REVIEW OF DRAFT NERC MINI-GRID REGULATIONS BY THE RENEWABLE ENERGY ASSOCIATION OF NIGERIA (REAN)

The Renewable Energy Association of Nigeria (REAN) is an umbrella association of other renewable energy associations in Nigeria that provides a unified platform for all Renewable Energy Companies, practitioners and promoters to speak with one voice and provide valuable input into the development of policies in the Renewable Energy Market.

A select committee of REAN has reviewed the draft Mini-Grid Regulations proposed by NERC. This was done with the aim to highlight areas where the draft regulations may not favor private investment in the sector. The members of this committee of seasoned Renewable Energy practitioners, project developers and professionals include;

- **Bolade Soremekun** (CEO, Rubitec Solar) – Chairman of Mini-Grid Regulations Review Committee
- **Segun Adaju** (CEO, Consistent Energy) – President, REAN
- **Habiba Ali** (CEO, Sosai Renewable Energies Co) – Vice President, REAN
- **Dotun Tokun** (CEO, Solar Mate Engineering)
- **Femi Adeyemo** (Co-Founder, Arnergy Solar)
- **Hannah Kabir** (MD, Creeds Energy) – Treasurer, REAN
- **Godwin Eni Aigbokhan** (Renewable Energy Markets Adviser, NCCN) – Secretary of Mini-Grid Regulations Review Committee

It is this committee's assertion that the draft regulations are more in the interests of the Distribution companies (DisCos) with the private investment in the mini-grids being a secondary consideration. This committee also asserts that the draft regulations seek to control the profitability of the mini-grid operator and this is inimical to private investment. The committee has highlighted the following areas of the draft regulations where the interests of the mini-grid operators need to be better protected;

1. In the preface of the draft regulation it was stated that it **"shall promote the engagement of the private sector, communities, Non-Governmental Organisations and other stakeholders in achieving nationwide electrification, and it seeks to minimize major risks associated with Mini-Grid investments**

such as: (1) Sudden tariff changes, as tariffs would have been agreed in advance by the relevant parties". It is the view of this committee that this may be inevitable for diesel or Natural Gas powered (or hybrid) mini-grids where these fuels are subject to price fluctuations. It is therefore the recommendation of this committee that the overall document is amended to reflect different categories of technology that could be used to power mini-grids and tariffs and treat price fluctuations on this basis.

2. Staying in the Preface (Page 2) of the document it was stated that ***"The tariffs are expected to be higher than the current Electricity Distribution Company (DisCo) retail tariffs. However, they will be lower than any electricity supply of the same quality generated from conventional sources in these areas"*** NERC will need to be clear on what the conventional sources are and provide their reasoning behind the expectation that mini-grid tariffs should be lower.
3. On page 11, the document defines what unserved and underserved areas are however this definition needs to be more objective and put into verifiable terms (For instance, the document could define an underserved area as having less than 3 hours/day of power supplied over 2 years). This leaves this definition completely to the DisCos. It is therefore the recommendation of this committee that a definition for these areas is included in the document as the open ended nature of this may give the DisCos the powers to act as an arbiter in this area.
4. In Article 7, Section 1 (c) (Page 13), the document requires the mini-grid operator to obtain a written consent from the DisCo for any project within its 5 year (extension?) plan. This again gives the DisCos too much leeway and prevents the mini-grid operator from adequately identifying areas that are truly within the DisCos 5 year plan. Thus, this committee recommends that NERC obtains the 5 year plans of all DisCos on an annual basis and prospective mini-grid developers should approach the NERC to confirm if the proposed area falls within the DisCos 5 year plan.
5. The Section on Interconnected mini-grids (Article 9, Section 1-2) gives no explicit provision for excess power to be sold to the Discos. This again does not allow the mini-grid developer to maximize his profit, especially during off-peak periods.
6. That technical codes and standards should be adhered to (Article 11, Section1, Page 15) is dependent on whether or not the MYTO methodology allows the mini-grid developer to adequately recover his costs. It is therefore imperative that the commission shares this methodology with all mini-grid developers.

7. That the NERC will need to approve a tariff review is a good thing and this committee commends the commission for stating that new tariffs will be applied 30 days after their approval (Article 13, Section4, Page 17). What is however omitted is the timeframe for this approval to be secured. This is too open-ended and may be a source of worry for the developer; therefore this committee recommends that NERC responds to an application for a review of the mini-grid tariff within a period of 3 months.

8. Article 18, Section 1 needs further clarification. Will the mini-grid developer be required to sign contracts with individual households who will like to use its services? This is an unnecessarily cumbersome and bureaucratic requirement if the community leaders are expected to sign an agreement with the mini-grid developer in the first place. This committee sees no value in this section because households in the areas where the mini-grid will operate will be required to purchase some equipment before they can use the mini-grid's service and this is a sufficient form of an agreement.

9. Where the distribution network extends into an unserved area where an isolated mini-grid (of over 100kW of installed capacity) is in operation under permit, the mini-grid operator can either decide to become integrated into the DisCo's Network as an interconnected mini-grid or it transfers its assets to the DisCo with the promise of compensation (Article 19). This section of the draft regulation also states that where the Distribution network extends to an unserved area where a registered mini-grid (of less than 100kW) is in operation, the mini-grid has two months to remove its equipment without any compensation. This leaves very little time for the operator to react. This committee recommends that the time period for the removal of assets be extended to 6 months within which time the mini-grid developer is allowed to continue collecting revenue based on the willing buyer-willing seller model.

10. In Article 19, Section 2 (b) the draft regulations make provisions for the compensation of mini-grid developers when a DisCo moves into an unserved area. However, the provision in this Section reads like the commission expects that the developer to recover his costs within a 5 year period. In reality, the project developer spreads his costs over a minimum period of 10 years in order to provide a very affordable tariff for the final consumer. This committee recommends that a 10 year period for the life span of the mini-grid should be clearly stated and any compensation should be tied to 10 years. Also, it is the recommendation of this committee that the commercial value of the mini-grid (as evaluated by an independent valuer) rather than the asset's depreciated value be used as the basis for any compensation payment (especially important due to exchange rate fluctuations)

11. In defining the exclusivity period for mini-grid operators, the draft regulations refer to a period of 12 months if the unserved area is within the 5 year extension plan of the DisCo but does not state what exclusivity period will apply for mini-grid projects outside this range (Chapter VI, Section 21). The exclusivity period also means that the DisCo is allowed to extend the network to the area served by the mini-grid operator within the 5 year period (which can also mean year one) which leaves little room for the private investor to recover his investment costs. This puts the developer under pressure from day one and will not encourage investment in the sector,

12. According to the draft regulation in Article 20, the tariff may be agreed with 60% of the community but could still be overruled by the commission. It is the view of this committee that this requirement should be expunged from the regulation because this is an anti-market requirement. The point of engaging the community is to determine what they are spending on energy and provide a cheaper solution. If this has been done by the mini-grid operator and the community members are aware of the benefits of connecting to the mini-grid, the market should be left alone to determine the prices.

Committee Recommendations:

It is the recommendation of this committee that the forgoing amendments to the draft regulations proposed by this committee will make private sector investment in mini-grids more attractive in the long and short term. Private sector investment will flow into a sector where regulations read like their interests are protected.

Sincerely,
FOR: REAN MINI-GRID REGULATIONS REVIEW COMMITTEE

Bolade Soremekun
CEO –Rubitec Solar/Chairman REAN Mini-Grid Regulations Review Committee