



**PUBLIC UTILITIES  
COMMISSION  
BELIZE**

**CONSULTATIVE PAPER**

LICENCE AND CONSENT IN RESPECT  
OF ELECTRICITY ACTIVITIES

Issue Date: August 30, 2022

## Consultation Procedure

The PUC invites and welcomes written submissions and comments from interested parties in the subject matter for this Consultative Paper.

### Submission of Comments

The written submissions and comments should be submitted to the PUC before 4:30 PM, Friday, October 14, 2022 either:

- by hand to: Public Utilities Commission, 2<sup>nd</sup> Floor Marina Towers, Princess Margaret Drive, Belize City, Belize. ***Re: Responses to the Consultative Paper – Licence & Consent in respect of Electrical Activities;***
- by email to: [info@puc.bz](mailto:info@puc.bz);
- by mail to: P.O. Box 300, Belize City, Belize.

### Confidentiality

The PUC intends to publish the responses to this Consultative Paper on its website. If a commenting party's response contains any information that is confidential in nature, a clearly marked "Public Version," redacted to delete the confidential information, should be provided together with a complete version that is clearly marked as the "Confidential Version."

The "Confidential Version" should highlight the information that has been redacted. The PUC requires for the respondent to provide an explanation justifying the needs to submit a response in confidential basis. The PUC has the sole discretion to determine whether to publish any submission marked as confidential.

Redactions should be strictly limited to "confidential information," meaning a trade secret, information whose commercial value would be diminished or destroyed by public disclosure, information whose disclosure would have an adverse effect on the commercial interests of the commenting party, or information that is legally subject to confidential treatment.

# Consultative Paper – Licence and Consent in respect of Electricity Activities

## 1. INTRODUCTION

Thirty years ago, the Legislature in its wisdom created a legal framework wherein private actors were permitted to participate in a competitive electricity market for generation and supply, Belize's electricity industry was restructured under a Single Buyer model with Belize Electricity Limited ("BEL") playing a key role as a vertically-integrated utility - the generation, transmission and supply of electricity to the public being vested in the new company. From a regulatory perspective, generation activities being separated from the natural monopoly of electricity transmission and distribution.

Technology shifts, environmental pressures and deeper integration of the electricity industry into the broader economic sectors has created the impetus for fundamental changes in the structure of electricity markets. While core electricity network activities (transmission and distribution) remain in their original monopoly structures, electricity generation and supply markets are being opened up to competition to a rapidly expanding number of economic actors. For this evolution in generation and supply to materialize the network services activities will need to evolve to accommodate interoperability of communication & physical infrastructure, smart grid technologies, etc.

The transformation of the electricity industry, which is put into action through regulations, codes of practice and licences, the Public Utilities Commission ("PUC" or "the Commission") strives to facilitate the development of competitive and sustainable electricity markets, while protecting reliability and continuity of supply.

Interested Parties are invited to comment on the proposed licensing framework and in particular in relation to the questions raised by the Commission. Kindly provide the reasons and any relevant supporting evidence in your responses.

*This consultative document does not constitute legal, commercial or technical instruction. It is intended to garner input from Interested Parties as the Commission moves ahead to make subsidiary legislation intended to create a modern electricity licence and consent regime.*

## 2. BACKGROUND

### 2.1. Legislative Framework

The Electricity Act (1992) ("the Act") delegates to the Commission the power to **grant Licences** conducting certain **Electricity Activities**,

- ✦ Section 14: The Commission may grant a Licence authorizing any Person- to **generate, transmit, or supply** electricity.
- ✦ Section 15: Makes it an offence to undertake unlicensed energy activities, but exempts a Person that installs relevant energy infrastructure of not more than 75 kW on premises owned or occupied by him to supply those premises only.
- ✦ Section 17: Elucidates that a Licence may be granted either to all persons, to persons of a class or to a particular person.
- ✦ Section 19: More fully prescribes the special responsibilities conferred on a Licensee authorized to transmit electricity for public supply.
- ✦ Section 24: The Commission shall keep a register of licences granted

Furthermore, the Act delegates to the Commission the power to **grant Consent for the construction and operation of generating stations** by Persons authorized by a Licence to do so.

- ✦ Section 51-(1): A generating station shall not be constructed, extended or operated except in accordance with a Consent granted by the Commission.
- ✦ Section 51-(2): Exempt licensees do NOT require a Consent for their facilities.
- ✦ Section 51-(4): The Commission may by Order expand the Class of licensees that need NOT apply for a Consent in respect of their facilities.
- ✦ Section 48: The provisions of the First Schedule (*which relate to the use, certification, testing and maintenance of electricity meters*) shall have effect.
- ✦ Section 49: The provisions of the Second Schedule (*which relate to the impact of the facility on ecosystems*) shall have effect.
- ✦ Section 51-(8): The provisions of the Third Schedule (*which relate to the Application process, and appraisal by Planning authorities/ Other persons*) shall have effect.

In exercising those functions the Commission is required to balance, amongst other things:

- ✦ the interests of consumers and users in relation to cost, quality and availability of services;
- ✦ the need to satisfy demand for relevant services;
- ✦ the economic and social development and well-being of Belize society;
- ✦ the introduction and promotion of effective sustainable competition;
- ✦ the introduction of innovation and new services and the improvement of services; and
- ✦ the environment and any effects on the environment.

As the Legislature intended that the regulatory regime is aligned to the best interests of Belize.

## 2.2. Policy Environment

Under the National Sustainable Energy Strategy (2014), the Government of Belize expressed a desire for the PUC to put in place a modern licensing regime. Thus, BEL engaged DNV-GL

to estimate the level of variable renewable energy (VRE) penetration that may be accommodated on the Grid. Whereupon the PUC published a draft Licence & Consent Byelaw in the second half of 2017, making provisions for classes of licenses undertaking distributed generation. That Rulemaking proceeding was not suspended indefinitely.

The Government of Belize made commitments under the UNFCCC at the most recent COP held in Glasgow, Scotland. The most consequential pledges being (i) achieving at least 75% clean energy in electricity by 2030, and (ii) complete decarbonization by 2050. In keeping with these commitments, the Government of Belize endorsed the Energy Roadmap 2021, which reaffirmed its desire to create an enabling environment for distributed energy resources (DERs) at the earliest. The Commission is publishing this Consultative Paper for the purpose of making a suitable Licence & Consent Byelaw to fulfill these policy goals.

### 3. SCOPE OF REGULATORY REGIME

This section considers various categories of activities undertaken in electricity generation, transmission and supply, the legal provisions applying to those categories, and the appropriate types of licences or exemptions for each category.

#### 3.1. Licensable and Non-licensable Activities

The Commission interpretation of the specific activities defined in Law are as follows:

- ✚ **generate** – the provision of electric capacity, associated energy and ancillary services by use of relevant electricity infrastructure.
- ✚ **transmit** –
  - the conveyance of bulk electricity from power stations to substations, or between substations by way of relevant electricity infrastructure;
  - carrying out system operations to achieve least cost outcomes;
  - being a participant in regional electricity markets.
- ✚ **supply** –
  - the conveyance of retail electricity from substations to premises via relevant electricity infrastructure;
  - trade in electricity services with other licensees;
  - persons undertaking public supply shall carry out customer administration.

Anything falling within these definitions must be licensed, or exempted from the requirement to apply for a licence. Once the proposed Regulations go into effect every person in Belize will be required to get a licence and be placed on the register. Failure to comply is an offence with remedies prescribed in the Electricity Act. Therefore, existing operators of electricity systems not yet authorized will need to procure the requisite licence in order to be lawful.

### 3.2. Authorization for Generation

A person who wishes to own and operate an electricity generation plant will generally need to obtain an electricity licence granted under Section 14 of the Electricity Act unless certain exemptions apply (*for example, the generating plant is for self-supply and has a nameplate capacity not more than 75 kW*).

In determining whether to grant or extend an electricity licence, the Commission shall consider, among other things, the proposed project's

- ✚ Public purpose in advancing Belize social and economic well-being;
- ✚ Value proposition for realizing a more reliable, efficient, integrated and economical energy system; and

The applicant's:

- ✚ Ability to finance the activity.
- ✚ Experience in carrying on the activity.
- ✚ Ability to perform the duties that would be imposed on that person under the Electricity Act and the electricity licence, if granted.

### 3.3. Ongoing Requirements

Compliance with any restrictions or conditions in the electricity licence is required, as well as with the statutory duties imposed under the Electricity Act. Some of the key conditions and duties are:

- ✚ Generally, a generation licensee must enter into regulatory agreements on specified terms, including:
  - a connection agreement with BEL's network services for connection of its generating station to the transmission or distribution system;
  - an agreement with the BEL's power system operations for the purposes of creating a contractual relationship between the power system operator and the licensee as a market participant; and
  - an agreement between the licensee and the purchaser for the provision of metering services that is subject to conformity assessments under the supervision of the PUC.
- ✚ A generation licensee must develop and maintain a reliable, efficient, coordinated and economical system of electricity generation in accordance with the market rules and applicable codes of practice and other standards of performance issued or approved by the PUC.
- ✚ Refer any subject matter affecting the level and quality of electric service, or is likely to impact rates demanded from users, to the Commission. In particular, the disposal or re-assignment of relevant assets and disputes between licensees.

### 3.4. Licence to All Persons

This licence type allows for a light-handed approach, where few or no conditions are imposed and parties are free to engage in the defined activity with no further administrative requirement. The practical effect of such a licence is persons meeting the criteria make a single filing to the PUC in respect of technical requirements, and [if applicable] planning and environmental clearances. That is, there is no need for licensing and consent proceedings before the Commission.

The following are the categories of activity which the Commission has considered could be ubiquitous:

#### **3.4.1 Minor Self-Generation and Supply**

*Where a person generates electricity and the entire output is for the purpose of supplying himself only. This would comprise individuals, companies and other legal persons using small off-grid generation facilities to supply their own premises.*

*Generation capacity threshold – fossil-fuel fired generation technologies up to 75 kW, Renewable energy technologies (onshore) < 250 kW, Combined heat and power (CHP) < 500 kW.*

The Commission proposes that these persons shall register with the Commission and on a monthly basis file their energy production and consumption.

#### **3.4.2 Minor Distributed Generation**

Where a person generates electricity for himself and is permitted to sell the excess. This would comprise individuals, companies and other legal persons using small generation facilities to supply their own needs, who may resell electricity to the utility or third parties. Generation capacity threshold – Residential < 2.5 kW<sub>e</sub>, Commercial (120 V, 240 V, 480 V network) < 5 kW<sub>e</sub>, Commercial (dedicated transformer or primary network) < 25 kW<sub>e</sub>,

The Commission proposes that these persons shall register with the Commission and be required to obtain metering services from the utility. The utility on a monthly basis to file these persons energy production and consumption.

#### **3.4.3 Backup Generation and Supply**

(1) Where a person generates electricity as a “backup” facility in order to supply power whenever there is an interruption to his main supply of electricity. This includes circumstances where companies and individuals are connected to the grid and operate standby generators.

If this operational status is to change the Commission shall be notified forthwith, and on a monthly basis file their energy production and hours run.

(2) Where a person installs energy storage systems < 1 MW, and if grid-connected, does not sell any electricity services to the Utility.

*Requested responses for entries in Section 3.4*

*Q1 (a) – are there any additional generation capacity technologies that should be added to Section 3.4.1 that are not currently included?*

*Q1 (b) – are there any additional categories that should be added to Section 3.4.3 that are not currently included?*

*Q1 (c) – do you agree with the proposed capacity thresholds provided in Section 3.4.1, 3.4.2 and 3.4.2? If not, what alternative values do you propose and why?*

*Q1 (d) – are there any additional conditions that should be added that are not currently included and why?*

*Q1 (e) – are there any additional licensing entries that should be added that are not currently included in Section 3.4? Provide your reasoning.*

*Q1 (f) – do you agree with the Commissions' consent proceeding position? If not, what alternatives do you propose?*

### 3.5. Licence to Persons of a Class

This licence type is intended to be used where it is not necessary to control the individual players in the market but it is necessary to ensure compliance with certain common conditions that would apply to everyone operating under a class licence, for example conditions in respect of codes of practice, availability or disposal of assets, technology utilized, ownership structure, etc. The practical effect of such a licence to class of persons, means there may be only a consent proceeding before the Commission to consider inputs from planning and environmental authorities and affected licensees.

The following are the categories of electricity activities wherein the Commission may grant a general authorization for generation and/or supply to certain classes of persons:



### **3.5.1 Intermediate Self-Generation and Supply**

Where a person generates electricity and the entire output is for the purpose of supplying himself only. This would comprise individuals, companies and other legal persons using off-grid generation facilities to supply their own premises, who are not reselling electricity to third parties.

Generation capacity threshold –Renewable energy technologies (*onshore*) < 1 MW, Renewable energy technologies (*offshore*) < 0.25 MW, Combined heat and power (CHP) < 2 MW.

The Commission proposes that these persons shall file a Consent before constructing and operating the facility.

### **3.5.2 Intermediate Distributed Generation**

(1) Where a person generates electricity from a capacity not exceeding his peak demand, for himself and is permitted to sell the excess. This would comprise individuals, companies and other legal persons using generation facilities to supply their own needs who may resell electricity to the utility or third parties.

Generation capacity threshold – Dedicated transformer or Primary network < 250 kW<sub>e</sub>,

(2) Where a person installs energy storage systems < 1 MW, and if grid-connected, is permitted to trade electricity services with the Utility.

The Commission proposes that no Consent proceeding is necessary.

### **3.5.3 Community Generation and Supply**

Where a grouping of persons generates electricity and the entire output is for the purpose of supplying themselves only. This would comprise local government, NGO's, cooperatives and other such legal persons using micro-, mini-grids to supply their own needs.

Generation capacity threshold –Renewable energy technologies (*onshore*) < 1 MW, Combined heat and power (CHP) < 2 MW.

The Commission proposes that these persons may need file a Consent before constructing and operating the proposed facility.

### **3.5.4 Reseller**

Where a person or grouping of persons procure electricity for the purpose of supplying electricity services to other persons within a defined physical area. This would comprise Business complexes, Condos, Gated communities, charging stations and other such

arrangements of buying in bulk and distributing within the physical boundaries of a real property.

### **3.5.5 Aggregator**

Where a grouping of persons who own and operate DERs seek to collectively undertaken commercial arrangements with the Utility. Each DER owner must meet the specific classification (*to all persons, class of persons, individual*) to be included in the Aggregation.

### **3.5.6 Temporary**

Where a Person, other than a Utility, proposes to provide temporary electricity services using a mobile generation unit.

A Consent from the Commission is required for capacity exceeding 75 kW.

#### *Requested responses for entries in Section 3.5*

*Q2 (a) - are there any additional generation capacity technologies that should be added in Section 3.5.1 that are not currently included?*

*Q2 (b) – do you agree with the proposed capacity thresholds provided for in Section 3.5.1, 3.5.2 and 3.5.3? If not, what alternative values do you propose and why?*

*Q2 (c) - do you agree with the inclusion of categories 3.5.4 to 3.5.6? If not, what alternative classification do you propose?*

*Q2 (d) – can you propose any additional categories for inclusion? Kindly justify your request.*

*Q2 (e) – are there additional conditions that should be added that are not currently included and why?*

### 3.6. Licence to a particular Person

This licence type is intended to be used where there is only one or very few players in the market and/or where the activity being licensed is essential to customers, e.g. in the case of the public supply licensees, where customers may have to rely solely on the licensee for their electricity supply. The practical effect of such a licence, means there is first a licence proceeding and thereafter, on submission of design and operational standards of performance, a consent proceeding before the Commission.

The following are the categories of activity which the Commission has considered could be granted to a Person as prescribed in Section 14 of the Electricity Act.

#### **3.6.1 Major Self-Generation and Supply**

Where a person generates electricity and the entire output is for the purpose of supplying himself only. This would comprise individuals, companies and other legal persons using sizable generation facilities to supply their own premises, who are not reselling electricity to the Utility or third parties.

Generation capacity threshold –Renewable energy technologies (*onshore*) > 1 MW, Renewable energy technologies (*offshore*) > 0.25 MW, Combined heat and power (CHP) > 2 MW.

#### **3.6.2 Major Distributed Generation**

Where a person generates electricity from a capacity not exceeding his peak demand, for himself and is permitted to sell the excess. This would comprise individuals, companies and other legal persons using large generation facilities to supply their own needs who may resell electricity to the utility or third parties.

Generation capacity threshold – Primary network > 250 kW<sub>e</sub> and < 1 MW<sub>e</sub>.

#### **3.6.3 Independent Power Producers**

Licence application can only be countenanced as a consequence of a Person being successful in any Calls for Competition under the *aegis* of the PUC.

#### **3.6.4 Utilities**

Where a person generates electricity for the wholesale market, transmits and supplies electricity to the public.

*Requested responses for entries in Section 3.6*

*Q3 (a) - are there any additional generation capacity technologies that should be added in Section 3.6.1 that are not currently included?*

*Q3 (b) – do you agree with the proposed capacity thresholds provided for in Section 3.6.1 and 3.6.2? If not, what alternative values do you propose and why?*

*Q3 (c) - do you agree with the inclusion of categories 3.6.3 to 3.6.4 both inclusive? If not, what alternative classification do you propose?*

*Q3 (d) – can you propose any additional categories for inclusion? Kindly justify your request.*

*Q3 (e) – are there any conditions that should be added and why?*

#### 4. CONCLUSION

This consultative document sets out in brief the approach that the Public Utilities Commission proposes to take in respect of licensing of electricity undertakings in Belize.

The views of interested parties are hereby invited.