

STANDARD REQUIREMENTS FOR WINDPARK DEVELOPMENT
(A Ministry of Public Infrastructure Publication)

The Government of Guyana embraces the role for renewable energy resources – such as wind energy – to provide new electricity generation capacity within the context of the Green Economy. Accordingly, the Ministry of Public Infrastructure is undertaking a number of initiatives to provide the policy, regulatory and technical frameworks for the development of wind energy in line with international standards and best practice. The recently updated Study of Guyana’s Power Generation System Expansion identifies the role for up to 26 MW of wind energy generation capacity within the immediate future from 2017. With regard to the policy frameworks for renewable energy in Guyana, the Ministry of Public Infrastructure is currently in the process of updating the 1994 National Energy Policy under a Policy Steering Committee to provide the framework and strategy to guide the transition of Guyana to an economy that is energy efficient, low-carbon, based on cost-effective, indigenous renewable energy sources and provides for increased energy security. Interests in renewable energy development will be guided and supported within this framework. A draft of the updated National Energy Policy will be available by the end of 2016 and the policy will be finalized within the second half of 2017 by means of a consultative process of stakeholders.

Futhermore, and with respect to wind energy development, the Ministry of Public Infrastructure engaged an international expert in March 2016 to advise, inter alia, on the environmental, economic and technical issues, requirements and processes that would be necessary for a systematic and professional development of wind energy projects. The consultancy has resulted in clear guidelines and criteria for assisting project developers and all stakeholders (including government departments and agencies) to develop wind energy projects in a sustainable manner and according to international standards and best practice.

Overall, the policy, regulatory and technical frameworks are expected to facilitate the most socially, environmentally and economically sustainable projects as quickly as possible.

Consequently, the Ministry hereby outlines the main requirements, which are consistent with international standards, to be met by prospective wind energy developers in the preparation of their projects and which are necessary to lead to Power Purchase Agreement negotiations.

(1) Environmental Permit

The international standard for the safety distance between turbine and human dwellings requires a minimum of approx. 3 rotor diameters which is equivalent a noise level of 45 ... 50 dB(A), depending on the type of wind turbine.

(2) Building Permit

This is a legal requirement under the Town and Country Planning Act for the construction of any building including parks, or change of land use of engineering services such as provision of electricity services.

(3) Technical and Economic Feasibility Study (or Pre-Feasibility Study)

A full-fledged feasibility study arriving at a positive result. The study should indicate the construction, installation and operation and maintenance costs etc. Such a feasibility study must include the detailed planning of the grid connection of the wind park, as this always constitutes a major cost component. A project with unrealistic assumptions with regard to feasibility - if awarded a PPA by the public utility/GOG could result in a reputation loss not only for the Developer, but even more so, for the public utility/GOG.

(4) Certificate of the Manufacturer

The certificate must state that the manufacturer gives a minimum of full 20 years operation guarantee for the wind turbine to be supplied in the planned configuration (addressing, in particular, the turbine-to-turbine distance).

(5) Independently Measured Power Curve, a Noise Certificate and a Grid-Compliance Certificate

(6) Declaration of intended Off taker about the Ability of the electric Grid to absorb both the maximum instantaneous Power and the total annual Production from the proposed Wind Park

(7) Official Information about Project Financing (equity/loan ratio, name of financing institution, condition of loan, grace period etc.)