

PUBLIC PROJECT SUMMARY

Screening: This Project has been reviewed against OPIC's categorical prohibitions and determined to be categorically eligible. The Project has been screened as Category A because its greenhouse gas emissions exceed 100,000 tons of CO_{2eq} per year.

Applicable Standards: OPIC's environmental and social due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following Performance Standards:

- PS1: Assessment and Management of Environmental and Social Risks and Impact
- PS2: Labor and Working Conditions.
- PS3: Resource Efficiency and Pollution Prevention
- PS4: Community Health, Safety and Security
- PS5: Land Acquisition and Involuntary Resettlement
- PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- PS8: Cultural Heritage

The Project has no known impacts on Indigenous Peoples. Therefore, P.S. 7 is not triggered at this time.

Consistent with the requirements of PS 3 (Resource Efficiency and Pollution Prevention) the Project is required to meet applicable provisions of the IFC General Environmental Health and Safety (EHS) Guidelines (April 30, 2007) and the IFC EHS Guidelines for Thermal Power Plants (December 19, 2008), Environmental, Health, and Safety Guidelines for Construction Materials Extraction (April 30, 2007), and to use best efforts to meet the EHS guidelines for Electric Power Transmission and Distribution (April 30, 2007).

Environmental and Social Risks and Mitigation: The major environmental and social issues associated with the Project are related to air quality, noise, biological or ecological issues associated with disturbance to the site, in particular mangroves that will be removed as part of construction, water supply or water discharge, the need for appropriate occupational health and safety measures to assure worker safety during construction and operation of the Project, and potential cumulative impacts due to the possible development of multiple power generation facilities in close proximity to the site.

The plant will initially run on Light Crude Oil (LCO), but also has the capability to run on diesel fuel and natural gas. Diesel fuel will only be used during startup and as backup in the unlikely circumstance that LCO is unavailable. Natural gas will become the primary fuel for the facility once available; however, the timing of natural gas availability is uncertain. As a result, impacts from the facility have all been evaluated using LCO, the worst case scenario. The LCO will be delivered by tankers to a Single Point Mooring (SPM) buoy and then transported to the site via pipeline to the existing VRA site. From the VRA site to the Amandi site the Project will construct a new 1 km pipeline.

The burning of LCO will result in emissions of NO_x, SO₂ and Particulate Matter. NO_x emissions will be controlled via a water injection system and the fuel used will have sulfur and ash contents low enough to meet IFC guideline limits for these pollutants. Ambient air quality modeling does not indicate any exceedance of Ghanaian standards. Nonetheless, baseline air quality data was not extensive and it is unclear if the existing plants adjacent to the site were operational during the sampling period. The facility will have continuous emissions monitoring to assure stack emissions meet IFC requirements for this type of plant and OPIC will require continued ambient air quality monitoring and mitigation if necessary to assure impacts are as predicted. CO_{2eq} emissions for the plant are estimated at 1.44 million tons.

Noise modeling was conducted to determine baseline noise levels and predicted noise once the power plant is operational. Noise levels are predicted to be within IFC requirements, with the exception of one receptor. Mitigation will be required for that receptor and noise monitoring will be required during operations to verify noise emissions meet IFC standards.

The site is bordered on the west by the Anankwari River. The river supports a mangrove forest of which approximately one hectare will be disturbed during construction. The Project will mitigate this impact by the planting of an additional 3.8 hectares of mangroves. OPIC will require a biodiversity management plan to assure the mitigation is effective. There is no other vegetation of ecological significance on the remainder of the site. The Anankwari River was also identified in the Environmental and Social Impact Assessment as sacred and locals have indicated the need for rituals prior to construction. OPIC will require consideration of these cultural sensitivities in the Stakeholder Engagement Plan.

The plant will have a dry cooling system in place to minimize water requirements. Water will be needed for NO_x control and plant operations and will be withdrawn from the ocean via a buried pipeline which will extend about 1.2 km offshore. Wastewater will also be discharged into the ocean via a treated effluent discharge pipeline which will run alongside the intake pipeline and extend about 600 meters offshore. OPIC will require monitoring of effluent discharge to assure it meets IFC requirements. The Project will require transport of fill and materials by truck to the site. A portion of the road goes through a densely populated area with both residences and businesses located close to the road. OPIC will require a transportation safety plan to assure consideration of these issues.

Cumulative Impacts for this project are an issue. The Project site is adjacent to three existing power plants owned and operated by the Volta River Authority (VRA), the government-owned energy supplier. VRA has plans for a fourth plant near the Project site. Additionally, three other independent power companies have plans to construct generation plants on sites adjacent to the Amandi facility. While the likelihood of all these projects going forward is uncertain at this time, total power produced in the area could be as much as 2,700 MW. The construction and operation

of a significant number of large generating facilities in a concentrated area may have cumulative impacts on traffic, impact air quality and noise, and result in other environmental and social impacts to the residents in the nearby town of Aboadze. OPIC will require that the developer use best efforts to coordinate with other developers in the area to minimize cumulative impacts and to coordinate monitoring of air quality and noise. Additionally, interaction with the local communities should be coordinated as well as any corporate social responsibility programs.

In addition to the mitigation described above, the Project will be required to provide OPIC with annual reports summarizing the Project's Environmental and Social Performance and demonstrating compliance with the IFC Performance Standards and industry specific guidelines. The Project will also be required to conduct an independent third party audit to show compliance with environmental and social covenants and to develop an Occupational Health and Safety Plan and Emergency Response Plan for both the construction and operational phases of the Project.

OPIC Site Visit: OPIC staff undertook an environmental and social due diligence site visit from March 24 through 27, 2015. Meetings were held with the Ghana Environmental Protection Agency (EPA), The Ghana Energy Commission, the Shama District Assembly, Chief and Elders of Aboadze, community representatives from Kwaku Anlo and Nyametease villages, and a local education NGO.

Community Consultations: Public consultation meetings have been ongoing for a number of years and are documented in the Project's Stakeholder Engagement Plan.