ENERGY AUTHORITY SURINAME

Consulting Services to Support Renewable Energy (RE) Tenders in Suriname

November 2024

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1. INTRODUCTION

The current document is the Inception Report of the assignment "**SU-L1055-033 – Support Renewable Energy Tenders in Suriname"** being carried out by **MRC Group of Companies, through MRC Spain (appointed lead firm)** for the N.V. Energiebedrijven Suriname (EBS, the electricity company) to perform the consulting services established in the respective contract.

The main objective of this consultancy is to support EBS in preparing templates and documentation for launching the first utility-scale Renewable Energy (RE) tender in the country. The specific objectives are to:

- Support in designing the RE tenders for solar, wind, and biomass energy.
- Draft the RfP and Power Purchase Agreement (PPA) for RE tenders.
- Strengthen the capacity of EBS and EAS in RE tenders.

As stated in the Terms of Reference, the assignment comprises five tasks:

- Task 0: Inception phase.
- Task 1: Review the existing literature and information provided by EBS and necessary to execute the consultancy.
- Task 2: Support in designing the RE tenders for solar, wind, and biomass projects.
- Task 3: Draft the RfP and PPA for RE tender.
- Task 4: Training and capacity building.

The present report corresponds to the Task 2 report, and also summarizes the results of Task 1 (which does not have an associated dedicated report) in Chapter 2. The heart of Task 2 is the development of the conceptual design of the auction mechanism, and in this sense this report is instrumental for the subsequent Tasks and includes a discussion on the reasoning behind the design choices made.

1.1 BACKGROUND AND OBJECTIVES

Suriname, located in northeastern South America, covers an area of 163,820 square kilometres, with a population of around 635,000 primarily concentrated along the coast. The interior regions, home to Indigenous and Maroon communities, are mostly accessible by waterways or air.

The country's energy sector is primarily served by the National Power System, comprising seven isolated power grids operated by EBS. The main system, EPAR, supplies energy to approximately 150,000 consumers across urban and rural areas, relying on hydro and thermal power, with Afobaka Hydro Power Plant and SPCS being the primary sources.

In addition to EPAR, EBS manages six other power systems along the coast, including ENIC, which serves the western region. These grids depend mainly on diesel-based thermal power for around 10,489 customers. In the interior, delivering electricity remains a challenge, with 132 isolated village systems reliant on small diesel generators operated by DEV.

Suriname is gradually transitioning to renewable energy. EBS has started installing solar systems in areas like Atjoni, Nickerie, and Coronie. Larger initiatives, such as the Upper Suriname project led by the Ministry of Natural Resources (MNR) in partnership with the IDB, EBS, and the European Union, aim to provide electricity to over 2,000 families in the Amazon hinterland through 10 renewable energy-powered mini-grids.

Private sector participation in renewable energy remains limited but present. The commissioning of a 5 MW solar plant in 2014 to support the Rosebel gold mine demonstrates potential for further involvement. Additionally, biomass feasibility studies highlight the country's steps towards diversifying its energy sources.

The energy sector operates within a solid regulatory framework under the Electricity Act and the Energy Authority Act, with the MNR and the Energy Authority of Suriname (EAS) guiding policy and regulation.

Suriname is preparing for an upcoming utility-scale renewable energy tender, a key step toward diversifying the energy mix. This consultancy will support EBS in its preparation for this milestone, aligned with Suriname's objective of building a sustainable energy future focused on practical implementation and regulatory stability.

MRC Spain is part of the MRC Group of companies, a family of ten sister companies that share a common history and operate internationally as a single organization, combining their human resources, technical skills, and geographical presence to better serve clients worldwide. MRC is focused on energy, water, and sustainable growth. PSR has over thirty years of experience and a highly international client base. PSR is a globally leading provider of advanced analytical tools and consulting services in electricity and gas; and an active contributor to applied research on cutting-edge optimization solutions, energy policy and power system economics. Altogether, the Consulting Team presents a strong experience in auction design and regulation, as well as extensive knowledge of different systems worldwide.

The proposed scope of services comprises four Tasks, namely (i) Task 1: review of existing international procurement procedures and the revision of the local legal framework, identified gaps and recommendations for setting the enabling environment for a competitive procurement framework, including the roles of energy sector's entities (the previous deliverable: Inception Report); (ii) Task 2 (this report): proposal of auction design, rules and guidelines; (iii) Task 3: initial proposal and design of PPAs and RfPs; (iv) Task 4: training and capacity building.

1.2 THE PRESENT TASK: CONCEPTUAL DESIGN

In the first task, the Consultants carried out a review of Suriname's local legal framework and of relevant international experiences, identifying gaps and recommendations for enabling an environment for a competitive procurement framework, including the roles of energy sector entities.

In this second phase, the Consultants will present the recommendations for the generation procurement procedures, protocols, rules and award mechanisms. All recommendations will be aligned with international best practices presented in Task 1, but always adapting the mechanism to Suriname's specific features.

The current report is structured as follows:

- A conceptual introduction regarding the fundamental choices of the auction model and the general proposal for Suriname is presented in Chapter 2.
- Suriname's background in relation to renewable energy potential, including preliminary directives on how to organize the auction itself, is presented in Chapter 3 (and complemented by the Annex as indicated below).
- The consolidation of the auction scheme (technology-specific auctions carried out sequentially or in parallel), definition of auction demand, and other related considerations are addressed in Chapter 4.

- Considerations on contract design, risk allocation, sovereign guarantees, off-taker creditworthiness, contract duration, and curtailment clauses are analyzed in Chapter 5.
- The auction timeline, qualification process, winner selection mechanism, along with bid bond and completion bond requirements, are detailed in Chapter 6.
- The main conclusions of the report are presented in Chapter 7.
- Chapter 8 is the Annex, with more detailed information on reviewed documents and conclusions covering renewable energy sources, including biomass, hydropower, solar energy, urban solid waste, and wind energy.

1.3 CLASSIFICATION OF DESIGN ELEMENTS

In 2015, the International Renewable Energy Agency (IRENA) published the Renewable Energy Auctions: A Guide to Design report. The report presents a framework for analyzing the design of renewable energy auctions and addresses the implications of different design approaches. The structure was later updated in a report published in 2019, Renewable Energy Auctions: Status and Trends Beyond Price. The framework divides the analysis into four different design elements, categorized as (i) auction demand, (ii) qualification requirements, (iii) winner selection process and (iv) sellers' liabilities. Each of these categories incorporates a number of bifurcated and inter-related design choices that must be made by policymakers seeking to implement an auction, and they serve as a helpful guide in the complex landscape of auction design to make sure that key elements are taken into account.

This does not mean that additional considerations cannot be taken into account, although sometimes those other considerations can be tied into the four categories mentioned earlier. In the current report, we have highlighted the definition of products and the auction timeline as additions to the main categories. The following figure summarizes IRENA's framework. It is worth highlighting that similar models are commonly used in the context of renewable procurement. For example, the Solar Risk Mitigation Initiative (SRMI) uses a similar rationale. This and other examples indicate that there is a general consensus for the steps and best practices for the good implementation of RE auctions, although there isn't a design that performs best in all cases – the design needs to be adapted for the system needs and challenges.

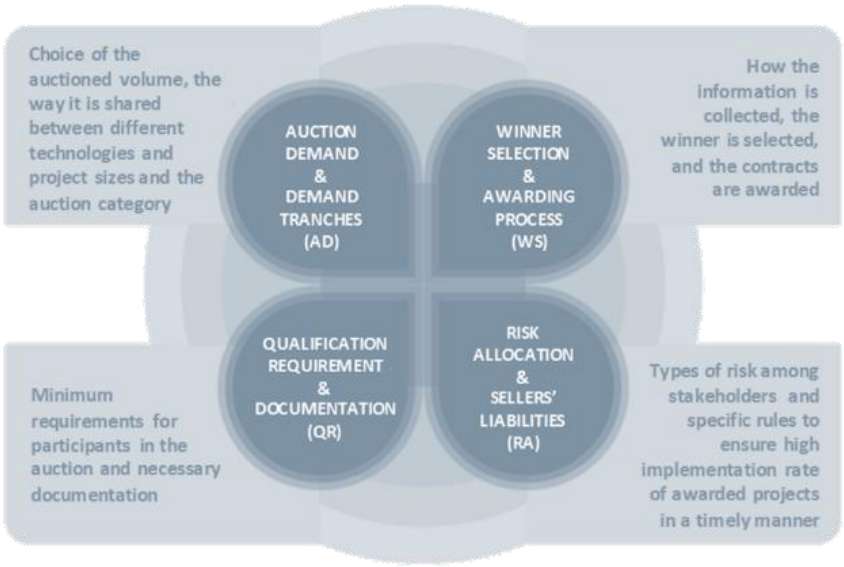


Figure 1-1- General framework for analyzing design choices of renewable energy auctions. Source: IRENA, 2019.

The design of the auction needs to meet the country's context and specificities. Therefore, it varies significantly across countries in many aspects, such as technology specificity, prequalification criteria and other relevant characteristics. Auction design elements and other external factors can have a high influence over the outcome of the auction performance (such as cost reduction, achieve high realisation rates, ensure security of supply and grid integration). It is therefore of crucial importance, in the scope of this work, to suggest elements suitable for a small-island power system of the Caribbean region. In chapters 3 through 5, each of the important drivers of the auction's design (according to IRENA's framework) will be addressed considering Suriname's context and particularities.

1) Definition of auction demand and products. An auction can either focus on a specific technology (technology-specific) or include multiple technologies (technology-neutral), with each approach having distinct objectives. Technology-specific auctions aim to support the deployment of a single technology at the lowest possible cost, providing greater certainty and visibility for short- and long-term investments. This certainty can help scale the upstream value chain and reduce the cost of capital, thereby lowering overall investment costs. In the absence of FiT or guaranteed remuneration schemes, technology specific auctions also enable the development of less mature technologies that may struggle to compete with more established ones. In contrast, technology-neutral auctions allow for competition between different technologies, awarding support to those that deliver the best performance. This approach tends to be more cost-efficient in terms of financial support, as it focuses on selecting the most least-cost combination across all technologies.

2) Auction process and qualification. The prequalification criteria set the minimum requirements for a participant to enter the auction. This goes from technical requirement to specific legal/financial conditions to be fulfilled by the bidders. Stricter qualification requirements generally lead to more reliable outcomes, reducing the risk of project failures and deterring high-risk investors. However, these stricter criteria can also create barriers for new entrants, potentially limiting competition in the auction.

3) Winner selection process. It can be either purely price-based or consider multiple factors. While price-only auctions are the most common method of bid evaluation globally, some cases have incorporated multi-criteria approaches. Price-only auctions do not capture the contribution of environmental objectives and the externalities associated with supported measures, which may lead to suboptimal outcomes. On the other hand, multi-criteria auctions can also lead to suboptimal outcomes if the different dimensions are not appropriately weighted. When tendering authorities include multi-criteria auctions, the results and overall performance are very sensitive to how these parameters are defined during the design phase of each auction.

4) Risk allocation and remuneration schemes. The payment received by the awardee can take different forms: a fixed price, a fixed premium on the top of the wholesale price, or a premium that varies with the price level (one- or two-sided sliding premiums). Auctioneers may also apply caps for both the premium level and/or the total remuneration (wholesale price plus support), creating hybrid solutions. The choice of the remuneration scheme influences the participants' bidding behaviour and, consequently, the final awarded prices, as well as the cost of the support scheme.

2. SURINAME BACKGROUND

2.1 ELECTRICITY LEGISLATION

Since 2016, the legislation of the electricity sector in Suriname is given by the Electricity Act and the Energy Authority Suriname Act. These laws were designed to update the electricity market with the aim to improve both the technical and financial performance of the sector, encourage private participation, and enhance the regulatory framework through the creation of the Energy Authority Suriname (EAS).

The following sections examine various issues identified within the current energy legislation: the Electricity Act, the EAS Act and other relevant legislation. Each issue is analysed, followed by proposed solutions to address these challenges.

2.1.1. ELECTRICITY ACT 2016

The Electricity Act 2016 is a comprehensive legislative framework designed to regulate and transform Suriname's electricity sector. The Act is pivotal in guiding the country toward a more modern, efficient, and sustainable energy system, reflecting international best practices and the global shift towards renewable energy.

The Act sets the stage for a significant overhaul of Suriname's electricity market, which has traditionally been dominated by state-owned entities. It introduces mechanisms aimed at increasing private sector participation, particularly in the generation of electricity from renewable sources such as solar and wind energy. By mandating competitive bidding processes for these projects, the Act seeks to foster a more competitive and diversified electricity market, reducing the country's reliance on fossil fuels and promoting environmental sustainability.

A central component of the Act is the Electricity Sector Plan (ESP), which must be prepared by the EAS and issued by the government every five years as a State Decree. The ESP is a strategic document that outlines the country's long-term electricity needs, focusing on generation, transmission, and distribution. It includes technical, economic, and financial projections, as well as strategies for reducing government subsidies and achieving cost-reflective tariffs. The ESP is designed to guide the development of the electricity sector over a 20-year horizon, ensuring that the sector can meet future demand in a sustainable and economically viable manner.

The Act also emphasizes the importance of integrating renewable energy into the national grid. It includes provisions for self-generation, allowing consumers to produce their own electricity and feed excess production into the grid. This initiative is particularly significant in promoting decentralized power generation and enhancing energy security in remote areas where grid connection may be limited or unreliable. The Act encourages the development of small-scale renewable energy projects, which can be a critical component of Suriname's energy mix, especially in rural and off-grid areas.

The Act delineates the roles and responsibilities of key stakeholders in the electricity sector. EBS, the state-owned electricity company, is designated as the single buyer of electricity for the national grid. This designation positions EBS as the central player in the sector, responsible for purchasing electricity from both state-owned and private producers and distributing it to consumers. However, the Act also introduces a level of competition by allowing Independent Power Producers (IPPs) to generate electricity, though their ability to sell directly to consumers remains restricted. This creates a controlled environment where private participation is encouraged but within the bounds set by the state.

One of the critical issues identified in the Act is the lack of specificity in the definitions and provisions related to renewable energy. For instance, while the Act recognizes solar and wind

energy, it does not explicitly define other renewable sources such as biomass (including rice husk), hydropower, and geothermal energy. This lack of clarity could lead to inconsistencies in how different types of renewable energy projects are treated under the law, potentially hindering their development. These definitions should be clarified to ensure that all forms of renewable energy are adequately recognized and supported.

Moreover, the Electricity Act defines a state-owned company as a company whose shares are entirely (100%) owned by the State. This definition presents two key issues: It is unclear whether a subsidiary of a state-owned company qualifies as a state-owned company and the requirement for 100% ownership is restrictive. A more suitable definition would be to classify a state-owned company as one in which the majority of shares is owned by the government or another state-owned company.

Additionally, one of key sets of provisions of the Act grant EAS the authority to request data and information from EBS and other sector entities. The current legislation does not give EAS explicit authority to prescribe definitions for the data it requests, which might be problematic for financial data. It is crucial that the cost data reported for tariff setting purposes exclusively represents costs from electricity activities. Currently, there is no assurance that this is the case.

Finally, the Electricity Act articulates the regulator's jurisdictional authority, by giving a strong and robust mandate but without a legal mandate to make tariff decisions. According to the Law, the role of EAS covers a remarkable set of responsibilities and tasks, but It does not include "tariff setting" or "processes and methodologies for undertaking tariff reviews". The definition of tariffs has not been transferred to the EAS, that currently has no prerogative to initiate revisions to the tariff system. With a new regulatory framework to be developed, opportunity exists to amend the Law and to change provisions that allocates tariff decision authority to the EAS.

2.1.2. ARTICLE 21 OF THE ELECTRICITY ACT: RE EXPANSION OF CAPACITY BY MEANS OF TENDERING PROCEDURES

Very relevant to this assignment is article 21. While the production of electricity from fossil fuels remains a matter for state-owned companies, article 21, para 1 of the Electricity Act states that the Electricity Company "shall" follow a public procurement process for RE expansion projects: utility-scale solar and wind generation projects shall be awarded through a public procurement process to bidders that will then become licensed producers.

The para 5 of the same Article states that the EBS is obliged to conclude a PPA (defined by the Law as "supply agreement") with producers who have a license for the production of electricity.

Within this framework, the role of the EAS is to supervise the process, while the EBS will be responsible for organizing and conducting the public tender and all preparing relevant documentation.

This article of the Electricity Act is clear: whereas non-RE expansion projects and hydroelectric power plants can only be awarded to state-owned companies, a competitive process is the rule for utility-scale solar or wind generation projects, apparently with no exceptions. For RE projects, tendering procedures will become the main way of entry into the market. Tying these new projects with appropriate long-term PPAs reduces, particularly in markets as the existing in Suriname, business risks for investors, facilitating international project finance.

It is therefore implicitly suggested by the legislation adopted in 2016 to reduce or stop unsolicited bids for RE energy projects, since engaging with all interested parties on various projects individually could potentially turn the competitive procurement mechanism ineffective discourage serious potential investors due to the high-risk involved in a market with limited output purchasers and may create perceptions of lack of transparency in the PPA's to be signed by these free-lance generators.

2.1.3. ENERGY AUTHORITY OF SURINAME ACT 2016

The Energy Authority of Suriname (EAS) Act 2016 establishes the Energy Authority of Suriname as the primary regulatory body responsible for overseeing the electricity sector in Suriname. The Act outlines the structure, powers, and responsibilities of the EAS, positioning it as a central figure in the implementation of the country's energy policy and the enforcement of the Electricity Act 2016.

The EAS is tasked with a wide range of regulatory functions, including the preparation and implementation of the Electricity Sector Plan (ESP), the supervision of compliance with the Electricity Act, and the provision of both solicited and unsolicited advice to the government and other stakeholders. The ESP, which is a key strategic document, must be updated every five years and serves as the blueprint for the country's long-term electricity development. The EAS's role in preparing the ESP underscores its central importance in shaping the future of Suriname's electricity sector.

A crucial aspect of the EAS's mandate is its authority to regulate and supervise all entities operating within the electricity sector, including the state-owned electricity company, N.V. Energie Bedrijven Suriname (EBS), and any Independent Power Producers (IPPs). The EAS has the power to conduct audits, enforce compliance with regulations, and impose penalties for non-compliance. This regulatory oversight is essential for ensuring that all sector participants adhere to the rules and standards set forth in the Electricity Act, thereby maintaining the integrity and reliability of the electricity supply.

The Act also emphasizes the importance of the EAS's financial and operational independence. It establishes a funding mechanism for the EAS that currently includes a levy of SRD 1 ct/kWh on the electricity tariff. This financial independence is critical for ensuring that the EAS can operate without undue influence from the government or the entities it regulates, allowing it to perform its duties effectively and impartially.

The EAS's organizational structure is carefully outlined in the Act. The Authority is headed by a Director and a Deputy Director, both of whom are appointed by the Minister upon the recommendation of the Supervisory Board. The Supervisory Board itself is composed of representatives from various sectors, including government ministries, academia, and industry, ensuring a balanced and diverse oversight of the EAS's activities. The Board is responsible for approving the EAS's budget, overseeing its management, and ensuring that it operates in accordance with the law.

However, the Act also presents certain challenges that could hinder the EAS's effectiveness. One significant issue is the limitation on the number of staff the EAS can employ. The Act imposes a cap of five employees, which may be insufficient given the wide range of responsibilities assigned to the EAS. This staffing limitation could restrict the EAS's ability to carry out its regulatory functions effectively, particularly as the electricity sector grows and becomes more complex. This limitation should be reconsidered to ensure that the EAS has the necessary resources to fulfill its mandate.

Another area of concern, as mentioned earlier, is the EAS's limited role in tariff setting. While the EAS is responsible for supervising the application of tariff methodologies, the final authority to set tariffs remains with the Government. This arrangement could undermine the EAS's ability to ensure that tariffs are set in a manner that reflects the true cost of electricity supply and promotes the financial sustainability of the sector. The EAS should be granted a more direct role in tariff setting, potentially through amendments to the Electricity Act and the EAS Act.

2.2 SINGLE BUYER PROCEDURE

In this complex and fragmented electricity infrastructure, the Electricity Act grants single-buyer responsibility to the Electricity Company.

In some countries, the single buyer model has been implemented as a first stage in power sector reform. In other cases, the single buyer model has been used to attract private financing of new generation capacity.

In the pure single-buyer model, the PPAs are signed between IPPs and the state utility, which acts as buyer. In extended single-buyer models, PPAs are also allowed between IPPs and private parties: the buyer of electricity can also be directly a large consumer or an aggregator of small users. In Suriname this is extended model is not possible though as the Electricity Law does not allow IPPs to sell electricity directly to eligible large final customers.

In a small economy with a small electricity sector, it is usual to eliminate the monopoly in generation (diversifying fuel sources by providing support for investment in renewable generation). IPPs own and operate power plants and sell their output exclusively to the utility, which buys electricity as agreed in a PPA. The spirit of this approach is confirmed by the Electricity Act.

The single buyer model introduces a layer of competition, since the buyer uses competitive bidding processes for renewable energy to allocate power purchase agreements, via auctions. The auctions approach has gained traction as a convergence component between liberalized and regulated systems, seen as added regulation for a liberalized system and as added liberalization for a state-owned regulated system (IRENA 2019). In the auctions approach, the risk for the construction and performance of renewable energy plants lies with the IPP contractors.

In the case of Suriname, article 10 para 3 of the Electricity Law states that the electricity company supplies purchased electricity to customers, ***"without prejudice to the right of the State to purchase electricity itself and to supply this via the national grid or other networks to the electricity company or to energy-intensive companies on special terms and tariffs"*.**

As noted above, the Law indicates that the government (or a specific ministry) may act as the buyer in PPAs, particularly for large-scale or strategic projects, to secure energy supply or to meet certain policy objectives. This approach - the possibility to have two "single" buyers: the electricity company and the Government - seems a reminiscence of the two old PPAs between the GoS and RGM and the PPA between SSPC and the GoS.

1. In the PPA with RGM, the GoS is acting as seller of electricity, and it commits to supplying an amount of electricity produced by the Afobaka hydropower plant. In this PPA, it is the Ministry the counterpart entity in a PPA, as seller.

2. Regarding the second agreement, the SPCS, as a generation company, has agreed to sell electricity to the GoS. In the PPA with SPCS, the GoS is acting as buyer of electricity.

While having more than one buyer from independent power producers is more feasible in liberalized markets, it is less common in regulated settings.

In particular, the involvement of a ministry or government entity, beyond the electricity company, as a counterparty in a PPA is generally limited to specific exceptional scenarios. In a modern electricity sector configuration, the role of the government is typically the policymaker and not a market participant. It's generally considered best practice for the government not to be a commercial participant to ensure transparency, competition, and efficiency in the market. The ministry or government's involvement as a direct buyer might be reserved for extraordinary circumstances, and even then, it should be transparent to avoid market distortions.

It is worth noticing that in a market where the level of fragmentation in the electricity infrastructure is limited, it is common to have only one single off-taker, typically a state-owned utility or a designated national electricity company, which buys electricity from IPPs and then distributes it to consumers. In countries with fragmented electricity infrastructure, such as Suriname, the shift towards a decentralized electricity market could result in a diverse and complex range of PPA structures.

Currently, the Electricity Law prevents IPPs from selling electricity directly to private end-customers. As the market further evolves and there's a growing emphasis on decentralized generation, this could change, potentially allowing IPPs to engage directly also with non-public consumers. Within the future landscape of Suriname's Electricity Supply Industry, the introduction of multiple sellers and buyers (public and private) for electricity generated by IPPs could become a reality. This scenario would enable an IPP to establish PPAs with various entities, each covering different segments of the power produced.

2.3 EXPANSION PLANS FOR GENERATION AND TRANSMISSION

The Electricity Sector Plan (ESP) is part of the energy planning process in Suriname.

The National Power System consists of seven isolated power networks served by N.V. Energie Bedrijven Suriname. The national electricity access rate is 90% with disparities and differences in terms of access for the urban and rural populations. In isolated and remote communities of the Hinterland, about 130 villages are being intermittently served with small diesel generators by the Dienst Electrificatie Voorziening (DEV), part of the Ministry of Natural Resources (MNH); responsible for rural electrification in the sparsely inhabited interior.

The results of unreliable electricity, or lack thereof, on rural productivity have been documented with impacts on income, employment, school enrollment and firm productivity.

In the country's interior, geographic distances, remote locations, low population density and limited infrastructure constitute obstacles. Electricity is scarce and, when available, expensive compared to the provision by the national grid. The lack of reliable provision hampers rural productivity.

Technical capacity is needed in the formulation of the ESP. EAS is benefitting from the technical support provided by the IDB that will support the implementation of energy reforms, including consultancy services for the elaboration of the Electricity Sector Plan 2024-2028.

The vision of the ESP shall align with the sustainable development paradigm. But renewable energy is being slowly introduced in Suriname. Several efforts and projects are contributing to improve the know-how in Suriname for implementing RE in off-grid projects to improve the quality service of electricity in rural communities.

With the Electricity Act, the Government has recognized that the diversification of the generation mix is required to diminish the dependence on fossil fuels and endorsed the growing trend for the adoption and use of more renewable energy technologies.

Article 8 of the Electricity Act establishes that at least once every five years, the government shall establish the ESP prepared by the EAS by State Decree, with a time horizon of 20 years. The ESP deals with the overall adequacy of the electricity supply system and the estimated demand for electricity.

Article 9 indicates that the ESP shall at least include a forecast of electricity consumption in the short, medium and long term, the planning of the needs for investments in production,

transmission and distribution capacity and a financial projection for the five-year period with an analysis of the options for reducing the governmental grants.

When implementing an ESP for a country or region, it's crucial to recognize that there isn't a one-size-fits-all solution. The specific configuration and components of the ESP and the subsequent studies may vary what matters most is achieving the desired outcomes.

The transition from planning to implementation has been identified as one of the most challenging aspects of power system expansion. Two essential gaps that may impact full implementation of the ESP and its objectives are:

- The lack of a Generation Expansion Plan, whose aim is to find the optimal plan for the construction of new generation capacity. The Generation Expansion Plan includes the detailed sequence of investments that need to be made over a defined period. While the ESP usually analyses and shapes demand and supply, and it incorporates a holistic assessment of available resources and opportunities for demand management into deriving a least cost combination of supply and demand side measures, the generation expansion plan focuses on supply only and in coordinated planning of generation and transmission facilities to provide cost economies.

- The lack of a Network Expansion Plan, aimed at strategically guiding the development and enhancement of the transmission and distribution infrastructure.

One of the primary challenges encountered in the implementation of an ESP is the often-unclear path for executing the proposed projects and investments. To address this challenge effectively, it becomes crucial to consider the requisite instruments necessary to facilitate the execution of diverse projects.

Experience has shown that the final step of obtaining legal status is problematic. In 2018, EAS drafted and submitted – with the support of Castalia Consulting - an Electricity Sector Plan 2019-2023 to the Government, but it was never subsequently issued.

3. RENEWABLE POTENTIAL IN SURINAME AND CONSEQUENCES FOR THE AUCTION DESIGN

3.1 OVERVIEW OF RENEWABLE TECHNOLOGIES AND POTENTIAL

A detailed assessment of renewable potential in Suriname was carried out involving a detailed assessment of various documents – the key takeaways from this analysis are presented in Annex 1 (chapter 8). Key renewable technologies addressed include (i) solar power, (ii) wind power, (iii) biomass (including rice husks, forestry, and urban solid waste), and (iv) hydropower.

While in practice the ultimate choice of technologies to focus on will be a decision of Surinamese energy policy, it is crucial to obtain an overview of relevant technical and economic parameters of the renewable energy sources that might be targeted by such an auctioning program (i.e. considering the estimated energy potential, cost-efficiency, and overall feasibility within Suriname's renewable landscape).

Solar power is one of the key technologies identified, with a very competitive price (likely to fall within the $100-$150/MWh range), that is likely to make it one of the more cost-effective renewable energy options for Suriname. Despite limitations on available land for large-scale solar farms, the high levels of solar radiation in Suriname make solar energy a feasible option, especially if carefully sited on already degraded or underutilized lands. The cost competitiveness and scalability of standard solar installations mean that they can play a significant role in expanding the renewable energy capacity, especially in areas where the availability of other renewable options is restricted.

Even within the "solar power" umbrella, it is possible to consider a number of variants (that could be explicitly spelled out in the auction):

- Floating solar technology could be targeted, with the goal of building new capacity explicitly on the Afobaka reservoir. Floating solar presents an innovative solution to use available water bodies, and while they tend to have larger costs to build the necessary structures they can achieve higher efficiencies due to cooling and reduce evaporation.
- Another route would be focusing on smaller-scale rooftop solar facilities. The scattered and small-scale nature of rooftop solar installations tends to imply higher installation costs and lower efficiency than the centralized version, but they can play a role in empowering communities and consumers while also avoiding land availability issues.
- Another possible variant would be solar combined with energy storage – a route which will be addressed in detail in section 4.6.

Onshore and offshore wind power options are another possibility. Wind energy is limited by the geographical characteristics of Suriname, where viable wind resources are largely confined to a narrow coastal strip. The associated infrastructure costs, including necessary reinforcements to deal with frequent flooding and soil instability, make wind energy – at least for the moment – an impractical option for the auction.

Wood biomass, despite having a potentially quite competitive price and a potential of around 8.5 MW even if limited to using residue from sawmills as fuel, is a technology that faces sustainability concerns. Large-scale reliance on wood could threaten Suriname's forests, leading to significant deforestation risks and environmental degradation, which outweighs its moderate energy potential and economic attractiveness.

Waste-to-energy has a comparatively high estimated price (approximately $350/MWh if the benefit from reducing the amount of waste to be processed is not translated into an explicit

payment), but is supported by the dual benefit of generating energy while addressing the solid waste management challenges of Suriname. Urban solid waste is an ongoing issue, and converting this problem into an energy asset provides a practical way to deal with limited waste management infrastructure. However, careful economic structuring will be required to make this option attractive for investment.

The use of rice husk as an energy source is another relevant route, with an estimated cost of around $180/MWh. This biomass resource presents a moderate but consistent potential of 5 MW, derived from agricultural residues, making it an effective solution for reusing waste from Suriname's rice production. Given the challenges with biomass transportation and logistics, the development of rice husk power generation requires strategic planning to control costs. Nevertheless, this technology is promising as it provides a renewable energy source while helping reduce agricultural waste.

Finally, small hydropower was considered but ultimately not recommended due to high costs and significant environmental impacts. The need for infrastructure that could disrupt sensitive ecological areas, limits its attractiveness. Historical projects have shown that even small hydro developments can result in significant land flooding and social impacts, making them unsuitable under current conditions where environmental sustainability is a priority.

To ensure the success of the renewable energy auction and the broader transition to sustainable energy, Suriname must aim for solutions that are economically feasible but also safeguard the country’s ecological heritage. Emphasizing both immediate practicality and long-term sustainability will help ensure that renewable energy expansion strengthens the national grid while supporting local communities and preserving environmental integrity.

3.2 CONSOLIDATING A TABLE OF TARGET TECHNOLOGIES

The main objective of this overview is the identification of promising renewable energy technologies for inclusion in a targeted auctioning process. At the core of an effective renewable energy auction is the selection of the technologies to be contracted. This decision not only reflects current market conditions but also strategically shapes the future energy mix. By specifying target technologies, it is possible to optimize the use of Surinamese natural resources and foster growth in emerging renewable sectors, paving the way for a diversified and resilient energy portfolio. Whether it's harnessing solar, wind, or biomass resources, each technology brings distinct advantages that contribute to a balanced energy landscape.

The scale of the projects is another critical consideration, directly influencing market dynamics and participation. Tailoring plant size requirements can open opportunities for a broad spectrum of developers, from local entities to large multinational players. Smaller capacity thresholds can promote distributed generation, community involvement, and local economic benefits, while larger plants offer economies of scale that can lower overall costs. Striking the right balance ensures that the renewable energy ecosystem is both inclusive and competitive.

As will be discussed later, price caps function as safeguards against excessive costs while maintaining attractive investment opportunities. Determining these caps requires a careful balance – setting them too low risks dampening participation, while overly generous caps may lead to overpayment for energy. These limits should reflect current technology costs, anticipated efficiency improvements, and a reasonable return on investment. An effective price cap ensures value for consumers without compromising the financial viability of projects, supporting long-term sector growth.

The decision to apply site-specific requirements introduces an additional layer of strategic planning. Defining locations for projects before the auction can help address critical infrastructure needs, mitigate grid congestion, or promote regional economic development. However, these

requirements can also increase costs and reduce competition by limiting developer flexibility. When applied thoughtfully, site-specific mandates can align renewable energy goals with broader socio-economic and environmental objectives, guiding investments to areas where they can deliver the most value.

The interplay between these parameters is what ultimately determines the success of the auction. A holistic approach that considers how each element influences the others is crucial. For example, the choice of technology can impact plant size requirements, which in turn influence viable price ranges. Similarly, site-specific requirements might shape technology choices based on the availability of local resources or existing infrastructure. Each decision should be guided by a clear understanding of how it will affect overall market dynamics and long-term policy objectives.

Each of the individualized parameters for each technology targeted by the auction can be broadly viewed in a "summary table", as exemplified below. Note that, in the case of a technology-specific auction, the Table would have only a single row, and that the table contains information on:

- Target quantity to be contracted
- Price cap for that specific technology
- Whether there are any further constraints, such as location

Table 3-1– Example of application of the necessary definitions for Suriname's renewable tenders.

Technologies	Target quantity (MW)	Price cap (US$/MWh)	Site-specific
Rice Husk	5.0	~180	Nickerie
Ground-mounted Solar	10.0	~100	Paramaribo region
Ground-mounted Solar	5.0	~110	Any coastal region
Onshore Wind	5.0	~120	Any coastal region

The example "summary table" above shows what auction parameters could look like in an auction which simultaneously contracts three different technologies (biomass based on rice husks, ground-mounted solar PV, and onshore wind). In practice, each of the parameters summarized in this table must be defined by the institutions responsible for the "auctioneer" role, taking into account market analyses, policy priorities, and global best practices, tailored to the Surinamese specific context and aspirations. Therefore, these specifications will be able to optimize the renewable tender in Suriname, fostering innovation, competition, and progress towards clean energy targets.

It merits mentioning, however, that most likely Suriname authorities will be interested in carrying out individual technology-specific auctions (rather than a simultaneous contracting of multiple different technologies as indicated in the example Table above). Nonetheless, it is possible to use this "summary table" structure to make a distinction between different "demand tranches" involving the same technology – as noted by the example table below, which includes two tranches for the solar technology distinguished by location. This topic will be explored further in section 4.1.

3.3 CONSOLIDATING KEY POTENTIAL TAKEAWAYS

The renewable energy landscape in Suriname offers several distinct opportunities, albeit with significant constraints that shape their viability for large-scale deployment. Consolidating the key potential takeaways from the analysis of various renewable technologies reveals both the strengths and the obstacles that Suriname must navigate to achieve a sustainable energy future.

Solar power potentially represents the most relevant opportunity for the short term. Suriname's high solar irradiation levels make solar power a reliable renewable source, the investment and operational costs of solar tend to be quite competitive in the current international conjuncture, and combined with the experience that private companies and electricity sector institutions already have with this particular technology. Solar power has a major advantage to be the main target of a dedicated auctioning program. While solar power plants tend to have relatively demanding land use requirements, the scalability and cost-effectiveness of standard solar typically more than make up for this potential limitation.

Another potentially promising aspect of Suriname's renewable energy potential is the effective use of agricultural and municipal waste for energy generation. Technologies involving waste-to-energy and rice husk biomass stand out as practical, albeit small-scale, contributors to the country's energy mix. Waste-to-energy provides a dual benefit, addressing urban waste management challenges while generating electricity, despite the high operational costs. Similarly, rice husk offers a sensible use of agricultural by-products, particularly from the rice sector, turning what would otherwise be residual waste into a valuable energy resource. These biomass options not only enhance the energy supply but also provide practical waste management solutions, representing a pragmatic use of existing materials without additional pressure on natural ecosystems.

Other technologies evaluated during this process, while also certainly feasible, tend to demonstrate more significant limitations, which have ultimately precluded them from immediate consideration for inclusion in Suriname's renewable strategy. Hydropower, for instance, possesses considerable theoretical potential, particularly with small-scale hydro projects, but comes with high environmental and social costs due to the flooding of sensitive areas and disruption of local communities. The lessons from past hydropower projects, such as Afobaka, underscore the risks associated with inadequate socio-environmental considerations, making it challenging to justify further large-scale hydro developments under modern sustainability standards.

Similarly, both onshore and offshore wind energy face notable challenges, with wind potential largely limited to narrow coastal strips. The combination of logistical difficulties, high infrastructure costs, and limited wind reliability makes these projects less attractive under current conditions. Moreover, soil instability and flooding risks during the installation of measurement masts point to significant foundational costs, which make wind projects economically challenging.

Floating solar and rooftop solar were also analyzed but found lacking in terms of viability. Floating solar technology, while innovative, would require extensive studies regarding environmental impacts on water quality and aquatic ecosystems. Rooftop solar, on the other hand, suffers from a high cost per unit of energy generated and lacks the scale necessary for meaningful contributions to the national energy supply, making it unsuitable for auction-based development.

Wood biomass, despite having some energy potential, has been deemed unsuitable primarily because of sustainability concerns. The potential impact on Suriname's valuable forest ecosystems is substantial, with the risk of accelerating deforestation and harming biodiversity. Given the growing international and domestic emphasis on forest conservation, it becomes clear that wood as an energy source cannot align with Suriname's broader environmental goals.

Moving forward, the primary takeaway is that Suriname's path to renewable energy integration must be strategically selective, focusing on practical, localized solutions that leverage the country's existing strengths without undermining its environmental integrity. Waste-to-energy, rice husk, and standard solar emerge as viable avenues that can contribute meaningfully to a diverse energy portfolio. They each offer a way to balance energy needs with environmental concerns and economic considerations, albeit on a moderate scale.

The analysis shows that achieving a sustainable energy mix in Suriname will require an approach that prioritizes realistic, community-focused projects rather than large-scale, disruptive technologies. Investments should aim for a gradual transition, capitalizing on the resources available without compromising the natural environment or imposing unsustainable financial burdens. By building on the most feasible renewable options and ensuring that socio-environmental concerns are at the forefront of planning and development, Suriname can effectively consolidate its renewable energy efforts to create a resilient, sustainable energy system.

In the dynamic landscape of renewable energy procurement, well-structured auctions are powerful instruments for driving innovation, cost-efficiency, and sustainable development. The success of these auctions depends on carefully calibrated parameters that shape the competitive environment and align with broader policy objectives. This section outlines key elements crucial to the design of Suriname's renewable energy tender, considering the aspects discussed in the sections above.

4. DEFINITION OF AUCTION DEMAND AND PRODUCTS

4.1 INDEPENDENT TECHNOLOGY-SPECIFIC AUCTIONS

In the dynamic landscape of renewable energy procurement, well-structured auctions are powerful instruments for driving innovation, cost-efficiency, and sustainable development. The success of these auctions depends on carefully calibrated parameters that shape the competitive environment and align with broader policy objectives. This section outlines key elements crucial to the design of Suriname's renewable energy tender, considering the aspects discussed in the sections above.

In the pursuit of sustainable energy development, the design of renewable energy auctions plays an important role in achieving a balanced and diversified energy matrix. One of the most fundamental choices when designing a renewable auction is defining its general strategy regarding the definition of technologies. There are many ways to go, but the most basic concept is whether to go with technology-neutral or technology-specific auctions.

Technology-neutral auctions do not specify the renewable energy technology to be used. Developers can propose projects based on any renewable energy source, allowing for competition across different technologies. This approach encourages broad competition between various renewable energy technologies, potentially leading to lower prices and promoting innovation across all renewable energy sectors. Technology-neutral auctions tend to result in the selection of the most cost-effective projects, regardless of technology, and offer flexibility for developers to choose the technology best suited to their expertise and the proposed site.

Despite these advantages, technology-neutral auctions present their own set of challenges. Comparing bids across different technologies can be significantly more complex and require more sophisticated evaluation methods. Without a careful design, these auctions might lead to a concentration in one or two technologies, potentially neglecting other valuable energy sources. Moreover, if a country has specific goals for particular technologies, technology-neutral auctions may not guarantee these targets are met.

Technology-specific auctions, on the other hand, focus on a particular renewable energy source, such as solar, wind, or biomass. In these auctions, the auctioneer predetermines the type of technology to be developed. This approach allows policymakers to support specific technologies that align with national or regional strategies, simplifying bid comparisons and enabling the meeting of technology-specific targets. It can also stimulate the growth of industry-specific supply chains and expertise.

However, technology-specific auctions are not without drawbacks. By restricting technology options, these auctions may reduce the number of potential bidders and limit competition. They may not always result in the lowest-cost energy option if other technologies could provide cheaper alternatives. Additionally, focusing on a single technology might limit cross-technology innovations that could benefit the broader renewable energy sector.

The choice between technology-specific and technology-neutral auctions depends on various factors, including policy objectives, market maturity, grid integration capabilities, and the desired energy mix. Some countries opt for a combination of both approaches to balance their energy portfolio and achieve multiple objectives. In practice, many auctions fall somewhere between purely technology-specific and fully technology-neutral. For instance, an auction might be open to multiple technologies but with separate categories or quotas for different sources, allowing for some technology-specific targets while still maintaining broader competition.

Based on conference calls with EBS and on the discussions carried out during the first Workshop of the project, the recommendation for Suriname is to adopt independent technology-specific auctions. Furthermore, due to the maturity of solar photovoltaic (PV) technology in Suriname, solar is considered the most viable starting point for renewable energy procurement in the country. The decision to auction solar energy first reflects its well-established role in global renewable markets and its specific advantages for Suriname, including lower costs, scalability, and suitability for rapid deployment. Solar energy has seen significant cost reductions over recent years, and Suriname is well-positioned to capitalize on these developments. By focusing initially on solar PV, the country can accelerate investment and begin meeting its renewable energy goals efficiently. The decision to start with solar energy does not preclude the future development of other technologies but rather acknowledges the maturity and readiness of solar PV in Suriname's energy landscape.

While solar energy will be auctioned first, other renewable technologies such as biomass and wind may also be targeted in their own independent auctions, ensuring that each technology is evaluated based on its unique characteristics. This technology-specific approach allows for a more tailored design that considers the particularities of each energy source, with each renewable technology operating under its own auction mechanism. For example, the parameters governing the solar PV auction may differ from those applied to wind or biomass energy. These parameters include everything from technical requirements and project size limitations to the financial and operational conditions that bidders must meet. By tailoring the auction design to the specific needs and characteristics of each technology, it is possible to ensure that competition within each category is equitable and focused on maximizing the potential of that resource.

One of the most critical aspects of the design of independent technology-specific auctions is recognizing the vastly different generation profiles associated with each renewable technology. Solar energy, being aligned with daylight hours, offers a predictable generation profile, making it a natural candidate for early procurement. Wind energy, on the other hand, can be more variable, depending on weather patterns and geographic location. Biomass offers more controllable and predictable generation but depends on the availability of organic material. Each of these generation profiles influence how the auction design should be structured to ensure a fair and efficient procurement process.

By treating each technology as an independent product, the auction design can be fine-tuned to reflect the realities of the specific resource being auctioned. This ensures that the unique benefits and challenges of each renewable energy source are adequately valued, leading to a balanced and sustainable energy matrix. For example, it would not be reasonable to compare a solar power project against a biomass-fired power project in terms of their $/MWh price alone, given that these two technologies have very different production profiles and ability to be dispatched by the system operator. However, two solar PV projects are typically much more comparable, since they share the feature of having a generation profile that is highly concentrated at peak daylight hours (even if the true profiles may be slightly different at different locations). By running independent technology-specific auctions, it is possible to value each technology based on their own merits and operational dynamics: focusing on cost efficiency and scalability (the case of solar) or valuing greater dispatchability or decorrelated production profiles, for example.

Through careful calibration of auction parameters, a competitive environment can be fostered that reduces costs while promoting innovation and investment in renewable energy. The result is an auction structure that not only meets the immediate needs of energy procurement but also contributes to the long-term goal of a resilient and sustainable energy future.

4.2 SITE DEFINITION: FLEXIBLE OR SITE-SPECIFIC

In a technology-specific auction, a key consideration is the approach to site selection. The auction can either specify the technology and allow participants to propose different locations, or it can

pre-define the site in a site-specific auction. In the latter case, the auctioneer determines both the exact location and the technology to be used. As a result, the auctioneer is responsible for identifying and evaluating potential sites, as well as securing the necessary site-related documentation for the project's development.

In the context of Suriname, specific recommendations can be made based on the characteristics of each renewable energy technology being considered. For solid urban waste, a plant size of 6.5 MW is planned in Paramaribo, making it ideal for a site-specific auction. This approach ensures that the necessary infrastructure for waste processing and energy generation is available and aligns with the urban nature of the waste feedstock. Similarly, the rice husk technology, with a 5 MW capacity planned for Nickerie, should also follow a site-specific approach, as the availability and proximity of feedstock are crucial to the project's success. Ensuring long-term access to rice husk supply in this location is key, alongside proper grid integration.

For standard solar, however, a technology-specific auction is recommended, without site specification. Solar projects offer flexibility in location, and allowing developers to propose sites anywhere in Suriname will foster greater participation and take advantage of the country's solar potential. This broader scope ensures more competitive bidding and supports Suriname's renewable energy targets. Lastly, for onshore wind, a site-specific auction in the coastal region is advisable. Wind energy's dependence on local wind patterns and the need for grid integration in a defined area make it essential to select a site that optimizes resource potential and connection to existing infrastructure.

By adopting this balanced approach - favouring site-specific auctions for technologies that require close attention to resource availability and logistics (such as solid urban waste, rice husk, and onshore wind), while using a technology-specific auction for more flexible resources like standard solar - Suriname can effectively meet its energy procurement goals. This tailored strategy supports both cost-efficiency and the broader renewable energy development goals, while ensuring the unique challenges and opportunities of each renewable technology are addressed.

For the site-specific auctions, the auctioneer should select at least a few options to be evaluated more in-depth among the most attractive locations in terms of resource potential. This should include an assessment of the maximum capacity that could be built in that particular location (associated with the size of the site and terrain features such as slopes and roughness) and an estimate of the amount of electricity that can be produced – ideally, based on direct renewable resource measurements. Then, it is important to analyze the ease of acquisition of the land, possible environmental and social constraints, and the cost of connecting to the grid. Based on this pre-analysis process, the auctioneer should select one or more candidate sites for the auction, having in mind the desired technologies and associated capacities, and making sure that the total expected amount of installed capacity to be built corresponds to the previously established demand target.

Note that the information that needs to be gathered must be sufficient to allow for a fair comparison of the candidate sites. The more options for the development of the project, the greater is the bargaining power in the negotiations. Additionally, having multiple alternatives for the project development also makes it possible to easily replace the site if negotiations get complicated. For cost reduction purposes, it is possible to carry out a simplified analysis of the candidates at this stage, as long as this does not compromise the transparency and efficiency of the site selection process.

For the site selected for the auction, it would be desirable from the project developers' standpoint to have access to at least the following documentation, which would reduce risks associated with the project development process (and it would make sense for the auctioneer to centralize the efforts associated with procuring these documents):

- Detailed information regarding the quality of the renewable energy resource on site, including historical measurement data. This data availability – and its trustworthiness – allows participants to plan their bidding strategy and submit competitive offers.
- Environmental permit, ensuring that the project development is possible and mitigating uncertainty during the project construction.
- Grid connection permit, including approval by the system operator that the project's planned capacity can be evacuated to the electricity grid. In case the grid connection implies additional costs, a detailed study of the impacts of the demanded amount in the transmission system and identification of possible needed reinforcements should be provided.
- Land use documentation based on previous negotiations with the landowners – either with a direct allowance to use the land (with proof of ownership) or an indication of any costs that the project developer would need to incur for site leasing or acquisition.
- A basic engineering project for the power plant containing suggestions on more detailed information regarding number, type and positioning of each equipment. This engineering project is rarely rigidly determined, allowing for some flexibility for bidders to propose revisions to the proposed project (and in some cases, for particularly simple technologies and sites, a simplified summary of the plant's physical characteristics can be used instead of the engineering project itself).

4.3 DEMANDED QUANTITY

Once the auction design is set, the first step of the auctioning process is to define the target amount of capacity to be contracted. By carefully evaluating demand dynamics, resource potential, transmission capacity, and system evolution, the independent technology-specific auction can be designed to optimally allocate renewable energy demand, supporting both market efficiency and the country's broader renewable energy goals.

The demand for each auction must be aligned with system planning and the desired evolution of the generation mix. This requires forecasting demand growth, evaluating the potential of different expansion technologies, and considering national or regional policies and goals. Additionally, the expected cost of each technology, both in terms of international benchmarks and local specifics, such as taxes, system charges, and the existing ecosystem of companies and professionals, must also be factored. This cost assessment helps ensure cost-effective procurement and reflects the value of the services provided by each technology to the energy system.

It is also important to assess the capacity of the transmission infrastructure in order to ensure it can accommodate the additional renewable energy and effectively meet the auction targets. This evaluation helps prevent bottlenecks in the grid and ensures that the energy generated can be efficiently delivered to where it is needed.

Furthermore, if demand growth is insufficient, the institution responsible for designing the auction should assess whether existing thermal power generation needs to be displaced to ensure adequate offtake for renewable energy projects. This decision should be consistent with the country's energy strategy and long-term sustainability goals.

Depending on these targets, an auction may either procure a large project or split the demand into multiple smaller projects or even multiple auctions over time. This phased approach offers flexibility to adapt to future changes in market conditions or system needs, allowing policymakers to adjust their strategies as new information becomes available. By setting capacity targets and site-specific characteristics, the auction process can more effectively ensure that renewable resources are effectively integrated into the grid. Site selection and analysis of renewable resource quality also play a key role in determining the success of the auction and in achieving the broader energy system goals. Additionally, the auction design may incorporate variable plant

sizes for each technology, allowing investors to propose project sizes within a specified range. This flexibility enables investors to tailor their projects according to their capacities and resources.

Another important aspect of the auction demand is whether to disclose the targeted amount or not, striving to balance encouraging robust participation while preventing coordinated bidding that could inflate prices. Given Suriname's relatively small demand for each renewable energy technology, providing transparency regarding demand targets could be more advantageous. This approach can help investors better understand market opportunities and foster a more informed and competitive bidding process.

Ultimately, strategies for managing information disclosure must be tailored to the specific market context, policy goals, and maturity of the renewable energy sector. A well-designed auction finds the right balance between providing enough information to attract diverse participation and preserving competitive dynamics that drive innovation and cost reductions. As the renewable energy landscape evolves, ongoing evaluation and refinement of these approaches are critical to ensuring that energy auctions remain effective tools for advancing renewable energy objectives, safeguarding consumer interests, and maintaining system reliability.

4.4 EXPRESSING AND DISTRIBUTING THE AUCTION DEMAND

Once an auction demand is estimated, taking into account all elements discussed in section 4.3, it is necessary to express it in a transparent way, so that potential bidders can plan accordingly. While there is some reasoning for expressing the auction demand as a target quantity of electricity to be produced (e.g. a total in GWh per year), in the context of technology-specific auctions (as discussed in section 4.1) it is often more straightforward to express the target quantity in terms of installed capacity, e.g. "15 MW of solar PV". This amount of total installed capacity can be more readily understood by the bidding companies, Suriname institutions, and the general public; and given that among projects of a given technology there us typically a relatively small level of variation in their production profiles and expected capacity factor this should not be a major issue.

It is important to highlight, however, that even if the contracted quantity is expressed in terms of MW of installed capacity, actual payments made throughout the plant's useful life ought to be tied to electricity effectively produced, as suggested by the price quoted in $/MWh. This is important to create proper performance incentives for the plant to maximize availability and electricity delivered to the grid. An important exception to this rule (i.e. situations in which the seller's remuneration is not directly proportional to the total amount of electricity delivered in a given period) involves special provisions in case of renewable curtailment, which must be addressed explicitly within the auctioned contract and will be addressed in more detail in section 5.3.

A final consideration is with regards to how the total auction demand could (and should) be split among different projects. For example, once the government decides that they wish to contract 15 MW of total solar capacity, should this correspond to a single large project, a handful of medium-sized projects, or several small projects? Of course, it is possible for policymakers to leave this breakdown up to the auctioning process itself – i.e. the more competitive projects will be contracted, no matter whether they correspond to three 5 MW projects or one 8 MW project plus one 5 MW project plus one 2 MW project. While this is good on paper, it creates the need for more complex rules for dealing with the possibility of mismatch between the auction's demanded quantity and the seller's supplied quantity. For example, if the auctioneer must choose between under-contracting capacity (e.g. contracting only 14 MW out of the 15 MW target) or over-contracting capacity (e.g. contracting 17 MW out of the 15 MW target) because the smallest unit available to complement the demand is 3 MW, what should it choose? What if there is a different 4 MW unit that, despite leading to an even greater level of over-contracting, is cheaper than the 3 MW unit considered?

In order to ensure transparent treatment, all of these rules for winner selection would have to be spelled out in the auction, increasing complexity at relatively little gain – seeing that, because generally economies of scale play a role, it is usually expected that larger projects will tend to be more competitive in the auction. For this reason, it seems more reasonable to "pre-select" not only the target total quantity to be auctioned, but also the target size of the plant to be contracted. Going back to our 15 MW of solar PV example, the auction demand could be broken down in several different ways, out of which we highlight some examples:

- One project to be awarded, with a capacity of 12 MW to 15 MW
- Three projects to be awarded, with a capacity of 4 MW to 5 MW each
- Two projects to be awarded, one with a capacity between 8 MW and 10 MW and the other with a capacity between 4 MW and 5 MW

Note that allowing some flexibility (i.e. a minimum and maximum capacity range) is desirable for the bidders' engineering project, but the above breakdowns make it very clear what is the expectation of Suriname authorities. It is even possible to add additional specifications (such as site specificity as discussed in section 4.2 or other qualifiers as introduced in section 3.2) to each of the target projects individually.

4.5 PRICE CAP AND DISCLOSURE

Price caps represent the system's maximum willingness to pay for the energy auctioned, acting as a key regulatory mechanism. The primary objectives of price caps include cost control, preventing speculative bidding, encouraging efficiency, and signalling market expectations. By capping bid prices, governments can ensure that renewable energy procurement remains within budgetary limits, preventing excessive costs for consumers and taxpayers. Furthermore, well-calibrated caps can push bidders to optimize their project designs and discover cost efficiencies.

There are generally two types of price caps: hard caps and soft caps. Hard caps establish strict upper limits on bid prices, where any bid exceeding the cap is automatically disqualified. While this approach provides clarity and strict boundaries, it can also be rigid, potentially discouraging participation if the cap is set too low. On the other hand, soft caps are more flexible, allowing bids above the cap to be considered, but often with penalties or reduced chances of selection. This approach introduces some flexibility while still maintaining overall cost control.

In an independent technology-specific auction, the price cap for each product must reflect the cost dynamics and risk profiles of the associated technology. For instance, technologies like solar PV and wind have distinct economic characteristics that should be reflected in the cap levels. Solar PV, with its relative maturity and declining costs of solar panels, might warrant a lower price cap. In contrast, biomass, due to its capital-intensive nature and fuel supply risks, could justify higher cap. Local conditions also play a significant role in determining the economic viability of renewable energy projects. Factors such as resource quality, land costs, and grid connection expenses must be considered when setting price caps. In mature markets with established supply chains, lower caps may be more appropriate, while emerging markets might require higher caps to attract investment and support market development.

Additionally, the deliverability of energy at different times and the ease of integrating various technologies into the existing grid infrastructure influence the price cap levels. Technologies that can reliably provide energy during peak demand periods or integrate seamlessly into the grid may justify higher caps. Conversely, technologies with intermittent or location-specific generation profiles might need lower caps to account for the additional costs related to grid management and integration. Price caps should also align with broader policy objectives, balancing cost efficiency with goals such as rapid deployment and local industry growth. Given the dynamic nature of technology and market conditions, it is essential to periodically review and adjust price caps to ensure they remain relevant and effective in achieving both economic and policy goals.

Another important design decision is whether or not to disclose the price cap to bidders before the auction. Full disclosure tends to increase transparency and trust, giving investors clearer guidelines for their offers. However, full disclosure might lead to bids clustering around the cap rather than reflecting the actual cost efficiencies, which reduces competition. On the other hand, keeping the price cap undisclosed introduces the risk that otherwise viable projects could be disqualified if they exceed the cap by a small margin, especially in cases where competition is limited. This can lead to undersubscribed auctions, where fewer projects are awarded contracts than planned, which could hinder the achievement of procurement goals.

Considering the balance of pros and cons, it is recommended that the price cap be disclosed to investors during the Surinamese auction (as shown in the "summary table" example from section 3.2). This practice, grounded in the benefits of transparency and efficiency, can help create a fairer and more competitive auction process that aligns with the long-term goals of sustainable development in the renewable energy sector.

4.6 ON THE POSSIBILITY OF TARGETING A STORAGE PRODUCT

One of the topics raised in discussions with EBS has been the possibility of targeting battery systems (or other storage technologies) in Suriname's auctioning program. While this is certainly a possibility, and definitely there is increased worldwide interest in this type of product, it is important to take into account the physical reality of Suriname and how it contrasts with other countries. It is important to highlight that the biggest use case for batteries is in "capacity-constrained" systems that have a hard time dealing with a peak demand at nighttime hours while at the same time having excess solar production capacity at midday hours.

Suriname's largest interconnected system, in contrast, is largely an "energy-constrained" system, and given the availability of hydroelectric power with a reservoir to smoothen out seasonal fluctuations it can meet the evening peak of demand with relative ease. Furthermore, Suriname still has a modest penetration of variable renewable energy, and therefore there isn't an excess of renewable energy that can be produced at a low cost and stored for later use. The greatest benefit of storage materializes when there is a large difference in the marginal value of electricity produced at different times – and therefore, if a diesel-fired generator is required to meet the demand at all times (whether at peak hours or at off-peak hours), the benefit of such a storage system will be limited.

Despite these setbacks, there are two prospective situations in which introducing battery systems in Suriname auctions might make sense. The first one is if there is a possibility of either decommissioning thermal generators or postponing new investments in thermal generators. In this case, the battery system is not there to take advantage of the price difference, but rather to implement peak shaving (avoiding an electricity shortage at peak hours). The second one is as part of a more ambitious project of scaling up renewable energy, which could involve solar jumping from a very low share of Suriname's electricity production to a much larger one – this is a possibility that needs to be taken seriously, as illustrated by the highlight from section 5.3.

In both of these cases, however, a strategy that seems more sensible, rather than purchasing battery systems directly, is to carry out an auction targeted at integrated systems including solar power and batteries (as introduced in section 3.2). Note that, while there is no evidence that there would be an immediate need for storage in Suriname for the reasons established previously, future auctioning rounds could implement a demand tranche targeting the implementation of battery systems along with their solar power projects[2], with explicit requirements on the "firmness"

[2] While it would be possible to have other sources represented jointly with batteries as well, solar power tends to be not only the most cost-effective option but also the technology that most benefits from storage systems.

and “dispatchability” of this joint system as a whole for operating the system. That way, it is possible to maintain the logic of a remuneration in $/MWh (as indicated in section 4.4) – noting that the baseline remuneration of a solar-plus=battery system must evidently be higher than in the case of a solar system by itself. There is international precedent for this type of hybrid unit design.

5. CONTRACT DESIGN AND RISK ALLOCATION

5.1 SOVEREIGN GUARANTEES AND OFF-TAKER CREDITWORTHINESS

A key consideration for the success of renewable energy projects is the creditworthiness of the off-taker, which plays a central role in enabling IPPs to secure financing and mitigate risks. In Suriname, EBS is the off-taker for new renewable projects under the framework of the Electricity Act.

As with many utilities worldwide, EBS faces financial challenges related to its debt levels and operational costs. Much of its investment in infrastructure and energy development has been financed through loans from multilateral institutions, such as the Inter-American Development Bank (IDB) and the Caribbean Development Bank (CDB). While these loans are facilitated by the government, they are ultimately transferred to EBS's balance sheet as liabilities, creating a significant financial obligation for the utility. This has led to some concerns about the company's ability to meet future obligations, particularly under PPAs, where consistent payment to IPPs is essential.

Given these challenges, payment guarantees become a critical consideration for renewable energy investors. Sovereign guarantees, in which the government guarantees EBS's payment obligations, are one of the most effective tools to reassure lenders and investors, as they provide a financial safety net in case the utility faces any difficulties. Sovereign guarantees can help ease financing conditions, making it easier for projects to move forward.

However, the International Monetary Fund (IMF) program currently in place in Suriname limits the government's ability to issue new sovereign guarantees. This presents a temporary hurdle, as many international investors and financiers rely on such guarantees to reduce risk. The IMF program is expected to conclude within the next year, at which point the possibility of offering sovereign guarantees could be reinstated. This will enhance the country's ability to attract foreign investment and facilitate project financing for renewable energy development.

In the interim, alternative financial instruments can be explored to mitigate off-taker risk and ensure that projects continue to attract investment. Potential options include:

- Multilateral Development Bank Guarantees: International financial institutions such as the IDB or CDB could provide partial risk guarantees to bolster investor confidence, particularly for larger projects requiring significant capital investments.
- Escrow Accounts: Establishing escrow accounts funded by the government or through partnerships with multilateral agencies could help ensure that payments to IPPs are made in full and on time, reducing the perceived payment risk.
- Structured Payment Mechanisms: Other structured payment arrangements, such as setting up letters of credit, may provide additional layers of security for investors while waiting for the return of sovereign guarantees.

EBS remains an essential partner in Suriname's energy sector, and its role will be critical in achieving the country's renewable energy goals. While certain financial challenges exist, there are positive prospects for strengthening the investment environment as the IMF program concludes. Looking forward, the combination of government support, multilateral partnerships, and innovative financial solutions will ensure that Suriname's energy transition is successful, with EBS at the centre of these efforts. As the government continues to enhance the financial frameworks and payment structures for IPPs, the country is well-positioned to attract significant investment and build a resilient renewable energy market.

5.2 CONTRACT DURATION AND INDEXATION

In the context of energy auctions, contract duration and indexation are very relevant aspects of the PPA, having a direct impact on the financing of projects and, consequently, the results of the auction. Long-term auctions can offer more predictability for generators and ease the credit and financing conditions from reputable institutions. Furthermore, in a system with no market to negotiate energy after the end of the contract, there is little sense in defining a term substantially shorter than the typical useful life of the project. In this sense, the Consultants propose offering 20 to 25-year contracts.

In terms of remuneration, the price should be established as a purely variable component defined in $/MWh. It is a common practice worldwide to allow for indexation to the USD exchange rate. This is because most materials and equipment are benchmarked in USD, and most loans from international banks are also made in USD. It is extremely important that the contract model explicitly defines a reproducible process for obtaining the indexation parameters used to calculate the price adjustment (including the data source, the type of average used, the period of time covered, and the frequency of recalculations).

In terms of price indexation, this is another factor that directly impacts financing conditions. Since most equipment and materials are benchmarked in USD, and loans from reputable international institutions tend to be made in USD, an indexation of the remuneration price to the USD exchange rate tends to ease negotiations and generally leads to better financing conditions. Therefore, the recommendation is to index prices to the USD in order to attract and maintain foreign investment. This approach ensures stability for international investors, mitigating risks associated with local currency fluctuations.

5.3 CURTAILMENT CLAUSES FOR RENEWABLES

Curtailment refers to the reduction in the output of a generator from its potential production, given available resources, typically due to external factors, such as transmission constraints, equipment failures, or resource availability deviations. While Suriname currently does not face significant curtailment issues, it is prudent to address this risk proactively in the renewable energy auction design. Curtailment is a crucial topic to consider in energy contracts, particularly long-term ones, as issues typically arise when the share of renewables in the generation mix increases. Incorporating well-structured curtailment clauses in the contract will ensure proper risk allocation and fair compensation for renewable generators.

Even though renewable energy sources generally have dispatch priority, high levels of renewable penetration can occasionally lead to situations where electricity demand cannot accommodate the full amount of available renewable electricity. In such cases, forced reductions in generation due to external factors are classified as curtailments. It is important to note that reductions caused by the generator itself, such as equipment unavailability, are not considered under this clause.

There are various approaches to managing curtailment risks. Some systems place all the risk on the buyer, compensating the seller based on expected dispatch during curtailment events. Others place the risk on the seller, providing no compensation if electricity is not delivered to the grid. A reasonable approach is to share the risk between the buyer and the seller. However, it is crucial to recognize that any risks borne by the generator will likely be reflected in their financial offer. Consequently, higher risks for the generator may lead to higher prices in the auction.

A risk-sharing strategy for curtailment can only be effectively implemented when renewable generators have priority dispatch and are assured that curtailment will only occur due to physical limitations in delivering electricity. This assumes that thermal generators will not be given priority over renewables unless justified by transmission system constraints.

One potential design for a risk-sharing mechanism involves setting a “curtailment allowance level”. Under this design, one party is responsible for curtailment up to this level, while the other party assumes responsibility for curtailment beyond this threshold. The first party may experience more frequent revenue reductions but faces a capped maximum loss. The second party, on the other hand, typically does not incur liabilities but is exposed to rare instances of extremely high curtailment, often due to planning faults.

Given these considerations, it is recommended to allocate curtailment risks between the buyer and the seller. This balanced approach can be effectively illustrated by the contract template from IRENA’s Open Solar Contracts initiative, which employs a similar risk-sharing strategy. For Suriname, the contract should outline the following provisions:

i. Which party is responsible for which component of curtailment risk (e.g. if the project developer assumes the risk of “small” levels of curtailment but is protected in case curtailment exceeds the reference allowance level, or on the contrary if the project developer is shielded from the risk of curtailment below the allowance level but not larger ones);
ii. The curtailment allowance level itself;
iii. The time period for aggregating curtailment events to determine if the threshold has been exceeded (usually one month);
iv. The method for calculating the renewable generators’ “counterfactual” output during curtailment events to determine compensation for curtailment beyond the allowance limit (typically using a moving average of similar hours with no curtailment); and
v. Any other particulars for handling curtailment events according to the contract rules (note that the contract should also include general provisions for conflict resolution).

6. AUCTION PROCESS

6.1 AUCTION TIMELINE

The following figure summarizes the general auction process and responsible entities. In this section, each step in the diagram will be further explained.

Figure 6-1 - Proposed general auction process and responsible entities

The auction process for Suriname should begin with a Strategic Design Phase (with the present ongoing project being a key contribution to this stage), where the overarching objectives and principles of the auction are established. This phase involves defining the capacity to be contracted and selecting the appropriate technologies. This strategic planning must also assess potential constraints, such as grid capacity and regulatory limitations, while aligning with Suriname's broader energy transition goals. The outcome of this stage is to ensure that the auction aligns with both the long-term strategic goals of Suriname's energy system and the immediate operational requirements, establishing a clear roadmap for subsequent steps.

Once the strategic design is completed, the Announcement and Expression of Interest (EoI) Phase follows. During this phase, that should last around one month, the auction is formally announced and all interested parties are invited to submit their Expressions of Interest (EoI). This process serves not only as a gauge of market interest, but also as an initial filter for capable participants. Concurrently, preliminary clarifications and adjustments can be made, enabling refinements to the auction design based on early feedback. By the end of this phase, the auctioneer should have a clear sense of the market landscape and the potential competition among bidders.

Simultaneously, the Design and Parameterization Phase begins. This phase could be as short as two to three months, and should focus on the preparation of detailed auction documents, including the Request for Proposal (RfP), technical guidelines, and qualification criteria. During this stage, the auction parameters, such as bid evaluation methods and criteria for selecting winners, are meticulously defined (answering any pending questions from the Strategic Design phase). The robustness of the design is critical here, as it determines the auction's efficiency and fairness. The documents must be clear, comprehensive, and leave no room for ambiguity, ensuring that all bidders have access to the same information.

After finalizing the auction design, the Publication of Auction Documents marks the start of the following phase. All auction-related documents are made publicly available, allowing potential

bidders ample time to analyze and prepare their proposals. Accessibility and transparency are key, and these documents should be easily available, ideally at no cost, to encourage broad participation. Wide dissemination through various channels, including industry platforms and events, can help attract a diverse range of qualified bidders. During this period, stakeholders can also clarify any uncertainties and finalize their strategies.

Following that, there is a Hearings, Feedback, and Revisions Phase, during which public hearings or sessions with stakeholders provide an opportunity for feedback on the auction documents. This phase is crucial for fine-tuning the auction process and addressing any remaining ambiguities. Incorporating input from potential bidders and other stakeholders ensures that the auction's final terms are fair, transparent, and widely accepted. Any necessary revisions to the process or documentation are made before the final bid submissions, fostering confidence and reducing the risk of disputes.

The Registration and Qualification Process follows. In this phase, bidders formally register and submit documentation, proving their technical and financial capabilities. It is usually at this stage that a "bid bond" is submitted (see section 6.4). The evaluation is thorough, filtering out unqualified bidders through rigorous assessments. The criteria applied during this stage typically include financial stability, relevant experience, and adherence to the project's technical requirements – ensuring that only competent participants move forward enhances the overall competitiveness and reliability of the auction. The evaluation criteria may also include elements like project viability, compliance with specifications, and environmental considerations, which can be assessed and translated into a verdict on whether the project passes or fails qualification. By the end of this phase, a vetted group of bidders is ready to advance to the more critical stages.

Once the qualification process is finalized, the Bid Submission Phase begins. During this phase, bidders submit their technical and financial proposals. The submission process must be clearly structured to guarantee fairness and confidentiality, with all bids handled securely. Depending on the auction's design, there may be multiple rounds of evaluation, starting with technical compliance and followed by financial assessment. A transparent bid opening process, possibly involving public sessions, adds credibility. Bidders who meet the technical criteria proceed to the financial evaluation, ensuring that only feasible and cost-effective proposals are considered for final selection.

The Bid Evaluation and Contract Awarding Phase may involve a more rigorous or thorough evaluation of the financial proposals (noting that the "technical proposals" were evaluated as part of the Qualification process) according to the auction's predefined winner selection criteria. Financial bids are then analyzed to determine cost-effectiveness, typically focusing on the lowest tariff or total project cost. The selection process is designed to be impartial, with results being transparently communicated. Once the winning bids are announced, preparations for the next stage and formalizing the agreements are made.

The Contract Signing Phase follows. The terms are finalized based on the pre-established contract model, implying that there is generally no room for negotiations of contract terms at this stage. The contract signing formalizes the commitments of all parties, ensuring that the project moves forward under clear and enforceable terms. This phase is vital for establishing trust and setting clear expectations, as the final agreements cover everything from project timelines to risk allocation and dispute resolution. Once signed, the focus shifts to the project's implementation, with all stakeholders clear on their roles and responsibilities. It is usually at this stage that a "completion bond" is submitted (see section 6.4).

Post-contract signing, the Monitoring of Construction Milestones Phase begins, which lasts until the project eventually comes online. Regular oversight ensures the project adheres to timelines, quality standards, and agreed benchmarks. This phase includes tracking key milestones such as success of the project in obtaining financing, construction progress, and commissioning of imported equipment. Proactive monitoring and timely interventions help prevent delays, ensuring

that the project remains on schedule. Communication between the developer, regulatory authorities, and other stakeholders is maintained, allowing for adjustments as needed to keep the project on track.

Finally, the project reaches its Commercial Operations Date (COD). Upon successful completion and passing all commissioning tests, the project begins operations, contributing to Suriname's energy capacity. The COD represents the achievement of the auction's objectives and the commencement of energy production under the contract terms, and typically at this point the project selected will begin a relationship directly with the system operator. Continuous performance monitoring post-COD ensures that the project meets its long-term operational goals and contractual obligations, thereby securing the benefits envisioned during the auction's initial strategic design phase.

6.2 Auction Day: Qualification and Winner Selection

In the auction design recommended for Suriname, we propose to carry out three key steps of the main flowchart of the auction timeline presented previously in a single day, which we refer to as the "Auction Day". Under this design, three crucial stages are conducted on the Auction Day: the Registration & Qualification Process, Bid Submission, and Bid Selection. These interlinked phases ensure that only qualified participants advance, that bids are properly submitted, and that the most suitable candidates are selected, ultimately reinforcing the integrity and competitiveness of the entire process. The Auction Day marks the culmination of extensive preparatory efforts and establishing the foundation for future project success.

In the Auction Day, each of the phases builds upon the preceding one to ensure that the most qualified, prepared, and competitive bidders are selected. As long as none of the processes involved is particularly complex (in particular, qualification and winner selection can be extremely thorough, involving detailed technical assessments by the staff of the Suriname institutions and potentially even running optimization models to determine the winning projects), it is quite reasonable to carry them out sequentially and in-person in this manner. By integrating these steps, the Auction Day ensures a fair, transparent, and efficient process that not only selects the best bidder but also solidifies the foundations for a successful project implementation. Each phase is indispensable, reinforcing the need for a comprehensive and well-planned approach that brings together qualification, submission, and selection in a seamless and effective manner.

Typically, the bidders must bring two envelopes, a Technical Proposal and a Financial Proposal, which will be opened sequentially.

- The evaluation of the Technical Proposal corresponds to the Registration & Qualification Process, where bidders must prove their eligibility to participate in the auction. During this phase, bidders submit documentation to demonstrate their technical, financial, and operational capabilities, ensuring they are sufficiently prepared to execute the project should they be awarded the contract. The auction rules ought to establish a list of required documents (see section 6.3) that must be submitted, and if the Technical Proposal is compliant with these requirements the bidder will be qualified for the next stage.
- The opening of the Financial Proposal corresponds to the Bid Submission phase. Here, qualified bidders formally present their financial and technical proposals in accordance with the guidelines outlined in the auction documents. Because in the Auction Day model bidders are present in person, this is a simple process – but it's important for the financial bid envelopes to remain sealed throughout the Registration & Qualification Process to ensure transparency.

The Bid Selection process corresponds to the comparative assessments of the Financial Proposals in order to determine the winners. According to the mechanism proposed in section

4.4, there should be a single winner for each demand tranche (broken down into more or less specific projects), and therefore the process is quite straightforward – it can be carried out by simply comparing the bid prices in $/MWh and choosing the cheapest one(s). This approach is possible because projects bidding on the same demand tranche are relatively comparable, as addressed in section 4.1 (they are even more comparable in the case of site-specific auctions as discussed in section 4.2), and taking into account that all contracts are awarded with the same duration and indexation rules (see section 5.2).

In case there are any other criteria that will be considered in winner selection (such as a “grading” of the technical proposal, the perceived feasibility of the project timeline, other considerations on “value added”), this should be made explicit and unambiguous in the auction documents. Furthermore, the auction documents also ought to establish what happens in case of a tie (i.e. if two bidders submit exactly the same price) – usually involving the description of a random process that can be carried out in person in the Auction Day.

The selected winner is awarded a contract at the price submitted in the winning bid, a process known as a "pay-as-bid" auction. The result is that, at the end of a single day, the key steps of the auction process itself have been finalized – it is possible to return the bid bonds of bidders that were not successful, collect the completion bond of the winning bidder, and move forward to the contract signing stage. Note that, if the winner fails to sign the contract within a reasonable timeframe, the bid bond is forfeited (a mechanism that must also be spelled out in the auction documents). Upon contract signing, the winner is expected to proceed with the development of the project.

6.3 QUALIFICATION CRITERIA

The qualification process outlines a set of mandatory requirements that must be met by each bidder for their offer to be considered valid. If a bidder fails to meet these requirements, their financial proposal will not be opened, as they will be deemed incapable of delivering the required services. This approach is crucial for filtering out bidders who lack the necessary qualifications, ensuring that only those with the appropriate capabilities advance to the final stages of the auction. The qualification criteria aim to ensure that only capable and reliable bidders participate in the auction, thereby reducing the risk of project delays or failures.

The consultants’ recommendation is to implement a simplified qualification phase based on clear go/no-go decisions for each of the key requirements. In this proposed model, bidders would need to conclusively demonstrate their technical and financial capabilities to proceed. By setting clear and enforceable qualification criteria, the auction design can minimize the risk of speculative or underqualified participants, which has been a recurring challenge in auction frameworks globally.

Qualification requirements typically fall into three main categories: financial, technical, and legal capabilities. These criteria are essential not only for screening participants but also for enhancing the credibility and bankability of the projects awarded. Striking a balance between stringent requirements that ensure reliability and more flexible criteria that encourage broader participation is crucial. Overly strict requirements might discourage smaller or newer players, limiting competition, whereas more relaxed criteria could lead to higher risks of project non-completion or speculative bidding.

With the above considerations in mind, the Consultants propose the following list of basic requirements:

- Submission of a Completed Confirmation Form: The bidders must submit a simplified form confirming their acceptance and understanding of the project’s characteristics, as outlined in the auction documents. This form ensures that all participants are fully aware of the project’s requirements before proceeding.

- Proof of Past Project Development Experience: While not mandatory, demonstrating relevant past experience is a strong indicator of reliability. Bidders should submit a sworn statement detailing previous projects of similar scale and technology, including contact information for validation. As a threshold, bidders must show that they have successfully developed at least two similar projects with a total installed capacity equal to or greater than the capacity being auctioned.
- Minimum Net Worth Requirement: A minimum net worth proportional to the total project capacity, often set at approximately 100 US$/kW, should be demonstrated. This requirement enhances the financial credibility of participants and reduces the risk of speculative bids.
- Submission of a Bid Bond: As part of the qualification process, bidders must provide proof that they have secured the necessary bid bond, as outlined in the auction's financial guarantees. This bond serves as a commitment to proceed with the project under the specified terms if selected as a winner. It will be further detailed on section 6.4.
- Preliminary Permits and Licenses: Although final versions of permits, such as grid access and environmental licenses, are not required at this stage, bidders must demonstrate that they have already initiated these processes. Winning bidders will be expected to finalize these permits post-auction.

The qualification process, validating agents' documentation, can be carried out in a pre-auction step or in the auction day, just before the opening of the financial bids and winner selection. In the context of Suriname, the proposed design is of a qualification process in the auction day. Even though it would be possible to carry out a more thorough process in which Suriname institutions are responsible for assessing bidders' financial, technical, and legal qualifications over a longer period, we believe that this design (with an expedite validation of submitted qualification documents) is more suitable for Suriname.

6.4 BID BOND AND COMPLETION BOND

A bid bond is a financial guarantee that reflects the bidder's commitment to participate in the auction and, if selected as the winner, to sign the awarded contracts. Typically, this bond is submitted alongside the other required documentation during the qualification phase (as outlined in section 6.3).

If a bidder does not win the auction, the bid bond should be automatically and immediately refunded. For winning bidders, the bid bond is often replaced by a completion bond, which is usually higher in value and represents the winner's obligation to construct the project and supply electricity under the terms of the auctioned contract. If the auction winner fails to submit the completion bond and, consequently, does not sign the awarded contract, the bid bond is forfeited. Similarly, the completion bond may be partially or fully forfeited if the bidder fails to fulfil their commitment to build the project.

Higher bond amounts provide stronger financial incentives for participants to honour their commitments; however, they also raise the costs for bidders (even if the bonds are eventually refunded), which may impact the competitiveness of the auction. In practice, bid bonds in international renewable energy auctions are typically around $10/kW, while completion bonds are closer to $50/kW, although there is significant variation.

7. CONCLUSION

In this report, associated with Task 2 of the “Consulting Services to Support Renewable Energy (RE) Tenders in Suriname” project, the Consultants have presented a set of recommendations for the generation procurement procedures and protocols to be implemented in Suriname. All recommendations were supported by an extensive list of international experiences presented in the Inception Report and adapted to the Surinamese reality and context.

The proposed auction design is based on a technology-specific approach, tailored to the distinct characteristics of solar, wind, biomass, and. Solar energy is prioritized in the initial stages due to its maturity and cost-competitiveness, while biomass and contribute to a diversified and sustainable energy mix. These technologies are recommended based on their potential to meet Suriname’s long-term energy needs, ensuring a balance between reliability, sustainability, and cost-efficiency.

The report also discusses the site selection: flexible (technology-specific only) or site-specific auctions. The recommendation is of a hybrid approach: solar energy is best suited for technology-specific auctions, allowing developers the flexibility to select optimal sites, while biomass and projects benefit from site-specific auctions due to resource proximity and logistical factors. The auctioneer should ensure that site-specific studies, permits, and documentation are in place, especially for biomass and waste-to-energy projects.

The definition of demand and price cap for each technology is also critical. The report emphasizes that demand should be aligned with the projected growth in energy consumption, the phase-out of conventional energy sources, and the national energy targets. Price caps, in turn, should be reflect the cost structures and risk profiles of each renewable technology, providing fair but competitive pricing signals for investors.

In terms of contract duration and indexation, the Consultants recommend long-term contracts of 20 to 25 years to enhance financial predictability. Additionally, contracts should be indexed to the U.S. dollar, given the reliance on international financing and the need to mitigate currency fluctuation risks. This should help attract newcomers and possibly foreign investors, improving the competitiveness of auctions – ultimately leading to lower awarded prices and, consequently, lower costs for final consumers.

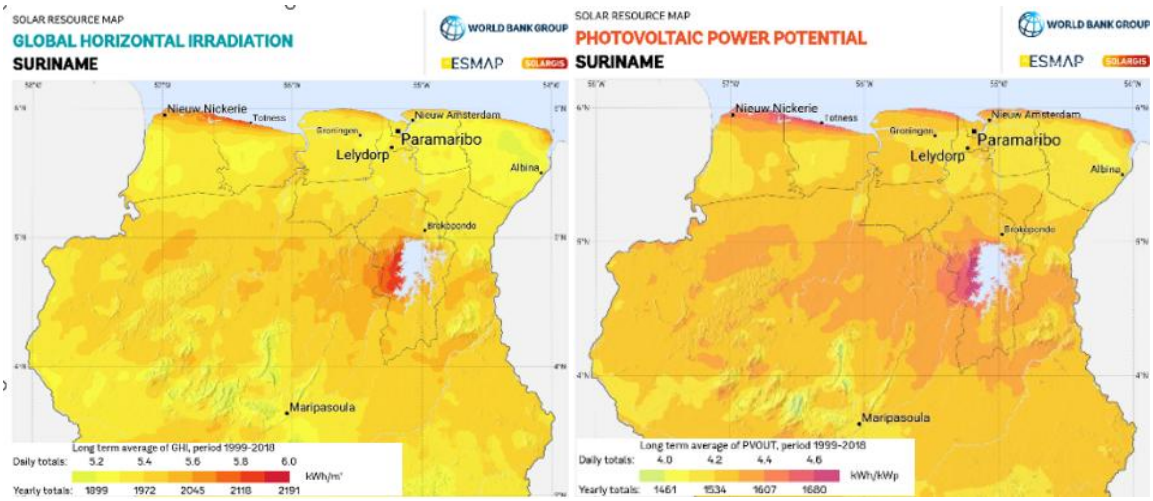
Finally, addressing the creditworthiness of the off-taker, EBS plays a crucial role in enabling IPPs to secure financing and mitigate risks. While EBS is currently navigating financial constraints, alternative solutions such as multilateral guarantees or escrow accounts can mitigate risk for investors. Looking ahead, the reintroduction of sovereign guarantees, once the IMF program is completed, will further strengthen Suriname's investment climate and support its renewable energy transition.

Overall, the Consultants have proposed a comprehensive auction design that aligns with Suriname’s unique energy landscape. By fostering a competitive and transparent process, establishing clear demand and price structures, and offering long-term financial stability, Suriname can attract both local and international investments. This will help the country achieve its renewable energy goals while ensuring a reliable, cost-effective, and sustainable energy future.

8. ANNEX: RENEWABLE TECHNOLOGY ANALYSIS

8.1 SOLAR

Suriname is well served by solar radiation throughout the year. The Global Solar Atlas, published by the World Bank, highlights Suriname's strong potential for photovoltaic (PV) power generation.[3] The study provides a comprehensive analysis of the solar resources available across the country, focusing on key indicators such as Global Horizontal Irradiance (GHI) and practical photovoltaic power output (PVOUT).



Source: Global Solar Atlas

Figure 8-1- Suriname's Photovoltaic Power Potential

Suriname's average theoretical potential for GHI is estimated at 5.378 kWh/m² per day, placing the country in a favorable position compared to global averages. This level of solar irradiance is consistent across most of the evaluated areas, suggesting that the entire country could be suitable for solar PV installations.

Additionally, the practical potential, measured in kWh/kWp, varies slightly across the country but remains high, with an average practical potential of 4.269 kWh/kWp. This indicates that solar installations in Suriname can produce a substantial amount of electricity relative to the installed capacity. The study classifies land into different levels of practical potential, with the majority of the evaluated land falling into levels that are highly conducive to utility-scale PV projects.

The monthly variation of photovoltaic power output also indicates that Suriname experiences relatively consistent solar power generation throughout the year. The seasonality index, which measures the ratio between the highest and lowest monthly PV output, is low at 1.33, reflecting minimal seasonal fluctuation and further supporting the feasibility of solar energy as a reliable source of power throughout the year.

One limitation for solar development in Suriname is the lack of open area for ground-mounted large scale solar facilities, since most of the country is covered by dense forest. Nevertheless, there is potential for floating large scale in the Afobaka reservoir.

A desktop simulation with the Global Solar Atlas shows that a fixed floating large scale 1000 kWp system would generate 1.530 GWh per year, that is, a capacity factor of 0.17. Considering the

[3] Available at: https://globalsolaratlas.info/download/suriname

2087.2 kWh/m² per year estimate, a 10 MW system would require almost 4.2 ha, that is the size of approximately four soccer fields.

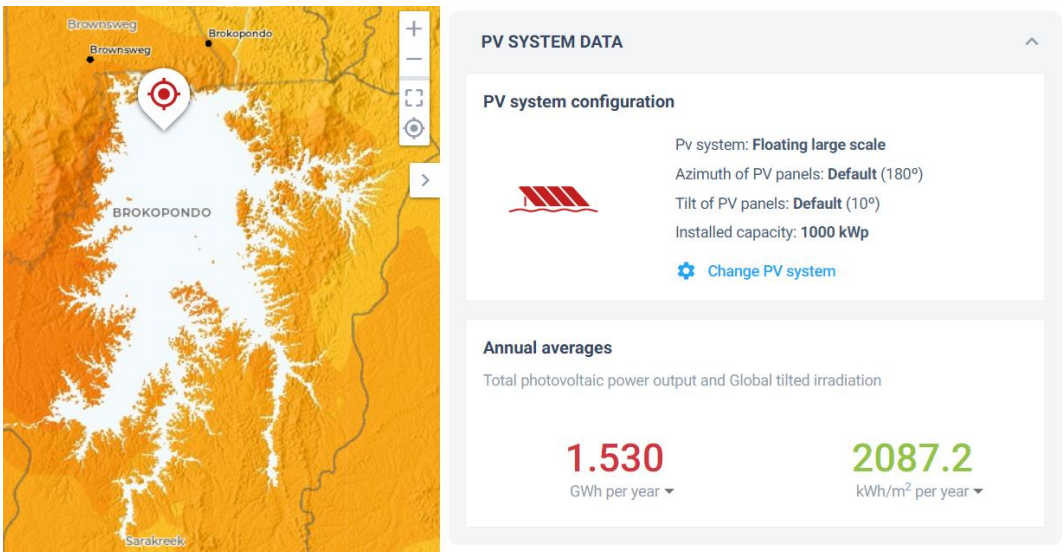


Figure 8-2- Floating PV simulation in the Afobaka reservoir. Source: Global Solar Atlas[1].

Additional studies would be required to evaluate the feasibility of floating solar in the specific conditions of the Afobaka reservoirs, including environmental impacts in water quality and other aspects.

A small residential PV system configuration in the city of Paramaribo would yield 1.45 MWh per year, according to the GSA, what represents a 0.165 capacity factor.

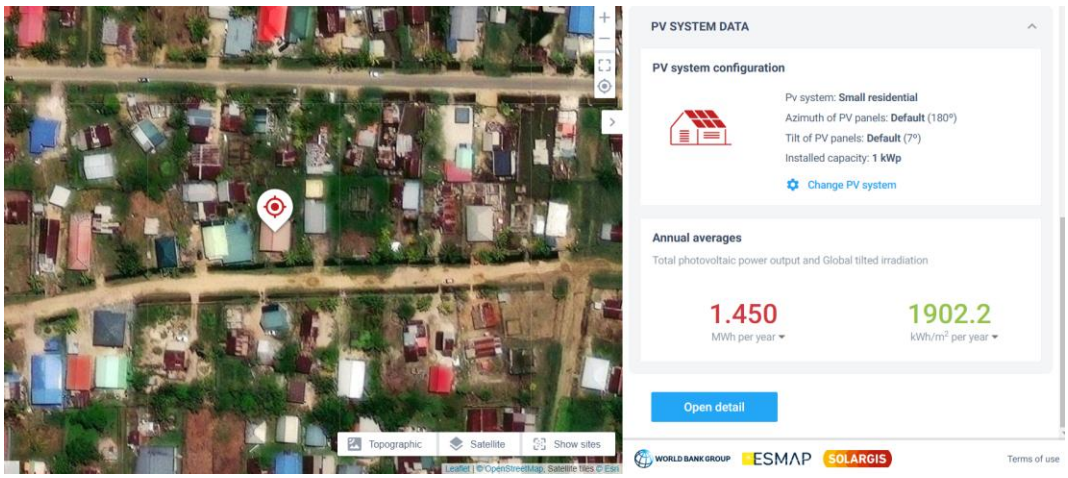


Figure 8-3- Small residential PV simulation in Paramaribo city. Source: Global Solar Atlas[1].

In the regions with the highest solar irradiation (closed to the Afobaka reservoir and on the coast of Nickerie), a ground-mounted large scale PV system with no tracking would yield approximately 1.7 GWh per year (0.194 capacity factor). A 1-axis tracking system, the most used in large-scale systems, can increase production by 24%.

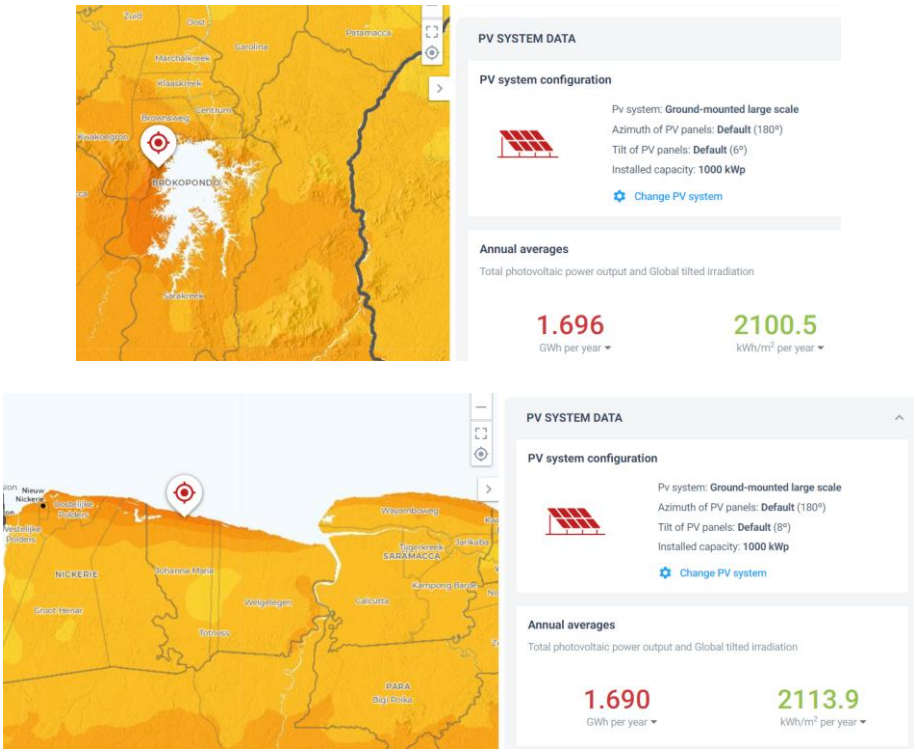


Figure 8-4- Ground-mounted large scale PV systems with no tracking. Source: Global Solar Atlas[1].

8.2 WIND

The Global Wind Atlas, developed by the World Bank in collaboration with other global institutions, provides valuable insights into the wind energy resources available in Suriname, highlighting areas that could be suitable for wind energy development.[4]

Suriname's wind resources are generally moderate, with higher wind speeds predominantly found along the coastal areas and in some elevated regions. The Atlas shows that wind speeds at 100 meters above ground level, which is a standard height for assessing utility-scale wind projects, can reach levels that are suitable for commercial wind energy generation. However, compared to global wind energy hotspots, Suriname's wind speeds are relatively modest, indicating that wind energy development would need to be carefully targeted to the most promising locations.

In addition to wind speed, the Global Wind Atlas provides data on wind power density, which is a measure of the amount of power available in the wind over a specific area. Suriname's wind power density values suggest that while there are areas with viable wind energy potential, the overall resource is not as abundant as in other regions known for wind energy production. This means that while wind energy can contribute to the country's energy mix, it may need to be complemented by other renewable sources like solar.

The usable onshore wind power potential of Suriname is limited to a narrow strip very close to the coast. According to the Global Wind Atlas[4], the offshore wind capacity factor limited to 60 km from the coast is 42% on average.

[4] Available at: https://globalwindatlas.info/en/area/Suriname

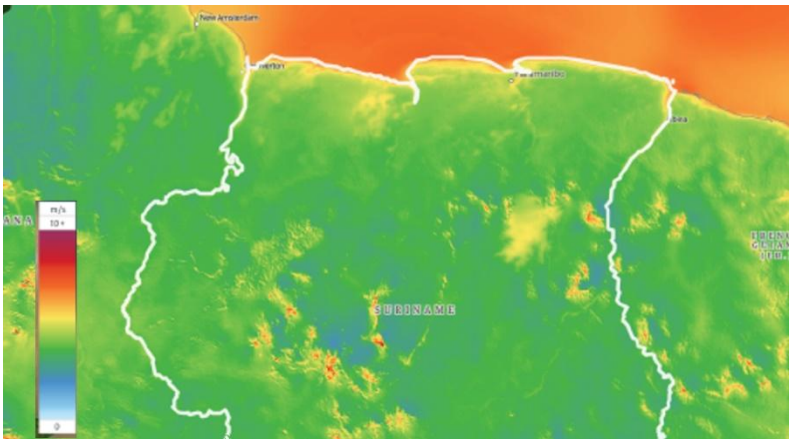


Figure 8-5- Mean wind speed at 100 m. Source: Global Wind Atlas[5] (GWA).

8.2.1. THE RINA REPORT

The Onshore Wind Resource Assessment of the Coast of Suriname[6] (RINA, 2022) was conducted by RINA Consulting S.p.A., in collaboration with VORTEX and MEASWIND, to assess the wind energy potential along the coastal areas of Suriname. The project aimed to provide a clear understanding of the wind resources in the region, supporting the country's efforts to develop renewable energy, particularly wind energy, in line with its broader sustainability goals.

The study involved several phases, beginning with the installation of meteorological towers and remote sensing systems (SoDAR) at five key coastal locations. These systems were installed to collect detailed wind and weather data over a one-year period, providing accurate measurements of wind speed, wind direction, temperature, and other meteorological factors. The locations for these installations were carefully selected based on factors such as proximity to existing infrastructure and potential for high wind energy yield. Throughout the project, the installation faced challenges, including difficult weather conditions and site accessibility issues, particularly due to heavy rainfall and flooding of the ground (requiring additional reinforcements as a precaution). Nevertheless, the towers and SoDAR were successfully commissioned, and data collection proceeded as planned.

Over the 12-month period, the meteorological and SoDAR systems captured data that were subsequently processed and analyzed according to international standards (IEC 61400). This included applying strict quality control measures to ensure the accuracy and reliability of the data. VORTEX, a leading company in wind resource mapping, utilized the data to generate detailed wind resource maps at various heights, ranging from 50m to 120m. These maps provided essential insights into the wind speeds and patterns along Suriname's coast, allowing for the identification of high-potential sites for wind energy development.

The analysis showed that the coastal regions of Suriname display varying levels of wind energy potential, with certain areas demonstrating sufficient wind speeds to be considered viable for utility-scale wind farms. The wind resource maps generated by VORTEX highlighted these areas, showing where wind speeds were most favorable, particularly at heights of 80m and 120m, which are typical hub heights for modern wind turbines. The availability of this detailed wind data will play a crucial role in informing future decisions regarding wind farm siting and development.

In addition to the technical aspects of wind resource assessment, RINA Consulting also focused on capacity building and knowledge transfer. Due to the COVID-19 pandemic, much of the training

[5] https://globalwindatlas.info/en

[6] RINA Consulting. Onshore Wind Resource Assessment of the Coast of Suriname. Final Project Report. The Ministry of Natural Resources, Suriname. July 2022. P0018060 Rev00.

and capacity-building activities were conducted remotely. These training sessions were designed to equip local stakeholders with the necessary skills to operate and maintain wind measurement equipment, manage data, and conduct basic wind resource assessments. This knowledge transfer ensures that Suriname has the internal capability to continue wind resource evaluations and expand its renewable energy initiatives independently in the future.

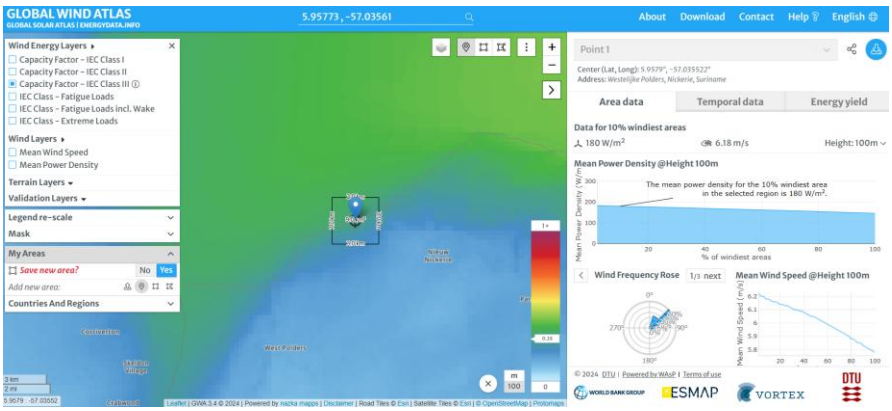
Furthermore, to enhance the reliability of the one-year wind data, long-term datasets from global reanalysis sources (such as ERA5) were used to correlate and extend the findings. By using this long-term data, the wind resource assessment could predict wind patterns and availability beyond the measurement period, providing a more comprehensive understanding of the wind energy potential over a longer time frame. This correlation ensures that any wind farm development is based on reliable data, minimizing financial risk and improving project bankability.

The study's findings underscore the potential for wind energy as a significant component of Suriname's renewable energy strategy. However, it also highlights some of the logistical and technical challenges associated with developing wind energy in the region, such as site accessibility, environmental conditions, and the need for further grid integration studies to support the introduction of large-scale wind energy projects.

8.2.2. THE DONK & WIJNTUIN REPORT

In the Donk & Wijntuin (2016) report[7], two onshore sites were studied, with one turbine Vestas V100 - 1.8 MW each, hub height at 95 m and 12% to 25% estimated losses. These assumptions yield a capacity factor of 34% to 40% in the Zeedijk site (District Nickerie) and 26% to 30% in the Weg naar zee site (District Wanica).

In contrast to the estimates from the report, the Global Wind Atlas indicates a maximum capacity factor of 29% in Zeedijk (lower than in the report), and 33% in Weg naar zee (higher than in the report), considering a Generic 3.45 MW wind turbine and 12% losses. Even though on-ground measurements in Suriname are certainly a more reliable data source, there have been difficulties in gathering this data in practice, as illustrated by the RINA report – and this study was finalized prior to the RINA data gathering effort. The uncertainty in the quality of the wind resource, while it can be mitigated by further measurement efforts, ought to be taken into account by policymakers.



[7] DONK, P.; WIJNTUIN, M. Optimized Wind Resource Assessment for the Determination of Wind Energy Potential and Feasibility of Wind Energy Projects in Suriname. August 2016. NV Energiebedrijven.

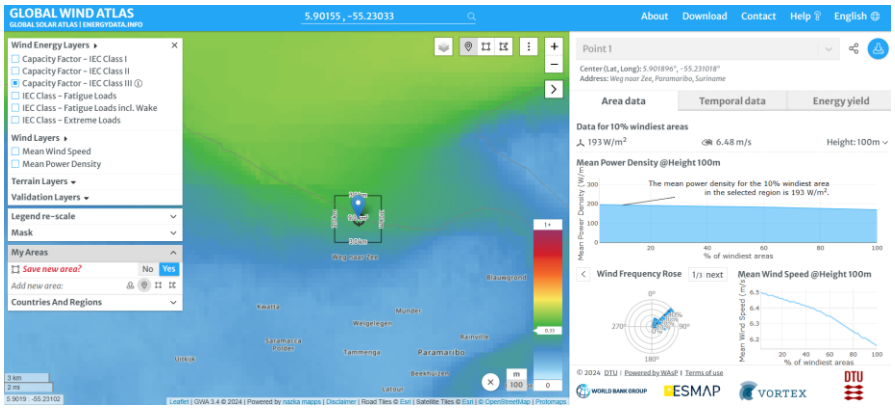


Figure 8-6- Capacity factors for IEC Class III for Zeedijk (above) and Weg naar zee (below) using Generic 3.45 MW turbines.

Another consideration is that preliminary studies seem to indicate that Suriname's soil might require additional work for the wind turbine foundations. The exact nature of the work required (and therefore its associated costs) depends on the soil characteristics and depth observed in the on the geotechnical surveys results, which could lead to increasing the diameter of the foundation, excavating to replace the material that does not meet the desired requirements with a more competent material, and/or finally piling of the foundation. The last solution, piling the foundation, can increase the cost of installing each wind turbine by approximately USD 200,000. In addition, if the region is regularly flooded due to shallow water table, more robust foundation is needed. In this context, geotechnical surveys are fundamental to correctly calculate the investment cost of candidate wind projects.

The RINA wind resource assessment provides a more solid foundation for future renewable energy projects in Suriname. The data and insights gained from this study will be critical in guiding decisions on the development of wind energy, ensuring that Suriname can harness its coastal wind resources to support its transition to a more sustainable and diversified energy mix. However, the physical geography of the coastal regions should not be underestimated and ought to be examined in more detail given the potential infrastructure costs – especially considering the relatively narrow availability of areas with moderate to good wind resources in the country.

For Suriname to harness renewable energy effectively, the strategy will need to focus on overcoming specific, localized barriers—whether they be logistical, environmental, or economic. Given the high costs and modest generation potential for both wind and other forms of renewable energy, a pragmatic approach involving smaller, decentralized energy solutions may be the most feasible route. This can ensure energy security while respecting environmental limitations and socio-economic conditions. Robust policy support, international financing, and local community involvement will be critical to unlocking Suriname's renewable energy potential.

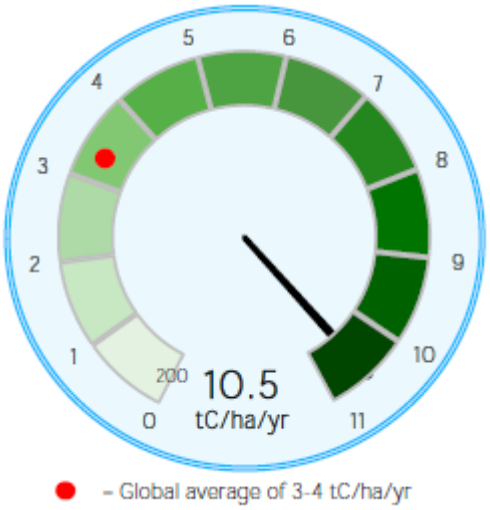
8.3 BIOMASS

According to UNFCCC (2022)[8], biomass is not expected to form a significant part of the generation matrix in Suriname in the near future. Nonetheless, it is relevant to explore the options available.

According to IRENA, biomass represents a significant potential for Suriname's energy matrix, driven by the availability of agricultural residues and forestry waste. However, biomass has not yet been fully exploited.

[8] UNFCCC (2022). First Biennial Update Report (BUR1) to the United Nations Framework Convention on Climate Change. November 2022. The Republic of Suriname.

Figure 7 - Biomass Potential: Net Primary Production



Source: IRENA[9]

The graph shows Suriname's biomass potential in terms of Net Primary Production (NPP), measured in tonnes of carbon per hectare per year (tC/ha/yr).[10] Surinam has an average NPP of 10.5 tC/ha/yr, which is significantly higher than the global average of 3-4 tC/ha/yr, as indicated by the red dot on the scale. This high NPP suggests that Suriname has a robust potential for biomass production due to its rich vegetation and favourable climatic conditions.

8.3.1. BIOMASS STUDIES IN SURINAME

Biomass resources could offer promising opportunities to diversify its energy mix and promote sustainable energy solutions. Several studies were made available highlighting the potential role of different biomass sources in the country, examining the availability of raw materials and the economic and environmental impacts of scaling up biomass production.

The major potential avenues explored in these studies will be highlighted in the subsections below: particularly rice husks, forestry biomass, and urban solid waste. One of the studies reviewed, however, focuses on the production potential of liquid biofuels in Suriname, which while potentially economically relevant is not as applicable to electricity production in particular. While sugarcane production, if scaled up as part of a biofuels strategy, could yield bioelectricity as a side product (as illustrated by the experience of Brazil, for example) Suriname's soil characteristics are not ideal for the production of sugarcane[11] (IDB, 2011)[12].

The study on biofuels emphasizes the country's abundant land and natural resources and highlights that crops such as sugarcane, cassava, and other high-yield plants are particularly suitable for the production of ethanol or biodiesel. Suriname's fertile land and favourable climatic conditions provide a solid foundation for developing a biofuel industry. The study suggests that

[9] Surinam Energy Profile. Available at: https://www.irena.org/-/media/Files/IRENA/Agency/Statistics/Statistical_Profiles/South-America/Suriname_South-America_RE_SP.pdf

[10] Net primary production (NPP) is the amount of carbon fixed by plants and accumulated as biomass each year. It is a basic measure of biomass productivity.

[11] The most feasible feedstock for ethanol production is cassava. In the case of biodiesel, the most feasible feedstocks are coconut and palm oil, both adapted to Suriname climate and soil conditions. However, as there is no mechanized harvest, the labor costs could be cost prohibitive.

[12] IDB (Inter-American Development Bank). Bioenergy Potential in Suriname. KPMG, Energy and Natural Resources Advisory. January 2011.

large-scale cultivation of these crops could not only reduce the country's reliance on imported fossil fuels but also create a new revenue stream through the export of biofuels.

The study also discusses the technological advancements needed to enhance biofuel production. It proposes the introduction of modern agricultural practices and technology to optimize crop yields and processing efficiency. Furthermore, the development of biofuel refineries and processing plants is crucial for transforming raw materials into usable energy products. The creation of such infrastructure is seen as essential for the success of a biofuel industry in Suriname.

In addition to technological considerations, the study highlights the economic benefits that could result from the development of the biofuel sector. It argues that biofuel production could generate employment opportunities in both rural and urban areas, from farming to refining and distribution. The potential for export also offers Suriname a path toward greater economic diversification, decreasing its dependency on traditional sectors such as mining and oil. However, the study points out certain challenges, such as the need for significant investment in infrastructure and technology, as well as the importance of a supportive regulatory framework to attract private sector participation. It also emphasizes the importance of sustainable agricultural practices to avoid land degradation and ensure that biofuel production does not compete with food production.

Generally speaking, studies that emphasize the potential for biomass to contribute to Suriname's energy transition also highlight the challenges, in particular the requirement of substantial investment in infrastructure, technology, and training. Moreover, the environmental impacts of large-scale biomass production must be carefully managed to avoid deforestation, land degradation, and competition with other land uses, such as agriculture and conservation. In order for Suriname to overcome these challenges, a coherent and supportive regulatory framework is required – including policies that promote sustainable biomass production, incentivize private sector participation, and ensure that biomass projects are aligned with national energy and environmental goals.

8.3.2. FORESTRY BIOMASS

The second study focuses on the potential for wood-based energy in Suriname, examining the extensive forest resources that can be harnessed for energy production. Suriname is one of the most forested countries in the world, with vast areas of tropical forests that could be sustainably managed for wood energy. The report outlines that forest residues, such as logging waste and sawmill by-products, represent a valuable source of biomass for energy generation.

The use of wood as an energy source has a long tradition in Suriname, particularly in rural areas where firewood and charcoal are common fuels for cooking and heating. However, the study suggests that modernizing and scaling up the wood energy sector could provide a more efficient and environmentally sustainable solution for meeting the country's growing energy needs. By utilizing wood residues and improving forest management practices, Suriname could significantly increase the contribution of biomass to its energy mix without depleting its natural resources.

The study also explores the potential for the development of wood pellets and wood chips, which could be used both domestically and for export. Wood pellets, in particular, offer a clean and efficient form of biomass that can be used in power plants or heating systems. The production of wood pellets would not only add value to Suriname's forestry sector but also open up new markets, particularly in Europe, where there is strong demand for renewable energy sources.

An important aspect of the wood energy potential is the environmental impact. The study emphasizes that sustainable forest management is critical to ensuring that wood biomass remains a renewable resource. This involves replanting trees, controlling logging activities, and minimizing the environmental footprint of biomass production. The report highlights that international

standards and certification schemes, such as the Forest Stewardship Council (FSC), could play a role in ensuring that Suriname's wood energy sector develops sustainably.

Economic considerations are also key. The study notes that wood energy could contribute to rural development by providing jobs in forest management, wood harvesting, and biomass processing. Furthermore, by reducing reliance on imported fossil fuels, wood energy could enhance Suriname's energy security and create a more resilient energy system. However, as with biofuels, significant investment in infrastructure and technology is required to realize this potential.

Additionally, the report underlines the importance of developing a supportive policy framework to encourage private investment and ensure that biomass projects are economically viable. This includes establishing clear guidelines for forest management, as well as providing incentives for renewable energy projects.

According to Matai et al. (2015)[13] the estimated bio-energy potential from the forest sector in Suriname is approximately 1,180,000 m^3 on an annual basis, considering a cutting cycle of 25 years, without jeopardizing the natural regeneration of the forest. From this total, 400,000 m^3 would come from waste from logging, 180,000 m^3 from waste from sawmill, and 600,000 m^3 from new additional roundwood extraction (60,000 ha times 10 m^3 per ha).

The timber company Greenheart Company Limited N.V. has added a 1.5 MW bio-energy unit in Apoera, for the generation of electricity from wood waste of its processing unit (5 m^3 per hour, 16 hours per day and 250 working days per year). About 20,000 m^3 of wood waste is converted into electricity in the bio-energy unit each year. The total 1,180,000 m^3 would thus offer the possibility of installing 59 power plants of 1.5 MW each, totaling 88.5 MW (Matai et al., 2015).

However, it is important to note that this would require 600,000 m^3 (50% of the total amount of wood) of additional roundwood extraction for electricity generation, what might raise concerns about the sustainability of using virgin tropical forest to energy production. If only the sawmill waste is used to produce electricity (180,000 m^3), the potential would be 13.5 MW in 1.5 MW plants like the Greenheart's ones.

8.3.3. RICE HUSK BIOMASS

As reported by Ramdutt et al. (2013)[14] power generation from rice rusk may not be economically attractive, but solves an existing environmental problem caused by rice production.

A pre-feasibility study of a 4 MWe rice husk power plant with an investment of US$ 11,4 million shows that the generation cost would be US$ 0.1562/kWh without taking into account the cost for rice husk (no cost for transportation, rice millers fee). Considering a scenario with a fuel cost of 15 US$/ton of rice husk the cost price will be US$ 0.1780/kWh (EBS-BCE, 2007[15]).

8.3.4. URBAN SOLID WASTE

The consultants also had access to a feasibility study for waste-to-energy production at the Ornamibo site. A key component of the economic viability analyzed is the so-called "gate tipping" fee, which indicates the possibility of the government and/or municipalities (which usually bear the costs of waste disposal) paying a contribution per ton of urban solid waste processed. In case the urban solid waste plant must be made viable only with electricity sales, then the breakeven

[13] Matai, R.; Jagessar, S.R.; Egerton, L. Wood Energy in Suriname. Contribution of Forest Sector to the Energy Supply. Foundation for Forest Management and Production Control (SBB). Forestry Economic Services. February 2015.
[14] Ramdutt, Ashwin; Meghoe, Remy; Bipat, Armand; van Els, Rudi Henri. Potentials for electric energy generation from rice husk residue in Suriname (2013). 22nd International Congress of Mechanical Engineering (COBEM 2013).
[15] EBS-BCE (2007). Pre-Feasibility Study: Rice Husk Power Plant for Nickerie, BCE Consulting Engineers N.V. – NV Energiebedrijven Suriname.

cost calculated by the authors is 350 US$/MWh for a plant capable of processing 125 kt per year with a standard European CAPEX.

8.4 HYDROPOWER

Although Suriname has seven large rivers, the country's hydropower potential is limited due to its topography, which consists of an alluvial plain close to the coast, hills between valleys in the interior and mountain ranges in the southeast and central-west part of the country.

The population of Suriname is concentrated in the coast, in the alluvial plain, where building dams to create high artificial hydraulic heads would result in large flooded areas.

According to OLADE (1988)[16] the hydropower potential of Suriname was estimated in 2250 MW (see Table 8-1). Projects like Saramacca and Phedra were designed to power the population around Paramaribo, while large projects like Kabalebo, for instance, were designed to support possible future industrial development. However, these projects were conceived in the 1960's and 70's, when socioenvironmental safeguards were practically non-existent. This resulted in very large reservoirs with large 'flooded area / installed capacity' relationship.

Take for example the Afobaka reservoir, considered by the World Bank (2003)[17] the worst reservoir in the world, due to having flooded significantly more hectares of land per megawatt generated than any other large hydropower project analyzed.

It is very hard to presume that these large hydropower projects would get multilateral financing and be built nowadays, with the current socioenvironmental and sustainability guidelines for hydropower development. In this sense, if Suriname wants to consider hydropower development as an option, it is recommended to review and update the estimated hydro potential in light of current safeguard and technology. Low-head hydro power, for example, take advantage of the water flux in the river to generate power with run-of-river plants (no storage), instead of creating an artificial head and large reservoirs with seasonal storage, which results in large flooded areas.

Table 8-1 – Large and medium scale hydropower potential of Suriname

Project	River	Capacity (MW)
Davis Falls	Kabalebo/Corantijn	500
Kabalebo Airfield	Kabalebo	300
Matapi	Corantijn	150
Mao Pityan Falls	Coeroeni	250
Tapatosso	Tapanahony	400
Soekrati-poort	Marowijne	500 *
Phedra	Surinam	21
Saramacca I	Saramacca	36
Saramacca III	Saramacca	48
Saramacca IV	Saramacca	45

* Considering half of the river potential, since it is a border river.

[16] OLADE, Latin American Energy Organization. Regional Document on National Experiences with Small Hydropower Stations. Year 12. nº 3; December 1988. Available at: https://biblioteca.olade.org/opac-tmpl/Documentos/hm000340.pdf

[17] The World Bank. Ledec, George; Quintero, Juan David. Good Dams and Bad Dams: Environmental Criteria for Site Selection of Hydroelectric Projects. November 2003. Latin America and the Caribbean Region. Sustainable Development Working Paper No. 16. Latin America and the Caribbean Region. Environmentally and Socially Sustainable Development Sector Management Unit.

Figure 8-8- Identified hydropower projects in Suriname.

According to OLADE (1988) the Saramacca I would be located 3 km upstream the Kwakoegron village. The average generation would be 16 MW (44% capacity factor). The Saramacca III would have an average generation of 27 MW (56% capacity factor) and would be located 9 km upstream the mouth of the Kleine Saramacca River, including the diversion of this river to the created reservoir. This diversion represents 9 MW of the average generation. However, attention must be paid to the ecological flow rate used to size the project. The Saramacca IV capacity factor would be 51% and it would be located close to the Pakka Pakka Village.

In studies conducted many decades ago, ecological flow may not have been considered in the energy study. Currently, an ecological flow study that guarantees the preservation of the ecosystem is essential for projects that include water diversions.

According to UNFCCC (2022)[8] the renewable generation expansion plan of Suriname includes projects such as the Jai-Tapanahony Diversion (a complex of infrastructural projects whose main purpose is to develop extra hydropower capacity to the Afobaka plant), the Kabalebo Hydro Power Project, and the Grankiki Hydro Project (identified as a possible site for small-scale hydro power development).

In the case of the Jai-Tapanahony Diversion it is also very important to check if ecological flows were considered in the design and energy studies of the plant. The project also raised concerns, locally and internationally, as it would lead to the forced displacement of the traditional inhabitants of the Saramaka villages (GOPA, International Economics, PMCG, 2023[18]).

The Phedra project would be located in the Suriname river, downstream the existing Afobaka dam. OLADE (1988) mentions a capacity factor of 76%, considering the discharge diverted from the Jaikreek. Therefore, the same caveat about ecological flows applies here.

[18] GOPA, International Economics, PMCG (2023). Renewable Energy and Other Clean Technologies Regional Report. Support to EU Market Access Team and Trade Policy Analysis in CARIFORUM. April 2023. Available at: https://www.tradeeconomics.com/wp-content/uploads/Renewable-Energy-and-Other-Clean-Technologies-Regional-Report.pdf

GENERAL PROVISIONS

GENERAL PROVISIONS

ARTICLE 1. LEGAL BASIS

1.1 These Bidding Procedures are established pursuant to Article 21 of the Electricity Act of 2016.

1.2 These Bidding Procedures govern the procurement processes for renewable energy capacity projects.

1.3 These Bidding Procedures shall be binding upon all parties participating in the procurement process governed herein.

ARTICLE 2. ROLES AND RESPONSIBILITIES

2.1 The Energie Autoriteit Suriname (EAS) is responsible for the oversight and supervision of the Bidding Process.

2.2 The Electricity Company has, subject to approval from the EAS, the right to annul the Bidding Process at any time without any liability or any obligation and may in such cases re-issue the Bidding Process.

2.3 The EAS has the right, after consultation with the Electricity Company, to annul the Bidding Process at any time without any liability or any obligation.

BIDDING PROCESS AND CRITERIA

ARTICLE 3. STAGES OF THE BIDDING PROCESS

3.1 The purpose of the Bidding Process is to select the most advantageous Bid for contracting renewable energy capacity by the Electricity Company through a Power Purchase Agreement (PPA).

3.2 The Bidding Process consists of two stages: (1) Request for Expression of Interest (REOI), and (2) Request for Proposal (RFP).

3.3 Stage 1 (REOI) is open to all Potential Bidders to express their interest in participating in the Bidding Process for the given Project. Entities that meet the criteria set out in these Bidding Procedures will be selected as Prequalified

Bidders to participate in the subsequent Stage 2 (RFP). The most advantageous Bid in this RFP stage will then be selected as the Winning Bid, with whom a PPA for the Project will subsequently be signed.

ARTICLE 4. BIDDING CRITERIA

4.1 The selection of the Winning Bidder of the Bidding Process shall be based on objective, transparent, and non-discriminatory criteria and shall include:

a. the required capacity of the installation,

b. the capacity factor,

c. the location where delivery to the national grid must take place,

d. the nature of the primary sources,

e. the environmental impacts and the necessary mitigation thereof,

f. the minimum energy efficiency values that must be achieved,

g. the duration for which a permit is granted, and

h. the risk allocations.

4.2 In addition to the criteria mentioned in paragraph 1, the evaluation shall include an assessment of the applicant based on legal, technical, and financial criteria, as set out respectively in Articles 17 till 19 of these Bidding Procedures.

4.3 The Electricity Company shall include and specify the criteria referred to in these Bidding Procedures further in the REOI/RFP.

ARTICLE 5. ELECTRONIC COMMUNICATION AND SUBMISSIONS

5.1 All communication, submissions, clarification requests, responses, and any other interactions between the Electricity Company, the EAS, and the Bidders during the Bidding Process shall take place in electronic format, unless explicitly stated otherwise.

5.2 The Electricity Company shall indicate the email address and/or electronic submission platform for all such correspondence and document submissions.

5.3 All documents submitted electronically must be in editable and/or searchable formats (e.g., MS Word, Excel, or searchable PDF). Scanned handwritten documents shall not be accepted unless expressly allowed.

5.4 Bidders are responsible for ensuring that all electronic submissions are complete, accurate, and delivered before the specified deadlines. The Electricity Company shall not be responsible for any delays or failures in transmission due to technical errors on the side of the Bidder.

GENERAL REQUIREMENTS ON BIDDERS

ARTICLE 6. LEGAL STATUS OF BIDDERS

6.1 A Bidder may be:

a. a corporation or business organization, duly incorporated or validly existing and duly registered under the laws of its country of domicile; or

b. a Consortium, where each Consortium Member is a corporation or business organization, duly incorporated or validly existing and duly registered under the laws of its country of domicile.

6.2 In the event that the Bidder is a Consortium, a Consortium Leader shall be appointed.

6.3 All requirements set forth in these Bidding Procedures for a Bidder shall apply equally and individually to each Consortium Member.

6.4 Where the Bidder is a Consortium, all Consortium Members shall be jointly and severally liable for the obligations under this Bidding Process.

6.5 A change in the composition of a Bidder, either as a result of the addition of a new Consortium Member, substitution of an existing Consortium Member with a new member, withdrawal of a Consortium Member, and/or a change in the respective direct or indirect shareholdings in the proposed Seller, is not permitted after the Application Deadline and shall result in automatic disqualification.

ARTICLE 7. SINGLE SUBMISSION ONLY

7.1 It shall be deemed that by submitting an Application/Proposal, the Bidder has accepted the terms and conditions governing the Bidding Process, acknowledged that it does not have a Conflict of Interest, and agreed to be bound by the undertakings provided by it under the terms and conditions stated in the REOI/RFP.

7.2 A Bidder shall not be permitted to submit more than one Application/Proposal, or participate, whether directly or indirectly, in more than one Application/Proposal. In the event of such multiple participation, all Applications/Proposals involving that Bidder shall be considered invalid.

ARTICLE 8. CONTENT OF THE SUBMISSION

8.1 Bidder must submit a complete Application/Proposal, including all required information, forms and supporting documents as specified in the REOI/RFP.

8.2 The Application/Proposal:

a. must be prepared and submitted in strict accordance with the content, format, and instructions outlined in these Bidding Procedures and the REOI/RFP, and

b. shall include a sworn statement accepting the conditions of the REOI/RFP and the Bidding Procedures and confirming that there are no restrictions, inhibitions or inconsistencies stated.

8.3 The Bidder shall submit, as part of the Application/Proposal, the nomination of a duly authorized representative ("Authorized Representative") who is empowered to represent and irrevocably bind the Potential Bidder, and to conduct all business on its behalf during the Bidding Process. This authorization shall be evidenced by a certified copy of a resolution of the board of directors, confirming the appointment and powers of the nominated representative.

8.4 All pages of the Application/Proposal shall be electronically signed by the Authorized Representative of the Bidder. Where applicable, use can be made of an accepted electronic signature compliant software. If the Bidder is a Consortium, the Bid shall be signed by the Authorized Representative of each Consortium Member.

8.5 The Application/Proposal shall be in the English language.

ARTICLE 9. SUBMISSION BEFORE DEADLINE

9.1 Bidders must submit their Application/Proposal on or before the applicable deadline in accordance with the requirements of the REOI/RFP. Applications or Proposals submitted after the applicable deadline shall not be eligible for consideration and shall be rejected.

9.2 The Electricity Company may, at its discretion, extend the deadline for the submission of Applications/Proposals by issuing an Addendum or Corrigendum to all Bidders.

9.3 A Bidder may modify, substitute, or withdraw its Application/Proposal after submission, but before the applicable deadline, provided that a notice of the modification, substitution, or withdrawal is sent in electronic form prior to the applicable deadline. No Application/Proposal shall be modified, substituted, or withdrawn by the Bidder after the applicable deadline.

9.4 The notice mentioned in the previous paragraph shall include a subject line clearly marked as “MODIFICATION,” “SUBSTITUTION,” or “WITHDRAWAL,” as appropriate. For modifications or substitutions, the Bidder must submit updated electronic documents. The filenames shall reflect the change (e.g., ‘Technical Proposal – MODIFICATION’). The modified or substituting submission will supersede the previous submission upon receipt of the updated files.

9.5 The Electricity Company will not return any Application/Proposal, or any information provided along therewith by a Bidder. However, Applications/Proposals that have been rejected or withdrawn will be deleted by the Electricity Company on or after the applicable deadline. If the deleted files are not backed up by the Bidder within thirty (30) days of the applicable deadline, the Electricity Company shall have the right to permanently remove access to the files.

ARTICLE 10. RIGHT TO ACCEPT OR REJECT APPLICATIONS

10.1 The Electricity Company reserves the right to verify all statements, information, references, and documents submitted by a Bidder, including by way of reference checks. The Electricity Company may rely on and consider any information obtained from any reference or source in connection with any Application/Proposal and may further apply such information in evaluating the applicable Proposal. Failure of the Electricity Company to undertake any such

verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Electricity Company.

10.2 The Electricity Company may reject any Application/Proposal in the following circumstances:

a. if the Application/Proposal is deemed to be incomplete, non-responsive, inconsistent, ambiguous for any reason including, without limitation, if the Potential Bidder:

(i) fails to submit the Application/Proposal in strict accordance with the content, format, and instructions outlined in these Bidding Procedures and the REOI;

(ii) submits an Application/Proposal that is subject to any conditions or qualifications; or

(iii) fails to submit the Application/Proposal by the applicable deadline.

b. if the Potential Bidder:

(i) does not have the legal capacity to enter a contract, or is otherwise restricted from entering a contract;

(ii) is insolvent, in receivership, bankrupt or being wound up or its business activities are to be suspended, or it is to be the subject of legal proceedings for any of the foregoing, or it intends to submit an application for insolvency or liquidation.

10.3 The Electricity Company shall not proceed with the rejection of an Application/Proposal without prior approval from the EAS.

10.4 Any Bidder whose Application/Proposal is rejected shall be duly informed by the Electricity Company, and the reasons for the rejection shall be clearly stated.

ARTICLE 11. TREATMENT OF A SINGLE PROPOSAL

11.1 In the event that only one Application/Proposal is received, the Electricity Company may either:

a. Evaluate the Application/Proposal: If the Application/Proposal complies with all eligibility, qualification, and evaluation requirements, the Electricity Company may proceed with the Bidding Process.

b. Cancel and Relaunch: The Electricity Company may cancel and relaunch the Bidding Process, modifying the REOI/RFP terms as required to attract more Bidders.

11.2 The Electricity Company shall publicly disclose its decision on the treatment of a single proposal, as mentioned in the previous paragraph, and notify all Bidders.

REOI STAGE

ARTICLE 12. OPENING OF BIDS

12.1 The Electricity Company shall open the Applications/Proposals at the date and time as mentioned in the REOI/RFP.

12.2 The Electricity Company shall determine whether the opening ceremony for received Applications/Proposals will be conducted online or in person.

12.3 The Electricity Company will review and evaluate each Application/Proposal in accordance with these Bidding Procedures and the criteria set out in these Bidding Procedures and the REOI/RFP.

ARTICLE 13. CONTENT OF THE REOI AND TIMELINE

13.1 The Electricity Company shall issue a REOI for the Project. The REOI shall include all information necessary for a Potential Bidder to properly submit an Application, and shall, to the extent possible, include standardized forms and templates to facilitate the submission process.

13.2 The REOI shall mention:

a. The legal basis for the Bidding Process and reference to these Bidding Procedures;

b. The Timeline;

c. The electronic platform or method by which Potential Bidders can participate in the Bidding Process;

d. Description of the Project which shall include the technology, capacity, location, and other information needed to allow Potential Bidders to participate in the Bidding Process;

e. Prequalification requirements;

f. Contact information.

13.3 The REOI shall furthermore include as an attachment:

a. The Bidding Procedures

b. The PPA Outline

13.4 The "PPA Outline" mentioned in the previous paragraph shall not constitute the "concept PPA" as mentioned in Article 21 of the Electricity Act.

13.5 The Timeline mentioned in the previous paragraph shall include the date and time for:

a. Clarification Deadline;

b. Application Deadline;

c. Notification.

13.6 The Timeline mentioned in the previous paragraph shall comply with the following:

a. There shall be a period of at least 8 weeks between the EOI Announcement and the Application Deadline.

b. There shall be a period of at least 3 weeks between the EOI Announcement and the EOI Clarification Request Deadline.

c. There shall be a period of not more than 30 days between the Application Deadline and the Notification.

ARTICLE 14. ANNOUNCEMENT OF REOI

14.1 The Electricity Company shall announce, through its website and/or other media outlets, its intention to initiate a new Bidding Process and invite Potential Bidders to submit their Applications.

14.2 The EOI Announcement shall specify where interested parties can obtain the REOI, which will provide further details and instructions for participating in the Bidding Process.

14.3 The Electricity Company shall make the REOI available to any interested party that requests it, free of charge.

ARTICLE 15. CLARIFICATION REQUESTS

15.1 Potential Bidders may request clarifications on the REOI (including the PPA Outline) of the Electricity Company.

15.2 Clarification requests should be submitted before the Clarification Deadline. The Electricity Company has no obligation but may, at its sole discretion, elect to accept any question or request for clarification submitted after this deadline.

15.3 The Electricity Company will share all the clarification requests along with the responses thereto, with all Potential Bidders.

15.4 The Electricity Company may, on its own initiative, issue clarifications to the REOI to specify the scope or interpret any element of the content that, in its opinion, is insufficiently clear. Such clarifications shall constitute an integral part of the REOI and shall be shared with all Potential Bidders.

15.5 Clarifications will be published at the latest 10 days before the deadline for the submission of Applications.

ARTICLE 16. PREQUALIFICATION CRITERIA

16.1 In order to be Prequalified to participate in the RFP process, Potential Bidders must meet three Prequalification Criteria, namely: (1) Legal Prequalification Requirements, (2) Technical Prequalification Requirements, and (3) Financial Prequalification Requirements, as set out in these Bidding Procedures.

16.2 The Prequalification Criteria mentioned in the previous paragraph may be further specified in the REOI.

16.3 The evaluation shall be on a Pass/Fail basis, meaning that the Potential Bidder must fully meet each of the three Prequalification Criteria in order to pass the evaluation. Failure to satisfy this will result in disqualification from the Bidding Process, and the Potential Bidder will not be eligible to proceed to the RFP stage.

ARTICLE 17. LEGAL PREQUALIFICATION CRITERIA

17.1 The Potential Bidder shall be:

a. a legal entity that is duly incorporated, validly existing, and duly registered under the laws of its country of domicile; or

b. a Consortium, provided that each Consortium Member is a legal entity that is duly incorporated, validly existing, and duly registered under the laws of its respective country of domicile.

17.2 The Potential Bidder shall submit, as part of the EOI, documentary evidence demonstrating its legal status.

17.3 In the event that the Potential Bidder is a Consortium, the EOI shall also include the organizational chart and a description of the roles and responsibilities of each Consortium Member, as well as the consortium agreement, joint venture agreement, memorandum, or equivalent contract.

17.4 The Potential Bidder shall not have:

a. a Conflict of Interest; and

b. been in the process of liquidation and/or bankruptcy within the five (5) years prior to the date of the EOI Announcement; and

c. been convicted of any fraud, corruption, collusion, or money laundering or for a criminal act involving dishonesty, physical violence, or intentional harm to human life, or for any criminal offence related to their professional conduct; and

d. had a concession or power purchase agreement (or their equivalent) terminated that is attributable to an event of default of the power buyer or

seller respectively, where such power buyer or seller is an affiliate of the Potential Bidder; and

e. been previously suspended, disqualified or debarred from public procurement processes; and

f. been debarred (including temporary debarment) pursuant to the public sanctions list of any multilateral or international development bank or funding agency; and

g. been included on any sanction lists promulgated by the UN Security Council or its committees, or any other recognized international sanctions list; and

h. been engaged in business or transactions that are in violation of the sanctions imposed by the UN Security Council or its committees.

ARTICLE 18. TECHNICAL PREQUALIFICATION CRITERIA

18.1 The Potential Bidder shall:

A. demonstrate that it possesses the technical expertise necessary to successfully develop, construct, and operate the Project; and

B. demonstrate that it has relevant experience in the development, construction, and operation of projects comparable in scope, technology, and scale to the proposed Project.

ARTICLE 19. FINANCIAL PREQUALIFICATION CRITERIA

19.1 The Potential Bidder shall:

a. demonstrate financial soundness and stability;

b. provide evidence of sufficient financial capacity to support the development, implementation, and operation of the Project.

ARTICLE 20. CLARIFICATION REQUESTS BY THE ELECTRICITY COMPANY

20.1 The evaluation of each Application will be based solely on the contents of the Application and any clarification and/or supplementary information provided pursuant to this Article.

20.2 To facilitate the evaluation of each Application, the Electricity Company may, at its sole discretion, request written clarifications and/or supplementary information from any Potential Bidder regarding its Application after the Application has been received. The Potential Bidder shall provide the requested clarification(s) and/or supplementary information within the timeframe prescribed by the Electricity Company. Any extension of the response period shall be granted solely at the discretion of the Electricity Company.

20.3 The EAS shall be included in all correspondence related to requests for clarifications and/or supplementary information as mentioned in the previous paragraph.

20.4 If a Potential Bidder fails to provide any requested clarification and/or supplementary information within the prescribed timeframe, its Application may be rejected. Should the Application not be rejected, the Electricity Company reserves the right, at its sole discretion, to proceed with the evaluation of the Application by interpreting the unclarified elements to the best of its understanding.

20.5 The Electricity Company reserves the right to verify all statements, information, references, and documents submitted by the Potential Bidder in its Application, including by way of reference checks. The Electricity Company may rely on and consider any information obtained from any reference or source in connection with any Application and it may further apply any such information in evaluating the applicable Application. Failure of the Electricity Company to undertake any such verification shall not relieve the Potential Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Electricity Company.

ARTICLE 21. EVALUATION OF EOI

21.1 The Electricity Company shall only review those Applications that are not rejected.

21.2 The evaluation of the Applications shall be based on the Prequalification Criteria as set out in these Bidding Procedures and further detailed in the REOI. The Electricity Company shall review each Application and assess whether the Potential Bidder complies with each of the Prequalification Criteria individually.

21.3 If all Prequalification Criteria are rated as “pass,” and subject to approval by the EAS, the Potential Bidder shall be granted the status of Prequalified Bidder. If one or more Prequalification Criteria are rated as “fail,” and subject to approval by the EAS, the Potential Bidder shall not be granted Prequalified status.

21.4 In the event that there is only one Prequalified Bidder, or if no Potential Bidder is successfully Prequalified, the Bidding Process shall be cancelled and re-launched.

ARTICLE 22. NOTIFICATION AND DEBRIEFING

22.1 The Electricity Company will communicate with all Potential Bidders to inform them whether or not they have been selected as the Prequalified Bidders for participation in the RFP Stage.

22.2 The Electricity Company shall publicly disclose the names of the Prequalified Bidders and issue the RFP only to those Prequalified Bidders.

RFP STAGE

ARTICLE 23. CONTENT OF THE RFP AND TIMELINE

23.1 The Electricity Company shall include in the RFP at least the following information:

a. The legal basis including reference to these Bidding Procedures;

b. Description of the Project which shall include the technology, capacity, location, and other information needed to allow Potential Bidders to participate in the Bidding Process;

c. The electronic platform or method by which Potential Bidders can participate in the Bidding Process;

d. Bid Timeline;

e. Concept PPA

f. Contact information.

23.2 The Concept PPA referenced in the preceding paragraph shall serve within the meaning attached to it in Article 21 of the Electricity Act and shall not be subject to modification following the issuance of the RFP, except with respect to bid-specific provisions.

23.3 The Bid Timeline shall include:

a. RFP issued

b. Site Visit

c. RFP Clarification Request Deadline

d. Proposal Submission Date

e. Announcement of Winning Bidder

f. Signature of PPA

23.4 There shall be a period of at least 2 months between the date of the RFP Issuance and the Signature of PPA. There shall be a period of at least 3 weeks between the date of the RFP Issuance and the RFP Clarification Request Deadline.

ARTICLE 24. DATA ROOM AND SITE VISIT

24.1 The Electricity Company shall establish a Data Room. Each Prequalified Bidder shall be granted access to the Data Room, which shall contain the RFP, any Addenda or Corrigenda, notice of invitation to the Pre-Bid Conference and any other relevant information for the RFP Stage of the Bidding Process.

24.2 Prequalified Bidders shall be encouraged by the Electricity Company to arrange and conduct a site review and visit prior to submitting their Bids as to ascertain for themselves the conditions, surroundings, civil structures, availability of power, water and other utilities for construction, access to the Project Site and proposed transmission line route. The Electricity Company shall take reasonable steps to facilitate safe and secure access to the Project Site for such site visits as requested by Prequalified Bidders. Any costs incurred during the site visit shall be fully borne by the Prequalified Bidders.

ARTICLE 25. PRE-BID CONFERENCE

25.1 A Pre-Bid Conference may be held by the Electricity Company for Prequalified Bidders. During the Pre-Bid Conference the Electricity Company shall provide further information about the Project, the RFP, and the Bidding Process.

25.2 The date, time and venue of the Pre-Bid Conference will be determined by the Electricity Company, and all Prequalified Bidders will be notified of this. Only Prequalified Bidders and their nominated potential contractors shall be allowed to participate.

25.3 Prior to the Pre-Bid Conference, Prequalified Bidders may submit any questions, requests for clarification and/or suggestions. Prequalified Bidders can also seek clarifications and make suggestions for consideration by the Electricity Company during the Pre-Bid Conference.

25.4 Any presentation materials presented by the Electricity Company at the Pre-Bid Conference will be uploaded to the Data Room.

25.5 The Electricity Company may set up one or more follow-up meetings after the initial Pre-Bid Conference, as it deems necessary.

ARTICLE 26. CLARIFICATION REQUESTS

26.1 Potential Bidders may request clarifications on the RFP from the Electricity Company.

26.2 Clarification requests should be submitted before the Clarification Deadline. The Electricity Company has no obligation but may, at its sole discretion, elect to accept any question or request for clarification submitted after this deadline.

26.3 The Electricity Company will share all the clarification requests along with the responses thereto, with all Prequalified Bidders.

26.4 The Electricity Company may, on its own initiative, issue clarifications to the RFP to specify the scope or interpret any element of the content that, in its opinion, is insufficiently clear. Such clarifications shall constitute an integral part of the RFP and shall be shared with all Prequalified Bidders.

26.5 Clarifications will be published at the latest 10 days before the deadline for the submission of Proposals.

ARTICLE 27. BID BOND

27.1 Each Prequalified Bidder will secure the performance of all the obligations required by this RFP and the PPA, by creating a Bid Bond. This Bid Bond will be constituted to the equivalent of USD 10 per kW of offered capacity. The Bid Bond shall be constituted in favor and to the satisfaction of the Electricity Company and shall be deposited under the custody of the Custodian Agent, a reputable bank in Suriname designated by the Electricity Company.

27.2 The Bid Bond shall be for a term of 180 consecutive days, automatically renewable for 90 consecutive days, if necessary, unless the Bidder has decided to withdraw the Bid after the original term of the guarantee has expired. In that case, he/she shall state their decision within at least fifteen (15) days before the original term will expire and said decision shall be effective when the stated term has expired.

27.3 If the Bidder: (i) communicates his decision to withdraw his Bid during the original Bid validity term; (ii) includes any false information provided as an affidavit; (iii) does not sign the Power Purchase Agreement pursuant to the RFP; or, (d) does not present the documentation required to obtain the PPA, then the Bidder will lose the Bid Bond in favor of the Electricity Company, who shall forfeit said guarantee without any previous administrative or legal action, giving the Bidder no right to any claim whatsoever.

27.4 The Bid Bond shall be constituted in favor and to the satisfaction of the Electricity Company, as a bank guarantee.

27.5 The non-compliance with the creation of the Bid Bond as provided herein will constitute enough cause for rejection of the Bid.

27.6 If any defect is found in the Bid Bond, whether related to the amount or to any other reason, such defect shall be remedied within the maximum term established by the Electricity Company under penalty of rejection of the Bid.

27.7 In the case of the Winning Bidder, the Bid Bond must remain valid until after the date of the PPA signature and as further specified pursuant to the terms of the PPA.

27.8 The Electricity Company shall not be liable to pay any interest on a Bid Bond.

27.9 The Bid Bond of unsuccessful Prequalified Bidders will be returned to these by the Electricity Company, without any interest, on the earlier of: where a Winning Bidder is appointed, within a period of 30 Days from the Effective Date

of the PPA; where the Bidding Process is cancelled in writing by the Electricity Company, within 15 Days from the date of cancellation of the process.

ARTICLE 28. CONTENT OF THE PROPOSAL

28.1 The Proposal shall consist of a Technical and a Commercial Proposal, each submitted separately in the method prescribed by the Electricity Company in the RFP.

28.2 The Commercial Proposal shall be submitted as a separate, password-protected electronic document. It will be opened on Auction Day only for Prequalified Bidders whose Technical Proposals pass the evaluation.

ARTICLE 29. CONTENT OF TECHNICAL PROPOSAL

29.1 The format and contents of the Technical Proposal shall be set out in the RFP.

29.2 Prequalified Bidders must propose for the Project as set out in the RFP. Prequalified Bidders will have access to the technical studies provided in the Data Room.

ARTICLE 30. CONTENT OF COMMERCIAL PROPOSAL

30.1 The format and contents of the Commercial Proposal shall be set out in the RFP. The RFP may include a ceiling on the tariffs to be offered by the Prequalified Bidder.

Evaluation of the Proposals

ARTICLE 31. AUCTION DAY

31.1 Auction Day is a single-day process on the date of the Proposal Submission Deadline, combining registration, qualification, bid submission, and winner selection for the Project as mentioned in the RFP. It begins at 9:00 a.m. Suriname Time with the Technical Proposal (Envelope I) evaluation, followed by the Commercial Proposal (Envelope II) evaluation at 3:00 p.m. for Prequalified Bidders who pass the Technical Proposal evaluation, with the Winning Bidder announced by 5:00 p.m.

31.2 The evaluation of the Proposals shall take place by the Electricity Company, under the supervision of the EAS.

31.3 The evaluation of each Proposal will be based solely on its content, attachments, supporting documentation, supplementary information, and any clarification provided pursuant to this Bid Procedure.

31.4 The Technical Proposal shall be securely stored by the Electricity Company, accessible only to the Electricity Company. The Commercial Proposal shall remain unopened, ensuring separation, until the Technical Proposals are evaluated.

31.5 Once the Technical Proposals are opened, the Electricity Company will publicly disclose the list of Prequalified Bidders that have submitted a Proposal, Project details, offered Products, Bid Bond status, and confirmation of Commercial Proposal submission.

31.6 The Electricity Company will issue an electronic submission receipt to each Bidder, which shall include a timestamp and submission details, which Bidders may acknowledge electronically.

ARTICLE 32. EVALUATION OF PROPOSALS

32.1 The Electricity Company shall proceed to conduct its evaluation of those Proposals that are not rejected or disqualified under a two-step process as follows, with all steps conducted electronically on Auction Day:

a. Technical Step: Review and evaluation of mandatory requirements in the Technical Proposal (Envelope I);

b. Commercial Step: Review and evaluation of the Offered Tariff submitted in the Commercial Proposal (Envelope II), with the Winning Bidder selected based on the lowest tariff.

32.2 The evaluation of all Technical Proposal requirements mentioned in the previous paragraph will be on a pass/fail basis and Prequalified Bidders are therefore required to satisfy all requirements of the Technical Proposal for their Commercial Proposal to be considered.

32.3 If further clarification is needed from a Prequalified Bidder during the Technical Proposal evaluation (e.g., incomplete documentation), the Electricity Company will request clarification via email to the Bidder’s registered contact by 12:00 p.m. on Auction Day. Bidders must respond by email to the Electricity

Company within 2 hours (by 2:00 p.m.), with non-responses resulting in rejection of the Proposal.

32.4 The Prequalified Bidder whose Technical Proposal (Envelope I) and Commercial Proposal (Envelope II) comply with the requirements set out in this Bid Procedure, and who proposes the lowest Offered Tariff shall be selected as the Winning Bidder.

32.5 Following completion of the evaluation on Auction Day, the Electricity Company will publicly disclose the results by 5:00 p.m. Suriname Time and subsequently email all Prequalified Bidders to inform them whether they have been selected as the Winning Bidder.

32.6 The public disclosure mentioned in the previous paragraph will include:

a. The names of all Prequalified Bidders who submitted Proposals;

b. The Offered Tariff quotes submitted by all Prequalified Bidders who passes the technical evaluation in their Commercial Proposals;

c. The lowest Offered Tariff and the name of the Winning Bidder.

ARTICLE 33. DEBRIEFING

33.1 The Electricity Company must, upon the request of any Prequalified Bidder, conduct a debriefing session within 10 Business Days. Any information given to the Prequalified Bidder in a debriefing session must remain confidential. During said debriefing, only the strengths and weaknesses of the Prequalified Bidder's Proposal will be disclosed and discussed; the evaluation, ranking, and content of any other Proposals will not be disclosed. This debriefing does not affect the appeals process.

ARTICLE 34. BID REPORT

34.1 Within 5 days after the Auction Day, the Electricity Company will submit to the EAS, for its approval, the Bid Report which shall contain:

a. List of Prequalified Bidders that have submitted a Proposal;

b. List of Prequalified Bidders that have not submitted a Proposal;

c. List of rejected Proposals and reasons for this;

d. Result of the evaluation including the ranking of the Prequalified Bidders;

e. Identification of the Winning Bidder, being the Prequalified Bidder with the first ranking.

34.2 The approval by the EAS as referred to in the previous paragraph shall only be given if there are no pending complaints or appeals from any Prequalified Bidder regarding the Bid Process.

ARTICLE 35. NOTICE OF AWARD

35.1 Immediately after approval of the Bid Report by the EAS, the Electricity Company shall declare the Winning Bidder through the publication of the Notice of Award.

35.2 The Electricity Company shall invite the Winning Bidder to the signing of the PPA, which shall be not more than 30 days after the publication of the date of the Notice of Award.

35.3 The invitation to the Winning Bidder, as referred to in the previous paragraph, shall include the final PPA to be executed. This PPA shall be identical in all material respects to the Draft PPA included in the RFP, except that it shall incorporate and reflect all bid-specific terms and conditions resulting from the Bidding Process.

ARTICLE 36. PROJECT COMPANY INCORPORATION

36.1 The Winning Bidder shall, within 30 days after the Notice of Award, establish a public limited company (Naamloze Vennootschap – NV) under the laws of the Republic of Suriname. This corporation shall be nominated by the Winning Bidder as the Seller with whom the PPA will be executed.

36.2 The Winning Bidder shall submit to the Electricity Company the following proof of existence of the Seller:

a. Constitutive act or legal statutes; and

b. Certificate of registration in the Public Registry of Commerce which confirms the existence, the legal capacity, and the proper constitution of the company;

36.3 Failure of the Winning Bidder to perform any of the obligations set out in this Article shall result in the forfeiture of the Bid Bond and disqualification of the Winning Bidder. In such a case, the Electricity Company shall declare the next highest-ranking Prequalified Bidder as the Winning Bidder.

OTHER PROVISIONS

ARTICLE 37. GOVERNING LAW

37.1 The Bidding Process shall be conducted in accordance with the laws and regulations of the Republic of Suriname.

37.2 Potential Bidders and their respective partners, suppliers, sub-contractors, sub-consultants, officers, employees, agents, service providers and advisers shall observe the laws of the Republic of Suriname.

ARTICLE 38. OWN COST

38.1 Each Bidder shall bear all costs associated with its participation in the Bidding Process. This includes all stages of the Bidding Process including, inter alia, the costs and expenses related to its involvement in:

a. site visits and inspections;

b. information gathering process;

c. preparation and submission of queries and requests for clarification;

d. preparation and submission of responses to questions or requests for clarification;

e. attendance at the Pre-Bid Conference and any follow-on meetings scheduled;

f. preparation, collection, and submission of the Proposal and all required supporting documents or information; and

g. post-bid activity including meetings to finalize and execute the PPA.

ARTICLE 39. CHANGE IN LAW PRIOR TO THE EFFECTIVE DATE FOR THE PPA

39.1 On the occurrence of a Change in Law after the Proposal Submission Deadline but before the Effective Date of the PPA which may reasonably be believed to have a material impact on the Proposal, the Winning Bidder may notify the Electricity Company in writing of such Change in Law, upon which: the Electricity Company shall invite the Winning Bidder to confirm in writing that the Offered Tariff shall remain unchanged, as indicated in the Proposal within a period indicated by the Electricity Company, which shall not be less than ten (10) Business Days from said invitation.

39.2 To the extent the Winning Bidder confirms its Offered Tariff, it shall maintain its Winning Bidder status; failing which within a period indicated by the Electricity Company, which shall not be less than ten (10) Business Days, the Electricity Company shall invite all Prequalified Bidders who submitted a Proposal to re-submit their Proposal. The Electricity Company will proceed with a new tender evaluation and a new Winning Bidder shall be announced based on the re-submitted Proposals.

39.3 If any Prequalified Bidder withdraws or declines to re-submit due to the Change in Law, such Prequalified Bidder's Bid Bond shall not be drawn. Any Prequalified Bidders who resubmit their Proposal according to this Article shall be bound by the Bid Bond provisions of these Bid Procedures.

ARTICLE 40. COMPLAINTS AND APPEALS PROCESS

40.1 A Bidder may submit a written complaint to the Electricity Company within 7 calendar days of receiving the relevant notification, if it disagrees with a decision made by the Electricity Company in the Bidding Process.

40.2 The Electricity Company shall review the complaint and issue a decision within 7 calendar days of receipt. This decision shall include the rationale for the evaluation outcome and the basis for the determination.

40.3 If the Bidder disagrees with the decision mentioned in the previous paragraph, the Bidder may submit an appeal to the EAS within 7 calendar days of receiving that decision. EAS shall review the appeal and issue a written decision on the appeal within seven 7 calendar days of receipt, including the rationale for its determination.

40.4 Any complaint of appeal shall include:

a. Reference to the Announcement;

b. The decision;

c. The grounds for disagreement with the decision;

d. Any supporting evidence.

ARTICLE 41. CONFLICT OF INTEREST

41.1 Bidders must disclose any actual or potential conflict of interest to the Electricity Company. Failure to disclose may result in disqualification.

41.2 For the purposes of these Bidding Procedures, "Conflict of Interest" means any situation in which a Bidder or any of its affiliates, subcontractors, or key personnel has interests, relationships, or activities that could improperly influence or appear to influence the fairness and impartiality of their participation in the Bidding Process. Such conflict may arise from direct or indirect financial, personal, or other relationships with other stakeholders or their staff involved in the Bidding Process.

41.3 Notwithstanding anything else to the contrary, Bidders may use the same local firm or firms to obtain geotechnical, topographical, or other technical information about the site and may use the same firm or firms to obtain local legal advice in respect of the Project.

ARTICLE 42. FRAUDULENT AND CORRUPT PRACTICES

42.1 Prequalified Bidders must comply with applicable anti-corruption laws and refrain from any fraudulent, corrupt, or unethical practices during the Bidding Process. Any violation shall result in immediate disqualification and forfeiture of the Bid Bond.

42.2 In the event of such a violation, the Electricity Company or the EAS may report the matter to the appropriate authorities.

42.3 Furthermore, a Bidder shall not be eligible to participate in any Bidding Process for any other project of the Electricity Company for a period of 3 years from the date such Potential Bidder is found by the Electricity Company to have

directly or indirectly or through an agent, engaged or indulged in any fraudulent, corrupt, or unethical practices.

ARTICLE 43. CONFIDENTIALITY

43.1 All communications between the Bidders, the Electricity Company, the EAS, as well as any other authority relevant to the Bidding Process, and all information obtained in connection with or arising out of the Bidding Process, shall be treated as confidential during as well as after the completion of the Bidding Process.

43.2 Bidders must treat all information received as part of the Bidding Process in a highly confidential manner and not use this information for any purpose other than for the purpose of the Bidding Process and to fulfil any related requirement thereto.

43.3 In the event of any breach of confidentiality by the Bidder, the Electricity Company, after approval by the EAS, may at any time during the Bidding Process disqualify the Bidder.

43.4 Bidders may share confidential information with their respective employees, consultants, professional advisers, lenders, and potential contractors; provided however that appropriate confidentiality arrangements are in place.

43.5 Notwithstanding the foregoing, the obligation of confidentiality shall not pertain to information which was at the time of disclosure, or which thereafter became, part of the public domain or is required to be disclosed by law or a court order, where, in such cases, all reasonable attempts will be made to notify the Electricity Company in advance of doing so.

43.6 The Electricity Company shall endeavor to maintain the confidentiality of information and/or documents relating to the prequalification, examination, clarification, evaluation, negotiations, approval or any other function related to the Bidding Process, provided that this shall not restrict disclosure to any person who is officially concerned with the Bidding Process or is a retained professional advisor advising the Electricity Company or other state authority in the Electricity Company in relation to matters arising out of, or concerning the Bidding Process. The Electricity Company will further require all those who have access to such information and/or documents to treat them as confidential.

ARTICLE 44. OWNERSHIP

44.1 Prequalified Bidders must treat all information obtained in connection with or arising out of the Bidding Process as the property of the Electricity Company. Bidding documents and all other correspondence, documentation and information provided to the Electricity Company by the Bidder in connection with the Bidding Process shall become the property of the Electricity Company. All information collected or processed by or for the Electricity Company is for the sole use of the Electricity Company at its discretion.

Format
Request for Expression of Interest

Request for Expression of Interest

Competitive Procurement Process for Independent Power Producers of Electricity

from Renewable Sources

Expression of Interest (EoI)

20XX

Request for the Expression of Interest (EoI)

For Independent Power Producers of Electricity from Renewables Sources

1. INTRODUCTION

1.1 BACKGROUND

The vision for the power sector as set out in the Electricity Sector Plan (ESP) in May 2025 is based on the goal of meeting Suriname's electrical deand needs while maximizing well-being through an efficient allocation of resources.

This request for expression of interest (REOI) follows the ESP and the Generation Expansion Plan, which have established the long-term plan for Suriname's power sector to reach the target for renewable source development, including 50 MW of solar PV by 2026. To achieve the goals of the Plan, N.V. Energiebedrijven Suriname (EBS - the Electricity Company) will be required to mobilize significant amounts of investments in a timely manner to allow for the commissioning of the targeted additional capacity, starting with an initial 10 MW solar PV tender structured as two 5 MW projects in 2026.

EBS is inviting all interested parties to participate in this REOI and submit Applications in response to this REOI for evaluation and shortlisting by EBS under the oversight of the Energy Authority of Suriname (EAS).

Shortlisted Potential Bidders shall be named as Prequalified Bidders and shall be invited to respond to the RFP

1.2 LEGAL BASIS

This REOI is issued in accordance with the Electricity Act 2016 (Article 21) and the Bidding Procedures (SB 2025 no X), which mandates EBS as the single buyer to procure renewable energy capacity through competitive tenders, overseen by the Energy Authority of Suriname (EAS).

Potential Bidders are strongly advised to familiarize themselves with the Bidding Procedures, which govern this Bidding Process including this REOI stage.

2. OVERVIEW OF THE BIDDING PROCESS

2.1 OBJECTIVE

The outcome of the Bidding Process is the selection of the Winning Bidder. Pursuant to Article 21(4) of the Electricity Act, the Winning Bidder shall be granted a license to construct, operate,

and maintain the Project subject to this Bidding Process. In accordance with Article 21(5) of the Electricity Act, the Winning Bidder shall subsequently enter into a Power Purchase Agreement (PPA) with EBS.

The draft PPA is attached to this REOI.

2.2 TWO STAGE BIDDING PROCESS

A two-stage bidding process has been adopted for this Project in accordance with the Bidding Procedures, comprising:

- **Stage 1: REOI Stage**
    - Potential Bidders will submit Applications per this REOI's terms. Applications will be evaluated based on defined prequalification criteria.
    - The REOI Stage concludes when EBS identifies the Prequalified Bidders and notifies all Potential Bidders of the results.
- **Stage 2: RFP Stage**
    - The RFP Stage is the competitive procurement process that follows the REOI Stage and is intended to result in the selection of a Winning Bidder.
    - Only the Prequalified Bidders will be invited to submit Proposals during the RFP Stage. Submission of a Bid Bond will be required at the RFP Stage.
    - EBS will assess Proposals received from Prequalified Bidders and will take the decision on selection of a Winning Bidder.
    - Once selected, the Winning Bidder shall finalize the Project Agreements with the Buyer and execute or procure the execution of the Project Agreements by the Project Company.
    - Should the Winning Bidder delay the signing of the Project Agreements beyond the date specified in the RFP, the EBS reserves the right to award the Project to the next RFP compliant Prequalified Bidder in place of the Winning Bidder.

3. TIMELINE

The following timeline applies to thie REOI stage:

Table 1: Timeline

Activity	**Dates**
Publication of REOI	…
Clarification Deadline	… [at least 3 weeks after publication]
Deadline for Applications	… [at least 8 weeks after publication]
Notification of results	… [less than 30 days after application]

Interested Parties shall register on the EBS tender portal to receive a copy of the full tender dossier and instructions for submitting their Application.

4. CONTACT

The adress of the EBS tender portal is: [insert]

The EBS contact details for the purpose of this bidding process is: [insert email address]

All communication and submissions under this bidding process will be electronic.

5. RESPONSIBILITY OF POTENTIAL BIDDERS

For the purposes of assessing and responding to this REOI, each Potential Bidder should at its own cost conduct its own investigation and analysis of the Project and the laws, regulations and policies applicable to this REOI and the bidding process for the Project.

6. CLARIFICATION REQUESTS

Potential Bidders are referred to Article 8 of the Bidding Procedures which prescribe the process for clarification requests.

The deadline for clarification requests is indicated in Table 1 above.

7. PROJECT SITE

The EBS has decided to undertake the Project as a public procurement based on the Electricity Act 2016 (Article 21) requirements.

The Project consists of a [X MW] PV plant.

The Project offers flexibility in site selection: Potential sites include coastal and urban areas of Suriname within ESP-identified locations. Final site selection remains the responsibility of the Bidders.

8. PREQUALIFICATION REQUIREMENTS

In order to be Prequalified to participate in the RFP process, Potential Bidders must meet three Prequalification Criteria namely (1) Legal Prequalification Requirements, (2) Technical Prequalification Requirements, and (3) Financial Prequalification Requirements.

8.1 LEGAL PREQUALIFICATION REQUIREMENTS

In accordance with Article [@17] of the Bidding Procedures, Potential Bidders must demonstrate their legal status and integrity as follows:

(A) Legal Status and Incorporation

- The Potential Bidder must be a legal entity duly incorporated, validly existing, and duly registered under the laws of its country of domicile.
- In the case of a Consortium, each Consortium Member must separately meet this requirement.

(B) Required Documentation

- A valid certificate of incorporation, business registration, or equivalent legal document evidencing the existence of the Potential Bidder (and each Consortium Member, if applicable).
- If submitting as a Consortium, the REOI shall include:
    - An organizational chart and description of each Consortium Member's role; and

- A consortium agreement, joint venture agreement, memorandum, or equivalent contract outlining responsibilities and decision-making arrangements.

(C) Integrity and Compliance Requirements

The Potential Bidder (including all Consortium Members, if applicable) shall provide a sworn statement confirming that it:

- Has no Conflict of Interest;
- Is not under liquidation or bankruptcy proceedings, and has not been within the last five (5) years;
- Has not been convicted for fraud, corruption, collusion, money laundering, or any criminal act involving dishonesty or harm to human life;
- Has not had a power purchase agreement or concession terminated for default attributable to the Potential Bidder or its affiliates;
- Has not been previously suspended, disqualified, or debarred from public procurement processes;
- Is not subject to debarment or sanctions by any multilateral development bank or international financial institution;
- Is not listed on any sanctions lists issued by the UN Security Council or other recognized international sanctions bodies;
- Is not engaged in business or transactions that would violate international sanctions.

(D) Verification

All submitted legal documents shall be accompanied by an authorized translation into English (if issued in another language). The Electricity Company reserves the right to request additional clarifications or notarized/legalized copies of any document.

8.2 **TECHNICAL PREQUALIFICATION REQUIREMENTS**

Reference is made to Article [@18] of the Bidding Procedures for the applicable technical prequalification requirements. Pursuant to Article 18.1 of the Bidding Procedures, the technical Prequalification Criteria are further specified as follows:

(A) The Lead Sponsor (in the case of a single Potential Bidder) or all Consortium Members in aggregate (in the case of a Consortium), must demonstrate relevant experience of: (i) developing (directly themselves): (ii) financing (through own equity with optionally external loans); and (iii) operating and maintaining (directly themselves) at least (the "Technical Prequalification Requirements"):

- completion of at least two solar PV projects totaling ≥10 MW, operational for ≥12 months since January 2016, verified by sworn statements; and
- a portfolio of grid connected power plants of any technology anywhere in the world of in aggregate equal to a minimum of 20 MWe (for all technologies).

(B) Aforesaid experience requirements shall be subject to the following technical criteria:

- Eligible Projects shall have entered commercial operation after 1st January 2016;
- Eligible Projects shall have at least twelve (12) months of operational history since their respective commercial operation date as of the REOI issue date;
- Each Eligible Project must have a minimum installed capacity of 5 MWe (for wind projects, this threshold is expressed as 5 MWac).
- A minimum of two (2) Eligible Projects meeting the above criteria must be demonstrated, totaling at least 10 MW of operational capacity.

(C) For each power plant listed, the Potential Bidder shall provide a clear statement with a reasonable description of the Eligible Project and a summary of documentary evidence.

8.3 **FINANCIAL PREQUALIFICATION REQUIREMENTS**

Reference is made to Article [@19] of the Bidding Procedures for the applicable financial prequalification requirements. Pursuant to Article 19.1 of the Bidding Procedures, the financial Prequalification Criteria are further specified as follows:

Subject to the exceptions listed below, a Potential Bidder (whether directly or through its parent company) must satisfy each and all of the following financial requirements (the "Financial Prequalification Requirements"):

(A) Each Consortium Member to provide certified copies of audited consolidated financial statements for the last three (3) full financial years as at the Application Deadline. Audited consolidated financial statements shall include a consolidated balance sheet, income statement, statement of cash flows and accompanying notes per international audit standards. If applicable law does not require the auditing of financial statements for a Consortium Member or such Consortium Member has not in fact had its financial statements audited for any of the last three (3) full financial years, Financial Prequalification Criteria will be satisfied by submitting non-audited consolidated financial statements accompanied by a sworn statement.

(B) A Lead Sponsor (whether a single Potential Bidder or in a Consortium) must have for each of the last three full financial years as at the Application Deadline:

- a net worth (being the total amount of all total assets minus all total liabilities, as stated in the audited balance sheet) of at least five millions USD $5,000,000) (or its equivalent in another currency); and

- net worth to total assets ratio of at least fifteen per cent (15%).

9. SUBMISSION OF THE APPLICATION

9.1 APPLICATION DOCUMENTS

Each Potential Bidder must submit its Application on or before the Clarification Deadline strictly in accordance with the requirements of this REOI.

Each Application must include:

a. the Submission Identification Sheet, duly completed in the format provided in Annex 3 – EOI Application Forms (Form 1);

b. the Letter of Application, duly completed and executed in the format provided in Annex 3 – EOI Application Forms (Form 2) (the "Letter of Application").

9.2 SIGNING, SEALING, AND MARKING OF APPLICATIONS

Potential Bidders must submit their Application electronically as a password-protected PDF file through the EBS tender portal. The submission process requires a two-step password mechanism: (i) a unique login password provided by EBS to access the tender portal, and (ii) a separate password set by the Potential Bidder to protect the PDF file, which must be emailed to EBS upon submission. Detailed submission instructions, including portal access and password requirements, will be provided to registered Potential Bidders.

The Application shall be digitally signed by the Authorized Representative of the Potential Bidder, using a recognized electronic signature compliant with international standards (e.g., Adobe Acrobat Sign, DocuSign).

No physical copies or memory sticks are required. The electronically submitted Application, once verified, shall be considered the original submission.

Potential Bidders must complete and include the REOI Submission Identification Sheet (Form 1, Annex 3) as part of the Application. The Identification Sheet shall be clearly titled:

> *"EOI for Competitive Procurement Process for Independent Power Producers of Electricity from Renewable Sources in Suriname – (Insert code) Solar PV Tender"*

It shall also include the name and address of the Potential Bidder and indicate the Application Deadline.

Applications must be submitted via the EBS tender portal by the Application Deadline. For password submission and inquiries, contact:

Designation: Tender Secretariat, N.V. Energiebedrijven Suriname

Name: [insert contact name]Email address: [insert email]

9.3 **APPLICATION DEADLINE**

Applications shall be submitted on or before the Application Deadline as mentioned in Table 1 (Timeline).

Applications received by the EBS after the specified time on the Application Deadline shall not be eligible for consideration and shall be rejected.

10. EVALUATION OF THE APPLICATIONS

10.1 OPENING OF APPLICATIONS

EBS shall open the Applications at:

- [date and time]

Whether an opening ceremony for received Applications is to be made online or offline will be determined by the EBS closer to the Application Deadline.

10.2 EVALUATION

Potential Bidders are refered to Bidding Procedures which set out the procedure and criteria for the evaluation of the Applications.

APPENDIX

- Annex 1: Bidding Procedures
- Annex 2: Power Purchase Agreement (PPA) Outline
- Annex 3: EOI Application Forms
    - Form 1: Submission Identification Sheet
    - Form 2: Letter of Application

Form 1: Submission Identification Sheet

Expression of Interest (EOI) for Competitive Procurement Process for Independent Power Producers of Electricity from Renewable Sources in Suriname – Solar PV Tender.

Tender Reference Code	*[Insert Tender Reference Code as provided by EBS]*
Name of Potential Bidder	*[Legal name of the Potential Bidder / Lead Sponsor]*
Country of Incorporation	*[Insert country of incorporation / domicile]*
Registered Address	*[Insert full registered address of the Potential Bidder]*
Authorized Representative	*[Name, title, and contact details of the Authorized Representative]*
Consortium Members (if applicable)	*[List all Consortium Members, their percentage participation, and roles]*
Application Submission Date	*[Insert date of submission]*
Application Deadline	*[Insert date of the REOI deadline]*

Tender Contact Person: [Insert name, position, email, and phone number for official communications]

Declaration:

We hereby confirm that the information provided in this Submission Identification Sheet is accurate and complete.

Signed:
[Authorized Representative Name]
[Position/Title]
[Company Name]
[Date]

This form shall be subject to review and approval by the competent Legal Department of EBS prior to final issuance.

Form 2: Letter of Application

Expression of Interest (EOI) for Competitive Procurement Process for Independent Power Producers of Electricity from Renewable Sources in Suriname – Solar PV Tender

To:
Tender Secretariat
N.V. Energiebedrijven Suriname (EBS)
[Insert address or email]

Subject: Submission of Expression of Interest – [Tender Reference Code]

Dear Sir/Madam,

We, the undersigned, hereby submit our Expression of Interest to participate in the Competitive Procurement Process for Independent Power Producers of Electricity from Renewable Sources in Suriname – Solar PV Tender.

In accordance with the requirements of the Request for Expression of Interest (REOI), we confirm that:

1. We have reviewed and understood the REOI and the associated Bidding Procedures.
2. We meet the Legal, Technical, and Financial Prequalification Requirements as set out in Section 8 of the REOI and Articles 17–19 of the Bidding Procedures.
3. We are submitting all required supporting documentation and forms, including the Submission Identification Sheet (Form 1).
4. We accept that the submission of this Expression of Interest is non-binding and does not entitle us to any claims or rights beyond the scope defined in the REOI.

Where applicable, we submit this Expression of Interest as a Consortium with the following members:
- *[Lead Sponsor Name – % share]*
- *[Consortium Member Name – % share]*
- *[Consortium Member Name – % share]*

We hereby designate [Name of Authorized Representative] as our sole contact person for all communications related to this EOI.

We declare that all information provided in this application is true, accurate, and complete.

Yours faithfully,

Signed:
[Authorized Representative Name]
[Position/Title]

[Company Name / Lead Sponsor]
[Date]

This form shall be subject to review and approval by the competent Legal Department of EBS prior to final issuance.

Format
REQUEST FOR PROPOSALS

Competitive Procurement Process for Independent Power Producers of Electricity from Renewable Sources

XX

REQUEST FOR PROPOSALS

(date of launch)

INTRODUCTION

This Request for Proposals (RfP) follows the completion of the Request for Expressions of Interest (REoI) stage and constitutes the second phase of the competitive tender process for the selection of a Winning Bidder to develop up to 5 MW of Solar PV generation capacity in Suriname.

The tender is administered by EBS and overseen by the EAS.

Only entities that have been formally prequalified through the REoI stage ("Prequalified Bidders") are eligible to participate in this RfP stage.

1. Legal Basis and Jurisdiction

The Project shall be procured and implemented in accordance with the Electricity Act 2016 (Article 21), the applicable provisions of the Electricity Sector Plan (ESP), Volume III, and the Bidding Procedures (SB 2025 no. [●]), which govern this competitive tender process.

Bidders are strongly encouraged to familiarise themselves with the Bidding Procedures.

Any reference to an Article is intended to refer to an Article of the Bidding Procedures.

This RfP and the resulting Power Purchase Agreement (PPA) shall be governed by the Laws of Suriname, with exclusive jurisdiction vested in the competent courts of Suriname.

EBS does not intend to issue any legal due diligence report or formal overview of the legal or taxation framework applicable to the Project. Prequalified Bidders are solely responsible for conducting their own legal, regulatory, and financial due diligence, and are encouraged to engage independent advisers as necessary.

2. Overview of the bidding process

The competitive procurement process for this Project follows a two-stage structure. Stage 2 (the RfP Stage) of the process and is open only to entities that have been formally prequalified through Stage 1 (the REoI Stage).

The full description of the tender process, including submission rules, evaluation methodology, and applicable timelines, is provided in the Bidding Procedures, which are incorporated by reference into this RfP.

3. Current Process - Description

As set out in Articles 3 and Article 12 through Article 22 of the Bidding Procedures, EBS has completed the following steps as part of the first stage (REoI Stage) of the procurement process:

- Published the REoI notice in the national press and on its official website on [insert exact date, ideally in January 2026];
- Received official Expressions of Interest from Potential Bidders by [insert exact date, ideally in March 2026];

- Determined the list of Potential Bidders on [insert exact date, ideally in March 2026];
- Approved the REoI by internal decision [insert decision number], dated [insert exact date, ideally around March 2026], and published on [insert official channel for publication];
- Approved the list of Prequalified Bidders by internal decision [insert decision number], dated [insert exact date, ideally in April 2026], and published on [insert official channel for publication];

Only the Prequalified Bidders identified through this process are eligible to participate in this RfP stage.

Activity	Dates
Publication of Request for Expression of Interest	
Clarifications / Consultation Period / Questions	
Answers	
Presentation of Expressions of Interest / Deadline for submission of the EoI	
Information to short-listed bidders	

EBS anticipate carrying out the RfP Stage in accordance with the timeline set out in Table below.

Table 1: Bid Schedule

Milestone	Indicative Date
Issuance of RfP to Prequalified Bidders	[insert exact date, ideally in April 2026]
Site Visit (optional but recommended)	[insert exact date, ideally 1–2 weeks after RFP issuance]
Deadline for submission of clarification questions	[insert exact date, at least 3 weeks after RFP issuance]
Deadline for submission of Proposals	[insert exact date, ideally 5–6 weeks after RFP issuance]
Opening and evaluation of Proposals	[insert exact Auction Day, same as Proposal Submission Deadline]
Announcement of Winning Bidder	[insert exact Auction Day, same as Proposal Submission Deadline]
Publication of Notice Award	[insert exact date, immediately after announcement]
Signature of PPA	[insert exact date, within 30 days after the publication of the Notice of Award]

Prequalified Bidders will be notified of any changes to this RfP through an Addendum or Corrigendum issued by EBS.

Proposals shall be submitted in two separate envelopes in accordance with the instructions in the Bidding Procedures:

- Envelope I to contain the Letter of Proposal, Bid Bond and Technical Proposal;
- Envelope II to contain the Commercial Proposal.

4. Project Site

As per the ESP (May 2025), EBS has defined the target capacity and technology for this tender.

The Project offers flexibility in site selection, provided that proposed locations fall within the ESP-identified coastal or peri-urban zones (e.g., La Paix, Vijfde Rijweg). Final site selection remains the responsibility of the Bidders and shall be supported with appropriate documentation as outlined in Articles 28 and 29 of the Bidding Procedures.

The maximum capacity to be contracted under this RfP is 5 MWac, to be installed as a grid-connected photovoltaic power station ("PV Station").

Site-specific interconnection parameters, including available capacity and indicative Interconnection Points, are provided in Form I.2.B of this RfP.

Reference is made to Article 29 of the Bidding Procedures, which specifies the required technical documentation regarding site characteristics, land use, grid access, and interconnection assumptions.

To support the preparation of Technical Proposals, EBS provides the following indicative documentation, aligned with the process described in the Bidding Procedures:

- Information on renewable energy resource potential at selected zones, including any available historical measurement data;
- A draft environmental permit template (the final permit remains the responsibility of the Winning Bidder);
- A draft grid access permit, including preliminary confirmation from the system operator that the proposed capacity may be evacuated to the grid (subject to final approval);
- Land use documentation, if applicable, relevant to eligible zones.

Bidders shall be solely responsible for verifying the suitability and compliance of their proposed site, including legal rights, environmental constraints, and permitting requirements. No site will be assigned or secured by EBS.

5. Auction Demand

Bids shall be evaluated in accordance with the pay-as-bid model, and the ceiling tariff of 120 USD/MWh constitutes the maximum acceptable price under Article 4 of the Bidding Procedures.

Auction Demand is found in the table below:

Product	Demand
Capacity Product	5 MW

The Maximum Price in this RFP, on which the Bidder will apply its competitive discount is:

Product	Maximum Price or Price Cap
Capacity Product	120 USD/MWh (pay-as-bid applies, bidders offer a tariff at or below this cap for the energy produced by the 5 MW capacity, paid per MWh delivered under the PPA)

The submitted tariff shall be at or below the price cap and will be paid for each MWh delivered under the PPA for the contracted capacity, in line with the rules established under this RFP and the Bidding Procedures.

For reference, the applicable criteria governing capacity, pricing, and evaluation are defined under Article 4 of the Bidding Procedures, while the timeline for auction-related steps is provided under Article 23.3 of the Bidding Procedures.

INSTRUCTIONS TO PREQUALIFIED BIDDERS

6. Information – Data collection

(a) Reference is made to Article 9 of the Bidding Procedures. Each Prequalified Bidder must submit their Proposal on or before the Proposal Submission Date strictly in accordance with the requirements of this RFP. Late submissions shall not be considered.

(b) Reference is made to Article 24 of the Bidding Procedures. A Data Room shall be made available to all Prequalified Bidders. It shall contain this RFP, any Addenda or Corrigenda, notices including the invitation to the Pre-Bid Conference, and other relevant materials for the RFP Stage. Only Prequalified Bidders shall be granted extended access during the RFP Stage.

(c) Reference is made to Article 24.2 of the Bidding Procedures. Prequalified Bidders are encouraged to conduct a Site review and visit prior to submitting their Proposals, to assess for themselves the conditions, surroundings, and infrastructure (including access, grid, water, and other utilities). Reasonable facilitation for safe and secure access to the Site shall be provided. All costs associated with site visits—virtual or physical—shall be borne entirely by the Prequalified Bidders.

(d) Reference is made to Article 7.1 of the Bidding Procedures. Submission of a Proposal implies acceptance of the terms and conditions of this RFP, confirmation that no Conflict of Interest exists, and agreement to be bound by the undertakings set out herein.

7. Pre-Bid Conference

(a) Reference is made to Article 25.1 of the Bidding Procedures. A Pre-Bid Conference will be convened for Prequalified Bidders. The date, time, and format (online or in-person) of the conference shall be determined and communicated in advance. Participation shall be limited to Prequalified Bidders and their nominated potential contractors. The purpose of the Pre-Bid Conference is to provide additional details regarding the Project, the RFP, and the Bidding Process.

Prequalified Bidders may submit written questions, requests for clarification, and suggestions prior to the conference in accordance with the procedures set out in Article 26.1 of the Bidding Procedures. Clarifications and suggestions may also be raised during the session itself.

(b) Reference is made to Article 25.4 of the Bidding Procedures. Any presentation materials shared during the Pre-Bid Conference shall be uploaded to the Data Room for access by all Prequalified Bidders.

(c) Reference is made to Article 25.5 of the Bidding Procedures. Follow-up meetings may be organized at the discretion of the Tendering Authority should additional clarification or engagement be deemed necessary.

8. Clarification Requests.

(a) Reference is made to Article 26.1 of the Bidding Procedures. Prequalified Bidders may submit written questions, requests for clarification, or suggestions for consideration regarding the content of this RFP. These may be submitted before or on the RFP Clarification Request Deadline as indicated in the Bid Schedule in Table 1 from Section 3 of this RFP and in accordance with Article 23.3(c) of the Bidding Procedures.

(b) All clarification requests must be submitted to both of the following email addresses:

[Insert email addresses in bold for clarity]

The template below shall be used for all such submissions:

> **Subject:** Submission of queries, requests for clarification and/or suggestions for consideration in respect of the Request for Proposal ("RFP") issued for [Insert Project Name]
>
> **Defined terms:** Unless otherwise defined, capitalized terms used in this submission shall have the meaning given to them in the RFP and PPA.

Date of submission: [Insert date of submission]

Prequalified Bidder: [Insert name of Prequalified Bidder]

Ref. No.	Clause of RFP	Query / Request for Clarification / Suggestion for Consideration	Proposed Drafting Amendment* (if any)

(c) Reference is made to Article 26.3 of the Bidding Procedures. All received queries, requests for clarification, and suggestions—along with the official responses—shall be distributed to all Prequalified Bidders through the [Insert distribution channel, e.g., Data Room or official email list], without identifying the source of the submissions.

9. Proposal Costs

Each Prequalified Bidder shall bear all costs associated with its participation in the Bidding Process, including but not limited to the evaluation of this RFP and the preparation and submission of its Proposal. As stipulated in Article 38.1 of the Bidding Procedures, such costs include among others:

- Site visits and inspections;
- Information gathering and review of documents made available in the Data Room;
- Preparation and submission to the Tender Commission of queries and requests for clarification;
- Preparation and submission of responses to clarification requests from the Tender Commission;
- Attendance at the Pre-Bid Conference and any follow-up meetings organized by the Tender Commission;
- Preparation, collection, and submission of the Proposal and all required supporting documentation; and
- Post-bid activities, including meetings to finalize and execute the Power Purchase Agreement (PPA).

No costs or expenses incurred by a Prequalified Bidder in connection with any of the foregoing shall be reimbursed by the Electricity Company.

10. Bid Bond

(a) Each Prequalified Bidder shall secure the performance of all obligations under this RFP and the PPA by establishing a Bid Bond. The Bid Bond shall be constituted in the amount of USD 10 per kW of offered capacity (e.g., USD 50,000 for 5 MW), in accordance with Article 27.1 of the Bidding Procedures. It must be valid for 180 days from the Proposal Submission Date and automatically renewable for an additional 90 days if necessary. The Bid Bond shall be in favor and to the satisfaction of the Electricity Company, and deposited with a reputable bank in Suriname designated as the Custodian Agent.

(b) The Bidder may withdraw its Bid only after the original term of the Bid Bond expires, by providing

notice at least fifteen (15) days in advance, as stated in Article 27.2.

(c) As per Article 27.3, the Bidder shall forfeit the Bid Bond in favor of the Electricity Company without any administrative or legal action, and without any entitlement to claim, if the Bidder:

(i) withdraws the Bid during the original validity period;

(ii) submits false information;

(iii) fails to sign the PPA in accordance with the RFP; or

(iv) fails to provide documentation required to obtain the final concession.

(d) The Bid Bond shall be a bank guarantee and constituted in accordance with the terms of Article 27.4.

(e) Non-compliance with the requirement to establish the Bid Bond shall result in rejection of the Proposal, as per Article 27.5.

(f) Any defect in the Bid Bond—whether related to amount or form—must be remedied within the period specified by the Electricity Company, failing which the Bid shall be rejected (Article 27.6).

(g) For the Winning Bidder, the Bid Bond shall remain valid until after the PPA is signed, and as further detailed in the PPA (Article 27.7).

(h) No interest shall be payable on any Bid Bond (Article 27.8).

(i) The Bid Bonds of unsuccessful Bidders will be returned without interest: either within 30 days after the PPA Effective Date (in case of award) or within 15 days following written cancellation of the Bidding Process (Article 27.9).

11. Proposal Requirements

(a) The Bidder shall submit the following certified and legalized documentation as part of its Proposal, in accordance with the requirements set forth in Article 28 and Article 8.2 of the Bidding Procedures:

- Organization chart of the Economic Group to which it belongs;
- Constitutive act or legal statutes, duly registered with the competent body, accompanied by documentation evidencing the election of current administrators or powers of attorney granting authority to the legal representative;
- Commitment to form a Consortium, where applicable, by public or private instrument (see also Article 6.2);
- Foreign firms must establish legal representation in Suriname, in accordance with national law;
- Certificates of Non-Indebtedness in Suriname and the country of the Foreign Firm.

(b) In all cases, each legal entity constituting the Bidder must provide original or duly certified and legalized copies of the following documents:

(c) For legal entities constituted in Suriname:

- Name, designation, or business name;
- Taxpayer Identification Number;
- Legal address, telephone number, and corporate email address;
- Articles of incorporation, corporate agreement, and current bylaws;
- Certificate of registration in the Public Registry of Commerce confirming existence, legal capacity, and proper constitution, as required under Article 6.1.

(d) For all legal entities, whether constituted in Suriname or abroad:

- Power of attorney confirming the authority of representatives to act on behalf of each constituent entity of the Bidder (Article 8.3);
- Bid Bond (Article 27.1);
- Sworn statement accepting the terms of the RFP and confirming the absence of any restrictions, inhibitions, or inconsistencies (Article 8.2(b)).

(e) All documentation issued abroad must comply with the applicable legal formalities in the jurisdiction of issuance.

(b) Financial statements for the most recent fiscal year, presented in accordance with the applicable laws. In the case of a foreign Bidder, these statements must conform to the regulations of the relevant home jurisdiction and be translated into English (Article 19.1).

(c) A form confirming the Bidder's acceptance of the site-specific features of the Project, as outlined in the documentation provided with the Auction materials.

(d) Documentation evidencing relevant project development experience, including a sworn statement outlining key details of previous projects, financing sources, and buyer contact details for verification purposes (Article 18.1).

12. **Submission of Technical and Commercial Proposal**

Reference is made to Articles 5, 8, 9, 29, and 30 of the Bidding Procedures for the full rules governing submission format, deadlines, access control, and structure of the Technical and Commercial Proposals.

(a) All pages of the Proposal and its related documents shall be digitally signed using a recognized electronic signature compliant with international standards (e.g., Adobe Acrobat Sign, DocuSign) by the legal representative or bearer of a power of attorney of the Bidder. If the Bidder is a Consortium, the documents shall be signed by the Authorized Representative of each Consortium Member.

(b) The Proposal shall consist of two clearly identified and password-protected PDF files:

"Technical Proposal (including Bid Bond)"

"Commercial Proposal"

c) These files must be submitted via the EBS tender portal (insert website) on or before the Proposal Submission Date indicated in the Bid Schedule Table 1 from Section 3. Bidders shall set individual file passwords and email them upon submission to [insert email], using the secure two-step password system described in Article 5 of the Bidding Procedures.

d) The Technical Proposal must include the digital RfP Submission Identification Sheet (Appendix 1), listing the Bidder's name, address, and Proposal Submission Date.

IMPORTANT: The Technical and Commercial Proposals shall be kept securely and separately. The Commercial Proposals shall remain encrypted and unopened until the Technical Proposals have been evaluated in accordance with the procedures in Article 32.

e) Once Technical Proposals are opened, the Evaluation Committee will publish on [insert website] the list of Prequalified Bidders who submitted proposals, project details, Bid Bond compliance status, and confirmation of Commercial Proposal submission. Digital submission receipts, including timestamps and file details, will also be sent to all participating Bidders.

- **Responsibility for submission**
  Prequalified Bidders are solely responsible for ensuring the timely submission of their proposals and for securing confirmation of receipt, including timestamp and file details, from the tender portal. No submissions shall be accepted after the Proposal Submission Date.
- **Extension of submission deadline**
  The Tendering Authority may, at its discretion, extend the Proposal Submission Date by issuing an Addendum or Corrigendum through the tender portal and via email to all Prequalified Bidders.
- **Late submissions**
  Any proposals received after the deadline will be automatically disqualified and disregarded without exception.
- **Modifications, substitutions, or withdrawals**
  Changes to submitted proposals are only permitted before the Proposal Submission Date. Any modification, substitution, or withdrawal must be formally notified by email, clearly marked "MODIFICATION," "SUBSTITUTION," or "WITHDRAWAL" in the subject line. Updated files must follow the same submission format and use revised filenames (e.g., Technical Proposal – MODIFICATION).
- **Changes in bidder composition**

Any changes to the composition of a Prequalified Bidder (for example, changes to Consortium members or shareholding structure) may be considered prior to submission but are subject to prior approval by the Tendering Authority.

- **Joint liability for consortiums**
  In the case of a Consortium, all Consortium Members shall remain jointly and severally liable under this RfP.
- **Return of submissions**
  Proposals and supporting documents submitted will not be returned. Disqualified or withdrawn files will be deleted after 30 days unless the Bidder has backed them up separately.
- **Language and signing requirements**
  All proposals must be submitted in English and digitally signed using a recognized international-standard electronic signature (e.g., Adobe Acrobat Sign, DocuSign). In the case of a Consortium, the proposal must be signed by the Authorized Representatives of each Consortium Member.
- **Final deadline and file handling**
  Bids will be accepted through the tender portal until 11:59 p.m. Suriname Time on the Proposal Submission Date. Once received, files will be automatically sorted and securely locked based on their filenames to ensure integrity until the official opening.

13. Technical Proposal

(a) In accordance with Article 29.2 of the Bidding Procedures, each Prequalified Bidder shall submit, as part of its Technical Proposal, all required forms and supporting documents specified in Appendix 2 of this RfP. These documents are intended to demonstrate compliance with the technical requirements and to enable pass/fail evaluation on Auction Day.

(b) Prequalified Bidders shall have access to technical studies and data made available in the Data Room, including project-specific information and site-related documentation.

(c) Bidders are required to submit Proposals for Solar PV technology with a nominal capacity of 5 MWac. Proposals shall be submitted using the relevant forms in Appendix 2, detailing project site, design, and key implementation partners. Provided the proposed solution meets the technical requirements defined in the PPA and complies with applicable Grid Codes, the Electricity Company remains technology neutral.

(d) The PPA follows an output-based structure: the Seller is remunerated based on energy delivered. This provides a natural incentive for performance throughout the PPA term. The Seller is responsible for ensuring full design, permitting, construction, grid interconnection, and operation of the Project, including:

- All necessary environmental, construction, and operating permits in accordance with Surinamese law;
- Full EPC scope: design, engineering, procurement, construction, and commissioning of the plant and interconnection facilities;
- Independent due diligence of the proposed site(s);
- Provision of temporary and permanent site facilities and services;
- Site security and access control;
- Full scope of civil, mechanical, electrical, and SCADA works;
- Grid connection works per the EBS Grid Codes;
- Performance testing, commissioning, and long-term O&M.

(e) Prequalified Bidders are responsible for optimal design and performance of the Project. Flexibility in design is permitted, provided all minimum technical standards are met.

(f) Bidders may propose capacity above 5 MWac if it enhances land utilization and tariff competitiveness. Capacity shall be referenced in MWac, as measured at the grid connection point, per the PPA.

(g) The Technical Proposal must include the following items, submitted in English in a single PDF file, as outlined in Section 12 and Article 29.3. All proposals will be evaluated on a pass/fail basis. Only passing Bidders will advance to commercial evaluation. Further documentation from the Winning Bidder will be required post-award.

Title	Requirement	Form of Submission
Legal Documentation	Identity & incorporation documents; proof of minimum net worth (USD 100/kW); and Bid Bond (USD 10/kW). A Completion Bond (USD 50/kW) will be required at PPA signing.	Digital submission as part of the Technical Proposal PDF, including scanned copies of legal documents, financial statements, and Bid Bond proof.
Simplified Technical Information Form	Prequalified Bidders must submit a simplified form detailing key project information, including: (1) Generation Technology: Solar PV, specifying system type (e.g., ground-mounted, fixed-tilt). (2) Total Nameplate Capacity: total capacity of generation equipment (e.g., 5 MWdc).	Form I.2.A, Appendix 2.

	(3) Interconnection Point (e.g., La Paix substation). (4) Maximum Capacity at Grid Connection Point: maximum capacity injectable at the grid connection point (e.g., 5 MWac). (5) Project Location: municipality and geographic coordinates (e.g., La Paix, Paramaribo, 5.852°N, 55.203°W). (6) Target Milestone Dates: key project milestones, including securing financing, starting construction, starting test operations, and achieving Commercial Operations Date (COD) (e.g., COD by December 2026).	
Grid Connection Permit or Capacity Statement	Grid capacity confirmation letter or preliminary interconnection approval in accordance with the EBS Grid Codes. Final permits required post-award.	Digital submission as part of the Technical Proposal PDF, including the permit or EBS statement.
Past Project Development Experience	Prequalified Bidders must demonstrate experience in developing at least two renewable energy projects totalling the auctioned capacity (e.g., ≥10 MW solar PV for the 10 MW tender). This must be submitted via a sworn statement detailing past projects, including project specifics (e.g., capacity, location, completion date), financing sources, and contact information for validation.	Sworn statement template provided in Appendix 2, to be completed and included as part of the Technical Proposal PDF.

14. Commercial Proposal

The Commercial Proposal shall be submitted as a separate, password-protected PDF via the EBS tender portal (insert website) on (insert date), as defined in Section 3.2 and in accordance with the submission process detailed in Section 12 and Article 5 and 9 of the Bidding Procedures.

It shall be opened on Auction Day only for Prequalified Bidders whose Technical Proposals have passed evaluation (see Section 13 or Article 32.2 of the Bidding Procedures).

The Winning Bidder will be selected based on the lowest Offered Tariff (pay-as-bid), in accordance with the evaluation methodology set out in Article 32 of the Bidding Procedures.

The Offered Tariff must not exceed the Maximum Price (Price Cap) of USD 120/MWh, as specified in Section 5 of this RFP and in accordance with Article 30 of the Bidding Procedures.

To demonstrate compliance with the commercial requirements, each Prequalified Bidder shall submit all documents and forms listed in Appendix 3, including the Commercial Proposal Form, the Financial Assumptions Form, and the CPI Indexation Acknowledgment

For these purposes, the following shall be considered:

- The Bidders shall offer the Offered Tariff for the solar PV energy produced in this format:

  Offered Tariff: USD/MWh

- The Offered Tariff will be annually indexed at a rate equal to 50% of the change in the U.S. Consumer Price Index (CPI), using the formula:

  Payment = Offered Tariff × (0.5 + 0.5 × CPI_current / CPI_base),

  where

  CPI current is the U.S. CPI at the adjustment date and CPI_base is the U.S. CPI at the PPA signing date. Detailed indexation procedures are provided in the PPA (Appendix 3).

EVALUATION OF THE PROPOSALS

15. Opening of Proposals

(a) EBS shall open the Proposals at 10:00 a.m. Suriname Time on the Proposal Submission Date, as specified in Section 3. The evaluation will be conducted digitally, with the Technical Proposal (Envelope I) PDF accessed first via the EBS tender portal (insert website). Prequalified Bidders or their Authorized Representatives may attend virtually via a video conference link provided on (insert website).

(b) The completeness and compliance of Envelope I will be examined in accordance with Section 13. Evaluation of Envelope I shall follow a pass/fail methodology as outlined in Article 32 of the Bidding Procedures, under EAS supervision. Bidders passing this step will be publicly announced on (insert website) by [insert time to be after 2:00 pm] Suriname Time on the same day.

(c) EBS shall only open and evaluate the Commercial Proposal (Envelope II) PDF of Prequalified Bidders who have passed the completeness and compliance check and mandatory requirements in accordance the previous paragraph.

(d) The Prequalified Bidders will be invited to the virtual Commercial Proposal opening at 3:00 p.m. Suriname Time (insert date). The selection will be based on the lowest Offered Tariff, as per Section 14.

(e) Reference is made to Article 40 of the Bidding Procedures for appeal mechanisms. Appeals must be submitted via email to (insert email address) within the time specified in the Bidding Procedures.

16. Right to accept or reject any or all Proposals

(a) EBS may reject any Proposal or annul the process without liability or notice. If so, it may re-issue the REOI and/or RFP. See Articles 2 and 10 of the Bidding Procedures.

(b) Notwithstanding anything contained in this RFP, the EBS shall reject any Proposal if the Proposal is deemed to be incomplete, non-responsive, inconsistent, ambiguous.

17. Evaluation

(a) Evaluation shall follow a two-step process as per Article 32 of the Bidding Procedures:

- Step 1: Pass/Fail check of Technical Proposal (Envelope I)
- Step 2: Review of Commercial Proposal (Envelope II)

The Winning Bidder will be the bidder with the Lowest Offered Tariff not exceeding 120 USD/MWh.

(b) Auction Day shall include all evaluation steps as per Article 32 of the Bidding Procedures, with clarifications allowed until 2:00 p.m.

(c) Only one Winning Bidder will be selected.

(d) Disclosure of results: names, tariffs, and selected bidder — on (insert website) by 4:00 p.m.

(e) PPA signing shall occur within 30 days post-Auction Day.

(f) EBS reserves the right to verify submitted information. Failure to verify does not absolve the Bidder.

18. Award of Agreement

(a) Upon final evaluation, EBS will issue a report recommending the award per Article 34 of the Bidding Procedures.

(b) Notice of award and instructions to proceed with PPA execution shall follow, with announcement on (insert website).

(c) Notice will be emailed to the Winning Bidder within 5 Business Days.

(d) Unsuccessful Bidders may request a debriefing within 10 Business Days.

19. Treatment of a Single Proposal

(a) In the event of only one Proposal the procedure shall be followed as specified in Article 7 of the Bidding Procedures.

POWER PURCHASE AGREEMENT

20. Signature of PPA

(a) The Power Purchase Agreement (PPA) shall follow the format provided in Appendix 4 of this RfP and incorporate and reflect all bid-specific terms and conditions resulting from the Bidding Process.

(b) After selection and notification of the Winning Bidder under Section 18, EBS shall invite the Winning Bidder to finalize and sign the PPA within 30 days of the award.

(c) The notice of acceptance and signature timeline shall be sent to the registered contact (Appendix 1).

(d) Upon signature, the PPA will be published on (insert website) within 2 Business Days. Appeals must be submitted within 7 calendar days of the award, pursuant to Article 40 of the Bidding Procedures.

21. Dispatch Priority. Treatment for curtailment

(a) The awarded solar PV project will receive dispatch priority over fossil fuel-based generation in accordance with the Electricity Act 2016 (Article 21) and EBS Grid Codes, subject to operational directives of the grid operator. In the event of curtailment, the Winning Bidder shall be treated in accordance with the PPA (Appendix 4).

22. Change in Law prior to the Effective Date for the PPA.

(a) If a Change in Law (as defined in the PPA) occurs after the Proposal Submission Date but prior to the Effective Date of the PPA, the Winning Bidder may notify EBS. EBS will then request the Bidder to confirm whether the Offered Tariff remains unchanged within a minimum of ten (10) Business Days.

If confirmation is provided, the Winning Bidder maintains its status. If not, EBS shall invite all Prequalified Bidders who submitted Proposals to re-submit their Commercial Proposals (Envelope II) and any affected parts of Envelope I via the EBS tender portal, ensuring compliance with the 120 USD/MWh tariff cap.

A new evaluation shall occur, and a revised Winning Bidder will be selected and disclosed publicly. Bid Bonds remain protected per Section 10(a), and all Bidders must still comply with the Bid Bond requirements.

Appeals must follow Article 40 of the Bidding Procedures, and the process will be concluded promptly to allow signature within 30 days of the original award.

23. Project Company Incorporation

(a) The Winning Bidder must incorporate the Seller in the Republic of Suriname before the PPA execution deadline (within 30 days of the award) in accordance with Article 36 of the Bidding Procedures. The Seller must be legally constituted under Surinamese law.

(b) Upon incorporation, the Winning Bidder must submit the Seller's state registration certificate to EBS by email to (insert email address).

(c) Failure to comply will result in:

- Forfeiture of the Bid Bond;
- Disqualification of the Winning Bidder;
- Cancellation of the bidding process by EBS within ten (10) Business Days, publicly disclosed on (insert website);
- Optionally, EBS may invite the next highest-ranking Prequalified Bidder to proceed, under the same conditions and obligations. If this bidder declines within 30 Days, EBS may cancel and relaunch the process.

Appeals may be filed in accordance with Article 40 of the Bidding Procedures.

EBS Contact Details

All correspondence and contact by Prequalified Bidders (including Consortium Members in the case of a Consortium) with the EBS in relation to this RFP must be made only by email directly with both of the following representative as designated by the EBS or any alternative representative as may be notified by the EBS to the Prequalified Bidders separately.

EBS Representative:	

APPENDICES

Appendix 1: Proposal Submission Forms

- **Form 1. RfP Submission Identification Sheet**
- **Form 2. Letter of Proposal**
- **Form 3. Letter of Authorization for Consortium Leader**
- **Form 4. Authorization to a Representative**
- **Form 5. Bid Bond (Bank Guarantee)**

Appendix 2: Technical Proposal Requirements (Envelope I)

- **Form I.1: Legal Documentation**
- **Form I.2.A: Technical Information and Project Description**
- **Form I.2.B: Development Experience**

Appendix 3: Commercial Proposal Requirements (Envelope II)

- **Form II.1: Commercial Proposal Letter**
- **Form II.2: Commercial Proposal Form**
- **Form II.3: Financial Assumptions Form**
- **Form II.4: Acknowledgment of CPI Indexation Formula**

Appendix 4: Draft Power Purchase Agreement (PPA)

Appendix 5: EBS Grid Codes

FORMS AND TEMPLATES

APPENDIX 1: PROPOSAL SUBMISSION FORMS

FORM 1: RFP SUBMISSION IDENTIFICATION SHEET

DUE DATE: (insert date)

Designation:	
Address:	

SUBMISSION OF PROPOSAL UNDER THE REQUEST FOR PROPOSALS

Name of Prequalified Bidder: _____

Name of Consortium Leader (if applicable): _____

Name(s) of the Consortium Members (if applicable): _____

Address: _____

Phone Number: _____

Fax Number: _____

Email: _____

Date and Time of Submission of the Proposal: _____

(For EBS use only: to be filled in by the EBSon receipt of Proposal)

FORM 2:

LETTER OF PROPOSAL[1]

Date: [***please insert day, month, year***]

To:

Dear Sir,

Subject: Request for Proposal for 5 MW Solar PV Tender

Letter of Proposal for [insert the name of the Prequalified Bidder] (the "Prequalified Bidder")

I, *[Name],* being duly authorized to represent and act [as Consortium Leader] on behalf of [***please insert the name of the Prequalified Bidder***] a *[corporation/partnership/Consortium*] *[organized and existing under the laws of [place]/organized by agreement among its Consortium Members*], hereby declare that:

having reviewed and examined the RFP and any Addenda and Corrigenda and having fully understood all the information provided therein and in accordance with the same, the Prequalified Bidder hereby submits its Proposal, and agrees and undertakes to abide by all the terms and conditions of the RFP;

there are no changes to the information contained in the Prequalified Bidder's Application which affects or may affect its satisfaction of the requirements of the REoI as assessed in accordance with the provisions of the REoI, save for:

[PLEASE INSERT FULL DETAILS OR DELETE TO CONFIRM THIS IS NOT APPLICABLE].

all relevant forms, documents and information are enclosed in this Proposal in accordance with the requirements of the RFP;

the statements set out in this Proposal are made for the express purpose to be selected as the Winning Bidder of the Project;

all statements made and all information and documents provided by the Prequalified Bidder in or in connection with this Proposal are true and correct; nothing has been omitted which renders such information misleading; all documents accompanying such Proposal are true copies of their respective originals; and the EBS may rely on such statements, information and documents when evaluating Proposals to select a Winning Bidder under the RFP;

the EBS is authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection to the RFP, and to seek clarification from [the Prequalified

[1] **Note to Prequalified Bidders**: To be provided on letterhead of the Prequalified Bidder or, in the case of a Consortium, the Consortium Leader, including full postal address, telephone number and email address.

Bidder's / each Consortium Member's] accountants, financiers and clients regarding any aspects of the Proposal.

The Prequalified Bidder shall make available to the EBS any additional information they request to supplement or verify anything in the Proposal;

the Prequalified Bidder agrees, accepts and undertakes to abide by all the terms and conditions of the RFP and the PPA;

this Proposal shall be valid for a period of 180 Days from the Proposal Submission Date or any other period as may be mutually agreed by us and the EBS;

this Proposal is submitted in the full understanding and acceptance of the EBS' rights under the terms of the RFP and the PPA; and

the EBS and a EBS Representative may contact the following persons for further information or clarification:

Key Contact Person:

Name: _____

Designation: _____

Address: _____

Tel No. _____

Mobile _____

Email: _____

(Please fill in details of the key contact person)

Alternative Contact:

Name: _____

Designation: _____

Address: _____

Tel No. _____

Mobile _____

Email: _____

(Please fill in details of an alternative contact person)

Signed by [***insert name of Authorized Representative***])

for and on behalf[2] of [***insert name Prequalified Bidder, if a single entity or Consortium Leader, if a Consortium***]:

[2] **Note to Prequalified Bidder**: In case of a Consortium, the Authorized Representative of the Consortium Leader should sign.

FORM 3:

LETTER OF AUTHORIZATION FOR CONSORTIUM LEADER[3]

Date: [***please insert day, month, year***]

To:

Dear Sirs,

Subject: Request for Proposals

Letter of Authorization for [insert the name of the Consortium Leader] (the "Consortium Leader")

We, [PLEASE INSERT NAMES AND ADDRESS OF OTHER CONSORTIUM MEMBER(S)] do hereby irrevocably appoint and authorize [PLEASE INSERT NAME AND ADDRESS OF THE CONSORTIUM LEADER] (**"Consortium Leader"**) to represent each of us individually and all of us collectively as Consortium Members in Prequalified Bidder (the **"Prequalified Bidder"** or the **"Consortium"**) in all matters in connection with the RFP, including but not limited to: executing and submitting of the Proposal and other relevant documents; participating in any Pre-Bid Conferences and other meetings held during the RFP Stage or otherwise during the bid process; providing or submitting queries and requests for clarification to the Tender Commission; providing information and responses to the Tender Commission; representing the Consortium in all matters before the Tender Commission; signing and execution of all Project Agreements, including the PPA, and undertakings consequent to acceptance of the Consortium's Proposal, and generally dealing with the EBS in all matters in connection with or relating to or arising out of the Consortium's Proposal for the Project and/ or upon award of the Project to the Consortium.

We hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by the Consortium Leader pursuant to and in exercise of the powers conferred by this letter of authorization and that all acts, deeds and things done by the Consortium Leader in exercise of the authority hereby conferred shall and shall always be deemed to have been done by us.

This letter of authorization shall be governed by, and construed in accordance with, the laws of [ ] and the courts of [ ][4] shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with this letter of authorization.

---

[3] **Note to Prequalified Bidders**: To be provided only in the case of a Consortium. To be provided on the letterhead of each Consortium Member who is not a Consortium Leader. The letterhead shall include full postal address, telephone number and email address.

[4] **Note to Prequalified Bidders**: For the Consortium arrangements, the Prequalified Bidders are free to choose an acceptable and agreeable governing law and jurisdiction of courts.

Signed by [***insert name of Authorized Representative of a Consortium Member***])
)
for and on behalf of [***insert name of Consortium Member***]:)
)

FORM 4:

AUTHORIZATION TO A REPRESENTATIVE[56]

IT WAS RESOLVED THAT:

[PLEASE INSERT NAME OF THE AUTHORIZED REPRESENTATIVE] (**"Authorized Representative"**) of [PLEASE INSERT ADDRESS OF THE AUTHORIZED REPRESENTATIVE] be hereby appointed and authorized to act on behalf of [PLEASE INSERT NAME OF THE PREQUALIFIED BIDDER OR CONSORTIUM MEMBER] (**"Company"**) in all matters in connection with the Request for Proposals for (**"RFP"**), including but not limited to: executing and submitting of the Proposal and other relevant documents (including power of attorney); participating in any Pre-Bid Conferences and other meetings held during the RFP or otherwise during the bid process; providing or submitting queries and requests for clarification to the Tender Commission; providing information and responses to the Tender Commission; representing the Company in all matters before the EBS/ EBS [and other Consortium Members]; signing and execution of all Project Agreements, including the PPA, and undertakings consequent to acceptance of the Proposal, and generally dealing with the EBS [and other Consortium Members] in all matters in connection with the Proposal for the Project and/ or upon award of the Project to the Company or the Consortium of which the Company is a member; and all acts, deeds and things lawfully done or caused to be done by the Authorized Representative pursuant to and in exercise of the powers conferred by this resolution be hereby ratified and confirmed.

---

5 **Note to Prequalified Bidders**: To be provided on letterhead of the Prequalified Bidder or, in the case of a Consortium, the Consortium Leader, including full postal address, telephone number and email address.

6 **Note to Prequalified Bidder**: The authorization must meet the requirements of Section of the REoI and if applicable, must be accompanied by the required supporting documentation.

FORM 5:

BID BOND:

BANK GUARANTEE

B.G. No. [PLEASE INSERT BANK GUARANTEE REFERENCE NUMBER]

Date: [PLEASE INSERT DAY, MONTH, YEAR]

To: [address]

Copy:

WHEREAS:

(A) The RFP document requires the Prequalified Bidders to furnish a Bid Bond to the Purchaser in an amount of …… (USD) as security for due and faithful performance of its obligations, under and in accordance with the Tender Documents (as defined herein below).

(B) We, [PLEASE INSERT NAME OF THE BANK] having our registered office at [PLEASE INSERT ADDRESS OF THE BANK] and one of its branches at [PLEASE INSERT ADDRESS OF THE BRANCH OFFICE] (the **"Bank"**) have agreed to furnish this Bank Guarantee by way of Bid Bond.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. In consideration of the Purchaser having agreed to receive the Proposal of [PLEASE INSERT NAME OF THE PREQUALIFIED BIDDER] and having its address at [PLEASE INSERT ADDRESS OF THE PREQUALIFIED BIDDER] (hereinafter referred to as the **"Prequalified Bidder"** which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns), for implementing the Project pursuant to the RFP dated [DATE] issued in respect of the Project and other related documents including without limitation the draft PPA (hereinafter collectively referred to as "**Tender Documents**"), the Bank at the request of the Prequalified Bidder, hereby in terms of Clause of the RFP, irrevocably, unconditionally and without reservation guarantees the due and faithful fulfilment and compliance of the terms and conditions of the Tender Documents (including the RFP) by the said Prequalified Bidder and unconditionally and irrevocably undertakes to pay forthwith on demand to the Purchaser an amount or amounts which, when aggregated with any other sums paid to the Purchaser under this Guarantee are an amount not exceeding the Maximum Amount (as defined herein below) as it is our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Prequalified Bidder if the Prequalified Bidder fails to fulfil or comply with all or any of the terms and conditions contained in the said Tender Documents (hereinafter referred to as the **"Guarantee"**).

2. Any such written demand made by the Purchaser stating that the Prequalified Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Tender Documents shall be final, conclusive and binding on the Bank.

3. The Bank, hereby unconditionally undertakes to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Prequalified Bidder or any other person and irrespective of whether the claim of the Purchaser is disputed by the Prequalified Bidder or not, merely on the first demand from the Purchaser stating that the amount claimed is due to the Purchaser by reason of failure of the Prequalified Bidder to fulfil and comply with the terms and conditions contained in the Tender Documents. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, the Bank's liability under this Guarantee shall be restricted to an amount not exceeding ……. (USD) (the **"Maximum Amount**").

4. This Guarantee shall be irrevocable and remain in full force for a period of …. Days from the Proposal Submission Date (i.e. the date of submission of the Proposal), and the Bank agrees that this Guarantee shall be capable of extension in accordance with the terms of the RFP such that the validity period of this Guarantee is no shorter than the validity period as required under the RFP, or for such extended period as may be mutually agreed between the EBS and the Prequalified Bidder. This Guarantee shall continue to be enforceable for such validity period till all amounts under this Guarantee have been paid.

5. This Guarantee shall be governed by and construed in all respects in the accordance with the [please insert either Law or [any other common law jurisdiction]]. The ….. Courts shall have exclusive jurisdiction to settle any disputes which may arise out of or in connection with this Guarantee.

IN WITNESS WHEREOF THE BANK HAS SET ITS HANDS HEREUNDER ON THE DAY MONTH AND YEAR FIRST HEREINABOVE WRITTEN.

Signed and Delivered by _____ Bank.

By the hand of Mr./Ms. _____, its _____ and authorized official.

(Signature of the Authorized Signatory)

(Official Seal)

NOTES:

(i) The Bank Guarantee should contain the name, designation and code number of the officer(s) signing the Guarantee.

(ii) The address, telephone number and other details of the Head Office of the Bank as well as of issuing Branch should be mentioned on the covering letter of issuing Branch.

APPENDIX 2: TECHNICAL PROPOSAL REQUIREMENTS (ENVELOPE I)

FORM I.1: LEGAL DOCUMENTATION

This Form sets out the legal documentation for the Project. Flexibility is allowed as long as the Project complies with all the requisites contained in this Form.

The following is a list of the documents to be submitted by Prequalified Bidders in their Technical Proposal.

Title	Requirement	Form of Submission
Legal Identity	Documents confirming the Bidder's legal identity and incorporation (e.g., certificate of incorporation, business registration).	Digital submission as part of the Technical Proposal PDF (scanned documents).
Financial Capacity	Audited financial statements from the past two years demonstrating a minimum net worth of USD $100/kW of offered capacity (e.g., $500,000 for 5 MW).	Scanned PDF copies of financial statements included in Technical Proposal.
Bid Bond	Proof of Bid Bond at USD $10/kW of offered capacity (e.g., $50,000 for 5 MW), as required in Section 10(a). A Completion Bond at USD $50/kW will be required post-award.	PDF copy of Bid Bond instrument included in Technical Proposal.

FORM I.2.A: TECHNICAL INFORMATION AND PROJECT DESCRIPTION

Title	Requirement	Form of Submission
Simplified Technical Info Form	Key project data including: • Technology type (e.g., solar PV, ground-mounted) • Total nameplate capacity (e.g., 5 MWdc) • Interconnection point (e.g., La Paix substation) • Maximum capacity at injection point (e.g., 5 MWac) • Project location (e.g., coordinates) • Key milestone dates (e.g., COD by Dec 2026)	Forms completed and submitted in Technical Proposal PDF.
Grid Connection Statement	Preliminary grid connection permit issued by EBS/EPAR or a capacity confirmation statement from EBS confirming accommodation of proposed capacity per Suriname Grid Codes (e.g., 5 MWac injection at specified point).	Scanned PDF of permit or EBS capacity letter included in Technical Proposal.

FORM I.2.B: DEVELOPMENT EXPERIENCE

Title	Requirement	Form of Submission
Project Development History	Sworn statement demonstrating experience with at least two completed renewable energy projects totaling the auctioned capacity (e.g., ≥10 MW for a 10 MW auction). Must include: • Project capacity and technology • Location and COD • Funding source(s) • Contact details for reference	Complete sworn statement using template in Appendix 2. Submit as part of the Technical Proposal PDF.

APPENDIX 3: COMMERCIAL PROPOSAL REQUIREMENTS (ENVELOPE II)

FORM II.1: COMMERCIAL PROPOSAL LETTER

Date: [PLEASE INSERT DAY, MONTH, YEAR]

Reference No.: [*insert ref number if required*]

To: [address]

Dear Sirs,

Request for Proposal for 5 MW Solar PV Tender
Envelope II for [*insert the name of the Prequalified Bidder*] (the "Prequalified Bidder")

We hereby quote the Offered Tariff for the "Project" as follow: [insert tariff in USD/MWh, not exceeding 120 USD/MWh, per Section 14]

We hereby agree and undertake to be bound by the information submitted as part of Envelope II, including the CPI indexation formula specified in Section 14 (Form II.4).

Signed by [***insert name of Authorized Representative***]	)
for and on behalf[7] of [***insert name of Prequalified Bidder, if a single entity or Consortium Leader, if a Consortium***]:	)

[7] **Note to Prequalified Bidders:** in case of a Consortium, the authorised representative of the Lead Member should sign.

FORM II.2: COMMERCIAL PROPOSAL FORM

Bidder:	
Power Plant: (Solar PV)	
Interconnection Point (IP)	
Offered Tariff US$/MWh (not exceeding 120 US$/MWh)	
Share of the Offered Tariff to be indexed to the US CPI.	50%
Offered Capacity MW	[insert capacity, e.g., 5 MW]
Guaranteed Energy GWh/year	[insert value, based on estimated output, e.g., 8.75 GWh/year for a 5 MW plant]
Minimum Guaranteed Energy GWh/year	[insert value, e.g., 80% of guaranteed energy, approximately 7 GWh/year]

*The Bidder shall propose the share of the Offered Price of each product that will be indexed to the CPI as indicated above.

FORM II.3: FINANCIAL ASSUMPTIONS FORM

[To be completed and submitted by the Bidder as part of the Commercial Proposal – Envelope II]

Bidder Name: _____

Project Name: _____

Date of Submission: _____

1. Key Assumptions

Assumption Category	**Input / Assumption**
Installed Capacity (MWp)	
Contracted Capacity (MWac)	
Annual Generation (MWh/year)	
Project Commercial Operation Date (COD)	
Project Economic Life (years)	
Construction Period (months)	

2. Capital Expenditure (CAPEX)

Item	**USD (or Nominated Currency)**
EPC Costs (incl. contingency)	
Development Costs	
Land Lease or Acquisition	
Grid Interconnection	
Financial Close & Legal Fees	
IDC (Interest During Construction)	
Total CAPEX	

3. Operating Expenditure (OPEX)

Item	**Annual Amount (USD)**	**Escalation Rate (%)**
O&M Services		
Insurance		
Land Lease or Property Tax		
Asset Management		
Other		
Total Annual OPEX		

4. Financing Assumptions

Parameter	Assumption
Debt-to-Equity Ratio (%)	
Interest Rate on Debt (%)	
Tenor of Debt (years)	
Grace Period (years)	
Equity IRR Target (%)	

5. Tariff Assumptions

Parameter	Value
Proposed Levelized Tariff (USD/kWh)	
Tariff Escalation Mechanism	[CPI-indexed or fixed]
Deemed Energy Payment Included?	Yes / No

Certification

I hereby certify that the above financial assumptions represent the basis on which our Commercial Proposal has been prepared.

Name: _____

Title: _____

Signature: _____

Date: _____

FORM II.4: ACKNOWLEDGMENT OF CPI INDEXATION FORMULA

[To be completed and signed by the Bidder as part of the Commercial Proposal – Envelope II]

Bidder Name: _____
Project Name: _____
Date of Submission: _____

We, the undersigned, acknowledge and confirm our understanding that the **tariff proposed in Form II.2** will be subject to annual indexation in accordance with the following Consumer Price Index (CPI)-linked formula:

Indexation Formula:

$Tariff_n = Tariff_o \times (0.5 + 0.5 \times CPI\_current / CPI\_base)$
where:

- **$Tariff_n$** = Tariff applicable for year *n*
- **$Tariff_o$** = Base tariff proposed in Commercial Proposal
- **CPI_current =** U.S. Consumer Price Index (CPI-U) for the current year, as published by [insert CPI source – e.g., U.S. Bureau of Labor Statistics]
- **CPI_base =** U.S. Consumer Price Index (CPI-U) for the base year (Commercial Operation Date)

This adjustment reflects an indexation rate equal to 50% of the change in the U.S. Consumer Price Index (CPI-U), as specified in Section 14 of this RFP.

We understand and agree to this indexation formula being applied annually from the **Commercial Operation Date** for the duration of the Power Purchase Agreement.

Authorized Signatory
Name: _____
Title: _____
Signature: _____
Date: _____

APPENDIX 4: DRAFT POWER PURCHASE AGREEMENT (PPA)

[TO BE ATTACHED]

APPENDIX 5: EBS GRID CODES

[TO BE ATTACHED]

Format
POWER PURCHASE AGREEMENT

DATED: _____

[INSERT NAME OF BUYER]

as the Buyer and

[INSERT NAME OF PROJECT COMPANY]

as the Project Company

POWER PURCHASE AGREEMENT

SOLAR PV PROJECT - 5 MW

CONTENTS

This **AGREEMENT** is dated the [●] day of [●] 20[●]

BETWEEN:

N.V. Energiebedrijven Suriname (EBS), a company incorporated under the laws of the Republic of Suriname, registered at Noorderkerkstraat 2-14, Paramaribo (the 'Buyer');

and

[●] [a limited liability company] incorporated under the laws of the Republic of Suriname, with its principal place of business at [●] (the 'Project Company'),

together the **Parties** and each a **Party**.

WHEREAS:

(A) To advance the Electricity Sector Plan (ESP), Suriname supports Solar PV generation through competitive tenders.

(B) Consequently, the Electricity Act 2016: provides a framework for solicited proposals regarding the issuance of a generation license and for the construction and operation of new generation capacities through a competitive procurement process as outlined in Articles 14 and 21, and overseen by the Energy Authority Suriname (EAS);

(C) The Buyer is designated as the single buyer under the Electricity Act 2016 (Article 21) to procure renewable energy;

(D) The Project Company was selected as the Winning Bidder under the competitive procurement process defined in the Bidding Procedures (SB 2025 no. [●]), following the evaluation of its Technical and Commercial Proposals in accordance with the RfP;

(E) The Buyer has accepted the Project Company’s proposal for the sale of energy and the EAS has authorized the Parties to enter into a binding power purchase agreement to buy and sell energy generated subject to the terms and conditions as set forth in this Agreement;

(F) EAS has approved this Agreement for the sale of energy from the Solar PV Facility with a total installed capacity of 5 MW;

(G) This Agreement has been prepared in accordance with, and incorporates by reference where applicable, the terms and provisions of the Bidding Procedures (SB 2025 no. [●]), the RfP, and the REoI documentation.

NOW IT IS HEREBY AGREED as follows**:**

PART 1 - KEY INFORMATION TABLE

Commercial Information

Subject	Clause	Key Information
Abandonment Period of Time		[●]
Commercial Operation Longstop Date		[180] Business Days from the Scheduled COD
Cost or Savings Threshold		[To be defined if cost-sharing or savings mechanism applies]
Expiry Date		20 years from COD
Minimum Capacity		5 MW
Scheduled COD		[●]
CP Longstop Date		[●]
Grid Availability Date		[Date confirmed by EBS per Interconnection Statement]
Delay Liquidated Damages Cap		[●][1]
Delay Liquidated Damages Rate		[Currency]/MWp/day
Required Credit Rating		[●]
Contracted Capacity		5 MW
Deemed Overpayment Monthly Limit		[●]
Buyer Curtailment Allowance		5% of annual energy output (deemed energy paid)
Energy Charge		Pay-as-bid, up to USD $.../MWh, CPI-indexed
Nominated Currency		USD
Liquidity Support Instrument Delivery Date		[●]

[1] **User Note:** Insert a figure which is the product of a number of days, being the difference between the Scheduled Commercial Operation Date and the Commercial Operation Longstop Date x Delay Liquidated Damages Rate x MW Contracted Capacity.

Liquidity Support Factor 1		[define if applicable]
Liquidity Support Factor 2		[define if applicable]
Default Rate		[●]
Governing Law		Laws of the Republic of Suriname
Arbitration Rules		UNCITRAL Arbitration Rules
Arbitration Language		English
Arbitration Seat		Republic of Suriname

Options

Subject	Clause	Key Information
Engineer		[*insert name of proposed Engineer 1]* *[insert name of proposed Engineer 2]* *[insert name of proposed Engineer 3*]
Technical Dispute Determination Option		[*By agreement between the Parties/ At the election of either Party*]

Project Information

Subject	Clause	Key Information
Business Day		[A day banks are open in Suriname]
Government		Government of Suriname
Landowner		[●]
Market Monitor		The Energy Authority of Suriname
Nominated Account		[●][Insert payment account details]
Construction Security amount		[●][USD]
Regulator		Energy Authority of Suriname
Site		[Insert project-specific coordinates and municipality]

System Operator		The N.V. Energiebedrijven Suriname (EBS)
Buyer Notice Details		For the attention of: [●] Address: [●] Tel. No: [●] Fax No. [●] Email: [●]
Project Company Notice Details		For the attention of: [●] Address: [●] Tel. No: [●] Fax No. [●] Email: [●]

PART 2 GENERAL CONDITIONS

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

This Agreement includes the Schedules and the Key Information Table which are incorporated by reference.

1.2 Interpretation

(a) Unless the context otherwise requires, the following rules of interpretation shall apply to this Agreement:

(i) words in the singular include the plural and in the plural include the singular;

(ii) use of any gender includes the other genders and neuter;

(iii) references to a particular statute or statutory provision or other Law shall:

- include all subordinate legislation made from time to time under that statute, statutory provision or other Law; and
- be construed as a reference to such Law as amended, re-enacted, consolidated, supplemented, replaced or renumbered (or as its application or interpretation is changed or affected by other Laws) from time to time and as was, is, or will be (as the case may be) applicable at the time in question;

(iv) references to this Agreement or any other agreement, deed or instrument is a reference to this Agreement or as the case may be, the relevant agreement, deed or instrument as amended, supplemented, replaced or novated from time to time;

(v) references to Clauses and Schedules are to clauses of and schedules to this Agreement;

(vi) references to a paragraph or a Part are to a paragraph or part of the Schedule in which such reference appears;

(vii) references to a day or Day shall mean a period of twenty-four (24) hours running from midnight to midnight and reference to any time or date shall save where otherwise expressly stated to the contrary, be a reference to the time or date (as the case may be) in Suriname;

(viii) references to a person shall be construed so as to include:

- any individual, firm, body corporate, Authority, joint venture, association, undertaking, partnership or limited partnership (whether or not having separate legal personality); and
- a reference to the successors, permitted transferees and permitted assigns of the same;

(ix) the words "include", "including" or "in particular" must not limit the generality of any preceding words or be construed as being limited to the same class as any preceding words where a wider construction is possible;

(x) references to "written" or "writing" shall include all data in written form whether represented in hand-written facsimile, printed or e-mail form (but excluding short-message-service ("SMS") and other electronic forms of communication); and

(xi) any express obligation or liability of a Party to ensure or procure the performance of any obligation by any other person must not be reduced, discharged or otherwise adversely affected by any act, omission, matter or thing which would have discharged or affected the liability of that Party had it been a principal obligor or by anything done or omitted by any person which but for this provision, might operate or exonerate or discharge that Party or otherwise reduce or extinguish its liability under this Agreement.

(b) The Table of Contents, headings and titles are for convenience only and do not affect the interpretation of this Agreement.

(c) The Schedules form part of this Agreement and shall have the same force and effect as if expressly set out in the body of this Agreement and any reference to this Agreement shall include the Schedules.

1.3 Order of Precedence

The documents forming this Agreement are intended to be mutually explanatory of one another. If any inconsistencies or conflicts arise between the documents forming this Agreement, the order of precedence governing matters of interpretation shall be as follows:

(a) the Key Information Table;

(b) the main body of this Agreement; and

(c) the Schedules attached to this Agreement.

2. TERM OF AGREEMENT

This Agreement shall become effective on the Signature Date and shall unless extended or terminated earlier in accordance with this Agreement, continue in full force and effect for the duration of the Term as defined in the Key Information Table.

3. COMMITMENTS OF THE PARTIES

3.1. Sale and Purchase of Energy

On and from the Commercial Operation Date (or if earlier, the Deemed Commercial Operation Date) and subject to and in accordance with this Agreement, the Project Company shall sell exclusively to the Buyer and the Buyer shall purchase all Energy produced by the Facility up to the Contracted Capacity, save that nothing in this Agreement shall oblige the Project Company to Operate or Maintain the Facility outside of the Technical Limits.

3.2. Utilities and Consumables

(a) At all times during the Term, the Project Company shall be responsible at its sole cost and expense for securing all supplies of electricity, water, sanitation, telecommunications, waste disposal services and all other utilities required for the Construction, Operation and Maintenance of the Facility.

(b) The Project Company shall be responsible at its sole cost and expense for obtaining, stockpiling (if applicable) and transporting all supplies of consumables necessary to comply with its obligations under this Agreement.

3.3. Contracting

(a) The Project Company may engage Contractors to Construct, Operate and Maintain the Facility.

(b) Notwithstanding the engagement of any Contractor pursuant to Clause 4.3(a), the Project

Company shall at all times remain liable for the performance of its obligations under this Agreement and for any acts, omissions, defaults or negligence of each Contractor (including such Contractor's sub-contractors, agents or employees) as if such acts, omissions, defaults or negligence were those of the Project Company or its agents or employees.

3.4. Connecting to the Grid

(a) The Buyer shall be responsible for the design, construction, installation, commissioning, operation and maintenance of the Grid in accordance with the applicable Codes. The Project Company shall cause the Facility to be electrically connected with the Grid and shall be responsible for complying with all applicable Codes and requirements of the Buyer, including applicable interconnection and metering requirements, and entering into the Interconnection Agreement with the Buyer.

(b) The Buyer shall ensure that the Grid will be made available to the Project Company by the Grid Availability Date for the interconnection, Commissioning, testing (including the Initial Tests) and future Operation and Maintenance of the Facility.

3.5. Independent Engineer

On or prior to the commencement of Construction of the Facility, the Project Company shall appoint one of three (3) company agreed by the Parties and identified in the Key Information Table to act as an independent consulting engineer for the purposes of monitoring the Construction and Commissioning of the Facility in accordance with this Agreement. If the Parties are unable to agree on the three (3) companies who may act as such independent consulting engineer, then the Market Monitor in its sole discretion may determine the slate of the three (3) companies from which the Project Company can appoint such independent consulting engineer.

3.6. Construction Schedule and Progress Reporting

(a) Within [●] Days of the Effective Date, the Project Company shall submit to the Buyer a detailed Construction Schedule setting out all key milestones for the design, procurement, installation, testing, and commissioning of the Facility, including target dates for achieving each milestone up to the Scheduled Commercial Operation Date.

(b) The Project Company shall provide periodic written progress reports to the Buyer on a [monthly/quarterly] basis (or at such frequency as the Buyer may reasonably request), detailing: (i) the status of construction activities against the approved Construction Schedule; (ii) any delays, deviations, or risks; and (iii) the mitigation measures proposed to ensure achievement of the Scheduled COD.

(c) Any material amendment to the Construction Schedule requires prior written notice to, and consultation with, the Buyer.

3.7. EPC Contract(s) and Main Contractor Agreements

(a) No later than [●] Days after the Effective Date, and in any event prior to commencement of material construction works, the Project Company shall provide the Buyer with certified copies of the executed EPC Contract(s) or equivalent Main Contractor Agreements for the Facility.

(b) Such contract(s) shall identify the contractor(s) responsible for engineering, procurement, and construction of the Facility and include performance guarantees and completion obligations consistent with this Agreement.

(c) The Project Company shall promptly notify the Buyer of any material amendment, replacement, or termination of such EPC Contract(s) or Main Contractor Agreements.

3.8. Direct Agreement

The Buyer shall use all reasonable efforts to execute, acknowledge and deliver the Direct Agreement substantially in the form attached hereto at Schedule 10 (Form of Direct Agreement) and any and all further documents and instruments at the Project Company's reasonable cost (such costs to be agreed by the Project Company prior to the issuance of any such legal opinions), and to take any other actions, which may be necessary to satisfy the reasonable requests of any Lender or prospective Lender in connection with the financing or refinancing of the Facility, including executing and delivering to the Lenders a consent to assignment (or other form of direct agreement) concerning the Facility between the Buyer and the Lenders in form and substance satisfactory to the Lenders.

4. CHALLENGES TO COMMENCEMENT OF COMMERCIAL OPERATIONS

4.1. Liquidated Damages

(a) If the Commercial Operation Date (or Deemed Commercial Operation Date (if applicable) does not occur on or prior to the Scheduled Commercial Operation Date through no fault of the Buyer, liquidated damages shall be payable by the Project Company to the Buyer (to be only utilized as directed by the Market Monitor) at the Delay Liquidated Damages Rate for each day that the Commercial Operation Date is delayed beyond such date; provided however that the total amount of liquidated damages payable under this Clause 4.1(a) shall not exceed the Delay Liquidated Damages Cap.

(b) The payment of liquidated damages calculated in accordance with Clause 4.1(a) shall be the Buyer's exclusive remedy for the Project Company's failure to achieve the Commercial Operation Date on or before the Scheduled Commercial Operation Date, but shall not preclude the Buyer from pursuing such other remedies as may be available to the Buyer for any other breach of this Agreement by the Project Company.

(c) The Parties have agreed that the payment of liquidated damages calculated in accordance with Clause 4.1(a) are reasonable as a genuine pre-estimate of the loss that the Buyer would suffer. The Project Company hereby waives any defence as to the validity of any liquidated damages in this Agreement on the grounds that such liquidated damages are void as penalties.

(d) For the avoidance of doubt, failure by the Project Company to provide the Construction Schedule, periodic progress reports, or executed EPC Contract(s) in accordance with Clauses 3.6 and 3.7 shall constitute a material breach and may be treated as a delay impacting the Scheduled COD.

4.2. Construction Security

(a) Within seven (7) days of the Effective Date, the Project Company shall provide to the Buyer a Construction Security in the form of a Bank Guarantee to ensure that the Commercial Operation Date (or Deemed Commercial Operation Date (if applicable)) is achieved by the Commercial Operation Longstop Date.

(b) The Construction Security shall be:

(i) maintained and/or renewed by the Project Company until the Commercial Operation Date (or Deemed Commercial Operation Date (if any)) is achieved or this Agreement is terminated in accordance with its terms;

(ii) in a form and substance satisfactory to the Buyer (acting reasonably);

(iii) issued by a financial institution which has a credit rating equal to or better than the Required Credit Rating;

(iv) in an amount equal to the maximum amount of liquidated damages which may become payable pursuant to Clause 5.1(a);

(v) constitute an on-demand, unconditional and irrevocable commitment to pay by the bank by which it is issued; and

(vi) be enforceable by the Buyer immediately upon any failure by the Project Company to pay liquidated damages under Clause 5.1(a).

(c) There shall be no discontinuity between the expiration of the Construction Security and the effectiveness of the Operations Security (defined below), and the Construction Security shall be returned to the Project Company promptly following delivery to the Buyer of the Operations Security and the occurrence of the effective date of the Operations Security.

4.3. Operations Security

(a) On the Commercial Operation Date, the Project Company shall provide to the Buyer security (the "**Operations Security**") to ensure the completion and proper operation and maintenance of the Facility.

(b) The Operations Security shall be:

(i) an unconditional and irrevocable direct pay letter of credit issued by a financial institution which has a credit rating equal to or better than the Required Credit Rating;

(ii) in a form and substance satisfactory to the Buyer (acting reasonably); and

(iii) adjusted in terms of amount from time to time in accordance with Schedule 11 (Operations Security).

(c) The Operations Security may be applied to:

(i) the payment of liquidated damages and accrued interest thereon in accordance with this Agreement;

(ii) the payment of other Damages and interest that the Project Company shall be required to pay to the Buyer.

(d) Except as expressly provided in this Agreement, the Project Company shall maintain the Operations Security at the level designated in Clause 4.3(b) at all times; except that the Project Company may have 14 Days from the date the Buyer gives notice to the Project Company that it has retained or collected funds from the Operations Security pursuant to this Clause 4.3 (d), to replenish the Operations Security so as to return it to the required level, as escalated.

(e) Upon termination of this Agreement:

(i) the Buyer shall be entitled to retain or collect, as the case may be, from the Operations Security any Damages or moneys then due or reasonably expected to be due to the Buyer by the Project Company and shall pay or return to the Project Company the remainder of the Operations Security, if any; and

(ii) if there is any Dispute between the Project Company and the Buyer has been referred to Dispute Resolution pursuant to this Agreement, then the Buyer shall be entitled to retain or collect, as the case may be, from the Operations Security, an amount equal to the Damages or moneys that the Buyer, in its reasonable judgment, deems sufficient to satisfy any amount that may be due to the Buyer by reason of such Dispute. Upon settlement or resolution of the Dispute, the Buyer shall pay or return to the Project Company the remaining amount of Operations Security.

4.4. Failure to Commission at or Above Minimum Capacity

If a Commissioning Failure occurs:

(a) Clause 16.1(a)(iv) (*Event of Default*) shall apply, provided that

(b) if the Buyer does not issue a Notice of Intent to Terminate in respect of the Commissioning Failure within twenty (20) Business Days of the Commercial Operation Longstop Date, the Buyer will be deemed to have (i) waived the Project Company Event of Default resulting from the Commissioning Failure, and (ii) accepted the Facility, in which case the Contracted Capacity shall be reduced to the Installed Capacity (if any) of the Facility certified by the Engineer on or prior to the Commercial Operation Longstop Date.

4.5. Commissioning at or Above Minimum Capacity

(a) If the Commercial Operation Date has occurred on or prior to the Commercial Operation Longstop Date and the results of the Initial Tests as certified by the Engineer demonstrate that the Installed Capacity of the Facility, having passed the Initial Tests, reaches or exceeds the Minimum Capacity but is less than the Contracted Capacity, the Contracted Capacity shall be reduced to the Installed Capacity of the Facility as applicable as at the Commercial Operation Date (the "**Actual Capacity**").

(b) Where the Contracted Capacity has been amended and reduced to the Actual Capacity in accordance with Clause 4.5(a), neither Party shall have any obligation to purchase or supply and must not be held liable for failing to purchase or supply Energy or other attributes associated with or attributable to Energy generated by the Facility in excess of the Actual Capacity (the "**Excess Capacity**").

(c) From the Commercial Operation Date, if the Facility is able to generate any Excess Capacity, the Project Company may not sell the Energy or other attributes associated with or attributable to the Excess Capacity to any third parties, including the Buyer.

4.6. Deemed Commissioning

If the Commercial Operation Date is delayed or prevented beyond the Commercial Operation Longstop Date by any of the following events:

(a) failure by the Buyer to perform any of its obligations under this Agreement;

(b) failure by the Buyer to make the Grid available and/or to evacuate Energy generated (or to be generated) during Initial Tests carried out (or to be carried out) in accordance with this Agreement; or

(c) failure by the System Operator to take any actions to ensure that the Facility can participate in the energy market administered by the System Operator,

the Project Company shall be entitled to apply in writing to the Engineer (with a copy provided to the Buyer) for a certification of the date on which, in the Engineer's professional opinion, the Commercial Operation Date would have occurred but for the occurrence of the event(s) listed above (such date the "**Deemed Commercial Operation Date**").

4.7. Deemed Commissioning Payments

If a Deemed Commercial Operation Date occurs, then subject to subject to Clause 5.6 (Curtailment Allowance), the Buyer shall make Deemed Energy Payments to the Project Company in respect of the period on and from the Deemed Commercial Operation Date until the actual Commercial Operation Date (the "**Deemed Operation Period**") based on (i) the Contracted Capacity; (ii) the Guaranteed Performance Ratio as defined in the Supply Agreement; and (iii) the actual solar

irradiation during the Deemed Operation Period and otherwise in accordance with Clause 8 (Compensation, Payment and Billing).

4.8. Deemed Energy Overpayment

(a) If:

(i) Deemed Energy Payments in respect of a Deemed Operation Period have been paid in accordance with Clause 4.7 (Deemed Commissioning Payments), and

(ii) the Actual Capacity is below the Contracted Capacity upon achieving the actual Commercial Operation Date, and/or

(iii) the actual performance ratio of the Facility as certified by the Engineer is below the Guaranteed Performance Ratio at the end of the Performance Testing Period as defined in the Supply Agreement, used to calculate Deemed Energy Payments in respect of the Deemed Operation Period;

then the Buyer shall calculate the difference between (i) the aggregate of all Deemed Energy Payments actually paid by the Buyer to the Project Company in respect of the Deemed Operation Period and (ii) the aggregate of all Deemed Energy Payments that would have been payable if the Actual Capacity and performance ratio of the Facility certified by the Engineer had been used to calculate those Deemed Energy Payments (the amount of such difference being expressed in the Nominated Currency and being the "**Deemed Overpayment**");

(b) Deductions for the Deemed Overpayment shall be made from any amount payable by the Buyer pursuant to Schedule 4 (*Determination of Payments*) until the value of all such deductions is equal to the amount of the Deemed Overpayment and the amount of any deduction in a month must not exceed the Deemed Overpayment Monthly Limit;

(c) If the Parties do not agree on whether or not Deemed Energy Payments are payable, or the amount of such Deemed Energy Payments, this shall be treated as a Technical Dispute. The Independent Expert (if appointed) shall be instructed to establish whether Deemed Energy Payments are payable and where the amount is in Dispute, establish the amount of Deemed Energy Payments payable.

5. OPERATION OF THE FACILITY AND DELIVERY OF ENERGY

5.1. Construction, Operation and Maintenance of the Facility

The Project Company undertakes:

(a) to Construct, Operate and Maintain the Facility in accordance with:

(i) applicable Laws;

(ii) all applicable Authorisations;

(iii) the Codes as they apply to the Project Company and/or to the Facility; and

(iv) Good Industry Practice (including where they relate to synchronising, voltage and reactive power control);

(b) to not generate Energy in excess of the Actual Capacity without the Buyer's prior written consent;

(c) to deliver all Energy generated by the Facility to the Delivery Point, except to the extent such Energy is used for the Operation and Maintenance of the Facility;

(d) to at all times co-operate in good faith with the Buyer, provided that such co-operation does not result in the Project Company being in breach of any Law, Authorisations or Codes; and

(e) to maintain the settings of all protective relays installed in the Facility at levels agreed in writing between the Project Company and the Buyer from time to time and not to change such settings without the prior written consent of the Buyer in the Interconnection Agreement.

5.2. Deemed Energy

From the earlier of the Commercial Operation Date or Deemed Commercial Operation Date (if any), if the ability of the Facility to generate and deliver Energy to the Delivery Point is reduced by:

(a) failure by the Buyer to perform any of its obligations under this Agreement;

(b) dispatch or back down instructions issued by the Buyer and/or the Network Operator (or the failure of the Buyer and/or Network Operator to issue dispatch instructions in accordance with this Agreement);

(c) failure by the Network Operator to evacuate Energy which the Facility could have otherwise generated and delivered to the Delivery Point in accordance with this Agreement;

(d) events which cause a Deemed Commercial Operation Date to occur;

(e) an instruction from the Buyer and/or the Network Operator to change the agreed settings of the protective relays installed at the Facility, (together, "**Curtailment Events**"), then:

(i) the period during which the ability of the Facility to generate and deliver Energy to the Delivery Point is so reduced shall be a "Buyer Curtailment Period";

(ii) the Buyer shall pay the Energy Charge to the Project Company for all Energy actually received by the Buyer during the Buyer Curtailment Period;

(iii) subject to Clauses 5.6 (Deemed Commissioning Payments) and 5.7 (Deemed Energy Overpayment),

- Energy that otherwise could have been generated and delivered by the Facility to the Delivery Point during the Buyer Curtailment Period as calculated in accordance with Schedule 4 (Determination of Payments) shall constitute "Deemed Energy"; and
- subject to Clause 6.6 (Curtailment Allowance), the Buyer shall make Deemed Energy Payments to the Project Company in respect of such Deemed Energy in accordance with Schedule 4 (Determination of Payments).

5.3. Sale and Purchase of Energy

(a) On and from the Commercial Operation Date or if earlier, the Deemed Commercial Operation Date:

(i) the Project Company shall in good faith provide declarations of the Available Capacity to the Buyer and the System Operator each day, in accordance with the Codes and Operating and Dispatch Procedures; and

(ii) the System Operator shall respond with Dispatch Instructions, in each case in accordance with the Codes and Operating and Dispatch Procedures.

(b) Energy sold and purchased under this Agreement shall be delivered by the Project Company to the Buyer at the Delivery Point and title in and risk of loss of all such Energy shall pass to the Buyer at the Delivery Point.

(c) The Parties agree that the Project Company may not without the prior written consent of the Buyer, sell or deliver Energy produced by the Facility to any person other than the Buyer, except to the extent that Energy is required by the Project Company or any Contractor for the Operation or Maintenance of the Facility.

5.4. Operating and Dispatch Procedures

(a) Until such time as the Market Monitor has approved a new Dispatch Code or developed and implemented an interim Dispatch Code, the Parties shall use reasonable endeavours prior to the Commercial Operation Date to agree upon a suite of operating and dispatch procedures including at a minimum, procedures in respect of those matters set out in Schedule 7 (*Requirements for Operating and Dispatch Procedures*), which procedures shall be the "**Operating and Dispatch Procedures**" and each Party shall comply with them. The Parties acknowledge and agree that the Operating and Dispatch Procedures shall give priority to solar generation over fossil fuel generation.

(b) Notwithstanding Clause 5.4(a) above, if the Parties do not agree the operating and dispatch procedures sixty (60) days prior the Scheduled COD, (a) this shall be treated as a Technical Dispute and (b) the Independent Expert shall be instructed to establish the "**Operating and Dispatch Procedures**" in accordance with such procedures as may have been agreed between the Parties and otherwise in accordance with Schedule 7 (Requirements for Operating and Dispatch Procedures).

5.5. Observance of Technical Limits

Nothing contained in this Agreement shall be construed to require the Project Company to Operate the Facility at any time, in any manner inconsistent with the Interconnection Agreement, the Codes, Technical Limits or applicable Law.

5.6. Curtailment Allowance level

When either the Buyer or the System Operator curtails the production of energy at the facility due to constraints on the grid, emergencies, or for other reasons, the Buyer shall compensate the Project Company for Deemed Energy up to the annual Buyer Curtailment Allowance limit, in accordance with Schedule 4 (*Determination of Payments*). The Project Company is entitled to Deemed Energy Payments up to the Buyer Curtailment Allowance level, in accordance with Schedule 4.

6. METERING

6.1. Metering System Installation and Sealing

(a) Prior to the Commercial Operation Date or if earlier, the Deemed Commercial Operation Date, the Project Company shall at its sole cost and expense install, test and calibrate the Main Meter and the Check Meter at the Delivery Point.

(b) On and from the Commercial Operation Date or if earlier the Deemed Commercial Operation Date:

(i) the Project Company shall own, Maintain, replace, test and calibrate the Main Meter; and

(ii) the Buyer shall own, Maintain, replace, test and calibrate the Check Meter.

(c) The Metering System shall have the functional capability to determine the Metered Energy quantities as set out in Schedule 3 (*Determination of Metered Quantities*).

(d) The Project Company undertakes to provide to the Buyer access to the Main Meter for the installation of and collection of data from any SCADA System.

(e) The Metering System shall be jointly sealed, by the Project Company and Buyer, immediately after the Commercial Operation Date. The Project Company will own the seals on the Main Meter and the Buyer will own the seals on the Check Meter. These seals shall only be broken for the purposes of inspection, testing, maintenance or adjustment of the relevant meter and shall be immediately re-sealed, jointly by the Project Company and Buyer, after that purpose is completed. A Party who wishes to break a seal on the Main Meter or the Check Meter shall give at least forty-eight (48) hours' advance notice to the other Party. If the other Party does not attend the breaking of the seal in person, having been served with such notice, the Party wishing to break the seals may proceed, but shall provide a signed explanation to the other Party, within forty-eight (48) hours of such breaking of the seals.

(f) Subject to Clause 6.1(e), the seals must not be broken by any Party without the consent of the other Party, such consent must not be unreasonably withheld, conditioned or delayed. Both Parties undertake not to and shall procure that none of its agents, employees and Affiliates do not tamper or otherwise interfere with any part of the Metering System in any way.

6.2. Meter Reading

(a) The Main Meter and the Check Meter shall be read monthly by the Project Company and the Buyer in accordance with Schedule 3 (*Determination of Metered Quantities*).

(b) The monthly meter readings shall be used to determine the monthly Metered Energy quantities in accordance with Schedule 3 (*Determination of Metered Quantities*).

6.3. Meter Testing

(a) The Project Company shall initially test the Main Meter and the Buyer shall initially test the Check Meter for accuracy in accordance with Schedule 5 (*Meter Specifications*), at least ten (10) Business Days prior to either delivering or receiving Energy through the Delivery Point.

(b) The Project Company shall have the Main Meter and the Buyer shall have the Check Meter tested in accordance with the requirements of Schedule 5 (*Meter Specifications*) and if necessary, recalibrated at least once every twenty-four (24) months or whenever either Party has reason to believe that the equipment is no longer performing within the standards of accuracy prescribed in Schedule 5 (*Meter Specifications*) and has given notice to the other Party of such concern. Testing or re-calibration of the Main Meter or the Check Meter shall be arranged on a mutually acceptable date agreed between the Parties and shall be carried out in the presence of both Parties' duly Authorised Person(s).

(c) After completion of any testing in accordance with Clause 6.3(b), the Project Company shall prepare and promptly submit to the Buyer a statement which shall be a record of the results of the testing and if applicable, the extent to which the Main Meter or Check Meter performed outside the limits of accuracy prescribed under Schedule 5 (*Meter Specifications*).

(d) The Metered Energy supplied by the Project Company to the Buyer shall be measured using readings of the Main Meter, unless such meter is found to be malfunctioning and/or performing outside the limits of accuracy specified in Schedule 5 (*Meter Specifications*). In such event, the procedure specified in Schedule 3 (*Determination of Metered Quantities*) shall be used to determine the Metered Energy.

(e) If, at any time it is determined by the Parties as a consequence of a test, or as is otherwise manifestly evident, that the Main Meter or Check Meter should be replaced, then the Project Company shall replace the Main Meter or the Buyer shall replace the Check Meter as the case may be, at its own expense.

(f) If either Party breaches its obligations under this Clause 7 (*Metering*), the meter readings

supplied by the other Party shall be binding, save for any manifest error.

7. OUTAGES AND MAINTENANCE

7.1. Annual Planned Maintenance Schedule

(a) Not later than sixty (60) Business Days prior to the commencement of each Contract Year (save for the first Contract Year for which the corresponding period shall be thirty (30) Business Days prior to the Commercial Operations Date), the Project Company shall submit its planned Scheduled Outages for that year following consultation with the Buyer regarding the Buyer's anticipated Buyer Curtailment Periods in that year (each such planned full or partial interruption being a "**Scheduled Outage**").

(b) The Buyer may on not less than thirty (30) Business Days' notice to the Project Company, request the Project Company to reschedule a Scheduled Outage to an alternative month and the Project Company shall use all reasonable endeavours to accommodate such rescheduling provided it is consistent with the standards of a Reasonable and Prudent Operator and the O&M Agreement.

(c) The Project Company may on giving not less than fifteen (15) Business Days' notice to the Buyer, reschedule a Scheduled Outage to an alternative month provided that such rescheduling is agreed to in writing by the Buyer, such consent may not be unreasonably withheld or delayed.

7.2. Monthly Planned Maintenance Schedule

(a) Not later than five (5) Business Days prior to the commencement of each month and following consultation with the Buyer regarding the Buyer's anticipated Buyer Curtailment Periods during that month, the Project Company shall submit to the Buyer its planned Scheduled Outages for the month.

(b) The Buyer may on not less than five (5) Business Days' notice to the Project Company, request the Project Company to reschedule a Scheduled Outage to an agreed time period and the Project Company shall use all reasonable endeavours to accommodate such rescheduling if it is consistent with the standards of a Reasonable and Prudent Operator and the O&M Agreement.

(c) The Project Company may on not less than five (5) Business Days' notice to the Buyer, reschedule a Scheduled Outage to another time period provided that such rescheduling is agreed to in writing by the Buyer, such consent may not be unreasonably withheld or delayed by more than five Business Days' from receipt of notice by the Buyer.

7.3. Unscheduled Outages

If an Unscheduled Outage occurs, the Project Company shall inform the Buyer as soon as possible (and in any event within four (4) hours from the commencement of the Unscheduled Outage) of the cause and the expected (or as the case may be, the actual) duration of the Unscheduled Outage.

8. COMPENSATION, PAYMENT AND BILLING

8.1. Invoices for Energy Delivered and Deemed Generated Energy

The Buyer shall pay the Project Company:

(a) the Energy Charge for Metered Energy delivered to the Buyer at the Delivery Point on or after the Commercial Operation Date; and

(b) any Deemed Energy Payments payable in accordance with this Agreement.

8.2. Billing and Payment

(a) On or before the fifth (5th) day of each month following the month in which the Commercial Operation Date or Deemed Commercial Operation Date occurs, the Project Company shall prepare and deliver to the Buyer an Invoice showing the Energy Charges and any Deemed Energy Payments (in the Nominated Currency) payable to the Project Company for the preceding month. Each such Invoice shall show information and calculations with sufficient detail to permit the Buyer to confirm the compliance of the Invoice with Schedule 4 (*Determination of Payments*).

(b) The Buyer shall subject to Clause 8.3 (*Disputed Payments*), pay all Invoices on or before the Due Date for the relevant Invoice. If in accordance with Clause 8.3 (*Disputed Payments*), the Buyer disputes any aspect of an Invoice, it shall nonetheless pay all amounts not in dispute by the applicable Due Date.

(c) All payments shall be made in the Nominated Currency in cleared funds and into the relevant Party's Nominated Account.

(d) Without prejudice to any other rights or remedies, any amount not paid when due (unless disputed in good faith in accordance with Clause 8.3 (*Disputed Payments*)) shall bear interest at the Default Rate, compounded monthly and based on the actual number of days elapsed from the applicable Due Date until payment is made, based on a three hundred and sixty-five (365)-day year.

8.3. Disputed Payments

(a) If any sum or part of any sum stated in an Invoice is disputed in good faith by the Buyer, then:

(i) the Buyer shall promptly issue to the Project Company a notice ("**Invoice Dispute Notice**") specifying in detail the subject matter of the dispute; and

(A) if the Project Company accepts the Buyer's Invoice Dispute Notice, the Project Company shall issue a revised Invoice not later than five (5) Business Days of receipt of the Invoice Dispute Notice and Clause 8.2 (*Billing and Payment*) shall apply to such revised Invoice; or

(B) if the Project Company does not accept the Buyer's Invoice Dispute Notice, the Project Company must notify the Buyer to this effect not later than five (5) Business Days of receipt of such Invoice Dispute Notice and this shall be treated as a Technical Dispute, provided that the Buyer shall in any event pay any undisputed sum in accordance with Clause 8.2 (*Billing and Payment*); and

(ii) the Buyer shall pay such amount as is agreed or determined payable in respect of the disputed sum on the Due Date for the original Invoice or if later, not later than twenty (20) Business Days of:

(A) the date on which the Parties resolve the disputed sum; or

(B) the date of final determination by an Independent Expert or arbitral tribunal (as the case may be), if the Parties fail to reach an agreement and the matter has been referred for Expert Determination or arbitration in accordance with Clause 21 (*Governing Law and Dispute Resolution*).

(b) If the Buyer disputes any amount specified in any Invoice presented by the Project Company more than three (3) times in any period of nine (9) consecutive months and to the extent that the disputes are found to be valid (in whole or in part) by the Project Company or otherwise determined to be valid (in whole or in part) by an Independent Expert or arbitral tribunal appointed in accordance with Clause 21 (*Governing Law and Dispute Resolution*),

then the Parties shall meet at the request of either Party to discuss and resolve the causes of the persistent billing errors.

8.4. Renewable Energy Credits

(a) The Parties acknowledge that all Renewable Energy Credits relating to the Project shall be owned by and be the property of the Government as stipulated in the conditions of the Generation License.

9. LIQUIDITY SUPPORT

9.1. Obligation to Provide Liquidity Support

The Buyer shall provide the Project Company with the first Liquidity Support Instrument on or before the Liquidity Support Instrument Delivery Date.

9.2. Liquidity Support Instrument Amount

Each Liquidity Support Instrument shall be for an amount equal to:

(a) Liquidity Support Factor 1 times the estimated average monthly billing for the first Contract Year; and

(b) Liquidity Support Factor 2 times the average of the monthly invoice of the previous Contract Year for each subsequent Contract Year.

9.3. Maintenance of Liquidity Support

The Buyer shall ensure that:

(a) each Liquidity Support Instrument shall be valid for a term of at least a twelve (12) months;

(b) the initial Liquidity Support Instrument or a replacement Liquidity Support Instrument in the Liquidity Support Required Amount shall be in effect at all times after the initial obligation to procure the initial Liquidity Support Instrument arises under Clause 9.1 (*Obligation to Provide Liquidity Support*); ***provided that*** in respect of any replacement Liquidity Support Instrument, the Project Company has given Buyer at least forty-five (45) Days' notice of the requirement to procure such replacement Liquidity Support Instrument; and

(c) each Liquidity Support Instrument will provide *inter alia* that if the Liquidity Support Instrument is not replaced by a further Liquidity Support Instrument in the Liquidity Support Required Amount within thirty (30) Days prior to the expiry of such Liquidity Support Instrument, the issuing bank[2] will be instructed to draw the full amount under the Liquidity Support Instrument and apply such moneys as security in issuing a replacement Liquidity Support Instrument in the Liquidity Support Required Amount.

9.4. Draw on Liquidity Support

(a) The Project Company shall be entitled to draw upon the Liquidity Support Instrument with prior written notice to the Buyer for any payment due from the Buyer to the Project Company under an Invoice that is overdue for at least thirty (30) Days.

(b) Within thirty (30) Days of any drawing of funds by the Project Company under the Liquidity Support Instrument, the Buyer shall provide to the Project Company either:

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[2] **User note**: In certain circumstances, it may be the Project Company who will be entitled to draw in the event that the Liquidity Support Instrument is not duly replaced. To be considered on a project specific basis.

(i) a replacement Liquidity Support Instrument in the Liquidity Support Required Amount (which shall replace and not be in addition to the Liquidity Support Instrument upon which the relevant drawing of funds was made); or

(ii) confirmation from the issuing bank addressed to the Project Company that the guaranteed amount under the Liquidity Support Instrument has been replenished up to, or continues to be equal to the Liquidity Support Required Amount.

(c) If the Project Company draws against the Liquidity Support Instrument and later the Parties agree or if the Parties cannot reach agreement, it is determined in accordance with Clause 21 (*Governing Law and Dispute Resolution*) that the Project Company was not entitled to do so with respect to all or a portion of such drawn amount, then the Project Company shall promptly repay to the Buyer an amount equal to the drawn amount that the Project Company was not entitled to draw, together with all actual, reasonable and documented expenses incurred by the Buyer in connection with such drawing plus interest at the Default Rate on such amount and expenses from the date of drawing until the date such amount is repaid.

10. UNDERTAKINGS AND WARRANTIES OF THE PARTIES

10.1. Mutual Access

The Project Company shall provide the Buyer with access to the Site and the Buyer shall provide the Project Company with access to the Interconnection Facilities (and each case including other property to which a Party has rights of access by way of lease or licence in connection with the Project) at reasonable hours, subject to compliance with applicable Health and Safety Legislation and security requirements and upon reasonable notice for any reasonable purpose in connection with the performance of the obligations imposed on a Party by this Agreement or the Codes.

10.2. Compliance with Law

(a) Each Party undertakes that it shall comply with all applicable Law and Codes.

(b) The Buyer shall provide reasonable assistance to the Project Company with the procurement of Authorisations and expedite or cause to be expedited consideration of such applications with respect to:

(i) foreign workers;

(ii) foreign investment and other ownership arrangements; and

(iii) the Construction, Operation, Maintenance, insurance and financing of the Facility.

10.3. Representations and Warranties

(a) Each Party represents and warrants on the Signature Date and the Effective Date that:

(i) it is a company duly organised and validly existing under the Law and has all requisite legal power and authority to execute this Agreement and to carry out the terms, conditions and provisions contained in this Agreement;

(ii) all Authorisations required for the execution, delivery and performance by it of this Agreement and the transactions contemplated in this Agreement have been obtained and are in full force and effect or if not required prior to the Commercial Operation Date, have been applied for or will at the relevant time be applied for through the due process required by the relevant Authority and the receipt of such Authorisations shall be received on or prior to the Commercial Operation Date;

(iii) this Agreement constitutes its valid, legal and binding obligations enforceable in accordance with the terms hereof, subject in each case only to the Legal Reservations;

(iv) there are no written actions, suits or proceedings pending or to its knowledge, threatened, against or affecting it before any court or administrative body or arbitral tribunal that might materially or adversely affect its ability to meet and carry out its obligations under this Agreement;

(v) the execution, delivery and performance of this Agreement has been duly authorised by all requisite corporate action and will not contravene any provision of or constitute a default of its by-laws, constitutional documents or under any other agreement or instrument to which it is a party or by which its property may be bound; and

(vi) in entering into this Agreement it has not committed any Fraudulent or Corrupt Practice.

(b) The Project Company represents and warrants that any land, wayleave, right of way, easement or other interest in land which it may require for carrying out the Project has been acquired or secured or will be acquired or secured within such time period as is necessary in order for it to carry out its obligations in accordance with this Agreement.

11. ANTI-CORRUPTION PROVISIONS

11.1. Anti-Corruption

Each Party undertakes to the other Party that it will:

(a) not and it will procure that its officers, employees, agents, sub-contractors and any other persons who perform services for or on its behalf in connection with the Project will not breach or could cause the other Party to breach in connection with the Project any applicable Laws intended to prevent bribery or other forms of corruption;

(b) keep accurate and up to date records showing all payments made and received and all other advantages given and received by it in connection with the Project and the steps it takes or has taken to comply with Clause 11.1(a) (*Anti-Corruption*);

(c) permit the other Party to inspect the records referred to above as reasonably required; and

(d) to the extent permitted by applicable Law, promptly notify the other Party of any Government investigation of which it becomes aware and/or any internal investigation, relating to actual or alleged breaches of applicable Laws intended to prevent bribery or other forms of corruption in connection with the Project.

11.2. Anti-Corruption Warranties

(a) Each Party warrants that as at the date of this Agreement and to the best of its knowledge, neither itself nor any of its officers, employees, agents, sub-contractors or any other persons who perform services for or on behalf of it in connection with the Project:

(i) has engaged in any Corrupt Practice;

(ii) has been convicted of any Corrupt Practice; or

(iii) is under any Government or internal investigation for any alleged Corrupt Practice.

(b) The Project Company will include in any sub-contract which it enters into in connection with this Agreement:

(i) a clause equivalent to this Clause 11 (*Anti-Corruption Provisions*); and

(ii) a right for the Buyer to exercise equivalent rights over the sub-contractor to those which the Buyer is entitled to exercise over the Project Company in Clause 11.1(c) (*Anti-Corruption*) above.

(c) The Project Company and the Buyer will indemnify each other against all Losses (including all Direct Losses and Special Losses), liabilities, costs, damages and expenses that the other Party will incur or suffer in connection with:

(i) any breach by it or in the case of the Project Company, by the Shareholder or Project Company of Clause 11.1 (*Anti-Corruption*) or paragraphs (a) or (b) of this Clause 11.2 (*Anti-Corruption Warranties*); and

(ii) in the case of the Project Company, any breach by any Contractor of any equivalent provisions contained in the relevant sub-contract.

12. INSURANCE AND TAXES

12.1. Insurance

(a) The Project Company shall (and the Project Company shall procure that each Contractor shall) at its sole cost and expense:

(i) take out and maintain such insurance cover as is customary, desirable and consistent with the standards of a Reasonable and Prudent Operator, including at a minimum the insurances set out in Schedule 8 (*Insurance Requirements*) ("**Required Insurances**"); and

(ii) ensure that the Buyer, its directors, officers, employees, assignees, Affiliates and agents shall be additional insureds under the Required Insurances, provided that the Buyer furnishes the Project Company with such requisite information.

(b) The Project Company shall furnish to the Buyer copies of insurance policies effecting the Required Insurances and the Buyer may request the Project Company from time to time to provide proof that all relevant premiums have been paid and that the relevant policy or policies remain in existence.

(c) Subject to Clause 12.1(d) and unless the Buyer otherwise agrees in writing, the Project Company shall apply the proceeds of any claim made under the Required Insurances (other than claims under business interruption insurance, delay in start-up insurance, any other loss of revenue insurance or third party liability insurance) towards reinstatement, reconstruction, replacement, repair and/or renewal of any loss of or damage to the Facility in the first instance.

(d) It is acknowledged and agreed that the Lenders may have:

(i) security over and rights under the Required Insurances; and

(ii) the right to apply and/or require the application of all or some of the proceeds of any claim(s) on the Required Insurances towards payment or repayment (as the case may be) of amounts owing to the Lenders under the Finance Agreements (and in priority to Clause 12.1(c)).

(e) If:

(i) the Project Company receives proceeds from any claim made under the Required Insurances;

(ii) such claim is made in respect of one or more Curtailment Events or one or more events which caused or otherwise gave rise to one or more Curtailment Events; and

(iii) such proceeds are not applied towards (A) reinstatement, reconstruction, replacement, repair and/or renewal of any loss of or damage to the Facility in accordance with Clause 12.1(c) or (B) payment or repayment (as the case may be) of amounts owing to the Lenders under the Finance Agreements in accordance with Clause 12.1 (d),

then Buyer's obligation to pay for the Deemed Energy which arose as a result of the applicable Curtailment Events shall be reduced by the amount of such proceeds.

(f) Each Party shall require its insurers to waive the insurers' rights of subrogation in favour of the other Party and the Lenders.

13. Taxes

The Project Company shall be responsible for payment of any and all royalties, taxes, fees, or assessments levied against its property, leasehold rights or other assets or profits by any Authority as may be provided for by any applicable Law and shall settle such levies without attempting to recover them from the other Party except through the Energy Charge or the Deemed Energy Payments.

14. INDEMNITIES

Each Party (the "**Indemnifying Party**") shall indemnify and hold harmless the other Party, its Affiliates and their respective officers, employees, consultants, agents and representatives (the "**Indemnified Parties**") against any and all Losses which may be asserted against or suffered by any of the Indemnified Parties arising in respect or as a consequence of:

(a) any death, injury, loss or damage to property suffered by a third party, to the extent resulting from any negligent act or omission of the Indemnifying Party and its respective officers, employees, consultants, agents and representatives, provided that the death, injury, loss or damage to property suffered by the relevant third party is not attributable to any act or omission of any one or more of the Indemnified Parties or to the failure of one or more of the Indemnified Parties to use reasonable endeavours to mitigate or avoid the death, injury, loss or damage to property in question; and

(b) access to the Indemnified Party's property made by the Indemnifying Party (or its personnel or contractors) in accordance with Clause 10.1 (*Mutual Access*), except to the extent that such costs, claims, liabilities, expenses, suits, actions or proceedings are incurred as a result of an act, omission, negligence or breach by the Indemnified Party (or its personnel or Contractors).

15. FORCE MAJEURE

15.1 Responsibilities of the Parties during a Force Majeure Event

(a) If a Force Majeure Event occurs the Affected Party shall deliver a written notice to the Non-Affected Party ("**Force Majeure Notice**") as soon as reasonably practical of:

(i) the date of commencement of the Force Majeure Event;

(ii) the nature and expected duration of the Force Majeure Event; and

(iii) the actual and anticipated effect of the Force Majeure Event on the performance by the Affected Party of its obligations under this Agreement.

(b) If the Affected Party does not deliver the Force Majeure Notice in accordance with Clause 15.1(a), the Affected Party is not entitled to any relief pursuant to Clause 15.2 (*Effect of a Force Majeure Event*) until such time as a Force Majeure Notice is delivered by the Affected Party.

(c) The Affected Party shall:

(i) make all reasonable efforts to prevent and reduce to a minimum and mitigate the effect of any delay caused by any Force Majeure Event;

(ii) take any action in accordance with the standards of a Reasonable and Prudent Operator to ensure resumption of normal performance of this Agreement after the cessation of any Force Majeure Event as promptly as possible and otherwise perform its obligations in accordance with this Agreement; and

(iii) for the duration of any Force Majeure Event, regularly (and in any event upon the Non-Affected Party's reasonable request) provide the Non-Affected Party with updates in relation to the Force Majeure Event, including the information required under Clauses 15.1(a)(ii) and 15.1(a)(iii) above.

(d) Not later than seven (7) Business Days following the cessation of any Force Majeure Event, the Affected Party must notify the Non-Affected Party of the cessation of the Force Majeure Event and shall submit to the Non-Affected Party reasonable proof of the nature of the Force Majeure Event and its effect on the performance by the Affected Party of its obligations under this Agreement.

(e) If the Parties are unable to agree in good faith on the occurrence or existence of a Force Majeure Event, such dispute shall be finally settled in accordance with the dispute resolution procedure set forth in Clause 22 (*Governing Law and Dispute Resolution*), provided however that the burden of proof as to the occurrence or existence of such Force Majeure Event shall be upon the Party claiming relief or excuse of performance of its obligations on account of such Force Majeure Event.

15.2 Effect of a Force Majeure Event

(a) The Affected Party will be excused from performance of its obligations under this Agreement to the extent that performance is impeded or prevented due to a Force Majeure Event and will not be liable for the non-performance of such obligation during the period of a Force Majeure Event.

(b) If the Affected Party's ability to perform an obligation under this Agreement by a contractual milestone set out in this Agreement (including but not limited to the Scheduled COD and the Commercial Operation Longstop Date) is affected by a Force Majeure Event, the relevant contractual milestone shall be extended by one day for each day that the Affected Party is unable to comply with the relevant obligation as a result of such Force Majeure Event or is delayed as a result of such Force Majeure Event in complying with the relevant obligation under this Agreement. In the case of Other Force Majeure Event, the Term shall be automatically extended for a period equal to the duration of the Other Force Majeure Event.

(c) Notwithstanding the existence of any Force Majeure Event, the Affected Party shall however continue to perform all of its obligations under this Agreement, which are not affected by such Force Majeure Event in accordance with this Agreement.

15.3 No Liability for Other Losses

Save and except as expressly provided in this Agreement, no Party shall be liable in any manner whatsoever to the other Party in respect of any loss relating to or arising out of the occurrence or existence of any Force Majeure Event or the exercise by it of any right pursuant to this Clause 15 (*Force Majeure*) above.

16. TERMINATION

16.1. Event of Default

(a) Each of the following events shall (to the extent not caused by a Buyer Event of Default, an Emergency or a Force Majeure Event) be a "**Project Company Event of Default**" which if not cured within the time permitted in this Clause (if any), shall give rise to the right on the part of the Buyer to terminate this Agreement in accordance with Clause 16.3 (*Termination Notices*):

(i) any assignment or transfer by the Project Company of all or any of its rights, benefits or obligations hereunder to a third party in breach of Clause 20.4 (*Assignment and Other Dealings*);

(ii) the Project Company fails to achieve the Commercial Operation Date on or before the Commercial Operation Longstop Date;

(iii) Abandonment;

(iv) subject to Clause 4.4 (Failure to Commission at or Above Minimum Capacity);

(v) the Project Company is subject to an Insolvency Event;

(vi) the Project Company is in breach of Clause 11.1 (*Anti-Corruption*) or 11.2 (*Anti-Corruption Warranties*);

(vii) revocation or lapse of any Authorisation arising from a breach by the Project Company of such Authorisation which prevents the Project Company's ability to lawfully (A) perform its obligations under this Agreement; (B) (prior to the Commercial Operation Date) Construct the Facility; and/or (C) (on and from the Commercial Operation Date) Operate and/or Maintain the Facility and/or generate Energy and deliver such Energy to the Delivery Point;

(viii) the Implementation Agreement and/or Grid Connection Agreement is terminated as a result of any default of the Project Company or Shareholders thereunder;

(ix) the land rights necessary for the Construction, Operation and Maintenance of the Facility on the Site are no longer in force in accordance with applicable Law, or the Land Agreement has been terminated, in each case as a result of any default of the Project Company; or

(x) any material breach by the Project Company of this Agreement (other than breaches expressly provided for in this Clause 16.1(a)), which is not remedied within fifteen (15) Business Days following notice by the Buyer stating that a breach of this Agreement has occurred and identifying the breach in question.

(b) Each of the following shall (to the extent not caused by a Project Company Event of Default or a Force Majeure Event) be a "**Buyer Event of Default**" which if not cured within the time permitted, shall give rise to the right on the part of the Project Company to terminate this Agreement in accordance with Clause 16.3 (*Termination Notices*):

(i) the Project Company fails to achieve the Commercial Operation Date on or before the Commercial Operation Longstop Date as a result of the Buyer's breach of this Agreement;

(ii) subject to Clause 8.2 (*Billing and Payment*), the Buyer fails to make a payment in full of any undisputed amount due to the Project Company under this Agreement not later than twenty (20) Business Days of its Due Date or fails to pay a disputed amount not later than twenty (20) Business Days of the resolution of the Dispute in accordance with Clause 8.3(a)(ii) (*Disputed Payments*);

(iii) the Buyer is subject to an Insolvency Event;

(iv) the Buyer is in breach of Clauses 11.1 (*Anti-Corruption*) or 11.2 (*Anti-Corruption Warranties*);

(v) any assignment or transfer by the Buyer of all or any of its rights, benefits or obligations hereunder to a third party in breach of Clause 20.4 (*Assignment and Other Dealings*);

(vi) revocation or lapse of any Authorisation arising from any breach by the Buyer of such Authorisation (including any failure by the Buyer to perform or observe any of the conditions to which such Authorisation may be subject);

(vii) where the Government is responsible for procuring the Site, the land rights necessary for the Construction, Operation and Maintenance of the Facility on the Site are no longer in force in accordance with applicable Law, or the Land Agreement is terminated in each case as a result of any default of the Buyer or the Landowner;

(viii) any other material breach by the Buyer of this Agreement (other than the breaches expressly provided for in this Clause 16.1(b)), which is not remedied within fifteen (15) Business Days following notice by the Project Company stating that a material breach of this Agreement has occurred and identifying the breach in question;

(ix) the Grid Connection Agreement is terminated as a result of any default by the Network Operator thereunder;

(x) the Implementation Agreement is terminated as a result of a Government Default; or

(xi) a Frustrating Change in Law occurs.

16.2. Prolonged Force Majeure Events

If a Prolonged Force Majeure Event occurs provided that such Prolonged Force Majeure Event is continuing either Party may terminate this Agreement upon twenty (20) Business Days' notice to the other Party.

16.3. Termination Notices

(a) Upon occurrence of a Buyer Event of Default or a Project Company Event of Default as the case may be, that is not cured within the applicable grace period (if any), the non-defaulting Party may at its option initiate termination of this Agreement by notifying the defaulting Party of its intention to terminate this Agreement ("**Notice of Intent to Terminate**"). The Notice of Intent to Terminate shall specify in reasonable detail the Buyer Event of Default or the Project Company Event of Default as the case may be.

(b) Following the giving of a Notice of Intent to Terminate, the Parties shall consult for a period of twenty (20) Business Days (or such longer period as the Parties may agree) as to what steps shall be taken with a view to mitigating the consequences of the relevant event taking into account all prevailing circumstances. During such consultation period following delivery of the Notice of Intent to Terminate, the defaulting Party may continue to seek to cure the default.

(c) Upon expiration of such consultation period described in Clause 16.3(b), unless the Parties have otherwise agreed or unless the Buyer Event of Default or the Project Company Event of Default which is the subject of the Notice of Intent to Terminate has been remedied, the non-defaulting Party may terminate this Agreement by delivering a further notice to the defaulting Party in writing (the "**Termination Notice**"), whereupon this Agreement shall immediately terminate (the "**Termination Date**").

16.4. Limitations of Liability

(a) Except pursuant to Clauses 14 (*Indemnities*) neither the Buyer nor the Project Company shall be liable to the other for the other's Special Loss.

(b) Nothing in this Clause 16.4 (*Limitations of Liability*) shall relieve either Party from any express obligation under this Agreement to make a payment to the other Party when due.

17. RETENTION OF THE FACILITY

Unless an obligation arises under the Implementation Agreement for the sale and purchase of the Sale Items as defined in the Implementation Agreement, from the earlier of the Expiry Date and the date on which this Agreement is terminated in accordance with its terms, the Project Company shall subject to the rights of the Lenders pursuant to the Direct Agreement, have the right to either (i) continue to Operate and Maintain the Facility and sell Energy to a third-party until the end of the operational life of the Facility or (ii) sell the Facility to a third-party purchaser provided that in each case the Facility can continue to be operated by the Project Company or any such third-party purchaser in accordance with all applicable Laws, Authorisations and applicable Codes. The Buyer shall refrain from doing anything that may prevent, impede or delay such arrangements.

18. CONFIDENTIAL INFORMATION

18.1. Non-disclosure of Confidential Information

Each Party (a "Receiving Party") shall (and shall procure that its Affiliates (the "Receiving Group") shall) keep confidential and not disclose to any third party nor use other than for a Permitted Purpose any Confidential Information of the other Party (a "Disclosing Party") (or such other Party's Affiliates (the "Disclosing Group")).

18.2. Exceptions

(a) Clause 18.1 (*Non-disclosure of Confidential Information*) shall not apply if and to the extent that:

(i) such Confidential Information is in the public domain (other than by reason of a breach of any obligation of confidentiality applicable to the Receiving Group);

(ii) such Confidential Information was known by the Receiving Group (without any obligation of confidentiality in respect of it) prior to the first disclosure of such information to the Receiving Group by (or on behalf of) the Disclosing Group;

(iii) such Confidential Information is disclosed to the Receiving Group on a non-confidential basis by person(s) other than by the Disclosing Group (or person(s) acting on its behalf) in circumstances where the Receiving Group reasonably believed that such disclosure was lawfully made without breach of any obligation of confidentiality by such person(s);

(iv) the Disclosing Party has consented in writing to such disclosure or use of such Confidential Information or has otherwise confirmed in writing that such Confidential Information is not confidential;

(v) disclosure is made by outside consultants or advisors engaged by or on behalf of the disclosing Party and acting in that capacity in connection with the Project (including insurance, tax and legal advisors);

(vi) disclosure is made to the Lender and to any Affiliate, advisor, agent, trustee or representative of the Lender;

(vii) such disclosure or use is required by Law, the Government pursuant to the Implementation Agreement, the rules of any investment exchange to which the Receiving Group may be subject or by any competent Authority having jurisdiction over the Receiving Group.

(b) If disclosure or use is to be made pursuant to Clause 18.2(a), then if permitted by Law, the Receiving Party shall consult with the Disclosing Party reasonably in advance of such disclosure or use so as to permit the Disclosing Party reasonable opportunity to review and comment on such disclosure or intended use and if so desired by the Disclosing Party, for the Disclosing Party to take any reasonable action to prevent or restrict such disclosure or use.

18.3. Disclosure Between Members of the Recipient Party's Group and/or Delegates

Notwithstanding Clause 18.1 (Non-disclosure of Confidential Information), the disclosure of Confidential Information between members of the Receiving Group and/or Delegates of the Receiving Group shall be permitted, provided that:

(a) such disclosure is restricted to those persons who reasonably need to know such information in connection with the Permitted Purpose or by the nature of their role as a Delegate of the Receiving Group; and

(b) the Receiving Party shall procure that any person to whom Confidential Information is disclosed under this Clause 18.3 (*Disclosure Between Members of the Recipient Party's Group and/or Delegates*) and all other Delegates of the Receiving Group shall comply with the obligations of confidentiality and restrictions on use applicable under this Clause 19 (*Confidential Information*) in the same manner as such restrictions and obligations apply to the Receiving Party.

18.4. Return of Confidential Information

The Receiving Party shall upon written request of the Disclosing Party, procure that all Confidential Information provided by (or on behalf of) the Disclosing Group to the Receiving Group (or derived from Confidential Information disclosed to the Receiving Party by (or on behalf of) the Disclosing Party) shall to the extent within the possession or control of the Receiving Group (or any Delegate of it), be promptly returned to the Disclosing Party (or if so authorised by the Disclosing Party, destroyed or deleted) provided that in respect of any information stored electronically or in other non-physical media, it shall be sufficient for the Receiving Party to procure that access to such information is restricted to non-commercial archiving purposes only.

18.5. Obligations Survive Termination

The obligations of each Party contained in this Clause 18 (Confidential Information) shall survive the termination of this Agreement and shall continue for a period of two (2) years after the Expiry Date or the Termination Date, if earlier.

18.6. Injunctive Relief

Each Party acknowledges that monetary damages alone may not be a sufficient remedy for any actual or threatened breach of this Clause 18 (Confidential Information), that injunctive and specific performance or any other equitable relief may be available to the non-defaulting Party in respect of any such breach and that no proof of special damages shall be necessary for the enforcement of this Clause 18 (Confidential Information). Such remedies shall be in addition to and not in lieu or limitation of any other remedy available to the Non-Defaulting Party under this Agreement or otherwise at Law or in equity.

19. NOTICES

19.1. Method of Service

A notice or other communication given under this Agreement by any Party to the other Party shall be in writing (which shall include e-mail), signed in manuscript by or on behalf of the Party giving it (which includes a faxed or scanned manuscript signature) or in the case of e-mail, that the message was sent from an e-mail address of the Party giving it (and which sender's e-mail address is one to which notices and other communications may also be validly delivered to that Party under this Clause 19.1 (Method of Service)), in the English language and may be either:

(a) delivered personally by hand; or

(b) if sent from within the same jurisdiction in which the recipient's address is located, then sent by courier (or if sent from outside the jurisdiction in which the recipient's address is located, then sent by international courier); or

(c) sent by e-mail,

in each case addressed to each Party in accordance with the notice details contained in the Key Information Table.

19.2. Deemed Service

Without prejudice to any earlier time at which a notice or other communication may be actually given and received, a properly addressed notice will in any event:

(a) if personally delivered, be deemed to have been given and received upon delivery at the relevant address;

(b) if posted to an address in the same jurisdiction as that from which it was sent by courier (which courier advises of delivery within two (2) Business Days), be deemed to have been given and received two (2) Business Days after the date of posting;

(c) if sent to an address in a different jurisdiction as that from which it was sent by international courier (which courier advises of delivery within seven (7) Business Days), be deemed to have been given and received seven (7) Business Days after the date of posting;

(d) if sent by facsimile and a confirmatory successful transmission report is given by the transmitting device, be deemed to have been given and received on the date of transmission (or if such day is not a Business Day, then the next Business Day); and

(e) if sent by e-mail and no delivery failure is reported to or by the sender's e-mail server, be deemed to have been given and received on the date such e-mail was sent (or if such day is not a Business Day, then the next Business Day).

19.3. Proof of Service

In proving service, it shall be sufficient to prove that:

(a) the envelope containing the notice or other communication was addressed to the address of the relevant Party as set out in Clause 19.1 (*Method of service*) (or as otherwise notified by that Party pursuant to Clause 19.5 (*Change of address*)) and delivered to either custody of the courier or international courier firm (as applicable); or

(b) the notice or other communication was transmitted in full by facsimile to the facsimile number of the relevant Party set out in Clause 19.1 (*Method of service*) (or as otherwise notified by that Party pursuant to Clause 19.5 (*Change of address*)) (as evidenced by a confirmatory transmission report); or

(c) that the e-mail was correctly addressed and that no delivery failure was reported to or by the sender's e-mail server.

19.4. Receipt Outside Business Hours

If receipt or deemed receipt of a notice or other communication occurs before 9.30 a.m. in the country of receipt on a Business Day, the notice or other communication shall be deemed to have been received at 9.30 a.m. (in the country of receipt) on that day. If deemed receipt occurs after 5.30 p.m. (in the country of receipt) on a Business Day or on a day which is not a Business Day, the notice or other communication shall be deemed to have been received at 9.30 a.m. (in the country of receipt) on the next Business Day.

19.5. Change of Address

Any Party to this Agreement may give at least five (5) Business Days' notice to the other Party to change its address or other details specified in Clause 19.1 (Method of service).

19.6. Service of Proceedings

This Clause 19 (Notices) does not apply to the service of any documents relating to any proceedings in any court or where applicable, any arbitration or other method of dispute resolution.

20. MISCELLANEOUS

20.1. No Partnership

This Agreement must not constitute or imply any partnership, joint venture, agency, fiduciary relationship or other relationship between the Parties other than the contractual relationship expressly provided for in this Agreement. Neither Party shall have nor represented that it has any authority to make any commitment on the other Party's behalf.

20.2. Further Assurance

Each Party shall insofar as it is reasonably able to do so and at its own expense execute and deliver all such documents and do all such things as may be reasonably required from time to time to give full effect to this Agreement and to secure to the other Party the full benefit of the rights, powers, privileges and remedies conferred upon the other Party in this Agreement.

20.3. Costs

Save as expressly provided in this Agreement to the contrary, each Party shall be responsible for its own costs incurred in connection with the negotiation, preparation, execution and implementation by it of this Agreement, provided that this Clause 20.3 (Costs) must not prejudice the right of either Party to seek to recover its costs in any litigation or dispute resolution procedure which may arise out of this Agreement. Each Party shall bear its own costs in relation to the negotiation and preparation of this Agreement.

20.4. Assignment and Other Dealings

(a) Neither Party may assign or otherwise transfer all or any of its rights, benefits or obligations hereunder without the other Party's prior written consent.

(b) If the Project Company intends to obtain financing for the Project, the Project Company may assign to or grant a security interest of all of its rights and interests under or pursuant to this Agreement for such purposes. The Project Company must notify the Buyer of the creation of such security over its rights and interests under this Agreement at least thirty (30) Business Days prior to the execution of any such assignment or security interest.

(c) The Buyer agrees to enter into a direct agreement with the Lender upon the Project Company's reasonable request in connection with the financing or refinancing of the Project.

20.5. Entire Agreement

(a) There will be deemed to be incorporated into this Agreement the contents of any side letter supplemental or ancillary to this Agreement as if they had been set out expressly in this Agreement.[3]

(b) Each Party acknowledges and agrees that:

(i) it has not relied on or been induced to enter into this Agreement by any representation, warranty, statement, assurance, promise or undertaking of any kind except as expressly included in this Agreement; and

(ii) it must not be liable to the other (whether in equity, contract, tort or under statute or otherwise) for any representation, warranty, promise, statement, assurance or undertaking which is not set out in this Agreement and neither Party shall be entitled to claim damages or terminate or rescind this Agreement by reason of any misrepresentation (other than a fraudulent misrepresentation) having been made to it by any person (whether a Party or not) at any time and upon which it has relied before entering into this Agreement.

(c) Nothing in this Clause 20.5 (*Entire Agreement*) shall limit or exclude any liability or remedy for fraud or wilful misconduct.

20.6. Variation

This Agreement may only be varied in writing signed by each Party.

20.7. Severance

(a) If any provision of this Agreement (or part of a provision) is held by any court of competent jurisdiction to be invalid, unenforceable or illegal, such provision (or part) shall to that extent be deemed not to form part of this Agreement and the other provisions of this Agreement shall remain in force.

(b) If any invalid, unenforceable or illegal provision would be valid, enforceable or legal if some part of it were deleted, the provision shall apply with whatever modification is necessary to give effect to the intention of the Parties.

(c) If any provision of this Agreement (or part of a provision) is held by any court of competent jurisdiction to be invalid, unenforceable or illegal and Clause 20.7(a) does not apply, the Parties will agree a replacement provision which is legal and enforceable and achieves to the greatest extent possible the same effect as would have been achieved by the invalid, unenforceable or illegal provision.

20.8. Counterparts

(a) This Agreement may be executed in any number of counterparts, each of which is deemed to be an original and which together have the same effect as if each Party had signed the same document.

(b) This Agreement may be executed through the use of facsimile transmission and a counterpart of this Agreement that contains the facsimile signature of a Party, which counterpart has been transmitted by facsimile transmission to the other Party at such facsimile number as such other Party shall request, shall constitute an executed counterpart of this Agreement.

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[3] **User Note:** Exceptions to this Clause to be considered on a project specific basis.

20.9. Language of the Agreement

(a) The language of this Agreement is English and all documents, notices, waivers and all other written communications or otherwise between the Parties in connection with this Agreement shall be in English.

(b) If this Agreement is translated into any other language, the English language text shall prevail unless the relevant document is a constitutional, statutory or other official document.

20.10. Waiver

(a) No failure to exercise, nor any delay in exercising any right, power, privilege or remedy under this Agreement shall in any way impair or affect the exercise of such right, power or privilege or remedy; or operate as a waiver of such right, power or privilege or remedy in whole or in part.

(b) The waiver by any Party of any of its rights or remedies arising under this Agreement or by Law must not constitute a continuation of that or any other right or remedy.

(c) No single or partial exercise of any right, power, privilege or remedy under this Agreement shall preclude or restrict the further exercise of that or any other right, power, privilege or remedy.

20.11. Rights and Remedies are Cumulative

The rights, powers, privileges and remedies provided in this Agreement are cumulative and are not exclusive of any rights, powers, privileges or remedies provided by Law or otherwise.

20.12. Third party rights

A person who is not a party to this Agreement must not have any rights to enforce any term of this Agreement.

20.13. Mitigation

The Parties shall mitigate any Losses they may incur pursuant to this Agreement to the extent specified hereunder and where not specified, to the extent required by Law.

21. GOVERNING LAW

This Agreement, and any non-contractual obligations arising out of or in connection with it (including any disputes regarding its existence, validity, interpretation, performance, or termination), shall be governed by and construed in accordance with the laws of the Republic of Suriname, without giving effect to any choice of law or conflict of laws rules or provisions that would require the application of the laws of any other jurisdiction.

22. EXPERT DETERMINATION

22.1. Expert Determination

(a) If referral to an Independent Expert is expressly required by this Agreement, the Technical Dispute shall be subject to determination by an Independent Expert under this Clause 22.1 (''Expert Determination'').

(b) The Expert Determination process will be commenced by a Party delivering a written notice to the other Party requesting an Expert Determination in respect of the Technical Dispute.

(c) Within ten (10) Business Days of the delivery of the written notice under Clause 22.1(b), the Parties shall appoint an Independent Expert to determine the Technical Dispute. If the Parties fail

to agree the identity of the Independent Expert within such period, the requesting Party shall thereafter request the Expert Appointing Authority to appoint the Independent Expert to determine the Technical Dispute. The request shall indicate the nature of the Technical Dispute and the requesting Party shall make payment of any such fees that may be required. The other Party shall have the opportunity to provide its comments on the request to the Expert Appointing Authority.

(d) The Independent Expert shall in consultation with the Parties decide upon the procedure to be followed in order to arrive at the Independent Expert's determination. The Independent Expert may decide to conduct the procedure in a summary or informal manner or may decide to dispense with specific formalities, procedures, pleadings, discovery or strict rules of evidence, provided however that the Parties are afforded equal treatment and a reasonable right to be heard.

(e) The Independent Expert shall issue its Expert Determination not later than forty-five (45) Business Days from the date of the Independent Expert's instruction and shall include the reasons for the decision.

(f) If the Expert Determination is manifestly incorrect, reached negligently, fraudulently or in bad faith, either Party may by notice provided to the other Party not later than twenty (20) Business Days after the date of issue of the determination, regard the Expert Determination as a Dispute and refer the Dispute for arbitration under Clause 23 (*Dispute Resolution*).

(g) Subject to Clause 22.1(f), the Expert Determination shall be final and binding on the Parties and shall be complied with promptly by the Parties, unless challenged under Clause 23 *(Dispute Resolution)* within thirty (30) Days of the date the Expert's final decision is received by the parties to the Dispute. In such arbitration, the Expert shall not (without the written consent of the parties to the Dispute) be appointed to act as an arbitrator or as adviser to the Parties.

23. DISPUTE RESOLUTION

If a Dispute arises out of or in connection with this Agreement, then, except as expressly provided in this Agreement, such as in the case of a Technical Dispute subject to Expert Determination as set out in Clause 22, the Parties shall follow the procedure set out in this Clause 23.

23.1. Senior Manager Discussions

The Parties shall resolve any Dispute arising between them, in the first instance, by mutual consultation, to be commenced by the delivery of a notice by a Party to the other Party that a Dispute has arisen specifying particulars of the Dispute.
(a) If the Parties are unable to settle the Dispute through mutual consultation within fourteen (14) days of delivery of the notice of dispute, then either Party shall refer the Dispute in writing to a committee comprising one (1) senior manager of each of the Parties, such senior managers shall not be involved in the day to day running and/or management of the Agreement ("**Management Committee**"), with a copy of the notice of referral to the other Party.

(b) The Management Committee shall convene at a mutually agreed venue within fourteen (14) days of the notice of referral to consider the information available in order to provide a written opinion on the Dispute within twenty-eight (28) days of the notice of referral. The Parties may agree to longer periods for convening the Management Committee and for it to form an opinion.

(c) If a written decision is reached by the Management Committee, signed by all members of the Management Committee and expressly stating that the decision resolves the Dispute, such decision shall be final and binding on the Parties. No other kind of decision, opinion, award or findings by the Management Committee or any of its members shall be binding on the Parties.

23.2. Arbitration

(a) If the Parties are unable to resolve the Dispute, it shall be finally settled by arbitration in accordance with the Arbitration Rules.

(b) The arbitration shall be conducted in the Arbitration Language.

(c) The seat or legal place of the arbitration shall be the Arbitration Seat.

(d) The Governing Law shall also apply to this Clause 23.3 (Arbitration).

23.3. Confidentiality of Disputes

Notwithstanding Clause (*Confidential Information*), this Clause 23.4 (*Confidentiality of Disputes*) applies with respect to any Dispute unless the Parties expressly agree in writing to the contrary. The Parties undertake to keep confidential the outcome of all senior manager discussions and mediations, and all awards in arbitration, together with all materials created for the purpose of senior manager discussions, mediations, and arbitration proceedings and all other documents produced by another Party in those processes, to the extent not otherwise in the public domain. This confidentiality undertaking does not apply where disclosure is:
(a) required by applicable Law, regulation, court order, the Government or any appropriate Authority;

(b) to protect or pursue a legal right or to enforce or challenge a settlement agreement,or arbitral award in *bona fide* legal proceedings before a state court or other judicial authority; and to their professional advisers, consultants, technical experts, project managers, Lenders, insurers and Affiliates.

SIGNATURE PAGE TO THE POWER PURCHASE AGREEMENT

THIS AGREEMENT has been entered into on the Signature Date. [4]

[4] **User Note**: Signature blocks will need to be confirmed based on Laws applicable to execution of documents from each Party's country of incorporation.

Schedule 1 – Functional Specification of Facility

This Schedule outlines the minimum technical and functional requirements of the [Project Name] Solar PV Facility to ensure compliance with grid compatibility, safety, and performance standards.

1. Facility Overview

Item	Specification
Technology	Ground-mounted solar photovoltaic (PV)
Installed Capacity	5 MWp (per project)
AC Output Capacity	[To be confirmed by Bidder and approved by EBS]
Expected COD	[Insert Date – e.g., 31 December 2026]
Location	[Site coordinates and address – e.g., La Paix, Paramaribo]
Site Area	[To be provided by Project Company] (minimum land area to meet generation needs)

---

2. System Components and Minimum Requirements

Component	Specification
PV Modules	Tier 1 panels, IEC certified, minimum 25-year performance warranty
Inverters	Grid-compliant, anti-islanding feature, minimum 10-year warranty
Mounting Structures	Galvanized steel or aluminum, wind-resistant design
Monitoring System	SCADA-enabled, real-time reporting to EBS and System Operator
Auxiliary Equipment	Includes transformers, protection devices, and connection cables as per EBS grid code

[EBS Engineering Division to validate final technical component list]

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3. Performance Requirements

Parameter	Requirement
Minimum Capacity Factor	18% (annual average)
Availability	≥ 98% (excluding scheduled maintenance)
Output Tolerance	Within ±10% of annual committed output
Power Quality	As per EBS Grid Code (e.g., voltage and frequency compliance)

---

4. Grid Compliance and Interconnection

The Facility shall:

- Be designed to connect at [designated substation name], with a maximum injection capacity of 5 MWac.
- Include protection and metering equipment in accordance with EBS's interconnection requirements.
- Incorporate reactive power control capability per grid operator specifications.

[Grid interconnection drawings and specifications to be validated by EBS prior to energization]

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5. Environmental and Safety Compliance

The Facility shall:

- Comply with Suriname's Environmental Laws and all applicable EAS requirements.
- Include a certified Environmental Impact Assessment (EIA) where required.
- Meet international electrical safety and fire prevention standards (e.g., IEC, NEC).

[Legal review required by EBS counsel on liability and compliance responsibilities]

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6. Spare Parts and O&M Requirements

Project Company shall:

- Maintain a stock of essential spare parts for at least 3 years of operation.
- Submit an O&M plan including maintenance frequency, response time, and escalation procedures.

[To be reviewed by EBS technical and operations teams]

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7. Warranty and Guarantees

- PV modules and inverters must be warranted for at least 10 and 25 years respectively.

- The Project Company shall ensure performance guarantees and manufacturer coverage are enforceable in Suriname.

[EBS legal counsel to confirm enforceability and dispute resolution for foreign equipment warranties]

Schedule 2 – Site Details and Interconnection Parameters

This Schedule defines the physical site and associated interconnection parameters for the [Project Name] Facility. It establishes the boundaries, land rights, and interconnection point necessary for implementation and operation.

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1. Site Description

Item	Specification
Project Name	[Insert official name of Project]
Site Location	[Insert municipality and address – e.g., La Paix, Paramaribo]
Geographic Coordinates	[Latitude, Longitude – e.g., 5.852°N, 55.203°W]
Site Area	[Insert hectares or m²] (sufficient for full PV array and infrastructure)
Access Roads	[Insert access details – e.g., public road connection]
Land Ownership	[Private/Public – to be specified by Bidder]
Use Rights Documentation	[Lease, title deed, or land use agreement]

[EBS Legal Team to verify authenticity of land rights and usage documentation]

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2. Land Use and Permits

The Project Company shall:

- Provide evidence of land control for the duration of the PPA term (e.g., lease agreement or ownership deed).
- Comply with national and municipal zoning regulations.
- Submit necessary land development approvals from competent authorities.

[Legal review required to confirm validity of land tenure arrangements for entire PPA duration]

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3. Environmental and Social Considerations

The site must:

- Avoid protected or sensitive areas unless cleared through Environmental Impact Assessment (EIA).
- Be free of third-party occupation, land disputes, or encumbrances.
- Comply with legal environmental and social screening guidelines.

[EBS to validate screening and EIA compliance]

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4. Grid Interconnection Point

Parameter	Specification
Designated Substation	[e.g., La Paix or Vijfde Rijweg Substation]
Interconnection Voltage Level	[e.g., 12.5 kV or 33 kV]
Maximum Injected Capacity	5 MWac per project
Connection Infrastructure	[To be built by Project Company or confirmed by EBS]
Metering Location	[To be specified in single-line diagram]

[EBS Grid Division to confirm connection point availability and metering requirements]

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5. Site Map and Technical Drawings

The Project Company shall provide:

- A detailed site layout including module rows, inverters, control room, perimeter fencing, access roads, and drainage.
- A single-line diagram showing the electrical connection to the interconnection point.
- Geographic information system (GIS) file if available.

[Technical drawings subject to approval by EBS Engineering Department prior to NTP]

Schedule 3 – Metering Procedures and Quantities

This Schedule sets out the procedures and responsibilities for metering the Delivered Energy generated by the Facility and injected into the Grid at the Delivery Point.

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1. Definitions

- **Delivered Energy**: The net electrical energy output (in kWh or MWh) delivered by the Facility at the Delivery Point, as recorded by the Main Meter.
- **Main Meter**: The primary revenue-grade meter installed at the Delivery Point, used for billing and settlement under this Agreement.
- **Check Meter**: A secondary meter used for validation and reconciliation purposes.
- **Deemed Energy**: Energy assumed to be delivered during curtailment events attributable to the Buyer or System Operator, as defined in the PPA.

[Definitions to be cross-checked with PPA Article 1 to ensure consistency. Legal review required.]

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2. Metering Equipment

- The Project Company shall install and maintain the Main Meter and Check Meter at the Delivery Point in accordance with applicable grid codes and standards.
- Metering equipment must:
    - Be **revenue-grade**, with accuracy class of **0.2% or better**;
    - Be installed in a secure, tamper-proof enclosure;
    - Be connected to a remote monitoring system accessible to both Parties.

[Technical specs to be confirmed by EBS metering division before energization]

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3. Metering Procedure

- The Main Meter will be read monthly by EBS or an authorized third party.
- Meter readings will be:
    - Taken on the **first Business Day of each month**;
    - Witnessed by both Parties or done remotely via SCADA/AMR interface;
    - Recorded in a **joint signed statement** confirming Delivered Energy for the billing period.
- If the Main Meter fails, the Check Meter will be used. If both fail:
    - Delivered Energy will be estimated using mutually agreed fallback methods, such as:
        - Historical performance under similar irradiance;
        - SCADA data;
        - Inverter output records.

[EBS Engineering to validate fallback methodology compatibility with their billing system]

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4. Correction and Dispute Resolution

- Either Party may request a **meter test** by a certified laboratory. If the error exceeds ±0.5%:
    - The faulty meter will be recalibrated or replaced at the responsible Party's cost;
    - Readings for up to **three preceding months** may be adjusted.
- Disputes over readings will follow the **dispute resolution procedure in Article [●]** of this Agreement.

[Insert cross-reference to Article on Dispute Resolution; EBS legal review required]

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5. Access and Security

- EBS shall have unrestricted access to the metering installation for inspection and reading, with prior notice.
- The Project Company must notify EBS **at least 5 Business Days in advance** of any planned maintenance or changes to metering infrastructure.

Schedule 4 – Payment Calculation and Deemed Energy Rules

This Schedule sets out the payment mechanism for Delivered Energy, including adjustments for inflation, curtailment, under/overperformance, and penalties. All payments shall be made in the Nominated Currency (USD), in accordance with the terms set out in Article [●] of this Agreement.

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1. Energy Charge Calculation

The Buyer shall pay the Project Company an Energy Charge for Delivered Energy, calculated as:

Energy Charge ($) = **Delivered Energy (MWh)** × **Applicable Tariff ($/MWh)**

- The **Applicable Tariff** shall be the Offered Tariff awarded to the Project Company, and shall remain fixed for 50% of the contract term, with the other 50% adjusted annually to United States CPI:
- **Applicable Tariff (Year n)** = **Offered Tariff × [0.5 + 0.5 × (CPI_n / CPI_0)]**
- Where:
- **CPI_n** = Consumer Price Index in the relevant billing year (as published by the U.S. Bureau of Labor Statistics)
- **CPI_0** = CPI in the year of PPA signing (as published by the U.S. Bureau of Labor Statistics)

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2. Deemed Energy Payments

If curtailment occurs due to Buyer or System Operator instruction, the Project Company shall be entitled to compensation for **Deemed Energy**, subject to the following:

- Up to 5% of expected annual output is eligible for Deemed Energy Payments.
- Payment for Deemed Energy is made at the Applicable Tariff.
- No payment shall be made for curtailment exceeding the 5% allowance.

[EBS to confirm method for recording deemed events and validating claimed losses.]

---

3. Performance Incentives and Penalties

If the Project deviates outside of the ±10% output tolerance band defined in the PPA:

- Underperformance Penalty: 5% deduction on the Applicable Tariff per MWh below the lower limit.
- Overperformance: No additional payment above contracted volume. Any excess is accepted without compensation.
- Example:
- Tariff: $70/MWh; annual output below tolerance: 0.5 GWh
- Penalty = 0.5 GWh × $3,500 = **$1,750 deduction**

[Insert link to PPA Article [●] for tolerances and metering.]

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4. Payment Schedule

- Invoices to be submitted monthly by the 10th day following each billing period.
- Payments shall be made within 30 Business Days from receipt of valid invoice.
- Late payments shall incur interest at the **Default Rate** defined in Part 1 – Key Information Table.

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5. Dispute Procedure

In case of disagreement over invoiced amounts:

- The undisputed portion shall be paid on time.
- The disputed amount will be resolved under Article [●] (Dispute Resolution).
- Once resolved, any underpaid/overpaid amounts shall be settled with interest.

[EBS legal counsel to review and align this procedure with the arbitration framework in the main body]

Schedule 5 – Meter Specifications

This Schedule sets out the technical and operational requirements for metering equipment used to measure Delivered Energy at the Delivery Point.

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1. Main Metering System

The Project Company shall install and maintain the **Main Metering System** at the designated **Delivery Point**, capable of:

- Measuring net active energy (kWh and MWh)
- Recording data at 15-minute intervals
- Remote access for Buyer and System Operator (read-only)
- Minimum accuracy class: **Class 0.2s** in accordance with IEC 62053-22

The Main Metering System shall comply with all applicable **EBS metering codes and standards**.

[EBS technical team to confirm any Suriname-specific metering or communication standards]

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2. Check Metering System

A **Check Meter** shall be installed by the Buyer (or designated System Operator) and:

- Be independent from the Main Meter
- Mirror the same technical specs and accuracy
- Be used for cross-verification in the event of metering disputes

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3. Metering Equipment Ownership and Maintenance

- The Main Meter is owned and maintained by the Project Company
- The Check Meter is owned and maintained by the Buyer
- Each party shall grant reasonable access to their equipment for inspection and calibration

All meters must be tested and certified:

- Before Commercial Operation Date
- Annually, or as mutually agreed
- Calibration to be done by a **certified third-party laboratory**

Calibration reports shall be shared with the other Party within 10 Business Days of completion

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4. Metering Disputes

If the Main Meter fails or is found to be inaccurate (error >0.5%):

- The Check Meter will be used temporarily
- Historical data may be used for back-calculation (e.g., past 30-day average)
- Disputes will follow the process in Article [●] of this Agreement

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5. Data Access and Reporting

- Real-time data sharing via SCADA or similar interface (read-only for Buyer)
- Monthly reports to be submitted with the invoice, showing:
    - Hourly and daily delivered energy
    - Monthly summary (MWh total)
    - Curtailment events and estimated Deemed Energy, if applicable

[To be reviewed by EBS SCADA and metering teams for integration requirements]

Schedule 6 – Testing Programme

This Schedule outlines the procedures and requirements for testing the Facility before achieving the Commercial Operation Date (COD), to verify compliance with contractual performance and grid compatibility.

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1. Purpose of Testing

The objective of the Testing Programme is to:

- Verify the Facility's ability to deliver power in accordance with the Technical Specifications (Schedule 1)
- Confirm safe and stable operation under grid conditions
- Fulfill all requirements for COD as per Article [●] of the Agreement

---

2. Types of Tests

The following tests shall be conducted by the Project Company, under the supervision of the Buyer and/or System Operator:

Test Type	Description	Responsible Party
Pre-Commissioning Tests	Equipment-level checks and manufacturer tests	Project Company
Grid Synchronization Test	First energization and synchronization to the grid	Project Company + System Operator
Performance Test	Verification of output, ramp rates, and reliability	Project Company
Communication & SCADA Interface Test	Confirmation of real-time data feed and alarms to Buyer	Project Company + System Operator
Protection Scheme Test	Testing of breakers, relays, and fault response	Project Company

[Buyer and System Operator to confirm if additional tests are required under EBS grid codes or safety regulations]

---

3. Test Procedures and Protocols

- The Project Company shall submit a Testing Protocol at least 30 Business Days prior to the anticipated testing date.
- The Testing Protocol must include:

- Test objectives, timelines, and responsible personnel
- Safety and communication procedures
- Criteria for success/failure

[Buyer and System Operator shall review and approve the Testing Protocol within 15 Business Days of receipt.]

---

4. COD Declaration

Upon successful completion of all required tests:

- The Project Company shall issue a COD Declaration
- The Buyer shall acknowledge COD in writing within 10 Business Days unless valid reasons for rejection are provided

If COD is rejected:

- The Buyer shall specify deficiencies in writing
- The Project Company shall re-test the failed items within 15 Business Days

[Legal review required to align this with termination clauses if testing delays exceed longstop date]

---

5. Reporting

- All test results must be documented and certified by a qualified engineer
- A Final Testing Report must be submitted within 10 Business Days post-testing

The Final Testing Report shall include:

- Summary of all tests performed
- Outcomes (pass/fail)
- Issues encountered and corrective actions
- Signature of Buyer’s representative and independent engineer (if required)

Schedule 7 – Requirements for Operating and Dispatch Procedures

This Schedule defines the operational coordination and dispatch rules applicable to the Facility during its Commercial Operation Period, ensuring compatibility with Suriname's grid standards and Buyer requirements.

---

1. Operating Instructions

- The System Operator (EBS) shall issue written or electronic operating instructions to the Project Company, including:
    - Start-up and shutdown commands
    - Ramp-up or ramp-down rates
    - Active/reactive power adjustments
    - Emergency shutdowns
- Instructions shall conform to:
    - EBS Grid Code provisions
    - Operational agreements between the Buyer and the System Operator

---

2. Communication Protocols

- The Facility shall maintain continuous communication with the Buyer and System Operator via SCADA interface.
- Key communication requirements include:
    - Real-time monitoring of generation output
    - Availability status and fault reporting
    - Scheduled maintenance notifications (min. 10 Business Days in advance)

[EBS IT and grid operations teams to validate technical compatibility and cybersecurity compliance]

---

3. Daily Dispatch Coordination

- The Project Company must submit daily availability declarations to the System Operator by 18:00 of the previous day.
- The System Operator will confirm the dispatch schedule for the next day, with possible intra-day adjustments in case of:
    - Grid congestion
    - Curtailment events
    - Emergency maintenance

---

4. Curtailment Handling

- Curtailment events initiated by the Buyer or System Operator shall follow rules defined in Schedule 4 (Payments) and Clause [●] of this Agreement.

- The Facility shall respond within 5 minutes of receiving curtailment instructions.

[Legal input required to confirm interaction between operational instructions and deemed energy compensation clauses]

---

5. Reporting and Logs

The Project Company must maintain and provide access to:

- Dispatch logs (hourly generation and setpoint data)

- Incident and fault reports (within 24 hours)

- Monthly operating summaries

These records shall be retained for a minimum of 5 years and shared upon Buyer’s request.

Schedule 8 – Insurance Requirements

This Schedule sets forth the insurance policies that the Project Company must obtain and maintain throughout the Term to ensure risk mitigation, contractual security, and compliance with Suriname's regulatory expectations.

---

1. General Insurance Requirements

The Project Company shall procure and maintain, at its sole cost, the following insurances:

a) Construction All-Risks Insurance

Period: From commencement of construction to COD.

Coverage:

- Physical loss or damage to works, equipment, and materials.
- Third-party property damage and bodily injury.

Minimum Sum Insured: Replacement value of the Facility.

Deductibles: Reasonable industry standard (to be approved by Buyer).

b) Operational All-Risks / Property Insurance

Period: From COD to the end of the Term.

Coverage:

- Physical loss or damage to the Facility.
- Natural disasters, fire, theft, vandalism.

Minimum Sum Insured: Full reinstatement value.

c) Third-Party Liability Insurance

Coverage:

- Death or injury to any person.
- Damage to property not owned by the Project Company.

Minimum Limit: USD $5 million per occurrence.

d) Employer's Liability Insurance

Coverage:

- Injury or death of employees or subcontractors on site.
- Minimum coverage in accordance with Surinamese labor law.

e) Business Interruption Insurance (recommended)

Coverage:

- Lost revenue during outages caused by insured events.

- Suggested for the duration of restoration period + 3 months.

[EBS legal and risk team to confirm applicable thresholds and local statutory limits for liability coverages. Cross-reference with national insurance law and labor codes.]

---

2. Insurance Certificates and Compliance

Certificates of insurance shall be submitted:

- Prior to Financial Close, and
- Annually, with evidence of renewal.

All policies must:

- Name EBS as additional insured and loss payee (where applicable).
- Include a waiver of subrogation against EBS.
- Include a 30-day prior written notice clause for cancellation or material change.

---

3. Insurance Providers

All insurers must:

- Be licensed to operate in Suriname or approved by EBS.
- Hold a minimum credit rating of [●] from a recognized international agency (e.g., S&P, AM Best, Fitch).

[Insert EBS-required credit rating threshold and list of pre-approved insurers.]

---

4. Failure to Insure

Failure to procure or renew required insurances shall constitute a Material Breach under Clause [●] of this Agreement and may result in:

- Suspension of payments;
- Withholding of milestone disbursements; or
- Termination, if not remedied within 30 days.

Schedule 9 – Liquidity Support Instrument

This Schedule outlines the required form, structure, and use of the Liquidity Support Instrument (LSI) to ensure financial security for the Buyer against performance and payment defaults by the Project Company.

---

1. Purpose

The Liquidity Support Instrument serves as a financial guarantee from the Project Company, ensuring:

- Fulfillment of the Project Company's obligations under the PPA;
- Timely commencement of construction;
- Financial coverage in the event of delay or early-stage underperformance.

---

2. Form of Instrument

The Liquidity Support Instrument shall be provided in the form of an unconditional and irrevocable standby letter of credit (SBLC) or a bank guarantee, issued by a reputable financial institution acceptable to the Buyer.

[EBS legal team to confirm approved financial institutions and preferred format — SBLC or bank guarantee — based on local banking regulations.]

---

3. Amount

The value of the Liquidity Support Instrument shall be:

USD $50/kW of Contracted Capacity

(e.g., USD $250,000 per 5 MW project)

[To be validated against the final bid structure and capacity blocks defined in the Auction Notice.]

---

4. Validity Period

The Liquidity Support Instrument must:

- Be issued prior to PPA signing;
- Remain valid until the earlier of:
    - Commercial Operation Date (COD), or
    - [●] months following the Scheduled COD, unless extended due to delays attributable to the Buyer or force majeure.

[Insert appropriate buffer period (e.g., 18–24 months) based on project schedule and risk tolerance.]

---

5. Beneficiary

The Liquidity Support Instrument shall name N.V. Energiebedrijven Suriname (EBS) as the sole beneficiary.

---

6. Drawdown Rights

EBS shall have the right to draw down the Liquidity Support Instrument under the following circumstances:

- Failure to achieve COD within the agreed Longstop Date;
- Early termination of the PPA due to default by the Project Company;
- Non-fulfillment of critical conditions precedent or milestone requirements.

[Legal counsel to finalize the definition of "critical conditions precedent" for early drawdown.]

---

7. Replenishment

If any drawdown is made:

- The Project Company shall replenish the Liquidity Support Instrument to its full amount within [●] Business Days, or
- Provide a replacement instrument acceptable to the Buyer.

---

8. Release Conditions

The Liquidity Support Instrument shall be released or terminated upon:

- Achievement of COD and successful performance of all commissioning tests as defined in Schedule 6;
- Replacement with the Completion Bond, as defined in Clause [●] of the PPA.

Schedule 10 – Form of Direct Agreement

This DIRECT AGREEMENT (the "Agreement") is entered into on [●], by and among:

1. N.V. Energiebedrijven Suriname (EBS), a limited liability company incorporated under the laws of Suriname, with its principal office at [●] (hereinafter referred to as the "Buyer");

2. [Project Company Name], a company incorporated under the laws of the Republic of Suriname, with its registered office at [●] (hereinafter referred to as the "Project Company");

3. [Lender or Security Trustee Name], acting as [lender/security trustee] on behalf of the financing parties (hereinafter referred to as the "Lender").

---

1. Purpose

This Agreement ensures that the Lenders:

- Have notice of and access to the Power Purchase Agreement (PPA);
- May exercise certain step-in rights in the event of a Project Company default;
- Receive continued project performance assurances from the Buyer during enforcement or restructuring periods.

---

2. Acknowledgment and Consent

The Buyer acknowledges and agrees:

- That it has reviewed the financing arrangements;
- That it shall not terminate or amend the PPA without prior written notice to the Lender;
- That it consents to a collateral assignment of the Project Company's rights under the PPA in favor of the Lender.

---

3. Step-In Rights

The Lender shall have the right to:

- Cure defaults by the Project Company under the PPA;
- Step in to assume the rights and obligations of the Project Company under the PPA, within [●] Business Days of notice of default;
- Appoint a nominee or designee to operate the facility temporarily or permanently.

[EBS Legal Counsel to define the cure period (typically 60–90 days) and acceptable nominee standards.]

---

4. No Termination Without Notice

The Buyer agrees not to:

- Terminate the PPA due to any Project Company default,
- Without giving the Lender prior written notice of [●] Business Days and an opportunity to cure.

---

5. Assignment of Rights

The Buyer consents to:

- The Project Company assigning its rights and obligations under the PPA as security for the financing;
- The Lender or its designee assuming such rights in accordance with this Agreement.

---

6. Continued Performance

The Buyer undertakes to continue fulfilling its obligations under the PPA during:

- Any Lender enforcement action;
- Any period during which a designee operates the facility under Lender direction.

---

7. Governing Law and Dispute Resolution

This Direct Agreement shall be governed by the laws of Suriname, and any disputes shall be resolved through arbitration, in accordance with the dispute mechanism set forth in the PPA.

[Final legal review required to confirm enforceability under Surinamese law and banking practices.]

Schedule 11 – Operations Security

This Schedule sets out the requirements and details for the Operations Security to be provided by the Project Company in accordance with Clause 4.3 of the Agreement.

---

1. Form of Operations Security

The Operations Security shall be provided in the form of an **unconditional and irrevocable direct pay letter of credit** issued by a bank that meets or exceeds the Required Credit Rating as defined in the Agreement.

The letter of credit shall:

- Be payable at sight;
- Be issued in favour of the Buyer;
- Remain valid until the expiration of the Term or until released in accordance with Clause 4.3(e);
- Permit partial and multiple drawings;
- Include a statement that payment will be made against presentation of a certificate from the Buyer substantially in the form set out in Annex A to this Schedule.

---

2. Amount of Operations Security

The initial amount of the Operations Security shall be:

[Insert Amount] [in Nominated Currency]

This amount may be adjusted as follows:

- Annually indexed to inflation based on the CPI formula referenced in Appendix 3 (Form II.4);
- Increased if required under Clause 4.3(d) following any drawdown;
- Reduced or released in accordance with Clause 4.3(e).

---

3. Duration and Replenishment

The Operations Security shall:

- Be delivered by the Project Company on the Commercial Operation Date;
- Be maintained at all times during the Term of the Agreement;
- Be replenished within 14 Business Days if drawn upon, to restore the required amount.

---

4. Permitted Uses

The Buyer may draw on the Operations Security to cover:

- Liquidated damages and accrued interest;
- Other amounts due and payable by the Project Company under the Agreement, including indemnities;
- Any unresolved Disputes, as allowed by Clause 4.3(e)(ii).

---

5. Release of Operations Security

The Operations Security shall be returned or terminated:

- At the expiry or early termination of this Agreement;
- Upon settlement of all obligations and any outstanding Disputes;
- Subject to Buyer's confirmation that no further amounts are or may be due

Annex A – Form of Draw Certificate

(To be printed on Buyer's letterhead)

To: [Issuing Bank]

Date: [•]

We refer to the letter of credit No. [•] issued by you in favour of [Buyer Name] dated [•] (the "Letter of Credit").

We hereby certify that [Project Company] is obligated to pay us an amount of [insert amount] under the Power Purchase Agreement dated [insert date] and has failed to do so.

Accordingly, we hereby demand payment of [insert amount] under the Letter of Credit.

Payment should be made to the following account:

[Insert payment instructions]

Yours sincerely,

[Authorised Signatory]

[Title]

Schedule 12 – Glossary of Key Terms

This **Schedule** forms an integral part of the Power Purchase Agreement ("PPA"). It provides definitions and plain-language explanations of selected commercial, technical, and legal terms used throughout the PPA for ease of reference.

Where a term is defined both in the PPA and in this **schedule**, the definition in the PPA shall prevail in the event of any inconsistency.

1. KEY DATES AND MILESTONES

Scheduled Commercial Operation Date (Scheduled COD)

The planned date by which the Facility is expected to achieve Commercial Operation and begin supplying energy to the Buyer.

Commercial Operation Date (COD)

The date when the Facility has successfully completed all required testing and is certified by the Independent Engineer as ready for commercial operation in accordance with the PPA.

Deemed Commercial Operation Date

A date deemed to be the COD even if actual commissioning is delayed due to reasons beyond the control of the Project Company (e.g., Buyer's grid unavailability).

Commercial Operation Longstop Date

The latest permissible date by which COD must occur. If COD is not achieved by this date, the Buyer may exercise remedies including termination.

Conditions Precedent Longstop Date (CP Longstop Date)

The final date by which the Project Company must satisfy all pre-construction requirements (permits, licenses, financing, etc.) specified in the PPA.

Grid Availability Date

The date when the Buyer must make the grid available for interconnection, commissioning, and operation of the Facility.

Abandonment Period

The period of non-construction or non-operation that, if exceeded, may constitute an abandonment event and trigger a default.

2. CAPACITY AND PERFORMANCE

Contracted Capacity

The agreed capacity in megawatts (MW) that the Buyer is obligated to purchase from the Facility.

Installed Capacity / Actual Capacity

The actual capacity installed and verified by the Independent Engineer at COD.

Minimum Capacity

The minimum required capacity (MW) that the Facility must achieve for commissioning to be considered successful.

Excess Capacity

Any capacity generated above the Contracted Capacity. The Buyer is not obliged to purchase Excess Capacity under the PPA.

Guaranteed Performance Ratio

The guaranteed operational efficiency of the Facility, calculated as the ratio of actual energy output to expected output under defined solar conditions.

Curtailment Allowance

The allowable percentage of annual generation that the Buyer may curtail without triggering compensation obligations.

3. FINANCIAL AND PAYMENT TERMS

Energy Charge

The tariff per megawatt-hour (MWh) payable by the Buyer for energy delivered to the Delivery Point.

Pay-as-bid Tariff

The tariff offered by the Winning Bidder during the tender process and applied during the PPA term.

CPI-Indexed Tariff

A tariff that is periodically adjusted in line with the Consumer Price Index to account for inflation.

Deemed Energy

Energy the Facility could have generated but was unable to deliver due to Buyer-related reasons, such as grid unavailability.

Deemed Energy Payments

Payments made by the Buyer for Deemed Energy as if it had been delivered.

Deemed Overpayment

The overpaid amount if Deemed Energy Payments exceed the actual performance of the Facility after COD.

Deemed Overpayment Monthly Limit

The maximum monthly deduction allowed from future invoices to recover Deemed Overpayments.

Delay Liquidated Damages (LDs)

Pre-agreed daily compensation payable by the Project Company for failure to achieve COD by the Scheduled COD.

Delay LD Cap

The maximum aggregate amount of Delay Liquidated Damages payable.

Default Rate

The interest rate applied to overdue payments under the PPA.

4. SECURITIES AND GUARANTEES

Construction Security

A bank guarantee or equivalent security provided by the Project Company to ensure achievement of COD by the Commercial Operation Longstop Date.

Operations Security

A security provided by the Project Company at COD to ensure ongoing proper operation and maintenance of the Facility.

Liquidity Support Instrument

A financial guarantee provided by the Buyer (e.g., letter of credit) to secure timely payment obligations under the PPA.

Liquidity Support Factor 1 & Factor 2

Multipliers used to determine the required amount of Liquidity Support Instrument based on estimated or historical monthly invoices.

Required Credit Rating

The minimum acceptable credit rating for any financial institution issuing Construction Security, Operations Security, or Liquidity Support Instruments.

5. PARTIES AND ROLES

Buyer

N.V. Energiebedrijven Suriname (EBS), the single electricity buyer under the Electricity Act 2016.

Project Company

The Seller responsible for developing, financing, constructing, and operating the Facility.

System Operator

EBS in its operational capacity, managing dispatch and grid stability.

Market Monitor

The Energy Authority of Suriname (EAS), responsible for regulatory oversight of the project and the PPA.

Independent Engineer

A mutually agreed neutral technical expert who certifies construction, commissioning, and performance of the Facility.

6. OPERATIONS AND DISPATCH

Dispatch Instructions

Orders issued by the Buyer or System Operator regarding when and how much the Facility should generate.

Operating and Dispatch Procedures

The agreed technical and procedural framework for scheduling, dispatching, and controlling Facility output.

Technical Limits

The agreed operational constraints (e.g., voltage, frequency) within which the Facility must be operated.

Delivery Point

The metering point where the ownership and risk of electricity transfer from the Project Company to the Buyer.

7. RISK EVENTS AND REMEDIES

Force Majeure Event

An unforeseeable and unavoidable event beyond a Party’s control (e.g., natural disaster, war) that prevents performance under the PPA.

Prolonged Force Majeure Event

A Force Majeure Event lasting beyond a defined threshold, allowing either Party to terminate the PPA.

Event of Default

A material breach of the PPA (e.g., failure to achieve COD, non-payment, insolvency) that allows the non-defaulting Party to terminate.

Notice of Intent to Terminate / Termination Notice

Formal notices required to initiate and finalize termination following an Event of Default.

8. LEGAL AND DISPUTE RESOLUTION

Governing Law

The national law applicable to the PPA.

Arbitration Rules

The procedural rules governing arbitration (here, UNCITRAL Arbitration Rules).

Arbitration Seat

The legal jurisdiction in which arbitration is deemed to occur (here, the Republic of Suriname).

Expert Determination

A streamlined dispute resolution process for technical disputes, resolved by an Independent Expert whose decision may be binding.

9. INSURANCE AND TAXES

Required Insurances

Standard insurance policies (e.g., construction all-risk, liability insurance) the Project Company must maintain during construction and operation.

Renewable Energy Credits (RECs)

Environmental attributes of renewable energy generation. Under this PPA, RECs are owned by the Government of Suriname.

ABBREVIATIONS

COD – Commercial Operation Date

CP – Condition Precedent

EAS – Energy Authority of Suriname

EBS – N.V. Energiebedrijven Suriname

LDs – Liquidated Damages

MW / MWh – Megawatt / Megawatt-hour

Note: This Glossary is for convenience only. In case of any discrepancy, the binding definitions in the PPA shall prevail.