

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



IN THE MATTER OF THE APPLICATION FOR AUTHORITY TO DEVELOP, OWN, AND OPERATE DEDICATED POINT-TO-POINT LIMITED FACILITIES TO CONNECT THE 3.82 MW SPARC BULACAN PROJECT TO MANILA ELECTRIC COMPANY'S (MERALCO) DISTRIBUTION SYSTEM, WITH PRAYER FOR PROVISIONAL AUTHORITY,

ERC CASE NO. 2015-095 MC

**SPARC-SOLAR POWERED AGRI-RURAL COMMUNITIES CORPORATION (SPARC),
Applicant.**

X-----X

D O C K E T E D
Date: OCT 25 2017
By: [Signature]

DECISION

Before the Commission for resolution is SPARC-Solar Powered Agri-Rural Communities Corporation's (SPARC) *Application* filed on 24 November 2015, seeking the Commission's approval for authority to develop, own, and operate dedicated point-to-point limited facilities to connect the 3.82 MW SPARC Bulacan Project to Manila Electric Company's (MERALCO) Distribution System, with prayer for provisional authority.

In the said *Application*, SPARC alleged the following:

1. SPARC is a corporation duly organized and existing under and by virtue of Philippine laws, with principal office at Bonifacio Technology Center, 2nd Avenue corner 31st Street, Bonifacio Global City, Taguig City, Metro Manila. It may be served with pleadings, notices, orders and other legal processes through the undersigned Firm;

2. SPARC is engaged in the business of generating power derived from solar energy and other viable sources of renewable energy for lighting and power purposes. Copies of relevant corporate documents of SPARC are herewith attached and form integral parts hereof, as follows:

ANNEX	DOCUMENT
"A"	Certificate of Incorporation
"B"	Articles of Incorporation and By-Laws
"C"	General Information Sheet for Year 2015
"D"	Certificate of Non-Coverage from the Department of Environment and Natural Resources (DENR)
"E"	Audited Financial Statements for 2014
"F"	Renewable Energy Developer Certificate of Registration issued by the Department of Energy (DOE)

3. As a registered Renewable Energy (RE) Developer, SPARC was granted a Solar Energy Service Contract (SESC) to construct, operate and maintain a 3.82 MW solar farm facility on properties owned by the Agrarian Reform Beneficiaries (ARBs) in Agrarian Reform Communities (ARC) located at Barangay Pasong Inchik, San Rafael, Bulacan (hereinafter, the "3.82 MW SPARC Bulacan Project");

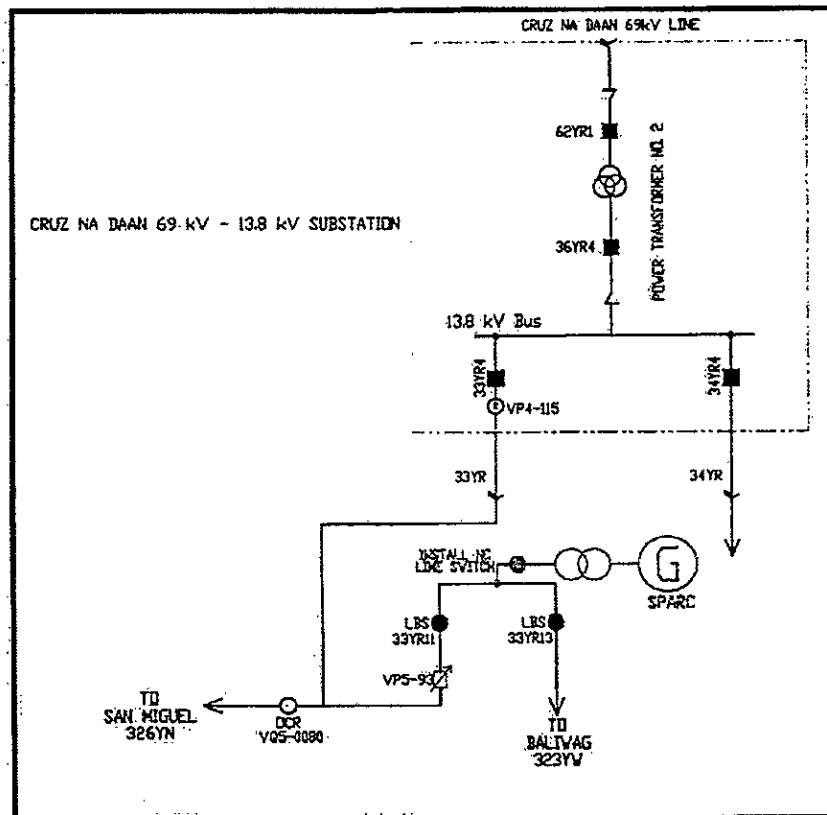
4. SPARC intends to sell all power generated by its 3.82MW SPARC Bulacan Project under the Feed-in Tariff (FIT) System at a rate of PhP8.69/kWh¹;

5. All generated electricity will be delivered and sold through the distribution system of the Manila Electric Company (MERALCO) via an interconnection to the latter's 13.8 kV distribution feeder Cruz na Daan (CND) 33YR;

6. SPARC's solar PV plants are connected to four (4) units of ABB PVS800 inverters each rated 1000kW. The 400 V inverter output shall be stepped-up to 13.8 kV through 2 (two) 2.4 MVA transformers. The 3.82 MW SPARC Bulacan Project will be interconnected to the 13.8 kV feeder Cruz na Daan 33 YR, with re-conductoring of approximately 4.8 km 3-phase line from #2 AWG to 336.4 MCM ACSR per phase along Barangay Pasong Inchik, San Rafael, Bulacan;

7. The figure below shows the single line diagram of CND Substation and set-up of CND 33YR with SPARC's 3.82 MW SPARC Bulacan Project:

¹ ERC Resolution No. 06, Series of 2015



8. SPARC's Bulacan Project is small and can connect to low voltage lines. Further, considering its location, that is, approaching the end portion of MERALCO's 13.8 kV circuit CND 33YR or about 5.0 ckt-km from MERALCO's CND Substation, SPARC decided that embedding to MERALCO's distribution system through herein proposed interconnection facilities is more economical than connecting to the high voltage lines of the Luzon Grid;

9. The foregoing proposed dedicated point-to-point limited facilities are required only for the purpose of connecting the 3.82 MW SPARC Bulacan Project to MERALCO's distribution system, and shall be used solely by SPARC;

10. To seek the Honorable Commission's authority to develop and own or operate herein proposed dedicated point-to-point limited facilities, SPARC respectfully submits this *Application* in accordance with *Section 2.9.2 (Connection Assets and Facilities) of the 2010 Distribution Services and Open Access Rules*, as amended (DSOAR), which provides that:

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

11. MERALCO performed a Distribution Impact Study (DIS) to determine the impact of connecting the 3.82 MW SPARC Bulacan Project to its distribution system, with respect to power flow and short circuit duty criteria. A copy of the DIS is herewith attached as **Annex "G"** and forms an integral part hereof;

12. When SPARC's solar energy generation plant is on-line, the DIS showed that:

- a. There would be no violations of the thermal loading criteria of any line segment of circuit CND 33 YR;
- b. Voltages along the line are expected to be within tolerable limits;
- c. The loads of CND Bk#2 and CND 33YR are expected to be within allowable loading limits at 50% and 52%, respectively;
- d. The maximum increase in fault current of around 0.192 kA at CND 13.8kV Bus No.2 would not have significant effect on the fault duty rating of the circuit breakers;
- e. The effect of SPARC's solar energy generation plant to short circuit levels is expected to be negligible at all line segments of CND 33YR.

13. With the foregoing results, it was determined that it is feasible to interconnect SPARC's solar plant to the distribution system of MERALCO, provided the recommendations in the DIS are followed;

14. For the procurement of materials, equipment and labor to construct the proposed dedicated point-to-point limited facilities, SPARC solicited an initial proposal from Power Dimension, Inc., which offered a total contract amount of PhP1,066,997.53, subject to negotiation and final agreement of the parties. Attached herewith and made an integral part hereof as **Annex "H"** is a copy of the Commercial Proposal of Power Dimension, Inc. showing the breakdown of costs, recommended installation dimensions, and component list, among others;

15. Meanwhile, MERALCO shall operate and maintain the proposed dedicated point-to-point limited facilities in accordance with the *Philippine Distribution Code* and/or other applicable laws or regulations and interconnection agreements. A Connection Agreement is still being negotiated between MERALCO and SPARC;

16. In support of this *Application*, the following documents are also submitted to the Honorable Commission:

ANNEX	DOCUMENT
"I"	Vicinity Map of the 3.82 MW SPARC Bulacan Project
"J"	Single line diagram of the 3.82 MW SPARC Bulacan Project
"K"	Gantt Chart/Work Schedule Timeline for the proposed dedicated point-to-point limited facilities
"L"	Sensitivity Analysis showing Expected Internal Rate of Return
"M"	Secretary's Certificate attesting to the resolution of SPARC's Board of Directors authorizing the development and ownership or operation of the proposed dedicated point-to-point limited facilities; the filing of an application with the Honorable Commission for authority to undertake the same; designating a representative to said application; and engaging the services of Diccion Law Firm therefor

17. SPARC reserves the right to submit additional documents when necessary or if so ordered by the Honorable Commission;

**PRAYER FOR THE ISSUANCE OF
 PROVISIONAL AUTHORITY**

18. All the foregoing allegations are herein re-pleaded by reference in support of this *Prayer* for the issuance of a provisional authority;

19. SPARC will sell 100% of the power generated by its 3.82MW SPARC Bulacan Project under the FIT System. Pursuant to the Honorable Commission's *Resolution No.6, Series of 2015*, a solar FIT rate equivalent to PhP8.69/kWh applicable for the second batch of solar power projects, shall be implemented for new capacities that will be covered by the revised 500 MW installation target, which is valid upon full subscription thereof or until **15 March 2016**, whichever comes first²;

20. At present, SPARC continues to secure permits and undertakes all required activities to be among the FIT-eligible second batch of solar power projects that can avail of the PhP8.69/kWh FIT;

21. Among the requirements to be nominated eligible for the second round of solar FIT is the DOE's confirmation of SPARC's Electromechanical Completion. Pursuant to the DOE's *Department Circular No. 2013-05-0009* which governs the selection of RE projects under FIT System and the award of Certificate for FIT Eligibility, the DOE shall issue the confirmation or denial of

² DOE Certification dated 30 April 2014.

Electromechanical Completion, including existence of interconnection facility³. It is provided thereunder that:

“Section 6. Issuance of Certificate of Endorsement for FIT Eligibility.

a. *The RE Developer shall inform the DOE that it has attained the Electromechanical Completion of the project to which the latter shall, within fifteen (15) working days from receipt thereof, conduct a site validation and inspection of the project **including the interconnection facility.***

b. *Electromechanical Completion is deemed attained if the construction phase is at least eighty percent (80%) completed as may be determined from the RE Developer’s Engineering, Procurement and Construction (EPC) contract or construction and development timeline under the approved Work Plan.*

c. *Not later than fifteen (15) working days from the last day of site validation, the DOE shall issue the confirmation or denial of the Electromechanical Completion, **including the existence of interconnection facility.***

d. *In the event the DOE confirms Electromechanical Completion of the project, it shall, within a period of five (5) days from the issuance thereof, nominate the eligibility of the project under the FIT system to the Energy Regulatory Commission (ERC) for the processing of Certificate of Compliance (COC) under FIT System, provided that the interconnection facility is fully in place. The DOE nomination to the ERC shall not be constructed as giving right to the RE Developer to be included in the FIT eligible projects.” [Emphasis supplied.]*

22. Strictly applying the foregoing dates, SPARC should notify the DOE that it has attained Electromechanical Completion, including the existence of interconnection facility, **not later than 25 January 2016**, approximately, excluding the period of processing with the Honorable Commission of a COC under the FIT System. Meanwhile, per its Work Schedule, SPARC shall complete 80% of the construction phase by, more or less, **22 January 2016**, when its Electromechanical Completion shall be deemed attained;

23. As such, prior to said dates, SPARC must have already secured authority from the Honorable Commission, albeit provisionally, to develop and own or operate the proposed dedicated point to point limited facilities, and actually construct the same, so it can timely declare Electromechanical Completion;

³ Section 6. Issuance of Certificate of Endorsement for FIT Eligibility.

24. The 3.82 MW SPARC Bulacan Project must, therefore, be immediately connected to the distribution system of MERALCO for it to be included within the 500 MW installation target approved for solar energy technology, thereby qualifying it for the second wave of FIT;

25. **Pending hearing on the merits, and considering the urgency of beating the foregoing 15 March 2016 deadline, a provisional authority to develop and own or operate the proposed dedicated point-to-point limited facilities to connect the 3.82 MW SPARC Bulacan Project to MERALCO's distribution system through the latter's 13.8 kV distribution feeder Cruz na Daan (CND) 33YR is herein prayed for;**

26. The subject matter of this *Application* is analogous to the approval by the Honorable Commission of electric capital projects. Thus, insofar as the grant of a provisional authority thereunder, *ERC Resolution No.13, Series of 2006*, as amended⁴, 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.]

27. For a renewable energy project to qualify for FIT, it has to be fully connected to the grid or a distribution system and must be able to readily export power thereto. **Since the installation target for solar energy resource is only at 500 MW, and with the 15 March 2016 deadline, qualifying for FIT is on a *first come, first served basis* among solar energy projects that are fully commissioned and 100% connected to the grid or the distribution system.** Therefore, a delay in the approval of the proposed interconnection facilities poses additional risks to SPARC in terms of getting its 3.82 MW SPARC Bulacan

⁴ Resolution No. 18, series of 2008 and Resolution No. 26, Series of 2009

Project into the 500MW installation target, that would entitle it to the PhP8.69/kWh FIT rate;

28. Should SPARC fail to qualify for the second round of solar FIT and becomes eligible only for the next FIT to be approved by the Honorable Commission, it is probable that for the succeeding batch of solar projects, the FIT rate will already be lower. There is also no assurance when or how soon the next solar FIT for the third batch of projects will take effect or be implemented. These uncertainties are perils that SPARC is not willing to take for its 3.82 MW power plant in Bulacan, if it were to ascertain the financial viability of the project;

29. The next available option, then, is for SPARC to deliver and sell power to the Wholesale Electricity Spot Market (WESM). However, this does not put SPARC in a better position considering the unpredictability of market prices, which over the years, proved to be unviable as well. Further, due to its size at 3.82 MW, and the intermittence of its energy source, SPARC will merely be a price-taker in the WESM. As a price-taker, it will have to settle on whatever price the market dictates, even if such price is not enough to recover costs in ensuring the sustainable and viable operation of its solar energy generation plant;

30. As clearly demanded by the foregoing circumstances, a provisional authority for the construction and ownership or operation of the proposed interconnection facilities must be secured to ensure that SPARC's 3.82 MW Bulacan Project qualifies for the second round of solar FIT, thereby, safeguarding its viability and sustainability.

PRAYER

WHEREFORE, in view of all the foregoing, it is most respectfully prayed of this Honorable Commission that prior to and/or pending hearing on the merits, a **PROVISIONAL AUTHORITY** be issued to immediately allow the development and ownership or operation of the proposed dedicated point-to-point limited facilities to connect the 3.82 MW SPARC Bulacan Project to MERALCO's Distribution System at its 13.8 kV distribution feeder Cruz na Daan 33YR; and that after due notice and hearing, a **FINAL AUTHORITY** be issued to permanently authorize the same.

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

The Commission having found the said *Application* sufficient in form and substance with the required fees having been paid, issued an *Order* and a *Notice of Public Hearing*, both dated 05 February 2016, setting the case for initial hearing on 24 February 2016.

In the same *Order*, SPARC was directed to cause the publication of the *Notice of Public Hearing*, at its own expense, once (1x) in a newspaper of general circulation in the Philippines, with the date of publication to be made not later than ten (10) days before the date of the scheduled initial hearing.

The Office of the Solicitor General (OSG), the Commission on Audit (COA), and the Committees on Energy of both Houses of Congress were furnished with copies of the *Order* and the *Notice of Public Hearing*, and were requested to have their respective duly authorized representatives present at the initial hearing.

Likewise, the Offices of the Provincial Governor, the City and Municipal Mayors, and the Local Government Unit (LGU) legislative bodies within the affected area were furnished with copies of the *Order* and *Notice of Public Hearing* for the appropriate posting thereof on their respective bulletin boards.

Applicant SPARC filed on 18 February 2016 its *Pre-trial Brief*, with an attached Judicial Affidavit of JJ Samuel A. Soriano.

On 23 February 2016, SPARC filed a *Notice of Compliance (to the Order dated 05 February 2016)* with even date.

During the 24 February 2016 hearing, SPARC appeared through its counsel and presented proofs of its compliance with the Commission's jurisdictional requirements. The documents were admitted as Applicant's evidence and marked as Exhibits "P" to "V". The expository presentation was delivered by Mr. JJ Samuel A. Soriano, SPARC's President, and the Commission propounded clarificatory questions which Mr. Soriano addressed. SPARC was directed to submit additional documents. Since Applicant SPARC proposed to connect to Manila Electric Company's (MERALCO) Cruz na Daan Substation located in San Rafael, Bulacan, MERALCO was directed to manifest its interest to participate in the proceedings. The next hearing for the purpose of pre-trial conference and presentation of evidence was set on 03 March 2016.

MERALCO filed its *Petition for Intervention (With Entry of Appearance)* and *Pre-trial Brief*, both dated 01 March 2016, on even date.

On 03 March 2016, SPARC filed a *Notice of Compliance (to the Order dated 24 February 2016)* with even date. During the hearing, Mr. Soriano was presented as Applicant's witness and was made to identify his Judicial Affidavit and the signature therein which were duly marked. MERALCO appeared and was admitted Intervenor in the instant case. The Commission, as well as Intervenor MERALCO, propounded clarificatory questions which the witness addressed. The Applicant was directed to submit additional documents for the evaluation of its Application.

On 07 March 2016, SPARC filed its *Formal Offer of Evidence (FOE)* with even date, as well as its *Notice of Compliance* dated 04 March 2016, while MERALCO filed on 11 March 2016 a *Manifestation* with even date stating no comment on Applicant's FOE.

On 13 June 2016, the Commission issued an *Order* directing Applicant SPARC to submit additional documents to facilitate the evaluation of the instant Application. SPARC filed a *Notice of Compliance with Manifestation (to the Order dated 13 June 2016)* on 11 July 2016.

On 15 July 2016, an Order was issued by the Commission directing Intervenor MERALCO to submit a technical study related to the instant Application to facilitate further evaluation of the Application. MERALCO filed its *Compliance* on 22 August 2016 with even date.

On 09 February 2017, the Commission issued another *Order* directing MERALCO to submit further calculation and explanation of the technical study related to the instant case. MERALCO filed its *Compliance* on 22 March 2017.

Finding the exhibits contained in Applicant's *Formal Offer of Evidence* and the additional documents submitted in compliance with the Commission's directives relevant and material in the evaluation of this case, the Commission issued an *Order* dated 15 June 2017, admitting the exhibits and declaring the case submitted for resolution.

ISSUE

The issue for the Commission's resolution is whether SPARC should be given authority to develop, own and operate dedicated point-to-point limited facilities, to connect the 3.82 MW SPARC Project to MERALCO's Distribution System.

COMMISSION'S RULING

The Commission grants Applicant SPARC the authority to develop and own a dedicated point-to-point limited facility to connect its 3.82 MW SPARC Solar Power Plant (SPP) to MERALCO's Distribution System, subject to certain conditions.

DISCUSSION

SPARC is a corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines. It is engaged in the business of generating power derived from solar energy for lighting and power purposes.

It will construct, operate and maintain the 3.82 MW SPARC Solar Power Plant (SPP) Project on properties owned by the Agrarian Reform Beneficiaries in Agrarian Reform Communities located in Barangay Pasong Inchik, San Rafael, Bulacan.

SPARC entered into a Memorandum of Understanding with the agencies of the National Convergence Initiative (NCI), namely: Department of Agriculture, Department of Agrarian Reform and the Department of Environment and Natural Resources (DENR) on 2 February 2011 for the implementation of solar power program with social development component.

SPARC is holder of Solar Energy Service Contract (Registration No. SECS 2012-03-014) by virtue of which it was granted the right to develop, construct, own and operate the 3.82 MW solar farm facility. Likewise, SPARC filed an application with the DOE for a Certificate of Endorsement for FIT Eligibility (COE-FIT) but has yet to obtain the same.

SPARC obtained a Certificate of Non-Coverage (CNC), under CNC No. CNC-CO-1305-0003, from the DENR on 16 May 2013.

The Application is filed pursuant to Section 9(f) of Republic Act No. 9136 or the “Electric Power Industry Reform Act of 2001” and Section 5, Rule 5 of its Implementing Rules and Regulations (IRR).

Project Description

In order to dispatch the capacity to be generated by the SPP, the Applicant deems it necessary, feasible and cost-effective to connect the said plant to the distribution system of MERALCO through a dedicated point-to-point limited facility.

To dispatch its power to the grid through the 13.8 kV distribution line of MERALCO, SPARC developed a dedicated point-to-point limited facility which consists of the following:

- Substation;
- 13.8 kV line;
- Switchgear;
- Metering Facilities;
- Protection and Grounding System; and
- Telecommunication Facilities.

Need for the Project

As stated in the Application and as manifested during the hearing, the dedicated point-to-point limited facility will be utilized by SPARC’s Solar Power Plant to connect and deliver its generated power to MERALCO’s Distribution System.

Project Rationale

The dedicated point-to-point limited facility is necessary for the power plant to deliver its generated power to the grid through the distribution system of MERALCO.

Result of the Distribution Impact Study (DIS)

As agreed by both parties, MERALCO performed the Distribution Impact Study (DIS) to determine the impact of connecting the generating plant to the distribution system with respect to all applicable planning criteria.

The DIS involves power flow analysis and short circuit analysis to determine whether the interconnection of SPARC would have significant effect on the steady state and fault conditions of MERALCO's 13.8 kV distribution system.

Based on the results of the study, it is feasible to interconnect the Solar Power Plant of SPARC to the distribution system of MERALCO provided that the recommendations of the former will be followed. Prerequisite to interconnection, the requirements in the DIS shall be met and will be the subject of the Distribution Asset Study (DAS).

Option/Alternative Considered

In deciding that the proposed connection is the most feasible means of dispatching its generated power, SPARC likewise considered the option of being directly connected to the National Grid Corporation of the Philippines (NGCP). However, considering that the SPARC SPP holds barely 3.82 MW in capacity, it is more economical to be embedded to its host distribution utility or low voltage lines than to connect to high voltage lines of NGCP since stepping up the voltage would require additional equipment which is more expensive.

Technical Configuration

In order for SPARC to dispatch its generated power to the grid, it should connect its solar power plant to the distribution system of MERALCO by tapping at the 13.8 kV distribution feeder Cruz na Daan (CND) 33 YR. By default, it is the obligation of MERALCO, who was granted the exclusive franchise, to build, operate and maintain its distribution system.

However, Section 2.9.2 of the Distribution System Open Access Rules (DSOAR) provided the generation company an option to develop and own or operate its dedicated point-to-point limited facilities, to wit:

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

Hence, the application.

The requirements relating to the connection of a generator to a distribution system is provided in Section 5.4.1 of the Philippine Distribution Code (PDC), to wit:

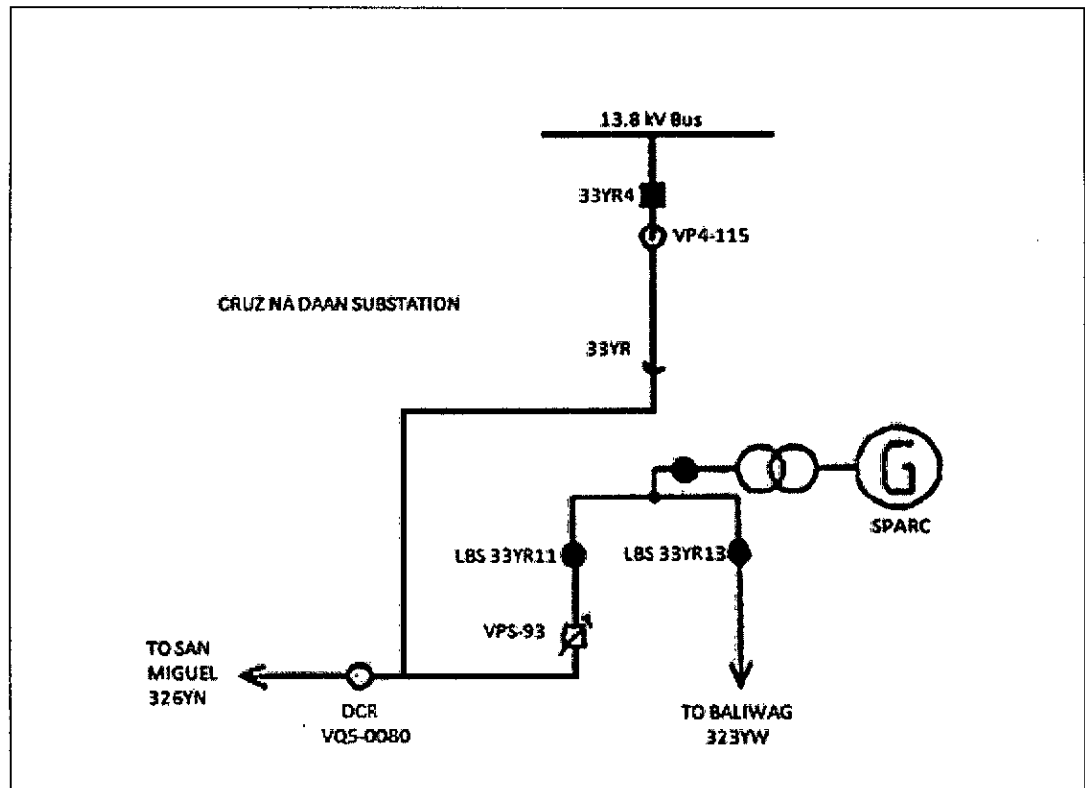
5.4.1.1. The Embedded Generator's Equipment shall be connected to the Distribution System at the voltage level agreed by the Distributor and the Generator based on the Distribution Impact Studies.

5.4.1.2. The Connection Point shall be controlled by a Circuit Breaker that is capable of interrupting the maximum short circuit current at the point of connection.

5.4.1.3. Disconnection switches shall also be provided and arranged to isolate the Circuit Breaker for maintenance purposes.

The single line diagram below illustrates SPARC's compliance with the provisions of the PDC and the requirements noted in the DIS and DAS.

Single Line Diagram



SPARC constructed its 100 meter line using 1-336.4 MCM ACSR. It also reconductored MERALCO's existing 4.8 km 3-phase line from #2 AWG to 336.4 MCM ACSR per phase as required by the distribution utility in order to accommodate the connection of the generating plant.

MERALCO submitted a technical study to justify the necessity of requiring the reconductoring from #2 AWG to a 336.4 MCM ACSR given that the solar power plant's output is only 3.85 MW. MERALCO's simulations are as follows:

1. The maximum long duration voltage variation at the connection point of SPARC SPP, without reconductoring, will reach as high as 14.9%. Sections 3.2.3.3 and 3.2.3.4 require the DU to ensure that no undervoltage or overvoltage (+/- 10% of nominal voltage) is present at the connection point of any user during normal operating conditions.

2. The maximum voltage fluctuation during operation of SPARC SPP, without reconductoring, will reach as high as 10.1%. Under the Investor-Owned Electric Distribution Utility Planning Manual (IOUPM), a 3% voltage fluctuation can be translated as leading to excessive flicker severity.
3. The higher ampacity of the 336.4 MCM ACSR conductor will likewise provide sufficient capacity for load transfers between adjacent circuits during line troubles, as well as to support service reliability improvement in the area through provision of tying facilities.

MERALCO, to justify the abovementioned requirement to SPARC, noted Section 2.10.2 of the DSOAR which provides:

In the event that the DU is required to invest in new facilities or distribution upgrades to meet its obligations under the new or modified Connection Agreement, and the Connection Customer is to shoulder these costs, the Connection Customer shall provide the DU with a letter of credit in the form specified in the DSOAR, if requested to do so by the DU, before the DU commences the necessary work.

It is worthy of note that the reconducted line is not considered part of the dedicated point-to-point limited facility. Further, the documents submitted by MERALCO to the Commission did not completely prove that SPARC caused the power quality problem. Section 2.7.4 of DSOAR provides:

x x x. If the DU requests facilities in excess of that which is necessary to meet the End-user's power requirement and such request is necessary to accommodate anticipated growth of additional customers, then all costs attributable to such excess shall be subject to the RDWR for DUs under PBR or treated as Electric Plant Held for Future Use for ECs and other DUs.

However, SPARC willingly shouldered the cost of the reconductoring of the line based on the submitted contract with a subject "*Interconnection of 3.82 MW Solar Farm Power Plant with MERALCO's 13.8 kV Grid*" marked as Exhibit "BB" in the Applicant's

Formal Offer of Evidence. Hence, the said cost shall be treated as Contribution in Aid of Construction (CIAC).

SPARC installed a step-up transformer rated at 0.4 kV/13.8 kV, with delta connection on the MERALCO side of the transformer.

The appropriate protection equipment was required by MERALCO to be installed to ensure that its generating facilities shall be automatically disconnected from MERALCO's Distribution System when feeder CND 33YR experiences reverse power flow.

A 13.8 kV line switch was installed at the connection point as a means of electrically isolating SPARC from MERALCO's system particularly during fault condition.

A direct tripping of the solar power plant (off-line) when the service from CND 33 YR is lost were required to be employed and proper settings for the inverters of SPARC were done to avoid damage during automatic reclosing of the 33 YR breaker.

Teleprotection equipment and communication links for the direct transfer trip of the main breakers of SPARC were installed to disengage its inverters when CND 33 YR trips out to avoid unintentional islanding.

The installation of 13.8 kV metering facilities were installed near the connection point as observed during the conduct of ocular inspection of the subject facility.

Lastly, the single line diagram submitted by the Applicant shows that the proposed project, except for the reconductoring, is to be used solely by the Applicant and no other user is connected in compliance with Rule 5 Section 5a(i) of the IRR of the EPIRA, to wit:

xxx. 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.

Technical and Financial Capability

SPARC manifested in its Application that MERALCO shall operate and maintain the proposed dedicated point-to-point limited facility in accordance with the PDC and/or other applicable laws or regulations and interconnection agreements. This is notwithstanding the fact that SPARC was the one who constructed the dedicated point-to-point limited facility.

SPARC claims that it has the financial capability to undertake the development and construction of the dedicated point-to-point limited line. Its financial capability will be assessed in its application for Certificate of Compliance (COC), to ensure that the Applicant is compliant with the financial qualifications set forth in the Financial Guidelines for Generation Companies.

Project Cost

The total estimated cost of the proposed project is PhP12,787,497.30 covering all the facilities to be constructed by SPARC, including the cost of assets that are not part of the dedicated point-to-point limited facility.

It is worthy to note that the estimated cost is only for the purpose of computing the applicable permit fee (based on the total project cost evaluated, disregarding the functions and classification of each facility) and not for rate making purposes, considering that this is not the actual cost or the Optimized Depreciated Replacement Cost (ODRC).

It should also be emphasized that the aforementioned amounts are not necessarily the fair market value that should be used when the subject assets are actually transferred to MERALCO.

Although the Applicant filed for FIT eligibility with the DOE, the application is yet to be approved. Thus, in the event that the same becomes FIT eligible, the cost of the said facilities that are included in the approved FIT Rate shall be considered once the asset is transferred to MERALCO:

- If the fair market value (subject to optimization) is higher than the facilities' cost incorporated in the determination of the FIT rate, MERALCO shall pay the difference between the said cost and the fair market value.
- If the fair market value is lower than the facilities' cost incorporated in the determination of the FIT, the asset shall be treated as CIAC. MERALCO shall maintain a separate account of these amounts and the assets should not appear in rate base or in its asset appraisal.

Prescribed Fees

Permit fee for the authority to construct the subject project is prescribed under Commonwealth Act No. 146, as amended, for the reimbursement of the expenses of the Commission in evaluating the case based on its total project cost.

In the instant Application, the project includes facilities that are not part of the dedicated point-to-point limited facility. Since the Application was filed solely by SPARC (including the reconducted line), the permit fee should be paid solely by the Applicant based on the total cost of the project, computed as follows:

$$\begin{aligned} \text{Permit Fee} &= \frac{\text{Total Project Cost} \times 0.75}{100} \\ &= \frac{12,787,497.30 \times 0.75}{100} \\ \text{Permit Fee} &= \text{PhP}95,906.23 \end{aligned}$$

(intentionally left blank)

WHEREFORE, the foregoing premises considered, SPARC-Solar Powered Agri-Rural Communities Corporation's (SPARC) is hereby **AUTHORIZED** to develop and own a dedicated point-to-point limited facility to connect its 3.82 MW SPARC Solar Power Plant (SPP) to Manila Electric Company's (MERALCO) Distribution System, subject to the following conditions:

- MERALCO shall operate and maintain the dedicated point-to-point limited facility subject to applicable charges;
- The subject facility shall be developed and constructed in accordance with the Distribution Impact Study (DIS) and Distribution Asset Study (DAS) requirements so as not to result in the degradation of MERALCO's distribution system;
- The dedicated point-to-point limited facility shall be used solely by the generating facility; and
- Any portion of the dedicated point-to-point limited facility required for competitive purposes or to connect any other user, ownership of the same shall be transferred to MERALCO at a fair market price but subject to optimization. In determining the fair market price, the cost of the facility as incorporated in the determination of the Feed-in-Tariff (FIT) shall be considered, in the event that the generation company be FIT eligible.

However, the existing 4 km. reconducted line of MERALCO does not form part of the dedicated point-to-point limited facility of SPARC.

(intentionally left blank)

Relative thereto, SPARC shall be required to pay the permit fee amounting to **Ninety-Five Thousand Nine Hundred Six and 23/100 Pesos (PhP95,906.23)**, computed based on Section 40 (g) of Commonwealth Act No. 146 and the Revised Schedule of ERC Fees and Charges.

SO ORDERED.

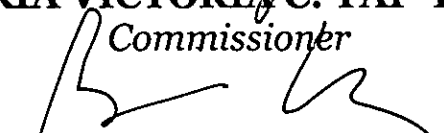
Pasig City, 06 July 2017.

JOSE VICENTE B. SALAZAR*
Chairman and CEO


ALFREDO J. NON
Commissioner


GLORIA VICTORIA C. YAP-TARUC
Commissioner


JOSEFINA PATRICIA A. MAGPALE-ASIRIT
Commissioner


GERONIMO D. STA. ANA
Commissioner

Y

ROS: ramg/llgjr/fgbd

LS: arg/apv

* The Chairman was placed on preventive suspension as per Order of the Office of the President (OP-DC Case No. 17-D-094) dated 2 May 2017 and received on 04 May 2017.

Copy Furnished:

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10. **Office of the Local Legislative Body**
Taguig City
11. **Office of the Mayor**
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12. **Office of the Local Legislative Body**
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13. **Office of the Provincial Governor**
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