Evaluation of Saint George's Cay Power Company Limited (SGCPC) Renewable Energy Plan and Supporting Documents

Statement of Results and Final Determination

ES 07/2026

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1. Introduction

The Utilities Regulation and Competition Authority ('URCA') issues this Statement of Results and Final Determination regarding URCA's Preliminary Determination on the Evaluation of Saint George's Cay Power Company Limited ('SGCPC') Renewable Energy Plan and Supporting Documents.

URCA is the independent regulator of the electricity sector (ES) in accordance with the Electricity Act, 2024 (referred to as 'EA'). The EA sets out the powers, duties, and responsibilities of URCA in addition to the statutory obligations of entities operating in the ES. URCA has the statutory mandate and responsibility for licensing and regulating persons who wish to generate, transmit, distribute, or supply electricity within The Bahamas.

As an Authorised Public Electricity Supplier (APES), SGCPC is required to produce a Renewable Energy Plan (REP) to increase the proportion of renewable energy capacity used in its generation to help achieve the national energy and electricity sector policy objectives set out in section 51 of the EA.[1] As the regulator for the ES, URCA is obligated to review and determine whether or not to approve the REP having regard to the statutory criteria set out in the EA, the electricity sector policy objectives, and the national energy policy.

As URCA considers SGCPC's REP to be of public significance for the area served by SGCPC, in accordance with section 49(3) of the EA, URCA published a Preliminary Determination and Draft Order (ES 02/2025)[2] on 15 August 2025 to allow persons with sufficient interest a reasonable opportunity to comment on the SGCPC'S REP.

The closing date for the submission of responses to URCA on the Preliminary Determination was 7 November 2025. By the closing date, URCA received dozens of written responses and a petition signed by multiple residents. URCA also attended a public forum held by SGCPC on Thursday, 23 October 2025 during which SGCPC presented its plan and residents gave their feedback. The feedback provided at the public forum has also been incorporated into this Statement of Results and Final Determination in addition to the written submissions received by URCA. URCA thanks all respondents for their submissions and participation in the consultation.

[1] Electricity Act 2024, section 51(1)

[2] The Preliminary Determination and Draft Order ES 02/2025 can be found here: https://urcabahamas.bs/wp-content/uploads/2025/08/URCA-ES-022025-SGCPC-RE-Plan-Consultation.pdf.

In reaching its decision, URCA has given the utmost consideration to the submissions made by respondents to the consultation. The publication of this document ends URCA's public engagement on SGCPC's REP.

While URCA has sought to respond directly to comments and representations received during the consultation process, URCA expressly states that any failure to respond to any issue raised by a respondent does not necessarily signify agreement in whole or in part with the comment, that URCA has not considered the comment, or that URCA considers the comment unimportant or without merit.

1.1 Background

SGCPC is an URCA licensee with the APES designation, exclusively serving Saint George's Cay (on which the settlement of Spanish Wells is located) and Russell Island. As the sole electricity supplier to residences and businesses on these islands, SGCPC is mandated under section 51(2) of the EA to develop and submit a time-bound plan for the introduction of sustainable renewable energy technologies into its electricity supply system which requires URCA's approval.

To fulfil this requirement, SGCPC has submitted an application to URCA. This submission included the eight documents listed below. These documents are contained in Annexes A to H of the Preliminary Determination document. Collectively, the documents make up SGCPC's REP.

(a) Executive Summary, 01 July 2025
(b) Renewable Energy Plan, 02 July 2025
(c) Application for Electricity Service Account, Rev 2024-08-08
(d) Grid Interconnection Application (GIA), Rev 2025-04-02
(e) Terms & Conditions for Customer-Owned Solar Energy SSRG and RESG Operated Under a Grid-Interconnection Agreement (GIA), Rev 2025-0701
(f) Customer Grid Interconnection Requirements (GIR) for Renewable Generation PV Systems and Off-Grid Renewable Energy Systems, Rev 2025-07-01
(g) Glossary & Definitions, Rev 2025-05-11
(h) St Georges Cay Power Company (SGCPC) Renewable-Energy Fee Structure Addendum, Rev 2025-07-12

1.2 Structure of the Remainder of this Document

The remainder of the document is set out as follows:

- Section 2 provides the regulatory framework relevant to this Statement of Results and Final Decision.
- Section 3 summarises the feedback received and provides URCA's responses to the feedback.
- Section 4 consists of URCA's Final Determination
- Section 5 contains URCA's Order.
- Section 6 contains the conclusion and next steps.

2. Regulatory Framework

This section sets out the regulatory framework under which URCA has exercised its powers to issue this Statement of Results and Final Determination.

The ES in The Bahamas operates under the EA which establishes the legal framework for the regulation of the sector by URCA. URCA is tasked with implementing, monitoring, and enforcing the provisions of the EA, holding extensive powers, particularly concerning its licensees.

The ES policy aims to provide a safe, cost-effective, reliable, and environmentally sustainable electricity supply across The Bahamas. Key objectives include advancing economic growth and international competitiveness, enhancing energy security, fostering competition in electricity generation, protecting the environment, promoting energy efficiency and renewable energy use, encouraging private investment and innovation, and incentivizing improved performance in operations and customer service.

Section 7 of the EA mandates URCA to issue regulatory processes that are fair, objective, non-discriminatory, and transparent, aligning with the National Energy Policy (NEP) and the Electricity Sector Policy (ESP).

Under section 51(2) of the EA, all PES and APES must develop and submit a time-bound plan for integrating sustainable renewable energy technologies into their systems. Further, section 51(3) of the EA mandates that this plan must include provisions for facilitating residential renewable energy generation and addressing the reliability of intermittent resources, considering cost-effective storage technologies.

Section 54 outlines the procedures for connecting residential renewable energy systems to the grid. Property owners can apply to a PES or APES (depending on the location of the resident) for permits to install and operate renewable energy systems, which must be registered and interconnected according to URCA's regulatory measures. The grid interconnection agreement will ensure that the public electricity supplier purchases or credits the owner for excess power generated.

Section 55 addresses renewable energy projects by small-scale businesses, commercial enterprises, and government agencies. PES or APES must approve these projects, ensuring they meet URCA’s regulations and do not negatively impact the electricity supply system. URCA will maintain and publish a list of approved projects, including their sizes and capacities.

Finally, section 51(5) requires URCA to publish summaries of proposed renewable energy plans for public information and determine their consistency with sector policy objectives and national energy policy. Having regard to the language used in section 51(5)(b) of the EA, this approval may be given by URCA

through a determination process since URCA is required to publish the REP and to 'determine whether to approve the plan as consistent with the sector policy objectives and national energy policy.'

URCA is empowered by section 49 of the EA to make determinations and, prior to issuing a determination, may issue a notice of preliminary determination. Furthermore, as set out in section 48(1), URCA may also issue an order to enforce a determination made by URCA under the EA. An enforcement order pursuant to section 48(1) may be issued concurrently with the determination.

Section 49(3) states that URCA shall, in making a determination, consult persons with sufficient interest in the subject matter of the determination and provide reasons in writing for the determination.

The cumulative effect of the above provisions of the EA establishes URCA's legal authority to determine whether to approve or not approve an REP presented to URCA in accordance with the above stated provisions of the EA.

3. Responses to the Preliminary Determination

In this section, URCA summarises and responds to the feedback received during the consultation period for URCA's Preliminary Determination and Draft Order.

3.1 General Comments

This subsection contains the summaries of comments made that were not in response to specific consultation questions and URCA's responses to those comments.

DMP's Comments

DMP disagrees with the imposition of SGCPC's proposed REP on residents who already made the investment of installing private solar systems in their homes, adding that the Prime Minister of The Bahamas had encouraged people to install renewable energy. DMP believes it is unfair and dictatorial for a private company such as SGCPC to propose outrageous fees and restrictions on individual homeowners. DMP asks URCA to have empathy for those who have struggled to make the investment in solar energy.

JJ's Comments

Referring to Section 4.1 of the Preliminary Determination which outlines the requirements of what an REP should include, JJ is concerned that the proposed REP would grant regulatory and financial authority over private renewable systems to SGCPC, a shareholder-owned profit-driven utility, thereby creating a conflict of interest that can threaten national renewable energy goals.

In reference to SGCPC's statement that customer-owned solar is not favoured economically since it reduces grid sales and increases fixed costs for SGCPC (Section 1.7 of the REP's Executive Summary), JJ believes this confirms SGCPC's bias and that by granting SGCPC oversight over private renewable systems, this would enable it to restrict competition and collect unjustified fees. JJ further stated that both The Bahamas Government and URCA have prioritised renewable and self-generation development therefore SGCPC's authority should be limited to grid safety, i.e., specifically preventing unsafe back feed or energisation. JJ considers that issues such as policy enforcement or fee collection should be outside of SGCPC's remit. JJ maintains that oversight of renewable energy installations should remain the exclusive responsibility of Bahamian government agencies.

According to JJ, certified inverters already include anti-islanding protection thus ensuring disconnection from the grid during outages. JJ also claims that safety can be verified through a simple inspection therefore making SGCPC's proposed controls redundant.

JJ considers a $235 metre installation fee and recurring charges for non-exporting systems to be excessive and unjustifiable. JJ also disagrees with SGCPC's proposal to require non-safety related requirements (e.g., insurance and structural checks).

According to JJ, SGCPC's energy growth projections and implementation plans lack an independent review and contain no verifiable schedule or performance commitments. JJ added that despite years of promises, SGCPC has produced no renewable energy while private residents now account for approximately 8% of renewable generation in the service area.

JJ is also concerned that the implementation of fees on customers with existing solar systems will discourage others from installing private solar systems and that SGCPC may implement additional fees in the future to 'punish' individuals with existing solar systems.

LJ's Comments

While LJ supports the transition to renewable energy, LJ advises URCA to ensure that the implementation of renewable energy is equitable, transparent, and technically sound especially for consumer-owned solar systems.

LJ considers Spanish Wells to be one of the most advanced communities per capita in renewable readiness across The Bahamas, adding that this should be recognised as a pilot model for other islands and not subjected to disproportionate scrutiny. As such, LJ requests that URCA promote what was done in Spanish Wells to other areas in The Bahamas to encourage replication of successful frameworks from SGCPC's REP and residential solar installations. LJ also recommends that URCA avoid regulatory overreach because it may discourage community-led innovation.

Regarding energy growth and grid limitations, LJ stated that many residential areas on the island operate on single-phase electricity therefore making some of the proposed costs and technical assumptions questionable. LJ added that maps should clearly indicate where three-phase service is available and where it is not. In LJ's view, SGCPC appears to have ample land for centralised solar development and should incorporate solar partners accordingly.

In respect to interconnection requirements, LJ considers that only grid-tied systems that are net-metered and that export power should require interconnection monitoring while systems with back-up inverters or off-grid configurations should not be subject to interconnection fees or oversight.

LJ believes that town council and Ministry of Works should not be involved in the solar approval process due to concerns of bias and inconsistency in their decisions. LJ recommends that SGCPC and URCA should establish a direct and transparent approval pathway for solar installations.

Regarding compensation for exported power, LJ claims that while many residents do not wish to sell back to the grid, those who do wish to export also use anti-islanding inverters that shut down automatically thereby eliminating any safety concerns. LJ considers SGCPC's proposed compensation rate of $0.05 cent per unit to be unfair and should be on par with the retail rate or fuel savings since the solar output is of equal quality as what is offered by SGCPC.

LJ called the scaling model based on New Providence unreasonable. LJ agrees with the REP's support for both grid-tied and off-grid systems but requested more clarification on the logistics and costs.

According to LJ, the definitions provided were clear and helpful but LJ suggests the use of a plain-language version for public education so that everyone would be able to understand.

Regarding fees, LJ stated the proposed fees, especially the network connection fee of up to $2,000, are impractical and lack technological justification. LJ explained that most residential solar owners have reliable internet connections which can support monitoring, reporting, and remote diagnostics therefore requiring a separate network fee for grid-tied systems is redundant and unjustified with today's technology. If SGCPC seeks residential contribution to help it meet its renewable quota, then SGCPC should incentivize solar adoption instead of attempting to penalising it.

Overall, LJ recommends the following:

- Transparency: publication of technical standards, compensation rates, and approval timelines.
- Education: provide workshops and visual guides for homeowners.
- Support: establish a dedicated liaison for solar inquiries.
- Equity: recognise Spanish Wells as a model community and avoid unnecessary regulatory burdens.
- Accountability: hold SGCPC accountable to its own standards and to be knowledgeable to the consumer model.

Furthermore, LJ stated that many residents still do not fully understand the implications of the REP as several individuals asked, 'What does this all mean?'. LJ considers this to mean that both SGCPC and URCA have not communicated the proposed REP effectively to the public.

In addition to the above, LJ also has the following concerns:

- LJ considers it to be an invasion of privacy if SGCPC is allowed to inspect or monitor private solar systems.
- Middle class residents in the Family Island residents are struggling due to a high cost of living, inflation, and the lack of concern from corporations. For some, one full paycheck per month can be spent to pay their SGCPC electricity bill. URCA and SGCPC appear to overlook this burden.
- LJ is especially concerned by the fact that SGCPC required a loan to pay shareholder dividends. LJ believes the loan and reports of selective share purchasing undermine SGCPC's original vision of being an equal opportunity community venture, adding that the prioritisation of wealthier stakeholders has marginalised lower-income families who are already overwhelmed by utility costs.

BH's Comments

BH repeated the same concerns expressed by JJ above. In addition to those, BH questions SGCPC's claims that it was currently losing money on the power they are selling because in BH's view, SGCPC shareholders still earn a profit every year.

Regarding solar generator inverters, due to anti-islanding protection, BH asserts that only an inspection to confirm whether a grid connected inverter is certified is necessary for customers that have arranged to export power to the grid. According to BH, SGCPC already installed new meters on homes that have private solar systems to record the power that is exported to the grid. In BH's view, customers that export no power should remain free of SGCPC oversight.

BH disagrees with SGCPC's assumption that any customer that has renewable self-generation capability and an SGCPC meter installed must be grid connected. BH explained that a key component of a grid-tied solar system is that the system will provide bi-directional power flow. As mentioned previously, SGCPC can identify grid-tied systems by records of which premises are exporting power to the grid via their meters.

BH questions SGCPC's claim that a technician received an electric shock from an incorrectly installed system. The first rule of working safely on an electrical system is to verify that no power is present by using a meter to verify no voltage. If this simple safety practice were followed, then it is unlikely that an injury would have occurred. BH added that it should not be taken lightly the danger associated with grid-tied renewables but given that inverters are specifically designed to not energise a de-energised grid, more information is needed before SGCPC implements all its proposed requirements based on an unsubstantiated claim that the system in question was improperly wired.

Regarding Annex F of the REP, BH considers that it incorrectly identifies grid connection systems and does not cover all examples of non-grid-tied systems. For example, power could be provided to a dwelling with an electrical distribution that is separate from that provided by the solar self-generation. BH explained that in this case, SGCPC power can be provided to a separate breaker panel to supply high current draw

appliances (e.g., water heater, dryer, oven, or battery charger) while solar self-generation supplies power for air conditioning and home electronics (especially those that can be damaged by power surges from the grid).

SH's Comments

SH repeated many of the comments provided by LJ above. In addition to those comments, SH stated that after two or more years of contemplating design and implementation, it seems as though there was no activity on the SGCPC solar farm area until very recently. However, SGCPC now wants to push and aggravate customers to a point of action without consideration for the customers. According to SH, customers are concerned by the uncertainty with the solar venture and SH wants customer concerns to be accounted for.

MU's Comments

According to MU, SGCPC's projections are based on estimates, adding that they lack reliability due to previous delays in renewable energy projects. MU recommends that a qualified third-party assess the projections. In MU's view, there is a noted bias against private renewable energy systems.

In terms of the application and interconnection process, MU stated that Annex C is user-friendly while Annex G requires clearer definitions of grid connected systems particularly regarding hybrid systems. MU further recommended the following:

- Clear literature should differentiate between hybrid, grid-tied, and off-grid systems.
- More reasonable terms and fees for hybrid systems that do not export power are necessary, as they can help stabilise load curves.
- The absence of qualified electrical contractors in the area is a concern.
- Backup generator procedures are not addressed.

In respect to the terms and conditions for customer-owned solar energy, MU stated the following:

- Clear differentiation of system types is needed in the terms.
- SGCPC should not control modifications to hybrid or off-grid systems and that SGCPC lacks authority over customer-owned transfer switches.
- Random inspections by SGCPC should require probable cause.

Regarding compensation for exporting power, MU considers the current compensation rates for exported power to be unreasonable and that they should be reevaluated by an independent party. MU also considers a rollover policy for credits or monetary payments to be essential to encourage exports.

MU disagrees with SGCPC imposing fees on off-grid systems and requests that these fees be eliminated. In MU's view, a clear path for processing legacy systems should be established but SGCPC's proposed

timeline for inspections and tests is excessive. MU also recommends that SGCPC's right to inspect should include a clearer breakdown of costs and should only be done with probable cause. MU further stated that the viability of wind and tidal power requires further expertise. MU considers the definitions in the glossary to be overly technical for the public.

MU also suggests that fees be adjusted for different system types to reflect their minimal impact on the grid.

MU also requests clarity on inspection requirements and stated that certification from licensed electricians is needed.

LH's Comments

LH repeated comments made by JJ and others. In addition to those, LH stated the following set out below.

- SGCPC's comment that customer-owned solar is 'not favoured economically because it reduces SGCPC's electricity sales' proves that SGCPC's motive is financial instead of public safety.
- The proposed fees (including a $235 inspection fee for a five-minute meter swap) are unreasonable and amount to taxation without oversight. Off-grid systems should not be charged any fees.
- Residents should have the right to generate their own clean energy without paying rent to a monopoly utility.
- Solar energy reduces dependence on imported oil and stabilizes electricity prices.
- Decentralised power means fewer blackouts and faster recovery after storms.
- With private solar energy, families can control their energy costs and contribute to sustainability goals.
- Self-generation eases peak demand and lowers strain on the grid.
- According to LH, a monopoly hurts the people by creating higher costs, being less innovative, suppressing consumer choice in renewable options, shifting public power policy into private hands, and undermining trust in government energy reform.
- The REP should contain more information such as a detailed schedule, identification of vendors supplying equipment, a drafted construction plan or contract, and performance requirements to achieve the goals desired by The Bahamian Government.
- SGCPC's role should be limited to grid safety such as ensuring that grid-tied systems cannot export unsafe levels of power and ensuring disconnection during outages.

RC's Comments

According to RC, past and present government administrations have been encouraging citizens to install renewable energy. RC believes government legislation was implemented to support renewable energy by a deadline of 2033. With that stated, RC questions what the difference is between citizens generating

solar energy from citizens collecting rain or well water for their personal use and whether the latter should also incur an annual 'tax'. RC believes that if the Government recognises and licenses a three-phase electrical engineer or technician then they should be able to inspect systems in Spanish Wells. Inspections should be open to all who are certified and RC is uncertain whether SGCPC can monopolise this.

RC does not understand why his SGCPC electricity bills are so high and wonders whether SGCPC is throttling meter usage. RC finds it impossible that a five bedroom house with two large continuously running central air conditioning units, a pool, all electrical appliances, and no solar can have a lower electricity bill than a small three bedroom house with all gas appliances and approximately 75% solar. RC claims that before it became known that he had solar installed, his electricity bill declined, however, once it was discovered that he had solar, his electricity bill increased with no explanation and no assistance to address his concerns. RC agrees that the private systems should be inspected to check for safety but disagrees with charging people thousands of dollars annually for an inspection without allowing the public to choose their own technician to do the inspection. To RC's knowledge, SGCPC does not have any three-phase electricians employed and must hire a foreigner to conduct inspections.

RC also does not think an inspection on an annual basis is necessary since solar systems do not change annually and have a decade's worth of warranty. RC questions whether the annual frequency being proposed is to generate more income, adding that all systems are UL listed and have rapid shutdown integrated. RC hopes his concerns can get resolved quickly as it is affecting his business.

Community Petition Comments ('Community')

The Community referenced section 7 of the EA, the Government's policy objective to reach 30% renewable energy by 2030, and the Government's website newenergyera.com which, according to the Community, contemplates support for environmentally sustainable electricity, enhanced consumer protection, off-grid systems, and other measures relevant to decentralised generation and resilience.

The Community stated that many hybrid systems installed in Spanish Wells were not originally installed with the current capacity but were expanded following communications and actions by SGCPC that created a reasonable fear among residents that their continued grid connection could be jeopardised. To support these claims, the Community provided the following:

- a redacted electricity bill from SGCPC dated 30 November 2022 which included the following disclaimer:

> SGCPC is excited to announce the start of our Solar Community program that will benefit our entire community. We recognize that many residents want to put Solar on their roofs and tie into the Grid. Please do not do that because it is unsafe for everyone on the Grid and may damage Powerplant equipment. To ensure safety and stability of the electricity

supply for all customers, any premise with Solar connected to the Grid without approval from the Power Company may be completely disconnected by SGCPC technicians. If you have Solar questions, email us at sgcpcsolar@gmail.com. We will share more information soon. Thank you for your understanding.

- An email from Brenton Nixon dated December 2022 addressed to SGCPC stating that he was writing on behalf of a customer, whose name was redacted, to install an energy storage solution. Mr. Nixon explained that the proposed solar system would not feed into the grid at any time and will only power the household with a no feed-in grid tariff application. The email also stated that grid tying involved many stability issues including frequency and voltage anomalies, overloading of existing transmission lines, and demand and supply mismatch. Mr. Nixon also stated that the system was great to stabilise the grid and would rescue congested transmission lines and help the grid retain stability.

- SGCPC's response to Mr. Nixon stated that it was unclear whether Mr. Nixon wanted to install a battery system, had already installed a battery system, or was planning to or had already installed a solar energy system. SGCPC advised Mr. Nixon that it was illegal to install a grid-tied system without the inspection and written approval of the utility company. SGCPC stated that it would not approve or allow PV or BESS to be connected to the grid in compliance with URCA regulations. SGCPC then stated that for PV and BESS systems operating off-grid, approval was required because the ATS or MTS would still be connected to the grid and these were critical to grid safety. SGCPC then listed the documentation required for approval.

The Community quoted URCA's Preliminary Determination which states 'The REP also accommodates persons who wish to be off-grid – that is to have no connection to and be completely independent of SGCPC.' According to the Community, URCA is the only entity with jurisdiction over off-grid systems as set out in section 55(3) of the EA therefore SGCPC does not have the authority to impose fees, inspections, or oversight for off-grid systems. As such, the Community questions why URCA would make the preliminarily determination that the REP is consistent with sector policy objectives and the NEP and that the REP should be approved. The Community added that if URCA approves the REP language that impacts off-grid systems, URCA should explicitly identify the statutory basis for such approval and provide an explanation. The Community then quoted the sections of the REP that allows SGCPC to disconnect non-compliant systems.

Without limiting any other remedies, the Community requests that URCA:

- defer final approval of any REP provisions that may purport to regulate off-grid systems until the jurisdictional question is resolved;

- require SGCPC to remove or revise any REP provisions that exceed SGCPC's statutory powers related to off-grid systems;
- require SGCPC to revise the REP to expressly facilitate decentralised renewable participation consistent with the NEP and to provide clear, non-discriminatory processes for hybrid and grid-tied systems; and
- require that any fees, inspection regimes, or compliance obligations be proportionate, transparent, and supported by specific statutory authority and stakeholder consultation.

According to the Community, most systems on Spanish Wells were installed by Smart Power Solutions (SPS), a licensed supplier and installer. SPS sought engagement with SGCPC on behalf of customers but, according to the SPS correspondence provided, SPS received an unfriendly response from SGCPC and discontinued further pursuit. The Community also stated that subject to applicable procedural rules, the REP should reflect a true and documented history of stakeholder engagement and should not rely on incomplete or inaccurate representations that material stakeholder approaches did not occur.

The Community also provided a petition signed by dozens of residents. The petition noted that in the SGCPC 23 October 2025 meeting, SGCPC committed to removal of all fees, inspections, and oversight of off-grid solar projects which it acknowledged was under URCA's purview.

According to the Community, SGCPC often confused off-grid systems and hybrid systems. As such, the Community requests clear, consistent definitions of solar system configurations to avoid confusion and subjectivity. The Community also noted that SGCPC's definition of grid-tied was not consistent with that of Bahamas Power and Light ('BPL') and referred to Section 3 of BPL's Small Scale Renewable Generation (SSRG) Application Form.

The Community considers the proposed payback for grid-tied customers that choose to export power back to the grid is insufficient, noting that SGCPC would purchase power from exporters at $0.05 per kWh while charging customers approximately $0.45 per kWh. The Community asserts that this lopsided fee structure discourages customers from exporting while at the same time, being subjected to poorly regulated frequency (SGCPC grid frequency typically runs faster than 60 Hz) and potential for power surges (e.g., lightning strikes on grid). The Community also finds it discouraging that the proposed sell-back does not carry over from one billing period to the next, failing to account for the customer's investment, maintenance, and depreciation over time. The Community further notes that SGCPC wants to impose a network fee 'not to exceed $2,000' but the Community opines that the export pay back fee would require a customer to provide SGCPC with 40,000 kWh of export power just to recoup the network connection fee (this ignores the time value of money).

The Community believes that SGCPC should only have authority over self-generation projects that could result in the increase in export capacity to the grid. Such an inspection would be consistent with that

required by BPL for which a fee of $50 is required. The Community considers SGCPC's application fees to be exorbitant and contrary to renewable energy policy objectives.

Referring to SGCPC's concern that solar self-generation project may result in rapid load demands to the grid for situations such as passing clouds, the Community responded that the batteries allow power to be smoothed out during the day as solar input varies and to allow a continued source of power at night when no solar generation occurs, adding that SGCPC's concern was misinformed.

The Community opposes SGCPC being the sole inspector rather than allowing external licensed three-phase inspectors.

According to the Community, SGCPC's REP is presented as a plan to increase renewable energy to achieve The Bahamas's renewable energy goals, however, the REP instead proposes to regulate and tax individuals who have installed or intend to install renewable energy. The Community advocates for SGCPC to be evaluated against the requirements in the EA, adding that the proposed REP has no regulatory requirements or penalties if SGCPC fails to meet the 30% renewable energy goal projected by 2027. The Community also mentioned that SGCPC stated similar goals previously which they did not meet.

The Community also claims that the public awareness regarding the proposed REP and URCA's Preliminary Determination was lacking with there being no announcements via mass email or on Facebook and little notice given about the town hall meeting that was held.

Furthermore, the Community stated that the proposed REP seeks to implement requirements for which SGCPC has no jurisdiction including the establishment of insurance requirements for PV systems, establishing limits on the amount of solar power installed whether grid-tied or not, and limiting renewable self-generating capacity based on SGCPC historical records of electricity use.

JH's Comments

JH provided comments on specific sections of the REP as set out below.

Annex A

1.7 – According to JH, this section states that less energy will be sold by SGCPC which is in fact true although self-inflicted because much of the community has questioned SGCPC for more than ten years on solar initiatives to reduce the cost of some of the most expensive electricity in the world ($0.4796 per kWh VAT inclusive as of October 2025). SGCPC's answer of 'we are working on it' or 'soon' could only go so far. Eventually, people invested in solar themselves. Even after stating construction would begin in early 2023, SGCPC has yet to install the first PV panel.

3.3 – JH could not find legislation to support this statement in the EA or NEP.

Annex B

2.2 - Upon receiving the APESL license from URCA in 2018, JH believes that this REP should have begun development at that time.

2.5(D) – JH considers that this claim once substantiated must reference an unlawful grid tied system or hybrid system that was not set at zero export.

2.7 - Although SGCPC is most likely the most reliable power utility in The Bahamas, JH considers the claim that it "averages less than one unplanned outage a year" is not true.

2.12 – JH estimates that 90% of the PV systems satisfy this.

2.15(C) – SGCPC claims the number of private solar installations is a good outcome in terms of meeting the 2030 yet if legacy systems are forced off-grid, SGCPC will not be able to recognise them in their 30% renewable energy by 2030 quota. These systems will then be registered through URCA only and recognized against the Bahamas national quota for 30% renewable energy by 2030.

2.15(D) - This statement is incorrect.

3.6 - The risk referenced here would only be relevant to a traditional grid-tied system. A hybrid system would use ESS to supplement power when the sun goes down or there are clouds and only switch to the grid after the ESS is drained. All ESS systems would discharge at individual rates and would therefore create smooth load curves. Homes shutting down central air conditions around the same time at night pose a much more likely and greater threat.

6.4 - As most or all private systems already have ESS installed, SGCPC's need for ESS should be entirely based on their own PV production or future grid tie allowance.

6.12 - Legacy hybrid systems already operate on this concept.

7.1 - EA 2024 has no literature showing town council/local government involvement.

7.4 - Without an approved REP, the supplier cannot provide the required documents for an interested party to move forward with any RE system which would lead to a stalemate situation in which there is no way forward.

7.4(D) – The referenced program should effectively be a grandfathering clause that may be different to the formal policy for new installations. To streamline and expedite this process as they claim they hope to do, this program should be a separate document that should be included as an additional annex to the REP. Because of the statement ‘non-compliant systems may be disconnected from the grid’, this program

should not be treated as an afterthought but an integral part of the REP. Therefore, this REP should not be considered until it is in place for public review.

7.5(B) - A detailed explanation why a battery charger cannot be utilised to charge batteries only (no connection to PV equipment) and a system still be considered off-grid is necessary. There are EVs and other equipment on Spanish Wells that have larger batteries with higher DCV and larger chargers than most ESS.

9.0 - Off-grid falls under URCA & Ministry of Works not SGCPC. What relevance does a GIR have if the grid is not involved unless for a standalone charger only? Who gives SGCPC authority to make this statement: 'non-compliant systems will not be allowed to operate'?

11.2 - Clarity between hybrid and grid-tied is necessary.

11.3(B) - One-time fees are quite high and should be broken down further into grid-tied, hybrid with export, and hybrid without export with each having a separate price point. The breakdown for reapplication fees needs to be addressed as it is not contained in this REP. Only the overall cost (55% of first cost) of a reapplication is provided. Off-grid should be unequivocally removed from all fees as committed by SGCPC and its representatives at the public meeting.

12.1 - SGCPC has had no framework or resources to set a path towards this goal. None of their past presentations and much of this REP still do not align with the statements of the Bahamas government and its current leadership.

12.3 - Who is the proposed inspector and what are his/her qualifications to perform said inspections? A detailed inspection guideline detailing the breakdown of the scope and fees should also be provided either as an addition to a current annex in this REP or a separate annex.

12.4 - If SGCPC decides to voluntarily carry out these actions, why is it at the customers' expense?

MP's Comments

MP stated that they wrote their comments as a resident who believes in fairness, justice, and the right of every household to live without outside manipulation, adding that the REP should be a tool to uplift the community not a burden that weighs residents down. MP emphasized that their words were not meant to insinuate judgement but to call for what is right and fair. According to MP, the proposed REP is not fair as it mixes up systems, charges too much, and gives SGCPC powers which it should not have. However, MP believes that the plan can be fixed by revising the definitions, applying fair fees, and respecting people's rights to become a plan that uplifts the community and honours what is right.

Town Hall Comments

SGCPC made a presentation on SGCPC's renewable energy plan then answered questions from the attendees. The attendees' main issues, concerns, and comments are summarised below.

- Many attendees interpreted the SGCPC's proposed moratorium as SGCPC wanting to stop customers from installing private PV systems indefinitely. Most attendees strongly opposed what they considered to be a prevention of customers installing private systems.
- Most attendees opposed the proposed annual inspection fee or felt that it was too high. They did not see a need to pay an inspection fee to the company.
- Brenton Nixon, who installed most of the PV systems on the island, claimed that he is a licenced electrician, is aware of the requirements by Ministry of Works and URCA, and offered to perform the inspections and provide the necessary documentation for the systems that he installed at no charge.
- Some attendees felt that SGCPC did not have a right to tell them what they can install on their house/property.
- Most attendees who had solar systems installed had the export option turned off because they were informed that exporting could potentially harm SGCPC's grid.
- There is a clear need for more awareness and education on solar energy, grid-tied systems, and SGCPC's REP.
- Two attendees asked if they could charge their batteries by running a generator to be what they considered 'off grid'.
- Some attendees were willing to help SGCPC achieve its goals so that residents who do not have solar end up paying more.

URCA's Response/Final Determination

As set out in section 57(1) of the EA, URCA reminds the public that the approval of an approving authority and an authorised public electricity supplier licence granted by URCA are required to do the following:

(a) construct an electricity supply system, or a component of such a system, or a component of such a system, for the purpose of supplying electrical energy to the public in the whole or a part of the Family Island;
(b) generate, transmit, distribute or supply electricity to the public in the whole or a part of a Family Island; or
(c) install or operate in a Family island a standby generating plant with a generating capacity exceeding one thousand kilowatts.

As per sections 57(2)(b) and (c), the legislation allows exceptions to section 57(1) above to accommodate renewable energy for those without an APES licence however the approval of an approving authority is still required. The exceptions allowed are:

. . . where -

(b) a property owner utilises, for the purpose of supplying energy for residential use, renewable energy sources in accordance with the requirements of section 54; or
(c) URCA approves in writing renewable energy self-generation projects advanced by the Government or a small-scale business or commercial enterprise in accordance with section 55.

In accordance with sections 54 and 55 of the EA, URCA advises respondents that all renewable energy systems connected to the grid, regardless of whether electricity is exported to the grid or not, are required to be approved by the utility company they are connected to. Property owners must apply to the utility for permits to install and operate renewable energy systems prior to be connected to the grid.

As per section 57(2)(a), a person is allowed to install and operate a standby generating plant approved by the Ministry of Works, and notified to the relevant approving authority, with a generating capacity of one thousand kilowatts or less and such plant is used solely for the supply of electricity in case of the failure of supply by a PES or APES, in case of other emergency.

On a related note and in response to the question raised by respondents of whether they can use a standby generator to charge their batteries for their renewable energy system, URCA advises that standby generators are not allowed to charge energy storage systems or ESS because the use of standby generators are only allowed to be used on a temporary basis when the public supplier is unable to supply electricity.

URCA advises respondents that under section 51(2) of the EA, all PES and APES must develop and submit a time-bound plan for integrating sustainable renewable energy technologies into their systems. Further, section 51(3) of the EA mandates that this plan must include provisions for facilitating residential renewable energy generation and addressing the reliability of intermittent resources, considering cost-effective storage technologies. Both the EA and the NEP recognise and encourage renewable energy adoption by both utilities and residents which contribute to the Government's goal of 30% renewable energy by 2030.

In response to concerns that SGCPC's plan and growth projections lack an independent review, URCA reiterates that, in line with section 51(2), all plans by PES and APES to integrate renewable energy must be submitted to URCA for URCA's review.

URCA acknowledges and agrees that off-grid systems fall under URCA's remit and therefore do not require the relevant utility company's approval. In the case of off-grid systems, URCA approves off-grid systems which must comply with the Ministry of Works and Canadian Electrical Code (CEC) requirements on the premises. There is no meter hence no utility side of the meter. URCA also confirms that off-grid systems are not subject to interconnection fees since there is no connection to the grid.

As highlighted by respondents, SGCPC included language in its REP that states off-grid systems also require SGCPC's approval in addition to URCA's. To correct this, URCA has amended SGCPC's REP and removed such language.

URCA notes the respondents' concerns about SGCPC's proposed fees. URCA emphasises that all proposed fees that a PES or APES intends to charge the public related to renewable energy must be reviewed and approved by URCA before they are implemented. Having reviewed SGCPC's proposed fees and the respondents' concerns, URCA has amended the fees which can be found in Annex H. URCA addresses the issue of fees and presents the URCA-amended fees in URCA's response to Consultation Question 9 below.

Regarding the feedback that the definitions should be made clearer, URCA has amended the definitions in Annex G. Further details are provided in response to Consultation Question 8 below.

URCA agrees with the feedback that there needs to be more public education and awareness regarding the SGCPC REP and the regulations on renewable energy in general. URCA will work with its Corporate and Consumer Relations Department to improve awareness of URCA's role and its policies. URCA also acknowledges that SGCPC has a responsibility to educate its customers on the SGCPC REP.

URCA notes the comments about the proposed requirement that a three-phase electrician is required to carry out installations, URCA will amend the requirement to stipulate that all installations carried out must be done by a single- or three-phase electrician who is licensed in The Bahamas. This revised approach also aligns with BPL's requirement.[3]

In respect to SGCPC's proposed compensation rate, URCA addresses this in response to Consultation Question 4 below.

In response to LJ'S concern that SGCPC required a loan to pay shareholder dividends, URCA advises that this is outside the scope of this consultation.

Regarding claims that inspections or safety checks are not necessary because renewable systems have anti-islanding protection, URCA advises that not all systems have anti-islanding protection and even for systems that do have anti-islanding protection, the ant-islanding feature is not always turned on. In addition to anti-islanding, there other safety features that must be checked to ensure a system is suitable to be connected to the grid prior to receiving an approval. The utility will perform these safety checks during the application process and, if necessary, any re-assessments that are done. However, separate

[3] BPL's Grid Tied Small Scale Renewable Generation Application - https://www.bplco.com/wp-content/uploads/2020/02/SSRG_Application_-_FINAL_ver_4.0_Final-1.pdf.

from the application and re-assessment fees as detailed in its response to Consultation Question 9 below, URCA has removed the recurring annual inspection fees from the Fee Structure in Annex H to align SGCPC's REP with the approach taken by BPL. URCA adds that the utility has the authority to perform inspections on the utility side of the meter which it is responsible for however these inspections do not and should not incur a fee. For the avoidance of doubt, inspections are different from an assessment performed as part of the application process or later as a re-assessment (for example, if a customer makes another application or there are changes to the PV system).

URCA again emphasizes that once a system has the ability to connect to the grid, it is considered to be grid-tied whether it exports power or does not export power and/or whether it has an energy storage system or does not have an energy storage system.

Regarding SGCPC's claim that a technician received an electric shock from an incorrectly installed renewable energy system, URCA states that it would require more information and it would have to review SGCPC's transmission and distribution safety practices before providing a conclusion on whether the electric shock was caused by an incorrectly installed renewable energy system. Generally, staff must be trained to work on a live or energised line. If staff are not trained for live line work, then the system must be isolated, tested, proven dead or de-energised, and then grounded on either end before work is done.

In response to BH's comment regarding Section 3.3 of Annex A of the REP, URCA refers BH to section 55 of the EA which sets out the approval process that apply to off-grid systems. Regarding the statement that the use of a backup generator is only permitted during emergencies (i.e., in the event that the utility has an outage), URCA's response to this is set out above and is in accordance with section 57(2)(a) of the EA.

In reference to BH's request that Section 2.5(D) of Annex B of the REP must reference an unlawful grid tied or hybrid system, URCA explains that an unlawful system is one that is not permitted or approved in accordance with the EA. The relevant sections of the EA are quoted above.

In response to BH's comment about Section 3.6 of Annex B of the REP, URCA advises that BH's scenario may be the case for a PV system with ESS but not all PV systems have ESS.

Regarding BH's comment on Section 7.1 of the REP that the EA does not require Ministry of Works and Town Council involvement, URCA advises that it is the statutory responsibility of the appropriate building authority, being the Grand Bahama Port Authority in the Port Area and the Ministry of Works elsewhere in The Bahamas, acting under the Building Regulation Act 1971 or the applicable regulatory framework (e.g. relevant building codes) to ensure the safety of occupation of a building. Building inspections, which may include an assessment of electrical wiring among other structural and safety elements, are conducted by the relevant building authority. As such, the customer's side of the meter falls under the relevant building authority's remit. URCA's remit arises under the EA 2024, which establishes its authority to

regulate the electricity sector and to oversee matters concerned with the safe provision of electricity on the utility side of the meter.

Regarding BH's comment on Section 12.4 of Annex B of the REP questioning why the customer should be charged fees if SGCPC chooses to disconnect an unauthorised/unpermitted installation from the grid, URCA advises BH that utilities charge fees to cover their expenses. In this case, inspections are necessary due to safety concerns and the impact on SGCPC's operations. The general concept is that the entity that causes the expense pays for it.

URCA notes The Community's concern about whether SGCPC has the authority to require PV system owners to maintain general liability insurance. URCA advises that general liability insurance is necessary to provide, at a minimum, protection in the event of electrical or mechanical failure or malfunction of the installation that causes loss or damage to property and/or injury or death to individuals. However, URCA observed that the insurance liability requirement in Section 10.8 of Annex B in the REP was inconsistent with the requirement in the Grid Interconnection Requirements. As a result, URCA amended Section 10.8 of Annex B to ensure consistency.

URCA acknowledges The Community's concern about SGCPC's claim in the REP that customers never approached SGCPC about installing PV systems. While URCA does not have a position on the claim's veracity, the claim should not be in the REP therefore URCA will remove it.

Regarding JH's suggestion that a grandfathering clause should be included for existing systems, URCA does not consider a grandfathering clause to be necessary. SGCPC stated in its Town Hall meeting that it is accepting applications for existing installed systems. Despite this, URCA emphasizes that everyone has an obligation to follow the relevant legislation for renewable energy. Furthermore, the legislation was in place at the time that existing PV system owners installed their systems.

3.2 Responses to Specific Consultation Questions

In this Section, URCA summarises and responds to the comments made regarding specific consultation questions. Due to the volume of responses, many of which are similar, URCA will summarise the main points made by respondents.

Consultation Question 1

In the REP (Annex B), are the projected energy growth (section 2) and plans to meet that growth (section 6) reasonable? If not, what changes should be made?

The feedback to this question was similar to comments made in the general comments which stated that the projections were based solely on SGCPC estimates, SGCPC is biased in its statement that customer-owned solar energy is not favoured economically, and that an independent third party should review the projections.

Respondents stated that SGCPC's projected growth numbers looked like guesses and that SGCPC's previous deadlines to implement renewable energy, i.e., first months of 2023, were missed.

Respondents stated that hybrid systems should not be grouped with grid-tied systems because hybrid systems that export power to the grid are not the same as grid-tied, adding that each type of system, i.e., hybrid, grid-tied, and off-grid, should have its own rules.

The Community suggested the following language for the REP: *'All demand and generation projections and any material plan that depends thereon shall be certified by an independent, URCA-approved technical and financial reviewer. URCA shall withhold final approval of any measure materially dependent on such projections until such independent review is completed and its recommendations have been satisfactorily addressed.'*

URCA's Response/Final Determination

URCA considers SGCPC to be well-placed to determine the growth projections for its service area. The area is not large and there is a strong network of information on the island which means SGCPC should be aware of any significant growth changes, e.g., a new resort or the closing of a fish house. Accordingly, URCA does not view SGCPC's growth projections as being unreasonable. Also, no data or information was received as part of the public consultation process to refute SGCPC's projections therefore SGCPC's projections are deemed acceptable.

Consultation Question 2

Is the Application for Electricity Service account (Annex C) and the Grid Interconnection Application (Annex D) easy to follow and comply with? If not, what changes should be made?

Multiple respondents consider Annex C to be easy to follow. Respondents did not provide comments on Annex D but instead stated that that Annex G is incomplete and confusing because it does not explain what 'grid connected' means. Respondents also stated that hybrid systems should be included and there should be rules for backup generators. A few respondents stated that licensed three-phase electricians are not recognised and one respondent suggested there should be an alternative to a licensed three-phase electrician since there are none on Spanish Wells.

Multiple respondents repeated what was stated in the general comments that there should be more reasonable terms and fees for hybrid systems which cannot or do not wish to export power to the grid.

According to BH, the grid connection definition is inadequate because it assumes all grid connections can export power to the grid. BH stated that the residential solar generation on Spanish Wells is a single-phase centre tapped 240/120VAC arrangement, yet the Grid Interconnection agreement requires a licensed three phase contractor sign-off. To the best of BH's knowledge, there is no licensed three-phase contractor on the island. BH questioned why the Grid Interconnection Application was only for solar generation and not all forms of power generated by a customer including gas or diesel generators.

The Community repeated comments made by other respondents to this question. The Community added that there should be separate application paths and fees schedules for each type of system, i.e., hybrid, grid-tied, and off-grid; guidance on battery discharge profiles and non-export hybrid operation; and a procedure for backup generator registration and safe operation consistent with local capabilities.

URCA's Response/Final Determination

URCA notes the consensus that the Application for Electricity Service (Annex C) is easy to follow.
With respect to the Grid Interconnection Application (Annex D), URCA notes that the respondents' concerns pertain to the definitions which are contained in Annex G not Annex D. URCA addresses these concerns in response to Consultation Question 8 below.

Regarding the comments on systems that have energy storage systems or batteries and whether systems that export power should be treated differently, URCA refers respondents to URCA's responses to Consultation Question 1 above.

Regarding the requirement to use a licensed three-phase electrician, as stated in URCA's response to Consultation Question 1 above, URCA relaxed this requirement so that a single- or three-phase electrical contractor licensed in The Bahamas can install the system.

Consultation Question 3

Are the Terms & Conditions for Customer-Owned Solar Energy SSRG or RESG Operated Under a Grid-Interconnected Agreement (Annex E) reasonable? If not, what changes should be made?

Many respondents repeated general comments provided in Section 3.1 above. These include objections to SGCPC having authority over customer transfer switches; disconnections; non-exporting, hybrid, and off-grid systems; and the right to inspect. Respondents also repeated previous arguments regarding the need for definitions and terms for all systems and charging fair fees for non-exporting hybrids. Respondents suggested that inspections should be limited to cases where there is probably cause and one respondent suggested that the costs of inspections should be covered by SGCPC unless there is a documented cause to state otherwise.

According to the Community, Annex E requires revisions to protect customer rights and to limit unilateral utility control over customer assets and lawful off-grid operation, adding that contractual terms must be reasonable, proportionate, and within statutory authority. The Community suggested the following language: '*SGCPC may not unilaterally require modifications to customer-owned hybrid or off-grid equipment except where there is documented risk to public safety or grid integrity and then only pursuant to URCA-approved procedures. Access or inspections shall require reasonable notice and a showing of probably cause, except in emergency circumstances.'*

URCA's Response/Final Determination

The Ministry of Works has an obligation to check that the renewable energy system installed on the owner's premises complies with the Canadian Electrical Code. SGCPC has an obligation to ensure that the system installed on the owner's premises does not cause a nuisance to the electricity grid from an operational and safety point of view. Neither of these obligations should be applied in an ad hoc way and all systems should be checked for compliance.

No party – SGCPC, MOW, or URCA – should enter onto a private property without permission, except in reasonable extenuating circumstances; for example, where doing so would prevent the immediate loss of life. Permission may be granted through a contract; for example, SGCPC meter reading. In the case of the contracts related to the REP, the expectation is that SGCPC or the MOW will be invited on to the private property by the owner or their representative to carry out their work.

Section 8.7 of the REP will be modified to state that SGCPC will not have control over private renewable energy systems, for modification or operations, unless it enters into a contractual arrangement with the owner to do so. SGCPC retains the legal right to disconnect the system for failure to comply with the law or regulations, per the EA 2024 section 54(8).

Consultation Question 4

Are the method and amount of compensation for persons exporting power to the grid reasonable, as outlined in section 7.12 of the SGCPC REP (Annex B)? If not, what changes should be made?

DH disagrees that the compensation is reasonable, stating that the pay rate of $0.05 per kWh is too low and only one-tenth of the real cost. In DH's view, there is no benefit in exporting power in the absence of rollover credits. DH also considers the $2,000 network fee is to high and owners of private solar systems would not be able to recoup their investment with the proposed fee amounts.

JJ stated that at $0.436 pre-VAT or $0.4796 VAT inclusive per kWh, a $0.05 per kWh compensation is absurd and only 11.5% of the pre-VAT rate. JJ stated that based on SGCPC LCOE estimates, SGCPC will compensate at the rate which they can produce their own solar energy, but JJ considers it unlikely that SGCPC can produce solar energy at $0.05 per kWh considering the cost of PV and its loan interest. As such, JJ recommended that the compensation rate be reevaluated by an independent third party because the proposed rates are speculative and in SGCPC's best financial interest. Like other respondents, JJ favours rollover credits to make exporting feasible for those with private systems and that the proposed $2,000 network fee is not feasible. For illustrative purposes, if one imports 100 kWh from the grid, it will take the export of 872 kWh to negate the incurred cost or a monetary payment of $43.60.

BH does not consider the proposed compensation to be reasonable. BH explained that SGCPC has proposed recurring annual fees which in most cases will exceed any payback expected from customer exported power. According to BH, given that SGCPC intends to generate 30% of their power from solar, exported power from customers will be used to reduce the fuel cost to produce the remaining 70%, providing significant advantages for SGCPC and little to no advantage to exporting customers. BH considers that customers will be better off increasing battery storage capacity to avoid the need to purchase power from SGCPC at the proposed charges of $0.40 - $0.50 per kwh.

According to the Community, the proposed export compensation is unreasonable and economically unviable for most exporters, adding that compensation structures should promote NEP goals for decentralised generation and should be supported by transparent cost-of-service or market-referenced analysis approved by URCA. The proposed rate does not reflect the costs incurred to install private solar systems. The Community also opposes the proposed network fee for reasons stated by other respondents. The Community suggested the following language: *'Export compensation rates and attendant fees shall be recalculated based on an independent economic study commissioned or approved by URCA. Exported energy shall be eligible for either (a) monetary payment at a URCA-approved rate; or (b) a rollover credit*

mechanism that carries forward export credits for at least 12 months. Network connection fees shall be capped at a level proportional to expected export revenues and shall be transparently itemised.'

URCA's Response/Final Determination

URCA agrees with the respondents that SGCPC's proposed compensation rate is too low. URCA considers BPL's method of using the monthly prevailing fuel charge rate to be an appropriate benchmark and will require SGCPC to use the same method. As such, URCA determines that the amount of compensation for persons exporting power to SGCPC's grid must be equal to the monthly prevailing fuel charge rate. URCA will amend Section 7.11 of SGCPC's REP to reflect the URCA-approved compensation rate.

Consultation Question 5

Are the Capacity Limits as outlined in section 2 of the Customer Grid Interconnection Requirements (GIR) for Renewable Energy Generation PV Systems and Off-Grid Renewable Energy Systems (Annex F) reasonable? If not, what changes should be made?

Many respondents made similar comments to those summarised in Section 3.1. Respondents disagree that SGCPC has jurisdiction over off-grid systems. According to multiple respondents, the limits wrongly confuse system types. Respondents stated that optional export for hybrid systems should be considered as all hybrid system owners will not wish to export and therefore should not count toward the current grid-tied cap of 350 kw dc. Respondents have the view that past usage is not a good measure for sizing a solar system because customers previously limited their usage due to the excessive electricity costs and therefore will likely need more capacity to achieve the improved quality of life which they hope to achieve by investing in a private solar system (e.g., increasing air conditioning usage). Respondents also suggested that there should be more clarification on how legacy private systems are treated.

According to the Community, the proposed capacity limits are unreasonable because they fail to distinguish hybrid systems that elect not to export, they do not respect that SGCPC has no jurisdiction over off-grid systems, and they do not account for latent customer demand suppressed by historical high costs. The Community advocated for capacity limits to be calibrated to technical constraints, statutory jurisdiction, and policy objectives promoting equitable access to decentralised generation. The Community suggested the following language: *'Capacity caps shall apply only to systems that export to the distribution network. Hybrid systems electing non-export operation shall be exempt from the grid-tied capacity cap. Sizing determinations shall consider projected, reasonable future demand where supporting documentation is provided.'*

URCA's Response/Final Determination

Grid-tied systems should be sized to meet the internal needs of the property and avoid export of power to the grid. Having large PV systems connected to the grid has been shown to negatively impact the

electric grid due to variability of output.[4] URCA reminds the public whether a grid-tied system exports power or not, that system is still subject to the law, the utility's Grid Interconnection Requirements, and URCA's renewable energy regulations.

Consultation Question 6

Is the Application and Interconnection Process for All Systems as outlined in section 3 of the GIR (Annex F) reasonable? If not, what changes should be made?

In DH's view, the proposed process is too slow and heavy, adding that legacy systems should have a fast-track option. DH considers that hybrid, grid-tied, and off-grid systems should be separated and that town council should only handle new builds or ground-mounted systems, not roof panels. DH also stated that waiting 21 days for inspection and 45 days for approval is too long. DH also considers that extra inspections should be paid for by SGCPC not the customer.

Multiple respondents repeated comments made previously regarding the removal of fees and oversight related to off-grid systems. Respondents argued that a clear and concise path to expedite the processing of legacy systems should be added as an addendum to the plan. Respondents noted that most of this document was copied from the BPL equivalent. Respondents also share DH's views regarding town council not being involved in roof panels.

Referring to the statement that 'If SGCPC does not carry out these tests within 45 calendar days of receiving approvals from the Ministry of Works, the system is considered approved, and the customer may interconnect the system to the Grid', multiple respondents highlighted the possibility of a 6.5 week downtime before operating the system if SGCPC does not inspect.

Concerning the statement 'SGCPC maintains the right to perform additional inspection and functionality testing for interconnected systems at any time, after providing the customer-generator with at least 48 hours' notice', respondents requested clarification whether this is at SGCPC's cost and recommends that if this is required then there should be probable cause for said inspection.

The Community suggested the following language: *'Legacy systems installed prior to the REP effective date shall be eligible for an expedited review track. SGCPC shall conduct initial inspections within 14 calendar days or provide documented cause for delay; systems shall not be deemed approved by lapse of 45 days.*

[4] *A tale of two grids: how CA and TX generation responded differently to the April 2024 solar eclipse* - https://watttime.org/news-and-insights/a-tale-of-two-grids-how-ca-and-tx-generation-responded-differently-to-the-april-2024-solar-eclipse/

Additional inspections require reasonable notice and shall be at SGCPC's expense except where a customer is found non-compliant, in which case reasonable inspection costs may be charged.'

URCA's Response/Final Determination

As stated in SGCPC's Town Hall meeting, SGCPC confirmed that it will accept applications for existing systems. For the avoidance of doubt, in addition to the application process, existing systems must comply with the REP's requirements. Systems that have yet to be installed will be subject to the process set out in the REP. SGCPC reserves the right to expedite the application process for future systems, if necessary.

Consultation Question 7

Does the System Architecture set out in sections 5.4 and 5.5 of the REP (Annex B) cover the types that will be needed? If not, what changes should be made?

Multiple respondents suggested that qualified experts should examine the sections. Respondents also consider that wind turbines may be risky in a storm scenario and tidal power requires qualifications that are not locally available.

The Community stated that the architecture scope should be confirmed and expanded only after review by appropriately qualified technical specialists, adding that wind and tidal concepts require separate risk and resilience studies before inclusion. The Community suggested the following language: *'Inclusion of wind, tidal, or other non-PV architectures shall be contingent on a URCA-approved feasibility and risk assessment prepared by qualified specialists and on demonstration projects governed by explicit safety and insurance requirements.'*

URCA's Response/Final Determination

URCA considers the suggestion that the REP should address renewable energy sources in addition to Photo-Voltaic (PV) to be valid. SGCPC will be required to add Section 5.6 to its REP with the following language: 'Renewable energy systems that generate electricity using a technology other than or in addition to photo-voltaic generation shall first be submitted to URCA for approval. URCA will consult the relevant stakeholders, including SGCPC, when deciding approval.'

Consultation Question 8

Are the Definitions in the Glossary and Definitions (Annex G) easily understood? If not, which ones need to be revised and what is the difficulty?

Multiple respondents stated that Annex G was not easily understood because it contains technical words that most people do not understand. Respondents suggested that Annex G be written in plain language so everyone can understand.

The Community has the view that the definitions should be rewritten into plain language for public comprehension and must align with statutory definitions where applicable. The Community specified the following terms that require revision: hybrid system; grid-tied system; off-grid system; energy storage system; export; interconnected; and net metering terms. The Community suggested the following language: *'Annex G shall be revised to include plain-language definitions for all materially impactful terms and a cross-reference table showing any variation from statutory definitions; statutory definitions shall control in the event of conflict.'*

URCA's Response/Final Determination

Having considered the feedback that SGCPC's proposed Glossary and Definitions (Annex G) was difficult for non-technical people to understand, URCA has revised Annex G so that it uses more everyday language and less technical jargon. It is important to note that given the technical nature of the subject matter, some technical terms could not be avoided. URCA also added a definition of a hybrid system which was not in the original Annex G.

Consultation Question 9

Are the fees outlined in SGCPC Renewable Energy Fee Structure Addendum (Annex H) reasonable? If not, what changes should be made?

Multiple respondents repeated comments made in the General Comments section of this document and in response to other consultation questions, i.e., that the proposed fees are too high and that SGCPC oversight and fees should be removed for off-grid systems. Respondents argued that licensed three-phase electricians who do not work for SGCPC should be recognised so people are not forced to pay for unnecessary inspections. Respondents also recommended that SGCPC should have a licensed, certified, and insured electrician on staff, mentioning that it was a double standard for SGCPC not to have one. Respondents consider that hybrid systems, especially those not exporting, should have their own lower fee category.

DA stated that a $235 labour fee for the installation of a bi-directional meter, which takes approximately five minutes, is unreasonable, adding that this would equate to $2,820 per hour. DA recommended that the fee structure should be itemised to show the cost of each procedure involved so a clear cost can be

projected for those who wish to consider hiring a licensed three-phase electrician not affiliated with SGCPC.

MM repeated comments similar to those made by other respondents. MM also stated that the one-time fees are astronomical and unreasonable with no clear breakdown provided in Schedule A.

DS recommended a line-by-line breakdown of reapplication fees including document review, assessment, and inspection.

The Community had the same concerns as other respondents to this question. Additionally, the Community recommended a cap on network cable fees that are proportionate to expected export revenue, the itemised fee waivers or reduced fees in cases where an external licensed electrician is hired, and a hardship exemption for micro-producers and legacy installations.

URCA's Response/Final Determination

URCA notes the consensus from the respondents that SGCPC's proposed fees in Annex H are excessive and, in some cases, unnecessary. To address the respondents' concerns, URCA used the renewable energy fees charged by BPL as a benchmark and amended SGCPC's fees accordingly. When adjusting the fees, URCA considered that SGCPC is a smaller entity than BPL with a different cost structure therefore the URCA-revised SGCPC fees are slightly higher than those charged by BPL but still considerably less than the fees originally proposed by SGCPC.

URCA also confirms that SGCPC should not charge fees for an off-grid system therefore URCA will remove off-grid fees from SGCPC's fee structure. However, URCA reminds the public that off-grid systems are subject to URCA's approval and an application fee of $250 payable to URCA applies.[5]

URCA has also streamlined the fee structure and combined the review of documents, assessment, and administrative processing into a single item with one application fee.

The URCA-amended fees are set out below in Table 1 and Table 2 along with URCA's rationale for each amendment.

Table 1. URCA's Amendments to SGCPC's Renewable Energy Fee Structure - Schedule A: One-Time, Non-Recurring Fees

Item	SGCPC's Proposed Fee	URCA-approved Fee	URCA's Rationale for Fee Amendment

[5] URCA's renewable energy self-generation (RESG) system application which applies to Off-grid systems can be found here: https://urcabahamas.bs/wp-content/uploads/2022/07/URCA-RESG-Application-Form-v2.pdf.

Installation of SGCPC-owned bi-directional meter	$0 for equipment and $235 for labour	$0 for equipment and $50 for labour	The equipment will remain the property of SGCPC. URCA used BPL as a benchmark. BPL does not charge for equipment or labour for this procedure however URCA accounted for the fact that SGCPC is a smaller entity than BPL with a different cost structure.
Review[6] of documents, PV System with ESS	$395 for technical consulting and internal review	$150 application fee	To simplify the process and lower the fees, the overall application fee will cover the elements of an application including the review of documents, the assessment, and administrative processing. The same application fee will apply whether a PV system has ESS or not.
Review of documents, PV System without ESS	$790 for technical consulting and internal review	$150 application fee	See rationale for application fee above.
Review of documents, PV System Off-Grid	$790 for technical consulting and internal review	Not applicable.	Off-grid systems do not fall under SGCPC's remit however there is an application fee that is payable to URCA.

[6] URCA notes that SGCPC's review is intended to satisfy any concerns that SGCPC and to prepare for a site inspection relevant to the utility side of the meter. Building Control is responsible for the review and approval of the system on the consumer's side of the meter.

Assessment, PV System without ESS	$363 for field services	No fee.	This will be covered by the application fee. See note above.
Assessment, PV System with ESS	$665 for field services	No fee.	This will be covered by the application fee. See note above.
Assessment, PV System Off-Grid	$665 for field services	Not applicable.	Off-grid systems do not fall under SGCPC's remit however there is an application fee that is payable to URCA.
Administrative Processing	$25 for accounting and document processing	No fee.	This will be covered by the application fee. See note above.
Network connection	Not to exceed $2,000	No fee.	The network connection fee will be removed due to the absence of a network.
Re-application for PV System without ESS and with ESS	$420 for PV System without ESS; $815 for PV system with ESS (A combination of SGCPC's proposed review of documents fee and administrative processing fee)	$150 fee	Re-applications will be treated like new applications. See note about the application above.
Re-application for Off-grid	$815 for PV system Off-grid (A combination of SGCPC's proposed review of documents fee and administrative processing fee)	Not applicable.	Off-grid systems do not fall under SGCPC's remit however there is an application fee that is payable to URCA.
Re-assessment, PV System with ESS and without ESS	$388 for PV System without ESS; $690 for PV System with ESS (A combination of SGCPC's proposed assessment fee and administrative processing fee)	$50 fee	URCA considers that the re-assessment portion would require less time than the full application process therefore a lower fee is warranted.
Re-assessment, PV System Off-grid	$690 for PV System with Off-grid (A combination of SGCPC's proposed	Not applicable	Off-grid systems do not fall under SGCPC's remit

	assessment fee and administrative processing fee)		however there is an application fee that is payable to URCA.

Table 2. URCA's Amendments to SGCPC's Renewable Energy Fee Structure – Schedule B: Annual Recurring Fees

Item	SGCPC's Proposed Fee Amount	URCA-approved Fee Amount	URCA's Rationale for Fee Amendment
Assessment, PV System without ESS	$165 Field labor and administrative processing	No fee.	There will be no annual fee.
Assessment, PV System with ESS or Off-Grid	$235 Field labor and administrative processing	No fee.	There will be no annual fee.
Meter and network services charge	$120 Billed annually in advance	No fee.	Meter – this is in line with BPL. Network services charge – there will be no network.

4. Final Determination

This Final Determination is issued by the Utilities Regulation and Competition Authority ('URCA') to Saint George's Cay Power Company Limited (SGCPC or Licensee) in accordance with sections 49(1)(b)and 51 of the Electricity Act, 2024 (EA).

WHEREAS:

By email dated 2 July 2025, SGCPC submitted to URCA its Renewable Energy Plan (REP) for approval in accordance with section 51 of the EA.

In accordance with section 51(5)(a) of the EA, on 15 August 2025, URCA published a summary of SGCPC's proposed REP on URCA's website for public information purposes.

Section 51(5)(b) EA provides that 'URCA shall after publication of the plan, determine whether to approve the plan as consistent with the sector policy objectives and the national energy policy'.

In exercising its powers under section 49 of the EA, URCA has allowed persons with an interest in this matter a reasonable opportunity to comment on the proposed REP and URCA's Preliminary Determination.

NOW having considered the foregoing maters, **URCA HEREBY DETERMINES THAT**:

1. SGCPC is required to revise its REP dated 2 July 2025 to incorporate URCA's amendments set out in this Statement of Results and Final Determination and the accompanying annexes and submit the revised REP to URCA for URCA's review no later than fourteen (14) calendar days following the issuance of the Final Determination.
2. Once all of URCA's amendments are incorporated, SGCPC's REP will be deemed approved by URCA pursuant to section 51(2) EA.

Dated 27 March 2026

J. Carlton Smith
Chief Executive Officer

5. Order

This Order is enclosed by the Utilities Regulation and Competition Authority ('URCA') pursuant to section 49 of the Electricity Act, 2023 (EA), and issued in conjunction with the Final Determination.

WHEREAS by Final Determination made on 27 March 2026, URCA determined that pursuant to section 51 of the EA approved the Renewable Energy Plan of Saint George's Cay Power Company Limited (SGCPC) submitted to URCA on 2 July 2025 and later revised to include URCA's amendments that were detailed in the Final Determination to be consistent with the energy sector policy and objectives and the national energy policy.

In accordance with the role, functions and powers of URCA under the EA, URCA **HEREBY ORDERS THAT:**

1. SGCPC's REP including the amendments required by URCA's Statement of Results and Final Determination 07/2026 to become effective upon the incorporation of the URCA amendments.
2. SGCPC is required to incorporate all of URCA's amendments no later than fourteen (14) calendar days following the issuance of URCA's Final Determination.

Dated 27 March 2026

PENAL NOTICE: Failure to comply with this Final Determination and Order may result in URCA taking the appropriate regulatory action in accordance with the EA and Licence.

J. Carlton Smith
Chief Executive Officer

6. Conclusion and Next Steps

Having considered the responses to the Consultation Document as expressed within this Statement of Results, URCA has published the Statement of Results and Final Determination. The next steps are outlined as follows:

1. SGCPC is required to submit its revised REP incorporating URCA's amendments which are set out in this Statement of Results and Final Determination to URCA no later than fourteen (14) calendar days following the issuance of this Final Determination.

2. Once all of URCA's required amendments have been incorporated, SGCPC's REP will be deemed approved.

ST GEORGE'S CAY POWER COMPANY (SGCPC)

RENEWABLE ENERGY PLAN – EXECUTIVE SUMMARY – 1 July 2025

1.0 Background

1.1 This Renewable Energy Plan (REP) is required for St George's Cay Power Company (SGCPC) under its License from the Utilities Regulation and Competition Authority (URCA) regulations and The Bahamas Electricity Act 2024. (EA 2024). The REP describes how SGCPC intends to safely and sustainably grow and support renewable energy implementation and displacement of diesel fuel to make electricity.

1.2 Until now, 100% of our electricity has been from diesel-fueled gensets with no other generating sources. SGCPC enjoys exceptional reliability due to its construction, maintenance, and operational standards and controls.

1.3 The EA 2024 requires that this generation be accomplished in a least-cost manner that does not increase the cost of electricity to Customers.

1.4 To meet the least-cost requirement, SGCPC will build and own solar-energy (photovoltaic, or "PV") generating assets. PV represents the lowest possible capital investment and the best rate reduction proposition for Customers. This will include ground and roof PV Systems.

1.5 The only other potentially suitable renewable-energy technology that is technologically commercially viable are wind turbines. However, there are no commercial-size turbines available that are appropriately certified, are marine hardened, and can be operated to withstand the local wind speeds.

1.6 SGCPC also will allow and encourage Customers to install PV Systems that they may own themselves. Those systems must comply with SGCPC requirements and industry standards and best practices and not compromise the safety of the SGCPC system or network. All these systems will require approval from Town Council (as with any local property modifications that affect the appearance, access, and safety of a property), a permit from Ministry of Works (the same as any electrical work on a premise), and an application and approval from SGCPC. Without these three steps, a privately owned PV System cannot be connected to the SGCPC grid. These are not new requirements. Permits and approvals are enacted by the public to protect the public's safety and interests in their communities.

1.7 Customer-owned solar energy is not favored economically because it may result in electricity costs increasing for grid electricity. That is because this practice results in less grid electricity sold by SGCPC and therefore the application of fixed costs to less sold energy – resulting in higher cost. There also is higher capital investment by the community per unit of energy (because of lack of economy of scale).

1.8 The allowable sizing of Customer-owned PV Systems is based on guidance and regulations approved and implemented by BPL on New Providence Island. The SGCPC grid is approximately 1/100 the size of New Providence, so the limitations on SGCPC system sizing are roughly 1/100 compared to New Providence. That means, as an example, a residential PV System on Spanish Wells that is 10 kW power capacity would have an equivalent effect as a 1,000 kW PV system on the BPL New Providence grid.

1.9 SGCPC will compensate the owners of PV Systems installed on their premises for energy exported to the SGCPC grid, because that energy helps our community meet its 2030 and future goals. The compensation rate will be the monthly prevailing fuel charge rate

1.10 The REP anticipates the community will reach and exceed 30% by 2027 provided the REP is approved and the SGCPC projects move forward.

1.11 Adding batteries to the grid is essential to maintain grid stability as increased PV is added to the grid. Approaching or exceeding 50% power offset by PV (PV making half of the power at any moment during the day) is shown to cause problems with grid stability. Offsetting more than 10% to 15% of daily energy equates to close to 50% of the power during peak sun hours. The first PV farm being installed by SGCPC will offset approximately 15% of the annual energy, meaning more PV will require adding batteries.

1.12 SGCPC expects that the planned installation and operation of PV and ESS owned by SGCPC as described in the REP will allow SGCPC to reduce the cost of electricity for all Customers that are buying grid electricity.

1.13 There is a significant risk associated with privately owned PV Systems that SGCPC has observed around our community. One SGCPC's technicians received an electrical shock when working on the meter for a home with PV equipment that should have been de-energized under the operating circumstances. Safety of the public and our crews is the most important priority. It also is clear that many are not designed or built to withstand 180 mph hurricane winds. Without adequate oversight and authority, privately owned systems put SGCPC technicians, the grid, and their neighbors at risk due to uncontrolled energy export and potential for wind damage. Wind-blown PV panels ("modules") for instance can fly hundreds of feet and damage otherwise unharmed buildings or property.

2.0 Definitions and Key Terms

2.1 "PV" means photovoltaic, or the process of making electricity from the sun. The panels on the roof are also called PV "modules".

2.2 "PV System" means an assembled system of PV modules (the "array"), rapid shutdown components (if installed), an inverter (to turn the DC electricity from the PV module to AC electricity to use in the home), the racking system (whether on the roof or ground), and associated wiring. A PV System may or may not include an ESS.

2.3 "Point of Interconnection", "POI", means where the PV System is physically connected to the grid. This can be at the house main electrical panel or anywhere else on the Customer side of the SGCPC meter.

2.4 "Energy Storage System", "ESS", means a battery with the associated electrical and safety components necessary to safely store and dispatch energy as needed. The ESS includes an electronic device that is an inverter (turns DC to AC current) and a rectifier (turns AC to DC current). The ESS must be certified to the UL-9540 safety standard and all larger ESS include a fire-protection system. Battery fires are very dangerous and often cannot be extinguished until they burn completely.

2.5 "Power": Like the speedometer of a car. The rate of doing work. Power is measured in kilowatts (kW) or megawatts (MW). There is no factor of time in the measurement of power. A PV System size refers to the kW or MW of power capacity. Operating this system over time makes energy. Similar to a car going 30 miles an hour (like the "power") for 2 hours goes 60 miles (like the "energy").

2.6 "Energy": Like the odometer of a car. The capacity to do work. Energy is measured in kilowatts-hours (kWh) or megawatts-hours (MWh). Energy is the use of power over time.

2.7 "Yield" means the energy produced in a year by a certain power size of a PV System. While the Power of a PV System remains the same no matter where or how it is installed, the Energy it produces changes with the location and installation details. Yield depends on direction the PV modules are pointed (south, east, west) and their tilt angle, and various electrical factors. Usually, yield is in the range of 1400 to 1600, meaning a 10 kW PV System would produce 14,000 to 16,000 kWh a year.

2.8 "DC vs AC rating" means the power capacity for a PV System stated in kW-DC or kW-AC. The kW-DC is the total of the power of all the PV modules. The kW-AC is the AC output power of the PV Inverter. Usually, the engineer will design the PV Inverter smaller than the PV Modules, using a ratio in the range of 1.2 to 1.3 for roof systems or 1.3 to 1.4 for ground systems. The Yield also changes for systems stated in their AC rating; that typical yield is closer to 2,000 kWh per year per kW-AC of PV power capacity (compared to 1,400 to 1,600 stated above in Section 2.7).

2.9 "Off-Grid System" means a PV System that has no connection to the SGCPC grid.

2.10 "Levelized Cost of Energy" (LCOE) means the cost today and for the life of the PV System in $ per kWh of energy. It is calculated as the total cost of installation and operation for the 25–30-year life divided by the total energy produced over those years.

2.11 "Islanding" means the ability of a PV System to produce power when there is no grid voltage present at the system's POI. A PV System without an ESS is certified to be "anti-islanding" meaning it can never make power without being connected to an operating grid. A PV System with an ESS can make its own power without the grid, but it is essential for safety that this system NOT be connected to the grid and producing power and exporting energy to the grid when

the grid is not energized by the utility company (SGCPC) because that could easily electrocute a worker or someone responding to an emergency.

2.12 "Rapid Shutdown" means a safety component that turns off dangerous voltage within a PV array when the AC side of the inverter is turned off. Without rapid shutdown, it is likely that dangerous voltage as high as 600 V or 1000 V on a roof may be present, posing a safety risk to workers or emergency responders. Rapid shutdown is required by most electrical codes but not required in the Bahamas. It is considered a "best practice" for residential installations.

3.0 System Types and Sizing

3.1 There are two PV System types included and allowed by the REP. The difference is in the grid connection.

3.2 PV System (see Section 2) may or may not include an ESS and it is interconnected to the grid.

A. There is a significant safety challenge to SGCPC technicians and the public associated with PV Systems installed with ESS. If the system is installed exactly as designed by the engineer and intended by the manufacturer's instructions, then it is safe for norma operation. But if not, it is possible for the ESS to energize the grid when the grid is turned off. Because of this risk, these systems will require more thorough inspection by SGCPC to confirm the safety of the installation.

B. The size limitations for PV Systems are described in the Grid Interconnection Requirements (GIR). This document will be posted on the SGCPC website once approved by URCA. The limitations are based on the smaller of three measures:

(1) Maximum size of 30 kW.

(2) Size where Customer will use more electricity in a year than they produce ("net user" and not "net producer"). A net producer would be subject to different requirements under the EA 2024.

(3) a size deemed safe and reliable for the distribution and interconnection circuits.

3.3 An Off-Grid System has no grid connection. It is very similar to a PV System with ESS except there is no SGCPC meter or use of the grid. An off-grid system requires URCA approval. When an Off-Grid system's battery is depleted, the premises lose power. They can run a backup generator only during emergencies such as if the main power source is not available.

4.0 Connection Requirements, Application Process, and Fees

4.1 SGCPC encourages Customers to refer to the SGCPC Interconnection Requirements prior to paying deposits or signing contracts. Compliance is required and non-compliant systems will not be allowed to operate without the proper approvals.

4.2 The application process and forms will be posted on the SGCPC website, and any Customer can call the SGCPC business office any time to discuss their desired project or if they want SGCPC to consider their roof for a utility-owned system. The GIR describes the application and approval process.

4.3 The Customer shall employ a Bahamian-licensed electrician and follow published Codes and Standards. Grid-tied PV inverters shall be "anti-islanding" UL-1741 listed and IEEE-1547 certified. Other requirements are included in the GIR and Grid Interconnection Application (GIA).

4.4 Customer accepts the risk for installation, operation, performance. Customers shall have a liability insurance policy for the PV System as described in the GIR and GIA.

4.5 The fee structure is based on the time and effort required by SGCPC and its engineers to review documentation, inspect installations, and process approvals. The fees will be posted on an official Fee Structure Addendum on the SGCPC website.

ST GEORGE'S CAY POWER COMPANY

RENEWABLE ENERGY PLAN (REP)

2 July 2025

Table of Contents

1.0 Definitions

1.1 Refer to the SGCPC Glossary and Definitions for further clarification of technical terminology.

2.0 Background

2.1 The Utilities Regulation and Competition Authority (URCA) is The Bahamas' independent regulatory authority with responsibility for and authority over all entities that generate, transmit, distribute, or supply electricity to, from, or within The Bahamas.

2.2 St George's Cay Power Company Limited (SGCPC) was formed in 1982 and has 150 local shareholders. URCA granted License APESL-18-0003 to SGCPC in 2018 to generate, distribute, and sell electricity in its service area, and as a licensee it is required to follow all applicable policies, legislation and regulations.

2.3 SGCPC serves Spanish Wells and Russell Island. SGCPC has approximately 1300 customers, consisting of residential homes, rental homes and apartments, businesses, docks, and private properties with no premises.

2.4 Growth of Customers and energy consumed has been in the range of 1% to 3% annually. The analysis of trends is hindered by the COVID pandemic. The pandemic affected the energy consumed, the growth of the Customer base, and other factors. Please refer to Table 1 and Figure 1 for details.

Table 1: SGCPC Energy and Customer Data & Future Estimates

	a	b	c	d	e	f	g
		Energy [MWh]					
	Year	Generated	Sold	Customers	Change from previous year		
1	2018	10,898	10,076	1,161			
2	2019	11,007	10,178	1,194	Total	Non-VAT	VAT-able
3	2020	11,116	10,281	1,204	NA	NA	NA
4	2021	12,046	11,154	1,214	8%	-17%	23%
5	2022	11,881	10,999	1,232	-1%	-33%	11%
6	2023	12,080	11,186	1,265	2%	68%	-14%
7	2024	12,155	11,256	1,294	1%	12%	-4%
8	2025	12,335	11,425	1,313			
9	2026	12,517	11,596	1,333			
10	2027	12,703	11,770	1,353			
11	2028	12,891	11,947	1,373			
12	2029	13,082	12,126	1,394			
13	2030	13,275	12,308	1,415			

NOTE: Data for 2025 through 2030 are estimates.

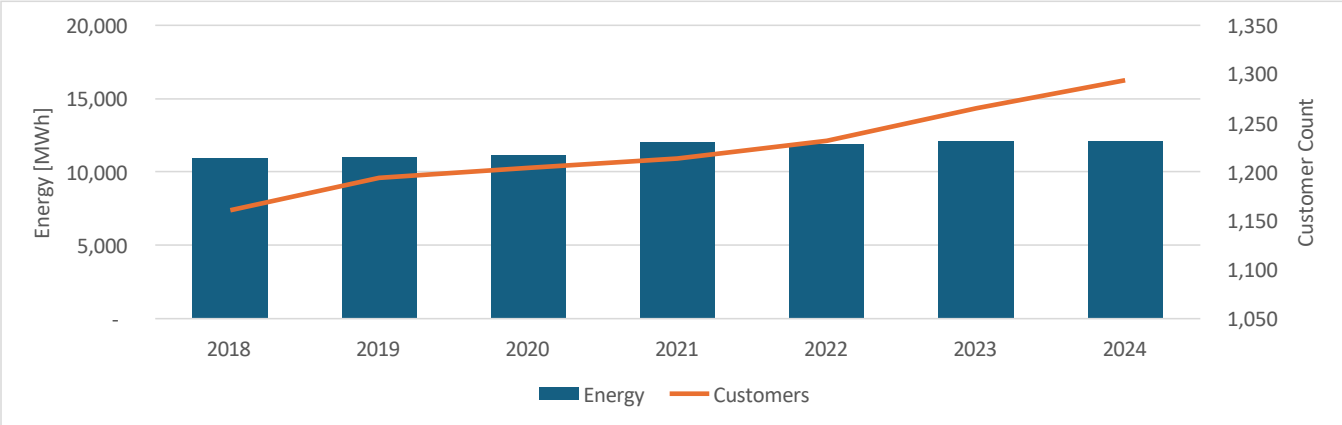

Figure 1: SGCPC Energy and Customer data

2.5 Year-over-year change in Non-VAT and VAT energy sold is noteworthy.

A. "Non-VAT" energy (column f) is where the monthly consumption by a Customer is less than $400, or approximately 1,000 kWh for the month. These Customers are exempt from paying VAT on their electricity purchases. This is intended to provide a community benefit to Customers that consume much less energy than typical premises.

B. Consumption of energy by Non-VAT Customers has increased significantly although inconsistently since 2020.

C. "VAT-able" Customers (column g) are those premises using more than $400 of electricity in any month. Consumption of energy by VAT-able Customers has dropped significantly in the last two years. Part or all of this may be the result of privately owned PV Systems.

D. SGCPC has only recently started installing bi-directional meters that record delivery and export of energy. This will make future analysis easier and clearer. Some of the bi-directional meters already installed as of this writing are indicating some Customers are exporting as much as 50% or more of their consumption. That indicates the PV System is significantly over-sized pursuant to proposed rulemaking and in comparison to BPL service areas. Refer to the SGCPC Grid Interconnection Requirements (GIR) on the SGCPC web site.

2.6 Until now, 100% of electricity has been from diesel-fueled gensets with no other generating sources. SGCPC is burning approximately 1,000,000 gallons of diesel a year and releasing 14,000 tons of CO_2 into the atmosphere every year.

2.7 SGCPC enjoys exceptional reliability due to its construction, maintenance, and operational standards and controls. SGCPC typically averages less than one unplanned outage a year.

2.8 Outages in other geographical regions of the Bahamas are far more frequent averaging as high as one outage a week or sometimes as frequently as 1-2 times a day.

2.9 SGCPC customers expect that SGCPC will maintain our record for the best reliability in the Bahamas. This requires ongoing management and control of the electrical grid network.

2.10 Compared to New Providence, the SGCPC power grid is approximately 1/100 the size, with roughly 1% of the peak power capacity and annual energy production. As such, limits and sizing of renewable-energy capacities and total allowances are generally scaled to 1% of the relevant metrics applied on New Providence Island.

A. For example, a solar-energy system operating on Spanish Wells with a power capacity of 10 kW would be equivalent to a system on New Providence with a power capacity of 1,000 kW (1 MW) with respect to its impact to the grid and its electrical and financial stability.

2.11 All Licensees are required to follow the Electricity Act 2024. (EA 2024). EA 2024 mandates the following.

A. Encouragement of competition in the generation of renewable electricity.

B. Development of plans that favor and promote the use of renewable energy "in the absence of competing reliability or cost considerations."

2.12 Licensees therefore are obligated to incorporate renewable energy in their generation portfolio and allow others to install renewable-energy systems on their premises provided that those systems do not compromise the safety of the Licensee's personnel, the community, or reliability and safety of the grid.

2.13 This mandate and prudent business operating practices require Licensees to employ the least-cost options, or options that do not represent an additional financial burden on the Licensee.

2.14 Pursuant to EA 2024 Section 51(1) and 53(1), SGCPC will ongoing monitor its generating capacity and loads, determine the need for additional generating capacity and whether that should be accomplished using renewable sources.

A. Should SGCPC decide that there is a need for additional renewable-energy generating capacity, SGCPC will notify URCA and provide justification for its decisions.

B. Should SGCPC decide to solicit competitive bids for electricity from Independent Power Providers, SGCPC will follow the requirements of Section 53 of the EA 2024.

2.15 Until now, many SGCPC Customers have installed their own solar-energy systems. Using terminology in this REP and accompanying documents, these are believed to be all PV Systems, some with or without ESS. (Refer to "Glossary and Definitions" document.) Without installation information, SGCPC is presuming none of them are Off-Grid Systems.

A. Based on an aerial and ground survey, as of June 2025, there are 46 PV Systems installed on Spanish Wells and Russell Island. Based on typical PV module sizing, this is estimated to be 430 to 540 kW-DC power capacity. Table 2 line 20 for calendar year 2025 reflects this as a single number, 400 kW; this is converted from kW-DC to kW-AC as the AC basis is the standard for all utility calculations.

B. Using the scaling discussed above, this is generally equivalent to what would be an unauthorized 43 MW to 54 MW of PV installed on New Providence Island (please refer to section 2.10, above). That would be a massive, unlicensed PV powerplant on New Providence, occupying more than 100 acres of land. That is the magnitude of the challenge faced here by SGCPC and the community.

C. These installations produce roughly 5.5% to 7.5% of total SGCPC energy sales and fossil-fuel offset. From the energy perspective of meeting 2030 and future carbon goals alone, this is a good outcome.

D. However, none of these installations are properly permitted or approved to operate. None of these existing system owners received approval from SGCPC. As far as SGCPC is aware, none of these systems were submitted to Town Council for review/approval or to Ministry of Works for a permit.

E. Evaluating some of them visually, SGCPC has reason to believe some of them are not installed to industry best practices or compliant with Code requirements. Many of them likely would be heavily damaged or destroyed by a hurricane of the magnitude required by Code. All of that flying debris would impact somewhere else – likely on a neighbor's property and hopefully not injuring others.

2.16 The power capacity of PV installed on any grid is typically limited to 50% of instantaneous demand if there is no ESS installed. Exceeding 50% PV penetration can cause grid instability and failures.

A. The estimated installed capacity of privately owned PV Systems is already exceeding 35% of the power demand on the grid (line 21 on Table 2).

B. Once SGCPC completes the Phase-1 PV Farm, the threat to grid stability will increase due to the higher PV Penetration fraction. This may require the automated curtailment of PV Systems or addition of ESS.

3.0 Energy Consumption and Expected Load Growth

3.1 The 2024 energy consumption for the SGCPC service area was approximately 12,000 MWh, or approximately 33 MWh a day average. Peak power demand is approximately 3.2 MW. These statistics correspond to less than 1% of the size of the New Providence service area.

3.2 Service-area consumption has been growing at 1% per year. This trend is expected to continue.

3.3 SGCPC in meeting its License conditions, Government policy, and URCA regulations, has decided to meet this demand at a minimum to the national target of 30% by 2030 using solar-energy systems.

3.4 In accordance with Section 53 of the EA this Renewable Generation can be met through a mix of larger MW-scale and smaller kW-scale installations. Please refer to this Plan and associated documentation for further details on justification pursuant to EA Section 53(2)(b). As noted elsewhere in this REP, larger installations of both PV and ESS will result in better economies of scale, lower capital investment by the community at large, and lower cost of energy.

3.5 SGCPC will also have to implement large-scale Energy Storage Systems (ESS) to support the growth of solar energy on the grid. The ESS is required to maintain grid stability with the addition of SGCPC-owned and Customer-owned solar assets.

3.6 SGCPC has an installed thermal capacity of 5 MW in existing diesel gensets. All assets are owned by SGCPC and there are no other providers under contract with SGCPC. Currently, SGCPC operates with low spinning reserves on the order of hundreds of kW of power capacity because of the consistent and predictable load profile. Given this balance of load and capacity, the Loss of Load Expectation (LOLE) is close to zero. This stability is evidenced by the outstanding reliability statistics for our Customers, although risk is added to this performance benefit due to unmanaged, unauthorized, and uncontrolled Customer-owned generating assets interconnected to the SGCPC grid.

4.0 Outlook

4.1 SGCPC expects Customers to continue to install privately owned PV Systems.

A. Going forward these will be restricted to the limitations posted in the GIR, and all installations no matter when installed will require approval from Town Council, permitting by the Ministry of Works, and inspection by and authorization to operate from SGCPC.

B. All installations will have a bi-directional meter installed to record separately the energy delivered and the energy exported back to the grid. SGCPC will pay Customers for the exported energy.

C. Ideally all Customers considering solar energy will carefully review the information on the SGCPC website and calculate their financial performance before investing. This is a major investment, and anyone buying a solar-energy system should scrutinize any proposal and shop just as carefully as if they were spending that sum on their home, like a kitchen remodel or new swimming pool.

4.2 SGCPS is mandated by EA-2024 and the terms of its License to maximize the amount of renewable generating sources used to supply electricity to its service area in alignment with national goals included in the Bahamas National Energy Policy.

4.3 SGCPC faces the same challenge as utility companies and communities around the world: provide reliable supply of power and energy, manage costs, remain financially sustainable, reduce use of fossil fuels to make electricity, reduce environmental risk and impacts.

4.4 SGCPC and all utility companies need to achieve these goals while adapting to technology that allows Customers to generate solar electricity themselves.

4.5 This Renewable Energy Plan (REP) and associated documents is the SGCPC plan for managing the grid and moving into the future as a Community. SGCPC will update this REP annually and submit the updated REP to URCA on an advisory basis.

4.6 Every three years, SGCPC shall submit to URCA for review as required in the EA 2024 Section 51.3. This submittal by SGCPC shall address sub-sections (a) through (g) of Section 51.3.

4.7 Every year, SGCPC will submit an annual report compliant with Section 51.3(f) describing progress regarding this REP plan.

5.0 Renewable Technology Options and Selection

5.1 Preamble. The Definitions section of EA 2024 defines "Renewable Electricity Resources" as resources that derive electricity from sources that are naturally replenished. This includes but is not limited to solar energy, wind, hydropower, geothermal, biomass, wave power, ocean thermal power and waste-to-energy technologies.

5.2 Of these technologies the most appropriate for an electricity utility of the size and character of SGCPC are solar ("PV") and wind.

5.3 Photovoltaic (PV)

A. PV is the only technology considered to be viable and practical at the scale needed by SGCPC and the community.

B. PV can be engineered and constructed to survive 180 mph winds with excellent corrosion resistance for a 30-year warranty service life.

C. There is no resource study required to deploy PV, since the solar resource is uniform across the Service Area and indeed the entire Bahamas.

D. There is no noise or other disturbance associated with a PV system.

5.4 Small wind turbines

A. SGCPC does not consider wind energy as a viable resource for our Service Area.

B. There are no large-scale turbines on the market that have sufficient wind rating for this locale.

C. Turbines would have to be the type that can be lowered, secured, and protected during a hurricane, typically smaller than 30 kW.

D. Lowering a turbine requires additional ground space for the turbine in its horizontal orientation.

E. Wind turbines do produce a sound pattern and shadow pattern that are undesirable to some people.

F. The wind resource is not continuous across the Service Area, and a wind-resource study would be required before deciding to deploy wind turbines. This would further delay use of wind turbines for meeting the 2030 goals.

5.5 Marine-based energy production

A. SGCPC considers these systems to not be commercially viable for the Bahamas. This includes tidal, wave, or thermal-energy conversion cycle systems.

B. SGCPC does not consider marine-based energy as a resource for our Service Area.

5.6 Renewable energy systems that generate electricity using a technology other than or in addition to photo-voltaic generation shall first be submitted to URCA for approval. URCA will consult the relevant stakeholders, including SGCPC, when deciding approval.

6.0 Structure and Analysis of the SGCPC Renewable Energy Plan (REP)

6.1 Preamble: SGCPC considers that there are several implementation pathways to achieve the 30% National Integration Target mandated by the National Energy Policy of the Bahamas. These include the following options. The pros and cons of each are discussed in the following paragraphs.

A. Large-scale PV on land owned or leased by SGCPC and constructed, installed, and operated by SGCPC.

B. Medium-scale PV on Customer premises constructed, installed, and operated by SGCPC.

C. Small-scale PV Systems or Off-Grid systems installed by individual Customers.

D. A combination of the above options.

6.2 In addition to offsetting 30% of diesel generation by 2030, the goals of this REP are to reduce energy costs to the community, improve grid reliability, reduce carbon emissions, reduce environmental risk, reduce air and noise pollution, provide frequency stability, and provide black-start capability.

6.3 Table 2 represents the SGCPC plan for PV and ESS deployment.

6.4 Initially, SGCPC intended to deploy as much PV as possible without the added investment of ESS. This limit is approximately 15% of annual energy production or 50% of instantaneous power demand. Given the growth of Customer-owned PV Systems that could export power to the grid, SGCPC has recognized that an ESS will be required as part of the Phase-1 PV Farm Further growth of PV will require additional ESS installations. This is posted on lines 19 and 20 of Table 2.

6.5 Phase-1 PV Farm

A. SGCPC has aggregated and purchased sufficient land adjacent to the Powerplant for the Phase-1 PV Farm.

B. This will offset approximately 13-15% of the annual energy consumption and about 1/3 of the demand power capacity.

C. The diesel powerplant will continue to run continuously with the Phase-1 PV Farm operating.

6.6 Phase 2 of the REP; SGCPC-owned Distributed Energy Resources (DER) on customer-owned premises.

A. Land is limited for generating resource siting, and land costs are high on Spanish Wells and Russell Island.

B. Because of this land shortfall, SGCPC intends to install and operate PV systems on the roofs of commercial (and possibly also residential) buildings.

C. SGCPC will pay an annual lease payment to the building owner.

D. SGCPC will pay all capital investment and operational expenses for the PV system(s) including liability insurance.

E. The lease rate will be based on the power capacity of the PV system and the expected financial performance of the installation. Financial performance will be evaluated on the ability to maintain or reduce SGCPC operating expenses and ultimately continue to be able to reduce customer rates.

6.7 Phase-3 PV Farm.

A. SGCPC has identified other suitable land for the expansion of the SGCPC-owned, ground-based PV array approach. This REP anticipates that the phase could have a Commercial Operations Date (COD) in 2027.

6.8 The annual energy consumption, fossil-fuel and expected PV energy production are depicted in Figure 2. This graph also includes the ESS power required as noted elsewhere herein.

Figure 2: SGCPC Energy Consumption, Sources and ESS Deployment

6.9 The LCOE from diesel fuel alone is approximately $0.33/kWh ($330/MWh) in 2025 dollars. This is driven primarily by the cost of diesel fuel, and also includes motor oil, service, preventative maintenance, and repairs. Refer to Glossary and Definitions for explanation of LCOE.

6.10 Adding PV to the grid will lower the energy generating cost because the LCOE for PV alone is much lower than the LCOE for diesel-fueled electricity. For example, the net change in LCOE resulting from the Phase-1 solar farm will be approximately a 10% reduction.

6.11 Once the PV power production compared to demand approaches 50%, reports from similar small utilities indicate that grid instability may result.

6.12 Adding ESS to the SGCPC grid will Improve stability, enable adding more PV capacity. When reaching higher PV penetration fractions it would be possible to shut down the diesel powerplant for part of the day depending on load and weather conditions.

6.13 The LCOE is reduced as PV and ESS are added to the grid, until reaching a Lowest LCOE (LLCOE). This is based on the capital investment (CapEx) and operating expenses (OpEx) for the powerplant. Based on the cost of diesel fuel in 2025, the LLCOE is realized when PV is making about 90% of the energy. Figure 3 depicts a typical comparison of PV penetration scenarios of this nature. This is calculated using the HOMER Energy ® analytical platform.

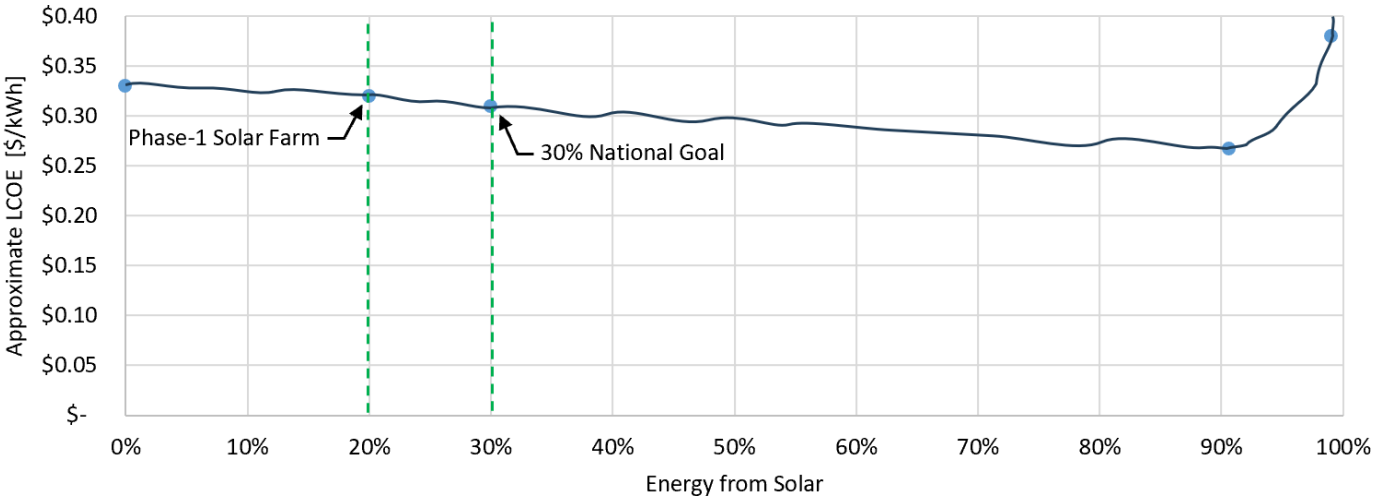

Figure 3: Approximate LCOE Scenario Comparison

6.14 The lowest-cost option for production of electricity is through SGCPC-owned PV and ESS (refer to Table 3). Because of this mandate in EA 2024, SGCPC favors electricity produced by SGCPC-owned solar-energy assets.

A. The Levelized Cost of Energy (LCOE) is defined in the Glossary and Definitions document. The inputs to the LCOE calculation are capital investment and the annual expense for operation and maintenance.

B. The larger the quantity of equipment being purchased (in any industry) the lower the cost. When SGCPC is buying materials at MW-scale pricing, the capital cost for equipment will be lower than the cost of equipment by homeowners at the residential scale. The cost of equipment typically may be as much as 50% less at the MW scale.

C. The cost of labor is similarly lower for MW-scale projects compared to residential-scale projects.

D. These equipment and labor effects result in a significantly lower capital investment for the MW-scale project.

E. The cost for operation and maintenance is similarly optimized for MW-scale projects compared to residential-scale projects.

F. The other factor in the LCOE calculation is energy production. The energy produced by MW-scale PV arrays will be optimized for direction and tilt (including consideration of wind forces) to produce the most electricity and highest yield and capacity factor compared to the residential projects that are limited to the direction and tilt of the building roof.

G. These two factors combined result in the LCOE for MW-scale projects that is significantly lower than residential-scale projects. Refer to Table 3.

6.15 There are options for combining PV and ESS to achieve different operational profiles and performance metrics. Below are three points of consideration for this REP.

6.16 Achieving the 30% National target (consumption adjusted for annual load growth) with minimum ESS for grid stability.

A. This will require approximately 1.8 to 2 MW-AC of PV capacity and a small ESS to maintain grid stability.

B. In this scenario, the diesel generators would still run continuously, or 8,760 hours a year.

C. This 30% configuration would reduce the LCOE by approximately 10% to 15% compared to diesel generation alone and based on the expected consumption growth.

6.17 Achieving the Lowest LCOE, or "LLCOE" (consumption adjusted for annual load growth), exceeding the 30% National target.

A. There is not enough land or roof area on Spanish Wells or Russell Island to support this option. This would be a practical goal only if the PV System was located on North Eleuthera with a submarine cable interconnection. This has been done elsewhere in the Bahamas between islands as far apart as several miles.

B. This will require approximately 7 to 8 MW-AC of PV capacity and 25 to 35 MWh of ESS energy storage.

C. The LLCOE for this optimal configuration is approximately 20% less than the cost of traditional diesel generation based on current diesel-fuel pricing.

D. This LLCOE system would displace approximately 90% of the diesel fuel with solar electricity and would enable turning off the diesel powerplant for approximately 80% of the year, reducing powerplant generator runtime from 8,760 hours to approximately 1,400 hours a year.

E. This would allow a reduction in the cost of grid electricity for all SGCPC Customers.

6.18 Ground-based PV Systems typically require 2.5 to 3 acres per MW-AC of power capacity. The land for the 2030 target options would be 5 to 6 acres. The land area required to build the LLCOE system referenced above would be approximately 20 acres.

6.19 SGCPC will install a fiber-optic network with a control platform for monitoring grid loads and PV production from SGCPC- and privately-owned PV Systems. This system will allow SGCPC to turn down or off various PV Systems as needed to maintain grid stability.

7.0 Perspective on Privately Owned Renewable Energy Systems

7.1 SGCPC supports the ownership of private PV Systems on Customer premises. Pursuant to Sections 54 and 55 of the EA 2024, Persons are allowed to install solar-energy systems on their own property. But it is essential that this be done in compliance with the building and electrical codes, that the Town Council approves the project (they need to approve anything as minor as a yard fence), the Ministry of Works issues a permit (required for all electrical projects), and SGCPC reviews, inspects, and approves the installation.

7.2 SGCPC recognizes there is a strong financial incentive for Customers to invest in their own renewable energy systems if they have the financial resources to do so. The LCOE from a privately owned PV System is approximately $0.12/kWh (refer to Table 3) compared to the utility's regular retail rate. Note, however, that the LCOE from a PV System with ESS is significantly higher than this amount because the ESS adds significant cost but does not itself produce any more energy.

7.3 Privately owned renewable-energy systems may result in the cost of grid electricity increasing for SGCPC Customers.

A. That is because privately owned solar-energy systems result in less energy produced and sold by SGCPC, and that forces SGCPC to spread the fixed expenses across less energy sold.

B. Additionally, Customer-owned PV Systems will cause SGCPC to buy ESS capacity sooner than would otherwise be required. That becomes another fixed expense to apply across all energy sold.

7.4 As of the date of this REP, there are 46 unpermitted PV installations in the Service Area.

A. SGCPC has no information regarding the code compliance of these installations or knowledge of whether they are installed pursuant to the manufacturer's installation requirements or industry standards and best practices. SGCPC is aware of one system that is installed incorrectly that resulted in

an electrical shock to SGCPC personnel when working on what should have been a de-energized meter installation. Luckily that technician was not permanently harmed.

B. A general survey of these systems leads to the conclusion that the installed capacity is somewhere between 360 kW-AC and 450 kW-AC.

C. It is unknown whether these installations are grid-tied or not. For safety reasons, SGCPC considers all these unpermitted PV Systems to be grid tied.

D. In accordance with EA 2024, Section 54(8) non-compliant systems may be disconnected from the grid. Once the REP is approved by URCA, SGCPC will institute a program to get all existing PV Systems processed for inspection.

7.5 SGCPC will recognize two types of renewable-energy systems. These are (A) Grid-tied PV System; and (B) Off-Grid PV System. These methods are further described in the current SGCPC Grid Interconnection Requirements (GIR). All equipment shall be UL listed for the intended purpose and installed pursuant to all manufacturer instructions. SGCPC will inspect all installations to ensure compliance and promote safety for SGCPC technicians and the general public. Refer to the GIR for further guidance and requirements.

A. Grid-tied PV System. Customers may buy and install a Grid-tied PV System and own and operate it themselves. A "PV System" may or may not include an ESS at the Customer's preference.

1. A Customer-owned Grid-tied PV System uses the SGCPC grid for power and energy when the PV System is not producing sufficient power and energy for the premise loads.

2. A PV System may be interconnected to the SGCPC grid and may export excess electricity to the grid for reimbursement by SGCPC at the prevailing tariff rate. The SGCPC grid in this case provides the voltage source that enables the PV System to operate. This is a critical "network service" provided by SGCPC to the Customer at no cost.

3. Should a Customer opt to install an ESS, it is particularly urgent that all equipment shall be UL listed "for the intended purpose" and installed pursuant to all manufacturer instructions. There have been instances where SGCPC technicians have been electrically shocked by incorrectly installed renewable energy systems including ESS on Customer premises. SGCPC will inspect all installations to ensure compliance and safety for SGCPC technicians and the general public. Refer to the Grid Interconnection Requirements (GIR) for current requirements and guidance.

4. SGCPC will promptly disconnect and lock out any Customer equipment should any systems be found to be non-compliant with the GIR, not installed pursuant to manufacturer's instructions, not UL listed for intended purpose, or otherwise deemed unsafe by SGCPC.

B. Off-Grid PV System. Customers may buy and install a PV System with ESS, and own and operate it themselves completely independently from the grid. This installation shall be physically isolated from the grid with no SGCPC meter or interconnection.

1. An Off-Grid installation should be engineered to support 100% of the energy consumption requirements of the premise, and the premise cannot use the SGCPC grid for power or energy when their ESS is depleted. Pursuant to EA 2024, a backup genset shall not be used for power generation beyond "emergency purposes" unless the installation has authorization from URCA to do so. Backup gensets operating during cloudy weather or other conditions because of inadequacy or dysfunction of the Off-Grid system is reportable to URCA for enforcement action.

7.6 Pursuant to EA 2024 Section 55, SGCPC will support the installation of solar-energy systems to supply energy for Government entities and for small-scale business or commercial enterprises, provided those systems comply with the SGCPC Interconnection Requirements.

7.7 By authorization to operate from SGCPC and their installation, Customers that own Renewable Energy Systems acknowledge and accept full responsibility for their installed system. Owners that want to remain

connected to the SGCPC grid shall maintain in effect a liability insurance policy with limits as posted in the Interconnection Requirements to manage the risk associated with potential losses, as is typical and ordinary utility policy.

7.8 Customers are forbidden to supply electricity to any equipment or electrical loads that are not on the premises where the system is installed. Supply connections shall not extend across or beyond parcel boundaries.

7.9 PV SYSTEMS. These systems are subject to the capacities and total allowable grid limitations of Customer-owned systems are as prescribed in the SGCPC Grid Interconnection Requirements.

A. The allowable capacities are based on four (4) criteria.

1. Maximum connected power capacity.
2. Power capacity based on annual energy consumption to ensure Net Consumer status (and not Net Producer status).
3. Power capacity based on average power demand to ensure distribution circuit safety and integrity.
4. Maximum allowable PV capacity for the entire grid for grid stability without SGCPC incurring additional investment requirements for more utility owned ESS.

7.10 Owners of PV Systems as defined in the Grid Interconnection Requirements, will be required to adhere to the Fee Addendum for the initial, non-recurring. These fees include items such as installation of the SGCPC-owned, bi-directional meter, interconnection and ampacity studies (if needed), related safety components, and
periodic inspections. These costs are defined in the Fee Addendum.

7.11 Should a Customer with an approved PV System produce more electricity than they are using on their premises, SGCPC will compensate Customers for energy exported to the SGCPC grid.

A. The rate SGCPC will pay for energy exported by a Customer to the SGCPC grid will be equal to the monthly prevailing fuel charge rate.

B. The energy exported to the grid by Customer will be tabulated monthly and reflected on the SGCPC invoice.

C. There is no carry-forward or carry-back considerations. That means if a Customer produces more than they consume there is no credit to carry forward to next month or apply retroactively to last month.

D. Customers that export energy to the grid will not be compensated for energy value that is in excess of their monthly energy (kWh) consumption. This is subject to a monthly true-up; meaning a Customer with grid-tied PV that is exporting energy to the grid will only be reimbursed for the kWh up to the amount of their grid usage during any month. This should never happen, however, if the system sizing limitations are followed.

E. Since Grid-connected PV systems are intermittent and not dispatchable, they cannot be relied upon to reduce distribution losses or provide benefit for load control or demand response. This, combined with

no control over production or performance, makes grid-tied PV unreliable with regard to generation assets or pricing structure.

F. The Customer-owned PV capacity shown on lines 19 and 20 of Table 2 represents the known and expected future growth of Customer-owned PV Systems. Some of these may be PV Systems or Off-Grid that are not grid tied (again noting SGCPC has no visibility in these installations). However, given the ESS has a service life and is costly to replace, the perspective for preservation of stability and safety is that these PV Systems with ESS may be reconfigured later into PV Systems without ESS. This capacity is used in the calculations in Table 2.

G. Should a Customer with a PV System not want to export power to the grid, the PV System should be sized during the engineering process to not produce more power than is demanded on the premises.

7.12 OFF-GRID PV & ESS. These installations do not have SGCPC-driven limitations on PV or ESS sizing. That is because these installations cannot be interconnected to the grid and do not affect the grid.

A. Approval is required for all renewable energy installations. For grid-tied PV systems, Customers shall apply to SGCPC for approval. For Off-Grid systems, persons shall apply to URCA for approval. EA 2024, Section 54(8) vests the responsibility and authority in SGCPC to turn off or disconnect any Customer system if SGCPC determines that installation may endanger the safety of persons or adversely impact the safety or stability of the grid.

7.13 In addition to SGCPC documents, Customers are required to comply with the Canadian Electrical Code (version as specified by Ministry of Works) and the ASCE 7-22 standard for wind forces on PV arrays (including the PV modules, racking system, attachments, foundations, and integrity of the structure).

7.14 SGCPC has great concern about the quality assurance and quality control of Customer-owned PV assets. Poorly engineered or installed private PV & ESS represent possible hazards and problems for the Community and the SGCPC grid.

A. Privately owned systems are more prone to be designed without proper regard and engineering oversight related to hurricane wind forces and effects. These pose a danger to neighbors during hurricanes resulting from failure of improperly engineered or installed racking and attachment systems and PV modules that are not designed for the possible wind forces in the region.

B. Improper installation or unlisted power electronics also can result in injury or death to SGCPC technicians that might be servicing or repairing grid components.

C. Poorly engineered private systems may damage the SGCPC generating plant and other customers' electronics resulting from signal distortion, uncontrolled variability, and exceeding power capacity stability limits.

D. SGCPC has already observed many PV systems installed on roofs and on the ground in our service area that are not in compliance with wind codes, standards, and best practices that represent a high likelihood of failure during a strong hurricane.

E. To protect the public welfare and minimize the chance that privately owned systems will result in injury to persons or damage to private property during a high-wind event, SGCPC will require that Ministry of Works assess the structural stability and compliance with ASCE 7-22 as part of the permitting process and before grid interconnection.

8.0 Procedure for Customer-Owned PV Systems

8.1 Customers wishing to build their own renewable-energy systems are encouraged to thoroughly assess the SGCPC website in advance of signing contracts or paying deposits. The relevant documents include the following.

A. Grid Interconnection Application (GIA) and GIA Terms and Conditions.

B. Grid Interconnection Requirements (GIR).

C. Fee Structure Addendum.

8.2 Customers are welcome to contact SGCPC in advance to discuss and explore the feasibility of their plans. SGCPC recommends that Customers also gain some education on solar energy prior to paying deposits or signing contracts for the installation of any renewable energy electricity generation system. Failure to conduct adequate due diligence is solely the onus of the buyer of the project.

8.3 Refer to the GIR for the approval process. Customer-owned PV Systems may operate in parallel with the grid once fully authorized and approved.

8.4 SGCPC shall timely review and process all applications for Customer-owned PV Systems pursuant to EA 2024 Section 54 and 55. Approval from Town Council and a permit from the Ministry of Works is required prior to SGCPC inspection.

8.5 Customers seeking this approval should refer to the URCA and Ministry of Works websites for documentation. The SGCPC Grid Interconnection Application (GIA) and Grid Interconnection Requirements (GIR) are made available on the SGCPC website.

8.6 Installing electrician.

A. Installation by a single or three-phase electrician who is licensed in The Bahamas is required. A copy of the electrician's license shall be included in the application package.

8.7 Customer application requires agreement to allow SGCPC to conduct annual safety inspection of wiring and compliance with manufacturer's criteria and UL listing
performance measures. SGCPC will not have control over private renewable energy systems, for modification or operations, unless it enters into a contractual arrangement with the owner to do so.

8.8 Customer accepts the risk for installation, operation, performance.

8.9 Customers must have a liability insurance policy as described in the SGCPC Interconnection Requirements.

9.0 Procedure for Off-Grid Systems

9.1 Owners should refer to the SGCPC Grid Interconnection Requirements (GIR), EA 2024, and URCA documentation prior to paying deposits or signing contracts. Off-Grid systems require URCA approval in addition to other approvals detailed in the GIR. Compliance is required and non-compliant systems will not be allowed to operate without the proper approvals as required by the GIR.

9.2 Approval steps.

A. Please refer to the URCA and Ministry of Works websites for their specific documentation. Required SGCPC forms and information will be available on the SGCPC website.

B. This is a clear and straightforward process to ensure safety for grid technicians.

9.3 Installing electrician.

A. Installation by a single or three-phase electrician who licensed in The Bahamas is required. A copy of the electrician's license shall be included in the application package.

9.4 Customer application requires agreement to allow SGCPC to conduct annual safety inspection of wiring and compliance with manufacturer's criteria and UL listing performance measures.

9.5 Customer accepts the risk for installation, operation, performance.

9.6 Customers must have a liability insurance policy as defined in the Grid Interconnection Requirements.

10.0 Documentation requirements for All Renewable Energy Systems

10.1 These same requirements apply whether the system is owned by a Customer or SGCPC directly. Except SGCPC-owned systems will always be certified and sealed by an Engineer licensed in the Bahamas.

10.2 It is highly recommended, but not required, that drawings be sealed by a licensed Engineer.

10.3 Drawings shall include a site plan showing location and connection(s) among all components.

10.4 Data sheets for PV modules, PV inverters, racking systems, and other major equipment. Home-made racking systems will require an engineer-sealed analysis of the structure to ensure it is designed to withstand 180 mph hurricane winds. For ground arrays that includes the foundations. For roof arrays, that includes the roof attachments. This is to protect the homeowner and also their neighbors.

10.5 Racking plan showing all roof attachments and waterproof flashings for roof-mounted arrays, or foundation designs for ground-mounted arrays.

10.6 Single-line electrical diagram showing all components and electrical interconnection including grid isolation devices.

- All systems shall have a separate, lockable, lever-operated disconnect safety switch that SGCPC can access and lock out if necessary for safety purposes.

10.7 Wind analysis for module frames, racking, roof attachment (for roof-mounted PV) or foundations (for ground-mounted PV) showing compliance with the ASCE 7–22 standard, 180 mph wind speed, and the applicable Wind Exposure Category. Pursuant to URCA, this analysis shall be submitted to the Ministry of Works.

10.8 The owner of a PV System must maintain general liability insurance that includes coverage for the PV System. Certificate of Insurance documenting liability insurance policy is required in amounts not less than:

- $50,000 for SSRG systems with capacity less than or equal to 5kW
- $100,000 for SSRG systems with capacity greater than 5kW, but less than or equal to 10kW
- $250,000 for SSRG systems with capacity greater than 10kW, but less than or equal to 100kW

10.9 Copy of the installing locally licensed single or three-phase electrician's license or the electrician's number as required on the ICA.

11.0 System Capacity and Fee Structure for Customer-Owned Systems

11.1 Customers wishing to build their own renewable-energy systems are encouraged to thoroughly assess the URCA website and SGCPC website in advance of signing contracts or paying deposits. The URCA website is www.URCABahamas.bs, and the SGCPC website is StGeorgesCayPower.com.

11.2 PV System capacity (those systems intending to interconnect to the SGCPC grid) shall be limited as described in the SGCPC Interconnection Requirements.

11.3 Additional fees apply to Customers for customer-owned Renewable-Energy systems. Refer to the current SGCPC Fee Addendum posted to the SGCP website for fees and other related details.

A. Customers applying for approval of renewable-energy systems will be required to pay additional fees on both a one-time, non-recurring basis.

1. The one-time, non-recurring fees are to pay for installation of a new, bi-directional meter, review of application documents, inspections, and administrative processing.

B. The various fees do not result in any added distributions or profits to SGCPC or its shareholders. Customers should refer to the Renewable-Energy Fee Structure Addendum for more details. Please note that fees are subject to change.

16.0 Disposition of Unpermitted Customer-Owned Systems

12.1 The safety of SGCPC personnel and the general public and the stability of the SGCPC grid may be adversely impacted by Customer owned systems. As of the date of publication of this Plan, none of these installations have been inspected or approved by URCA, SGCPC, Ministry of Works, or Town Council.

12.2 Upon URCA approval of this first Plan, the Customers and Owners of any privately owned renewable energy or energy storage system shall submit the appropriate permit and approval documents to SGCPC and/or URCA. The required documents are listed in the GIR and the SGCPC and URCA websites. SGCPC will arrange a schedule to process these applications within 60 days of submission by the Customer or Owner. SGCPC will then follow the published procedure for Customer or Owner submitted applications.

12.3 SGCPC will periodically survey the service area to identify unpermitted or unauthorized PV installations. SGCPC will issue a request to the property owner in writing to allow an inspection of the installation.

12.4 Unauthorized or unpermitted installations will result in a written warning by SGCPC and may be followed by the premises being disconnection from the grid by SGCPC until (1) authorization is secured as described herein; or (2) Customer authorizes SGCPC to positively and securely lock out the renewable-energy system to preclude it from operating in parallel with the grid, the cost to do so borne by the Customer.

12.5 Unauthorized or unpermitted installations that remain unauthorized after warning shall be subject to enforcement action by SGCPC and/or URCA.

TABLE 2

SGCPC Grid Growth, PV, and ESS Estimates

	GRID PARAMETERS	2025	2026	2027	2028	2029	2030
1	Annual sales [MWh]	12,300	12,500	12,700	12,900	13,100	13,300
2	Average daily generation [kWh]	36,300	36,900	37,500	38,100	38,700	39,200
3	Demand peak [kW] (see Note line 32)	3,200	3,300	3,300	3,400	3,400	3,500
4	Demand, Noon, Min [kW]	1,200	1,200	1,300	1,300	1,300	1,300
5	Demand, Noon, Max [kW]	2,900	3,000	3,000	3,100	3,100	3,200
6	**SOLAR ENERGY CAPACITY**						
7	**Phase-1 PV Farm**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
8	Power Capacity, incl. degradation [kW-AC]	1,040	1,030	1,020	1,010	1,000	1,000
9	Annual Energy [kWh]	2,163,000	2,142,000	2,122,000	2,101,000	2,080,000	2,080,000
10	**Phase-2 Roof PV Systems**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
11	Annual Installed Capacity [kW-AC]	-	200	200	200	200	200
12	Cumulative Power Capacity [kW-AC]	-	200	400	600	800	1,000
13	Annual Energy [kWh]	-	364,000	728,000	1,092,000	1,456,000	1,820,000
14	**Phase-3 Ground PV Systems**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
15	Annual Installed Capacity [kW-AC]	-	-	1,000	-	-	-
16	Cumulative Capacity, incl degradation [kW-AC]	-	-	1,000	995	990	985
17	Annual Energy [kWh]	-	-	2,080,000	2,070,000	2,059,000	2,049,000
18	**Customer-Owned PV Systems**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
19	Annual Installed Capacity [kW-AC] (see Note line 33	-	200	200	200	200	200
20	Cumulative Capacity, incl degradation [kW-AC]	400	600	800	1,000	1,200	1,400
21	Fraction of Min Noon Demand from Customer PV	33%	50%	62%	77%	92%	108%
22	Annual Energy [kWh]	620,000	930,000	1,240,000	1,550,000	1,860,000	2,170,000
23	Total Operating PV Capacity [kW-AC]	1,440	1,830	3,220	3,605	3,990	4,385
24	Total PV Electricity to the Grid [kWh]	2,783,000	3,436,000	6,170,000	6,813,000	7,455,000	8,119,000
25	**PV Energy Offset (incl Customer Owned)**	23%	27%	49%	53%	57%	61%
	PHASE-1A ESS DEPLOYMENT	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
26	PV as %-age of MIN noon demand, before ESS	120%	153%	248%	277%	307%	337%
27	PV as %-age of MAX noon demand before ESS	50%	61%	107%	116%	129%	137%
28	Minimum ESS Deployment, Annual [kW]	-	1,000	1,000	-	1,000	-
29	ESS Deployment, Cumulative [kW]	-	1,000	2,000	2,000	3,000	3,000
30	PV as %-age of MIN noon demand, after ESS	120%	69%	94%	123%	76%	107%
31	PV as %-age of MAX noon demand, after ESS	50%	28%	41%	52%	32%	43%

32 The daily power peak typically occurs between 5 pm and 7 pm. By that time, PV Systems are no longer producing electricity.

33 Line 20 power capacity is stated in kW-AC. Elsewhere in this REP this is referred to in kW-DC.

34 The power and capacity of PV and ESS that Customers may install is unknown but is assumed to be 200 kW per year.

35 ESS capacities are estimates and To Be Determined (TBD).

TABLE 3

LCOE CALCULATIONS FOR SYSTEM OPTIONS

		Calculation or Notes	Option 1	Option 2	Option 3
a	System capacity [kW-AC]		1,000	60	10
b	Unit cost installed [$/kW-AC]		$ 2,980	$ 3,600	$ 5,000
c	Total capital investment	a x b	$ 2,980,000	$ 216,000	$ 50,000
d	Yield [kWh/kWAC]		2,240	2,130	2,000
e	Energy, Yr-1	a x d	2,240,000	127,800	20,000
f	Total lifecycle energy [kWh]		64,200,000	3,663,000	573,000
g	Annual OpEx, Yr-1	q, r, s, t	$ 343,000	$ 25,000	$ 1,400
h	NPV of annual OpEx		$ 2,574,000	$ 192,000	$ 19,000
j	Owner equity		$ 605,000	$ 43,000	$ 50,000
k	Total discounted lifecycle cos	h + j	$ 3,179,000	$ 235,000	$ 70,000
m	LCOE [$/kWh]	k / f	$ 0.05	$ 0.06	$ 0.12

NOTES

n Option 1 is MW-scale PV owned by SGCPC and financed at prevailing conditions
o Option 2 is kW-scale PV owned by SGCPC and financed at prevailing conditions
p Option 3 is kW-scale PV purchased by SGCPC Customers at small scale
q Lifecycle is 30 years
r Annual PV degradation is 0.05%
s OpEx is insurance plus expected maintenanceplus debt service
t Insurance at $1 per $100 insured value
u Maintenance at $5 per kW for MW projects and $8 per kW for kW projects
v Debt service is prevailing load terms and conditions
w Cost escalation 3% per annum
x Discount rate 8% for LCOE calculation

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ST GEORGES CAY POWER COMPANY (SGCPC)

APPLICATION FOR ELECTRICITY SERVICE ACCOUNT

REQUIREMENTS TO OPEN AN ELECTRICITY ACCOUNT

1. All applicants must complete the following forms available on our website.
    a. SGCPC Contract for Supply.
    b. Customer Information Form.
    c. Credit Card Authorization Form.
2. All applicants must provide two forms of government issued photo identifications One of these must by your National Insurance Card the second must be one of the following.
    a. Passport
    b. Driver's License
    c. Voter's Card
3. Non-Bahamian Applicants must also provide a valid permanent residence permit or work permit Security Deposits.
4. The Security Deposit for new accounts is based on the projected or historical consumption at the location.
5. The invoice for the security deposit is issued by Customer Service or the Local Office and is payable by Debit Card, Credit Card, Cheque or Cash (Payments in cash are limited by compliance with the relevant statute and may be capped at B$10,000 or US$5,000 only).

ADDITIONAL REQUIREMENTS FOR A NEW ELECTRIC SERVICE TO YOUR PROPERTY

Proof of Property Ownership or Right of Land Use is required, either through:

_____Conveyance Documents for Owner Occupied Properties.

_____Relevant Deed, Probated Will and Death Certificate, or Letter of Administration/Certificate as to Grant of Probate evidencing legal interest in property.

Applicant must submit an approved Electrical Specification Document, either for New Construction or Service Upgrade/Modification to Existing Service. The document must be prepared by a licensed Electrical Contractor and approved by the Ministry of Works.

Upon completion of the project, Customer shall provide to SGCPC the relevant Approval Documentation from the Ministry of Works to verify that the wiring is safe for installation of electricity.

_____Electrical Permit Form (Specification of Proposed New/Upgrade Electrical Installation) – This must be submitted to the Ministry of Works by your licensed electrician. The Ministry of Works will review, stamp and approve the document and send it to SGCPC.

_____Original Electrical Installation Approval Certificate – Stamped and Signed by the Ministry of Works

_____Occupancy Certificate – For New Construction; Stamped and Signed by the Ministry of Works

If the property is a part of a subdivision or development, the Developer of that subdivision is required to install the electrical infrastructure to which you the Customer would connect. If you are developing for yourself or are seeking power to your own property inside an approved development where infrastructure does not exist, you must indicate how SGCPC will access your property. This shall be done by providing:

_____Survey/Plot Plan Stamped and Approved by the Relevant Government Agency (e.g. Physical Planning) – To show access to the nearest public right of way/thoroughfare.

_____The installation of all boundary pins from the main thoroughfare to the property to receive supply may also be required for overhead infrastructure.

_____The establishment of the road reservation may be required for underground infrastructure If infrastructure is required to be installed and you are developing for yourself as above, you will be required to pay the relevant Capital Contributions. This is for new services or upgrade requests.

- Customers requiring the installation of Capital Infrastructure by SGCPC to service their properties will be required to pay costs associated with establishing the service.
- Capital Contributions shall be paid in full before the commencement of works by SGCPC.
    - Customers are encouraged to make application as soon as possible so that they may be apprised of the Capital Contribution amounts so that this cost may be factored into the cost of construction and paid to allow the availability of power as close to the completion of the project as possible.
- The Capital Contribution does not include the required Security Deposit for the establishing of an electricity account.
    - After submitting a request for supply, and after satisfying any Capital Contribution, our teams will schedule the installation of needed infrastructure for the provision of supply.
- All equipment installed under the Capital Contribution up to the meter location, remains the property of St Georges Cay Power Company (SGCPC) unless otherwise agreed and will be serviced and maintained by SGCPC.
- Capital Contribution payments for service requests will be invoiced by SGCPC and should be paid directly to a SGCPC cashiering service center, or by wire transfer to SGCPC (wiring instructions are provided separately). The SGCPC Invoice Reference number must be included in the wire transfer information
    - Please note that employees are not permitted to receive payments for service outside of the above for any reason.
- Upon completion of the capital contribution works (i.e. the installation of infrastructure), the customer must visit our offices or submit a request by email to customerservice@SGCPCco.com to make an application for the supply of electricity. At this time, the security deposit will be calculated and invoiced

ST GEORGE'S CAY POWER COMPANY – GRID INTERCONNECTION APPLICATION (GIA)

Please fill out Sections 1, 2, and 3 completely. Please submit two printed copies of this GIA to the SGCPC office.

1. Customer Information Existing Premise ☐ New Construction ☐

Name _____ PO Box _____

Street Address _____

Account # _____ Meter Number _____

Telephone: Work _____ Mobile _____ Home _____

Email Address (required) _____

Account Type Residential ☐ Commercial ☐

Note: Refer to the most current "Fee Structure Addendum" for fees associated with this Application.

2. System Installer Information

	Solar Energy Contractor	or	Electrical Contractor
Company Name	_____		_____
Contact Person	_____		_____
PO Box	_____		_____
Telephone (Work)	_____		_____
Telephone (Mobile)	_____		_____
Email Address	_____		_____
Electrical License Number	_____		_____

3. Facility Information

Inverter nameplate rating _____kW Number of inverters _____Total AC capacity _____kW-AC

System Type: PV System ☐ Off-Grid ☐

(Refer to SGCPC Interconnection Requirements for System Type descriptions)

PV System includes ESS: No ☐ Yes ☐ Capacity _____kWh

Other onsite generation: Backup generator: No ☐ Yes ☐ Power _____kW

The following must be attached to this GIA pursuant to the SGCPC REP and Bahamas 2024 Electricity Act (EA-2024).

- Site plan showing PV array, inverter, ESS (if applicable), visible-break AC disconnect switch, and SGCPC meter.
- Single-line electrical diagram (including all above components).
- Data sheets for PV modules, PV inverters, and ESS (if applicable).
- Racking plan showing ground foundations, or roof attachments and waterproof flashings (roof arrays).
- Proof of required liability insurance (refer to Grid Interconnection Requirements).
- Proof that the non-refundable application fee has been paid.

Signing this GIA attests that your system engineer will complete the wind analysis compliant with the ASCE 7–22 standard and 180 mph wind speed for module frames, racking, roof attachment (roof) or foundations (ground).

Failure to submit all these documents will result in the GIA being rejected.

Customer Signature _____ Date _____

SGCPC Use Only

Date

Name

Annual Energy _____kWh

Average Demand _____kW

Max Allow. Capacity _____kW-AC

Status ____Complete ____Approved

Rev 2025-07-01

ST GEORGES CAY POWER COMPANY (SGCPC)

TERMS & CONDITIONS FOR CUSTOMER-OWNED SOLAR ENERGY SSRG or RESG

OPERATED UNDER A GRID-INTERCONNECTION AGREEMENT (GIA)

The Customer agrees to comply always as follows related to the operation of their PV System or PV Microgrid (the "system").

1. Operate and maintain (or engage services of qualified technician and/or engineer as may be required to operate and/or maintain) the system in accordance with all applicable Governmental standards and requirements and the instructions of the manufacturers of the equipment used to construct the various components of the system.
2. Comply with SGCPC requirements relating to the operation of the system which may be in effect from time to time.
3. Promptly notify SGCPC of any malfunction or breakdown of any component of the system that could constitute a foreseeable safety hazard, or which could reasonably be expected to cause disturbance or damage to the SGCPC Grid.
4. Not operate or allow the system to be operated so as to generate electricity at a rate greater than 110% of the system Nameplate Gross Power Rating as noted on the GIA.
5. Not add to or modify or allow any addition or modification to the system without the prior written consent of SGCPC.
6. Not alter, modify, tamper, or allow any alteration, modification or tampering with the system connection to the SGCPC Grid without SGCPC prior written consent. This includes the SGCPC-owned meter, service disconnect, AC disconnect or interconnection, and any Customer-owned Transfer Switch.
7. Not relocate or interconnect or allow any relocation or interconnection of the system to the SGCPC Grid at any location other than the Service Address without SGCPC prior written consent.
8. Not convey or distribute electricity or allow same across premise boundaries or property lines; specifically that the electricity produced by the system shall be consumed on the Customer premise by Customer loads on the Customer's property; unless it is a PV System and is exporting energy to the SGCPC Grid through the SGCPC bi-directional meter.
9. Allow SGCPC technicians access to system components on the utility side of the meter at any time when it is deemed necessary for safety or otherwise for inspection or testing during normal business hours.
10. Make all payments required under the approved program plans.

Signature below indicates acceptance of Terms and Conditions

Signature _____

Name _____

Address _____

Date _____

ST GEORGES CAY POWER COMPANY (SGCPC)

CUSTOMER GRID INTERCONNECTION REQUIREMENTS (GIR) FOR RENEWABLE ENERGY GENERATION

PV SYSTEMS

1. PURPOSE and AUTHORITY

This document describes the general provisions and technical requirements for connecting solar-energy systems (and other renewable-energy generating equipment) to SGCPC's power system. Most of these will be solar energy, or "photovoltaic", referred also as "PV systems", although these requirements of the Bahamas Electricity Act 2024 (also referred to as "EA2024" or "Electricity Act") also apply to wind and other non-fossil-fuel sources.

These requirements ensure:

1. The safety of SGCPC technicians, agents, customers, and the public.
2. The safety and compatibility of the renewable-energy system.
3. High standards of power reliability and quality for all customers.

This document sets out the:

- Capacity limits for PV systems (Section 2).
- Application and interconnection process for all systems (Section 3).
- General conditions for connecting a system to the Grid (Section 4).
- Technical interconnection requirements (Section 5).
- Glossary (Appendix A).

SGCPC is licensed by The Bahamas Utilities Regulation and Competition Authority (URCA) as an Authorized Public Electricity Supplier Licensee (APESL) in accordance with the 2024 Electricity Act. SGCPC has the authority and responsibility to manage the supply of electricity to all customers in the service area that are connected to the SGCPC grid and ensure customers comply with regulations developed by URCA.

All Customer-owned grid-tied systems require SGCPC approval and a permit from URCA.

For definitions and further technical information, please refer to the SGCPC Glossary and Definitions document available on the SGCPC website.

2. CAPACITY LIMITS

The allowable self-generation capacity for a Customer-owned, PV System is based on several factors.

- The maximum allowable power generation capacity for the entire grid.
- The maximum allowable power generation capacity that will ensure that Customers are not producing more energy than they are consuming.
- The integrity of the grid is maintained by limiting the potential for exceeding distribution circuit limitations.

The calculations are equivalent to those approved by URCA for Bahamas Power and Light on Family Islands with equivalent power demand peaks.

This grid-tied PV program is available on a 'first-come, first-served' basis up to a maximum total based on the capacity of PV and ESS installed and operated by SGCPC. of 250 kW-AC (350 kW-DC) of total, combined, grid-tied power capacity. No grid-tied customer-generation facilities will be allowed or approved above this limit until further notice.

The allowable installed capacity for any premise will be the smaller of the following three criteria. Refer to Table 1 for summary.

A. **Maximum Cap**: 30 kW-DC

B. **Net-Consumer**: "Installed Power Capacity" = "Annual Energy Consumption" divided by the "Yield";

where:

Installed Power Capacity is the total nameplate power capacity of the PV modules shown on the submitted plans and confirmed during the installation process, denoted as kW-DC;

Annual Energy Consumption is the total recorded energy consumption recorded by the premise meter for the previous year, denoted as kWh;

Yield is as defined in the Glossary and Definitions, and specified as 2,000 kWh/kW-AC.

For example, if a Customer consumed 10,000 kWh in the previous year, the allowed power capacity for a grid-tied PV System would be 10,000 kWh / 2000 kWh/kW = 5 kW-AC.

The calculation is intended to ensure that no Customer exceeds their annual expected energy consumption through self-generation.

C. **Distribution Circuit Integrity**:

C.1 Residential customers may install PV Systems with power capacity less than or equal to:

2 kW-AC + Average Customer Demand

"Average Customer Demand" (ACD) is the customer's total consumption in kilowatt hours (kWh) during the preceding 12 months, divided by 8,760 (the number of hours in a year). The calculation for ACD will be rounded up to the nearest whole number.

For example, a customer with ACD of 1.3 kW would be allowed to install a system with a maximum size of 4kW. This is based on:

1.3 kW ACD is rounded up to 2 kW, and 2 kW + 2 kW = 4 kW-AC.

C.2 Commercial customers may install PV Systems with power capacity less than or equal to:

15 kW + Average Customer Demand

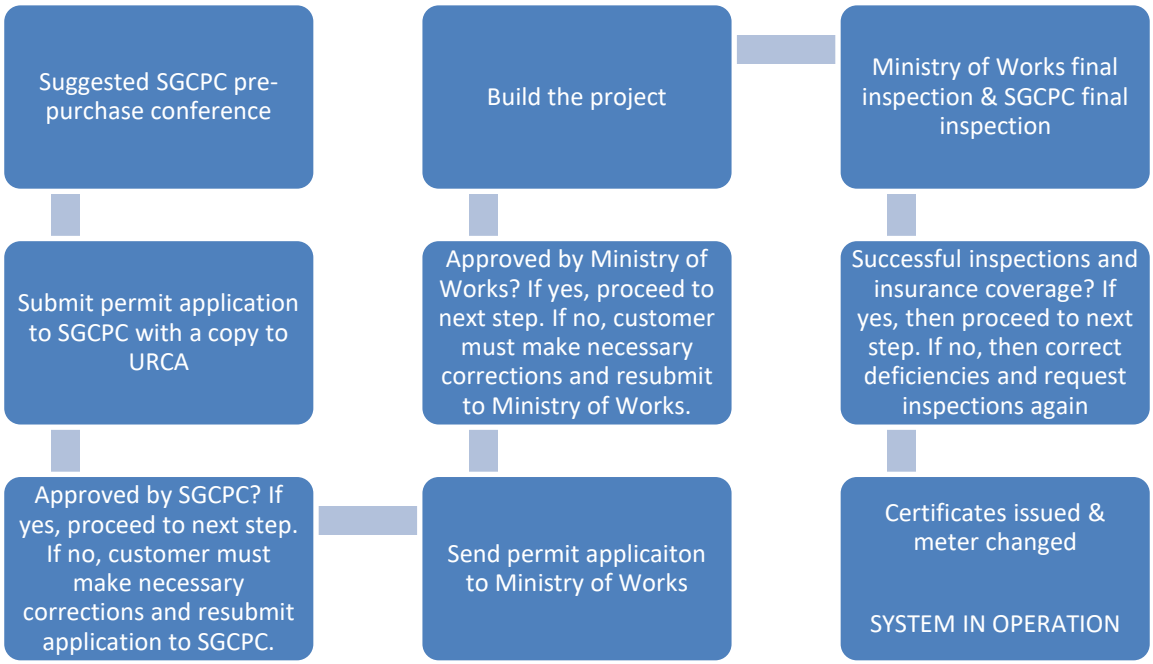
Table 1: PV System Limits

Parameter	Residential	Commercial Customer
A. Maximum Power	30 kW-AC	
B. Net Consumer	Annual Energy Consumption / 2000 kWh/kW-AC	
C. Distribution Circuit Integrity	2 kW-AC + ACD	15 kW-AC + ACD

3. APPLICATION AND INTERCONNECTION PROCESS FOR ALL SYSTEMS

This section describes the application and interconnection processes for all customers. ALL customers must submit the SGCPC Grid Interconnection Agreement (GIA) and secure the required written approvals BEFORE installing any PV system.

SGCPC recommends requesting a preliminary conference and opinion BEFORE signing a contract and buying your PV equipment. This approach will help ensure compliance with regulations and not committing your investment until you have confidence in its viability.



Off-Grid Systems require URCA written approval. On-Grid PV Systems, with or without ESS, require SGCPC written approval and do not require URCA approval.

All SGCPC forms are available on the SGCPC website. URCA forms are available on the URCA website.

SGCPC supports the installation of Customer-owned systems. SGCPC is not obligated to approve or allow the connection to the Grid of any installation that is non- compliant, unsafe, or unfit for purpose.

Customers should refer to the SGCPC GIA for a listing of the submittal requirements.

SGCPC will review the application and provide its response, either approving or denying the application, within 21 days of receipt of a completed application.

After receiving written approval from SGCPC to install the specified system, the Customer must apply to the Ministry of Works for the required permits. In the application to the Ministry of Works, the customer must include a copy of the approved GIA from SGCPC. Ministry of Works may also require approval from the Town Council.

The system shall be installed according to the technical specifications in the SGCPC Interconnection Requirements.

Once the installation is complete and Customer receives approved final inspection from Ministry of Works, Customer shall notify SGCPC and request final inspection to operate the system. Within 21 calendar days after written notice from the Customer, SGCPC will perform inspection and functionality tests to ensure the safe operation of the system.

SGCPC will carry out inspections and tests in accordance with Section 5 of this document and will advise the applicant in writing whether the system qualifies for interconnection to the Grid. SGCPC may, if deemed necessary, apply additional labelling and markers to identify the site as an approved system.

If SGCPC does not carry out these tests within 45 calendar days of receiving the approvals from the Ministry of Works, the system is considered approved, and the customer may interconnect the system to the Grid. SGCPC maintains the right to perform additional inspection and functionality testing for interconnected systems at any time, after providing the Customer-generator with at least 48 hours' notice.

Should SGCPC find during the inspection that the system is not compliant with the requirements of this GIR document or the approved application, SGCPC WILL reject the request to connect to the Grid and WILL disconnect and lock out an interconnected system.

To gain compliance and approval to operate, the Customer may take corrective action to ensure the system complies with the requirements. SGCPC will perform a second inspection and functionality test to ensure the safety of the system no later than 30 calendar days after the Customer requests a second inspection.

Customers with operating installations that are not permitted or approved must also follow this process to secure an approved GIA before continuing to operate that installation.

4. FEES FOR INTERCONNECTION

Non-recurring fees apply only once and are payable before the system is reviewed and inspected by SGCPC. Payment of applicable fees is required before operation will be approved by SGCPC.

5. GENERAL CONDITIONS

This section includes the conditions that apply to all Customers before SGCPC will approve any installation.

5.1 Customers Must Be in Good Standing

Persons seeking to acquire and connect systems to the Grid must be SGCPC customers in good standing.

For rented properties, the applicant must obtain and provide to SGCPC written approval from the property owner authorizing the installation and fully indemnifying SGCPC with respect to damages from the installation, maintenance, operation, or removal of the installation.

5.2 Types of Grid-tied Systems Allowed

Unless otherwise approved by SGCPC, to be eligible to connect and operate in parallel with the Grid, grid-tied systems must be photovoltaic (PV) and/or wind electricity generators and meet the technical requirements in Section 5 of this document.

5.3 Unauthorized Connections

For the purposes of public and utility personal safety and according to URCA regulations and the Electricity Act, SGCPC reserves the right to disconnect any customer who connects or has connected a system to the Grid without written authorization from SGCPC.

Should SGCPC decide to disconnect a system from the Grid, it shall notify URCA within two (2) days of doing so, giving reasons for the disconnection. A customer whose system has been disconnected pursuant to this power may have the matter reviewed by URCA by making a written request to URCA.

5.4 Code Compliance

The system must be located exclusively within the customer’s owned or rented property and observe all building codes and property line setbacks.

5.5 System Architecture

SGCPC allows two configurations for non-SGCPC-owned solar-energy systems.

(A) PV System (with or without an ESS). Represented by Figures 1 and 2, below.

Off-grid systems are represented by Figure 3 below. For the avoidance of doubt, Off-grid systems are reviewed by URCA.Customers that are planning their own onsite solar-energy system can evaluate these options to determine which one is the best solution for their needs and goals. SGCPC will not allow other configurations.

Customers are encouraged to consult with SGCPC before signing contracts for purchase and installation of a renewable energy system.

SGCPC encourages Customers to deploy their own solar-energy systems in striving for our national renewable energy goals. It is important to note that Customer-owned systems make more costly electricity than other

options for our Community, and these systems may result in the cost of electricity to go up for all other Customers in the Community that do not have their own solar-energy system.

Customers can switch from one architecture to another as their needs may change over time. In that case, a new application shall be submitted to SGCPC and the applicable approval process and fees will be required before that change is approved. SGCPC will inspect all installations at least once a year to ensure the installation is still compliant with the approved GIA.

5.4.1. PV System (No ESS): The building/property is connected to the grid and the system in parallel at the same time. That is, energy can flow through the SGCPC Meter in either direction and the PV System and Grid can both be connected to the Main AC Panel at the same time and power those loads at the same time. Additionally, the PV System may be isolated from the Grid using an ATS or MTS and supply electricity to the Main AC Panel loads in parallel with a backup genset. Refer to Figure 1.

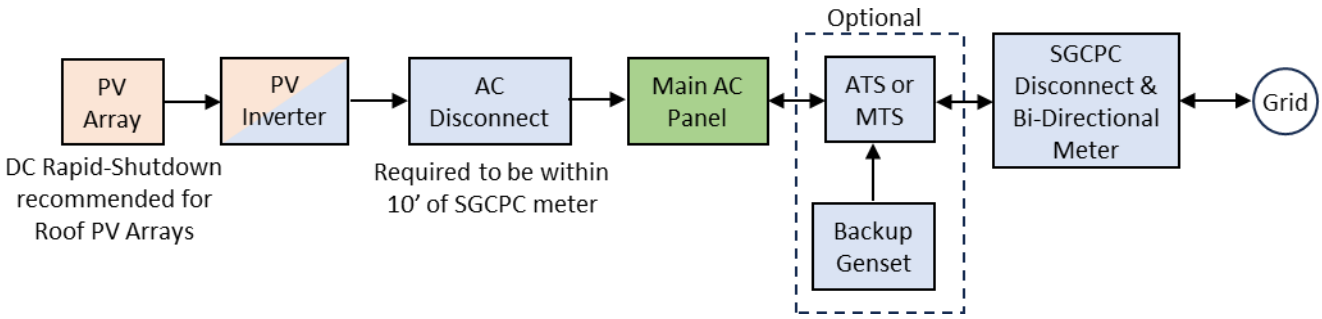


Figure 1: Diagram of Grid-Tied PV System Without ESS Interconnection and Metering Configuration

5.4.2. PV System (With ESS): A PV System with ESS requires a means to isolate the voltage-source equipment (ESS or backup genset) from the Grid in the event the conditional parameters of the grid exceed those listed in Table 2, below. This may be accomplished using the (a) internal circuitry of the power electronics (if the equipment is UL listed for this purpose), or (b) using an external ATS/MTS. Refer to Figure 2.

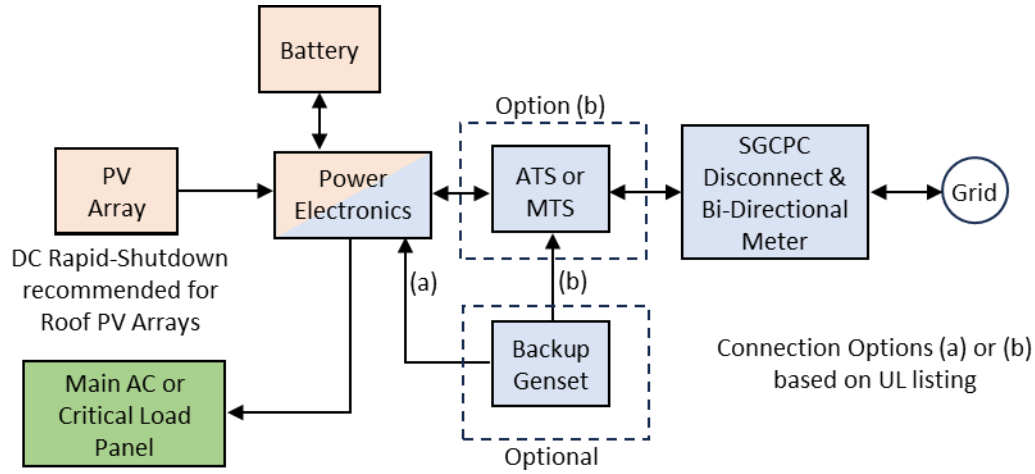


Figure 2: Diagram of PV System with ESS Interconnection and Metering Configuration

5.4.3. Off-Grid: The building/property is disconnected from the Grid. There are no utility service conductors or cables connected to the building or its electrical loads. Refer to Figure 3.

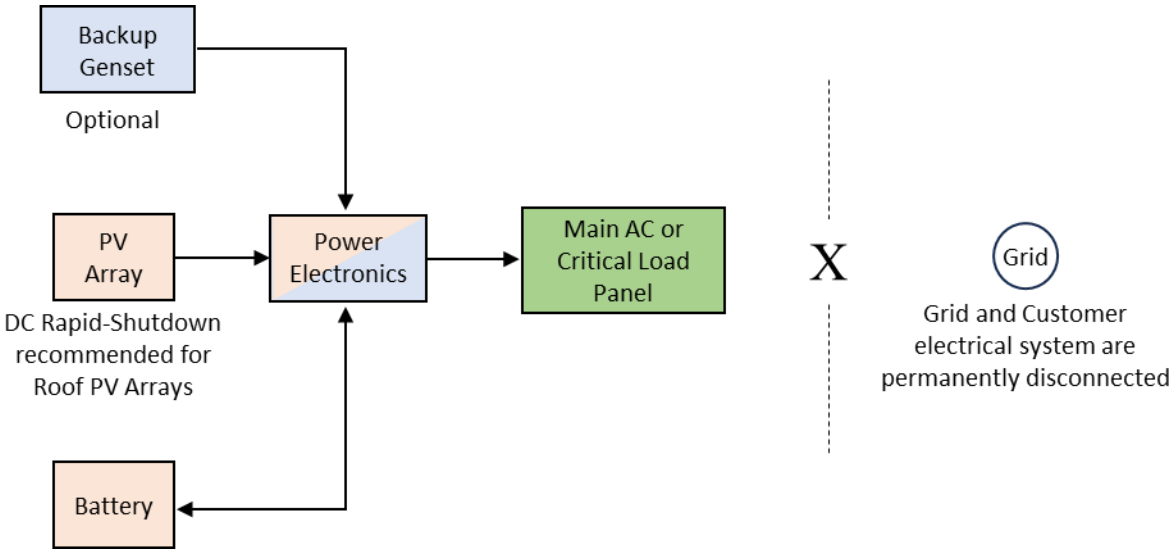


Figure 3: Diagram of Off-Grid PV and ESS Interconnection and Metering Configuration

5.6 Metering

Upon final inspection of a Grid-Tied system and permission to operate is granted by SGCPC, SGCPC will furnish and install a new customer meter at the premises at the Customer's expense. The existing meters do not record energy exported to the Grid. The new bi-directional meter will ensure consumed and exported energy is accurately recorded.

5.7 Labelling

Buildings and structures with a grid-tied PV system must, where practicable, have the disconnecting means grouped (in accordance with SGCPC's Grid Code). Where such an arrangement is not practicable, there must be a permanent plaque posted on or near each disconnecting means, indicating the location of all other service boxes supplying power to the building.

Grid-tied systems that include battery plants or other energy storage systems shall be labelled in a conspicuous, legible, and permanent manner with a suitable warning sign at the location of the service disconnecting means of the premises.

Labeling shall comply with the National Electrical Code (NEC) 2020 Article 690. A graphic summary of labeling requirements is posted on the SGCPC website.

5.8 Insurance

The owner of a PV system or PV Microgrid that is configured as Grid-Tied or Transfer Switch must maintain general liability insurance in amounts not less than:

- $50,000 for systems with capacity less than or equal to 5kW
- $100,000 for systems with capacity greater than 5kW, but less than or equal to 10kW
- $250,000 for systems with capacity greater than 10kW.

An endorsement of a homeowner's policy providing the required amount of coverage is acceptable to meet this insurance requirement. Failure to maintain the insurance coverage will render the Grid Interconnection Agreement invalid. SGCPC does not accept responsibility for the failure of the customer to renew its insurance policy.

Proof of insurance must be provided prior to SGCPC approving the GIA. This coverage is to provide, at a minimum, protection in the event of electrical or mechanical failure or malfunction of the installation that causes loss, damage injury or death to persons or property. SGCPC may from time to time require the homeowner to verify the existence of valid insurance coverage.

5.9 Indemnification

The owner of a grid-tied system must indemnify SGCPC, its agents, and third parties for losses and damages resulting from the operation of the system, except when the loss or damage occurs due to the negligent actions of SGCPC, its agents, or third parties. SGCPC and its agents will indemnify the customer for all loss to third parties resulting from the operation of the Grid except where SGCPC and its agents have used reasonable care in the exercise of their functions or when the loss occurs due to the negligent actions of the customer. Submission of the GIA implies acceptance of this Indemnification requirement.

5.10 Future Modifications and Expansion

The customer must obtain written approval from SGCPC and the Ministry of Works Electrical Inspection Department, prior to modifying, expanding, or altering the approved system. The customer must present an approved Electrical Inspection Certificate to SGCPC, and must obtain written approval from SGCPC, before interconnecting the modified system to the Grid. The customer may be required to execute a new Grid Interconnection Agreement, if applicable.

5.11 Customer-Owned Equipment Protection

The protection of the facility loads and generation equipment owned by the customer and ensuring compliance with all standards, codes and requirements of local authorities is solely the responsibility of the customer.

6. TECHNICAL INTERCONNECTION REQUIREMENTS

This section provides the technical requirements for SGCPC approval of installations of Grid-tied PV Systems. and lists typical conditions and response to abnormal conditions that the system is required to meet.

6.1 Equipment Certification

Equipment shall be placarded by the manufacturer indicating compliance with the following standards and listings. Documentation provided with the GIA shall include data sheets indicating these listings.

UL-1547 – Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources

UL 1741 – Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources

UL 9540 – Energy Storage Systems and Equipment

UL 9540A – Standard for Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems

(IEC 62933-5-1 and 2 is an accepted alternative for UL-9540)

UL 1998 – Software in Programmable Components

UL 1973 – ANSI/CAN/UL Batteries for Use in Stationary and Motive Auxiliary Power Applications

UL 62109 – Safety of Power Converters for Use in Photovoltaic Power Systems

(IEC 62109 is an accepted alternative for UL-62109)

UL 1703 – Flat-Plate Photovoltaic Modules and Panels

Electrical wiring shall conform with national standards, as set by the Ministry responsible for Building Regulation under Buildings Regulations (Chapter 200).

All components, inclusive of but not limited to inverters, AC panels, charge controllers and batteries, must be accompanied by the manufacturers' specifications sheets, installation/operation manuals, and other details relevant to the inverters function. These documents must be available at the time of application, initial installation inspection, and all subsequent inspections/reviews. Voltage, current and power limits, and operating points are key parameter sets must also be available for review. The year version of each standard or listing shall be 2018 or later year-version that is closest to the year of installation.

All small wind turbine systems must meet UL 6142 requirements as well as any applicable local code requirements.

6.2 Normal Voltage and Frequency

The maximum DC voltage shall not exceed 600 VDC for residential installations and 1000 VDC for commercial installations.

The grid AC voltage at the Point of Common Coupling (POCC) will vary depending on the customer, and the AC Output Circuit voltage shall be set to match that specification. Should the grid voltage deviate, the PV Inverter shall respond as described in Table 2.

The PV Inverter shall operate only in grid-following mode as a current source at a 60Hz frequency. Should the grid frequency deviate, the PV Inverter shall respond as described in Table 2.

6.3 Inverter Response to Abnormal Voltages and Frequencies

A PV System without ESS shall detect and promptly cease to energize the inverter AC Output Circuit(s) when any of the following criteria are exceeded. For three-phase systems, the disconnect shall be proven by certification to successfully disconnect when only one or two phases is out of tolerance, and not necessarily all three phases.

Table 2: Technical Requirements

Voltage Condition (% of Nominal Voltage)	Maximum Time to Disconnect
V <50%	0.16 sec – (10 cycles)
50% < V < 88%	2secs – (120 cycles)
110% < V < 120%	1 sec – (60 cycles)
V > 120%	0.16 sec – (10 cycles)
Frequency	**Maximum Time to Disconnect**
F < 59.4 Hz	0.16 sec – (10 cycles)
F > 60.6 Hz	0.16 sec – (10 cycles)

6.4 AC Disconnect

All systems connected to the SGCPC grid shall include a visible and lockable AC disconnect that will visibly and physically isolate all generating components (PV and/or ESS) from the grid. The AC Disconnect shall be in an accessible location at or near SGCPC's meter and required signage and notices are posted.

6.5 Electrical Islanding

Customer-owned PV Systems may operate in an islanded condition that does not export power or energy to the grid when he grid is in an abnormal condition as noted in Table 2. In these instances, the onsite system may supply premise electrical loads as follows. (a) A **PV System without ESS** may be physically disconnected from the grid using an Automatic Transfer Switch (ATS) or Manual Transfer Switch (MTS) and thence operate interconnected to an onsite backup genset supplying electricity to premise loads. (b) A **PV System with ESS** may isolate from the grid using its internal UL-listed circuitry or an ATS or MTS and supply electricity to premise loads.

All grid-tied systems shall detect abnormal conditions as noted in Table 2, above, and cease to export power to the Grid within a maximum of two seconds after the excursion of a phase or the service outside voltage or frequency standards, or complete loss of one or any number or combination of phases of the service.

In no case or instance shall a backup genset or ESS export power to the grid when the parameters in Table 2 are exceeded. Customer-owned systems found to be operating outside these requirements will be immediately disconnected and locked out from the SGCPC grid because of the safety risks.

6.6 Communications and Control

Inverters shall comply with IEEE-1547 (year-version 2018 or more current). This includes the ability to allow SGCPC to control the output of the inverter. Installations where SGCPC cannot connect and control the inverter will require a remotely actuated on-off switch owned and controlled remotely by SGCPC to limit excess energy that may be exported to the grid. This capability will be used to periodically limit solar-energy generation and export that could cause stability problems for the SGCPC diesel genset powerplant.

6.7 Rapid Shutdown

It is important to note that PV arrays installed on the roof of residential dwellings represent a potential electrical and fire safety hazard to occupants, residents, and emergency responders. Installation of rapid-shutdown devices for residential installations has been the industry's best practice since 2018. While the version year of the Canadian Electrical Code accepted by The Bahamas is silent on emergency rapid shutdown capability for residential PV arrays, SGCPC strongly recommends owners of roof-mounted PV arrays install rapid-shutdown devices for their own safety and the safety of neighbors and emergency responders. Until required by our electrical code, this is a best-practice recommendation and not a requirement.

6.8 Voltage Flicker

Voltage flicker is an increase or decrease in voltage over a short period of time and is normally associated with

fluctuating loads or motor starting. A flicker problem is site-specific and depends on the characteristics of the changes in load. A flicker is considered objectionable when it either causes a modulation of lighting levels sufficient to be irritating to humans or it causes equipment to malfunction. The PV System shall not cause objectionable flicker for other customers on the Grid.

6.9 DC Injection

The system shall not inject a DC current greater than 0.5% of the unit's rated output current at the Point of Delivery after a period of 6 cycles following connection to the Grid.

6.10 Harmonic Distortion

Systems are to employ pure-sinewave inverters and are expected to comply with IEEE Standard 519 current distortion limits regarding harmonic current injection into the Grid. The harmonic current injection arising from the system shall not exceed the values listed in Table 3 – (excluding any harmonic currents associated with harmonic voltage distortion present on the Grid without the system connected).

Table 3: Distortion Limitations

Total Harmonic Distortion Limit (of rated current)		5.0%
Maximum Distortion		
Harmonic Numbers	Even Harmonics	Odd Harmonics
h < 11	1.0%	4.0%
10 < h < 17	0.5%	2.0%
18 < h < 23	0.4%	1.5%
24 < h < 35	0.2%	0.6%
h > 35	0.1%	0.3%

Additionally, the THD shall comply with URCA Mandate, as listed in Table 4.

Table 4: URCA THD Mandate

Level	Bus Voltage at POCC	Individual Harmonic, h ≤ 50	Total Harmonic Distortion, THD
A	V ≤1.0 kV	5.0%	8.0%

ST GEORGES CAY POWER COMPANY (SGCPC)

GLOSSARY & DEFINITIONS

Automatic Transfer Switch (ATS): A device that automatically switches a building's electricity supply between two power sources (e.g., between the utility grid and a backup generator or battery system) so that power continues to be received safely without any manual action (like physically closing a switch or breaker). Refer also to "Manual Transfer Switch".

Bi-Directional Converter (BDC): An electronic device that allows electricity to flow from battery systems to electrical equipment and vice versa by converting:

- DC (Direct Current) power to AC power; or
- AC (Alternating Current) power to DC power.

This device is usually part of an Energy Storage System (ESS).

Capacity Factor: A measure of how much electricity a system actually produces compared to how much it could produce if it ran at full power all the time. It is calculated as:

$$Capacity\ Factor = \frac{Actual\ Energy\ produced\ in\ a\ Year}{Rated\ Power\ x\ 8760}$$

Where 8760 is the number of hours in a year (365x24).

DC-AC Derate Factor: A design ratio comparing the total solar panel capacity (DC) to inverter output capacity (AC). Solar panels are usually installed with more DC capacity than the inverter can output, because panels rarely operate at peak power. Typical values range from 1.2 to 1.4.

Energy: The amount of electricity used or produced over time, measured in kilowatt-hours (kWh). A simple comparison:

- Power = speed of a car
- Energy = distance traveled

Energy Storage System (ESS): A system, usually made of batteries and control electronics, that stores electricity for later use. It includes equipment to convert electricity between AC and DC forms and must meet recognized safety standards.

Feed-In Tariff (FiT): The payment rate the utility pays a customer **for excess solar electricity exported back to the grid**. This rate is published in the utility tariff schedule.

Flicker: A noticeable blinking or fluctuation in lights caused by sudden or repeated voltage changes, often due to motors or large equipment starting and stopping.

Genset: A machine that produces electricity using an engine and alternator in residential or commercial applications and is used as backup power during outages. Under section 22(3) of the Electricity Act 2024, a licence is not required for standby generating plants approved by the Ministry of Works, with a generating capacity not exceeding 1,000 kW, provided they are used solely to supply electricity during a failure of supply by a public electricity provider or in other emergency situations. Operation of backup generators for routine or non-emergency purposes is strictly prohibited.

Grid: The network of electrical wires, poles, and equipment used by the electric utility to deliver electricity throughout its service area.

Grid Interconnection Application (GIA): The document developed by a utility that is intended to lead to an Interconnection Agreement between privately-owned generation systems (such as a solar system) and the electrical utility. (The application once approved will allow the privately-owned system to connect to the electrical grid through an interconnection agreement.)

Grid-Tied PV System: A solar power system connected to the utility grid. It includes solar panels, inverters, mounting systems, wiring, and monitoring equipment. It may operate with battery storage or without battery storage.

Grid-Tied PV System with ESS: A solar system connected to the grid that also includes battery storage. It can continue supplying electricity even if the grid fails, provided safety equipment disconnects it from the grid during outages.

Grid-Tied PV System without ESS: A solar system connected to the grid but without batteries. It cannot operate when the grid is down, unless a generator is available.

Grounding: The intentional connection of electrical equipment or wiring to the earth (ground) to improve safety and system stability. Grounding helps prevent electric shock, reduces the risk of fire or equipment damage, and provides a stable reference point for system voltage during normal operation and electrical faults.

Harmonics: Electrical disturbances that distort normal voltage or current waveforms. Harmonics can cause equipment overheating, noise, or malfunction.

Hybrid Energy System: A system in which two or more energy sources are used to produce electricity. The sources can include renewable or non-renewable energy sources. A hybrid setup is created so that a user is not entirely dependent on one source of power.

Inverter: A device that converts DC electricity from solar panels or batteries into AC electricity used in homes and businesses.

Inverter Anti-Islanding: A safety function that automatically stops solar systems from sending electricity to the grid during outages, protecting utility workers and equipment.

Inverter Islanding: A condition where a system continues generating its own voltage when the grid is down. This is unsafe when connected to the utility system and is not allowed without proper isolation. Industry safety standards (IEEE-1547 and UL-1741SB) require that PV Inverters stop exporting power when they sense a grid failure (lack of grid voltage waveform).

Kilowatt (kW): A unit measuring instantaneous electrical power.

Kilowatt-hour (kWh): A unit measuring electricity used over time, commonly shown on electricity bills.

Levelized Cost of Energy (LCOE): The average lifetime cost of producing electricity, expressed as cost per kWh, including installation, maintenance, and operating costs.

Manual Transfer Switch (MTS): A switch that allows a person to manually select between two power sources, such as grid power and a generator. Refer also to “Automatic Transfer Switch”.

Off-Grid System: A power system that operates independently of the utility grid, using solar panels, batteries, and possibly a generator.

Photovoltaic (PV) means the physical process of converting sunlight to electricity.

Photovoltaic (PV) Inverter: A device converting solar panel DC electricity into usable AC electricity. It cannot operate alone and must be connected to a voltage source such as the grid or battery system.

Photovoltaic (PV) Module: Also known as a solar panel, this device converts sunlight into direct current (DC) electricity. When two or more solar panels are electrically connected and installed together, they are referred to as a solar array, which functions as a single power-producing unit.

Photovoltaic (PV) System: A complete solar power installation, possibly including batteries or generators, that may operate either connected to the grid or independently.

Power: The rate at which electricity is being used or produced, measured in kW or MW. Power is like the speedometer of electricity.

Point of Common Coupling (POCC): The physical point where a customer’s generation system connects to the utility’s

electrical network. Also referred to as the Point of Interconnection (POI).

Rectifier: A device converting AC electricity into DC electricity. Refer also to “Inverter” and “Bi-Directional Converter”.

Total Harmonic Distortion (THD): A measure of how many electrical waveforms are distorted by harmonics Refer also to “Harmonics”.

Voltage protection (over/under): Protective equipment that disconnects circuits if voltage becomes too high or too low to prevent equipment damage.

Voltage (current) Waveform: The shape that shows how voltage or current changes over time. AC electricity normally follows a smooth sine-wave pattern.

Yield: The amount of energy produced annually compared to system size. In The Bahamas, solar systems ideally produce **1,500–1,650 kWh per year per kW installed**.

ST GEORGES CAY POWER COMPANY (SGCPC)
RENEWABLE-ENERGY FEE STRUCTURE ADDENDUM

This Fee Structure schedule is current and applicable on the date noted above and subject to change without notice. Please contact the SGCPC office for further details or clarification. Fees are summarized in Table 1, below.

NON-RECURRING, ONE-TIME APPLICATION FEES

Proof of payment of the one-time, non-recurring fees outlined herein will be required before SGCPC authorizes the operation of the PV System or Off-Grid system. This does not include Town Council, Ministry of Works, or URCA fees.

Systems that are without approval contravening these Regulations will be assessed these fees upon discovery and proper application. Payment will be required before SGCPC proceeds with the assessment and processing of the application to operate in a legal status.

SGCPC will charge a one-time, non-recurring "Application Fee" for all systems. This fee is necessary for review of documents, assessment by SGCPC line technicians, application processing, and installation of the SGCPC-owned, bi-directional meter.
Should the Customer-owned project pass the initial Review and post-construction Assessment, there are no further one-time fees. Should the project fail the Review and/or Assessment, the same line-item fee(s) shall apply to each time that step has to be repeated. An application package that is incomplete or unclear will be rejected as a failed Review step.

SCHEDULE A: One-Time, Non-Recurring Fees.

Item	URCA-approved Fee
Installation of SGCPC-owned bi-directional meter	$50 fee
Application for System with ESS or without ESS – includes review of documents, assessment, and administrative processing	$150 application fee
Re-application for PV System with ESS or without ESS – includes review of documents, assessment, and administrative processing	$150 application fee
Re-assessment, PV System with ESS and without ESS	$50 per assessment
Application for Off-grid PV System	$150 application fee payable to URCA

Notes:

{a} Meter installation fees are for Grid-tied PV System only and are not required for an Off-Grid system. The meter remains the property of SGCPC. Customer pays a monthly fee for meter use and grid services.

{b} Off-grid systems are to be submitted to URCA for approval.

SGCPC encourages Customers to consult with SGCPC before signing a contract for installation and before starting the design process. That initial consultation may save repeat fees later, but this is optional at Customer's discretion. That initial consultation is at no charge provided it requires less than one hour to complete.

Notes (continued):