval. Once approved, the Office will not only communicate this to JPS but will make the plan public by posting on the OUR's web site.

3) JPS will be required to update the Demand Forecast and approved plan annually and to submit this update to the Office by March 31 each year.

4) The Office, once it is satisfied, will make the updated plans public on its web site by June 1 each year.

6.0 Policy for the Addition of Capacity

The addition of new capacity to the grid can be achieved by way of three modes:

(i) the installation of conventional technologies,
(ii) the utilization of renewable sources, and;
(iii) the setting up of co-generation installations

6.1 Conventional Technologies

Conventional Technologies refers to plants that traditionally burn fossil fuel or use nuclear sources and generate electricity exclusively. These plants are the most popular technologies employed in generating electricity. In Jamaica these technologies (fuel oil) account for 95% of the capacity on the grid. Conventional technologies produce electricity from fuel sources such as oil, coal, natural gas and hydroelectric, which is also renewable.

The following are rules to be observed for the addition of conventional capacity:

1) Pursuant to the Licence the upper limit at which capacity may be added to the grid without going through the competitive tendering process is 15 MW.

2) Addition of plant above the 15 MW rating will be initiated through a request for proposal following the approval of the LCEP.

3) The competition will be conducted consistent with the process set out in the Licence.

4) Successful bidders must satisfy the criterion of lowest evaluated economic cost to the system and, among other things, must be in line with the technical and financial conditions specified in the Request for Proposals.

5) Capacity additions will be considered either on the basis of providing firm capacity and energy to the system or supplying energy-only to the grid.

6) The contractual arrangements negotiated between JPS and the investor will form the basis of the Power Purchase Agreement (PPA) between the parties.

7) The PPA must be approved by the Office before being executed by the parties.

8) Prices under these PPAs will be based on the avoided cost[2] of generation to the grid.

9) The criteria of technical practicality and financial robustness must be satisfied in this category.

6.2 Renewable Technologies

This classification applies to plants in which the source of primary energy is continually naturally regenerated. Such sources of primary energy include sunshine, wind, rivers and biological cycles. Exploitation of such renewable resources does not lead to depletion of reserves and minimizes adverse environmental effects.

In Jamaica, the potential indigenous energy sources are all renewable. They include hydroelectric developments, solar, wind, and biomass fuels. The disadvantage with most renewable sources is that their availability tends to be intermittent. Solar power is not generated at night, wind flow direction and intensities are variable, whilst hydroelectric generation will be dependent on the stream flows and, in specific instances, may not be available at all at certain periods of the year. It will then be necessary to have alternative generating capacity installed to ensure availability of capacity to meet system demand at times when the supply from the renewable sources is restricted. For these reasons it is probable that renewable energy technologies will produce electricity for the grid at higher prices than those of the conventionally-fuelled generating units whose output they would displace.

In its Energy Policy the government proposes a number of incentives to make investment in electricity generation for the public grid from renewable sources economically attractive. Under this policy the Government has set a target whereby 15% of the total generating capacity for the grid will be provided from renewable energy resources by the end of the year 2015. In addition, a premium of up to 15% above the utility's avoided costs will be allowed for purchases of electricity generated from renewable sources.

Projects for power supply to the grid from renewable energy sources will be classified in three categories:

[2] "Avoided cost" is the incremental cost that is not incurred by the utility if the additional output is provided by an alternative project, such as an independent power producer".

1. Large additions : plants of sizes greater than 15 MW
2. Medium additions: plants greater than 100 KW but less than 15 MW
3. Small additions: plants of 100 KW and less

The LCEP will be developed such that a block of capacity will be reserved for additions from renewable sources. The size the block will be announced, from time to time, by the Office.

Capacities equal to and greater than 15 MW will be added on the basis of a competitive process consistent with Condition 18 of the Licence. This will be the preferred route for meeting the total capacity assigned to renewables.

If, however, the block assigned for renewables is not completely filled by large additions within the time specified by the Office renewable proposals for capacity less than 15 MW (medium and small additions) will be considered. These proposals may not be subjected to a competitive tendering process but priority will be given to proposals that are technically feasible with the lowest economic cost.

Small additions of 100 KW and less will be made to the system by way of a Standard Offer Contract issued by JPS.

6.3 Cogeneration Plants

Cogeneration, sometimes referred to as “combined heat and power (CHP)” is the simultaneous generation of process heat and electricity from combustion of the same fuel. Fuel combustion to produce heat or power separately is less efficient than cogeneration in converting fuel to useful energy.

The energy efficiency realized in converting fuel to electricity in plants producing electricity alone is dependent on the technology employed. Generating stations equipped with steam turbines and burning fossil fuels can achieve maximum efficiencies of about 45% and combined cycle plants burning natural gas may realize thermal efficiencies in excess of 60%. However, efficiencies in excess of 80% may be obtained with cogeneration plants under favourable conditions. Cogeneration plants therefore may provide opportunities for more fuel-efficient power generation in Jamaica.

However demand for heat, usually steam, by an industrial process is a pre-requisite for successful implementation of cogeneration projects. Integration of power production and process heat requirements may place limits on the siting and power generating capacity of cogeneration plants. For these reasons cogeneration plants may not easily comply with the conditions of bid documents

prepared to solicit competitive bids. However, the potential for electricity production at high fuel efficiencies may make it prudent to evaluate cogeneration projects outside of the competitive process and without bid solicitation for new capacity. The greater fuel efficiency of such plants should be reflected in supply costs lower than the avoided cost. Proposals in this category will not be considered by the Office if the proposed sale price of electricity exceeds the avoided costs published from time to time by the Office.

Cogeneration by virtue of its design should result in prices that are lower than the avoided cost. For the avoidance of doubt the Office will not consider proposals for this category where the price exceeds the avoided cost.

All cogeneration proposals will be assessed against the latest LCEP. In considering proposals for cogeneration plants outside of the competitive process the conversion efficiency for electricity production must average at least 65% of the heat value of the fuel.

Decisions on acceptance of unsolicited cogeneration proposals will be influenced, inter alia by the:

- Implementation timeframe
- Site location
- Environmental impact
- Fuel efficiency
- Fuel type and origin
- Price

Cogeneration plants burning biomass[3] will qualify to be classified as renewable energy, provided that the biomass medium is produced in Jamaica. In such instances the Office may approve the purchase of electricity to be transacted at prices higher than the utility's avoided cost by application of the premium provided for electricity generated from renewable energy resources.

6.4 Excess (Dumped) Energy Policy

Independent generators (from conventional or renewable sources) that provide energy to satisfy a part or their full energy needs may from time to time have excess energy which they might choose to sell to the national grid. The Office will allow for this type of transaction through a standardized PPA from JPS. The rate formula and pricing structure applicable must be approved by the Office before it becomes effective.

[3] Biomass includes bagasse.

6.5 Net Billing Policy

”Net Billing” provisions are made for small commercial and residential installations with capacity up to 100 KW from intermittent sources of renewable energy. By the nature of these installations supplemental power will be needed from the grid, from time to time, and on occasions they will have excess energy available for sale. These installations will be allowed to exchange power with the grid under a net billing arrangement which involves:

- The installation of up to two (2) meters on the facility. Each meter will measure energy flow in opposite directions. One meter will account for flows from JPS to the IPP and the other from the IPP to JPS.

- JPS will be responsible for the installation and maintenance of the two meters. Meter costs will be recovered through the rates charged to IPP from electricity from JPS.

- A standard contract which will specify the rate fixed by the OUR at which the IPP will sell power to, and purchase power from the grid. This rate will be determined by the Office and published from time to time.

7.0 Competition for New Capacity

Following the approval of the LCEP proposals will be solicited for capacity additions. At which time the OUR will identify the portion of the total capacity addition to be filled by conventional technologies and the portion to be satisfied through renewable energy sources. Proposals based on conventional technologies and renewable technologies shall be subject to separate competitive processes.

7.1 Requests for Proposals

In keeping with the framework provided in the Licence and in order to ensure that the competitive process achieves the objectives of reasonable prices and productive efficiency, the Office has separated the competitive bidding process into two categories:

(i) Tendering without JPS as a bidder
(ii) Tendering with JPS as a bidder

7.1.1 Competitive Tendering when JPS is Not a Bidder

In Condition18 and Section 4 of the Licence states that the Licensee is obliged to carry out the tender process in accordance with an approach approved by the Office. In order to ensure that the competitive process is one that is fair and transparent, the Office will require that JPS adhere to the following steps, in the event it is not tendering:

a) JPS will be required to establish a multi-disciplinary project team for the management of the bid process. Among other things, the project team will be assigned the task of developing the request for proposal (RFP), evaluating the bids and making recommendations to JPS with respect to the developer that should be awarded the contract for the addition. The team must reflect a balance of the various disciplines (engineering, economics, finance, law, environmental management, etc.) required to make sound decisions with regards to the capacity addition.

b) The Office will review the proposed structure of the project team and the proposed team members will be expected to have the appropriate qualification and experience.

c) The Office reserves the right to have its representatives observe the process of review and evaluation of the bids but in any event all reports and related documents are to be deposited with the Office.

The Office has the responsibility of approving the RFP developed by the project team. The RFP shall, among other things, contain at minimum:

- A copy of the LCEP
- Information on the capacity (in MW) being sought
- Expected (but not guaranteed) annual capacity factor
- Draft power purchase agreement
- Lists of information to be submitted with the proposal
- Environmental requirements
- Criteria to be applied in evaluation of the proposals and the weighting of each
- Deadline for submission of proposal

As provided in the Licence the Office may issue directives for the competitive bidding exercise to be redone if in its reasonable opinion the exercise did not conform to the process it approved.

7.1.2 Competitive Tendering with JPS as a Bidder

In the event that JPS is tendering for the new capacity addition, the Office will be responsible for establishing the project team to undertake the tendering and evaluation of bids, The project team will be comprised of persons and/or entities external to the OUR. The team will report its findings and recommendations to the Office which will give final approval. Personnel from JPS or any company affiliated to the utility will not be allowed to be part of the project team.

The Office reserves the right to have its representatives observe the process of review and evaluation of the bids but in any event all reports and related documents are to be deposited with the Office.

7.2 Evaluation Process

The evaluation exercise may be classified into two (2) broad categories: (1) technical and (2) legal, financial and economic. The project team must establish the necessary rules and procedures, (which is subject to the approval of the Office) so as to ensure that the bidding and evaluation may be free from corrupt and fraudulent practise.

7.2.1 Technical Evaluation

The objective of the technical evaluation is to identify at an early stage any potential violation that may occur in relation to the relevant technical standards and appropriate engineering specifications. This aspect of the evaluation will, among other things, include assessment of:

- the proposed technology, fuel source and performance ratings of the plant
- the facilities required for interconnection to the transmission or distribution system.
- the implications of the project for power flows across the grid.
- the environmental effect of the project against the standards promulgated by the National Environmental Planning Agency (NEPA) based on the Environmental Impact Assessment submitted by the bidder.

7.2.2 Legal, Financial & Economic Evaluation

The financial and economic evaluation involves:

- Examination of the ownership structure of the firm
- Background checks into the creditworthiness of the firm and a determination as to whether the principals are fit and proper as investors.
- Sources and stability of financing arrangements
- Economic analysis of the pricing structure and the implication of its long term cost impact on the system.

In addition, the proposed tariff indexation schedule will be assessed. This schedule should identify the price escalators, the reference variables for the adjustment and the mechanism that is applicable.

7.3 Negotiations

At the end of the evaluation exercise the successful bidder will be notified by the Office and the negotiation of the PPA and other agreements will commence. In the event the successful bidder is:

1. JPS the negotiations will be with the Office the conclusion of which will result in a "**virtual**" PPA signed with the OUR, which will be structured in a way that will separate the costs associated with the addition from its existing business, precluding it from any form of cost cross-subsidization.

2. an entity other than JPS, the negotiations will be between the entity and JPS. The Office must approve the PPA and other agreements made before they can become effective.

8.0 The Non-competitive Addition Process

By virtue of the underlying technologies, conditions laid out in the Licence and government policy with regards to certain sources of generation, unlike conventional and renewable technologies of capacities 15 MW and above, the following category of generation may be added to the grid via a non-competitive process;

a) All Cogeneration plants (regardless of size)

b) Conventional technology and renewable energy with Capacity additions less than 15MW

c) the sale of excess energy by independent generators

As stated in Section 7.1 above the Office, in publishing the amount of capacity that is open to competitive bidding, will also declare the amount of capacity assigned to renewable technologies. In addition, the Office will make periodic announcements (no more frequently than annually) regarding the increment of such capacity that is required within a specified period.

Proposals for cogeneration plants as well as those for the sale of excess energy may not require solicitation from the Office. Proposals based on cogeneration technology may be made simultaneously to the OUR and JPS.

As indicated above, small additions of 100 kW and less will be made to the system by way of a Standard Offer Contracts from JPS.

The Standard Offer Contract will, among other things, address the following:

- Price
- Rights and responsibilities of parties to the contract
- Safety
- Technical requirements of facility
- The assignment of interconnection cost

8.1 Submission of Proposals

Submissions of proposals that qualify for the non-competitive evaluation process shall be made simultaneously to JPS and the OUR.

Developers of these projects should, as a minimum, provide the following information:

- Identification of ownership group
- Size and type of facility
- Description of the technology
- Technical details of proposal
- Projected capacity availability and annual energy supplies to the grid
- Tentative project implementation milestones
- Proposed pricing structure
- Status of site selection or acquisition
- Status of fuel supply commitment (if appropriate)
- Financing commitments.

8.2 Evaluation Process

The technical, legal, financial and economic assessment, will be undertaken by JPS, and shall be no less rigorous than those specified for requested proposals in Section 7.2.

9.0 Public Notification

To ensure the greatest level of transparency in the selection process the Office will publicize the names of firms submitting solicited or unsolicited proposals and the information relevant to each submission, except such information as must be subjected to restricted circulation for reasons of commercial confidentiality. The information will be posted on the OUR's website and published on two or more occasions in at least two newspapers with national circulation.

10.0 Pricing

Electricity sold to JPS shall, except otherwise determined by the Office, take place under one of three arrangements:

1. Energy only Pricing contracts
2. Two-part Pricing contracts (capacity and energy)
3. Net Billing

10.1 Energy Only Pricing Contracts

Energy only pricing contracts are applicable in situations in which the capacity provided by the IPP cannot be guaranteed. This is particularly relevant in cases of renewable energy suppliers in which the availability of capacity is dependent on the vagaries of nature (e.g. hydro, wind and solar sources).

Under this arrangement the supplier shall be referenced against avoided variable cost on a per kWh basis. However, the final price might be established above (for renewable projects) or below (for cogeneration projects) the long run avoided variable cost depending on the technology employed and the incentives in place based on government policy.

While most contracts will take the long run avoided variable cost into consideration there will be scope for pricing based on the short term avoided cost. Under such arrangements the price per kWh will change from month to month depending on the cost of fuel to the system. Developers will not be able to change the pricing structure agreed to until after ten years.

10.2 Two-Part Pricing Contract

In the event that the supplier can guarantee an availability of a specified minimum capacity, the payment shall be based on the two-part price arrangement. The supplier shall be compensated for the capacity provided in terms of kW as well as for the energy supplied on a kWh basis at a specified minimum power factor. Contracts for all plants offering **firm capacity** of 100 KW or above will be of the two-part category.

Pricing will be determined on the basis of the negotiated power purchase agreement (PPA). Prices in the two-part arrangement will be structured as a fixed rate per unit of guaranteed capacity (e.g. $/kW) and a variable rate to be applied to energy sales ($/kWh). Both fixed and variable charges may be subject to escalation that would be determined by indices stipulated upon in the PPA.

JPS will be obliged to purchase any energy from the IPP, except where otherwise provided for in the PPA, on the basis of the merit order associated with economic dispatch of plants. Generating units on the public grid will be dispatched (called on to supply power to the grid) to satisfy incremental increases in electricity demand in the order which minimizes generation cost while satisfying all operating constraints. Calculation of the economic cost of generation of each unit subject to dispatch will be undertaken by JPS, but will be subject to OUR review and approval.

The Office, in an effort to secure the lowest economic cost for consumers, is considering the introduction of competition in the generation market, even within the present limited scope of the Licence. However, this issue will be subject of future examination and consultation.

Generally, the contractual term of the PPA will not exceed 20 years or the expected economic life of the unit(s), whichever is less.

10.3 Net Billing Pricing

In the case of net billing, energy inflows to the customer will be sold at a different rate from energy outflows to the grid. The customer's (or IPP's) bill will be invoiced for the difference in the value of energy outflow relative to inflows.

11.0 Renewable Premium

In order to encourage the development of renewable energy technology, the government has determined renewable plants will be allowed to sell electricity to JPS at a maximum of 15% above the avoided cost of energy. Given the dynamic developments taking place in these technologies the incremental price above the avoided cost will have to be reviewed periodically for new entrants in the industry.

12.0 Licencing

An IPP must be licenced to operate before it can be connected to the grid. Under the OUR Act licences are granted by the responsible Minister on the recommendation of the Office. A Licence will normally be granted after the successful conclusion of negotiations of the PPA. Licences in general will be for periods of 20 years or the expected economic life of the installation, which ever is lower.

13.0 Interconnection

Interconnection represents the last stage in the process before generation actually begins. Provisions for interconnection will form part of the arrangement established in the PPA.

In the case of IPPs of sizes 100 kW and less, interconnection arrangements will be embodied in the standard offer contracts.

PART 2

OUR's Response to Comment on Draft Regulatory Policy for the Addition of New Generating Capacity to the Public Electricity Supply System

1.0 Introduction

In February 2006, the Office posted its Draft ***Regulatory Policy for the Addition of New Generating Capacity to the Public Electricity Supply System*** (Ele 2005/08) on its website (www.our.org.jm) and invited comments from interested parties. During the period of three months given for comments, the Office received responses from two entities. The first of the comments was from the Jamaica Public Service Company Limited (JPS) in March 2006 and the second from Wigton Windfarm Limited in May 2006.

In this part of this document, the Office examines and responds to a number of important issues raised by JPS and Wigton.

2.0 Response JPS Comments

2.1 Regulatory Policy, Requests for, and Evaluation of, Proposals

JPS in its comments asserts that the procedure specified in Condition 18, Section 2 of the Licence already guarantees a "fair and transparent process" and as such there is no need for any changes to what already obtains to ensure a level playing field for all participants in the competitive process. JPS says it cannot agree to the course of action (stating that the draft policy seemingly gives the OUR absolute discretion as to the timing and soliciting of additional capacity for the distribution network). The addition of capacity to the national grid, it states, must be effectively planned for by JPS. The company expressed the view that "it may occasionally need to undertake upgrading or additional investment to the distribution system to effectively and efficiently distribute additional capacity, JPS' Least Cost Expansion Plan and the time lines set out therein were developed with this in mind. The addition of capacity to the grid should be an exercise that is scheduled in accordance with the corresponding needs/demands of the country. JPS' operations are planned to align with a schedule of projected demand."

JPS objects to the procedures set out in the in the draft Policy in relation to the request for proposals evaluation of proposals. JPS is of the opinion that the procedures outlined are in direct contravention of the procedures laid out at Condition 18 Section 4 of the Licence. JPS believes that "such conduct is in

breach of settled principles of Administrative Law as no reasonable tribunal would come to a decision or wilfully adopt a course of conduct that contravenes and disregard procedures prescribed in a Licence by the Minister". Secondly, the risk of performance in distributing an adequate and reliable supply of electricity and all penalties attached to any failure to so distribute with JPS. In short, JPS, as distributor, bears the risks associated with shortfalls in generation capacity. Consequently, JPS is of the opinion that a commercially reasonable approach would entrust JPS with the primary responsibility of developing RFPs and evaluating bids submitted in response."

In defending its position JPS anchors its argument on two main points. First, JPS is required to provide the prospective bidders with a copy of its most recent Least Cost Expansion Plan. Second, the Office has the power to order JPS to re-conduct the tendering process if it is not satisfied that that the initial tendering exercise conforms to the process it approved.

The Office, however, notes that Condition 2, Paragraph 4 (a) of the Licence states that *"the Licensee shall have the right together with other outside person(s) to compete for the right to develop new generation capacity."* Clearly, if JPS is a bidder and is at the same time the entity with primary responsibility for conducting the bidding exercise then, naturally, this raises questions about the objectivity, the transparency, and even the possible integrity, of the exercise. It is this principle with which the Office takes issue.

Condition 18, Paragraph 4 (d) therefore requires that where the Licensee is one of the tenderers for the provision of new capacity,

> *"The licensee shall be obliged to pay for an independent evaluator from fees collected from bidders to conduct the process in accordance with a procedure approved by the Office."*

It is clear that if the Licensee is one of the tenderers then its objectivity in conducting the tender process would be questioned. Therefore, the Licensee in such circumstance should not be the party to conduct the process. The Licence is silent as to who appoints the evaluator and the basis on which he is appointed. The Office is of the view that an evaluator appointed by the company when it itself is a tenderer would not be seen as independent. Further, since the procedures, including the manner in which the competition is to be conducted is subject to the approval of the Office, establishing a project team as the independent evaluator within the context of these procedures for the would not be in breach of the Licence.

Condition 18 Paragraph 6 provides that for capacity additions under 15MW the Office is given the power, following consultation with the Licensee, to approve a simpler procurement methodology on a case by case basis.

Further, the fact that it has a near monopoly in generation and it is itself the monopoly provider in the transmission and distribution segment of the electricity market creates an opportunity for collusion between the Licensee and other person(s) entering the market where the Licensee is not a bidder,. This observation is the more credible in light of the fact that power purchased from Independent Power Producers (IPPs) is treated as a direct pass-through under the prevailing tariff regime.

The Office cannot and has no intention to attempt to unilaterally change the terms and conditions of the Licence. Expectations were, however, that so far as the conduct of the tendering process is concerned JPS would have recognized the importance of adopting a posture that would repel any perception or allegation of un-competitiveness or lack of fair play. The Office recognizes JPS' rights and privileges that are enshrined in the Licence. As it appears that JPS is strident in its position that a Project Team established by the Office to undertake the tendering and evaluation process where JPS is itself **not** a bidder, constitutes a breach of the Licence the Office will take this under advisement and reserve its position on this particular issue.

2.2 Least Cost Expansion Plan

Condition 21, Paragraph 1 of the Licence provides -

> *"The Licensee shall within 6 months of this Licence being granted submit to the Office for its approval a statement setting out its Long Term Procedures. Such procedures shall set out the methodology which will be used by the Licensee to prepare the Least Cost Expansion Plan which shall conform to internationally- accepted best industry practice."*

Paragraph 2 of the said Condition provides-

> *"the Licensee shall submit the Least Cost Expansion Plan …… to the Office for review. The Office when satisfied that the plan represents the least economic costs for system expansion consistent with internationally accepted best practice, will recommend the plan to he Minister for his approval."*

The Licence therefore outlines the process for the preparation, review and approval of the Least Cost Expansion Plan ("LCEP") without fleshing out the frequency with which the plan is to be prepared or updated.

The Office has a responsibility as mandated under the Office of Utilities Regulation Act as amended ("the Act") where it considers necessary to *"give directions to any licensee or specified organization with a view to ensuring that:-*

a) *the needs of the consumers of the services provided by the licensee or specified organizations are met; and*

b) *the prescribed utility service operates efficiently . . ."*

Consequently, in specifying the manner and the frequency with which the LCEP is to be prepared the Office has not arrogated to itself powers that it does not have. On the contrary, it is fulfilling what it has been decreed by the Legislature to do under ***the Act*** to ensure the long term electricity needs of the country and citizens are adequately and efficiently met.

The policy requiring the updating of the LCEP annually is a requirement in other jurisdictions. With growing emphasis on renewable (pursuant to Government policy) and indigenous sources respectively and in the context of the volatility of fossil fuel prices and particularly having regard to the fact that fuel is a ("pass-through" in the tariff) to be paid by the electricity consumer, the Office is of the view that annual updates of the plan at this time is an incremental exercise and is both necessary and prudent. JPS' charge that this requirement is "an onerous and ultra-vires infringement of the Licence" is in the OUR's view baseless and accordingly rejected.

The draft Policy has indicated that *"after a process of consultation with JPS, the Office will publish the draft plan and solicit the views of other interested parties on the proposed plan. After, the public consultation is completed, the Office, will finalize its recommendations and submit the plan to the Minister for approval. Once approved, the Office will make the plan public by posting on the OUR's web site. The Office stated that it intends to hold public consultations on the LCEP".* To which JPS is of the opinion that "JPS' plan may be rejected on the basis of public consultation."

Indeed, the LCEP is a technical issue for which the Office is of the view that there is need for technical expertise. However, in the matter of generation expansion, the Office neither considers itself nor JPS to be the sole repository of technical knowledge. The Office also recognizes that there are other stakeholders in the

generation market, who should be given an opportunity to comment on the plan since ultimately it will affect them.

In addition, the Office believes that the LCEP is critical issue and it is important that it is handled in a transparent manner. Therefore by inviting comments from interested parties, the Office is both conforming to its statutory mandate to consult with stakeholders as well as practising good governance by being transparent. Accordingly, the Office refutes any suggestion that it is devising a means to supplant technical soundness with popular sentiments. As such the Office considers JPS' objection to what it states as "the intent to hold public consultation on the plan" as misconceived.

The Office maintains that it will post the draft LCEP on its website and interested parties may submit comments to the Office before it finalizes its own position on the JPS proposed plan. Transparency and fairness are principles central to regulation and are therefore nonnegotiable.

2.3 Addition of New Capacity

The draft Policy has been interpreted by JPS to "seemingly give the OUR absolute discretion as to the timing and soliciting of additional capacity for the distribution network." However the provisions in the policy is consistent with the powers provided under *the Act* and in keeping with the framework set out in the Licence;-

a) JPS will be expected to prepare the LCEP in keeping with the directives of the Office;
b) The OUR will review the plan and submit same to the Minister for approval; and
c) The Minister will approve the plan or alternatively refer the recommendation back to the Office for further reconsideration.

The Office must as the regulator in the electricity sector must act in accordance with the relevant legislation and as such while it must secure the viability of investors by providing the opportunity for reasonable returns on investment, it has a duty to ensure that the services provided are economic and electricity rates are reasonable. At the same time it must act consistent with and implement government's policy as applicable to the sector...

Condition 19 of the Licence provides that;

"The Licensee shall purchase electricity at the best effective price reasonably obtainable having regard to the sources available, contractual arrangements and Government policy."

One of the objectives stated in the Jamaica Energy Sector Policy and Strategy (1996) is to *"diversify the energy base; encourage the development of indigenous energy resources where economically viable and technically feasible; and to ensure the security of energy supplies."* This has also been reiterated in the Energy Policy Green Paper (2006). It is in this context that the draft Regulatory Policy made allowance for "unsolicited proposals." Furthermore, JPS was well aware of this policy at the time of the new licence issue and should therefore not be surprised of the regulatory imperative for including renewables in this policy. The Office therefore rejects the argument that the policy would have jeopardized JPS' profitability or be in conflict with the viability of new investors.

Notwithstanding, taking cognizance of the comments made by JPS and in an effort to secure transparent implementation of policy by orderly introduction of renewable capacity into the generation mix, the Office has modified its initial position. It has been decided that the annual capacity to be available from renewable sources will be a part of the input to the LCEP. The Office will announce periodically, but no more often than annually, the amount of capacity available to be filled by renewable sources and these will be added to the system by way of a separate competitive exercise similar to the procedure applicable to conventional plants.

The Office is mindful that timing of the addition of cogeneration of plants is tied to the industrialist's core activity and not necessarily to the requirements of the LCEP. On the assumption that a cogeneration plant will by definition provide power at a lower cost than conventional plants, it would be in the best interest of consumers for these plants to be accommodated within the ambit of the LCEP. This underscores the fact that the LCEP cannot be seen as a static instrument but must be updated regularly to take advantage of opportunities and to reflect changes in the economic environment.

The introduction of a cogeneration plant will not present an opportunity for competitive tendering as the investment decision ought to be driven by the developer's priority to satisfy an industrial process rather than for sale of capacity and/or energy to the grid. The Office is mandated by *the Act*, the primary regulatory instrument as follows:

Section 4B. (2*) "The Office may, where it considers it necessary, give directions to any licensee or specified organization with a view to ensuring that –*

(a) "the needs of the consumers of the services provided by the Licensee or specified organization are met";

(b) (iii) "afford to its customers economical and reliable service"

Section 4B (3) *"In the performance of its functions under the Act the Office shall undertake such measures as it considers necessary or desirable to –*

(c)) "protect the interest of consumers in relation to the supply of a prescribed utility service"

(d) "promote and encourage the development of modern and efficient utility services"

JPS seems to assume that it should be responsible for the timing and soliciting of additional capacity. However, the License is clear, JPS is obliged to develop the LCEP but it is the Minister who determines, on the recommendation of the Office, the sequence of additions and who is eligible for a Licence to sell electricity.

3.0 Response to Wigton Windfarm Comments

Wigton Windfarm's comments on the draft Policy, to a large extent, represent a request for clarifications on certain issues and a number of suggestions on how the presentation of the Policy may be enhanced. For instance, the question was raised as to whether the OUR was actually referring to "Net Billing" (as indicated in the Policy) or "Net Metering? The Policy, in fact, was specifically addressing Net Billing for which the purchasing and sale of electric energy by household or small businesses is facilitated by two separate meters transacted at different purchasing and selling rates. This is a different concept from "Net Billing" which involves an arrangement where there is a single meter and a rate at which electric energy is bought and sold.

3.1 Policy Retroactivity

Wigton questioned why the Policy is not given retroactive treatment. This comment is understandable in light of the Renewable Premium in the Policy which will allow plants generating electricity from renewable sources to sell electricity to the grid at 15% above the avoided cost of energy. Retroactivity presents practical, and sometimes impossible, challenges with respect to financing and enforcement. Furthermore, the Office is not allowed to approve the implementation of retroactive rates by applicable legislation. It is prohibited by

Section 12 (7) of the Act from making an order confirming tariffs that will bring into effect rates or fares on a date prior to the date of such order.

3.2 Least Cost Expansion Plan

Wigton advocates that *"For greater transparency and acceptance of results the OUR should consider hiring an independent appraiser and/or preparer of the LCEP."*

Wigton also contends that the *"Frequency of LCEP reviews should be clearly stated in the Policy so as to avoid tardiness in reviews and/or manipulation by the suppliers through delay in submitting information."* Additionally, Wigton suggests that the issuing of Directives every 5 years for the development of the LCEP is too infrequent and a shorter period should be considered for reasons of greater *"accuracy, opportunity for correcting anomalies, and acceptance of results by the public."*

The procedures laid out in Condition 21 of the Licence, designates JPS as developer and the Office as reviewer of the LCEP. With the Office as reviewer the Licence has compensated for any imbalance that may arise at the developmental stage of the LCEP. The Office always has the discretion to decide whiter it hires external expertise or utilises its own internal resources to review the LCEP submitted by JPS and to do the due diligence to ensure that the plan is consistent with the objectives enunciated in Section 2.0 of the Policy.

As stated above, Wigton believes that to safeguard against the Licensee tardiness or other forms of manipulation in submitting the LCEP, the OUR should clearly establish the frequency for the reviewing and updating of the LCEP. The OUR , in fact, has done this in Section 5 of the Policy by setting a five (5) year frequency the preparation of the LCEP which are to be punctuated by annual updates. However, the Office believes that a timetable by itself does not guarantee compliance. Nevertheless it should be pointed out that both ***the Act*** (Section 9) and the Licence (Condition 29) provides the means to deal with non-compliance of a material nature.

3.3 Net Metering

Wigton has requested that consideration be given, presumably in the Net Billing rate, for the avoided cost computation to be based on "current fuel being used and not new fuels to be introduced." In addition it has requested that capital as well as operating and maintenance costs should be included in the avoided cost.

In employing avoided cost based on the long term fuel price trajectory, generation planners send the correct price signal for investors. In other words, investors will see the avoided cost as the benchmark for the investment required for the project to be viable while on the other hand, this approach also facilitates the lowering of electricity prices in real terms to the consumer over time. The Office therefore maintains its approach to the computation of avoided cost since it reflects economic prudence and is in keeping with well established international practice.

It must be pointed out that even though the avoided cost may be expressed in terms of kWh it embodies all the costs (capital and energy costs) that go into the generation process. This should not be confused with the avoided energy cost which as the name suggests reflects only the average energy portion of the long run generation cost.

The calculation of avoided costs therefore depends on the nature of the contract. Where firm capacity is offered capital costs are included. If the contract is long term then the avoided cost must reflect the long term costs that would be avoided. The option of 'spot market' monthly pricing based on the current variable costs is available but it must be borne in mind that this may be drastically reduced with the introduction of new technologies and fuels.

3.4 Pricing

Wigton has proposed that an amendment be made to the policy to allow for the extension of the duration of the PPA *"subject to both parties (to the contract) renewing their agreement and/or the equipment are rehabilitated".* The OUR recognizes that because of changes in the business environment as well as enhancements in the technical aspects of a plant parties involved in a PPA might from time to time be interested in renegotiating their contract. The Office, in general has no objection to this, provided that it redounds to the benefit of consumers, whether it is by way of lower electricity prices, enhanced environmental benefits or any other favourable externality. However, the matter of contract renegotiation is one that the Office believes should be encapsulated in the PPA and as such sees no advantage for it to be included in the policy.

APPENDIX

Schedule 1 - Procedure for Generation Capacity Additions

PLANT/ENERGY TYPE	GENERATION SIZE/ CAPACITY	CAPACITY AUTHORI-ZATION	PROCEDURE	LICENCE TYPE	CONTRACT TYPE	INTERCON-NECTION AGREEMENT	PREMIUM APPLICATION	POWER PURCHASE TARIFF
Conventional Technology	Greater than 15 MW	LCEP	Competitive	Schedule 10	PPA	Yes	No	Avoided cost
	Less than 15 MW	LCEP	Competitive/ Non-competitive	Schedule 10	PPA	Yes	No	Avoided cost
Co-Generation	All sizes	N/A	Unsolicited/ Non-competitive	Schedule 10	PPA	Yes	Only if renewable energy source	Avoided cost discounted for shared benefits
Renewable Energy	Greater than 15 MW	Annual cap in LCEP	Competitive packages	Schedule 10	PPA	Yes	Yes	Avoided cost plus premium
	Less than 15 MW/Greater than 100 KW	Annual cap in LCEP	Competitive Packages/Non-competitive	Schedule 10	PPA	Yes	Yes	Avoided cost plus premium
	Less than 100 KW	N/A	Unsolicited/ Non-competitive	Schedule 11	Standard Offer	Standard Terms & Conditions	Yes	Avoided cost plus premium (Based on net billing)
Excess (Dump) Energy	All sizes	N/A	Unsolicited/ Non-competitive	Schedule 10	PPA	Yes	Only if renewable energy source	Avoided cost

Notes

1. All new generation supply are subject to grant of Licence from the Minister having responsibility for electricity matters
2. LCEP – Least Cost Expansion Plan
3. PPA – Power Purchase Agreement (If JPS is the owner of the facilities, a "virtual" PPA will be executed with the OUR)
4. Competitive – Public tendering for generation capacity addition
5. Non-competitive – Sole source or direct negotiations for power purchase
6. Unsolicited – May be submitted for consideration at any time
7. Renewable Energy – Energy source which is continually regenerated
8. Co-generation – Generator process heat used for dual purpose
9. Excess (Dump) Energy – Energy exported in excess of power producers' need

Schedule 2 - Fees

1. **<u>Processing Fee</u>:** all proposals for the addition of new capacity will require the payment of a processing fee. This fee will be payable to the OUR and should be made at the same time the proposal is submitted.

2. **<u>Regulatory Fee</u>:** annual regulatory fees as prescribed the licences from all IPPs.

Schedule 3

1. Conventional Technology with Capacity above 15 MW
2. Renewable Technology with Capacity above 15 MW

STEP 1

Request for Proposal (RFP) promulgated by the project team responsible for preparing the bid solicitation document for conventional technology. The RFP will be posted on the OUR web site at *www.OUR.org.jm.* The amount of capacity available for indigenous/ renewable technologies will be published separately by the OUR on its website.

STEP 2

Prospective Independent Power Producers (Pips) or the Licensee should prepare bid document consistent with the information and instructions provided in the RFP.

STEP 3

Prospective bidders must submit bid document along with the number of copies requested in accordance with instructions specified in the RFP on or before the deadline established.

STEP 4

The project team will acknowledge the receipt of the bid within 14 days of the deadline specified for submitting proposals.

STEP 5

The project team assigned the responsibility will evaluate bids on the basis of:

- Technical feasibility
- Legal and Financial soundness
- Economic robustness

The proposal selected must satisfy the criteria of technical practicality as well as minimum long run cost. The evaluation will be conducted over a period of no more than 6 months. At the end of evaluation exercise the successful bidder as well as the other bidders will be informed of the outcome.

STEP 6

The Office will contact the successful bidder and establish a time period over which the negotiation of the Purchase Power Agreement (PPA) with JPS (if the successful bidder is an entity other than JPS) is will take place. If after the negotiation period all there are still unresolved pre-contract issues, the Office reserves the right to terminate the negotiations and engage the next highest ranked bidder to the negotiation process.

STEP 7

The PPA as well as the associated price schedules shall be drafted by the successful bidder and the JPS. The PPA and all associated documents shall be submitted to the Office for approval. The Office may require that changes be made to the PPA and/or the associated schedules before it recommends the granting of a licence be granted to the IPP.

STEP 8

The Office will be responsible for the preparation of the licence which will be prepared simultaneous with the drafting of the PPA.

STEP 9

JPS and the IPP, where applicable, will develop the interconnection agreement which must be approved by the Office before the licence is granted.

STEP 10

The licence, the PPA, the inter-connection agreement and all other approvals (i.e. environmental and those related to construction) must be obtained by the IPP before clearance will be given by the Office for interconnection to the public electricity supply system.

Schedule 4

1. Conventional Technology between 100 KW and 15 MW.
2. Renewable Technology between 100 KW and 15 MW.

STEP 1

Proposals for the cogeneration plants and addition of capacity from conventional technologies less than 15MW may be submitted to JPS and the OUR at any time. Proposed additions by of renewable technologies (between 100 KW and 15 MW) must be consistent with the capacity published by the Office. In making a submission the potential IPP must enclose four (4) copies of the proposal. A soft copy of the proposal is also required.

The proposal, at a minimum, should provide the following information:

- Identification of ownership group
- Size and type of facility
- Technical details of proposal
- Projected capacity availability and annual energy supplies to the grid
- Tentative project implementation milestones
- Proposed pricing structure
- arrangement for site selection or acquisition
- arrangement for fuel supply commitment (if relevant).
- Financing commitments.

STEP 2

The OUR will acknowledge the receipt of the proposal within 14 days of its arrival.

STEP 3

On receipt of a proposal the OUR will conduct its own analysis and consult with potential parties to the contract in relation to the acceptability of the proposal.

The evaluation of the proposal will be based on the proposals:

- Technical feasibility
- Legal and Financial soundness
- Economic robustness

Selected proposals must satisfy the criteria of technical practicality and the price offered should be;

- For Conventional Plants: no more than the avoided cost of generation
- For Cogeneration Plants: less than the avoided cost of generation.
- For Renewable Sources: no more than a predetermined premium above the avoided cost.

The evaluation will be conducted over a period of no more than 3 months.

At the end of evaluation exercise the developer will be informed by the OUR of the outcome. If the proposal is deemed satisfactory the Office will advise JPS that it should be treated as a qualifying facility.

STEP 4

The Office will specify a time period for the negotiation of the PPA between the qualifying facility and JPS.

STEP 5

The prospective IPP should establish a MOU with JPS and notify the Office before concluding the PPA negotiations. This will signal to the Office that it may commence the licence preparation process.

STEP 6

The PPA as well as the associated price schedules shall be drafted by the successful bidder and JPS. The PPA and all associated documents shall be submitted to the Office for approval. The Office may require that changes be made to the PPA and/or the associated schedules before it recommends the granting of a licence be granted to the IPP.

STEP 7

The OUR will be responsible for the preparation of the licence for approval by the Minister. The Licence will be prepared simultaneous with the drafting of the PPA.

STEP 8

JPS and the IPP will develop the interconnection agreement which must be approved by the Office before the licence is granted.

STEP 9

The licence, the PPA, the inter-connection agreement and all other approvals (i.e. environmental and those related to construction) must be obtained by the IPP before clearance will be given by the Office for interconnection to the public electricity supply system.

Schedule 5

Cogeneration Plant

STEP 1

Proposals for the cogeneration plant may be submitted to JPS and the OUR at any time... In making a submission the potential IPP must enclose four (4) copies of the proposal. A soft copy of the proposal is also required.

The proposal, at a minimum, should provide the following information:

- Identification of ownership group
- Size and type of facility
- Technical details of proposal
- Projected capacity availability and annual energy supplies to the grid
- Tentative project implementation milestones
- Proposed pricing structure
- arrangement for site selection or acquisition
- arrangement for fuel supply commitment (if relevant).
- Financing commitments.

STEP 2

The OUR will acknowledge the receipt of the proposal within 14 days of its arrival.

STEP 3

On receipt of a proposal the OUR will conduct its own analysis and consult with potential parties to the contract in relation to the acceptability of the proposal.

STEP 4

The multi-disciplinary team will evaluate the proposal on the basis of:

- Technical feasibility
- Legal and Financial soundness
- Economic robustness

Of necessity proposals in this category must be assessed against the LCEP. In addition, proposals selected must satisfy the criteria of technical practicality and the price offered should be less than the avoided cost of generation.
The evaluation will be conducted over a period of no more than 6 months.

At the end of evaluation exercise the developer will be informed by the Office of the outcome.

STEP 5

If the developer's proposal is deemed acceptable the IPP will be contacted by the Office. The Office will specify a time period for the negotiation of the PPA between the successful bidder and JPS.

STEP 6

The Purchase Power Agreement (PPA) as well as the associated price schedules shall be drafted by the successful bidder and JPS.

The prospective IPP should establish a MOU with JPS and notify the Office before concluding the PPA negotiations. This will signal to the Office that it may commence the licence preparation process.

The PPA and all associated documents shall be submitted to the Office for approval. The Office may direct that changes be made to the PPA and/or the associated schedules before it recommends the granting of a licence be granted to the IPP.

STEP 7

The Office will be responsible for the preparation of the licence which will be prepared simultaneous with the drafting of the PPA.

STEP 8

JPS and the IPP will develop the interconnection agreement which must be approved by the Office before the licence is granted.

STEP 9

The licence, the PPA, the inter-connection agreement and all other approvals (i.e. environmental and those related to construction) must be obtained by the IPP before clearance will be given by the Office for interconnection to the public electricity supply system.

Schedule 6

1. **Conventional Technology with Capacity less than 100 KW**
2. **Renewable Technology with Capacity less than 100 KW**
3. **Excess Energy Sales from Independent Generators**

STEP 1

Application for the addition of capacity in this category may be made by using a standard application form available on the OUR web site: *www.our.org.jm*

The application form should be submitted in duplicate. One for should be submitted to the OUR and the other to JPS.

STEP 2

JPS will be required to acknowledging the receipt of the offer within 14 days of the receipt of the application.

STEP 3

JPS is required to respond to the applicant within two (2) months on receipt of the application indicating whether the application is accepted or rejected. If the application is rejected, JPS is required to state clearly the reason for the rejection. A copy of JPS communication to the customer must be simultaneously sent to the OUR.

STEP 4

If the application is accepted by JPS the prospective small power supplier will be required to sign a standard contract which is based on a predetermined price structured and a well defined interconnection arrangement. A standard licence will be issued by the Minister on recommendation of the Office before interconnection can be effected.

Schedule 7

GUIDELINES

PURCHASE POWER AGREEMENT FOR NEW GENERATION ADDITIONS TO THE PUBLIC ELECTRICITY SUPPLY SYSTEM

In executing Power Purchase Agreements for new additions to the national grid, there are key factors that need to be taken into consideration and encapsulated into the relevant agreement. These shall include inter alia, but not be limited to, the following:

1. The effective date and term of all ownership, financing, insurance, operating and maintenance agreements entered into by the proposed vendor.

2. A detailed functional description of the fuel type to be used whether traditional (coal, oil, diesel etc.) or renewable as well as the proposed transmission and distribution technology.

3. If the generating facility is located remotely from the Power Purchaser's system, the Vendor should investigate viable delivery points to the grid and the agreed delivery point identified.

4. A detailed description of the energy dispatch process as well as capacity and duration factors affecting provisioning.

5. Detailed construction schematics and schedules for completion of the energy production facility, if same is not already fully constructed.

6. A description of the facility's ability to comply with all applicable legislation and regulations concerning safety and environmental issues and requirements.

7. Commitments to environmental and emission standards.

8. All environmental benefits of the proposed Vendor's facility as well as a listing of expected emissions and other potential environmental liabilities that may be associated with the facility.

9. Forecast of proposed sales of capacity and energy to the Power Purchaser's grid.

10. The starting capacity rate and applicable formula for escalation for proposed indices or a schedule of capacity rates for the proposed contract term.

11. Specify that the actual delivered energy, in any month, shall be determined in accordance with relevant metering procedures which will be negotiated between the Power Purchaser and the Vendor.

12. Specify the basis (i.e., annually, quarterly, monthly, etc.) and type of all payments to be made.

13. Pricing formula for energy, schedule, or some combination of the two, for determining these payments.

14. As applicable, all formulae that will be used to calculate the full capacity and energy rate, or any other rate with all of its respective components well defined.

15. Components specified shall include the following:
    - The full capacity rate (and all of its components)
    - The energy rate (and all of its components)
    - A projection of any independent variable (i.e., operating hours, number of starts, etc.) that is to be used in the calculation of payments.

16. Infrastructure costs and any agreed payments between the Power Purchaser and the Vendor, where applicable.

17. Annual capacity factor commitments.

18. Liquidated damages provisions (where applicable) for failure to meet:

    - Availability guarantee.
    - Guaranteed net plant heat rate.
    - Guaranteed level of output.
    - Guaranteed commercial operation date.

Schedule 8

GUIDELINES

INTERCONNECTION AGREEMENT FOR NEW GENERATION ADDITIONS TO THE PUBLIC ELECTRICITY SUPPLY SYSTEM

1.0 In facilitating the interconnection of new generation facilities to the National Grid and executing the relevant Interconnection Agreements, there are key factors and elements that should be present. These include inter alia, but are not limited to, the following:

a) Power Providers proposing to interconnect new generation resources shall submit an application to the interconnection provider stating the purpose for which the facility is to be installed; and verifying that the Power Provider proposed facility meets the relevant Codes, Standards and Certification Requirements.

b) New generation resources that meet these requirements will be eligible for interconnection, subject to evaluation by the Office of Utilities Regulation.

2.0 Proposed interconnection agreements should encapsulate the following:

2.1 ***Provisions for the Scope and Purpose of Agreement***: This must satisfy the conditions under which the Interconnection Provider and the Power Provider agree that the generating facility may be interconnected to and operated in parallel with the Interconnection Provider's system.

2.2 ***Summary and Description of Interconnection Equipment and Facility***: (to be included in an Exhibit) including a description of the Generating Facility, a summary of its significant components and a diagram showing the general arrangement of Power Provider's facility and loads that are interconnected with Interconnection Provider 's electric distribution system.

2.3 ***Provisions addressing the Right of Access, Equipment Installation, Removal and Inspection as well as "Step in" rights.***

2.4 ***Provisions for the Disconnection of generation facility;*** including provisions allowing the Power Provider to retain the option to temporarily disconnect from Interconnection Provider's system at any time. Such temporary disconnection shall not be a termination of the Agreement unless the Power Provider exercises its termination rights.

2.5 ***Provisions speaking to the effective Term of Contract and Termination Rights;*** of the parties desiring to cease the fiduciary relationship.

2.6 ***Provisions stating Governing Law, Jurisdiction and Regulatory Authority***.

2.7 ***Provisions governing assignment to Other Parties/ Change of Ownership.***

2.8 ***Provisions for Amendment and Notification.***

2.9 ***Provision for the Responsibilities of Interconnection Provider and Power Provider:*** stating that each Party will, at its own cost and expense, operate, maintain, repair, and inspect, and shall be fully responsible for, the facility or facilities which it now or hereafter may own or lease unless otherwise specified.

2.10 ***Provisions for Cost Responsibility:*** Owners of qualifying facilities will be required to pay for any additional infrastructure costs to the extent that such costs are in excess of those that the power purchaser would have incurred had the owner not acquired the qualifying facility.

2.11 ***Provisions for Additional Facilities Costs:*** Where additional facilities are required to permit the interconnection of a facility, and offer no benefit to system capacity, the Interconnection Provider will bear the entire reasonable cost of such facilities as determined by the Facilities Study and at the actual cost provided for in the Facilities Study Agreement, but will not be subject to retroactive increases or decreases in such costs, unless determined by credits or refunds provided by mutual agreement with subsequent Power Providers

2.12 ***Provision for Reasonable Efforts***: The Parties shall make reasonable efforts to meet all specified time frames unless the Interconnection Provider and the Power Provider agree to a different schedule.

2.13 ***Dispute Resolution:*** If a dispute arises at any time either the Power Provider or the Interconnection Provider may seek immediate resolution through complaint procedures available through the jurisdictional regulatory authority (The Office of Utilities Regulation) or any alternative dispute resolution process as approved by the Office.

2.14 ***Interconnection Metering:*** Any metering necessitated by the use of the facility shall be installed at the Power Provider's expense and in accordance with the relevant regulatory requirements.

2.15 ***Commissioning:*** Commissioning tests of a Power Provider's installed equipment will be performed pursuant to applicable codes and standards**.**

2.16 ***Confidentiality:*** In accordance with the relevant laws and regulations, each Party shall hold in confidence and shall not disclose Confidential Information to any person (except employees, officers, representatives and agents that agree to be bound by this provision), except as required by law.

Schedule 9

APPLICATION FOR LICENCE TO SUPPLY ELECTRICITY GENERATING CAPACITY

(***Individual applicants should complete Sections A, G & H)***
(Companies/partnerships should complete Sections A-H)

SECTION A: ***(To be completed by all applicants)***

1. Name of Applicant: .....

   ( ) Individual ( ) Company ( ) Partnership

2. Postal Address: .....

   .....

   .....

3. Telephone Nos. .....

4. Facsimile No. .....

5. Email Address: .....

6. Name and address of any person or organization acting on behalf of the Applicant (Contact in Jamaica):

   Name: ....

   Address: .....

   .....

   .....

   Telephone Nos:.....

   Facsimile No: .....

   E-mail address: .....

SECTION B: *HISTORY OF APPLICANT* **-** (**B-F to be completed by companies/partnerships**)

1. Name of Company: .....

2. (a) Date of Incorporation and Registration:.....

   (b) Registration Number: .....

   (c) Address of Registered Office: .....

   .....

   .....

   (d) Share Capital

	par value (J$)	authorized (number)	issued (number)
Preference shares.....			
Ordinary shares.....			

   - Set out in an attachment the names, business addresses and dates of appointment of directors, chief executive officer and company secretary
   - Set out in an attachment the names, addresses and country of domicile and share-holdings of all shareholders holding more than 10% of any class of the shares of the applicant
   - Attach certified copies of the Memorandum and Articles of Association and Certificate of Incorporation

3. Applicant's bank (*if more than one bank provide additional information on a separate sheet*)

   Name: .....

   Address: .....

   .....

   Telephone No: ..... Facsimile No: .....

   E-mail address: .....

4. Applicant's auditor:

   Name: .....

   Address: .....

   .....

   Telephone No: ..... Facsimile No: .....

   E-mail address.....

SECTION C: *HISTORY OF APPLICANT*

Tick the appropriate box. If "YES" give particulars.

1. Has the Applicant ever applied for a licence or registration under any Act in Jamaica and been refused? ( ) YES ( ) NO

   .....
   .....

2. Has the Applicant ever been licensed under the any Act in Jamaica? ( ) YES ( ) NO

   .....
   .....

3. If the answer to question 2 is YES, has any such licence been revoked? ( ) YES ( ) NO

   .....
   .....

4. Has any connected person previously been granted a licence under any Act which was revoked?

   ( ) YES ( ) NO

   .....
   .....

5. Is the Applicant the holder of a licence or is engaged in a related business in any other country?

   ( ) YES ( ) NO

   .....
   .....

6. Has the Applicant or any connected person been refused a licence mentioned in question 5 above, or had a licence revoked? ( ) YES ( ) NO

   .....
   .....

7. Has the Applicant operated under or carried on business under any name other than the name in this application? ( ) YES ( ) NO

   .....
   .....

8. Has the Applicant ever -

   (a) been the defendant or respondent in any proceedings in any court in any jurisdiction in any part of the world involving fraud? ( ) YES ( ) NO

   .....
   .....

   (b) At any time declared bankruptcy or made a voluntary assignment in bankruptcy?

   ( ) YES ( ) NO

   .....

   If YES, in addition to giving particulars, attach a certified copy of Discharge.

SECTION D: *FINANCIAL INFORMATION*

Please attach the most recent audited Financial Statement which should be for a period ending not later than one year prior to the date of this application.

TICK the appropriate box. If "YES" give particulars.

Is there any person or company whose name is not disclosed in Section A who has any major financial interest in the Applicant, either beneficially or otherwise?

( ) YES ( ) NO

.....
.....
.....

SECTION E: *OFFENCES*

Tick the appropriate box. If "YES" give particulars.

1. Has the Applicant, or any director or executive officer of the Applicant, ever pleaded guilty or been found guilty under any law of Jamaica or any other country of any offence involving dishonesty, fraud or theft?

   ( ) YES ( ) NO

   .....
   .....
   .....

2. Has the Applicant, or any director or executive officer of the Applicant, ever been convicted of any criminal offence not mentioned in paragraph 1?

   ( ) YES ( ) NO

   .....
   .....
   .....

3. Is the Applicant, or any director or executive officer of the applicant, currently the subject of a charge or indictment under any law of Jamaica or any other country for contravention of any law or for any conduct of the type described in paragraphs 1 and 2?

   ( ) YES ( ) NO

   .....
   .....

SECTION F: *CIVIL PROCEEDINGS*

Tick the appropriate box. If "YES" give particulars.

1. Has any claim been made successfully in any civil matter before a court or other tribunal in Jamaica or any other country which was based in whole or in part on fraud, theft, deceit or misrepresentation or similar conduct against?

   (a) the Applicant

   ( ) YES ( ) NO

   ……

   ……

   ……

   ……

   (b) any director of the Applicant?

   ( ) YES ( ) NO

   ……

   ……

   ……

   (c) any executive officer of the Applicant?

   ( ) YES ( ) NO

   ……

   ……

   ……

2. Is there any claim pending in any civil matter before a court or other tribunal in Jamaica or any other country against the Applicant, or any director or executive officer of the Applicant, which is based in whole or in part on fraud, theft, deceit or misrepresentation or similar conduct?

   ( ) YES ( ) NO

   ……

   ……

   ……

SECTION G: *DESCRIPTION OF SYSTEM* ***(to be completed by all applicants)***

1. Provide a detailed description of the Generation System for which the licence application is made. Include:

   (a) A description of the principal components of the facility including boilers, prime movers and electric generators, and explain their operation, MW, MVA, MVAR (KW, KVA, KVAR) voltage, other relevant electrical and energy parameters;

   (b) Indicate transmission lines, transformers and switchyard equipment, if included as part of the facility; the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery; the actual or expected installation and operation dates of the facility;

   (c) Describe the primary energy input (e.g. coal, oil, waste, bio-mass, or other).

   (d) Indicate the proposed annual energy sale to the electric grid in MWh / kWh

   (e) Discuss any particular characteristic of the facility, which the electricity supplier believes might bear on its qualifying status. (*Use continuation sheet if necessary*).

   ……

   ……

   ……

   ……

   ……

   ……

   ……

   ……

   ……

   ……

   ……

   ……

   ……

SECTION H: *DECLARATION OF APPLICANT* ***(to be completed by all applicants)***

I/We …… declare that:
(Name of Applicant)
Individual/Company/Partnership

(i) I am/(We are) not disqualified from being granted a licence by reason of any legal impediment. I/(We are) possess the technical qualifications to fully perform the obligations imposed by the licence. I/(We are) satisfy the financial requirements for the construction and operation of the facility or provision of service to which this application relates.

(ii) I am/(We are) a fit and proper person to be granted a licence,

(iii) All information submitted in favour of this application is true and correct. I/(We) understand that a recommendation for approval from the Office of Utilities Regulation in respect of this application would be based on information as declared herein. I/(We) understand that, if I/(We) knowingly make any false statement in this application, any licence granted pursuant to this application may be revoked.

(1) If individual sign below:

……
Signature of Applicant

……
Date

(2) If company/partnership sign below:

……
Authorizing Officer

……
Position/Title

……
Date

OFFICE OF UTILITIES REGULATION

APPLICATION PROCEDURES FOR ADDITION OF NEW GENERATING CAPACITY TO THE PUBLIC ELECTRICITY SUPPLY SYSTEM

The Office of Utilities Regulation Act 1995 as amended ("the Act") authorizes the Office of Utilities Regulation (the Office) to receive and process applications for a licence and make recommendations to the portfolio Minister in relation to the application. These procedures set out the process by which the Office will solicit and process applications for licences to be issued for the addition of new Electricity Generating Capacity.

INITIATING THE LICENSING PROCESS

The Minister with portfolio responsibility for Energy, issues a directive pursuant to the Electric Lighting Act.

APPLICATION FORMS

Application forms and supporting documentation may be collected from:-

Office of Utilities Regulation
3rd Floor, PCJ Resource Centre,
36 Trafalgar Road
Kingston
Jamaica

or downloaded from the Office's website at www.our.org.jm, or by arrangement the Office will courier at applicant's cost.

COMPLETION AND SUBMISSION OF APPLICATIONS

- All applications should be submitted with the prescribed fees to the OUR. A receipt evidencing delivery of application will be given for each application submitted to the OUR.
- Receipts will be mailed by ordinary post to applicants who submit applications by registered post.
- Applications are received by the OUR on a continuing basis.
- All applications and supporting material should be submitted in English. Each application must state that it is being submitted pursuant to an Invitation.

- Applicants must submit no fewer than **three** (**3**) copies including soft copies of each application and **one** (**1**) each of the supporting documentation. The Office reserves the right to request additional copies of applications and supporting documentation.

- Additional information may be requested by the OUR or submitted by the applicant in respect of any application at any time before making its recommendations to the Minister.

- Each application must be accompanied by a non-refundable application fee as prescribed by the Office from time to time. A separate fee is payable in respect of each application. This payment shall be made by cash, certified cheque or bank draft made payable to the Office of Utilities Regulation.

- Applicants should note the disclosure requirements of the OUR Act 1995 as amended, and any Rules and Regulations made pursuant to this Act. The OUR strongly recommends that applicants rely on independent legal advice in preparing applications.

- Applicants are required to notify the Office of any change to the information submitted with the application. Notification should be done within fifteen (15) working days after the deadline for submission of applications.

- Applicants are required to meet all costs arising from (a) the preparation and submission of applications, (b) providing any additional information requested, and (c) the processing of each application including responding to public comments and attending at, and making submissions to the Office concerning these applications. The Office, the Ministry of Industry, Commerce, Science Technology (with Energy) and the Government of Jamaica will not accept responsibility or liability for such costs, regardless of whether or not a licence is granted.

PROCESSING OF APPLICATIONS

- Applications for licences will be published in a National Newspaper and interested parties are allowed 30 days for submitting comments to the OUR.

- All applications and supporting documentation become the property of the OUR upon submission. The OUR reserves the right to make public the names of corporate entities which have submitted applications as well as such information about the contents of the applications as it deems appropriate. Members of the public and other interested parties will have the right to inspect all applications and supporting documentation and to submit comments to the OUR.

- All supporting material submitted with individual applications which may contain sensitive/confidential information concerning business or commercial or financial affairs should be submitted along with the application in a sealed envelope marked "**Confidential Information**". Where the OUR proposes to disclose any such information, it will give the Applicant reasonable notice and an opportunity to make

representations to the OUR before the Office makes a final decision on disclosure of such information.

- An evaluation of the Application is conducted by the OUR to determine eligibility for the issuance of a licence. The **OUR** reserves the right to conduct discussions with Applicants if necessary.

- Applicants should be prepared to send a representative(s) to the offices of the OUR to discuss their applications and supporting documentation, if requested by the OUR.

RECOMMENDATIONS OF LICENCES

- The Office shall prepare a report setting out its recommendation for acceptance or rejection of each application. This report is submitted to the Minister for his consideration. Copies of this Report will be made available to each Applicant upon request.

ISSUANCE OF LICENCES

- Pursuant to the Act, the Minister may upon receipt of a recommendation from the Office, either grant the licence, refer the recommendation back to the Office for further consideration, or refuse to grant the licence and the Minister shall as soon as practicable give written reasons for the refusal.

- Licences granted by the Minister are issued by personnel in the Minister's Office. The Office shall maintain a register of all applications for licences and all licences granted pursuant to the Act, in electronic form.

Schedule 10

ELECTRIC LIGHTING ACT

LICENCE TO GENERATE AND SUPPLY POWER 100 KILOWATT AND OVER TO THE PUBLIC ELECTRICITY SYSTEM

[This Schedule will be provided at a later date]

Schedule 11

ELECTRIC LIGHTING ACT

LICENCE TO GENERATE AND SUPPLY POWER BELOW 100 KILOWATT TO THE PUBLIC ELECTRICITY SYSTEM

[This Schedule will be provided at a later date]