DEPARTMENT CIRCULAR	NO.	. 2018-	
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PRESCRIBING THE OMNIBUS GUIDELINES IN ENSURING THE SECURITY,
RELIABILITY, ADEQUACY, QUALITY AND AFFORDABILITY OF ELECTRIC POWER
SERVICES IN MISSIONARY ELECTRIFICATION THROUGH PRIVATE SECTOR
PARTICIPATION, COMPLIANCE TO TECHNICAL STANDARDS AND ADOPTION OF
APPROPRIATE TARIFF AND SUBSIDY POLICIES

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; and (iii) enhance the inflow of private capital and broaden the ownership base of the power generation, transmission and distribution sectors;

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

WHEREAS, Rule 13 and 14 of the Implementing Rules and Regulations of EPIRA (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 a Missionary Electrification Development Plan (MEDP); (ii) establishment of specific guidelines on how to encourage the inflow of private capital and the manner whereby other parties, including DUs and qualified third parties (QTP), can participate in missionary electrification; (iii) additional responsibilities of NPC-SPUG such as the provision of transmission lines in offgrid areas, (iv) privatization of its generation assets and other associated facilities, and (v) cessation of UC-ME subsidy to SPUG-serviced areas upon their interconnection to the Grid, among others;

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 in the privatization of electric power generation in areas that are served by NPC-SPUG through a Competitive Selection Process (CSP), disposal of NPC-SPUG generation and subtransmission assets, and graduation from missionary electrification, among others;

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 missionary electrification as well as 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 electric cooperatives (ECs) the power to

construct, acquire, own, operate and maintain generating facilities and allows an EC to bid on existing NPC-SPUG generating facilities within its franchise area, among others;

WHEREAS, the DOE issued DOE Department Circular No. 2017-12-0016 entitled "Adopting the Guidelines for the Performance Assessment and Audit of Power Generation, Transmission, Distribution Systems and Facilities" for the purpose of ensuring the security, reliability and quality of electric power services in the country, including off-grid areas;

WHEREAS, the DOE issued Department Circular Nos. DC2015-06-008 and DC2018-02-003 which provide specific guidelines for the conduct of CSP by DUs in order to procure their power supply for their captive market at least cost manner;

WHEREAS, there is a need to amend existing issuances of the Government and to prescribe an omnibus set of guidelines that incorporate and interrelate existing and new policies and directives of the Government for the purposes of attaining the total electrification at earliest possible time, promoting greater reliability, adequacy, quality and affordability of electric power services on missionary electrification, and providing greater opportunities for private sector participation while reducing UC-ME subsidies;

NOW THEREFORE, FOR AND IN CONSIDERATION OF THE FOREGOING PREMISES, the DOE hereby issues the following omnibus policy guidelines on missionary electrification, to wit:

RULE 1. COVERAGE

- 1.1. These Guidelines shall apply to the following entities performing off-grid electrification:
 - 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, engaged in the provision of electricity services.
- 1.2. Service areas covered by these Guidelines shall include:
 - 1.2.1. Small Grids;
 - 1.2.2. All unviable areas declared by the DOE under Section 59 of the EPIRA and Rule 14 of the EPIRA-IRR;
 - 1.2.3. New areas, whether or not covered by a franchise, being served or planned to be served by NPC or other service providers; and

1.2.4. New off-grid areas, as may be identified under 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 service where the resultant True Cost of Generation Rate is equal or less than the Subsidized Approved Generation Rate;

2.2. "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;

2.3. **"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 remote and unviable areas;

2.4. **"Graduation"** refers to the cessation of provision of missionary electrification subsidy in an area, by reason that the area or service is deemed commercially viable or when the area is interconnected into the Grid:

2.5. **"Grid"** refers to the high voltage backbone system of interconnected transmission lines substations and related facilities, located each in Luzon, Visayas and Mindanao;

2.6. "Missionary Area" refers to an off-grid area that is deemed eligible for missionary electrification subsidy by the DOE by reason that the provision of basic electricity services is not commercially viable;

2.7. "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, for the purposes of Section 70 of the EPIRA, the provision of power generation and associated power delivery systems in areas that are not connected to the Grid;

2.8. "Missionary Electrification Development Plan" or "MEDP" refers to the plan of the DOE, updated annually, detailing the Government's plans and programs for missionary electrification, including capital investment and operation in off-grid areas;

2.9. "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;

2.10. "National Power Corporation – Small Power Utilities Group" or "NPC-SPUG" refers to the unit of NPC mandated under the EPIRA to perform missionary electrification;

2.11. "Off-Grid Area" refers to an area that is not connected to the Grid;

 2.12. "Power Sector Assets and Liabilities Management Corporation" or "PSALM" refers to the government-owned and controlled corporation created under the EPIRA to administer the universal charge fund, among others;

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- 2.13. "Power Supply Agreement" or "PSA" refers to an Agreement between a power producer and a DU for supply of power;
- 2.14. "Private Sector Participation" refers to the installation of the power generation facilities and associated delivery systems in order to meet the demand requirements of an off-grid area by the concerned DU, NPP, QTP, and other eligible private entities, thus performing the functions of the NPC-SPUG as defined in Section 70 of the EPIRA.
- 2.15. "Qualified Third Party" or "QTP" refers to the alternative service provider duly qualified and authorized by the ERC to provide electricity services to particular unviable area/s:
- 2.16. "Small Grid" refers to the interconnected high voltage or medium voltage Off-Grid systems;
- "Subsidized Approved Generation Rate" or "SAGR" refers to the rate, expressed in 2.17. Peso per kilowatt-hour, which the ERC has determined would be desirable, on social acceptability grounds, for a DU to pay for missionary generation services. 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;
- "Subsidized Approved Retail Rate" or "SARR" refers to the rate, expressed in Peso per kilowatt-hour, which the ERC has determined would be the maximum that an enduser should pay for power supplied 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.
- 2.19. "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
- 2.20. "True Cost of Generation Rate" or "TCGR" refers to the full efficient costs of generating power in an area;
- 2.21. "Universal Charge for Missionary Electrification" or "UC-ME" refers to the portion of the Universal Charge which is designated for Missionary Electrification;
- "Unviable Area" refers to a geographical area within the franchise area of a DU where 2.22. 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 (MEDP).

Policy Objectives of MEDP. Consistent with Rule 13 of the EPIRA-IRR, the following 3.1. are the specific policy objectives to be observed in the formulation of the MEDP:

- 3.1.1. Ensure the provision of secured, reliable, adequate, quality and sustainable provision of electricity in missionary and other off-grid areas at reasonable rates;
- 3.1.2. Promote greater economic development and investments in off-grid and missionary areas within the limits of their carrying capacity such as productive use and conservation of natural resources and sustainable tourism through the provision of reliable electric power system;
- 3.1.3. Encourage the entry of advanced and more efficient power technologies towards the provision of more flexible and adaptive power systems and low-cost electricity services in missionary areas;
- 3.1.4. Rationalize the provision of UC-ME subsidy and gradually reduce public funding of UC-ME subsidy in the overall electricity tariff;
- 3.1.5. Assess the economic feasibility and timeline for the eventual interconnection of off-grid areas into the Grid, thus enabling the cessation of the UC-ME subsidy provision; and
- 3.1.6. Strengthen the capacity of all stakeholders involved in missionary 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, among others.
- 3.2. **Scope of MEDP**. The MEDP shall integrate the following plans and programs of the Government and stakeholders on missionary 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 Section 70 of the EPIRA, NPC shall submit to the DOE its 5-year plans and programs related to its generation, associated facilities, and activities in missionary areas, including the following:
 - 3.2.2.1. Annual capacity addition per area;
 - 3.2.2.2. Increase of service hours;
 - 3.2.2.3. Improvements in the operation and maintenance;
 - 3.2.2.4. Renewable energy development program;
 - 3.2.2.5. Efficiency improvement and fuel management program for power system facilities;
 - 3.2.2.6. Disposal of power generation and associated power delivery systems in missionary areas upon the entry of the private sector;
 - 3.2.2.7. Backbone power lines and other associated facilities;
 - 3.2.2.8. Interconnection to the Grid;
 - 3.2.2.9. Intra-connection of two or more off-grid areas;

- 3.2.2.10. Activities in support to the electrification of the unviable areas; and
- 3.2.2.11. Forecasts of effective SAGRs, SARRs, and TCGRs in missionary areas with methodology and assumptions, among others.
- 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, among others, the following:
 - 3.2.3.1. Historical and projected supply and demand;
 - 3.2.3.2. Power Supply Procurement Plan defining the transition from diesel-based systems into emerging power technologies;
 - 3.2.3.3. Compliance to minimum renewable energy requirements for off-grid areas in accordance with the Renewable Energy Act;
 - 3.2.3.4. Capital expenditure projects, such as expansion, rehabilitation, control and automation, and modernization, etc.;
 - 3.2.3.5. System loss reduction, vegetation management, and other programs to improve the electric power services;
 - 3.2.3.6. All projects in support to total electrification of their franchise area, including unviable areas, down to the household level, among others.
- 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 programs for interconnection of off-grid areas into the Grid as described in Rule 9 of this Circular. Said submission shall include the proposed interconnection projects, including the design details and corresponding schedules.
- 3.2.5. Power Development Plan (PDP) for Major Small Grids. Based on the plans of DUs, a 10-year power development plan for major Small Grids or provinces shall be included in the MEDP as explained in 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 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 shall follow the following timelines:
 - 3.3.1. NPC and NEA shall submit to the DOE their corporate plans and programs including planning parameters and assumptions not later than <u>January of the year</u>;

- 3.3.2. All DUs shall submit their individual DDPs not later than <u>March of the year</u>. Other information required from the DUs under Rule 3.2.3 shall be submitted not later than <u>June of the year</u>; and
- 3.3.3. 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**. Every three years, DOE shall publish the MEDP not later than <u>December covering a three (3) year period</u>. 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 IN OFF-GRID AREAS

- 4.1. **Role of the NPC.** Consistent with the EPIRA and the EPIRA-IRR, NPC is mandated to provide missionary electrification to unviable areas declared by the DOE and to provide power generation, including the associated facilities in off-grid areas 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 electricity end-users in off-grid areas with greater opportunities and options for obtaining more efficient, low-cost and more reliable supply of power;
 - 4.2.2. To reduce financial burden to the Government 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 missionary electrification shall include the following activities:
 - 4.3.1. Full take-over of the generation function in a missionary area by the NPP/s through the phase-out of NPC-SPUG power plants;
 - 4.3.2. Provision of new or additional generation capacity; and
 - 4.3.3. Provision of power generation and/or distribution system services in existing or new missionary areas.
- 4.4. **Procurement of PSAs.** DUs currently sourcing their power from NPC-SPUG are enjoined to procure their PSAs from NPPs through a competitive selection process in accordance with Section 23 of EPIRA and other relevant issuances of the DOE and/or the ERC.

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 DISPOSAL OF NPC-SPUG ASSETS IN OFF-GRID AREAS

5.1. Program for Privatization. NPC shall prepare an annual program and schedule for the privatization and disposal of assets in off-grid areas.

- 5.2. Treatment of Assets in Good Working Conditions. In cases of displaced assets in good working condition, NPC may dispose of the assets through competitive bidding or redeploy the assets to serve other areas.
- Procedure for Disposal. In accordance with applicable laws, the NPC shall formulate 5.3. procedures for the valuation and methods for the disposal of its assets in off-grid areas to be approved by the National Power Board and submitted to the DOE, ERC, and other relevant Government agencies.
- 5.4. Disposal of Generation Assets Displaced by PSP.
 - 5.4.1. The 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. The NPP shall specify its intent to use the assets acquired from NPC in its bid proposal during the procurement of PSA by the DU in the off-grid area. Said assets must also be clearly stated in the PSA of the NPP with the DU.
 - 5.4.3. The 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 the DU and the NPP, the qualified bid of the DU shall have preference over the other bids.
- 5.5. **Disposal 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 dispose its other associated facilities in accordance with existing laws and regulations.
 - 5.5.2. The DU shall have the option to acquire the power lines and associated assets being disposed by the NPC within its franchise area.

RULE 6. **ENSURING CAPACITY ADEQUACY IN OFF-GRID AREAS**

6.1. Declaration and Reporting of the Net Capability. For purposes of operational and long-term capacity expansion planning and consistent with the Philippine Grid Code and Distribution Code, the DOE and the ERC shall be responsible to assess and audit the actual capability of the power plants in the off-grid areas in accordance with its guidelines and other issuances.

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1 6.2. Quarterly Supply Adequacy Assessment Report. To facilitate continuous monitoring 2 of supply adequacy in off-grid areas and verify the need for additional capacity, the 3 following reportorial requirements shall be instituted: 4 5 6.2.1. The DU and NPC in a particular off-grid area shall submit a quarterly report to DOE, ERC, and NEA containing the following: 6 7 8 6.2.1.1. Historical supply-demand balance in the last three (3) months; and 9 10 Projected balance for the next twelve (12) months for each off-grid 6.2.1.2. 11 area. 12 6.2.2. NPPs/QTPs and other generators in a particular off-grid area shall submit to 13 14 DOE and ERC the quarterly updates on the following: 15 16 6.2.2.1. Declaration Net Plant Capability based on the ERC guidelines; and 17 18 6.2.2.2. Schedule of preventive and corrective maintenance plans of each power plant in the next twelve (12) months. 19 20 21 6.3. Load Forecasting. The DU shall diligently forecast the load in accordance with 22 prescribed guidelines, through the use of accurate data and appropriate forecasting 23 tools. 24 25 6.4. Treatment of Power Shortage. The rules for assessing existing and potential power 26 shortage in an off-grid area shall be as follows: 27 28 6.4.1. A DU in off-grid area experiencing capacity shortage, or is expecting capacity shortage in next 12 months, shall immediately inform the DOE and the ERC 29 30 through the submission of the following: 31 32 6.4.1.1. Updated Power Supply Procurement Plan; 33 34 6.4.1.2. Declaration of net capability of all existing generation facilities; 35 36 6.4.1.3. Capacities of incoming generation plants in next 12 months, if any; 37 38 39 6.4.1.4. Six-month historical supply-demand balance and twelve-month 40 projection of supply-demand balance indicating power shortage or 41 imminent shortage in the next twelve (12) months. 42 6.4.2. The NPC shall recommend to DOE for the approval for emergency power in 43 44 accordance to DOE CSP Policy Circular. 45 46 6.5. Generation Planning for Large Off-Grid Provinces. DOE shall be responsible to formulate a long-term power development plan for off-grid provinces with demand 47 requirements of more than 5 MW. Said plan shall be developed in close collaboration 48 49 with NEA, NPC and the concerned ECs. Said plan per province shall have the 50 following objectives: 51 52 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 RE Act;
- 6.5.4. Assess scenarios of eventual interconnection of the province into the Grid and
- 6.5.5. Develop program the adoption of advanced and more 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 area-specific Dispatch Protocol based on the actual configuration of the Small Grid which shall be prepared within a one-year period from initial operation.
- 7.1.4. Such area-specific Dispatch Protocol shall be developed in coordination with distribution entities, 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.
- 7.2. **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 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 to be accredited 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 and its personnel must have no other business relation with the DU and generation companies in the area;
- 7.3.2. **Technical Capacity.** The Entity must have sufficient experience as well as 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
- 7.3.4. **Ownership of power lines.** The owner of the backbone system of the Small Grid, either wholly or partly, shall be the preferred Third Party SO in the area.
- 7.4. **Role of NPC as Third Party SO.** The NPC shall develop a Standard SO Contract with corresponding TOR to be offered to the DUs in off-grid areas. Said Standard SO Contracts shall be published for reference by the stakeholders.
- 7.5. **Terms of Reference (TOR) for the ISO**. 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 SO in accordance with the relevant issuances from competent Government agencies;
 - 7.5.3. Access of the ISO 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 ISO 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 ISO 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 the ISO services as defined in the TOR.
- 7.6. **Dedicated SO Office**. Each System Operator of the Small Grid shall be required to set up a dedicated SO office.
- 7.7. **Reportorial Requirements**. Each System Operator of the Small Grid shall submit a quarterly operational report to the DOE and the 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 SMALL GRID AND OTHER OFF-GRID **POWER SYSTEMS** 8.1. Monitoring and Analysis of Reliability Data. The DOE and the ERC 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. Modernization of the Small Grids. Each DU in the off-grid areas shall prepare a long-8.2. 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. Efficiency Improvement of NPC-SPUG Power Plants. NPC-SPUG shall submit to 8.3. the DOE a quarterly monitoring report on the generation, outages, heat rate of generating units, fuel and lube utilization, as well as breakdown of plant operational expenses per power plant. NPC-SPUG shall develop its own efficiency and reliability improvement program for its power plants and systems in off-grid areas to form part of the MEDP.

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

- 9.1. **Definition and Scope of Interconnection of Small Grids**. 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 in off-grid areas;
 - 9.2.2. Reduce the burden of high power rates in off-grid areas; and
 - 9.2.3. Lead to the graduation of said areas 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

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- 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.
- 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 ON TARIFFS AND PHASE OUT OF UC-ME SUBSIDY IN MISSIONARY AREAS

- 10.1. **Policy Objectives**. The policy objectives of the Government in rationalizing the tariff and subsidy system in missionary areas are to:
 - 10.1.1. Maximize the recovery of cost of electricity services through innovative tariff mechanisms to reflect the capacity to pay of the electricity end-users;

- 10.1.2. Encourage and enable the entry of emerging power technologies, including but not limited to, hybrid RE systems, smart systems for the purpose of providing quality, reliable, secure, and affordable delivery of electricity services; and
- 10.1.3. Pursue, whenever feasible, the intra-connection of off-grid areas and interconnection of off-grid areas into the Grid towards the graduation from missionary electrification.
- 10.2. **Full Cost Recovery in Off-grid Areas**. The policy of full cost recovery shall be implemented as follows:
 - 10.2.1. The Government, through the ERC, shall pursue a new regime of tariff mechanism to maximize the recovery of all costs of electricity services from consumers in off-grid areas, without the UC-ME;
 - 10.2.2. The ERC shall issue a new rate structure for off-grid areas with cost allocation according to each customer class to the total cost of generation;
 - 10.2.3. Based on the allocation of generation costs per customer class, the DU in offgrid areas shall submit its effective SAGR to NPC-SPUG for the determination of the level of subsidy from the appropriation of the Government;
 - 10.2.4. An NPP with existing PSA for subsidy shall be entitled to full recovery of its ERC-approved TCGR through receipts from DU of the effective SAGR collected from customers and the corresponding UC-ME Subsidy, subject to thorough and comprehensive review by the ERC;
 - 10.2.5. A QTP with existing QSC for subsidy shall be entitled for full recovery of its ERC-approved FCRR through the collection of the effective SARR from its customers in unviable area and corresponding UC-ME Subsidy, subject to thorough and comprehensive review by the ERC;
 - 10.2.6. System Operators in off-grid areas shall assist the DUs in designing rates for the recovery of cost of system operation and ancillary services; and
 - 10.2.7. The NPC-SPUG shall finance its full operations from the revenues from sales, government allocation, grants, and donations.
- 10.3. **Eligibility for Subsidy**. The eligibility rules for the provision of subsidy are as follows:
 - 10.3.1. The following shall be eligible to the Government and UC-ME subsidy:
 - 10.3.1.1. All NPC activities related to missionary electrification;
 - 10.3.1.2. All marginalized customers in off-grid areas; and
 - 10.3.1.3. Existing PSAs and QSCs of NPPs and QTPs duly approved by the ERC.
 - 10.3.2. The following are not entitled to the Government and UC-ME subsidy:
 - 10.3.2.1. All non-marginalized customers in missionary areas;
 - 10.3.2.2. Marginalized end-users receiving lifeline subsidy;

- 10.3.2.3. Economic zones and highly-commercialized areas in off-grid areas; and
- 10.3.2.4. New PSAs of NPPs and other generators in off-grid areas.
- 10.3.3. Households that are deemed marginalized end-users shall be subsidized according to the lifeline policy. However, the generation component of the subsidy accorded to the marginalized household shall be charged from the UC-ME, subject to the graduation policy in this Circular; and
- 10.3.4. The verification of marginalized households shall be made through the issuance of the **Certificate of Indigency** by the local Social Welfare Officer in the off-grid area. The same must be consistent with the "Listahan" database being maintained by the Department of Social Welfare and Development.
- 10.4. **UC-ME Rationalization and Conclusion Program.** The rules governing the rationalization and conclusion of the UC-ME subsidy shall be as follows:
 - 10.4.1. With the assistance of the DOE, ERC, NPC, and NEA, in cases of ECs, the DUs serving missionary areas shall prepare a transition plan for the rationalization that will gradually phase out the provision of UC-ME subsidy not later than six (6) months upon the effectivity of this Circular. The transition shall specify the following:
 - 10.4.1.1. The prioritization of areas for rationalization;
 - 10.4.1.2. The start year and phase-out period/s the subsidy per area; and
 - 10.4.1.3. Subsidy reduction scheme per area.
 - 10.4.2. Not later than two (3) months thereafter, the NPC shall submit to the DOE the consolidated rationalization program containing the schedule of phase-out of UC-ME subsidy. The DOE shall assess the rationalization program and approve its incorporation into the MEDP for implementation. The program shall specify the following:
 - 10.4.2.1. Projected Rate Adjustments and UC-ME subsidy reduction per area; and
 - 10.4.2.2. Compliance and Impact Mitigation Plans by the NPC and the concerned DU.
 - 10.4.3. Missionary areas will be prioritized for rationalization using the following criteria:
 - 10.4.3.1. Current level of commercial viability of the area;
 - 10.4.3.2. Municipality or city classification;
 - 10.4.3.3. Demand and consumption in the previous year;
 - 10.4.3.4. Projected demand growth; and

10.4.3.5. Share of commercial and industrial customers in the overall consumption in the previous year, among others.

10.4.4. **Default Scheme for Subsidy Reduction**. Based on the start year of removal, the default scheme for gradual removal of subsidies shall be as follows:

Customer Type According to Monthly Electricity Consumption	Subsidy Reduction Scheme
more than 100 kWh but less	 Removal of subsidies in 2 years.
than 1,000 kWh	• Year-1 reduction shall not be less than 50%.
between 35 kWh and 100 kWh	 Removal of subsidies in 3 years. Year-1 reduction shall not be less than 25%.
Other customers excluding lifeline and poor households	 Removal of consumption subsidies in 5 years. Year-1 reduction shall not be more than 10%.

- 10.4.5. **Alternative Scheme.** The concerned DU may propose to the DOE an alternative scheme for subsidy reduction that is deemed more socio-politically acceptable in its franchise area with proper justification.
- 10.4.6. **Delay and Temporary Postponement of Subsidy Removal.** The DOE Secretary may approve the delay or temporary postponement of the implementation of the subsidy rationalization in a particular area in the case of calamities, force majeure, and other analogous circumstances.
- 10.4.7. Measures to Mitigate the Impacts of Subsidy Rationalization. The DOE, in cooperation with the ERC, NPC and NEA, shall conduct an Information Education and Communication (IEC) Program to educate the electricity endusers in off-grid areas on the economic reasons for the subsidy rationalization program. The NPC and NEA, in coordination with concerned DUs, shall submit to the DOE an assessment report on the potential impacts of the gradual removal of generation subsidies highlighting the following:
 - 10.4.7.1. Potential adverse impacts of the rationalization to a particular sector or class of customers and to the financial conditions of the DU; and
 - 10.4.7.2. Measures to mitigate the impacts of the subsidy removal.
- 10.4.8. Conclusion Program. PSAs and QSCs must include specific provisions for the conclusion program, i.e., the event of graduation of the area from UC-ME Subsidy. An area shall be deemed to have "graduated" upon:
 - 10.4.8.1. Attainment of parity between TCGR and effective SAGR per off-grid area;
 - 10.4.8.2. Interconnection of an off-grid area into the Grid; or
 - 10.4.8.3. Extension of distribution lines to an area being served by a QTP.
- 10.5. Monitoring of UC-ME Subsidy. The reporting of rates and subsidies are as follows:

- 10.5.1. Each NPP shall submit a quarterly report to the NPC and its off-taker DU containing the monthly computation of its TCGR based on the ERC-approved PSA;
- 10.5.2. The DU shall submit a quarterly report to the NPC on the computation of its effective SAGR per area based on the ERC-approved rates per customer class:
- 10.5.3. The NPC shall submit a semi-annual report to PSALM detailing the utilization of the UC-ME subsidy and disbursement to eligible areas and entities in the last six (6) months and the projected estimates in the next (6) months;
- 10.5.4. Copy of the above reports shall be provided to the DOE, ERC, and NEA for reference; and
- 10.5.5. PSALM shall submit to the DOE and ERC the status of the remittances and disbursement of UC-ME subsidy on a quarterly basis.

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 marginalized customers in off-grid areas, in accordance to Rule 10.3.4 of this Circular.

RULE 12. REGULATORY SUPPORT AND OTHER PROVISIONS

The ERC shall, within 90 days upon the effectivity of this Circular, 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. 2004-01-001 is hereby repealed.
- 14.2. Any department circular or issuance, contrary or inconsistent with these Rules is hereby repealed, modified or amended accordingly.

1 2 3 4 5	14.3.	Nothing in this Circular shall be construed to amend, supersede, or repeal any of the mechanism or institutions already existing or responsibilities already allocated or provided for under any existing law, rule or contract.
6		RULE 15.
7		EFFECTIVITY
8		
9		Circular shall take effect fifteen (15) days after its publication in at least two (2)
10	newsp	papers of general circulation and shall remain in effect until otherwise revoked.
11 12		
13	Signe	d this day of 2018 at the Department of Energy, Energy Center, Bonifacio
14		I City, Taguig City, Metro Manila.
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18		ALFONSO C. CUSI
19 20		ALFONSO G. CUSI Secretary
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