

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



**IN THE MATTER OF THE
APPLICATION FOR
AUTHORITY TO DEVELOP,
OWN, AND/OR OPERATE
DEDICATED POINT-TO-POINT
LIMITED FACILITIES TO
CONNECT THE 63MWp
PALAUIG SOLAR POWER
PLANT PROJECT TO THE
BOTOLAN 69/230 KV
SUBSTATION OF THE
NATIONAL GRID
CORPORATION OF THE
PHILIPPINES (NGCP), WITH
PRAYER FOR PROVISIONAL
AUTHORITY OR INTERIM
RELIEF**

ERC CASE NO. 2021-001 MC

**GIGASOL3, INC. (GIGASOL3),
*Applicant.***

Promulgated:
February 16, 2021

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NOTICE OF VIRTUAL HEARING

TO ALL INTERESTED PARTIES:

Notice is hereby given that on 12 January 2021, Gigasol3 Inc. (GIGASOL3) filed an *Application* dated 03 December 2020 (Application), seeking the Commission's approval of its authority to develop, own and/or operate a dedicated point-to-point limited facilities to connect the 63MWp Palauig Solar Power Plant Project to the Botolan 69/230 KV Substation of the National Grid Corporation of the Philippines (NGCP), with prayer for provisional authority or interim relief.

The pertinent portions of the said *Application* are hereunder quoted as follows:

I. THE APPLICANT

1. GIGASOL3 is a corporation duly organized and existing by virtue of and under the laws of the Republic of the Philippines, with principal office address at 4TH Floor, 6750 Ayala Avenue Office Tower, Makati City. It is primary organized to carry on the business of exploring, developing, and utilizing renewable energy resources, such as but not limited to biomass, biogas, hydropower, wind and solar energy, including operating, managing, maintaining, and rehabilitating energy systems and etc.;

Copies of GIGASOL3's Certificate of Incorporation, Articles of Incorporation, By-Laws, and the latest General Information Sheet are attached hereto and made integral parts hereof as **Annexes "A", "B", "C" and "D"**, respectively;

2. GIGASOL3 may be served orders and other processes through the undersigned Firm;

II. NATURE OF THE APPLICATION

3. This *Application* is submitted to this Honorable Commission pursuant to *Section 9 (f) of Republic Act No. 9136*, otherwise known as the "*Electric Power Industry Reform Act of 2001*" (EPIRA)¹, *Rule 5, Section 5 (a) of the EPIRA Implementing Rules and Regulations*², and *Section 4.2 of Resolution No. 23, Series of 2016* or the "*Resolution Adopting Amended Rules on the Definition and Boundaries of Connection Assets for Customers of Transmission Providers*"³ for its consideration and

¹ Section 9. Functions and Responsibilities.

xxx
(f) xxx
xxx

A generation company may develop and own or operate dedicated point-to-point limited transmission facilities that are consistent with the TDP: Provided, That such facilities are required only for the purpose of connecting to the transmission system, and are used solely by the generating facility, subject to prior authorization by the ERC: xxx

² Section 5. Dedicated Point-to-Point Limited Transmission Facility of a Generation Company.

(a) Subject to prior authorization from ERC, TRANSCO or its Buyer or Concessionaire may allow a Generation Company to develop, own and/or operate dedicated point-to-point limited transmission facilities; *Provided*, That:

- (i) Such dedicated point-to-point limited transmission facilities are required only for the purpose of connecting to the Grid which will be used solely by the Generation Facility, and are not used to serve End-users or Suppliers directly;
- (ii) The facilities are included and consistent with the TDP as certified by TRANSCO or its Buyer or Concessionaire; and
- (iii) Any other documents that may be required by the ERC.

³ 4.2. Connection Assets for Generation Customers of Transmission Provider

Connection Assets for generation customers of Transmission Provider include those assets from the last Single Mechanical Connection of a User System or Equipment of a Generation Company, at its Connection Point, to the last Single Mechanical Connection which is not shared with another Customer within the Grid

approval of GIGASOL3's proposed development, ownership, and operation of interconnection facilities (the "**Dedicated Facility Project**"), which will connect the approximately 63MWp Solar Power Plant Project (the "**Palauig Solar Power Plant**") located in Palauig, Zambales to the Luzon Grid through the 69/230kV Botolan Substation operated by the National Grid Corporation of the Philippines (NGCP).

Copy of the Secretary's Certificate dated 17 November 2020 attesting to the resolution of GIGASOL3's Board of Directors approving the Dedicated Facility Project, authorizing the filing of this *Application* and appointing the authorized representatives thereof is attached hereto and made an integral part hereof as **Annex "E"**;

III. STATEMENT OF FACTS

4. GIGASOL3 is a duly registered renewable energy developer of solar energy resources and is the holder of a Solar Energy Operating Contract No. SEOC No. 2020-02-560 (the "**Operating Contract**"), executed between the Republic of the Philippines, through the Department of Energy (DOE) and GIGASOL3 on 6 November 2019.

Copies of the Certificate of Registration issued by the DOE and the Operating Contract are attached hereto and made integral parts hereof as **Annexes "F" and "G"**, respectively;

5. The Operating Contract grants GIGASOL3 the exclusive right to explore, develop and utilize the Solar Energy Resources within the Contract Area⁴ located in Palauig, Zambales. Pursuant thereto, GIGASOL3 is developing the Palauig Solar Power Plant in Palauig, Zambales (the "**Project Site**");
6. To connect the Palauig Solar Power Plant to the Luzon Grid, GIGASOL3 shall develop and construct the Dedicated Facility Project, a dedicated point-to-point limited transmission facility to be used solely by the Palauig Solar Power Plant for its dispatch. GIGASOL3 intends that the power generated by the Palauig Solar Power Plant will be sold to the market on a merchant basis.

xxx

A Generation Company may develop and own or operate a dedicated point-to-point limited facilities provided, that such facilities are required only for the purpose of connecting to the transmission system, and are used solely by the generating facility, subject to prior authorization by the ERC.

⁴ Refers to the certain area comprised of 64.22 hectares in the Province of Zambales with metes and bounds exclusively reserved by the DOE and GIGASOL3, as RE Developer. See Annex A of the Operating Contract attached hereto as Annex "G" for the Contract Area's Technical Description and Map.

The Project Description and Project Profile are attached hereto and made integral parts hereof as **Annexes “H”** and **“H-1”**, respectively;

IV. TECHNICAL AND FINANCIAL CAPABILITY OF GIGASOL3

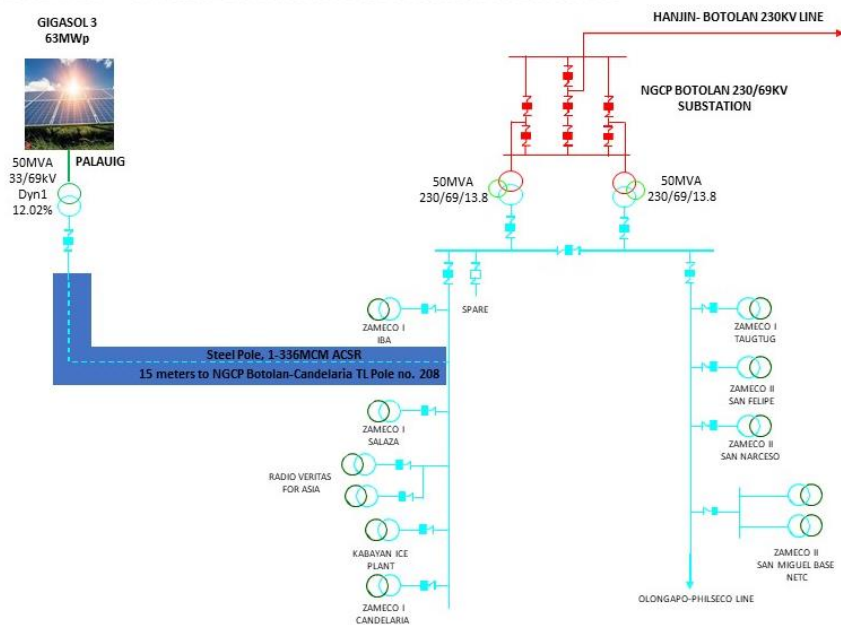
7. There are two schemes to connect the Palauig Solar Power Plant to the Luzon Grid: (a) Direct tap to Pole 208 of the NGCP 69kV Botolan-Candelaria line (Phase 1) or (b) direct connection to the NGCP 69kV Botolan Substation (Phase 2), both require the development and construction of a Dedicated Facility Project. GIGASOL3 intends to connect through both schemes and will use Phase 1 as an interim connection while waiting for Phase 2 to be completed;
8. The Pole 208 of the NGCP 69kV Botolan-Candelaria Subtransmission Line is the nearest connection point, while the NGCP 69kV Botolan Substation is the nearest substation from the switchyard of the Palauig Solar Power Plant (approximately 0.015 and 18 kilometers, respectively) compared to the other substations of the NGCP, such as the substation in Olongapo, Zambales (approximately 75 kilometers) and in Bolo, Pangasinan (approximately 65 kilometers).

A brief discussion on the Options Considered in Lieu of the Proposed Project is attached hereto and made an integral part hereof as **Annex “I”**;

9. With the foregoing, the Dedicated Facility Project, as outlined below, is the most effective way to connect the Palauig Solar Power Plant to the Luzon Grid.
 - 9.1. Phase 1, the interim connection, connects at Pole 208 of the NGCP 69kV Botolan-Candelaria line, which is the closest connection point to a Subtransmission Line to the switchyard of the Palauig Solar Power Plant – connecting the switchyard to this tapping point will require only a 0.015km line. The construction of this line will ensure the connection of the Palauig Solar Power Plant at the soonest possible time to meet the rising demand of the Luzon grid.
 - 9.1.1. This interim phase shall be composed of three (3) main parts, namely, the 69kV GIGASOL3 Palauig Substation located at the Project Site, the tap connection to the 69kV Botolan-Candelaria Subtransmission Line, and the Modification Work at the NGCP 69kV Botolan Substation, viz:

- 9.1.2. The 69kV GIGASOL3 Palauig Substation is designed using NGCP standards. All electrical equipment shall be designed to have a short circuit rating of 40kA;
- 9.1.3. The tap connection to the 69kV Botolan-Candelaria Subtransmission Line shall be made via a single circuit, 0.015km-long 336.4 MCM ACSR line;
- 9.1.4. The Modification Work at the NGCP 69kV Botolan Substation shall include installation of new potential transformer circuits, relocation of existing lightning arresters and modification of the feeder protection;
- 9.1.5. The construction of Phase 1 of the proposed Dedicated Facility Project, including both civil and electromechanical works, is estimated to be completed in January 2021;
- 9.1.6. The figure below shows the Single Line Diagram from GIGASOL3's Interim Connection (Phase 1) of the proposed Dedicated Facility Project up to the connection point at NGCP's Bay Substation:

GIGASOL3 – Phase 1: Interim Connection Scheme



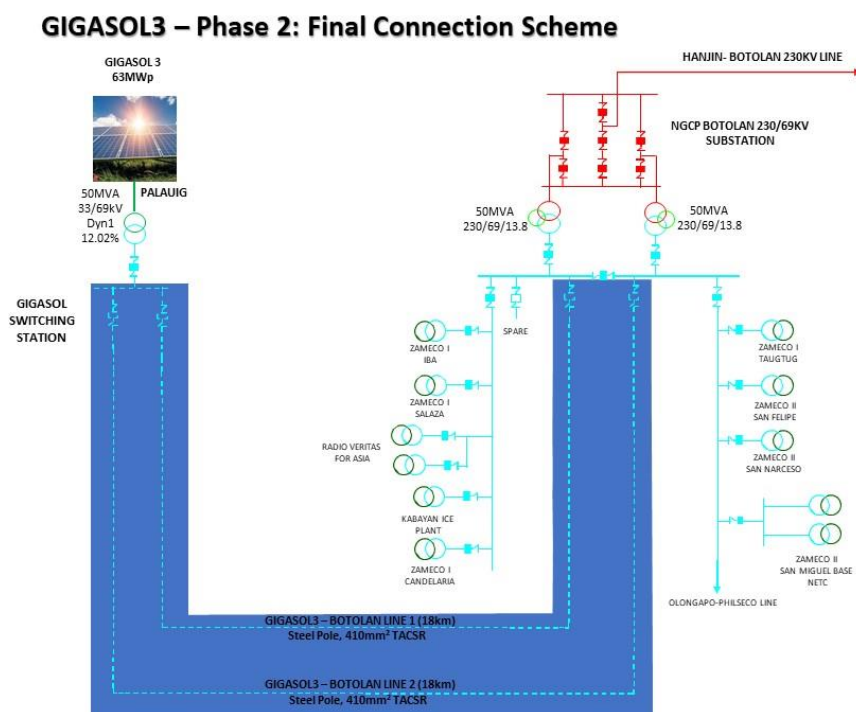
A copy of the Single Line Diagram of the Interim Connection is attached hereto and made an integral part hereof as **Annex “J”**;

- 9.2. Meanwhile, Phase 2, the final connection, connects at the NGCP 69kV Botolan Substation, which is the closest substation to the Project Site. The direct connection to this substation will require the

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construction of an 18km 69kV Line which will take at least twelve (12) months to complete. This 18km Line shall be the final connection used for the dispatch of the Palauig Solar Power Plant.

- 9.2.1. This final phase shall be composed of three (3) main parts, namely, the 69kV GIGASOL3 Line, the 69kV GIGASOL3 Palauig Substation located at the Project Site, and the Expansion Work at the NGCP Botolan 69kV Substation, viz:
- 9.2.2. The 69kV GIGASOL3 Line shall be a new double circuit 410 mm² TACSR transmission line approximately 18 km long;
- 9.2.3. A new outgoing bay shall be constructed at the 69kV GIGASOL3 Palauig Substation for the new double circuit line. The substation expansion shall be designed using NGCP standards and all electrical equipment shall have a short circuit rating of 40kA;
- 9.2.4. The Expansion Work at the NGCP Botolan 69kV Substation shall include the extension of the existing 69kV bus and the modification of the feeder protection.
- 9.2.5. The figure below shows the Single Line Diagram from GIGASOL3's Final Connection (Phase 2) of the proposed Dedicated Facility Project up to the connection point at NGCP's Botolan Substation:



A copy of the Single Line Diagram of the Final Connection is attached hereto and made an integral part hereof as **Annex “J-1”**;

10. The estimated cost of the construction of the Dedicated Facility Project is around PhP376.59M, inclusive of the cost for the construction of the switchyard. It will be funded privately by GIGASOL3 and will, therefore, not result in any unregulated charges.

The Dedicated Facility Project Cost Estimate is attached hereto and made an integral part hereof as **Annex “K”**;

11. Based on the approved System Impact Study (SIS) Report prepared by the NGCP, the connection of the Palauig Solar Power Plant to the Luzon Grid via Interim Connection and Final Connection are technically feasible based on the following assessments:

- 11.1. The thermal assessment results show that the entry of the Palauig Solar Power Plant via interim scheme in 2020 will result in the overloading of the 69kV Botolan-Candelaria Line and the 50MVA Botolan 230/69kV Power Transformer, however, in 2025, considering the final connection scheme and the installation of an additional 50MVA 230/69 kV Power Transformer at Botolan Substation, the transmission facilities have enough capacity during normal condition, but will be inadequate during single-outage contingency. Thus, the dispatch of the generating plants connected along the Botolan-Candelaria 69 kV Line should be regulated based on actual system conditions in 2020 and during N-1 condition in 2025 to avoid any overloading;
- 11.2. The voltage assessment results show that bus voltages in the study area are within the limits prescribed by the Philippine Grid Code (PGC) during normal and N-1 conditions in 2020 and 2025;
- 11.3. The short circuit assessment results show that the resulting fault level in the associated substations upon implementation of the Palauig Solar Power Plant is minimal and does not breach the interrupting rating of installed circuit breakers;
- 11.4. The rotor angle stability assessment results indicate that transient disturbances caused by three-phase faults in the transmission system do not lead to system instability;

- 11.5. The frequency assessment results show that sudden outage of all units of the Palauig Solar Power Plant, while supplying full capacity, does not cause the frequency of the system to drop below the 59.2 Hz limit for Automatic Load Dropping (ALD). Furthermore, it is expected that, under such scenario, the system will be able to maintain an acceptable frequency level.

A copy of the NGCP's System Impact Study Report for the Palauig Solar Power Plant is attached hereto and made an integral part hereof as **Annex "L"**;

12. GIGASOL3 engaged Almario Computer, Civil-Electrical Protection and Safety Technology to conduct the Facilities Study (FS) for the Palauig Solar Power Plant to ensure that the equipment to be installed will satisfy the recommendations of the SIS and that the Dedicated Facility Project complies with the Philippine Grid Code. The Facilities Study is currently being reviewed by the NGCP.

Copies of the Facilities Study and NGCP's letter dated 13 November 2020 to GIGASOL3 confirming that the FS is being subject to technical review are attached hereto and made integral parts hereof as **Annexes "M"** and **"M-1"**, respectively;

13. Considering that the NGCP has evaluated the system impact of connecting the Palauig Solar Power Plant to the Luzon Grid, GIGASOL3 requested NGCP for the issuance of a certification that the Palauig Solar Power Plant Project is consistent with NGCP's Transmission Development Plan (TDP), as well as a certification that it is in the process of securing Service Agreements, such as the Connection Agreement, with the NGCP. On 13 November 2020, NGCP informed GIGASOL3 that the subject project will be included in the formulation of the succeeding TDP update following its classification as an "indicative" Private Sector Initiated Power Project in the August 2020 update by the DOE.

Copies of GIGASOL3's letter to NGCP dated 06 November 2020 and NGCP's reply to GIGASOL3 dated 13 November 2020 are attached hereto and made integral parts hereof as **Annexes "N"** and **"N-1"**, respectively;

14. Relative thereto, GIGASOL3 requested the DOE for the inclusion of its project in the list of committed/initiated private sector power projects since projects included in the TDP are aligned with the DOE's List of Private Sector Initiated Power Projects.

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A copy of GIGASOL3's letter to the DOE dated 06 November 2020 is attached hereto and made an integral part hereof as **Annex "O"**;

15. Furthermore, JC Electrofields Power Systems Inc. (JCE) was contracted by GIGASOL3 for the construction of the Dedicated Facility Project, while it intends to engage the services of the NGCP for the operation and maintenance thereof.

A copy of the Corporate Profile of JCE is attached hereto and made an integral part hereof as **Annex "P"**, while a copy of GIGASOL3's letter of intent to secure the NGCP's O&M services is hereto attached as **Annex "P-1"**;

16. As of date, GIGASOL3 has secured or is in the process of securing the necessary permits, licenses and authority from regulatory agencies. In fact, on 27 January 2020, the Department of Environment and Natural Resources (DENR) issued an Environmental Compliance Certificate (ECC) to GIGASOL3's Palauig Solar Power Plant Project, copy is herewith attached as **Annex "Q"**.

A copy of the Sworn Statement of GIGASOL3's authorized representative, as to its filing of applications with all other concerned agencies is herewith attached as **Annex "R"**;

17. To fully support herein *Application*, the following attached documents are, likewise, being submitted for the Honorable Commission's consideration.

Annex	Document
"S"	Vicinity Map and Proposed Site of Project
"T"	Conceptual Engineering Design and Drawings for Interim Connection (Phase 1)
"T-1"	Conceptual Engineering Design and Drawings for Final Connection (Phase 2)
"U"	Gantt Chart
"V"	Relevant Dates of Dedicated Point to Point Application
"W"	Affidavit of Compliance to the Philippine Grid Code

V. PRAYER FOR THE ISSUANCE OF PROVISIONAL AUTHORITY OR INTERIM RELIEF

18. All the foregoing allegations are herein re-pleaded by reference in support of this *Prayer* for the issuance of a provisional authority or interim relief;
19. Connecting the Palauig Solar Power Plant to the Luzon Grid is a prerequisite to the commercial operations of the Palauig Solar Power Plant scheduled in the first quarter of 2021. It is necessary for GIGASOL3 to be granted a provisional authority or interim relief approving the

development and operation of the Dedicated Facility Project so that GIGASOL3 can commence commercial operations of the Palauig Solar Power Plant at the soonest possible time. Phase 1, in particular, requires an estimated construction time of five (5) months;

20. After all, Republic Act No. 9513, also known as the Renewable Energy Act of 2008 (RE Act), has declared that it is the policy of the State to “*accelerate the exploration and development of renewable energy resources such as, but not limited to, biomass, solar, wind, hydro, geothermal and ocean energy sources, including hybrid systems, to achieve energy self-reliance, through the adoption of sustainable energy development strategies to reduce the country’s dependence on fossil fuels and thereby minimize the country’s exposure to price fluctuations in the international markets, the effects of which spiral down to almost all sectors of the economy*”;⁵
21. Further, the subject matter of this *Application* is analogous to the Honorable Commission’s approval of electric capital projects. Thus, insofar as the grant of a provisional authority or interim relief, *ERC Resolution No. 13, Series of 2006*, as amended⁶, is hereby invoked. It is provided that:

“ARTICLE II
APPLICATIONS AND REQUIREMENTS

2.3 Evaluation and Approval

- xxx -

Upon filing of the application, the Commission may, on its own or upon motion, grant the issuance of a Provisional Authority (PA) based on the allegations of the application and on such other documents attached thereto or submitted by the parties. The Commission, if necessary, may schedule a hearing for the issuance of a PA not later than thirty (30) days from the filing of the application. Thereafter, the Commission shall issue a ruling either granting or denying the PA stating clearly the reasons therefore, within seventy five (75) days from the filing of the application.xxx. [Emphasis ours.]

22. A copy of the Affidavit executed by GIGASOL3’s authorized representative in support of the prayer for

⁵ Section 2 (a)

⁶ A Resolution Adopting the Guidelines to Govern the Submission, Evaluation and Approval of Electric Capital Projects, as amended by *Resolution No. 18, Series of 2008* and *Resolution No. 26, Series of 2009*.

issuance of provisional authority or interim relief is hereto attached and made an integral part hereof as **Annex “X”**;

23. Considering the above, there is clear and sufficient basis for the issuance of a provisional authority or interim relief pending the issuance of a final decision;
24. In view of all the foregoing, Applicant GIGASOL3 respectfully submits the instant *Application* for the Honorable Commission’s urgent and utmost consideration.

PRAYER

WHEREFORE, premises considered, GIGASOL3 respectfully prays that the Honorable Commission:

1. Pending hearing on the merits, **ISSUE** a **PROVISIONAL AUTHORITY** or **INTERIM RELIEF** to *immediately* allow GIGASOL3 to develop, own and/or operate the proposed dedicated point-to-point limited facility for its Palauig Solar Power Project; and
2. After due notice and hearing, **RENDER** a Decision **APPROVING** the *Application* with **FINALITY**.

Other just and equitable reliefs are, likewise, prayed for.

The Commission has set the instant *Application* for the determination of compliance with the jurisdictional requirements, expository presentations, pre-trial conference, and presentation of evidence on the following dates and online platform for the conduct thereof, pursuant to Resolution No. 09, Series of 2020⁷, dated 24 September 2020:

Date	Online Platform	Activity
08 April 2021 (Thursday) at two o'clock in the afternoon (02:00 P.M.)	Microsoft Teams (MS Teams) Application	Determination of compliance with jurisdictional requirements and Expository Presentation

⁷ A Resolution Adopting the Guidelines Governing Electronic Applications, Filings and Virtual Hearings Before the Energy Regulatory Commission.

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Date	Online Platform	Activity
15 April 2021 (Thursday) at two o'clock in the afternoon (02:00 P.M.)	Microsoft Teams (MS Teams) Application	Pre-Trial Conference and Presentation of Evidence

Any interested stakeholder may submit its comments and/or clarifications at least one (1) calendar day prior to the scheduled virtual hearing, via electronic mail (e-mail) at docket@erc.ph, copy furnish the Legal Service through legal@erc.ph. The Commission shall give priority to the stakeholders who have duly submitted their respective comments and/or clarifications, to discuss the same and propound questions during the course of the expository presentation.

Moreover, all persons who have an interest in the subject matter of the instant case may become a party by filing with the Commission via e-mail at docket@erc.ph, copy furnish the Legal Service through legal@erc.ph, a verified Petition to Intervene at least five (5) calendar days prior to the date of the initial virtual hearing and subject to the requirements under Rule 9 of the 2006 ERC Rules of Practice and Procedure, indicating therein the docket number and title of the case and stating the following:

- 1) The petitioner's name, mailing address, and e-mail address;
- 2) The nature of petitioner's interest in the subject matter of the proceeding and the way and manner in which such interest is affected by the issues involved in the proceeding; and
- 3) A statement of the relief desired.

Likewise, all other persons who may want their views known to the Commission with respect to the subject matter of the case may file through e-mail at docket@erc.ph, copy furnish the Legal Service through legal@erc.ph, their Opposition or Comment thereon at least five (5) calendar days prior to the initial virtual hearing and subject to the requirements under Rule 9 of the 2006 ERC Rules of Practice and Procedure. No particular form of Opposition or Comment is required, but the document, letter, or writing should contain the following:

- 1) The name, mailing address, and e-mail address of such person;
- 2) A concise statement of the Opposition or Comment; and
- 3) The grounds relied upon.

All such persons who wish to have a copy of the *Application* may request from GIGASOL3 that they be furnished with the same prior to the date of the initial hearing. GIGASOL3 is hereby directed to furnish all those making such request with copies of the *Application* and its attachments, through any of the available modes of service, upon their agreement, subject to the reimbursement of reasonable photocopying costs. Any such person may likewise examine the *Application* and other pertinent records filed with the Commission during the standard office hours. In the alternative, those persons who wish to have an electronic copy of the *Application* may request the Commission for the e-mail addresses of the GIGASOL3 by sending an e-mail to doCKET@erc.ph, copy furnish the Legal Service through legal@erc.ph. Nonetheless, any person may also access the *Application* as posted by the Commission in its official website at www.erc.gov.ph.

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Finally, all interested persons may be allowed to join the scheduled initial virtual hearing by providing the Commission, thru legal.virtualhearings@erc.ph, with their respective e-mail addresses and indicating therein the case number of the instant *Application*. The Commission will send the access link/s to the aforementioned hearing platform within five (5) working days prior to the scheduled hearing.

WITNESS, the Honorable Commissioners **ALEXIS M. LUMBATAN**, **FLORESINDA G. BALDO-DIGAL** and **MARKO ROMEO L. FUENTES**, Energy Regulatory Commission, this 4th day of February 2021 in Pasig City.




AGNES YST DEVANADERA
Chairperson and CEO


LS: JMS/CLB/MCCG