Caribbean Utilities Company, Ltd.
Certificate of Need

1. Need for the Certificate of Need

This document serves as a revised and updated formal certificate of need to demonstrate the need for additional generating capacity in Grand Cayman. By a Consent Order dated 1 August 2025 in Cause No: G161 of 2025, this document supersedes the June 7, 2024, submission, which is treated as being withdrawn. Based on our grid data analysis, load forecasts, and operational benchmarking we have identified a generating capacity need necessary to meet the capacity reserves and energy requirements for **June of 2027**. Caribbean Utilities Company, Ltd. (**CUC** or **the Company**), via this Certificate of Need (**CON**), formally requests the Utility Regulation & Competition Office ("URCO") to begin the solicitation process that will be used to obtain the needed generating capacity.

- In accordance with Conditions 29.1 and 31.1 of CUC's Transmission and Distribution Licence dated April 3, 2008 (**T&D Licence**). CUC hereby files this CON with the **URCO** to demonstrate the need for additional generating capacity on Grand Cayman.

- CUC has attached a forecast of peak electricity demand alongside the total available firm capacity, adjusted to reflect planned asset retirements and demand-side management initiatives. As per Condition 29.1 of the T&D Licence this analysis incorporates the following considerations:

    - Projected growth in electrical peak load requirements, incorporating demand-side management initiatives and alternative peak demand growth scenarios.
    - Assessment of the availability of existing generation capacity, inclusive of any anticipated retirement of generating units as proposed by the licensed generation entity(ies) and approved by URCO. This evaluation is based on considerations of economic viability, system reliability, technological obsolescence, safety standards, environmental compliance, applicable governmental and regulatory policies, and adherence to prudent utility practices.
    - Projected reserve capacity requirements have been determined by CUC using a minimum reserve margin equal to 35% and maximum reserve margin equal to 55%. These margins are calculated based on the peak load for the year that the proposed additional generation capacity is expected to be commissioned.
- Exhibit 1 provides a comprehensive listing of the existing generation resources currently in operation under license. Exhibit 2 presents a summary of historical and forecasted annual energy sales and peak demands figures. Exhibit 3 outlines the methodology and results of the minimum and maximum capacity requirement calculations under two scenarios: Current Resources (Scenario 1) and Proposed Resources (Scenario 2). Exhibit 4 presents the CON's resource need energy blocks. Exhibit 5 presents E3 critical periods reliability framework whitepaper. Exhibit 6 presents the Effective Load Carrying Capability (**ELCC**) methodology matrix. Exhibit 7 presents the technical and operational specifications. All aforementioned exhibits are hereby incorporated into this CON application.

2. Evaluation of Alternatives

As outlined in the Certificate of Need guidelines within CUC's Main Agreement, various alternatives have been evaluated.

Since the publication of the Integrated Resource Plan (**IRP**) in 2017, Grand Cayman has experienced significantly accelerated load growth beyond the projections of the original study. This increase is attributable to a combination of heightened economic activity, rising annual average temperatures, and other contributing factors. As a result, the quantity and composition of the generation resources identified in the IRP for the year 2027 would be insufficient to meet the anticipated system requirements. Nevertheless, the IRP continues to offer valuable directional guidance regarding the relative mix of resources that will support progress toward key objectives, including system reliability, cost-effectiveness, and environmental sustainability.

In alignment with the IRP, which incorporated prior National Energy Policy (**NEP**) carbon reduction targets through selected resource portfolios and assessed the associated cost implications, CUC has conducted a comprehensive evaluation of incremental generation resources to meet system capacity requirements consistent with the revised NEP objectives.

The assessment began with a base case scenario consisting solely of conventional thermal generation resources. A series of alternative portfolios were subsequently developed, integrating mature and commercially viable technologies with clearly defined development pathways to achieve operational readiness by 2027. These portfolios underwent dispatch and cost modelling to evaluate their impact on carbon emissions, renewable energy penetration, and relative changes in operating costs compared to the base case.

Further analysis included a risk assessment of development, permitting, and interconnection activities, with particular emphasis on their potential to affect capacity and reliability outcomes for the summer of 2027. Sensitivity analyses were also performed to examine the effects of key input variables, including alternative fuel options such as Liquefied Natural Gas (**LNG**), the contribution of the Dispatchable Solar Photovoltaic (**DPV**) project issued for Request for Proposal (**RFP**) by URCO in July 2025, lower-than-anticipated load growth projections, and a 20 MW increase in Distributed Generation (**DG**) interconnections from the 24 MW modelled for 2027.

Other initiatives and considerations included in the generation forecast analysis were:

- The potential to extend the operational life of retiring generation units.
- The forecast electricity demand for the growing EV market as mandated in the NEP.
- Impact of the successful installation of two utility scale energy storage systems for spinning reserve support to Grand Cayman's power grid, which enhance system reliability, operational efficiency and reduce carbon emissions.
- The implementation and promotion of demand management and energy efficiency initiatives to reduce load.

3. Recommended Action

Based on the projected need for additional generating capacity, as demonstrated herein, CUC requests URCO to approve the generating capacity according to the following criteria and

process guidelines and begin the solicitation process that will be used to obtain the needed generating capacity.

Technical Criteria

Total Capacity needed*: approximately 94 MW (Nominal gross)

Capacity Block	Capacity	Availability	Operational Hours
1	36 MW	24 hours per day	24 hours
2	33 MW	16 hours per day	Minimum operating hours are from 8:00 AM to 12:00 AM, during which generation capacity must be available. However, the T&D grid operator may choose to dispatch the capacity at any time, up to the maximum capacity availability factor over a 24-hour basis if needed.
3	25 MW	10 hours per day	Minimum operating hours are from 12:00 PM to 10:00 PM, during which generation capacity must be available. However, the T&D grid operator may choose to dispatch the capacity at any time, up to the maximum capacity availability factor, between 11:00 AM to 7:00 AM of the following day.

Nominal shall be defined to allow actual capacity to be within +/- 5% tolerance of the nominally listed value.

(*)The final capacity requirements across the designated Capacity Blocks remain to be determined and will be contingent upon the capacity contribution of the 22.5 MW DPV facility currently under bid for commercial operation in 2028. The DPV facility's capacity services contribution to each Capacity Block will be assessed using the Effective Load Carrying Capability (**ELCC**) methodology based on the winning bidder's final design specifications. The capacity figures presented in the Capacity Blocks above represent the gross system requirements before accounting for the DPV facility's ELCC-determined contribution. To satisfy the identified capacity need by June 2027, interim generation measures will be required until the DPV facility reaches completion and becomes operational in 2028, at which point the net additional capacity requirements may be adjusted accordingly.

Timing:

- Commercial Operation Date shall be no later than **January 01, 2029**

- Minimum useful life: 20-25 years

Technical and Operational Specifications:

- The technical and operational specifications set forth in **Exhibit 7** are hereby incorporated into this application by reference.

4. Certification

The Recommended Action outlined in this CON is based on CUC's interpretation of its obligations under the T&D Licence. The supporting calculations, projections, assumptions, and technical requirements have been developed through good faith efforts and in accordance with sound engineering principles. CUC hereby certifies that the next increment of capacity, as described in detail above, along with associated recommendations, is necessary to meet the projected electric generation requirements as of the recommended commercial date.

ON BEHALF OF
CARIBBEAN UTILITIES COMPANY, LTD.

[redacted]

Richard Hew

Feb 10, 2026
Date

5. Approval

This CON complies with the requirements of CUC's T&D License and applicable law and represents a valid determination of needed generation capacity and related requirements as set forth in the Recommended Action herein and is hereby approved.

ON BEHALF OF
UTILITY REGULATION AND COMPETITION OFFICE

[redacted]

TITLE:
J. SAMUEL JACKSON
CHAIRMAN

20 FEB 2026
Date

Exhibits included to support the application:

Exhibit 1: Licensed generating capacity
Exhibit 2: Historic & forecasted peak demand & annual sales

Exhibit 3: Min & max capacity of current & proposed resources
Exhibit 4: E3 CON resource need energy blocks
Exhibit 5: E3 Critical periods reliability framework whitepaper
Exhibit 6: ICAP – ELCC matrix example
Exhibit 7: Technical and operational specifications