

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 FACILITIES TO CONNECT THE TARLAC SOLAR PV POWER PLANT TO THE 69 kV CONCEPCION-TARELCO 1 TRANSMISSION LINE OF THE NATIONAL GRID CORPORATION OF THE PHILIPPINES WITH PRAYER FOR PROVISIONAL AUTHORITY

ERC Case No. 2016-001 MC

PETROSOLAR CORPORATION (PSC),

Applicant.

X -----X

D O C K E T E D

Date: FEB 16 2016

By: [Signature]

ORDER

On 06 January 2016, the Petrosolar Corporation (PSC) filed an application to develop, own, and/or operate dedicated point-to-point facilities to connect the Tarlac Solar PV Power Plant to the 69 kV Concepcion-Tarelco 1 Transmission Line of the National Grid Corporation of the Philippines, with prayer for provisional authority.

In the said application, PSC alleged, among others, the following:

1. PSC is a corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines with office address at 7th Floor, JMT Building, ADB Avenue, Ortigas Center, Pasig City, Metro Manila, Philippines.

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A copy of PSC's Certificate of Incorporation, Articles of Incorporation, By-Laws, and latest unaudited statements of financial position and income statements are attached to the application and made integral parts hereof as Annexes "A," "B," "C," "D," and "D-1," respectively.¹ A list of the names, titles, and responsibilities of the major stockholders and key management officials of PSC is likewise attached to the application and made an integral part hereof as Annex "E."

2. PSC may be served orders and other processes through the undersigned counsel.

3. This application is submitted to the Commission pursuant to Section 9(f) of Republic Act No. 9136, or the Electric Power Industry Reform Act of 2001 ("EPIRA")², Rule 5, Section 5 (a)(i)³ of the EPIRA Implementing Rules and Regulations, and Section 4.2 of Resolution No. 16 Series of 2011, or the Resolution Adopting the Amended Rules on the Definition and Boundaries of Connection Assets for Customers of Transmission Provider⁴ for its consideration and approval of

¹ As PSC was only incorporated on 17 June 2015, it is not yet required to submit its Audited Financial Statements ("AFS"). In lieu of the AFS, copies of the unaudited statements of financial position and statements of income of PSC are attached hereto and made integral parts hereof as Annexes "D" and "D-1."

² "Section 9. Functions and Responsibilities.

Xxx

(f) 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

³ 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;"

⁴ Section 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 Generator, at its Connection Point, to the last Single Mechanical Connection which is not shared with another Generator within the Grid.

Xxx



PSC's proposed development, construction, ownership and/or operation of interconnection facilities at the Tarlac Solar Photovoltaic Power Plant's ("TSPPP") switchyard, which shall connect the TSPPP to the 69 kV Concepcion-Tarelco 1 transmission line of the National Grid Corporation of the Philippines ("NGCP").

4. PSC is owned by PetroGreen Energy Corporation ("PGEC"), which holds 56% of the outstanding capital stock of PSC, and EEI Power Corporation ("EEIPC"), which holds the remaining 44%.
5. PGEC was the holder of Solar Energy Service Contract No. 2015-03-115 ("Service Contract") by virtue of which it was granted the right to explore, develop and utilize the Solar Energy Resources in the Contract Area located in the City of Tarlac, Tarlac.

A copy of the Service Contract in the name of PGEC is attached to the application and made an integral part hereof as Annex "F."

6. On 19 June 2015, PGEC assigned the Service Contract to PSC by virtue of a Deed of Assignment and Assumption where PGEC assigned all of its rights, interests, and obligations under the Service Contract in favor of PSC. On 25 August 2015, PGEC wrote a letter to the DOE requesting for the approval of the assignment by PGEC to PSC, which was granted by the DOE on 15 September 2015. A Certificate of Registration was thus issued by the DOE in the name of PSC.

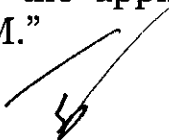
Copies of the Deed of Assignment and Assumption dated 19 June 2015, the letter request to the DOE dated 25 August 2015, the DOE letter of approval of the transfer dated 15 September 2015, and the Certificate of Registration in the name of PSC are attached to the application and made integral parts hereof as Annexes "G," "H," "I," and "J," respectively.

7. On 17 September 2015, the DOE affirmed the Declaration of Commerciality of TSPPP and approved the conversion of the Service Contract from pre-development to development stage. On 24 September 2015, the DOE issued a Confirmation of Commerciality in the name of PSC.

Copies of the DOE's letter dated 17 September 2015 and the DOE's Confirmation of Commerciality in the name of PSC are attached to the application and made integral parts hereof as Annexes "K" and "L," respectively.

8. The TSPPP involves the development, construction, operation, and maintenance of a 50 MW solar power project to be located in a 55-hectare property in Central Technopark, San Miguel, Tarlac City, Tarlac. The solar farm will consist of 189,648 photovoltaic ("PV") panels connected to 46 inverter stations, which are in turn connected to an internal 69kV substation.
9. The TSPPP will be connected to the NGCP's transmission system through the construction of a single circuit 1-336.4 MCM ACSR conductor from the plant site to the connection point. The proposed project subject of the instant Application involves the construction, operation and maintenance of about six (6) kilometers of interconnection facility that will extend from TSPPP's switchyard located inside Central Technopark towards NGCP's existing 69 kV Concepcion-Tarelco 1 transmission line in Tarlac City ("Dedicated Transmission Facility Project").
10. The Dedicated Transmission Facility Project is required only for the purpose of connecting PSC's TSPPP to the 69 kV Concepcion-Tarelco 1 transmission system of NGCP and will be used solely by TSPPP.

A more detailed description of the Dedicated Transmission Facility Project is attached to the application and made an integral part hereof as Annex "M."



11. On 4 April 2015, PGEC engaged the services of a third party consultant, EAGLEngineering Solutions Corporation to conduct a System Impact Study (“SIS”) to determine the impact of connecting the TSPPP to NGCP’s transmission system. The SIS showed that it is technically feasible to connect the TSPPP to the Luzon Grid.

12. Thereafter, NGCP conducted a review of the Third Party SIS for acceptability of the evaluation method, simulation results, and the study’s conclusions. On 6 November 2015, NGCP issued in favor of PSC, a Final Review Report of the Third Party SIS for the 50 MW TSPPP, finding that the conclusions in the Third Party SIS provide an acceptable assessment of the impact of the proposed connection of the TSPPP to the Luzon Grid, and that the SIS is consistent with NGCP’s own simulation results.

Copies of the SIS and the Final Review Report of the Third Party SIS for the 50 MW TSPPP are attached to the application and made integral parts hereof as Annexes “N” and “O,” respectively.

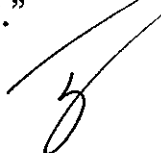
13. Three (3) connection schemes were considered for the interconnection of the TSPPP to the Grid, only one of which proved to be feasible in light of the constraints and difficulties posed by the other two (2) options.
 - a. The first option involves the construction of an estimated 4.0 km 69kV transmission line (T/L) poles at 60 ft. high on the south portion, with 22 T/L poles to be erected inside Central Technopark and 36 T/L poles to be erected along the properties of Central Azucarera de Tarlac (“CAT”) and Luisita Realty Corporation (“LRC”). This option requires negotiation for an easement of right of way with the CAT and LRC owners. After numerous meetings with the officers of CAT and LRC, however, both CAT and LRC rejected the proposal of PSC as they intend to develop the area as a residential oasis. The owners do not want any T/L poles erected on the frontage of their properties.

 - b. The second option, on the other hand, involves the replacement of the existing 13.8kV T/L of Tarlac Electric Inc. (“TEI”) which is situated along the north side, parallel to the Luisita Access Road. Under this option, PSC will erect 22 T/L poles inside Central Technopark with a

distance of 1.4 km, and will use the right of way of TEI on its existing 13.8 kV line to replace such line with 90 ft. high 36 T/L poles at a distance of 2.4 km, leading to the 69kV line of NGCP. The 13.8 kV line of TEI will be underbuilt to the 90 ft. high T/L poles. Unfortunately, this option was abandoned for a number of reasons. In the first place, TEI proposed the use of PSC's substation near the Phelps Dodge area as the tapping point to the 69 kV line of NGCP. This proposal is unacceptable because this is different from the tapping point considered in the Grid Impact Study submitted to NGCP. In addition, TEI would like to be the exclusive off-taker for the electricity produced in the TSPPP. This request however cannot be accommodated as the TSPPP is applying for a Feed-in-Tariff incentive. Moreover, there is no existing easement agreement among TEI, LRC and Tarlac Development Corporation ("TDC"), which are the owners of the properties over which the existing 13.8kV line of TEI is situated. PSC will also have to shoulder the economic loss of TEI due to the scheduled shutdown during maintenance of the 69 k/V T/L, as well as the cost of the under-built equipment and construction. Lastly, the 13.8kV line of TEI will have to be uprooted to give way to the expansion of the Luisita Access Road.

- c. Due to the constraints and difficulties in the first two (2) options, PSC decided to pursue the third and last option, which is the construction of the Dedicated Transmission Facility Project. This involves the erection of a 69 kV T/L along the RCBC and TDC properties. Under this option, a 6.0 km 69 kV T/L will be constructed from the TSPPP switchyard inside Central Technopark to the existing 69 kV line of NGCP in Tarlac City. The line will traverse the RCBC properties, then the TDC properties. A total of 93 poles will be erected at 60 ft. elevation. The T/L will then be tapped to the existing 69 k/V line of NGCP. It must be noted that PSC has entered into an easement agreement for the T/L poles with RCBC on 23 November 2015, while the easement agreement with TDC is presently being finalized.

A detailed discussion of the Options/Alternatives in Lieu of the Dedicated Transmission Facility Project as considered by PSC is attached to the application and made an integral part hereof as Annex "P."



14. In pursuit of the Dedicated Transmission Facility Project as the most viable option, PSC negotiated with NGCP for the signing of a Connection Agreement for the physical interconnection of the generation and connection facilities of TSPPP to NGCP's transmission system.
15. The operation and maintenance of the transmission line will also be performed by NGCP. As certified by NGCP, PSC is presently negotiating with the NGCP for the execution of an Operations and Maintenance (O&M) Agreement on the foregoing services.

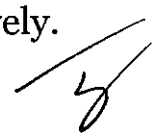
A Certification dated 22 December 2015 issued by the NGCP that PSC and NGCP have agreed on the general terms and conditions of a (1) Connection Agreement and (2) Operations and Maintenance (O&M) Agreement for the Dedicated Transmission Facility Project is attached to the application as Annex "Q."

16. As certified by NGCP, the TSPPP will be included in the Transmission Development Plan ("TDP") for 2014, as part of the Luzon Generation Capacity Addition. Notably, the system simulations used in the Third Party SIS considered all the existing and proposed generation projects, as well as the new interconnection projects in the Luzon Grid, as indicated in the NGCP's 2013 TDP.⁵

A copy of the NGCP Certification dated 29 December 2015 is attached to the application and made an integral part hereof as Annex "R."

17. On 9 July 2015, PSC entered into a Design, Supply, Delivery, Installation, Test/Commissioning, Civil Works and Construction Contract for the Dedicated Transmission Facility (the "Construction Contract") with Philcantech Enterprises. Copies of the Construction Contract and Secretary's Certificate containing resolutions of PSC's Board of Directors approving the construction of the transmission line and execution of the EPC Contract are attached to the application and made integral parts hereof as Annexes "S" and "T," respectively.

⁵ Third Party SIS, page nos. 9 and 11.



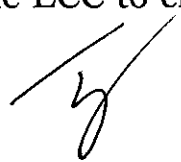
Copies of the Conceptual Engineering Designs and Drawings (Single-Line and Three-Line Diagrams) and Gantt Chart Construction Schedule are likewise attached to the application and made integral parts hereof as Annexes “U”, “U-1” and “V,” respectively.

18. The cost of the Dedicated Transmission Facility Project (e.g. transmission line, switchyard, and substation) amounting to PhP353,568,000.00 is estimated to be 10.46% of the total capital investment for the TSPPP. The estimated total project cost of TSPPP in the amount of PhP3.379 million will be funded by 25% equity and 75% debt. The breakdown of the major cost components of the TSPPP is as follows:

PROJECT COMPONENTS	COST (PHP)
Pre-Development Cost and G&A	30,305,908
Development Cost	8,461,976
PV Plant Facility	2,711,129,773
Site Development	84,473,814
Transmission Line, Switchyard, and Substation	353,568,000
Insurance	37,104,612
Financing Cost	148,765,918
Other CAPEX	5,190,000
TOTAL PROJECT COST	3,379,000,000

A copy of the Project Cost Estimates and highlights of the Financial Projections for TSPPP are presented in the projected financial and economic analysis and made an integral part of the application as Annexes “W” and “X,” respectively.

19. On 4 August 2015, the Department of Environment and Natural Resources (“DENR”) issued an Environmental Compliance Certificate (“ECC”) in the name of PGEC. On 3 November 2015, upon the request of PSC, the DENR approved the amendment of the ECC to change the name of the proponent from PGEC to PSC.



Copies of the ECC No. R03-1507-0322 in the name of PGEC and the Amended ECC No. R03-1507-0322 in the name of PSC are attached to the application and made integral parts hereof as Annexes "Y" and "Z," respectively.

20. In addition, PSC has filed or is in the process of filing an application for approval of the Dedicated Transmission Facility Project with all the concerned agencies that may have an interest therein. PSC also undertakes to file an application for a Certificate of Compliance with the Commission.

A copy of the sworn statement of PSC's Corporate Secretary, Arlan P. Profeta attesting to the fact that PSC has filed or shall file an application for approval of the Dedicated Transmission Facility Project with all the concerned agencies that may have an interest therein are attached to the application and made an integral part hereof as Annex "AA."

21. In summary, PSC hereby submits copies of the following documents, which are either identified as annexes above or additional documents in support of the application:

ANNEX REFERENCE	DOCUMENT
"A"	Certificate of Incorporation
"B"	Articles of Incorporation
"C"	By-Laws
"D"	Unaudited Statements of Financial Position
D-1"	Unaudited Statements of Income
"E"	List of Major Stockholders and Officers and their Responsibilities
"F"	Service Contract No. 2015-03-115
"G"	Deed of Assignment and Assumption dated 19 June 2015
"H"	Letter Request to the DOE on the Assignment dated 25 August 2015
"I"	DOE Letter of Approval of the Assignment date 15 September

	2015
“J”	Certificate of Registration (Registration No. SESC 2015-03-115) in the name of PSC
“K”	DOE Letter dated 17 September 2015 (approving the conversion of the Service Contract from pre-development to development stage)
“L”	Confirmation of Commerciality (No. SCC-2015-09-027) in the name of PSC dated 24 September 2015
“M”	Project Description
“N”	SIS
“O”	Final Review Report of the Third Party SIS for the 50 MW TSPPP dated 6 November 2015
“P”	Options/Alternatives in Lieu of the Dedicated Transmission Facility Project
“Q”	NGCP Certification dated 22 December 2015 on the (1) Connection Agreement and (2) the Operations and Management Agreement
“R”	NGCP Certification dated 29 December 2015 on Inclusion of the TSPPP in the TDP
“S”	Construction Contract between PSC and Philcantech Enterprises
“T”	Secretary’s Certificate containing resolutions of the Board of Directors of PSC approving the construction of the transmission line and execution of the EPC Contract
“U” and “U-1”	Conceptual Engineering Designs and Drawings
“V”	Gantt Chart Construction Schedule
“W”	Project Cost Estimates
“X”	Projected Financial and Economic Cost Analysis

"Y"	Environmental Compliance Certificate No. R03-1507-0322
"Z"	Amended Environmental Compliance Certificate No. R03-1507-0322
"AA"	Sworn Statement of PSC's Corporate Secretary, that an application for approval from the concerned agencies that may have an interest in the Dedicated Transmission Facility Project has been filed/or shall be filed by PSC
"BB"	Affidavit executed by Arlan P. Profeta dated 29 December 2015 in support of the prayer for issuance of provisional authority

ALLEGATIONS IN SUPPORT OF THE PRAYER FOR PROVISIONAL AUTHORITY

22. Under Rule 14 of the ERC Rules of Practice and Procedures, the Commission is authorized to issue a provisional authority or interim relief prior to a final decision in the instant application, provided that the facts and circumstances alleged warrant such remedy.

23. PSC respectfully submits that the following facts and circumstances clearly warrant the issuance by the Commission of a provisional authority or interim relief in the instant application.
 - a. As the RE Law aims to accelerate the development of the country's renewable energy resources and increase the utilization of renewable energy, it is in the interest of the government to help RE developers such as PSC to achieve commerciality and commence operations at the soonest practicable time. Needless to state, the construction of the dedicated point-to-point transmission facility is a prerequisite for the testing and commissioning, and ultimately, the commercial operations of TSPPP. It bears emphasis that one of the obligations of PSC under its financing agreements is to achieve its target commercial operation by the first



quarter of 2016. A provisional authority is thus urgently needed as PSC's failure to comply with this target will result in adverse consequences to PSC.

- b. Moreover, generation of electricity from solar resource contributes to the reduction of carbon and greenhouse gas emissions to the atmosphere through the displacement of power generated from bunker and other fossil fuel, while at the same time augmenting existing supply in the Luzon grid.
- c. Further, any impediment in the commercial operations of the TSPPP will affect the power supply projections of the DOE, which will have an adverse impact on the consumers. The issuance of a provisional authority will enable PSC to immediately start with the construction of the transmission facility, thus preventing any delay in the commercial operations of TSPPP.
- d. The issuance of a provisional authority is especially critical in light of the DOE's first-come, first-served policy on Feed-In-Tariff ("FIT") allocation, which intensified competition among wind Renewable Energy ("RE") Developers. Thus, pursuant to DOE Circular No. DC 2013-05-0009 or the "Guidelines for the Selection Process of Renewable Energy Projects under Feed-In Tariff System and the Award of Certificate for Feed-In Tariff Eligibility," a Certificate of Endorsement ("COE") for FIT Eligibility will only be issued by the DOE upon its validation of the successful commissioning of an RE power plant. The DOE shall issue the COE for FIT Eligibility on a first come, first served basis until the maximum installation target of 500 MW for solar technology is fully subscribed. The COE shall indicate the installed capacity that will be eligible for the FIT rate and the actual date of Commercial Operation. Significantly, the Commission has ruled that the new solar FIT of PhP8.69/kWh which was approved on 27 March 2015, is valid only until 15 March 2016.⁶ RE Developers have to meet this deadline to be entitled to the new FIT. It is thus imperative for PSC to secure a provisional authority to immediately commence with the construction of the transmission facility in order to eventually avail of the FIT, which is essential to the economic viability of the TSPPP.

⁶ Decision, *In the Matter of the Adoption of the Amendments to Resolution No. 10, Series of 2012, A Resolution Approving the Feed-in-Tariff (FIT) Rates, as Necessitated by the New Installation Target for Solar Energy Generation Set by the Department of Energy (DOE)*, ERC Case No. 2014-004 RM, p. 23.

A copy of the Affidavit executed by Arlan P. Profeta in support of the prayer for issuance of provisional authority is attached to the application and made an integral part hereof as Annex "BB."

- e. Considering the foregoing, there is clear and sufficient basis that the issuance of a provisional authority or interim relief pending the issuance of a final order or decision in the instant application is imperative.

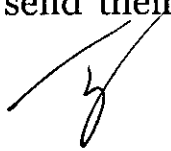
24. It prays that the Commission:

- a. Issue a provisional authority for the implementation of the development, ownership and/or operation of the dedicated point-to-point facilities by PSC for TSPPP to connect to the transmission system of NGCP; and
- b. Render, after hearing on the merits, a decision approving the instant application.

Finding the said application sufficient in form and substance with the required fees having been paid, the same is hereby set for jurisdictional hearing, expository presentation, pre-trial conference and evidentiary hearing on **10 March 2016 (Thursday) at three o'clock in the afternoon (3:00 P.M.) at the ERC Hearing Room, 15th Floor, Pacific Center Building, San Miguel Avenue, Pasig City.**

PSC is hereby directed to cause the publication of the attached Notice of Public Hearing, at its own expense, once (1x) in a newspaper of general circulation in the Philippines, at least ten (10) days before the date of the scheduled initial hearing. It is also directed to inform the consumers, by any other means available and appropriate, of the filing of the instant application, its reasons therefor, and of the scheduled hearing thereon.

Let copies of the application, this Order and the attached Notice of Public Hearing be furnished 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.



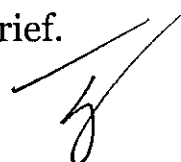
Likewise, let copies of this Order and the attached Notice of Public Hearing be furnished the Offices of the Governor of Tarlac and the Mayors of Pasig City and Tarlac City for the appropriate posting thereof on their respective bulletin boards.

PSC is hereby directed to furnish all those making requests therefor with copies of the application and its attachments, subject to reimbursement of reasonable photocopying costs.

On the date of the initial hearing, PSC must submit to the Commission its written Compliance with the jurisdictional requirements attaching therewith, methodically arranged and duly marked, the evidences on the actual posting and publication of the Notice of Public Hearing consisting of certifications issued to that effect, signed by the afore-mentioned Governor and Mayors or their duly authorized representatives, bearing the seals of their office, and the affidavit of the Editor or Business Manager of the newspaper where the said Notice of Public Hearing was published together with the complete issue of the said newspaper, and such other proofs of compliance with the requirements of the Commission.

PSC and all interested parties are directed to submit, at least five (5) days before the date of initial hearing and pre-trial conference, their respective Pre-trial Briefs containing, among others:

- a) A summary of admitted facts and proposed stipulation of facts;
- b) The issues to be tried or resolved;
- c) The documents or exhibits to be presented, stating the purposes and proposed markings therefore; and
- d) The number and names of the witnesses, with their written testimonies in an individual affidavit form, to be attached to the Pre-trial Brief.





Failure of PSC to submit the required Pre-trial Brief and Judicial Affidavits of its witnesses 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 said date of cancellation.

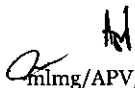
As part of the pre-trial conference, PSC must also be prepared to make an expository presentation of its application, aided by whatever communication medium that it may deem appropriate for the purpose, in order to put in plain words and explain, for the benefit of the consumers and other concerned parties, what the application is all about and the reasons and justifications being cited in support thereof.

SO ORDERED.

Pasig City, 02 February 2016.

FOR AND BY AUTHORITY
OF THE COMMISSION:


JOSE VICENTE B. SALAZAR
Chairman and CEO 


mlmg/APV/initial order - 2016-001 mc petrosolar

ERC
Office of the Chairman



B-2016-009-OC-00631

Copy Furnished:

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7. **Office of the City Mayor**
Pasig City
8. **Office of the City Mayor**
Tarlac City
9. **Office of the Provincial Governor**
Province of Tarlac

