POWER AFRICA INITIATIVE PARTNERSHIP MEMORANDUM OF UNDERSTANDING

BETWEEN

THE GOVERNMENT OF LIBERIA

AND

THE GOVERNMENT OF THE UNITED STATES OF AMERICA

This non-binding Memorandum of Understanding (MOU) is jointly signed by the Government of Liberia (GOL), acting through its Ministry of Land, Mines and Energy (MLME), and the Government of the United States of America ("USG"), acting through the Office of the Coordinator of Power Africa and Trade Africa and the United States Ambassador in Liberia. U.S. President Barack Obama launched the Power Africa initiative (Power Africa) on June 30, 2013. As appropriate in each country context, Power Africa draws on the tools and resources of multiple USG agencies, including the U.S. Agency for International Development (USAID), the Department of State (State), the Overseas Private Investment Corporation (OPIC), the Export-Import Bank of the United States (EXIM), the U.S. Trade and Development Agency (USTDA), the Millennium Challenge Corporation (MCC), the Department of the Treasury (Treasury), the Department of Commerce (DOC), the Department of Energy (DOE), and the U.S. African Development Foundation (USADF) to partner with the private and public sectors to increase significantly the amount of electricity available in sub-Saharan Africa.

WHEREAS, the Government of Liberia and the Government of the United States of America (the Participants) share a long history of partnership of fostering economic development formalized under the Economic and Technical Cooperation Agreement signed in Monrovia on February 3rd, 1956.

WHEREAS, the Participants seek to expand energy sector cooperation between their Governments and recognize the development imperative of addressing constraints to the delivery of reliable and affordable electrical power throughout Liberia;

NOW, THEREFORE, the Participants express the following intentions:

GOL Power Africa Intentions:

- 1. The GOL expresses its support for the Power Africa Initiative, which aligns with the GOL's five year development strategy -- the Agenda for Transformation. Through its participation in Power Africa, the GOL seeks to accelerate efforts to provide its businesses and citizens with access to clean, affordable, reliable electric power.
- 2. Accordingly, the GOL intends to make, *inter alia*, key policy reforms and structural changes with respect to the Energy Sector, including:

- Execution of catalytic, sustainable, transparent and non-discriminatory, but contextually relevant, reforms to spur rapid broad-based and inclusive economic growth.
- b. Allocation of adequate human and financial resources, subject to GOL revenue, to address known and emerging constraints throughout the power sector for domestic and external sources of power, including remediation of tariff and nontariff barriers to import clean electricity products.
- c. Implementation of appropriate policy and regulatory reforms and proposing legislation for enactment that modernize governance of the energy sector, increase the share of energy from renewable resources, and increase access through offgrid energy solutions.
- d. Implementation of legislative and policy reforms that promote gender equality and reduce gender disparities in the development and implementation of activities related to the power sector.

Specific Actions

- 3. Specific activities to be undertaken include:
 - (a) Passage of Electricity Law, and Creation of Energy Regulatory Function and Rural and Renewable Energy Agency (RREA). Improving energy sector governance with an immediate goal of submitting the Electricity Law pending receipt of comments from various partners. Among other significant issues, such new legislation, and the regulations which would be adopted pursuant to it, should clarify the roles and responsibilities of GOL agencies, address the market structure for electricity supply and service, and establish a regulatory function that adequately protects consumers and the utility company with international best practices for corporate governance, accounting, and transparency. Establish an autonomous RREA to promote access to modern energy services in off-grid rural areas of Liberia.
 - (b) Development of a Comprehensive Energy Sector Master Plan. Facilitating coordination of GOL and donor ongoing and planned interventions in the sector. The MLME confirms that it intends to use the Least Cost Power Development plan as the primary basis for a Master Plan for the electricity sector moving forward.
 - (c) Enhancement of the GOL's Capacity to Coordinate Energy Sector Modernization. Drawing on the expertise of embedded advisors in select government agencies, the GOL intends to put in place mechanisms for effectively managing Energy Sector modernization through enhanced interagency collaboration. By using its convening authority and drawing on expert support provided through Power Africa, MLME intends to put in place a mechanism which allows for broadbased, multi-stakeholder input into GOL planning and implementation of reconstruction and expansion of Liberia's power system, and supporting high-priority

transactions in the area of creation of mini and off-grid systems. Such a mechanism would allow for periodic meetings during which stakeholders would be updated as to the activities in the sector and progress on various projects and interventions and afforded an opportunity to provide their inputs and guidance.

- (d) Exploration of Options for Management Operations of the Liberia Electricity Corporation (LEC). Adopting a medium- or long-term management solution to promote LEC's emergence as a commercially and technically viable public utility. Toward this end, the GOL has already constituted a Donor Advisory Group on LEC, composed of the Ministry of Lands, Mines and Energy, LEC, Norway, WB, EU, USAID, and MCC, and the Group, with MCC leading the effort, has already commenced the process for obtaining recommendations and options for management of the utility going forward as well as requirements for donor support for the utility.
- (e) Expansion of Meaningful Private Sector Opportunities in Energy Sector. Recognizing the limited electricity market in Liberia at the moment, but looking forward to its expansion, reorganizing the operation of the electricity market to ensure a framework conductive to commercially viable private investment in generation, transmission and distribution.

USG Power Africa Intentions:

- **4.** The USG, through its ongoing development, financing, and energy programs, aims to continue to support GOL institutions responsible for the development and implementation of these policies, and intends to further seek to better align its programs, across all USG agencies, with GOL priorities.
- 5. As Liberia's energy sector modernizes, the USG, through the U.S. Embassy in Liberia, intends to consult with USAID, USTDA, MCC, DOE and other USG agencies on an ongoing basis to explore how additional U.S. Government resources can strengthen our government's engagement with the GOL under the auspices of Power Africa.

Specific Intentions:

- 6. In Liberia, the USG, through USAID intends to endeavor to provide an estimated \$10 million per year, subject to availability of funding, in support to the GOL energy sector in the form of energy sector assistance programs. The USG intends to continue to support GOL institutions responsible for the development and implementation of energy sector policies. Illustrative USAID activities include, but are not limited to:
 - (a) **Providing Capacity Building Support.** Improving energy sector governance by supporting the enactment and implementation of effective legislation and strengthening legal and regulatory institutions through technical support to the Ministry of Lands, Mines and Energy, the RREA and other agencies as

- appropriate. Supporting improved performance of the national utility company by reducing transmission and distribution losses, increasing key power sector institutional capacities and improving power sector planning, especially through capacity building within the Liberia Electricity Corporation and RREA;
- (b) Establishing pilot power stations. Promoting sustainable private investment in power through establishment of pilot power stations that demonstrate the economic viability of exploiting renewable energy resources with due attention to the environmental impacts, and the potential for replicating projects involving other donor initiatives and Liberian and international private investors.
- (c) Strengthening the Rural and Renewable Energy Agency (RREA). To effectively carry out its legislative mandates and responsibilities in the Scaled-Up Renewable Energy Program (SREP) funded by Climate Investment Funds and implemented through the World Bank and African Development Bank.
- (d) **Exploring Private Sector Opportunities.** Developing programs with the GOL to provide incentives to the private sector to invest in renewable energy in Liberia.
- 7. MCC and the GOL are in the early stages of developing a compact. Access to reliable and affordable power has been identified as a binding constraint to private investment and economic growth, and therefore the power sector is a probable area of investment under the compact. Pending Liberia's continued compact eligibility; MCC commits to engage with the GOL on project identification and development of energy sector investments. Specifically, MCC commits to exploring investment grants to address the following power sector needs during the course of compact development:
 - (a) Transmission and Distribution: Consultations with LEC, MLME, and other donors have indicated that there are limited opportunities for MCC investment in transmission and distribution within greater Monrovia, the Three Corridors and Mt. Coffee integration at this time. These projects are funded or planned to be funded by other donors, leaving gaps, some of which may be of a substantive nature. MCC intends to explore during due diligence the technical and economic viability of the unfunded projects, including GOL priority transmission and distribution and off-grid projects in other parts of the country, provided there is a rationale based on the medium and longer term requirements for the sector.
 - (b) West Africa Power Pool (WAPP) Second Circuit: The Least Cost Development plan identifies a second circuit that may be added to the Liberian portion of the Cote d'Ivoire-Liberia-Sierra Leone-Guinea (CLSG) interconnector, a leg of the West African Power Pool system. Currently, one 220kv line, with a capacity of 150 MW is being funded and Cote d'Ivoire has

committed to providing Liberia with 18 MW of capacity under a fixed 25-year commitment instrument priced at 13-14 cents per KwH. However, Cote d'Ivoire may provide additional electricity but based on a different price regime; the available additional electricity has not yet been disclosed. Already, Liberia is purchasing electricity from Cote d'Ivoire on a bilateral basis for border towns up to 8 MW capacity priced just below 15 cents for the next 20 years. MCC would explore the possibility of investing in the addition of a second line that would allow Liberia to import power beyond 150 MW to serve large power users in the mining industry and possibly to export power from future hydropower projects.

- (c) Connections. Current donor investment plans include support for 58,000 additional connections in Monrovia and the Three Corridors. LEC expansion plans call for a total of 90,180 connections leaving an unfunded gap of 32,000 connections. This connection forecast is based on outdated demand studies and may therefore not capture current demand. A gap identified by LEC is the need to conduct a demand study, which will allow LEC to update its demand projections (currently based on a 2008 study) and also understand the technical requirements, in terms of voltage, to meet that demand. MCC believes that this is a critical area for planning in the sector and for identifying future viable investments in the transmission and distribution sector, particularly outside Monrovia and would explore the possibility of investing in such a study. This study may also identify additional investments, which could be funded under a potential MCC compact with promising returns for economic growth and poverty reduction.
- **8.** The **United States African Development Foundation** (USADF) has announced the Off-Grid Challenge, jointly funded by GE and USAID, which is expected to award grants of up to \$100,000 to African companies and organizations to deploy renewable resources and power local communities.

General Terms and Conditions

- 9. The Participants intend to enter into one or more agreements for each project that would further describe the project and its implementation among the Participants.
- 10. The Participants intend to meet on a jointly determined and regular basis to discuss existing and new potential opportunities for cooperation and progress towards meeting the intentions expressed in this MOU.
- 11. The Participants intend to cooperate towards giving appropriate publicity to any cooperation provided.
- 12. This MOU is intended to become operational as of the date of signature by both Participants and is intended to remain operational through December 31, 2018, unless (i)

either Participant provides written notice to the other Participant of its intention to discontinue the MOU at an earlier time, or (ii) the MOU is extended by written consent of the Participants. Modification of the terms of this MOU should be made through a written modification signed by both Participants.

- 13. All potential actions of the Participants under this MOU are subject to the availability of funds. Nothing in this MOU should be construed to constitute an obligation or commitment of the Participants' funds; any such obligations or commitments are expected to be effected through separate agreements.
- 14. Nothing in this MOU should be construed as superseding or interfering in any way with any agreements or contracts entered into by any Participant, either prior to or subsequent to the signing of this MOU. This MOU is neither a binding agreement nor does it constitute a treaty or create any rights and obligations under international law, the laws of Liberia, or the laws of the United States.

Signed in Washington D.C.

FOR THE GOVERNMENT OF LIBERIA:

Patrick Sendolo

Minister of Lands, Mines and Energy

Republic of Liberia

Date: 8 H/14

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

Deborah Malac

V.S. Ambassador to, Liberia

Date

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

Andrew M. Herscowitz

Coordinator for Power Africa and Trade Africa

Date: 8/4