INITIAL ENVIRONMENTAL EXAMINATION (IEE) Amendment to the Power Africa Energy Program IEE for the Power Africa Delivery Units Component

Approval Document

PROGRAM/ACTIVITY DATA:

Program/Activity Number: AID-OAA-I-15-00001

Country/Region: Sub-Saharan Africa

Program/Activity Title: Delivery Units

Funding Begin: 2014 Funding End: 2019 LOP Amount: $15M

IEE Prepared By: Mariam Ubilava, Power Africa Environment Officer

Current Date: January 7, 2015

Expiration Date: December 31, 2019

IEE Amendment (Y/N): Y


ENVIRONMENTAL ACTION RECOMMENDED: (Place X where applicable)

Categorical Exclusion: X Negative Determination with Condition: X

Positive Determination: ___ Deferral: ___

PURPOSE AND SCOPE OF IEE AMENDMENT

This is an amendment #1 to the Power Africa Energy Program (Energy Program) Initial Environmental Examination (IEE) signed by the Bureau Environment Officer on April 17, 2014.

This amendment is specific to the Delivery Units component of the Power Africa Energy Program. This amendment serves several purposes:

- Expands the Delivery Units component beyond Eastern Africa to all of Sub-Saharan Africa;
- Adds two objectives to the Delivery Units component: (1) planning and technical support to the Office of the Power Africa Coordinator and Power Africa interagency teams at Post, and (2) reporting, research and analyses; and,
- Specifies a Life of Project (LOP) amount for the Delivery Units component.

As with the existing April 2014 IEE, this amendment provides a review of the reasonably foreseeable effects on the environment, as well as recommends Threshold Determinations for those activities that will be implemented under program.
All conditions, limitations and the stipulation for revisions established in the original IEE remain in full force throughout the life of the program, except as modified by this or any other IEE amendments.

Power Africa Delivery Units is a three year activity with approximately $15,000,000 LOP funding. The contract issued under this activity will provide technical expertise, analysis, management and consulting support to the host governments of at least the Power Africa focus countries to establish new or strengthen existing Delivery Units. Delivery Units will provide a platform for better alignment between host governments and companies, investors, donors, and civil society to accelerate the pace of reforms and improve governance in the power sector.

The April 17, 2014 IEE was approved before the President tripled the Power Africa goals and expanded the geographic focus to include potential activities in all of Sub-Saharan Africa. As a consequence, potential support from the Delivery Units activity is now also expanding to other parts of Sub-Saharan Africa, and this amendment is necessary.

Lastly, the Delivery Units initially included several anticipated objectives/activities:

• Identify and signal priorities across government and externally;
• Chase progress for results on government priorities;
• Provide a clear and easily understandable system for measuring progress and results;
• Hold government staff accountable to delivering on priorities and agreed upon targets; and
• Facilitate coordination and innovation across government.

Since the original IEE was prepared, the objectives of the Delivery Units component have been modified as follows:

• Planning and technical support to the Host Country Governments;
• Planning and technical support to the Office of the Power Africa Coordinator and Power Africa interagency teams at Post;
• Establishment and support of Delivery Units and/or Deployment of Policy Advisors; and,
• Provide reporting, research and analysis.

SUMMARY OF POTENTIAL IMPACTS OF THE ACTIVITIES, AND RECOMMENDED THRESHOLD DECISIONS AND MITIGATION ACTIONS:

The original IEE provided key background information primarily about the Eastern Africa region. To address the expansion of activities to other countries in Sub-Saharan Africa, the amendment considers environmental and other baseline information and host country regulatory requirements more broadly, as referenced in Section 2.0 of the attached annex. The modified Delivery Units activities were assessed in the context of this Sub-Saharan information and the recommendations for threshold determinations were developed. The original IEE set out that all activities were Categorically Excluded. Based on this more recent assessment it seems more prudent to recommend one of the activities as Negative with Conditions. The recommendation threshold decisions and mitigation actions for the Delivery Unit activities are presented in the table below:
<table>
<thead>
<tr>
<th>Activity or Activity Category</th>
<th>Recommended Determination and Recommended Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop and implement Delivery Unit Strategies and Implementation Plans for each of Power Africa countries; 2. Develop political economic analysis; 3. Provide technical expertise, analysis, management and consulting support to the host-country governments in ongoing efforts to identify and act upon opportunities to promote policy and regulatory reforms and advance transactions through Delivery Units (except where activities involving energy policy and regulatory reform that could detrimentally affect a host countries application of environmental and social safeguards); 4. Provide technical expertise, analysis, management and consulting support to the Power Africa interagency teams, the Office of the Power Africa Coordinator, and to the regional missions in East Africa and West Africa to support engagement with the host-country on policy and regulatory reform; 5. The implementing partner will evaluate progress and needs in countries; 6. Provide technical expertise, analysis and management and consulting support to the host-country governments and their Delivery Units, and/or the Policy Advisors; 7. Technical assistance to host-country governments and the Power Africa Interagency team to apply the findings of the Delivery Unit best practices in the local environment; and, 8. Provide quarterly and annual reports; final, country-by-country report on: 1) progress toward establishing/strengthening Delivery Units and/or placing advisors; 2) accomplishments of the Delivery Units/advisors themselves; and 3) progress on policy and regulatory reforms</td>
<td>For all activities, except activity 3, where activities involving energy policy and regulatory reform that could detrimentally affect a host countries application of environmental and social safeguards, a Categorical Exclusion is recommended for 216.2(2)(c)(2)(i) Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.) and 22 CFR 216.2(2)(c)(2)(iii) Analysis, studies, academic or research workshops and meetings. For activity 3, where promoting policy and regulatory reforms and advancing transactions could detrimentally affect a host countries application of environmental and social safeguards a Negative Determination with Conditions is recommended. The implementing partner will review the integrity of environmental and social safeguard processes as the policy and regulatory reform work proceeds, notify the Power Africa Team when issues are noted, and record the reviews in periodic reports already required by the contract. The Power Africa Team will assess reported issues and determine appropriate follow-up actions, which may include actions ranging from providing additional technical assistance and/or capacity building to ending the technical/transactional assistance to Delivery Units.</td>
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**SUMMARY OF GENERAL PROJECT IMPLEMENTATION AND MONITORING REQUIREMENTS**

All conditions and requirements of the 2014 Energy Program remain in full force. And as required by ADS 204.5.4, USAID Power Africa designated personnel will actively monitor and evaluate whether the program and its activities remain consistent with the approved environmental compliance requirements. If new or unforeseen consequences arise during implementation, the team will suspend the activity involved and initiate appropriate, further review in accordance with 22 CFR 216.

The amendment to the original Initial Environmental Examination is attached as an annex to this Approval Document.
APPROVAL OF IIE Amendment for Program Africa Delivery Units:

Approval:
PATA Coordinator: [Signature] Andrew M. Herscowitz

Date: [Signature]

Concurrence:
Bureau Environmental Officer: [Signature] Brian Hirsch

Date: [Signature]

Filename: (USAID/AFR BEO)

ADDITIONAL CLEARANCES:

Power Africa Environmental Officer: [Signature] Marian Ublava

Date: [Signature]

Program Office Team Director: [Signature] Hanna Jung

Date: [Signature]

Deputy Coordinator: [Signature] Karl Fickenscher

Date: [Signature]

OPTIONAL CLEARANCES:

Regional Environment Officer: [Signature] Diana Sharron

Date: [Signature]
INITIAL ENVIRONMENTAL EXAMINATION
Amendment for the
Power Africa Delivery Units Component

PROGRAM/ACTIVITY DATA:

Program/Activity Number: AID-OAA-I-15-00001
Program/Activity Title: Power Africa Delivery Units
Country/Region: Sub-Saharan Africa

USG Foreign Assistance Framework: Infrastructure

Period covered: 2014-2019
Life of Project Amount: $15M

1.0 BACKGROUND AND ACTIVITY/PROGRAM DESCRIPTION

1.1 Purpose and Scope of IEE

The purpose of this document, in accordance with Title 22, Code of Federal Regulations, Part 216 (22CFR216), is to provide a preliminary review of the reasonably foreseeable effects on the environment of activities under the Power Africa Deliver Units Contract (further referred as Delivery Units or the Contract), and on this basis, to recommend determinations and, as appropriate, attendant conditions, for these activities. Upon final approval of the IEE amendment, these recommended determinations are affirmed as 22 CFR 216 Threshold Decisions and Categorical Exclusions, and conditions become mandatory elements of Delivery Units implementation.

Power Africa Delivery Units is a three year activity with approximately $15,000,000 in Life of Project funding. The contract issued under this activity will provide technical expertise, analysis, management and consulting support to the host governments of at least the Power Africa focus countries to establish new or strengthen existing Delivery Units. Delivery Units will provide a platform for better alignment between host governments and companies, investors, donors, and civil society to accelerate the pace of reforms and improve governance.

This document is the amendment #1 to Power Africa Energy Program IEE that has been approved on April 17, 2014, http://gemini.info.usaid.gov/egat/envcomp/repository/pdf/39951.pdf. The IEE amendment has been requested to expand Delivery Units work throughout Sub Saharan Africa, add objectives, and list all potential interventions as well as provide threshold determinations for each activity.

This IEE is a critical element of a mandatory environmental review and compliance process meant to achieve environmentally sound activity design and implementation.
1.2 Background
The Power Africa Initiative (Power Africa) aims to unlock the energy potential of Sub-Saharan Africa (SSA) in order to accelerate economic growth on the continent. Power Africa has adopted a dual track approach to meeting its goals; focusing both on facilitating transactions to encourage private sector investment, while simultaneously supporting energy sector reforms to create an attractive environment for additional investment.

Power Africa aims to build upon and support the policy and regulatory reform momentum already in place in each of the Focus Countries. In support of these efforts, Power Africa intends to establish or strengthen existing Delivery Units, i.e. high-level government bodies situated in Head of State’s Offices or relevant Ministries, dedicated to facilitating policy and regulatory reforms.

1.3 Description of Activities
Power Africa Delivery Units will provide technical expertise, analysis, management and consulting support to the host governments of at least the Power Africa focus countries to establish new or strengthen existing Delivery Units. Delivery Units will provide a platform for better alignment between host governments and companies, investors, donors, and civil society to accelerate the pace of reforms and improve governance.

A Delivery Unit is a high-level government body situated in the Head of State’s Office or in a Ministry to coordinate and streamline efforts to: identify and signal priorities across government and externally; chase progress for results on government priorities; provide a clear and easily understandable system for measuring progress and results; hold government staff accountable to delivering on priorities and agreed upon targets; and facilitate coordination and innovation across government.

The Delivery Units activity will provide technical assistance to policy reform and related support to the Power Africa Coordinator’s Office; the USAID bilateral and regional missions in East Africa, South Africa and West Africa; and the USAID Africa Bureau in Washington, D.C. IP services will enable USAID, in coordination with Power Africa USG partners, respective governments, private sector, and international donors, to advance key reforms in the power sector.

In addition of supporting the creation or strengthening of Delivery Units and provision of policy support in Power Africa focus countries, this contract may involve providing similar technical assistance outside of Power Africa focus countries. The implementing partner will coordinate activities and ensure complementarity with the Senior Advisors Group (SAG) and Power Africa Transaction and Reform Program (PATRP), and other ongoing USG and donor technical assistance in the power sector.

Power Africa Deliver Units has four objectives:
1) Planning and technical support to the Host Country Governments;
2) Planning and technical support to the Office of the Power Africa Coordinator and Power Africa interagency teams at Post;
3) Establishment and support of Delivery Units and/or Deployment of Policy Advisors; and,
4) Provide reporting, research and analysis.
1) Planning and Technical Support to the Host Country Governments: The implementing partner will develop a standard methodology outlining their approach to the development of country-specific Delivery Unit strategies. The methodology will include consultation with the host country government and other relevant stakeholders from the private and public sectors, as well as research and analysis including a political economy analysis of the power sector and a gender assessment.

Illustrative activities include but are not limited to the following:

- Develop and implement Delivery Unit Strategies and Implementation Plans for each of the countries.
- Develop the specific approaches to be adopted in each country; specifying whether the recommended approach is to establish a Delivery Unit, strengthen an existing Delivery Unit, and/or place embedded Policy Advisors in government entities. The country-specific strategies will be vetted with the appropriate in-country stakeholders and the Power Africa interagency teams for review and approval.
- The Delivery Unit Implementation plans will articulate how the agreed upon strategy will be implemented.
- Undertake a “lab process” as part of their planning efforts to identify constraints, opportunities, and priorities to define the specific focus of a Delivery Unit or embedded Advisors in advancing energy sector policy and regulatory reform.

2) Planning and Technical Support to the Office of the Power Africa Coordinator and Power Africa Interagency Teams at Post: The implementing partner will work with the Power Africa interagency teams to support their contributions to the implementation of the country-specific Delivery Unit Strategies. Illustrative activities include, but are not limited to:

- Assisting the Power Africa Coordinator’s office and interagency teams in defining the strategic roles they may play in supporting the establishment or strengthening of Delivery Units. Power Africa’s role may involve offering technical assistance, funding, and/or political engagement.
- Supporting Delivery Units, this may involve policy or related transaction support to select projects in and outside of the Power Africa Focus Countries as required.

3) Establishment/strengthening and support of Delivery Unit and/or Deployment of Policy Advisors: Upon completion of the Delivery Unit Strategies and Implementation Plans, the implementing partner will, as appropriate, support the host-country government in strengthening an existing Delivery Unit or in establishing a new structure. This support may include engaging Delivery Unit funders, identifying and recruiting staff, developing Terms of Reference for staff, developing strategy and implementation plans, defining key metrics and results, and engaging external stakeholders to ensure buy-in and support for the objectives. In countries where the host-country government and the Power Africa Interagency team agree not to establish or strengthen an existing Delivery Unit, but to instead embed one or more Policy Advisors in relevant ministries or other government structures, the implementing partner will identify, recruit, and hire highly qualified candidates. He/she will be supported as necessary by the implementing partner and work in close collaboration with the Power Africa interagency team. In cases where Power Africa supported Transaction Advisors are working in country, the Policy Advisors must collaborate with the Transaction Advisor to ensure that policy and regulatory reforms advance private sector investment in the energy sector. In countries where Senior Advisors Group is actively supporting ministries or government entities, the implementing partner will facilitate
coordination between the Senior Advisor, Delivery Unit, and/or embedded Advisors are required.

4) Reporting, research and analysis: In addition to the research necessary to the development of the Delivery Unit Strategies, the implementing partner will conduct and disseminate research and analysis of best practices as needed to benefit Power Africa’s focus countries. The implementing partner will also perform mandated quarterly and annual reports based on a Monitoring & Evaluation framework. In addition, the implementing partner will provide regular progress updates on planning, outreach and implementation.

Activities in achieving each of these objectives will be mutually reinforcing to advance energy sector policy and regulatory reform. These objectives must be pursued in coordination with Power Africa’s complementary mechanisms, the Senior Advisors Group and the Power Africa Transaction and Reform Program.

The planned Delivery Unit activities are listed below:

1. Develop and implement Delivery Unit Strategies and Implementation Plans for each of Power Africa countries
2. Develop political economic analysis
3. Provide technical expertise, analysis, management and consulting support to the host-country governments in ongoing efforts to identify and act upon opportunities to promote policy and regulatory reforms and advance transactions through Delivery Units
4. Provide technical expertise, analysis, management and consulting support to the Power Africa interagency teams, the Office of the Power Africa Coordinator, and to the regional missions in East Africa and West Africa to support engagement with the host-country on policy and regulatory reform
5. The implementing partner will evaluate progress and needs in countries
6. Provide technical expertise, analysis and management and consulting support to the host-country governments and their Delivery Units, and/or the Policy Advisors
7. Technical assistance to host-country governments and the Power Africa Interagency team to apply the findings of the Delivery Unit best practices in the local environment
8. Provide quarterly and annual reports; final, country-by-country report on: 1) progress toward establishing/strengthening Delivery Units and/or placing advisors; 2) accomplishments of the Delivery Units/advisors themselves; and 3) progress on policy and regulatory reforms

2.0 BASELINE INFORMATION AND APPLICABLE HOST COUNTRY REQUIREMENTS

2.1 Locations Affected

Stretching 7,680 km north to south and 7,200 km from east to west, Africa is the second largest region in the world, accounting for 20 per cent of the world's land mass. Around 65 per cent of Africa is arid or semiarid, and the region experiences extreme variability in rainfall. Climatic regimes are roughly symmetrical around the equator, and are mirrored in the pattern of vegetation. Thus, dense tropical forests are found in the high-rainfall equatorial belt, with a gradient to both north and south, through savannas, grasslands and deserts. Approximately 20 per cent, 650 million ha of Africa's land is forest and around 45 per cent is characterized as extreme
deserts (1 274 million ha), and only 21 per cent (630 million ha) is suitable for cultivation (FAO 2001a, Reich, Numbem, Almaraz and Eswaran 2001, UNEP 1999a, FAOSTAT 2001).

Africa has abundant natural terrestrial resources and potential for economic, social and environmental development. Africa is rich with its biodiversity. However, there is a rapid habitat loss and overharvesting. In Western and Central Africa the main issues are deforestation and poaching of endangered species. In Eastern Africa, settlements and pasture lands in protected areas are big concerns. Overharvesting of medicinal plants is also the primary concern in Northern Africa. Africa's biodiversity protection has been a big issue and a lot of attentions have been paid for the last 30 years. Protection and conservation has been transferred to sustainable use of natural resources and sharing benefits among different stakeholders. Africa’s biological resources are being used to enhance economic growth opportunities, but sustainable use of resources, and proper management and utilization of those resources should be the main concept of the economic growth framework.

Forests and woodlands have played a critical role in the survival of human populations. They have been direct providers of shelter and food for people and their livestock, and of water, medicinal plants, building materials and fuel. But forests and woodlands also regulate our environment indirectly by slowing soil erosion, controlling run-off of rainwater and storing it, and regulating its release into our rivers and lakes. Globally, they help to regulate the climate and protect coastlines. Furthermore, forests and woodlands sustain many of our cultural, spiritual and religious values as well as playing an important role in the socio-economic development of industrial countries and being a vital resource for the socio-economic stability of developing ones. Loss of forests and woodlands therefore means loss of a vital resource and disruption of the socioeconomic activities they support. The emphasis in recent years on sustainable development has meant that the use of forests and woodlands has come under greater scrutiny in order to preserve a healthy resource base and sustain social and economic benefits.

The land and its resources are the cornerstones of Africa's culture and development. Pastoralism and subsistence agriculture are the traditional practices but commercial plantation agriculture has been promoted over the past 30 years, particularly in Western and Central Africa, as the foundation of economic growth. However, Africa's soils are not generally suited to cultivation, rainfall is variable in much of Africa and irrigation has been developed in only a few countries. Dependence on agriculture (in particular a narrow range of crops) has therefore had economic and environmental drawbacks.

National development policies and international trade agreements and/or restrictions have also affected agricultural development and natural resource quality. Soils and vegetation are being degraded largely as a result of increasing use of inorganic chemicals, reduction of fallow systems, increased monoculture, and cultivation of marginal areas. In Eastern and Southern Africa conflict between user groups over land and resources is the priority issue, resulting from competition between agriculture, pastoralists, and conservation areas, and from complex and inappropriate land tenure policies.

Desertification is another serious concern in Africa, particularly in the more arid zones where climate variability and poor land management practices combine to threaten the sustained productivity of soil and vegetation.
Land tenure reform, international cooperation, and integration of land resource management with development goals are required. Monitoring of climatic patterns and strategies to alleviate the pressures that economic growth places on terrestrial resources are additional priorities if Africa is to achieve sustainable development and protect its resource base.

Water: Africa lacks of availability and adequate quality of fresh water resources. Western and Central African countries have relatively abundant freshwater resources and fairly predictable rainfall. However, the distribution of human populations in these countries is such that the various user groups nevertheless experience difficulties and disparities in access to water resources. For example, the rural poor have to walk long distances to collect water for domestic consumption whereas agricultural and industrial users have access to subsidized resources.

Most other countries, particularly those in Northern Africa, the Horn of Africa, and in the Sahel, experience extreme variability and unpredictability in rainfall as well as frequent drought. User groups experience disparities in access to water resources, with Southern African countries showing the widest disparity in terms of both access and consumption.

Almost all African countries experience problems of water quality and are struggling to upgrade water treatment and wastewater processing plants. At present, large quantities of industrial and domestic wastewater are discharged untreated into watercourses and coastal waters and the resulting pollution poses a risk to human and aquatic life. Pollution of freshwater also compounds the existing problems of water availability by raising the costs of treatment and supply.

Reductions in rainfall (natural or induced through changes such as deforestation) also impact on infrastructure and urban development, particularly on electricity generation in many parts of Africa where hydro-electric power is well developed. Power shortages and poorly developed central power supplies contribute to deforestation by increasing the population's dependence on wood and charcoal for fuel.

Loss of natural habitat because of urban and agricultural sprawl contributes to declines in biodiversity, loss of economic development potential, and support for livelihoods. Endangerment and extinction of certain species (terrestrial, aquatic, and marine) put pressure on other resources as substitutes are sought to meet people's requirements. Changing patterns of resource distribution also affect life cycles of pests and diseases, and may in turn impact on human health, and crop and livestock yields.

Alien invasive plants cause changes to freshwater availability and alter the diversity and abundance of species within ecosystems. Aquatic weeds also change water quality by adding or removing nutrients and thus affect drinking water quality and human health.

Africa has rich and varied biological resources forming the region's natural wealth on which its social and economic systems are based. These resources also have global importance, for the world's climate and for the development of agriculture or industrial activities such as pharmaceutics, tourism or construction, to name but a few of the most important areas.

Although environmental issues above have been presented by sections, it is important to recognize that all of those sections are inter-linked. Deforestation and loss of vegetation cover increase the risk of soil erosion, which in turn impacts on aquatic and coastal ecosystems through
sedimentation and smothering of habitats. This reduces water availability and quality and contributes to coastal erosion, exacerbating the impacts of climate change on freshwater resources and of sea level rise. Deforestation also affects climatic conditions reducing rainfall and run-off at the micro level (thereby also impacting on freshwater availability and aquatic ecosystems) and contributes to global warming and its impacts at the macro level.

Persistent development challenges include low economic growth rates, fast deteriorating environmental conditions including decreasing forest cover, increasing poor agricultural practices leading to poor soil conditions, eroded ecosystems, and food insecurity with recurring food emergencies, and inadequate transportation and communications infrastructure. Others include, high population growth rates among the highest in the world to deficient social services (from poor water and sanitation to overburdened public education and health systems) and poor institutional capacities to deal with the increasing challenges.

Eastern Africa is a major repository of global biodiversity—in the arid lands of the Horn, in the oceans, in the lakes, in the closed forest ecosystems, and perhaps best known of all, the savanna mega-fauna (Stuart and Adams 1990). This region has high global priority and national opportunity for biodiversity conservation, as demonstrated in the large portions of land designated as protected areas and in the form of game reserves and national parks. Tanzania has almost 39 percent of its land area, Uganda has more than 27 percent of its land area, and Kenya has over 10 percent of its total land area as designated protected areas. The most recurrent problems in the Eastern African region that may be viewed as pertinent to all its countries include: recurring drought especially in the horn of Africa regions, but also in other parts of the region; conflicts in the region; Somalia war continues to foment extremism in the region; conflict in the Greater Lakes Region; and in the post conflict crisis in the Sudan; ongoing conflicts cause migration and displacement of people; high population growth; significant health challenges (HIV/AIDS, Malnutrition); and High poverty levels with over 40% of East Africans living on < $2 per day.

Due to a fast growing population in the region coupled and poor agricultural practices that have led to vast expansion of agriculture to the previously biodiversity conservation areas, the region is undergoing extensive habitat destruction, degradation, and severe depletion of wildlife, with serious consequences for biodiversity conservation on the continent. Biodiversity is defined here as variety of life forms, measured in terms of biomes, ecosystems, species, and genetic varieties and the interactions between them. Throughout the continent, biological resources are fundamental to human wellbeing: agriculture, livestock, logging, and fisheries.

**Climate Change**

Africa is extremely vulnerable to climate variability and temperature changes. The continent Africa is characterized by considerable extreme climatic events: droughts, floods and cyclones. It is likely that climate change will increase frequency of droughts and flooding, especially in those areas that are already vulnerable to weather extreme events. 1.5°C-2°C increase of temperature will contribute to increase of droughts and aridity that will result in 40-80 percent loss of cropland by the 2030s-2040s, increase arid and semi-arid areas, and loss of pastoral land – shifting from grass to woodland savannas. Changes may also occur on average annual precipitation – decrease of rain-fall in the northern Sahara and increase in East Africa. Global climate change will impact water scarcity and availability in Africa. It is expected 350-600 million population by 2050 to be exposed to increased water stress – water availability and accessibility. Water scarcity by itself will have implications on the agricultural sector. Some
African countries may experience loss of rain-fed crops and to be reduced by up to 50 percent by 2020. It is well known that climate change and natural disasters have high impact on vulnerable, poor population and small farmers. Therefore, with climate change, mostly, small scale farmers will be impacted as their crops depend on rain fall. This by-itself will impact food security, malnutrition and health, and especially increase risk of malaria.

Coastal areas and islands in Central and Western Africa are most vulnerable to sea level rise resulting from climate change. Coral bleaching due to sea temperature rise is the biggest threat to the Western Indian Ocean Islands and to the coasts of the countries of Eastern Africa. Impact on population will continue with climate change and sea-level rise. Africa has up to 320 coastal cities with 56 million people living in low elevation (<10m), coastal zones. With projected sea level rise, population living on these coastal cities will be affected. It will have implications on their socio-economic development. Sea-level rise could increase flooding, particularly on the coasts of Eastern Africa and possibly have implications on human health. It is also critical to consider changes in ecosystems and biodiversity that are followed by climate change in sub-Saharan Africa. Ecosystems are critical in Africa, contributing significantly to biodiversity and human well-being. With climate change and increase of temperature and droughts in sub-Saharan Africa, it is expected 25-40% of mammals to become endangered by 2050.

Africa's contribution to global GHG emissions is negligible, with the exception of emissions from South Africa and some countries of Northern Africa. However, deforestation, inappropriate coastal development, and poor agricultural practices and land management throughout Africa contribute to climate.

Rural areas of Africa consume wood, coal, oil, paraffin and other such fuels for domestic use that not only create unhealthy indoor conditions, but also contribute to GHG. Therefore, urgent action is required to develop alternative energy sources for Africa to avoid increasing GHG emissions and to stem widespread deforestation. One key uncertainty for Africa’s power sector is the impact of climate change on hydropower capacity and potential. Climate change could increase run-off and increase output from hydropower in East Africa, but decrease water run-off in parts of West and Southern Africa (Hamududu and Killingtveit, 2012).

2.2 Applicable Host Country Environmental and Social Laws, Regulations and Policies

At the moment, final determinations have not been made on which specific countries within Sub-Saharan Africa the Power Africa Delivery Units activity will be working. Therefore, in the Table 1, we provided a chart with a representative sample of countries’ environmental and social laws and policies where there is a potential for Delivery Units to work.

**Table 1. Host Country Environmental and Social Laws, Regulations and Policies**

<table>
<thead>
<tr>
<th>Country</th>
<th>Environmental Assessment Process</th>
<th>Land Ownership And Land Use Rights</th>
<th>Resettlement Policy And Regulations</th>
<th>Constraints On Development In Parks And Protected Areas</th>
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</tr>
<tr>
<td>Djibouti</td>
<td>Loi n°51/AN/09/6ème L portant Code de l’Environnement. Framework law promulgated in 2009 sets forth objectives of national environmental and sustainable development policy.</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Egypt</td>
<td>Law n°4 of 1994 for the Protection of the Environment: Environmental Affairs Agency (EAA): power projects subject to EIA.</td>
<td>No information</td>
<td>No information</td>
<td>Environmental Protection Fund (EPF) Law n°102 of 1983 Allows previously authorized activities in designed natural protectorate.</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Environment Proclamation 1996: framework for the protection of the environment and the enhancement of sustainable development.</td>
<td>Land Proclamation Act 1994: Land is owned by the State (art 3, comma 1) and may make such conditions for its use as it deems fit.</td>
<td>Unknown</td>
<td>Eritrea does not have a legal framework for the proclamation of protected areas, which are then managed under forestry law.</td>
<td>Environment Proclamation 1996: framework for water and coastal resources protection and management.</td>
<td>Environment Proclamation 1996: framework for protection of biodiversity and protected areas. Regulations not promulgated.</td>
</tr>
</tbody>
</table>
3.0 EVALUATION OF POTENTIAL ENVIRONMENTAL IMPACTS

Delivery Units will provide technical assistance and most of the activities do not have direct or indirect impact on human or environmental health. However, activities involving energy policy and regulatory reform may indirectly, but detrimentally affect a host countries application of environmental and social safeguards, particularly if reform efforts streamline or speed up energy projects to the extent that safeguards are not adequately addressed.

4.0 RECOMMENDED DETERMINATIONS AND CONDITIONS, INCLUDING GENERAL IMPLEMENTATION AND MONITORING REQUIREMENTS

4.1 Recommended Determinations and Conditions

**Categorical Exclusion is recommended** for activities 1-8, (except activity 3, where activities involving energy policy and regulatory reform that could detrimentally affect a host countries application of environmental and social safeguards) pursuant to 216.2(2)(c)(2)(i) Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.) and 22 CFR 216.2(2)(c)(2)(iii) Analysis, studies, academic or research workshops and meetings.

**A Negative Determination with Conditions** is recommended for activity 3 where promoting policy and regulatory reforms and advancing transactions could detrimentally affect a host countries application of environmental and social safeguards with the following conditions:
Implementing partners will be required to review the integrity of environmental and social safeguard processes as the policy and regulatory reform work proceeds, notify the Power Africa Team when issues are noted, and record the reviews in periodic reports already required by the contract. In consultation with the Regional Environmental Advisor and/or Bureau Environmental Officer of the Bureau for Africa, the Power Africa Team will assess reported issues and determine appropriate follow-up actions, which may include actions ranging from providing additional technical assistance and/or capacity building to ending the technical/transactional assistance Delivery Unit activity.

**Table 2. List of Activities and Threshold Determinations**

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<tr>
<td>1. Develop and implement Delivery Unit Strategies and Implementation Plans for each of Power Africa countries;</td>
<td>For all activities, except activity 3, where activities involving energy policy and regulatory reform that could detrimentally affect a host countries application of environmental and social safeguards, a Categorical Exclusion is recommended for 216.2(2)(c)(2)(i) Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.) and 22 CFR 216.2(2)(c)(2)(iii) Analysis, studies, academic or research workshops and meetings.</td>
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<td>2. Develop political economic analysis;</td>
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<td>3. Provide technical expertise, analysis, management and consulting support to the host-country governments in ongoing efforts to identify and act upon opportunities to promote policy and regulatory reforms and advance transactions through Delivery Units (except where activities involving energy policy and regulatory reform that could detrimentally affect a host countries application of environmental and social safeguards);</td>
<td>For activity 3, where promoting policy and regulatory reforms and advancing transactions could detrimentally affect a host countries application of environmental and social safeguards a Negative Determination with Conditions is recommended. The implementing partner will review the integrity of environmental and social safeguard processes as the policy and regulatory reform work proceeds, notify the Power Africa Team when issues are noted, and record the reviews in periodic reports already required by the contract. The Power Africa Team will assess reported issues and determine appropriate follow-up actions, which may include actions ranging from providing additional technical assistance and/or capacity building to ending the technical/transactional assistance Delivery Units.</td>
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<td>4. Provide technical expertise, analysis, management and consulting support to the Power Africa interagency teams, the Office of the Power Africa Coordinator, and to the regional missions in East Africa and West Africa to support engagement with the host-country on policy and regulatory reform;</td>
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<td>5. The implementing partner will evaluate progress and needs in countries;</td>
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<td>6. Provide technical expertise, analysis and management and consulting support to the host-country governments and their Delivery Units, and/or the Policy Advisors;</td>
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<td>7. Technical assistance to host-country governments and the Power Africa Interagency team to apply the findings of the Delivery Unit best practices in the local environment; and,</td>
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<td>8. Provide quarterly and annual reports; final, country-by-country report on: 1) progress toward establishing/strengthening Delivery Units and/or placing advisors; 2) accomplishments of the Delivery Units/advisors themselves; and 3) progress on policy and regulatory reforms</td>
<td></td>
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</table>

**4.2 General Implementation and Monitoring Requirements**

The implementing partner will be briefed by the COR on environmental compliance responsibilities; reporting requirements, if any; integration of environmental compliance requirements in work-plans and budgets; documentation coverage for new or modified activities; and, compliance with host country requirements.
All conditions and requirements of the April 2014 IEE remain in full force. And as required by ADS 204.5.4, USAID Power Africa designated personnel will actively monitor and evaluate whether the program and its activities remain consistent with the approved environmental compliance requirements. If new or unforeseen consequences arise during implementation, the team will suspend the activity involved and initiate appropriate, further review in accordance with 22 CFR 216.