# UTILITY REGULATION AND COMPETITION OFFICE

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# A. Introduction

- 1. The Utility Regulation and Competition Office (the 'Office' or the 'Authority') is the independent regulator for the electricity, information and communications technology, water, wastewater and fuels sectors in the Cayman Islands. The Office also regulates the use of electromagnetic spectrum and manages the .ky Internet domain.
- 2. A core responsibility of the Office is to make regulatory decisions with the appropriate input from persons with sufficient interest or who are likely to be affected by the outcome of such decisions. Consultation is an essential aspect of regulatory accountability and transparency and provides the formal mechanism for these persons to express their views. The requirement for the Office to consult is mandated in its enabling legislation and for the purposes of procedural fairness and compliance with administrative law principles.
- 3. A Draft Determination was issued 17 March 2025 in accordance with Section 7(1) of the Utility Regulation and Competition Act (2024 Revision) (the 'URC Act') in order to provide Caribbean Utilities Company, Ltd. ('CUC'), an opportunity to offer comments on the Draft Determination in relation to CUC's Certificate of Need ('CON') submitted on 7 June 2024.
- 4. The Office took CUC's comments into consideration when finalising this Determination.

# B. Legal Framework

5. The Office is guided by its statutory remit in developing the final Determination, notably the following provisions.

# 6. Section 6 of the URC Act

Section 6 in part states:

- (1) The principal functions of the Office, in the markets and sectors for which it has responsibility, are
  - (a) to promote objectives set out in any Policy
  - (b) to promote appropriate effective and fair competition
  - (c) to protect the short- and long-term interests of consumers in relation to utility services and in so doing —

- (i) supervise, monitor, and regulate any sectoral provider, in accordance with this Act, the regulations and sectoral legislation and any general policies made by Cabinet in writing;
- (ii) ensure that utility services are satisfactory and efficient and that charges imposed in respect of utility services are reasonable and reflect efficient costs of providing the services; and

 $[\ldots]$ 

- (d) to promote innovation and facilitate economic and national development.
- (2) In performing its functions and exercising its powers under this Act or any other Law, the Office may —

[...]

- (j) grant, modify and revoke authorisations;
- (k) collect from authorisation holders such information as the Office considers necessary for any one or more of the following purposes —
- (i) identifying the geographic position and nature of critical national infrastructure;

[...]

- (iii) any other prescribed purpose;
- (x) take into account and have regard for the protection of the environment;
- (3) Without prejudice to subsection (1) or (2), the Office has power to carry on any activity which appears to it to be requisite, advantageous or convenient for or in connection with the performance of its functions or the exercise of its powers under this Act or any other Law.
- 7. **Section 7(1) of the URC Act** requires the Office, before issuing an administrative determination which in the reasonable opinion of the Office is of public significance, "... to allow persons with sufficient interest or who are likely to be affected a reasonable opportunity to comment on the draft administrative determination."
- 8. Sections 9 and 26 of the Electricity Sector Regulation Act (2019 Revision)

Section 9 in part states:

- (1) Subject to this Law, the Office has power to do all things necessary or convenient to be done for or in connection with the performance of its functions.
- (2) Without prejudice to subsection (1), the principal functions of the Office shall include —

*[...]* 

(c) to monitor and regulate the rate, price, terms and conditions of electricity generated by Generators and supplied to T&D licensees for reward;

[...]

- (e) to grant, modify or renew licences for generation —
- (i) for additional electricity generation in the context of the generation solicitation process;

from alternative or renewable sources of energy; or

[...]

(f) to solicit additional generation capacity and conduct the generation solicitation process;

[...].

Section 26 in part states:

[...]

- (3) Where a Generator is awarded the right to supply additional electricity generation under the generation solicitation process, its existing licence shall be cancelled and a new licence issued to the licensee for a term not exceeding twenty-five years, to correspond with the period required for construction, reconstruction, replacement or modification of a generating station or any generating unit therein, together with the estimated economic life of the relevant generating unit or units or the term of the relevant PPA as appropriate; and the new licence shall cover
  - (a) the new generating unit or units and any existing generating unit or units covered under its previous licence which have not been retired; or
  - (b) the new PPA and any existing PPAs covered under its previous licence which have not expired, as appropriate.
- (4) Upon application by a Generator, the Office may, if it is satisfied that it is economic to extend the life of an existing generating unit or units, without application of the generation solicitation process, grant a new generation licence, the terms of which shall correspond with the new estimated life of the generating unit or units.
- (5) If, outside the contexts of section 9(2)(e)(i) and (ii) —
  (a) due to a destructive event, some or all of a Generator's generation assets are damaged or destroyed so as to prevent the Generator from being able to satisfy its obligations to supply sufficient electricity to the T&D licensee; and
  - (b) the Office is of the view that it would be in the best interests of consumers, the Office may grant a licence to another person either—

- (i) during the period in which the Generator is repairing or replacing its generation assets that are so damaged or destroyed; or
- (ii) if the Generator's PPAs are validly terminated as a result of its inability to recover from the destructive event, during the period that it will take to conduct the generation solicitation process in order to replace the Generator's generating capacity and enable the new licensee to put in place the generation assets that are required to meet such capacity, and any such licence shall be temporary in nature, shall be granted for no longer than such period of time as is reasonably necessary in the circumstances, and shall be subject to such conditions as the Office may, in its discretion, deem appropriate.
- (6) A licence may be renewed upon application by the licensee, or otherwise modified, suspended or revoked in accordance with this Law.
- (7) Generation licences shall not be exclusive.

# 9. Conditions 4, 6, 23, 29, 31 and 32 of CUC's Transmission & Distribution Licence (the 'T&D Licence'):

Condition 4 "Obligation to dispatch Generating Capacity" (in part) states:

#### Condition 4.4

The Licensee is responsible for the procurement of adequate generation supply, in terms of required energy, capacity and ancillary services to fully meet the needs of its Consumers, subject to the application of the Generation Solicitation Process.

## Condition 4.5

Except as authorised by the Authority in connection with purchases of renewable energy from customer-owned generation for self-supply, the Licensee shall not purchase electricity from any Person other than a Generation Licensee and may not purchase electricity from a Generation Licensee except in accordance with the relevant PPA.

#### Condition 6.8

The Licensee shall prepare and submit to the Authority a five-year forecast of projected loads and generation requirements as often as considered necessary by the Licensee but no less than annually. Upon request by the Authority at any time, the Licensee will provide the most recent five-year forecast.

Condition 23 "PPA Rate Structure" (in part) states:

The PPA structure will be prescribed in the Generation Solicitation Process to provide transparency and comparability in competitive bids. In that regard, the results of the evaluation of bids, including the relative scoring of the price and non-price criteria will be made available to all bidders.

#### Condition 29 "Need for New Generation" states:

- 29.1 The Licensee shall prepare a Certificate of Need to document the size and timing of future generation requirements for Grand Cayman for firm capacity, which shall be subject to competitive solicitations. The Licensee when preparing a Certificate of Need will consider the following factors:
- 29.1.1 Projected growth in electric peak load requirements (taking demandside management and alternative peak demand growth rates into account);
- 29.1.2 Availability of existing capacity, including any anticipated retirement of Generating units as proposed by the Licensee or any other generation licensee and approved by the Authority based on economics, reliability, obsolescence, safety and environmental requirements, Government and Regulatory policy and prudent utility practices;
- 29.1.3 Projected reserve capacity requirements the Licensee shall use a minimum reserve margin equal to 35% and maximum reserve margin equal to 55%, based on peak load projected for the year that the additional capacity is proposed to be in service;
- 29.1.4 Safety and environmental requirements.

# Condition 31 "Solicitation Process" states:

- 31.1 On an ongoing basis, the Authority shall be responsible for the solicitation process for new Generating Capacity. Unless the Authority approves a change in this procedure, this process will consist of a number of steps, as outlined below, some of which can proceed in parallel:
- 31.1.1 No less than three years in advance of the projected need, the Licensee will file, for the review and approval by the Authority, a Certificate of Need establishing the incremental amount of capacity for which the Authority would solicit. This Certificate of Need will allow sufficient time for the Authority to conduct the solicitation and for potential bidders to develop such project(s) on Grand Cayman.
- 31.1.2 Following the approval of the Certificate of Need, the Authority will prepare and publish the solicitation package, including the criteria (both quantitative and qualitative will be used) that they will use to evaluate bids, and the timetable for the solicitation. Bid evaluation criteria may include non-

price factors (e.g., permitting, environmental, finance ability) and price factors (e.g. capacity, energy and total project cost). Criteria and relative weighting will be transparent and set forth in the RFP; greater weight will be attached to price factors than non price factors. A scoring system indicating the relative weights of the various factors influencing the evaluation of proposals will be developed by the Authority and described in the RFP to ensure that, in addition to the relative weighting of price and non-price factors, the relative differences in the bid prices among the bidders and the relative differences of the non-price attributes among the bidders are given appropriate consideration in the selection process.

- 31.1.3 Well in advance of the projected need, the Authority will prepare and publish the minimum threshold requirements for bidders to be qualified to offer Generating Capacity on Grand Cayman. These threshold requirements will be consistent with (and may be the same as) the Authority's generation licence requirements. Solicitations will be open to all types of capacity that meet the required performance (e.g., including renewables if they can provide firm power). The Authority will then request expressions of interest from qualified parties and will evaluate their submissions to ensure that they meet the minimum criteria for participation. The Authority will eliminate potential bidders that do not meet the minimum criteria.
- 31.1.4 The Authority shall consider the Licensee to be a qualified bidder. The Authority will issue the RFP to the qualified bidders, with a specific deadline for responses.
- 31.1.5 In response to an RFP for new capacity, the Licensee will provide a bid to the Authority in a format comparable to the bids prescribed in the RFP for evaluation purposes and to compete with bids from other bidders. This bid will include information on project location, financing, permitting, etc, as well as price. The Licensee will provide its proposal to the Authority as a sealed bid in accordance with the schedule required of other qualified bidders. If there is competition to the Licensee providing this capacity, the Licensee shall be able to put into its Rate Base the amount of its bid, if the Licensee is the successful bidder. "Competition" shall be evidenced by the submission of one or more valid bids by one or more qualified bidders, in addition to the Licensee's bid. On the other hand, if there is no competition to the Licensee to provide the new capacity, then the Licensee may only place into its Rate Base an amount equal to its actual cost to build the new generation, an amount which the Licensee shall demonstrate to the Authority's satisfaction. The Authority shall review this proposed cost in a timely manner, using the Licensee's latest Capital Investment Plan and market information as indicators of cost, while making allowance for iustifiable differences.

- 31.1.6 The Authority shall assess the Licensee's bid compared to other competitive bids either by determining the unit with the lowest cost per kWh, or by calculating the net present value of the PPA charges and comparing that value to the Licensee's construction cost bid plus a comparable calculation of the net present value of the operating costs for the Licensee's proposed unit.
- 31.1.7 Bidders and or licensees shall not engage in anti-competitive practices in seeking to win the solicitation. The Authority will set and enforce level playing field rules for competitive bidding. All reasonable legal and professional fees incurred by the Licensees relating to disputes in the Generation Solicitation Process not covered by any award of costs shall be passed on to Consumers upon review and approval by the Authority, provided that the Licensee is successful in the relevant dispute.
- 31.1.8 The Licensee will develop a draft PPA to be included with the RFP, including such provisions as performance bonds, "step-in" rights, etc. For non-renewable projects, bidders must show fuel and lubricants as a separate component in their proposals so that, if they are successful, the Licensee can include that cost as a part of the Fuel Cost Charge in the rates to Consumers.
- 31.1.9 The Authority will receive and evaluate all responsive bids.
- 31.1.10 The Authority will conduct a detailed evaluation of the bids using the quantitative and qualitative criteria established in the RFP. The Licensee will support the process with transmission interconnection analysis of bids, if required by the Authority.
- 31.1.11 The Authority may choose a bid that is not the lowest cost, if consistent with the evaluation criteria. If Authority selects a higher cost bid, the Licensee will be compensated for the difference between that cost and the Licensee's bid in the form of a "Z Factor" adjustment so that the Licensee is not disadvantaged with respect to its Return on Rate Base and the formula for rate changes.
- 31.1.12 If the Licensee is not a successful bidder, the Licensee will negotiate a final PPA with the winner(s), including possible modification of the draft PPA as approved by the Authority. The final PPA will be submitted to the Authority for approval before it becomes effective.
- 31.1.13 The Authority will be responsible for managing the Generation Solicitation Process. The Generation Solicitation Process shall include milestones to assure that the chosen Generation Licensee will bring the needed supply on line as required by the PPA, and the Generation Licensee will make available contingency funds to procure temporary Generation, in

case it is unable to provide the Generating Capacity specified in the contract. The PPA will provide for penalties to be imposed on the Generation Licensee if any of the milestones are not achieved. These penalties should adequately compensate for any costs that may result from the Generation Licensee's default and therefore these costs should not be passed onto the consumer but absorbed by the Generation Licensee holding the PPA. The PPA should provide for penalties to cover the Licensee's legitimate costs for delay or for the failure of the Generation Licensee to supply power in accordance with the terms of the agreed PPA. The Licensee may apply to the Authority for recovery of any additional costs not covered by the PPA.

- 31.1.14 If the bidder accepts the package approved by the Authority, the Authority will issue a Generation Licence to the successful bidder(s), and plant construction can begin. Preliminary development (e.g., applying for permits, land acquisition) is acceptable before approval of the Generation Licence, but the Authority and the Licensee are not responsible for any costs or commitments made by the bidder in this regard, and shall not be involved in such activity.
- 31.1.15 If the results of the solicitation are not acceptable to the Licensee or any bidder(s), the aggrieved parties will have recourse to the dispute resolution procedures.
- 31.1.16 The non-pass-through components of the successful bidder's PPA would be an operating expense for the Licensee and would impact the Return on Rate Base calculation in the RCAM. Any generation installed by the Licensee would represent an increase in Fixed Assets and would impact the calculation of Rate Base in the RCAM. Additional operating costs, other than the pass-through components, would also impact the Return on Rate Base calculation in the RCAM.
- 31.1.17 Since the Licensee remains obligated for the reliability of supply previously approved by the Authority, appropriate measures in the PPA will provide for penalties and bonds to be paid to the Licensee by the Generation Licensee under the PPA that will be used toward the recovery of uncontrollable costs incurred by the Licensee as a result of delay or failure of a Generation Licensee to deliver the contracted generation. The Licensee may apply to the Authority for recovery of any additional costs not covered by these safeguards.

Condition 32 "Encouragement of Renewables" (in part) states:

#### Condition 32.1:

In the event of any renewables-only solicitations by the Authority, the Licensee will support the solicitation process with technical information and

advice to the Authority as requested. Notwithstanding such renewablesonly solicitations by the Authority, the Licensee may consider renewable projects on a case-by-case basis and negotiate PPAs with such projects subject to Authority approval. All renewable generation secured by the Authority or the Licensee must be consistent with Government policy.

# 10. Schedule 4 Generation Solicitation Process of CUC's Main Agreement (the 'Main Agreement'):

- Schedule 4.1 provides Guidelines Regarding the Certificate of Need
- Schedule 4.2 provides the Form of Certificate of Need
- Schedule 4.3 provides the Form of Request for Qualifications
- Schedule 4.4 provides the Form of Request for Proposals

# C. Background

- 11. Pursuant to Condition 29 of CUC's T&D Licence a CON is documentation to be submitted to the Office by CUC expressing a need for additional Firm generating capacity, which is subject to competitive solicitations. This documents the size and timing of future generation requirements for Grand Cayman for Firm capacity inclusive of internal combustion engine driven generators.
- 12. CUC submitted a CON¹ on 7 June 2024, received by the Office on the same date, for additional generation capacity. The submission includes specific details about the requested expansion. This was the first time that CUC submitted a formal CON to the Office since the Office's inception. It is also noted that for the past 5 years, CUC failed to submit the required annual five-year forecast of projected loads and generation requirements as required of it by Condition 6.8 of its T&D Licence. It should also be noted that even though the Office is prepared to consider the document submitted by CUC on 7 June 2024 as a CON, the same appears to not meet the prescribed format set out in Schedule 4.2 of CUC's Main Agreement. Nonetheless, given the now urgent need to progress the solicitation of additional Firm capacity, the Office has accepted the same as a CON and actioned the request accordingly.

"In accordance with Conditions 29.1 and 31.1 of CUC's Transmission and Distribution Licence dated April 3, 2008. Caribbean Utilities Company, Ltd. ("CUC" or the "Company") hereby files this Certificate of Need ("CON") with the Utility Regulation & Competition Office ("OfReg") to demonstrate the need for additional generating capacity on Grand Cayman.

<sup>&</sup>lt;sup>1</sup> https://www.cuc-cayman.com/about-us/our-licence/regulatory-submissions/

Attached to this CON Cover Letter, as Attachment B<sup>2</sup>, is a resource adequacy projection for 2027 demonstrating that with load growth and contract expirations, CUC has a large capacity shortfall of 82 MW ("ELCC")<sup>3</sup> / 90.1MW incremental thermal ("firm") capacity to fill to ensure adequate

system reliability. This study also reviewed:

-Projected growth in electric peak load (both low, mid and high growth scenarios) and energy requirements.

- -Availability of existing capacity, including any anticipated retirement and planned life extensions of generating units as proposed by the generation Licensee and approved by OfReg based on economics, reliability, obsolescence, safety and environmental requirements, Government and Regulatory policy and prudent utility practices.
- -Projected reserve capacity requirements
- given that the recommended resources include intermittent and non-firm technologies, CUC has utilised a portfolio ELCC analysis to achieve an equivalent effective capacity to meet the reliability outcome of the previous peak reserve margin required band."
- 13. CUC's CON filing proposed various scenarios, which also included a hybrid of internal combustion engine generation and intermittent renewable generation (solar) and battery storage, the latter of which falls outside the scope of and is therefore non-compliant with Condition 29 of CUC's T&D Licence.
- 14. The Office engaged the consulting firm, ICF Resources, LLC (ICF) to independently review the CUC's CON submission. ICF was tasked with providing its technical evaluation of the CON for the consideration of the Office, which included providing its views on the viability of CUC's request, and the ultimate impact on consumers. This involved evaluating CUC's methods for estimating future electricity demand and determining the optimal generation resource mix to meet that demand reliably and cost-effectively. Since CUC's CON proposal included options which proposed a mix of Firm ("thermal") and renewable energy, part of the assessment was to evaluate appropriate contributions from renewable resources.
- 15. ICF also collected information from CUC and its consultants, E3, through presentations, a question-and-answer session, and question-and-answer documents. The final report from ICF was submitted to the Office on 14 January 2025.
- 16. In reaching this Determination, the Office has taken into account the provisions of the CUC's Licences and Main Agreement, applicable

<sup>&</sup>lt;sup>2</sup> The study titled 'Generation Adequacy Study: Caribbean Utilities Company (CUC) Final Report' and dated 29 May 2024.

<sup>&</sup>lt;sup>3</sup> Effective Load Carrying Capabilities (ELCC)

legislation, the spirit and intent of the National Energy Policy, industry best practices, and ICF's final report. These inputs have collectively informed the Office's conclusion on the most appropriate approach to ensure a reliable supply of energy - particularly one capable of meeting peak demand without interruption. In so doing, the Office determined that in light of current circumstances, and based on numerous recent representations from CUC, ensuring grid stability and the predictability of available capacity is of paramount importance.

## **Current Generating Capacity and Retirement of Generation**

17. To determine that a Need is established, the Office must not only consider additional capacity needed for future growth but must also consider the resources available today and what the expectations for those resources are in the future. The CON identifies eight Firm generators with retirements in 2026 and 2027, representing 37.2 MW of nameplate capacity. At retirement, the identified generators will be between 20-40 years old, with the majority approximately 30 years old. These retirement dates are consistent with the 2017 Integrated Resource Plan<sup>4</sup> (IRP), apart from two generators originally scheduled for retirement in 2022, but their lifetimes were extended by five years. The CON identifies the existing generation portfolio to consist of 162.8 MW of Firm generators, 5 MW of solar PV, and 20 MW of battery storage. After the 37.2 MW of Firm generator retirements by 2027, the CON identifies 126 MW of remaining installed Firm generation. The CON, however, did not expound on the fact that CUC has added 20 MW of temporary generation units to its generating capacity and plans to add another 5 MW of temporary generation units in 2025, all of which fall outside of both CUC's Generation Licence and T&D Licence, and in any event are only needed now due to the failure of CUC issuing a CON in the past 10 years to keep pace with load growth requirements and retirements of existing generation. As such, the need to fill the gap in the CUC's generation capacity that is currently being filled by this temporary Firm generation was also taken into consideration.

# Load Forecast Projections for 2027 and Need for Capacity

18. Because CUC assumes an 81% effective capacity rating for the Firm assets, the effective capacity available to support peak loads is equivalent to 102 MW (i.e. 126 MW x 81%). In addition to the Firm generation, CUC identifies a combined 49 MW of installed utility-scale solar, including 5 MW utility solar, 24 MW Distributed Generation and 20 MW battery energy storage system, considered to be equivalent to 10 MW of firm/derated capacity with the assumed effective capacity rate. In total, the existing capacity expected to be online in 2027 is 175 MW installed/112 MW

<sup>&</sup>lt;sup>4</sup> https://www.cuc-cayman.com/renewables/integrated-resource-plan-irp/

firm/derated. Table 1 below summarises the 2027 CUC Capacity Position that was applied to establish the Need. The expected installed capacity in 2027 for each resource type is multiplied by the corresponding effective capacity per cent to arrive at the effective capacity volume (in MW) by resource type that year.

- 19. CUC does not count the planned 22.5 MW DPV project, being solicited by the Office, in the 2027 CUC Capacity Position. However, a Generation Adequacy Study dated 29 May 2024 done by Energy + Environmental Economics<sup>5</sup> (E3) suggests that 22.5 MW DPV has a 94% effective capacity, providing 22 MW of effective capacity, albeit that such capacity is not Firm capacity and therefore cannot be factored into the CON evaluation or considered as part of CUC's Firm generation capacity for the purposes of Conditions 29 or 31 of the CUC T&D Licence.
- 20. Assessing system peak demand is the first step in CON analysis and sets the foundation for determining the adequacy of generation resources to meet demand. CUC considers a peak load of 143 MW in 2027 in the CON analysis. This value reflects the High forecast of three separate demand forecasts presented by CUC. The High forecast is 13 MW above the Low forecast in 2027, with the 10% gap between the forecasts reflecting a significant difference and uncertainty in the potential peak demand over the next three years. CUC indicates the High forecast was derived through applying the recent historical load growth of 4.2% experienced between 2021 and 2024 year-to-date to current peak levels.

Table 1: 2027 CUC Capacity Position

Resource Type	Installed Capacity (MW)	Effective Capacity (MW)	Effective Capacity (%)
Thermal (i.e. Firm)	126	102	81%
Utility Solar	5	1	22%
Distributed Solar	24	1	3%
Storage (1 hour)	20	8	42%
Total	175	112	n.a.

# **Capacity Position and Procurement Needs**

21. Given the estimated peak demand, existing capacity, and planning reserve requirement, the CUC analysis implies or indicates a Total Need at Estimated Reserve Margin of 44 MW of installed capacity, which given the expected derating of future capacity additions to capture their effective peak

<sup>&</sup>lt;sup>5</sup> https://www.ethree.com/about/overview/

capacity contribution, is the equivalent of 82 MW as noted by ICF and shown in the Table 2 below.

Table 2: Estimated Need for New Capacity<sup>6</sup>

Parameter		Installed Capacity Method	Effective Capacity Method	
a.	Peak Demand	143 MW	143 MW	
b.	Recommended Planning Reserve	53%	36%	
c.	Recommended Total Resource Need [a*(1+b)]	219 MW	194 MW	
d.	Expected Existing Resources	175 MW	112 MW	
e.	Total Need at Estimated Reserve Margin [c-d]	44 MW	82 MW	
f.	Reserve Margin Range (35% - 55%)	18 – 47 MW	81 - 110 MW	

#### ICF Engagement with CUC to Gather Supplemental Information

- 22. After ICF's initial review of the documents identified in Chapter 3 of its report, ICF prepared data requests which were submitted to CUC. Prior to responding, CUC, together with its consultant E3, presented key points from the CUC's CON application to the Office and ICF via a teleconference on 20 November 2024. During this teleconference, ICF and the Office were provided with the opportunity to ask questions of CUC, and an additional data request was submitted following the teleconference based on the material presented.
  - Data Request Set 1: The Office conveyed to CUC a first set of data requests prepared by ICF. The data request consisted of eight questions seeking clarifications and additional information on the following topics:

<sup>&</sup>lt;sup>6</sup> The calculations in the table involve parameter 'a' being multiplied by 1 plus parameter 'b' to calculated parameter 'c', from which parameter 'd' is subtracted to reach parameter 'e'. Parameter 'f' is a reference calculation showing where parameter 'e' fits within a range of possible reserve margin outcomes. Effective Capacity Method is the ELCC method described in the CON.

- a. Effective Load Carrying Capability (ELCC) and Perfect Capacity<sup>7</sup>
- b. Demand growth scenarios
- c. National Energy Policy compliance
- d. Contribution of each resource type to fixed and operating costs
- e. Additional sensitivities considered
- f. Exclusion of resource types studied in the 2017 IRP
- g. Transmission system impacts and interconnection costs
- Teleconference: During the teleconference, CUC presented the Near-Term Adequacy Study (Attachment B) in detail and sought clarifications on certain ICF questions. CUC's consultant also presented the Scenario Comparison Tool described in Attachment B and CUC agreed to make this tool available to the Office and ICF for review. The tool includes inputs and outputs of each of the scenarios developed for the CON and as such contained helpful information and transparency regarding the analysis performed for the CON.
- Data Request Set 2: ICF submitted one additional question after the teleconference related to the utilisation of resources by scenario, to better understand the utilisation of each asset across the year as well as during peak load hours.

CUC responded to all questions, and the utility's responses were incorporated into ICF's review.

# Summary of Key Findings and Recommendations from ICF

- 23. Key findings from ICF's review are itemised below:
  - The methods used by CUC to estimate future electricity demand and determine the generation resource mix were reasonable.
  - The sufficiency of the CON application was assessed against industry norms and standards and found to be reasonable.
  - CUC provided sufficient evidence to support 82 MW of Need for effective capacity.
  - CUC failed to provide substantive evidence in support of procuring 98
     MW of effective capacity versus the identified need of 82 MW of Need.

<sup>&</sup>lt;sup>7</sup> ELCC was developed primarily to measure the reliable capacity contribution to peak conditions that could be expected from intermittent renewable resources. ELCC accounts for uncertainty about the expected hourly availability of these non- dispatchable renewable resources. ELCC may also be applied to dispatchable resources to account for potential non- availability of such resources. "Perfect Capacity" is a term introduced in the CON to capture the ELCC concept as applied to all types of generation resources.

# D. CUC's Comments and the Office's Response

24. The Office consulted with CUC on the draft administrative determination from 17 March 2025 to 31 March 2025. CUC provided its detailed response, via its attorneys, to the draft administration determination on 31 March 2025. A summary of the response is outlined below:

CUC's response raises concerns on both procedural and substantive grounds. Procedurally, CUC argues that the Office failed to uphold principles of fairness by not providing access to the ICF report, which informed the Draft Determination. It contends that this denied it the opportunity to respond fully and meaningfully. Substantively, CUC challenges the Office's position that solar generation coupled with battery storage cannot be classified as Firm power. It argues that this position misinterprets the terms of the T&D Licence and the NEP. CUC maintains that its proposal, which includes a combination of "thermal" (i.e. Firm) and hybrid renewable capacity, meets the system's reliability requirements and aligns with regulatory objectives. Additionally, CUC asserts that the Office's rejection of their proposed 98 MW capacity contradicts its own plan to solicit 90.1 MW of Firm capacity, and it suggests that further public consultation should have been conducted.

25. CUC's direct responses to the consultation questions are quoted below respectively:

Question 1 As CUC explicitly references the possibility of lifetime extensions in the CON submission, we request that CUC provide additional details on the reason(s) for retirement by unit, the potential for lifetime extension (that is, years extended and cost), and impact on total resource need?

# Response:

- 39. At the end of the generation license validity period for each generation unit, CUC undertakes a viability assessment both technically and commercially to identify the feasibility of extending the lifespan of that unit. This includes reviewing the availability of spares, operating cost affordability of new/alternative generation versus the extension of a generator, and any structural or mechanical wear that may make it unsafe to continue the operation of the relevant unit.
- 40. Due to delays in the procurement of new generation capacity, this exercise is currently underway against short-term generation solutions, in order to ascertain the viability of extending these units

to minimize the need for rental generation solutions while maintaining system reliability. This business case for the extension of generating units will be provided to the Office in the near future.

# Question 2 Please provide your views on any other matters you consider relevant to this Draft Determination.

## Response:

- 41. The matters relevant to the CON DD are addressed as fully as is presently possible, given the deficiencies in the CON DD and failure to provide the ICF report already addressed above. Given the impact of the anticipated capacity shortfall, and the consequent need for the timely addition of the necessary firm (and/or temporary) capacity, it is of course imperative that such matters be resolved on a proper and properly informed basis forthwith.
- 26. Regarding CUC's response to question 1 above, the Office noted that the CON outlines the planned retirement of eight Firm generators in 2026 and 2027, accounting for a combined nameplate capacity of 37.2 MW. These generators, ranging in age from 20 to 40 years, with most around 30 years old, were scheduled for retirement in alignment with the projections outlined in the 2017 Integrated Resource Plan (IRP). The Office acknowledges CUC's very recent request to extend the useful life of Units 1, 2, 3, 4, 19, 25, 41, and 42, dated 7 April 2025, and the urgency to maintain adequate capacity to avoid potential rolling blackouts in the near term. The Office is currently reviewing this request. While the proposed life extensions, which would require careful evaluation in any event, may offer short-term relief, they do not eliminate the urgent need for new Firm generation resources. The Office is also concerned that given the size and age of these generators, that even if the same are retrofitted with the most modern upgrades available for these units, there is good reason to believe that these older, smaller units will not be as efficient and certainly not as reliable as a fleet of new high efficiency generating units, which offer the added advantage of dual fuel capability and additional heat/steam generation, thereby enhancing their capacity and improving efficiency and lowering emissions. The Office is also cognizant of its statutory duty to encourage competition and to otherwise protect consumers interests, and has concluded that this late request, if granted, would effectively forgo the opportunity to solicit a bid for a significant amount of capacity, thereby reducing the viability of any competitive bid which could thereby effectively give CUC an unfair advantage such that it would continue to monopolize the generation of Firm electricity in Grand Cayman.
- 27. The ICF report is appended to this Final Determination and designated as "Annex 1." Notwithstanding the findings contained therein, the Office is

statutorily and contractually constrained by the terms of the T&D Licence and cannot act in breach of its provisions. CUC has contended that the Office's failure to disclose the ICF report during the consultation phase constitutes a breach of procedural fairness and impairs its ability to provide a fulsome and informed response. The Office respectfully rejects this assertion. The ICF report did not and cannot independently or decisively determine the outcome of the Office's decision. It was commissioned as a technical advisory input to inform the Office's internal deliberative process. The conclusions drawn by ICF were considered alongside other relevant factors, including legal obligations, sectoral policy, and internal analysis. The material findings of the ICF report that the Office accepted and relied upon were expressly cited in the Draft Determination. These included the reasonableness of CUC's demand forecasting methodology, the technical justification for procuring 82 MW of Firm Capacity, and the lack of evidentiary support for CUC's proposed procurement of 98 MW. The Office is satisfied that the inclusion of these substantive elements in the Draft Determination afforded CUC a fair and reasonable opportunity to respond and to address the basis for the Office's preliminary conclusions.

- 28. With regard to the consultation process, the Office maintains that the statutory requirement for consultation under Section 7(1) of the URC Act was satisfied. The consultation period and process were fair and appropriate, particularly considering the prior direct engagement between the Office and CUC on this matter over the preceding months. This included two meetings with the Board, which presented opportunities for data sharing and clarification. It is the Office's position that the relevant stakeholder, CUC, was appropriately consulted. In any event, the outcome of the "decision" in this instance is simply the approval of a Certificate of Need, issued by CUC, which then triggers a competitive bidding process that CUC is entitled to participate in as a proposed generation provider. Moreover, the Office's decision here is to adopt the first of a number of options proposed by CUC, being the only option which is fully compliant with the terms of Condition 29. The Office is therefore unable to see any validity in CUC's complaint of procedural unfairness and, in any event, it is hard to understand how CUC could claim to be aggrieved with, or prejudiced by, the Office's acceptance of one of the proposed options that CUC itself has made.
- 29. CUC further asserted that the Office failed to properly consider the objectives of the NEP. However, it should be noted that the Office is continuing to support the goals of the NEP through the issuance of a Request for Proposals for 22.5 MW of dispatchable solar plus battery storage, conducted under the Renewable Energy Auction Scheme. The Office also plans to issue additional solicitations for renewable capacity in due course, unless stated otherwise. The decision to proceed with Firm

generation procurement in this instance does not represent a deviation from NEP objectives but rather ensures system reliability and cost-effectiveness in the immediate term, while renewable integration continues in parallel. The Office has considered that most of the capacity that will be provided pursuant to the current CON will be utilized to address the existing shortfall in capacity that is being catered to by way of temporary generation and to provide for replacement of soon to be retired units. There is therefore good reason to conclude that there will be ample opportunity in the near future for additional renewable energy capacity to be implemented in accordance with the NEP's goals.

- 30. The Office's approach aligns with the general regulatory principles set out in the Electricity Sector Regulation Act, particularly those of stability, predictability, and cost-effectiveness. Firm power, by its nature, provides a higher degree of stability and predictability compared to intermittent generation, even when coupled with storage. Moreover, replacing older, smaller generation units with modern efficient and cleaner Firm generation capacity will serve to improve reliability and reduce costs to consumers, whilst supporting price stability, thereby fulfilling the Office's statutory obligation to protect the long-term interests of utility customers.
- 31. The decision not to approve some of the specific resource portfolio options proposed by CUC at this time does not reflect an anti-renewables stance. Rather, it reflects the Office's view that the proposed hybrid configuration, in its current form, does not conform to the terms of the T&D Licence as well as not being suitable for meeting the near-term need for Firm capacity. The Office continues to remain committed to advancing the integration of renewable energy sources through appropriate procurement mechanisms that align with existing licence conditions and policy objectives.

# E. Final Administrative Determination

- 32. The Office has reviewed the proposal submitted by CUC, along with CUC's written response dated 31 March 2025 and has decided to treat the same as a Certificate of Need ("CON") although it does not follow exactly the format prescribed by the CUC Main Agreement and only Scenario 1 of the proposal is compliant with Condition 29.1 of CUC's T&D Licence.
- 33. In its CON, CUC proposed a number of options that proposed combination of "thermal" (i.e. Firm) generation and hybrid solar-plus-storage resources to address a forecasted Firm capacity shortfall. The Office reiterates its position that, under the current Transmission and Distribution (T&D) Licence, intermittent resources—even when paired with storage—do not

qualify as "Firm" capacity for the purposes of Condition 29. While CUC has disagreed with this interpretation, it is notable that in its own submission, CUC differentiated between Firm and non-Firm resources. Specifically, CUC referred to Scenario 1 as "Firm," whereas the remaining scenarios were described as involving combinations of "Firm and standalone solar," "Firm and Hybrid Solar," or "Hybrid Solar and Storage"—implicitly acknowledging that the latter are not purely Firm capacity. The Office maintains that the consideration of these "Hybrid Solar and Storage" scenarios would first require a formal amendment to the T&D Licence, to redefine Firm capacity and provide any consequential amendments which is simply not feasible within the urgent timeframe for addressing the system's immediate needs.

- 34. To ensure that CUC can adequately meet the forecasted capacity demand in accordance with its T&D Licence and can then eliminate continued reliance on temporary generation, the Office determines that only Scenario 1—proposed by CUC and detailed in its CON—can be appropriately approved. Scenario 1 involves the procurement of Firm Capacity only. Accordingly, the Office will issue a Request for Proposals (RFP) for 90.1 MW of Firm Capacity. The Office has determined that Scenarios 2, 3, and 4 do not comply with Condition 29 of the T&D Licence. While acknowledging the importance of planning flexibility, the Office considers the procurement of 90.1 MW of Firm Capacity to be a proportionate and legally compliant response to the present capacity shortfall, and one that aligns with the maximum allowable reserve margin under the T&D Licence.
- 35. The Office acknowledges CUC's objections regarding the classification of Firm capacity and its interpretation of the T&D Licence. However, given the statutory and contractual framework, and CUC's own implicit recognition of the distinction between Firm and non-Firm generation types in its submission, the Office maintains that its position is both legally sound and consistent with its statutory mandate to ensure the provision of a reliable and cost-effective electricity supply in the public interest. The Office has also taken into account CUC's public and privately voiced concerns regarding the risks of unreliability and has concluded that the best way to ensure a reliable supply of generation is by way of Firm generation.
- 36. In making this determination, the Office has taken into account several factors, including CUC's current reliance on 25 MW of temporary generation in 2025 and 2026, the planned retirement of 37.2 MW of Firm Capacity by 2027, and projected load growth. Based on this context, the Office finds that procuring only 36 MW of new Firm Capacity—as proposed in one of the alternate scenarios—would be insufficient to meet expected demand, especially during nighttime hours and extended periods of overcast weather. As such, that level of capacity would also fail to address the need to replace temporary generation.

- 37. The Office further recognises that the proposed 90.1 MW of Firm Capacity represents the minimum required to maintain grid reliability and avoid the risk of blackouts or brownouts, as identified by CUC. This level of procurement does not result in an excessive buildout but instead constitutes a critical baseline necessary to preserve system stability. Importantly, this determination does not preclude future integration of renewable resources. The Office remains committed to supporting renewable energy in line with the National Energy Policy (NEP). In parallel with this Firm Capacity procurement, the Office is actively pursuing 22.5 MW of dispatchable photovoltaic generation paired with battery storage through a separate Request for Proposal under the Renewable Energy Auction Scheme. Additional solicitations for renewable resources are also anticipated.
- 38. To promote long-term flexibility and alignment with the NEP, the Office will require that all new Firm Capacity generators procured through this RFP be dual-fuel capable. This requirement supports the future integration of lower-emission alternative fuels and helps reduce the environmental impact over the operational life of the assets.
- 39. Therefore, the Office will issue a RFP for 90.1 MW of Firm Capacity, consistent with Scenario 1 of CUC's submission, to be conducted in accordance with the process outlined in Condition 31 of the T&D Licence. This Firm Capacity solicitation will be carried out concurrently with the ongoing 22.5 MW dispatchable PVplus battery storage procurement.
- 40. The Office reiterates its commitment to transparency, procedural fairness and encouraging competition in support of the long-term and balanced development of the energy sector and would encourage CUC and any interested parties to participate actively in the competitive solicitation process and to submit updated proposals that are consistent with existing licence conditions and system requirements.

This is the final Administrative Determination as issued by the Office.

Mr. J Samuel Jackson

Chairman of the Board of Directors

Utility Regulation and Competition Office

Date: 24 April 2025

[END]