

Republic of the Philippines
ENERGY REGULATORY COMMISSION
San Miguel Avenue, Pasig City



**IN THE MATTER OF THE
JOINT APPLICATION
FOR THE APPROVAL OF
THE POWER PURCHASE
AGREEMENT (PPA)
ENTERED INTO BY AND
BETWEEN QUEZON II
ELECTRIC
COOPERATIVE, INC.
(QUEZELCO II) AND
RENESONS ENERGY
POLILLO, INC. (REP)**

ERC CASE NO. 2018-050 RC

**QUEZON II ELECTRIC
COOPERATIVE, INC.
(QUEZELCO II) AND
RENESONS ENERGY
POLILLO, INC. (REP),
Applicants.**

D O C K E T E D
Date: JUL 06 2018
By: [Signature]

X-----X

ORDER

On 24 May 2018, the Quezon II Electric Cooperative, Inc. (QUEZELCO II) and Renesons Energy Polillo, Inc. (REP) filed a *Joint Application* dated 17 May 2018, seeking the approval of their Power Purchase Agreement (PPA).

QUEZELCO II and REP alleged the following in their *Application*:

THE APPLICANTS

1. Applicant QUEZELCO II is an electric cooperative duly organized and existing under and by virtue of Presidential Decree No. 269, as amended, with principal office address at the Municipality of Infanta, Quezon Province. It has been granted a franchise by the National Electrification Administration (NEA) to distribute electric service in the Municipalities of Burdeos, General Nakar, Infanta, Jomalig, Panukulan, Patnanungan, Polillo, and Real, all in the

Province of Quezon (Franchise Area). Copies of its Certificate of Registration, Articles of Incorporation and By-Laws are attached to the Application as Annexes "A" to "A-2" and made an integral part hereof.

2. Applicant REP is a generation company duly organized and existing under the laws of the Republic of the Philippines with principal office address at 5th Floor, Treston Building, University Parkway District, 32nd Street Corner C-5 Road, Bonifacio Global City, Taguig, Metro Manila. Copies of its Certificate of Incorporation issued by the Securities and Exchange Commission (SEC), Articles of Incorporation and By-Laws, latest General Information Sheet (GIS) and latest Audited Financial Statement are attached hereto as Annexes "B" to "B-4", respectively and all made integral parts hereof.
3. Applicants may be served Orders and other processes through the undersigned counsels.

NATURE OF THE APPLICATION

4. Pursuant to Rule 20 (B) of the Energy Regulatory Commission's Rules of Practice and Procedure (the "ERCPP") and other pertinent rules and regulations, this Application is being submitted to this Honorable Commission for its review and approval of the Power Purchase Agreement ("PPA") entered into by and between Joint Applicants QUEZELCO II and REP. A copy of the PPA is attached as Annex "C" of this Application and made an integral part hereof.

COMPLIANCE WITH PRE-FILING REQUIREMENTS

5. In compliance with the pre-filing requirements mandated under Rule 3, Section 4(e) of the Implementing Rules and Regulations of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 or the EPIRA, and Rule 6 of the 2006 Energy Regulatory Commission (ERC) Rules of Practice and Procedure, Joint Applicants furnished the legislative bodies of the local government units where they principally operate with copies of the present Application together with all the annexes and accompanying documents. Copies of the Certificates of Receipt of the presiding officer or secretary or their duly authorized representatives of the legislative bodies of the Province of Quezon, Municipalities of Infanta and Polillo and City of Taguig where Joint Applicants principally operate, respectively, and the copy of the Application with stamped received are attached hereto as Annexes "D" to "D-7".
6. Furthermore, Joint Applicants caused the publication of the present Application excluding the annexes and accompanying documents in a newspaper of general circulation within the Franchise Area. Copies of the said newspaper and corresponding Affidavit of Publication are

attached hereto as Annexes "E" and "E-1" and made an integral part hereof.

STATEMENT OF FACTS AND OF THE CASE

7. Since 1990, QUEZELCO II has been distributing electric power generated by the National Power Corporation-Small Power Utilities Group (NPC-SPUG) in the Island of Polillo on a 16-hour basis. Being an island without a connection to the main grid, all power supply in Polillo comes from the power generation of NPC-SPUG using its diesel generator sets. The municipality of Polillo is therefore an "off-grid area", unlike the municipalities of Infanta, Real and General Nakar that are connected to the Luzon grid.
8. Based on data from QUEZELCO II as shown in Annex "F" and made an integral part hereof, actual energy demand between 2016 and 2021 is forecast to grow at a compound annual growth rate (CAGR) of 5.12%. In 2018, energy demand is at 1.723MW. This is expected to grow to 1.986MW in 2021. During the ten-year period of 2021 until 2031, the CAGR of forecasted energy demand is 3.73%. By 2031, energy demand will reach 2.864MW. This is the requirement of the Island of Polillo that needs to be fulfilled by the current NPC-SPUG set-up.
9. Up until 2014, when REP started looking at the potential for investing in the Polillo, the power supply in the island was limited to only 16 hours daily. This limited power service has hampered the economic development in the area and limited the sustainability of QUEZELCO II's operations in the island. Brownouts were common during the 16-hour daily operation, thus effective power duration was significantly less. There was also the constant problem of voltage fluctuations. The areas at the end of the line suffer most from this service unreliability. This is a typical situation in an off-grid area and is a major hindrance to the establishment of businesses in the island.
10. The majority of the shareholders of REP have strong ties to Polillo, having been born and raised in the island prior to establishing their businesses in Manila. Their vision is to address the major interlocking socio-economic challenges of the island: (a) inefficient power supply characterized by black outs and power outages; (b) sluggish economic growth as approximately 30% of the population is still below the poverty line and there are no large industries or businesses; and (c) emigration of local talents due to lack of both income and employment opportunities.
11. With the apparent urgent need for a stable and sustainable power supply, REP invested in exploring the energy platforms suitable in the island. In 2014, REP through Preferred Energy Inc. (PEI) examined the power generation set-up of NPC-SPUG in Polillo and it was revealed that the

diesel generator sets deployed by NPC-SPUG have significant derating of 23.5% (from 2,680 kilowatts to 2,050 kilowatts) due to continuous operation that the units were not designed for. None of the NPC-SPUG units are designed for 24-hour duty. Even at the derated capacities, the NPC-SPUG diesel generators sets have been unreliable.

12. Exploring alternative energy platforms suitable to the island, PEI also conducted a biomass resource assessment of Polillo in 2014. PEI's biomass resource assessment report is attached as Annex "G" and concluded that there was more than enough collectible biomass to support the continuous operations of a biomass power plant with up to 2MW capacity.
13. Based on the conducted exploration endeavored by REP, a business model has been formulated to address the power requirement in the Island of Polillo. A copy of the REP's Business Model is attached as Annex "H" and made an integral part hereof. It contains REP's aim of providing a full service power supply of up to 5.5MW of power capacity, as needed to the people of Polillo. During the first phase, REP shall utilize diesel as the initial fuel source in generating electricity. The second phase shall introduce utilization of biomass from coconut wastes as its main fuel source and diesel as supplemental fuel source for reliability and steadiness of supply. This will in effect redound to efficient, reliable and cost-effective electricity service for the people in the Island of Polillo. In between the two phases of energy development is an interface of an oil mill development within the Island of Polillo to effectively collect and build the necessary biomass feedstock. The said oil mill shall be developed by an entity affiliated to REP.
14. The proposed diesel power plant with 2MW capacity of REP will feature containerized generator sets enabling easy handling, fast delivery, quick installation and commissioning. The modular design will allow delivery of power at any standard utility voltage, ensuring flexibility in generating capacity as demand grows or declines. The 2MW capacity of the diesel power plant will ensure coverage of the forecasted peak demand for 2018 of 1.723MW.
15. During the second phase, the proposed biomass power plant will be set up with a capacity of 1.5MW. REP's diesel generator sets will eventually support the biomass energy platform that will utilize the island's abundant coconut resource, thus offering an economically efficient and sustainable source of energy. The biomass platform will use renewable gasification technology that is a cleaner process than typical combustion. The 1.5MW Biomass Power Plant supplemented with 1.4MW diesel generators in 2021 will ensure coverage of the forecasted peak demand of 1.986MW.

16. On April 18, 2016, REP submitted an unsolicited proposal to QUEZELCO II to provide full service power supply of up to 5.5MW of power capacity, as needed, with an initial setup of a 2MW Diesel Capacity and 1.5MW Biomass Capacity. A copy of the unsolicited proposal of REP is attached hereto as Annex "I".
17. On March 7, 2016, REP provided the Department of Energy (DOE) a copy of its unsolicited proposal to QUEZELCO II to provide full service power in Polillo Island. On March 29, 2016, the DOE issued a letter to QUEZELCO II acknowledging the receipt of the unsolicited proposal of REP and informing that the DOE, NEA and National Power Corporation (NPC) are available to extend any possible support to QUEZELCO II in the review of the REP's unsolicited proposal. A copy of the DOE Letter is hereto attached as Annex "J".
18. After an initial evaluation of the unsolicited proposal of REP, QUEZELCO II has determined that the unsolicited proposal of REP contains complete legal, technical and commercial offer deemed advantageous to QUEZELCO II considering that REP proposes to fully displace the NPC-SPUG operations and to utilize a biomass and diesel technology that is not only environmentally friendly and compliant with the mandate to utilize renewable energy but also would provide the least cost electricity. Thus, QUEZELCO II resolves to accept the unsolicited proposal of REP through the issuance of QUEZELCO II Board Resolution No. 26 Series of 2016. Furthermore, QUEZELCO II created a Bids and Awards Committee (BAC) authorized to conduct the Competitive Selection Process (CSP) through Swiss Challenge through its Board Resolution No. 27 Series of 2016. The copies of the board resolutions on the acceptance of the unsolicited proposal of REP and the creation of BAC for the conduct of CSP are hereto attached as Annexes "K" and "K-1" of this Application and all made integral parts hereof.
19. On May 23, 2016, QUEZELCO II furnished the copies of its Board Resolution No. 26 Series of 2016 and Board Resolution No. 27 Series of 2016 to the ERC, DOE, NEA and NPC. The copies of the Transmittal Sheet enclosing the Board Resolution No. 26 Series of 2016 and Board Resolution No. 27 Series of 2016 to the ERC, DOE, NEA and NPC are hereto attached as Annexes "L" to "L-3" of this Application.
20. On June 1, 2016, the DOE issued a reply letter on the board resolutions transmitted by QUEZELCO II. The letter states that the DOE poses no objection to the conduct of the CSP to select the NPP for Polillo Island and that the DOE, NEA and NPC will provide any necessary assistance and resource to QUEZELCO II on the conduct of the CSP. Accordingly, a Memorandum dated June 1, 2016 was issued by the DOE to

NEA and NPC requesting the two agencies to extend any possible assistance to QUEZELCO II on the conduct of the CSP pursuant to Republic Act 10531 and Department Circular No. DC2004-01-001. In accordance with the Memorandum issued by the DOE, the two agencies sent a letter to QUEZELCO II instructing the Applicant QUEZELCO II to strictly observe the procedures on the conduct of the CSP and to inform them of the activities that QUEZELCO II would undertake in connection with the conduct of CSP. Copies of the DOE letter and Memorandum, and the NEA and NPC's reply letters are hereto attached as Annexes "M" to "M-3" of this Application.

21. **Conduct of the CSP.** In accordance with the Department Circular No. DC2004-01-001, QUEZELCO II undertook the conduct of the CSP through Swiss Challenge.

First Bidding

- 21.1 On November 22, 2016, QUEZELCO II notified the ERC, DOE, NEA and NPC on the conduct of its first CSP through Swiss Challenge. A notification letter enclosed with QUEZELCO II's Invitation to Submit Eligibility Documents and Comparative Technical and Financial Proposal and Terms of Reference were transmitted to the four agencies. Copies of the Transmittal Sheet, and Notification Letter on the conduct of the CSP are hereto attached as Annexes "N" to "N-3" and all made integral parts hereof.
- 21.2 On December 17, 2016 and December 25, 2016, respectively, QUEZELCO II published in a newspaper of national circulation the Invitation to Submit Eligibility Documents and Comparative Technical and Financial Proposal to solicit proposals from interested parties to challenge the unsolicited proposal of REP. A copy of the proof of such publication and the Affidavit of Publication are attached to this Application as Annexes "O" and "O-1".
- 21.3 On January 10, 2017, QUEZELCO II issued invitation letters to the DOE, NEA and NPC, requesting their respective representatives to serve as observers in the pre-comparative challenge conference set on January 17, 2017. Copies of the Invitation Letter are attached in this Application as Annexes "P" to "P-2".
- 21.4 No letter of intent was received by QUEZELCO II on the submission deadline of January 16, 2017. Thus, the BAC declared the failure of the first CSP and recommended the conduct of another CSP pursuant to ERC Resolution No.13 Series of 2015 and ERC Resolution No. 11 Series of 2005. The BAC's recommendation was duly confirmed in QUEZELCO II's Resolution No. 8 Series of 2017. A copy of the

Resolution No. 8 Series of 2017 is hereto attached as Annex "Q".

Second Bidding

- 21.5 In view of the failure of the first CSP, and in order to ensure that QUEZELCO II will get the most beneficial terms, pursuant to the guiding principles of CSP, QUEZELCO II notified the ERC, DOE, NEA and NPC on the conduct of the second CSP. Copies of the notifications are hereto attached as Annexes "R" to "R-3" and all made integral parts hereof.
- 21.6 On February 8, 2017 and February 15, 2017, QUEZELCO II published in a newspaper of national circulation another Invitation to Submit Eligibility Documents and Comparative Technical and Financial Proposal to solicit proposals from interested parties. A copy of the proof of such publication is attached to this Application as Annex "S".
- 21.7. On February 20, 2017, QUEZELCO II issued invitation letters to the DOE, NEA and NPC, requesting their respective representatives to serve as observers in the pre-comparative challenge conference for the second CSP set on March 3, 2017. Copies of the Invitation Letter are attached in this Application as Annexes "T" to "T-2"
- 21.8 No comparative proposals were received by QUEZELCO II on the submission deadline on March 10, 2017. Parenthetically, GNPowder Ltd.Co. responded to its Invitation to Submit Comparative Proposals only after the deadline set by QUEZELCO II and never submitted a comparative proposal. Thus, the BAC declared the failure of the second CSP and recommended the conduct of direct negotiation with the original proponent REP in accordance with the ERC Resolution No. 13 Series of 2015 and ERC Resolution No. 11 Series of 2005. This was duly confirmed in QUEZELCO II's Resolution No. 22 Series of 2017. A copy of the Resolution No. 22 Series of 2017 is hereto attached as Annex "U".

Direct Negotiation

- 21.9. On May 2, 2017, direct negotiation was undertaken between QUEZELCO II and REP. In this respect, QUEZELCO II in its Resolution No. 04 Series of 2017 confirmed the result of the direct negotiation process and recommended the issuance of the Notice of Award to REP after the Joint Endorsement from NEA and NPC is secured in accordance with Section 3 of ERC Resolution No. 13 Series of 2015 and ERC Resolution No. 11 Series of 2005. A copy of the

Resolution No. 04 Series of 2017 is hereto attached as Annex "V".

- 21.10. On May 6, 2017, QUEZELCO II transmitted to NPC the copies of the CSP documents in respect to QUEZELCO II's request for NPC and NEA Joint Endorsement on the conduct of the CSP. The copies of the CSP documents were also submitted to DOE and NEA. Copies of the Transmittal Sheets are hereto attached as Annexes "W" to "W-2".
- 21.11. On May 24, 2017, a meeting was conducted by the Board of Directors of QUEZELCO II wherein they confirmed the result of the direct negotiation process and authorized the General Manager of QUEZELCO II to issue the Notice of Award to REP. A copy of the Resolution No. 32 Series of 2017 is hereto attached as Annex "X".
- 21.12. On June 20, 2017, the NEA and NPC issued their Joint Endorsement on the conduct of the CSP to QUEZELCO II which is hereto attached as Annex "Y".
- 21.13. On September 19, 2017, the DOE issued the CSP Certification to QUEZELCO II which is attached as Annex "Z" in this Application.
- 21.14. On August 29, 2017, QUEZELCO II transmitted to NEA a draft copy of the PPA for NEA's review. A copy of the Transmittal Sheet enclosing the draft copy of the PPA is hereto attached as Annex "AA" of this Application.
- 21.15. NEA issued to QUEZELCO II a letter dated November 9, 2017 hereto attached as Annex "BB" confirming that the PPA is in order and that the Joint Applicants may proceed with the execution of the Agreement.
- 21.16. Accordingly, QUEZELCO II issued a Notice of Award to REP on December 1, 2017 and the Joint Applicants signed the PPA on December 4, 2017. A copy of the Notice of Award is hereto attached as Annex "CC" of this Application.

**EXECUTIVE SUMMARY OF THE POWER PURCHASE
AGREEMENT & RELATED INFORMATION**

22. **The Generation Facilities.** Under the PPA, REP shall build, own and operate Diesel and Biomass Power Plants to provide the electricity requirements and power supply of QUEZELCO II with a power capacity of up to 5.5MW in Polillo Island. REP will utilize the indigenous agricultural residues/wastes from the island's vast coconut plantations as feedstock, and complementing it with diesel generator sets to ensure reliability and steady supply, which is sufficient to

enable QUEZELCO II to operate and provide efficient and cost effective electricity services to the people of Polillo Island.

22.1 The 2MW Diesel Power Plant will consist seven (7) generating units.

22.2 The 1.5MW Biomass Power Plant will consist of three (3) generating units.

23. The Diesel and Biomass Power Plants are intended to replace the NPC-SPUG generation capacity in Polillo Island and will be interconnected with QUEZELCO II's 13.2 kV distribution network. It must be noted that the biomass power plant shall run as baseload power while the diesel generating sets will complement and ensure sufficiency and reliability of supply. A more detailed technical and economic characteristic of the generation mix is hereto attached as Annex "DD" of this Application.

24. **Salient Features of the Power Purchase Agreement**

24.1 **Supply of Electricity.** Under the PPA, QUEZELCO II agreed to accept all the energy deliveries by REP and QUEZELCO II shall pay for whatever energy (in kWh) delivered by REP and distributed/consumed by QUEZELCO II as measured by REP's billing meter.

24.2 **Guaranteed Energy.** REP shall ensure the availability of adequate electricity supply provided in the PPA (Schedule 1).

QUEZELCO II shall promptly notify REP of the occurrence of any event, which would result in QUEZELCO II's being unable to accept the electricity supplied in accordance with the terms of the PPA in order for REP to be able to accordingly implement adjustments and carry out a management plan that would ensure that the REP's financial return on its investment (as originally contemplated) is maintained. If, as a result of the failure to accept electricity, REP's financial return on its investment is reduced, prejudiced or otherwise adversely affected despite its efforts to manage its operating costs, REP has the option to charge the corresponding Capital Recovery Fee and the Fixed Operations and Maintenance Fee, deliver additional quantities in succeeding periods at the same rate as originally contracted, or extend the Cooperation Period to the extent necessary to restore or maintain the said return, or waive right to deliver such additional energy quantities.

The Joint Applicants shall formulate and agree on guidelines and protocols expressly setting out the events constituting failure to accept electricity and the corresponding reliefs available to REP.

24.3 **Additional Capacity.** In the event QUEZELCO II will require supply in excess of the supply from the REP's

Power Plant Facilities, QUEZELCO II shall accord REP the right of first refusal on the additional supply, subject to ERC rules and regulations and PPA approval. REP shall utilize its logistical advantage owing to its presence and existing operations in Polillo to find means to lower the tariff for such additional supply for the benefit of QUEZELCO II's customers.

24.4 **Delivery Points.** The Guaranteed Energy shall be delivered to QUEZELCO II at the delivery points as designated in the PPA (Schedule 3). The disconnect or isolation switches shall be provided and arranged by REP to isolate the circuit breaker and the metering equipment for maintenance purposes. The cost of interconnection to the QUEZELCO II distribution system including right of way acquisition shall be for the account of and provided by REP.

24.5 **Commercial Operation Period.** The Commercial Operation Period will commence from the start of the agreed Commercial Operation Date specified to by the Joint Applicants until the end of the twenty second (22nd) year unless pre-terminated in accordance with the provisions set forth under the PPA.

24.5.1 **Condition Precedents to Commercial Operation Date.** The Commercial Operation Date shall not commence unless the following condition precedents are complied with:

24.5.1.1 **ERC Approval.** The Joint Applicants have obtained ERC approval of the PPA and the issuance of an Authority to Operate (ATO) in its favor. Provided that a provisional authority granted by the ERC shall be considered as substantial fulfillment of this condition. Such ERC approval must contain a qualification that that the difference between the Generation Cost Recovery Rate (GCRR) and Subsidized Approved Retail Rate (SARR) is recoverable under UCME if the GCRR is higher than the SARR. Provided further, that in case of issuance of a provisional authority, REP is entitled to a ME Subsidy if such right is expressly granted by ERC in the order granting such provisional authority; and provided furthermore that, should ERC modify the terms of the PPA, the Joint Applicants shall renegotiate the terms of the PPA within thirty (30) days from the issuance of such ERC decision.

24.5.1.2 **Master Billing Meter.** REP shall provide and install separate Billing Meters for Diesel and Biomass. Such Billing Meter will be compliant with the Distribution Asset Study (DAS) and capable of real-time monitoring and recording for the purpose of

measuring the electric power supplied by its generating facilities. The meter shall be of 0.3 accuracy class or equivalent and capable of measuring and locally displaying at least the kW, kWh, kVAR, kVARh, and cumulative demand, with time-of-use, maintenance recording and pulse output features.

24.5.1.3 Certificate of Compliance (COC). REP shall have secured the necessary COC from the ERC.

24.5.1.4 Environmental permits and all relevant governmental consents.

24.6 Commercial Operation Date and Term

24.6.1 Commercial Operation Date. The target Commercial Operation Date of the Joint Applicants shall not be more than twelve (12) calendar months after the execution of the PPA. REP shall notify QUEZELCO II in writing of this date.

24.6.2 Term. The PPA shall have a term commencing on the Commercial Operation Date and expiring on the date on the last day of the twenty second (22nd) year of the Commercial Operation Period unless otherwise extended and/or terminated in accordance with PPA.

24.7 Contract Price. For electricity generated and delivered by REP, QUEZELCO II shall pay a Total Monthly Payment for each of the Biomass and Diesel Plant based on the formula provided in the PPA. The billing shall be based on the actual energy delivered for the billing month. No additional charges shall be imposed upon by REP to QUEZELCO II unless such additional charges shall have been approved by the ERC.

24.8 Generation Rate and Derivation. Financial models containing the derivation of rates and sample computations of the power rate are likewise, attached to the Application as Annexes "EE" and "EE-1".

24.9 Basis/Rationale of Indexation. The components of the Total Monthly Charges are adjusted accordingly to reflect the corresponding changes in the cost of generation.

The Fixed O&M Fee and Variable O&M Fee are subject to adjustments based on the movement of predetermined economic indices.

The Fixed Operations and Maintenance Charge represents monthly local costs and is adjusted monthly based on Consumer Price Index (CPI) to

reflect changes in cost due to inflation. The Variable Operation and Maintenance Fee is adjusted monthly based on the foreign exchange rate since it represents monthly foreign currency denominated costs. The Fuel Charge and Lube Oil Fee are adjusted based on the actual cost of fuel and lube oil. A copy of the basis/rationale of indexation is hereto attached as Annex "FF".

- 24.10 **Billing Month.** A Billing Month under the PPA means the period commencing on the first hour of the 26th day of the month and ending on the last hour of the 25th day of the next calendar month. QUEZELCO II shall pay to REP the amount in the final invoice within thirty (30) days after the date of receipt of such invoice.
- 24.11 **Prompt Payment Discount.** REP shall give QUEZELCO II a Prompt Payment Discount of three percent (3%) of gross amount (energy+VAT) for bills paid on or before the due date to be automatically deducted in its power bill gross amount.
- 24.12 **Payment Security.** QUEZELCO II shall provide and maintain a payment security in the form of an irrevocable standby letter of credit in favor of REP in the amount equivalent to the SAGR multiplied by QUEZELCO II's average monthly consumption for the preceding year of operation. The amount of Payment Security shall be adjusted at the end of every Contract Year, to be based on the prevailing SAGR and QUEZELCO II's average monthly consumption for the preceding year of operation. The Payment Security shall cover QUEZELCO II's payment obligations under the PPA and all through the Cooperation Period. REP shall have the option of drawing upon the Payment Security the amount of the unpaid REP's Invoice including the interests thereon.
- 24.13 **Maintenance.** REP shall maintain and service the Power Plant Facilities and perform scheduled preventive maintenance, with the schedule to be based on the specific needs of the Power Plant Facilities as determined by REP. REP may, in addition, provide other remedial maintenance and/or testing, as and when needed. Service maintenance and/or testing would include adjustments, testing, and replacement of parts and components deemed necessary by the Power Supplier. In general, the estimated preventive maintenance hour for Diesel Power Plant is four (4) hours every 400 running hours per unit and six (6) hours every 2000 running hours per unit. The estimated preventive maintenance hour for Biomass Power Plant is one (1) month every year per unit.

REP shall provide QUEZELCO II with detailed yearly schedule of its preventive maintenance in order for QUEZELCO II to disseminate in advance to its consumers the scheduled temporary plant shutdown. Provided that no temporary plant shutdown shall exceed eight (8) hours per preventive maintenance period. In case REP exceeds the eight (8) hour allocation for its periodic preventive maintenance, REP shall pay to QUEZELCO II for the income loss arising of such extended preventive maintenance period.

25. Commercial Advantage of the Generation Rate and Impact on QUEZELCO II's Rate

- 25.1 The implementation of the rate structure contained in the PPA will not adversely affect the existing rates which QUEZELCO II charges to its member-consumers considering that QUEZELCO II is one of the missionary areas in the Philippines entitled for missionary electrification subsidy. The generation rate to be charged will still be the ERC approved Php6.1989/kWh.
- 25.2 The difference between REP's True Cost Generation Rate (TCGR) shall be collected from NPC-SPUG through the Universal Charge-Missionary Electrification (UC-ME) fund which is being collected from all electricity end-users.
- 25.3. The PPA entered into by and between QUEZELCO II and REP will redound to the benefit of QUEZELCO II's member-consumers in terms of continuous, reliable, efficient and affordable supply of power in Polillo Island.
- 25.4 Moreover, the operation of 2.0MW Diesel and 1.5MW Biomass Power Plants will reduce the secondary tariff rate, hence, it will become beneficial to all electricity end-users as this will translate to a reduction in the amount of subsidy taken from the UC-ME. The operation of the Diesel and Biomass Power Plants will result to efficiency and improvement in the power supply in the island of Polillo, reduction in the NPC-SPUG's generation obligations on the island and the decrease in the government's missionary subsidy.
- 25.5 It bears to note that REP's TCGR based on the actual project cost (actual project cost with detailed breakdown is attached hereto as Annex "II") is actually more than the tariff rate proposed by REP and agreed in the PPA between QUEZELCO II and REP as shown in the table below:

Tariff Rate		
	Diesel	Biomass
Capital Recovery Fee	4.0994	5.2483
Fixed O&M Fee	5.8907	2.2394
Variable Fee	0.0999	0.0736
Fuel Fee	8.9100	5.5000
TOTAL TARIFFS	19.0000	13.0613

25.6. However, as earlier mentioned, considering that Polillo is close to the heart of the majority shareholders of REP and if only to spark development in the area, they agreed to a lower tariff rate, which is more socially acceptable and beneficial to the end-users.

25.7 A simulation of the rate impact of REP's proposed tariff was conducted and attached as Annex "GG". The simulation assumed considers the TCGR of NPC SPUG's Polillo Diesel Power plant is not comparable with the proposal of REP considering that the component so is only for Fixed O&M Fee and Fuel Fee, as obtained from NPC for the year 2016. Primarily, it does not take into account cost for Capital Recovery, which is integral to the development of a reliable, cost-efficient and sustainable power plant operation in the island. Thus, the simulation imputes this cost and arrived to a more realistic TCGR.

Clearly, if NPC shall construct the same plant proposed by REP, which shall provide quality, reliable and environmental friendly source of energy to QUEZELCO II, the subsidy shouldered by all electricity and end-users shall be higher. On the other hand, after considering the proposed tariff rate of biomass, (which is significantly lower than the TCGR of NPC if the latter will construct the same plant), the new power supply price under the PPA will ultimately reduce the amount of subsidy being shouldered by all electricity end-users and may relieve the government from serious losses in the missionary electrification of SPUG areas. Thus, REP proposed rates will ease the burden to all electricity end-users through lower ME Subsidy.

Based on the computation of REP, the estimated total reduction in the level of subsidy for the Polillo Island resulting from the operations of the Diesel and Biomass Power Plants is Php 681,042,779.92, as shown above. As a result, the total subsidy requirements for the duration of the PPA would be reduced by 24.2%.

26. Sources of Funds/Financial Plans. The project will be funded through loans and equity. The debt-equity ratio for the Diesel and Biomass Power Plants is 75:25. A copy of the debt-equity ratio is hereto attached as Annex "HH".

26.1 Project Costs. The total cost of the project for the 2MW Diesel Power Plant is estimated at Php210,043,423.54 and Php 216,904,611.77 for the 1.5MW Biomass Power Plant. The computation of the project costs for Diesel and Biomass Plants are based on procurement and installations, construction, development cost, plant site/area, permits and licenses, interest during construction and working capital. Based on the estimated project costs REP were able to derive the projected Capital Recovery Fee, Fixed Operations and Maintenance Fee, Variable Fee and Fuel Fee of the Diesel and Biomass Power Plants. Copies of the breakdown of components of said project costs and breakdown of Diesel and Biomass Power Plant base prices are attached in this Application as Annexes "II" and "II-1".

26.2 Computation of Equity Internal Rate of Return (EIRR) based on Discounted Cash Flow (DCF). REP prefers to use DCF model rather than Levelized Cost of Electricity (LCOE) in determining Cost Recovery Fee (CRF). LCOE which is calculated by finding annuity based on Weighted Average Cost of Return (WACC) disregards other important factors present in REP's business model. LCOE ignores changes in Kilowatt (KW) Forecast, the terms of loan, changes in working capital, infusion of equity, purchase of generator equipment and etc., all of which must be considered in order to arrive at a more accurate determination of the capital recovery of REP's business model.

REP's business model involves a two-phase approach. The first phase is the commercialization of the Diesel Power Plant scheduled in 2018. Capital infusion through equity and debt will be required immediately, and, as such, the term of the loan will commence immediately. The second phase is the Biomass Power Plant which will have its commercial operation three years after the first phase. The second phase will require a separate capital infusion, also in the form of equity and debt. Further, there would be a need for additional capital infusion for the Diesel Power Plant as generation requirements for diesel will surely adjust as the Biomass Power Plant comes-in.

The two phases of the project, will have different working capital requirements but both will be funded through debt. And lastly, all of these are foreseen to be materializing against a backdrop of changing

energy demand forecasts which REP is committed to supply over the life of the PPA.

As such, DCF will be a reliable method in determining CRF for our business Model since it captures realistic cash flow of the entire project across all of its phases against varying energy demand.

In this case, the project shall have an EIRR of 12.35%. A copy of the explanation on the derivation of the EIRR based on DCF is attached to the Application as Annex "JJ".

- 26.3 **Annual Interest.** REP is currently discussing the terms and conditions of the project financing with a prospective lender. A Letter dated January 31, 2018 from Development Bank of the Philippines (DBP), the lead arranger of the financing for the Project, on the principal amortization, term and interest during the term of the loan agreement is attached hereto as Annex "KK" and made an integral part hereof.

27. **Cash Flow**

- 27.1 **Breakdown of Operating and Maintenance Expenses and Cash Flow Projection.** REP projects an estimated annual operations and maintenance expense of Php271,212,726.60 for Diesel Power Plant and Php18,571,396.02 for Biomass Power Plant. A detailed breakdown of the projected operating expenses including a breakdown of expenses for each Power Plant and cash flow projection are hereto attached as Annexes "LL" and "LL-1"

28. **Fuel Procurement.** The details for the fuel procurement of REP for the Diesel and Biomass Power Plants are attached as Annex "MM" and made an integral part of this Application.
29. **DOE Certifications.** The proposed generation capacity of the project is consistent with the DOE Philippine Development Plant (PDP). The copies of the DOE Certification for Biomass and Diesel Power Plants are hereto attached as Annexes "NN" and "NN-1" of this Application.
30. **Environmental Compliance Certificate and Certificate of Non Coverage.** The Department of Environment and Natural Resources (DENR) has issued an Environmental Compliance Certificate (ECC) for the Diesel Power Plant and Certificate of Non Coverage(CNC) for Biomass Power Plant. The copies of ECC and CNC of the Power Plants are hereto attached as Annexes "OO" and "OO-1" of this Application.

31. **Certificate of Compliance.** As the Diesel and Biomass Power Plants, are still to be constructed, they are not yet covered by Certificates of Compliance (COC). In accordance with Resolution No.16 Series of 2014, REP shall file the necessary applications for COC no later than three (3) months before the commencement of commercial operations.
32. **Connection Agreement.** The Connection Agreement between the Joint Applicants is hereto attached in the instant Application as Annex "PP".
33. **Board Resolutions.** A copy of the Board Resolution adopted by the Board of Directors of QUEZELCO II authorizing the joint filing of the instant application with REP, is attached hereto as Annex "QQ" and made an integral part hereof. Likewise, a copy of Board Resolution passed by the Board of Directors of REP authorizing the joint filing of the instant Application, is attached hereto as Annex "RR" and made an integral part hereof.
34. In further support of the Application, REP hereby submits copies of the following documents to form integral parts hereof, to wit:

Annex	Document
"SS"	QUEZELCO II List of Board of Directors
"TT"	REP List of Affiliates, Subsidiaries and Related Group
"UU"	Details on REP's Application for Certificate of Registration with Board of Investment (BOI)
"VV"	Biomass Renewable Energy Operating Contract No. 2016-03-060
"WW"	Certificate of Registration Number RE-B2016-03-109 for 1.5MW Biomass Power Plant
"XX"	QUEZELCO II Certification on Demand Side Management Program
"YY"	Power Supply Agreement on the Sale of Electricity between NPC and QUEZELCO II
"ZZ"	QUEZELCO II Joint Affidavit on the conduct of CSP
"AAA"	Feasibility Study of 2MW Diesel Power Plant
"BBB"	Feasibility Study of 1.5MW Biomass Power Plant
"CCC"	Executive Summary of PPA
"DDD"	Life of Asset versus Term of Loan (Computation of Levelized Cost)
"EEE"	All Cost Analysis
"FFF"	Certification of the Net Heat Rate of 2MW Diesel Power Plant
"GGG"	Certification of the Net Heat Rate of 1.5MW Biomass Power Plant with Company Profile of Powermax Systems Corporation Limited
"HHH"	Daily Load and Number of Units Simulation

**ALLEGATIONS IN SUPPORT OF THE PRAYER FOR
PROVISIONAL AUTHORITY OR INTERIM RELIEF**

35. All the foregoing allegations are re-pleaded by reference in support of the Prayer for Issuance of a Provisional Authority.
36. As discussed above, there is a pressing need for efficient and cost effective supply of the power in Polillo Island. With the issuance of a provisional authority or interim relief, REP may commence construction and installation of Power Plant, provide power during testing and commissioning and eventually commence commercial operations to supply QUEZELCO II's power requirements, hence, providing its member-consumers with stable, reliable and efficient power supply.
37. The basis by which Joint Applicants QUEZELCO II and REP are praying for the issuance of a Provisional Authority or interim relief prior to final decision is Rule 14 of the ERC Rules of Practice and Procedure:
- “Section 3. Action on the Motion. – Motions for provisional authority or interim relief may be acted upon with or without hearing. The Commission shall act on the motion on the basis of the allegations of the application or petition and supporting documents and other evidences that applicant or petitioner has submitted and the comments or opposition filed by any interested person, if there be any.”*** [Emphasis Supplied]
38. QUEZELCO II Polillo island is sourcing its power requirements solely from NPC-SPUG. However, with inadequate power supply as a result of NPC-SPUG's limited generation capacity and its generation facilities are performing below its efficiency, QUEZELCO II's Franchise Area has been enduring power outages for a number of years now.
39. Such condition is to continue, and will even worsen in the coming years because of the steadily increasing demand for electricity coupled with the lack of available reliable power supply. It is expected that the power requirements of QUEZELCO II in the Polillo island's customers will significantly increase in the next few years as shown in its Load Forecast Projection.
- 39.1 In view of the increasing demand for power in its Franchise Area and the inability of NPC-SPUG to produce capacity addition, or increase the efficiency of existing generation facilities in the immediate term, there is an urgent necessity to implement the PPA between QUEZELCO II and REP, pending the hearing, evaluation and resolution of the Joint Application.

39.2 To emphasize the necessity for the issuance of provisional approval of this Joint Application, a Judicial Affidavit to support the prayer for issuance of provisional authority or interim relief is attached hereto as Annex "HHH" to form as an integral part of this Joint Application.

39.3 In view thereof and in recognition of the fact that a substantial amount of time is customarily needed to evaluate the documents submitted to support the approval of this Joint Application, Joint Applicants QUEZELCO II and REP respectfully seek the kind consideration of the Honorable Commission to approve the instant Joint Application immediately, albeit, provisionally.

**ALLEGATIONS IN SUPPORT OF THE PRAYER FOR
MOTION FOR NON-DISCLOSURE OF
CONFIDENTIAL INFORMATION**

40. Under Rule 4 of the ERC Rules of Practice and Procedure, the Honorable Commission may, upon request of a party and determination of the existence of conditions which would warrant such remedy, treat certain information submitted to it as confidential.

41. The following documents contain certain non-public information, data and projections involving business operations and trade secrets reflecting REP's investment and financial calculations, to wit:

Annex	Document
"H"	Business Model
"EE"	Financial Model Containing Derivation of Rates
"EE-1"	Sample Computation of Power Rate
"GG"	Rate Impact Simulation
"HH"	Debt-Equity Ratio
"II"	Breakdown of Project Cost
"KK"	Term Sheet
"LL"	Breakdown of Maintenance and Operating Expenses
"LL-1"	Cash Flow Projection
"MM"	Details of the Fuel Procurement Process

42. Joint Applicants respectfully request that pursuant to their PPA to maintain in strict confidence all confidential information, Annexes "H", "EE and EE-1", "GG", "HH", "II", "KK", "LL" and "LL-1" and "MM" which contain certain non-public information, data and calculations involving business operations and financial trade secrets reflecting investment and business calculations, be treated as confidential documents.

43. Further, in accordance with Section 1(b), Rule 4 of the ERC Rules, Joint Applicants hereby submit one (1) copy of

Annexes "H", "EE and EE-1", "GG", "HH", "II", "KK", "LL" and "LL-1" and "MM" in a sealed envelope, with the envelope and each page of the document stamped with the word "Confidential".

PRAYER

WHEREFORE, premises considered, it is respectfully prayed that the Honorable Commission shall:

1. Immediately issue an Order provisionally approving or an Order of interim relief of the PPA subject of the present Application as well as the generation rates and adjustment mechanisms indicated therein;
2. Issue an Order treating Annexes "H", "EE and EE-1", "GG", "HH", "II", "KK", "LL" and "LL-1" and "MM" of the instant Application, as confidential documents and the information contained therein as confidential and directing its non-disclosure pursuant to Rule 4, Section 1 of the ERC Rules of Practice and Procedure and prescribing the guidelines for the protection thereof; and
3. After full proceedings on the merits, issue a Decision **APPROVING** the terms of the Power Purchase Agreement between Joint Applicants QUEZELCO II and REP, making such provisional approval permanent.

Joint Applicants pray for all other reliefs just and equitable under the premises.

Finding the said *Application* sufficient in substance with the required fees having been paid, the same is hereby set for determination of compliance with the jurisdictional requirements, expository presentation, Pre-trial Conference, and evidentiary hearing on **31 July 2018 (Tuesday) at ten o'clock in the morning (10:00 AM), at the QUEZELCO II's Principal Office in Infanta, Quezon.**

Accordingly, Applicants are hereby directed to:

- 1) Cause the publication of the attached Notice of Public Hearing in two (2) newspapers of nationwide circulation in the Philippines at their own expense, twice (2x) within two (2) successive weeks, the dates of publication not being less than seven (7) days apart, and the date of the last publication to be made not later than ten (10) days before the date of the scheduled initial hearing;

- 2) Furnish with copies of this Order and the attached Notice of Public Hearing the Offices of the Provincial Governors, the City Mayors and the Local Government Unit (LGU) legislative bodies within the affected franchise area for the appropriate posting thereof on their respective bulletin boards;
- 3) Inform the consumers within the affected area of the filing of the *Application*, its reasons therefor, and of the scheduled hearing thereon, by any other means available and appropriate;
- 4) Furnish with copies of this Order and the attached Notice of Public Hearing the Office of the Solicitor General (OSG), the Commission on Audit (COA), and the Committees on Energy of both Houses of Congress. They are hereby requested, if they so desire, to send their duly authorized representatives at the scheduled hearing; and
- 5) Furnish with copies of the *Application* and its attachments all those making requests therefor, subject to reimbursement of reasonable photocopying costs.

On the date of the initial hearing, Applicants must submit to the Commission their written compliance with the aforementioned jurisdictional requirements attaching therewith, methodically arranged and duly marked the following:

- 1) The evidence of publication of the attached Notice of Public Hearing consisting of affidavits of the Editors or Business Managers of the newspapers where the said Notice of Public Hearing were published, and the complete issues of the said newspapers;
- 2) The evidence of actual posting of this Order and the attached Notice of Public Hearing consisting of certifications issued to that effect, signed by the aforementioned Governors, Mayors and LGU legislative bodies or their duly authorized representatives, bearing the seals of their offices;
- 3) The evidence of other means employed by Applicant to inform the consumers within the affected franchise area of the filing of the *Application*, its reasons therefor, and of the scheduled hearing thereon;

- 4) The evidence of receipt of copies of this Order and the attached Notice of Public Hearing by the Office of the Solicitor General (OSG), the Commission on Audit (COA), and the Committees on Energy of both Houses of Congress;
- 5) The evidence of receipt of copies of the *Application* and its attachments by all those making requests therefor, if any; and
- 6) Such other proof of compliance with the requirements of the Commission.

Applicants and all interested parties are also required to submit, at least five (5) days before the date of the initial hearing and Pre-Trial Conference, their respective Pre-Trial Briefs containing, among others:

- 1) A summary of admitted facts and proposed stipulation of facts;
- 2) The issues to be tried or resolved;
- 3) The documents or exhibits to be presented, stating the purposes and proposed markings therefor; and
- 4) The number and names of the witnesses, with their written testimonies in a Judicial Affidavit form attached to the Pre-trial Brief.

Failure of Applicants to comply with the above requirements within the prescribed period shall be a ground for cancellation of the scheduled hearing, and the resetting of which shall be six (6) months from the said date of cancellation.

(This space is left intentionally blank.)

QUEZELCO II and REP must also be prepared to make an expository presentation of the instant *Application*, aided by whatever communication medium that they may deem appropriate for the purpose, in order to put in plain words and explain, for the benefit of the consumers and other concerned parties, what the *Application* is all about and the reasons and justifications being cited in support thereof.

SO ORDERED.

Pasig City, 18 June 2018.

FOR AND BY AUTHORITY
OF THE COMMISSION:


JOSEFINA PATRICIA A. MAGPALE-ASIRIT
Commissioner


LS: JTB/LSP/APV

ERC CASE NO. 2018-050 RC
ORDER/ 18 JUNE 2018
PAGE 24 OF 25

Copy Furnished:

1. Dechavez Lerios-Amboy and Evangelista Law Offices
Atty. Jeremiah D. Francisco
Counsel for QUEZELCO II
Units 2008 20th Floor, Tycoon Centre, Pearl Drive, Ortigas Center,
Pasig City 1605
2. Ramos & Esguerra Law Offices
Unit 1003-1004 10th Floor, Pacific Center Building
San Miguel Avenue, Pasig City 1605
3. Quezon II Electric Cooperative, Inc. (QUEZELCO II)
Applicant
Brgy. Gumian, Infanta, Quezon
4. Office of the Solicitor General
134 Amorsolo Street, Legaspi Village, Makati City
5. Commission on Audit
Commonwealth Avenue, Quezon City
6. Senate Committee on Energy
GSIS Bldg. Roxas Blvd., Pasay City
7. House Committee on Energy
Batasan Hills, Quezon City
8. Philippine Chamber of Commerce and Industry (PCCI)
3rd Floor, Chamber and Industry Plaza (CIP), 1030 Campus Avenue corner Park Avenue,
McKinley Town Center, Fort Bonifacio, Taguig City
9. Office of the Governor
Province of Quezon
10. Office of the LGU legislative body
Province of Quezon
11. Office of the Mayor
Burdeos, Quezon
12. Local Government Unit (LGU) legislative body
Burdeos, Quezon
13. Office of the Mayor
General Nakar, Quezon
14. Office of the LGU legislative body
General Nakar, Quezon
15. Office of the Mayor
Infanta, Quezon
16. Office of the LGU legislative body
Infanta, Quezon
17. Office of the Mayor
Jomalig, Quezon
18. Office of the LGU legislative body
Jomalig, Quezon
19. Office of the Mayor
Panukulan, Quezon
20. Office of the LGU legislative body
Panukulan, Quezon

21. Office of the Mayor
Patnanungan, Quezon
22. Office of the LGU legislative body
Patnanungan, Quezon
23. Office of the Mayor
Polillo, Quezon
24. Office of the LGU legislative body
Polillo, Quezon
25. Office of the Mayor
Real, Quezon
26. Office of the Mayor
Real, Quezon
27. Office of the LGU legislative body
Real, Quezon
28. Regulatory and Operations Service (ROS)-Investigation and Enforcement Division (IED)
Energy Regulatory Commission
17th Floor, Pacific Center Bldg., San Miguel Avenue, Pasig City