

# Republic of the Philippines DEPARTMENT OF ENERGY

# DEPARTMENT CIRCULAR NO. DC 2019-01-0001

# PRESCRIBING THE OMNIBUS GUIDELINES ON ENHANCING OFF-GRID POWER DEVELOPMENT AND OPERATION

WHEREAS, Section 2 of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA), declares the policy of the State to: (i) ensure and accelerate the total electrification of the country; (ii) ensure the quality, reliability, security, and affordability of the supply of electric power; (iii) enhance the inflow of private capital and broaden the ownership base of the power generation, transmission and distribution sectors; and (iv) encourage the efficient use of energy and other modalities of demand-side management;

WHEREAS, Section 23 of the EPIRA recognizes the importance of sustaining the economic viability of distribution utilities (DUs) in the performance of the social obligation in their franchise to supply electricity in the least-cost manner to their captive market and to provide universal service to all areas within their franchise territory, including unviable areas;

WHEREAS, Section 70 of the EPIRA mandates the National Power Corporation through the Small Power Utilities Group (NPC-SPUG) to perform the missionary electrification function with the responsibility of providing power generation and its associated power delivery systems in areas not connected to the transmission system and with funding from the revenues from sales in missionary areas and from the Universal Charge for Missionary Electrification (UC-ME) fund;

WHEREAS, Rule 13 of the Implementing Rules and Regulations of EPIRA (EPIRA-IRR) provides that NPC-SPUG may draw on other funding sources such as appropriations from Congress, the utilization of private capital, multilateral aids and grants, Official Development Assistance Funds, and others;

WHEREAS, Rule 13 of the EPIRA-IRR provides that the NPC-SPUG shall source all the cost differentials between the sales revenues and operating expense and capital expense for expansion, rehabilitation and facilities for new areas of development based on the approved Missionary Electrification Development Plan (MEDP), from its share from the UC-ME and/or other sources as it may obtain;

WHEREAS, Rules 13 and 14 of the EPIRA-IRR articulate the guiding principles of missionary electrification and provision of electric services in remote and unviable areas through the following: (i) formulation of the MEDP; (ii) establishment of specific guidelines on how to encourage the inflow of private capital and the manner whereby other parties, including DUs and other qualified third parties, can participate in missionary electrification; (iii) additional responsibilities of the NPC-SPUG such as the provision of transmission lines in off-grid areas; (iv) privatization of the generation assets and other associated facilities of the NPC-SPUG, and (v) cessation of UC-ME subsidy to SPUG-serviced areas upon their interconnection to the Grid;

WHEREAS, the Department of Energy (DOE) issued Department Circular No. DC2004-01-001 entitled "Prescribing the Rules and Procedures for Private Sector Participation in Existing NPC-SPUG Areas Pursuant to Rule 13 of the Implementing Rules and Regulations of EPIRA (EPIRA-IRR)," which prescribes the procedures on the privatization of electric power generation in areas that are served by the NPC-SPUG through

a competitive process, disposal of generation and sub-transmission assets of the NPC-SPUG, and graduation from missionary electrification;

WHEREAS, Republic Act. No. 9513, otherwise known as the Renewable Energy (RE) Act of 2008, has promulgated the implementation of minimum percentage of RE generation for off-grid areas and the provision of RE Developers' Cash Incentives (REDCI) to be charged against the UC-ME subsidy as additional fiscal incentives to RE project developers utilizing eligible renewable energy resources;

WHEREAS, Republic Act No. 10531, otherwise known as the National Electrification Administration (NEA) Reform Act of 2013, bestows upon electric cooperatives (ECs) the power to construct, acquire, own, operate and maintain generating facilities and allows an EC to bid on existing generating facilities of the NPC-SPUG within its franchise area;

WHEREAS, the DOE issued Department Circular No. DC2015-06-008 and Department Circular No. DC2018-02-0003 which provide for specific guidelines for the conduct of a Competitive Selection Process by DUs in order to procure their power supply agreements for their captive market in the least cost manner;

**WHEREAS**, the DOE issued Department Circular No. DC2017-05-0008 and Department Circular No. DC2017-12-0016 which provide for the conduct of performance assessment and audit of power generation, transmission and distribution system facilities to ensure the security, reliability and quality of electric power services in the country, including off-grid areas;

**WHEREAS**, the DOE issued Department Circular No. DC2018-08-0024 entitled "Promulgating the Rules and Guidelines Governing the Establishment of the Renewable Portfolio Standards for Off-Grid Areas" which mandates generation companies to source a portion of the electricity from eligible RE resources;

**WHEREAS,** there is a need to amend existing issuances of the DOE and prescribe an omnibus set of guidelines that incorporate and interrelate all existing and new policies and strategies for achieving quality, reliability, affordability, security, stability, efficiency and accountability of electric power services in off-grid areas;

NOW THEREFORE, FOR AND IN CONSIDERATION OF THE FOREGOING PREMISES, the DOE hereby issues the following omnibus guidelines on off-grid power development and operation:

# **RULE 1. COVERAGE**

- 1.1. These guidelines shall apply to the following entities that are engaged in the provision of electricity services in off-grid areas:
  - 1.1.1. National Power Corporation (NPC);
  - 1.1.2. Distribution Utilities (DUs);
  - 1.1.3. New Power Providers (NPPs) and other generators;
  - 1.1.4. Qualified Third Parties (QTPs);

- 1.1.5. Renewable Energy Developers; and
- 1.1.6. Other service providers, government or private entities.
- 1.2. Off-grid areas and systems covered by these guidelines shall include:
  - 1.2.1. Small Grids and isolated low-voltage distribution systems;
  - 1.2.2. Unviable areas:
  - 1.2.3. New areas, whether or not covered by a franchise, that are planned to be served by the NPC or other service providers; and
  - 1.2.4. New areas as may be identified in the total electrification program of the Government and included in the MEDP.

### **RULE 2. DEFINITION OF TERMS**

- 2.1. "Commercially Viable" refers to an area or electricity service where the resultant True Cost of Generation Rate is equal or less than the Subsidized Approved Generation Rate:
- 2.2. "Department of Energy" or "DOE" refers to the Government agency created by virtue of Republic Act No. 7638 and mandated by the EPIRA to supervise the restructuring of the electric power industry, among others;
- 2.3. "Emergency Power" refers to the power required by a DU in the event that its actual power supply falls below its load demand due to force majeure or fortuitous events or other analogous circumstances that are beyond the control of the DU and such shortfall cannot be addressed through any reasonable means within a month, subject to the final determination by the DOE;
- 2.4. "Energy Regulatory Commission" or "ERC" refers to the quasi-judicial regulatory agency created pursuant to the EPIRA;
- 2.5. **"Full Cost Recovery Rate"** or **"FCRR"** refers to the rate, expressed in Peso per kilowatt-hour, that recovers the full efficient costs of generating, distributing and supplying electricity in unviable areas;
- 2.6. **"Graduation"** refers to the cessation of provision of subsidy from the Universal Charge for Missionary Electrification in an area, by reason that the area or electricity service is deemed commercially viable or when the area is interconnected into the Grid;
- 2.7. **"Grid"** refers to the high voltage backbone system of interconnected transmission lines substations and related facilities, located each in Luzon, Visayas and Mindanao;
- 2.8. "Missionary Area" refers to an off-grid area that is deemed eligible for missionary electrification subsidy by the DOE because the provision of basic electricity services is not commercially viable;

- 2.9. "Missionary Electrification" refers to the provision of basic electricity services in unviable areas with the ultimate aim of bringing the operations in these areas to viability levels, and pursuant to Section 70 of the EPIRA, the provision of power generation and associated power delivery systems in small islands and isolated areas that are not connected to the Grid:
- 2.10. "Missionary Electrification Development Plan" or "MEDP" refers to the development plan of the DOE, updated annually, detailing the policies, strategies, plans and programs for missionary electrification, including the capital investment and operation in off-grid areas;
- 2.11. "National Electrification Administration" or "NEA" refers to the Government agency created under Presidential Decree No. 269, as amended, to supervise the electric cooperatives, among others;
- 2.12. "New Power Provider" or "NPP" refers to a private entity duly selected through a competitive selection to provide power generation services in a missionary area;
- 2.13. "National Power Corporation Small Power Utilities Group" or "NPC-SPUG" refers to the unit of NPC mandated to perform missionary electrification;
- 2.14. "Off-Grid Area" refers to an area or system that is not connected to the Grid;
- 2.15. "Power Sector Assets and Liabilities Management Corporation" or "PSALM" refers to the government-owned and controlled corporation created pursuant to the EPIRA:
- 2.16. "Power Supply Agreement" or "PSA" refers to an agreement between a power producer and a DU for supply of power;
- 2.17. "Private Sector Participation" refers to the involvement of the private sector on power generation facilities and associated delivery systems in order to meet the demand requirements of an off-grid area, thus performing the functions of the NPC-SPUG as defined in Section 70 of the EPIRA.
- 2.18. "Qualified Third Party" or "QTP" refers to the alternative service provider duly qualified and authorized by the ERC to provide integrated power generation and distribution service to unviable area/s;
- 2.19. **"Small Grid"** refers to an interconnected high voltage or medium voltage Off-Grid system;
- 2.20. "Subsidized Approved Generation Rate" or "SAGR" refers to the rate, expressed in peso per kilowatt-hour, which the ERC has determined to be socially acceptable for a DU to pay for generation service. SAGR is further modified by this Circular as the generation rates approved by the ERC per area and customer class basis. The SAGR combined with the UC-ME subsidy should be equal to the TCGR;
- 2.21. "Subsidized Approved Retail Rate" or "SARR" refers to the rate, expressed in peso per kilowatt-hour, which the ERC has determined to be the maximum cost that an end-user should pay for an integrated power generation and distribution service

- by a QTP. SARR is further modified by this Circular as the actual retail rates approved by the ERC per customer class basis in a QTP area. The SARR combined with the UC-ME subsidy should equal to the FCRR.
- 2.22. "System Operator" or "SO" refers to the party responsible for generation dispatch, or the implementation of generation dispatch schedule based on the nomination of the DU from its PSAs with the Generators, the provision of ancillary services and operation to ensure safety, power quality, stability, reliability and security of the Small Grid:
- 2.23. "True Cost of Generation Rate" or "TCGR" refers to the full efficient cost of generating power in an area;
- 2.24. "Universal Charge for Missionary Electrification" or "UC-ME" refers to the portion of the Universal Charge which is designated for Missionary Electrification; and
- 2.25. "Unviable Area" refers to a geographical area within the franchise area of a DU where immediate extension of a distribution line is not feasible;

Other words and phrases have the same meanings as in the EPIRA and its EPIRA-IRR.

#### RULE 3. MISSIONARY ELECTRIFICATION DEVELOPMENT PLAN

- 3.1. Policy Objectives of Missionary Electrification Development Plan (MEDP). In line with the declared policy of the State and the mandate of the DOE in the EPIRA to supervise the restructuring of the electricity industry, the following are the specific policy objectives in the formulation of the MEDP:
  - 3.1.1. Ensure the quality, reliability, security and affordability of electricity service in off-grid areas;
  - 3.1.2. Contribute to the integrated and inclusive development of off-grid areas within the limits of their carrying capacity such as productive use and conservation of agrarian, marine and other natural resources and sustainable tourism through the provision of an appropriate electric power system;
  - 3.1.3. Encourage the entry of advanced and efficient power technologies towards the provision of flexible and adaptive power systems and low-cost electricity services in off-grid areas;
  - 3.1.4. Rationalize its operations and plan for the eventual phase-out of the subsidies in missionary areas;
  - 3.1.5. Assess the economic feasibility and timeline for the eventual interconnection of off-grid areas into the Grid; and
  - 3.1.6. Strengthen the capacity of all stakeholders involved in off-grid electrification to proficiently perform their respective roles and responsibilities, through the conduct of trainings, workshops and other forms of capacity building and institutional strengthening activities.

- 3.2. **Scope of the MEDP**. The MEDP shall integrate the following plans and programs of the Government and stakeholders in off-grid electrification:
  - 3.2.1. **Updated Policies and Strategies**. The DOE shall determine various strategies to support the policy objectives as envisioned in Rule 3.1 of this Circular.
  - 3.2.2. **NPC Corporate Plans and Programs**. In accordance with Rule 13 of the EPIRA-IRR, the NPC shall submit to the DOE its five-year plans and programs related to its power generation, associated power delivery systems and activities in off-grid areas, including, but not limited to, the following:
    - 3.2.2.1. Annual capacity addition per area;
    - 3.2.2.2. Increase of service level:
    - 3.2.2.3. Efficiency improvement in the operation and maintenance of power system facilities, including fuel management, replacement or refurbishing of existing diesel generating units that are beyond their economic life:
    - 3.2.2.4. Renewable energy development program, including the hybridization of diesel generating facilities;
    - 3.2.2.5. Optimized disposal or divestment of power generation and associated power delivery system assets in off-grid areas upon the entry of the private sector;
    - 3.2.2.6. Installation of backbone power lines and other associated facilities;
    - 3.2.2.7. Interconnection to the Grid;
    - 3.2.2.8. Intra-connection of two or more off-grid systems;
    - 3.2.2.9. Activities in support to the electrification of the unviable areas; and
    - 3.2.2.10. Forecasts of effective SAGRs, SARRs, TCGRs and FCRRs in offgrid areas with methodology and assumptions.
  - 3.2.3. Plans and Programs of DUs Serving Off-Grid Areas. The MEDP shall integrate the plans and forecasts of DUs serving off-grid areas as specified in their respective Distribution Development Plans (DDPs). These include, but not limited to, the following:
    - 3.2.3.1. Historical and projected supply and demand per off-grid area;
    - 3.2.3.2. Power Supply Procurement Plan, on a per area basis, including the program for transition from purely diesel-based power generation systems to an optimal supply mix;

- 3.2.3.3. Capital expenditure projects, such as expansion, rehabilitation, control and automation, and modernization, etc.;
- 3.2.3.4. System loss reduction, vegetation management, and other programs to improve the efficiency of electricity services; and
- 3.2.3.5. All projects in support to total electrification of their franchise area, including unviable areas, down to the household level.
- 3.2.4. **Program for Interconnection of the Small Grids.** The National Transmission Corporation (TRANSCO), its buyer, concessionaire or successor-in-interest shall submit its program for interconnection of off-grid areas into the Grid as described in Rule 9 of this Circular. The program shall include the proposed interconnection projects, including the project details and corresponding schedules.
- 3.2.5. Power Development Plan (PDP) for Island Provinces. Based on the plans of DUs, a 10-year power development plan for island provinces shall be included in the MEDP in line with Rule 6 of this Circular.
- 3.2.6. **Unviable Area Electrification**. In support to total electrification, the MEDP shall incorporate all activities involving the electrification of unviable areas by the QTPs and other eligible entities.
- 3.2.7. **Subsidy Requirements**. Allotment of UC-ME or government subsidy for the NPC-SPUG, NPPs, QTPs, DUs and RE developers for the next five (5) years shall be consolidated and presented in the MEDP on an annual basis.
- 3.3. **Preparation of the MEDP**. The DOE shall formulate the annual MEDP based on the submissions of the NPC, concerned DUs, and other stakeholders. The general procedure for the preparation of the MEDP for the succeeding years shall observe the following timelines:
  - 3.3.1. The NPC shall submit to the DOE its corporate plans and programs specific to off-grid areas, including planning parameters and assumptions not later than January of the current year;
  - 3.3.2. All DUs shall submit their individual DDPs not later than <u>March of the current year</u>. Other information required from the DUs under Rule 3.2.3 shall be submitted not later than June of the current year; and
  - 3.3.3. The DOE shall conduct consultations with all concerned stakeholders to update policies and to finalize the MEDP.
- 3.4. **Annual Preparation of the MEDP.** The DOE shall annually prepare the MEDP which shall incorporate the relevant submissions of the stakeholders.
- 3.5. **Publication of the MEDP**. The DOE shall publish the MEDP every three years. The DOE may choose to publish an abridged version of the annual MEDP or update only relevant sections of the previous year's publication.

#### **RULE 4. PRIVATE SECTOR PARTICIPATION**

- 4.1. **Role of the NPC.** Pursuant to Section 70 of the EPIRA, the NPC has the mandate to provide missionary electrification prior to the entry of the private sector.
- 4.2. **Private Sector Participation in Off-grid Areas**. All off-grid areas in the country are declared open for private sector participation with the following objectives:
  - 4.2.1. To provide consumers in off-grid areas with opportunities and options for obtaining reliable, environmentally-benign, efficient and least-cost supply of power;
  - 4.2.2. To reduce public funding by allowing the inflow of private capital to power generation and electrification in off-grid areas; and
  - 4.2.3. To rationalize and ultimately remove the UC-ME subsidy.
- 4.3. **Options for Private Sector Participation**. Private sector participation in off-grid electrification shall include the following activities:
  - 4.3.1. Full take-over of the generation function of the NPC-SPUG in a missionary area by NPP/s;
  - 4.3.2. Provision of new or additional generation capacity of existing NPP/s; and
  - 4.3.3. Provision of power generation and/or distribution system services in existing or new off-grid areas.
- 4.4. **Procurement of PSAs.** DUs currently sourcing their power supply from the NPC-SPUG are enjoined to procure their PSAs from NPPs through a competitive selection process in accordance with Section 23 of the EPIRA and other relevant issuances of the DOE.
- 4.5. **Selection and Authorization of QTPs.** The process of authorizing entities as QTP to perform unviable area electrification shall be in accordance to the guidelines and regulations issued by the DOE and ERC.

# RULE 5. PRIVATIZATION AND OPTIMIZED DISPOSAL OF NPC-SPUG ASSETS ON MISSIONARY ELECTRIFICATION

- 5.1. **Program for Privatization.** The NPC shall prepare an annual program and schedule for the privatization and optimized disposal of its assets that are utilized for missionary electrification.
- 5.2. **Treatment of Assets in Good Working Conditions**. In cases of displaced assets in good working condition, the NPC may sell the assets through competitive bidding or redeploy the assets to serve other off-grid areas.
- 5.3. **Procedure for Sale and Disposal.** In accordance with applicable laws, the NPC shall formulate procedures for the valuation and methods for the sale and disposal of its assets in off-grid areas to be approved by the National Power Board.

# 5.4. Disposal of Generation Assets Displaced by PSP.

- 5.4.1. An NPP shall have the option to bid on the NPC-SPUG assets displaced or to be displaced by the PSP program in the off-grid area.
- 5.4.2. An NPP shall specify its intent to use the assets acquired from the NPC in its bid proposal during the procurement of PSA by the DU in the off-grid area. Those assets must also be clearly stated in the PSA of the NPP with the DU.
- 5.4.3. DU/s shall also have the option to bid on the asset for the same purposes.
- 5.4.4. In case of a tie in the bid proposal between a DU and an NPP, the qualified bid of a DU shall have preference over the other bids.

### 5.5. Sale of Other Assets.

- 5.5.1. In the event of interconnection of the off-grid area to the Grid or for any other justifiable reasons, the NPC shall sell its other associated facilities in accordance with existing laws and regulations.
- 5.5.2. The DU or the System Operator, in behalf of the DU, shall have the option to acquire the power lines and associated assets of the NPC within its franchise area.

## **RULE 6. ENSURING CAPACITY ADEQUACY**

- 6.1. **Declaration and Reporting of the Net Capability**. For purposes of operational and long-term capacity expansion planning, the following shall be conducted:
  - 6.1.1. Consistent with the Philippine Grid Code and Distribution Code, the ERC shall be responsible to assess and determine the actual capability of existing power plants in off-grid areas in accordance with its guidelines and other issuances.
  - 6.1.2. The DOE and NEA shall conduct the assessment and audit of the electric power systems and services in off-grid areas as may be necessary.
- 6.2. Quarterly Supply Adequacy Assessment Report. To facilitate continuous monitoring of supply adequacy in off-grid areas and verify the need for additional capacity, the following reportorial requirements shall be instituted:
  - 6.2.1. In coordination with its System Operator, the DU in a particular off-grid area shall submit a quarterly report to the DOE, ERC, and, in the case of ECs, NEA, containing the following:
    - 6.2.1.1. Historical supply-demand balance in the last three (3) months; and
    - 6.2.1.2. Projected supply-demand balance for the next twelve (12) months for each off-grid area.

- 6.2.2. The NPC shall submit to the DOE the monthly status of the operation of its generation facilities in off-grid areas containing the following:
  - 6.2.2.1. Installed and dependable capacity per power plant;
  - 6.2.2.2. Heat rate:
  - 6.2.2.3. Generation and sales;
  - 6.2.2.4. Operating hours;
  - 6.2.2.5. Fuel and lube oil consumption and prices;
  - 6.2.2.6. Scheduled and unscheduled outages; and
  - 6.2.2.7. Efficiency parameters, including, but not limited to, fuel rate per unit generation and plant use and losses in accordance with relevant issuances of the DOE and ERC.
- 6.2.3. NPPs/QTPs and other generators in a particular off-grid area shall submit to the DOE and ERC the guarterly updates on the following:
  - 6.2.3.1. Declaration of Net Plant Capability based on the ERC guidelines;
  - 6.2.3.2. Corrective maintenance activities conducted during the period; and
  - 6.2.3.3. Schedule of preventive maintenance plans of each power plant in the next twelve (12) months.
- 6.3. Load Forecasting. DUs shall diligently forecast the load in accordance with prescribed guidelines, through the use of accurate data and appropriate forecasting tools.
- 6.4. **Treatment of Power Shortage.** A DU in off-grid area experiencing capacity shortage, or is expecting capacity shortage in next 12 months, shall immediately inform the DOE and ERC through the submission of the following:
  - 6.4.1. Updated Power Supply Procurement Plan;
  - 6.4.2. Joint declaration with its NPP/s, QTP/s or NPC-SPUG of net capability of all existing generation facilities;
  - 6.4.3. Capacities of incoming generation plants in the next 12 months, if any; and
  - 6.4.4. Six-month historical supply-demand balance and twelve-month projection of supply-demand balance indicating power shortage or imminent shortage in the next twelve (12) months.
- 6.5. **Generation Planning for Island Provinces**. In coordination with the concerned stakeholders and when the DOE deems it necessary, the DOE may assume the responsibility to formulate a long-term power development plan for off-grid island

provinces or other areas. The plan shall be developed in close collaboration with the NPC and, in the case of ECs, NEA, and shall have the following objectives:

- 6.5.1. Formulate least-cost capacity expansion plan for the province;
- 6.5.2. Determine optimal energy mix taking into account available indigenous and RE resources in the area;
- 6.5.3. Formulate least-cost compliance to minimum RE requirement under the RE Act;
- 6.5.4. Assess scenarios of eventual interconnection of the province into the Grid; and
- 6.5.5. Develop a program for the adoption of advanced and efficient power technologies for both baseload and regulating applications as replacement to existing high-speed diesel generator set in off-grid areas.

# **RULE 7. SYSTEM OPERATION FOR SMALL GRIDS**

# 7.1. General Provisions

- 7.1.1. The System Operator (SO) for a particular Small Grid shall be responsible to operate and manage the system in accordance to standards set under relevant issuances from competent Government agencies.
- 7.1.2. In a Small Grid with one distribution entity and one generator, the distribution entity shall be the Default SO. Otherwise, a competent third party SO shall be engaged.
- 7.1.3. In accordance with the relevant issuances from competent Government agencies, the SO in a particular Small Grid shall formulate its own areaspecific Dispatch Protocol based on the actual configuration of the Small Grid which shall be prepared within one (1) year upon its initial operation.
- 7.1.4. Such area-specific Dispatch Protocol shall be developed in coordination with distribution entities, the NPC, NPPs, and other generators connected to the Small Grid and shall be approved by the ERC.
- 7.1.5. The NEA shall be responsible to provide technical assistance and financing support to ECs serving off-grid areas in order to enhance its capability as Default SO. The NEA's support for capital expenditure shall include the acquisition of control and communication facilities, software tools, and other monitoring and coordination systems for the system operation.
- 7.1.6. The TRANSCO, its buyer, concessionaire or successor-in-interest, shall conduct capacity-building activities for prospective SOs.
- 7.2. **Engagement of Third Party SO.** The ERC shall issue relevant guidelines and other rules for the engagement of a third party SO.

- 7.2.1. The ERC shall review the capability of the distribution entity as Default SO in accordance with relevant issuances from competent Government agencies.
- 7.2.2. When the distribution entity is deemed not capable to perform its SO functions for any reason, the ERC shall direct the engagement of a third party to perform the SO responsibilities in the area.
- 7.2.3. The Third Party SO may be the NPC-SPUG or any Independent System Operator (ISO) duly accredited by the ERC.
- 7.3. **Minimum Qualifications of a Third Party SO.** The Third Party SO must meet the following minimum requirements:
  - 7.3.1. **No conflict of interest.** The entity must have no interest in the generation business. To ensure non-discriminatory performance of its functions, the Third Party SO and its personnel must have no equity interest with the DU and generation companies in the area;
  - 7.3.2. **Technical Capacity.** The entity must have sufficient experience and qualified technical manpower to properly perform the functions of an SO;
  - 7.3.3. Financial Capacity. The entity must have sufficient wherewithal for the capital investment and working capital necessary to perform the functions of the SO; and
- 7.4. Role of the NPC as Third Party SO. The NPC, subject to approval of ERC, shall develop a Standard SO Contract with corresponding terms of reference (TOR) to be offered to the DUs in off-grid areas. The Standard SO Contract shall be published for reference by the stakeholders.
- 7.5. **TOR for the Third Party SO**. As a minimum requirement, the TOR must contain:
  - 7.5.1. Minimum qualifications as specified in Rule 7.3 of this Circular;
  - 7.5.2. Scope of work, defining all the functions of the Third Party SO in accordance with the relevant issuances from competent Government agencies;
  - 7.5.3. Access of the Third Party SO to vital facilities, meters, and other equipment of the DU as well as relevant information on the operations of the DU and the generators in the Small Grid for the successful performance of its functions and duties as SO of the Small Grid;
  - 7.5.4. Establishment of a dedicated office by the Third Party SO near or within the premises of the DU;
  - 7.5.5. Reportorial requirements, as may be necessary;
  - 7.5.6. Funds or capital that may be infused by the Third Party SO in performing its functions and duties, including facility improvements which are compatible for interconnection to the Grid; and

- 7.5.7. Proposed payment mechanism for the recovery of cost of services of the Third Party SO as defined in the TOR.
- 7.6. **Dedicated SO Office**. Each SO of the Small Grid shall be required to set up a dedicated SO office.
- 7.7. **Reportorial Requirements**. Each SO of the Small Grid shall submit a quarterly operational report to the DOE and ERC for the purposes of the assessment and audit of the Small Grid.
- 7.8. **Regulatory Guidelines**. As regulator, the ERC shall issue the necessary guidelines for the regulation of Third Party SO of Small Grid systems including the review and approval of the SO contracts, and the rate-making for cost recovery.

# RULE 8. PROMOTING RELIABILITY AND EFFICIENCY OF OFF-GRID POWER SYSTEMS

- 8.1. **Monitoring and Analysis of Reliability Data**. The DOE and ERC, guided by their respective mandates, shall monitor and analyze all operational data and other information to facilitate accurate assessment and audit of the operational performance of all utilities, plant owners, and their facilities according to applicable standards and best practices.
- 8.2. **Modernization of the Off-Grid Systems**. Each DU in the off-grid areas shall prepare a long-term system development and modernization program with the objective of modernizing existing distribution systems for resiliency, reliability, and quality of electric power services, which shall be integrated into the DDP.
- 8.3. Efficiency Improvement of NPC-SPUG Power Plants. The NPC-SPUG shall develop its own efficiency and reliability improvement program, in accordance with (identify the reference standards to be followed) for its power plants and systems in off-grid areas to form part of the Missionary Electrification Plan which is integrated to the MEDP.

# **RULE 9. INTERCONNECTION AND INTRA-CONNECTION OF OFF-GRID AREAS**

- 9.1. Definition and Scope of Interconnection of Off-Grid Areas. For the purpose of this Circular, the term "Interconnection of an Off-Grid Area into the Grid" shall be limited to the construction of transmission line and associated facilities in order to connect a particular off-grid area into the Grid with the ultimate purpose of serving all captive customers in the area. It excludes the construction of similar facilities to provide point-to-point connection of a particular generation facility in an off-grid area into the Grid.
- 9.2. Objectives of Interconnection. The interconnection of off-grid areas shall:
  - 9.2.1. Improve the reliability and adequacy of power supply;
  - 9.2.2. Reduce the power rates; and

- 9.2.3. Lead to the graduation from UC-ME subsidy.
- 9.3. **Program for Interconnection.** The TRANSCO, its buyer, concessionaire or successor-in-interest shall submit to the DOE its annual program for the interconnection of off-grid areas.
  - 9.3.1. All interconnection projects shall be incorporated into the annual updating of the Transmission Development Plan.
  - 9.3.2. The TRANSCO, its buyer, concessionaire or successor-in-interest, shall be responsible for the engineering design, financing and implementation of an interconnection project, which may consist of multiple off-grid areas. Each project must be supported by techno-economic feasibility studies;
  - 9.3.3. As part of overall due diligence, the TRANSCO, its buyer, concessionaire or successor-in-interest shall undertake the necessary program to seek support of the local stakeholders and to prepare all the concerned parties on the implications of interconnection to existing arrangements in the area.
  - 9.3.4. The TRANSCO, its buyer, concessionaire or successor-in-interest, in coordination with the NPC, shall prepare, design, and facilitate the transition from off-grid to a grid-connected area. For this purpose, the TRANSCO, its buyer, concessionaire or successor-in-interest shall provide transmission services in areas identified by the DOE for interconnection. The system operation function and ownership of transmission assets in such area shall be transferred to TRANSCO, its buyer or concessionaire subject to a fair market value payment, provided that, the TRANSCO, its buyer or concessionaire shall maintain, rehabilitate and expand the transmission system prior to the interconnection.
  - 9.3.5. The ERC shall issue the necessary guidelines for the interconnection of off-grid areas.
- 9.4. **Sources of Funds for Interconnection**. Financing of interconnection projects shall be sourced out from:
  - 9.4.1. Corporate financing by the TRANSCO, its buyer, concessionaire or successor-in-interest;
  - 9.4.2. Appropriations from the National Government through the TRANSCO;
  - 9.4.3. Grant contributions from the concerned local government units; and
  - 9.4.4. Grants, donations and other similar sources.
- 9.5. Cost Recovery for Interconnection Projects. The ERC shall be responsible for the necessary adjustments to transmission charges or any other mechanism that will allow for the recovery of costs of the interconnection projects implemented or to be implemented by the TRANSCO, its buyer, concessionaire or successor-in-interest.
- 9.6. **Intra-connection of Off-Grid Systems**. The NPC, in coordination with the TRANSCO, its buyer, concessionaire or successor-in-interest, shall undertake the

necessary studies, actual financing and implementation of connecting two or more existing off-grid areas to form a larger power system. Each intra-connection project must be supported by detailed techno-economic feasibility studies and must require the approval of the DOE Secretary prior to implementation.

# RULE 10. RATIONALIZATION OF TARIFFS AND PHASE OUT OF UC-ME SUBSIDY IN MISSIONARY AREAS

- 10.1. The DOE, in consultation with the concerned stakeholders, shall study and formulate new policies and programs to rationalize existing tariffs in off-grid areas, including the removal of the UC-ME subsidy, not later than six (6) months upon the issuance of this circular.
- 10.2. The DOE shall also explore other sources of funding for subsidies including annual appropriation as defined in Rule 11 of this Circular.
- 10.3. In relation to the rationalization study, the DOE, in coordination with the NPC and NEA, shall constitute an advisory group to assist the DUs in the review of their existing power supply contracts.
- 10.4. Immediately upon the issuance of this Circular, all system losses incurred by DUs in serving off-grid areas shall no longer receive the UC-ME subsidy.

### **RULE 11. GOVERNMENT SUBSIDIES**

The Government shall allocate annual appropriation to the NPC in providing the subsidy to fund all NPC activities related to missionary electrification and all eligible customers in off-grid areas.

# **RULE 12. REGULATORY SUPPORT AND OTHER PROVISIONS**

Within 90 days upon the effectivity of this Circular, the ERC shall immediately act upon the following pending applications of the NPC including, but not limited to, UC-ME requirement, including the Renewable Energy Cash Incentive, for one (1) calendar year and UC-ME true-up adjustments for the previous year(s) and incremental currency exchange rate adjustment and generation rate adjustment mechanism over and above the SAGR.

### **RULE 13. SEPARABILITY CLAUSE**

If, for any reason, any provision of this Circular is declared unconstitutional or invalid, the other parts of provisions hereof which are not affected thereby shall continue to be in full force and effect.

### **RULE 14. REPEALING CLAUSE**

14.1. Department Circular No. DC2004-01-001 is hereby repealed.

- 14.2. Any department circular or issuance, contrary or inconsistent with these Rules is hereby repealed, modified or amended accordingly.
- 14.3. Nothing in this Circular shall be construed to affect any vested rights acquired from institutions or mechanisms existing prior to this Circular.
- 14.4. This Circular shall be applied prospectively.

#### **RULE 15. EFFECTIVITY**

This Circular shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation Copies of this Circular shall be filed with the University of the Philippines Law Center – Office of the National Administrative Register (UPLC-ONAR). This Circular shall remain in effect until otherwise revoked.

Signed this \_\_\_\_ day of \_\_\_\_ 2019 at the Department of Energy, Energy Center, Bonifacio Global City, Taguig City, Metro Manila.

JAN 25 2019

Secretary

IN REPLYING PLS. CITE: DOE-AGC-19000212