

#### **NOTICE OF CROSS SUBMISSIONS**

The Office invites all respondents to tender cross-submissions in relation to the  $E\&U\ 2020-2-Consultation\ from\ 22\ May\ 2020\ to\ 5\ June\ 2020.$ 

- 1. All cross submissions on this consultation should be made in writing and must be received by OfReg by email to <a href="mailto:consultations@ofreg.ky">consultations@ofreg.ky</a> by 5 p.m. on 5 June 2020 at the latest. When responding, please repeat the question above the corresponding response to each question.
- 2. OfReg will post any cross submissions received on its website www.ofreg.ky by 5 p.m. on 12 June 2020.
- 3. Submissions may be filed as follows:

By e-mail to: consultations@ofreg.ky

#### Or by post:

Utility Regulation and Competition Office P.O. Box 10189
Grand Cayman KY1-1002
CAYMAN ISLANDS

#### Or by courier:

Utility Regulation and Competition Office 3rd Floor, Alissta Towers 85 North Sound Road George Town Grand Cayman CAYMAN ISLANDS



"The Lowest Cost Solar - Guaranteed!"

May 15, 2020

#### To Ofreq

Please consider this letter and the issues we are concerned with the way the solar industry is progressing in Grand Cayman.

If there is no more allocation to the CORE program at this time the industry will cease to exist and jobs will be lost. The additional 700 kW that has been requested to be moved from the DER program should be added to to the existing phase of the CORE program at the same rates to enable the program to run until the Storage system that has been delayed CUC is installing.

We fully agree that in the future should be unsubsidised and believe net metering would solve this issue.

The current DER program is not a viable program for residential solar or small commercial. This program should be fully re evaluated.

We recommend 1 mW of the remaining unused DER program be moved back into the residential CORE program. This will help Cayman residents reduce their monthly expenditures by reducing their monthly power bill.

Regards

Dale Nickason

Affordable Solar Cayman Ltd.

148 David Foster Dr., George Town

Phone 345 546 6686



17th May 2020

Utility Regulation and Competition Office P.O. Box 10189
Grand Cayman KY11002

Attn: Malike Cummings, Gregg Anderson

RE: E&U2020-2-CONSULTATION PROPOSED RENEWABLE ENERGY

CAPACITY REALLOCATION AND TARIFF SETTING

Dear Sirs,

Firstly may I state that I hope you, your families and the entire OfReg team have remained healthy during these unprecedented times. Secondly, thank you for asking for input from industry.

In response to the consultation launched on 20<sup>th</sup> April please find GreenTech Solar's responses. The nine (9) questions within the consultation are noted and we respond accordingly. Some of our responses relate to multiple questions.

1. What are your views on the appropriateness of the aforementioned reallocation? Are there any other criteria that you consider a priority? Please explain why.

GreenTech supports the additional capacity being added to CORE as this supports the preservation of local jobs and the local solar industry as well as provides consumers with financially viable renewable energy systems. The need is immediate as the DER program intended to replace CORE is simply not an option for consumers and thus industry alike.

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2. State, giving reasons, whether you agree that 1 MW of the DER programme capacity should be transferred to the CORE programme?

The additional 700KWs of capacity from DER noted in the consultation should be approved and at the current rates and terms as governments additional capacity that was already added. The CORE program provides consumers with a simple, straightforward and certain return on investment and is the only viable program in Cayman for most consumers and should be preserved and improved. Cayman needs more solar options not fewer. The relative simplicity of a FIT program provides an environment where costs are more likely to be driven down and also opens up to a wider section of society as the program is more bankable.

3. What would the impact be of not allowing the RE 1 MW capacity reallocation to the CORE programme? Please provide evidence.

The impact in simple terms will cripple the renewable industry, particularly smaller operators and ensure that there is no feasible option for residential solar in the Cayman Islands for consumers. Local jobs will be lost as there will ne no further residential solar program to put to market. The DER program which is intended to replace the CORE program in actual test cases actually INCREASES utility bills. In ALL test cases of this DER programme 100% of the results came back with increased electricity bills – and this is even before the investment is taken into account. There will be No market for residential solar and for families to participate in the benefits of renewable apart from doing their part in both Cayman working towards the NEP objectives and the wider context in relation to reducing carbon emissions. This very unlikely scenario that a consumer would choose given that it will actually cost them to implement will be available only to the super wealthy.

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4. Do you agree that the new tariff should be the levelised cost of energy rates for this 1 MW of capacity?

GreenTech Solar fully supports the notion and aim that renewable energy should be unsubsidized. There needs to be a plan to get there – not just letting rates fall off a cliff overnight. This plan will provide all stakeholders alike with a clear, defined and actionable plan to follow and monitor. Currently and as a very recent economic discussion surrounding island states post COVID one very big threat (and thus opportunity for change) to the region that Cayman and particularly the renewable industry is unfortunately exposed to on a daily basis is Red Tape. This area needs to drastically reduce in order for a plan to get to unsubsidized rates. We have to 'touch' a project, very simple in nature an inordinate and unnecessary number of times to get completed. It is an area that the industry really needs OfReg's backing and support to work towards the mutual goal of reducing cost.

5. Do you agree that capacity limits for RE systems, that are differentiated based on location and feeder capacity, should be implemented for the grid as a stability safeguard?

As technology advances this largely becomes a moot point. There are solutions that allow self-consumption with battery storage coupled with a solar system designed that has either has limited or no export to the grid. This protects both the transformers and actually strengthens the stability and resiliency of the grid.

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6. Are there alternative mechanisms (other than changes to FITS) that could be used to incentivise and reward the installation of rooftop solar generation?

For residential solar other than going to net metering then not really. Cayman chose the FIT method. The proposed DER is neither one nor the other and not actionable for a few critical reasons.

7. Are the opportunities to benefit from rooftop solar available equitably across the community?

There is nothing more that GreenTech Solar would love to see than ensuring equal renewable options for everyone. A FIT program enables this as the program is both economically appealing and critically - bankable. The complexity and relative uncertainty of the DER program is not bankable because a) No-one will adopt for economic reasons and b) even if it did make economic sense the program itself is not bankable. Although we have been working with banks at an individual level and we have seen a wider society adoption of renewables it still has a very far way to go. A move away from a FIT program will only make this aim an even more remote reality.

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8. Do the costs of incentivising further solar installations outweigh the benefits to non-CORE consumers?

This really depends on which goals are the higher priority and also time frame involved. If it is to look at the wider country aim and the NEP goals then absolutely. This question will become irrelevant once there is a plan and timeframe to get towards unsubsidized solar. Then there are no losers. But in the absence of any plan then this question will likely have to be asked for longer than it should. We urge that a plan is put together showing the country how we are moving to unsubsidized solar.

9. Any other relevant matters that the person or group submitting would like to raise for consideration.

GreenTech Solar would also like to raise the following:

- Implementation of programs. The commercial DER program was supposed to have a January 2018 start date. It was completely unactionable and wasn't able to be brought to market until May 2019. We strongly feel that this shouldn't happen again and that the involvement and consultation with industry in the formulation of programs will greatly help in minimizing this occurring. We need to work together in formulating programs rather than fixing them.
- We feel the significant commercial DER delay is about to be repeated with the residential version – but for different reasons and a far wider impact. The program is completely unfeasible. Again, involve us earlier and more regularly and the results will be more impactful for the country.
- We ask for an **urgent** sit down/WebEx to go through the detailed process and economics of the DER program for residential customers.
- Outside of CORE only the large (but cash only) customers are being catered too through DER. There is presently nothing for customers between 10kW and 100kW in size.

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- We would like to ask for the ratchet period on large DER to reduce from two to one year that is more standard. As mentioned above the program is really only open to cash customers and that is essentially just a few in Cayman.
- We also want to reiterate the need for an agreed and documented plan to work towards unsubsidized solar.
- To help in this process (of cost reduction) a vast reduction in Red tape is needed that OfReg's support is needed on.
- Lastly and perhaps most critically when looking at 2020 alone I am very concerned that the CREA President has informed me that the revised timeline for the 20MW battery storage system has been moved from 2020 to 2021. We were expecting (and been communicated to) the RFP for this was coming to market at the end of March 2020. This extended timeframe is going to require OfReg to approve a further extension of capacity as a result. The DER currently has 2.5MW's remaining. We recommend leaving 1MW of capacity in DER and moving the rest to CORE. OfReg should reduce the CORE rate after the current 1.4MWs of additional CORE capacity is added and commensurate with the average rate level of drop it has carried out since the inception of the CORE program.

During this period I'm hearing of lots of people having moments of reflection of the past and also sharing optimism and ideas for the future – a better future. As an island(s) nation the need to become more resilient and self-sufficient is an extremely clear and growing one in several ways. Renewable energy is a solution to ensure that Cayman delivers both resiliency and self-sufficiency for its people in relation to her energy needs.

Yours faithfully,

Richard Harrison

Chief Executive Officer - GreenTech Group

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May 19th, 2020

Attention:
Malike Cummings - OfReg
Gregg Anderson - OfReg
Cc: Kristen Augustine - CI Govt.

Re: CORE Allocation Consultation Response

On behalf of CREA we are hereby formally writing in support of the consultation paper to include an additional 700KWs of CORE from the DER program as it is vital to the local industry, to consumer choice and remains the only economically viable renewable energy program for the vast majority of Cayman's consumers.

As a result of the CORE program being shut down for approximately 5 months this has resulted in backlog of customers; which means the initial tranche will go quicker than normal. In order to stabilize this adoption back to the norm there needs to be significantly more allocation provided. This will also save and create jobs as well as continue achieving the goals of the National Energy Policy while keeping the adoption of consumer renewable energy in the Cayman Islands advancing forward.

Today, more than ever, it is critical for Cayman to grow local jobs and stimulate the local economy; however CREA's commitment to ensuring renewable energy in Cayman can achieve wide adoption in an unsubsidized manner remains steadfast. As CREA has noted to OfReg prior there is a clear path of to achieving this; the steps that need to be taken are known to us and we look forward to accelerating this for the benefit of all with the help of Government, OfReg and CUC.

Since the recent consultations with CREA and OfReg and the issuance of the consultation paper CREA has come to learn from CUC that their deployment of the grid scale battery is significantly delayed due to Covid19. They no longer expect this battery to be online by 2021 and have now revised this to January 2022.

This is a significant change because CREA's request for a total of 1.4MWs at the current rates and terms was based on carrying the industry for the rest of the year until 2021, when additional capacity was available. This additional 1 year delay presents the same problem we are currently resolving. UNLESS this process can be sped up significantly which we strongly recommend OfReg attempts to do if it can.

If the battery cannot come online until 2022 it is CREA recommendation that OfReg leave 1 MW within DER and transfer the remaining to CORE to bridge this gap. This will exceed the initial 1.4MW recommendation but will absolutely be required beyond this year.

What is also required is for Cayman to fast track changes to the existing programs (DER/CORE) as well as implement new programs. CREA has several ideas on how best we can do this while minimizing or eliminating any subsidy. For example, consumers today can adopt renewable energy systems to self-consume and have **NO EXPORT of energy back to the grid**, which eliminates any negative impact on the CUC Grid Capacity limit AND is not subsidized by consumers. A flat grid fee for small residential consumers could be agreed with CUC, in what is a more simplified, certain and accessible program for average consumers over the DER program.

We believe strongly OfReg should consider these and other recommendations to increase renewable energy options for consumers on an expedited basis, especially given the current economic crisis the country is facing over the next 1-2 years in addition to the specific challenges of the local energy industry.

We note in the Consultation that the DER program not being applicable to most consumers is suggested to be a 'claim' by CREA for which no facts have been presented. CREA once again would like to reiterate its formal request to be able to present these facts to OfReg as soon as practicable, reaffirming that which we have stated in our in-person meetings that the DER program does not work and we can show a range of real world (not hypothetical) examples to prove this.

Part of OfReg's charge and the goals of the National Energy Policy is to innovate in regulation and CREA looks forward to helping play a part in that so that the country, the consumers and the industry can make it through these unprecedented economic times and not only survive but thrive.

We look forward to the approval of the 700KW transfer from the DER allocation as well as your consideration of moving more allocation from DER to fill this gap now stretched to 2022, 'if' OfReg cannot speed up that process. What CREA asks above all else is that OfReg act with urgency and be proactive, whatever its ultimate decisions, so that the industry does not yet grind to a halt which will cause the local industry to collapse, jobs to be lost, less economic activity in the country and the death of consumer choice in renewable energy in the Cayman Islands.

Regards,

James Whittaker CREA – President 1 345 916 7246

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19th May 2020

#### Proposed Renewable Energy Capacity Reallocation and Tariff Setting

Dear Sir/Madam,

I am writing on behalf of the above named company which has been in business in Cayman since 2015. We currently have 3 branches in the Caribbean and we have seen where the loss of CORE type programs have left people without jobs and not created opportunities elsewhere as a result.

Many Caymanians now benefit from the jobs created directly as well as the peripheral services that provide assistance to the industry. This local program has also exposed the Caymanian people to the AE industry worldwide and we must continue this exposure for future generations.

We therefore absolutely support the extra 700kw of CORE being made available to the private sector by way of the DER allocation. The CORE program provides consumers with a simple, straightforward and certain return on investment and is the only viable program in Cayman for most consumers and should be preserved and improved.

We completely understand that the program needs to become unsubsidized which can be achieved if we are able to cut through a lot of the red tape that keeps costs higher than could be otherwise. I would also like to point out that lower income households are now embracing the solar program and with all

banks financing the programs our last 5 client shave been low income households that will benefit hugely from their solar installs.

We were excited to hear of CUC's impending battery installation that would solve a lot of the "capacity" issues however we were not surprised to hear it was delayed. It is merely a bridge loan of CORE that we are asking for that can perhaps cover some of that waiting period and in the mean time keep people employed and trained to be ready for the re-emergence of the industry after the battery's installation. This extended timeframe is going to require OfReg to approve a further extension of capacity as a result. The DER currently has 2.5MW's remaining. We recommend leaving 1MW of capacity in DER and moving the rest to CORE. OfReg should reduce the CORE rate after the current 1.4MWs of additional CORE capacity is added and commensurate with the average rate level of drop it has carried out since the inception of the CORE program.

Personally I also do not see all of the DER being used by the public sector and it is certainly of little use to the private sector. Outside of DART there really are only a few businesses that could benefit from larger DER systems and considering this acute economic downturn any other potential purchasers of the DER program may now be out altogether. This is something we can testify to from recent experience. Therefore it is our opinion that the DER will take years to be fully allocated, if ever.

Thankyou for considering our request and keeping us employed as I don't know which industry is ready to hire those who will be left without work considering the current recession that is only going to get worse.

Regards

Neil de Vere

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## RESPONSE TO PROPOSED RENEWABLE ENERGY CAPACITY REALLOCATION AND TARIFF SETTING CONSULTATION ISSUED BY OfReg 20<sup>th</sup> APRIL 2020.

Submitted by: Charles Farrington (ex-Cayman ERA MD and currently Chairman of the Energy Policy Committee under the NEP)

Comment on OfReg's proposed features for any new FITS tariff (as per section 41 of the Consultation).

- a) I suggest that risk in this context is greatly dependent on certainty or the lack thereof and the time horizon. In other words, minimization of risk for investors/lenders would be achieved by the investor having certainty of the returns on their investment and by recouping their investment over the shortest possible time horizon. Neither of these may be in the best interests of consumers however and I expect OfReg will balance the competing interests of consumers and the investors in their deliberation on a new tariff. Perhaps the feature could have an added proviso of "whilst also taking into account the best interests of consumers".
- b) Establishing a tariff which avoids cross subsidy would be ideal but I expect it will run counter to objective a) above. It should also be acknowledged that there are already other cross subsidies throughout the grid and whilst tariffs attempt to minimize these, most if not all tariffs are compromises. Therefore, I suggest that elimination of cross subsidies in this aspect of the grid, whilst laudable, should NOT be a hard and fast feature of any new tariff.
- c) If by "degression schedule", OfReg means that the tariff will feature a reduction in the compensation rate to investors over time this may be acceptable in that it could shorten the period over which an investor recoups his costs without increasing the levelized cost of securing the solar resource. It will depend however on the schedule being "certain" at the outset so that the investor knows what his return over the life of the asset will be. Note however that in terms of the consumers interests this would seem to not necessarily be a good thing as all things being equal, the consumers (who ultimately pay for all generation resources) would prefer to pay later rather than sooner! Therefore, for an investment with a given levelised cost from a consumer's point of view, I would argue for a "progressive schedule" but this would not encourage investors. In conclusion, a "degression schedule" such as I have assumed, should in my view only be employed if it can realise a lower levelized cost for the asset. In other words, the investor needs to give up some overall return in exchange for the certainty of recouping his investment costs sooner.
  - If by "degression schedule" OfReg means a schedule with uncertain returns, please see my comments to a) above.
- d) The possibility of sub-grid capacity cap regulations expressed as a means to achieving equitable access to overall grid RE capacity allocations (which must have some limits at any given time), does not seem unreasonable. However, the devil will be in the details.

Will the caps accurately reflect the numbers of consumers in each sub-grid? Should it just be consumer numbers or should it be total average consumption in the sub-grid? Will the caps result in scarce RE deployment spaces (e.g. roof tops, car garages etc.) becoming "off limits"? I suggest that OfReg needs to seriously consider if this is really necessary in the interests of equity or is it just a means to give CUC greater flexibility in making upgrade investments in the grid? One of the issues facing the achievement of RE goals via solar in particular is the conflict between adding solar resources and reducing vegetation. Optimal utilization of already developed spaces has been identified as essential and it would be undesirable for a sub-grid capacity regulation to frustrate achievement of this goal.

Comment on the summary matters on which OfReg desires to hear the views of members of the public and industry (as per section 48 of the Consultation)

- a) It would seem that the reallocation of 1 MW of the DER capacity allocation is a sensible and desired action. The lack of uptake under this program since its introduction over 2 years ago would seem proof positive that the cost of solar has not yet decreased sufficiently to make the returns under this program attractive to consumer investors. The NEP is approved government general policy and therefore in my view OfReg is required to support same. The NEP speaks to encouraging innovation, the development of local RE industry and expertise and CUC's IRP has identified a significant amount of distributed RE as a desirable feature of its future energy production resources optimal portfolio. Therefore, I would conclude that OfReg should take the action in support of these goals.
- b) My understanding of a "levelized cost of energy" requires projections of future periodic costs over a specified period (e.g. 25-30 years) and the discounting of those costs to present value using a selected discount rate. OfReg has given no indication of any parameters for levelisation and since the future costs of energy are unknown as estimates must necessarily be used, the compensation investors would receive would be an estimate and depend hugely on the projected future costs of fossil fuel as well as other RE resources utilized by CUC. If by "levelized cost of energy" OfReg means what I would refer to as "avoided cost" this would still suffer from the same lack of certainty that a levelized cost would do. Perhaps this is why CREA described the DER program as "unbankable". DER compensation was, if I recollect correctly, essentially an "avoided cost" tariff.
- c) I agree tariffs should be reviewed as technology evolves and the cost of investing in RE hopefully continues to diminish. Another factor that might impact tariffs is "avoided cost". If the world gets it act together and implements a global tax on carbon in order to address climate change (something many experts opine is inevitable and essential) the avoided cost of energy could begin to climb very significantly. If this were to happen, it may be desirable to increase tariffs for RE to incentivize investors and accelerate RE adoption in the interests of reducing the cost of electricity. However, I think OfReg should have made it clear that tariff revisions would not be retroactive as this would add more uncertainty into the "bankability" question. In my view OfReg must necessarily take many

factors into account when adopting tariffs and a regular review is essential but not just with regard to technological evolutions but all market and regulatory factors.

Responses to specific questions in the Consultation (as per section 50 of the document).

- 1. I think the reallocation is appropriate as it seems that the cost of RE has not dropped sufficiently to make DER installations a "bankable" proposition at this point in time. Supporting local industry and expertise retention/growth are required by the NEP. It would have been helpful if the paper had included some indication of the current typical savings to small, medium and large DER investors and the current relevant cost of solar resources to take up the DER option. It is not clear to me what criteria are being referred to but if it is as per section 41 of the consultation document, I would suggest that:
  - a) is a priority; b) only an avoided cost tariff would avoid any future subsidy but this could result in overpayment for RE resources (e.g. if a global carbon tax is implemented) and the indeterminateness of such a tariff is contra to priority a); c) calls for forecasts and adds further indeterminateness of returns for investors and is contra priority a) and d) will add further "friction" to the expansion of RE resources and could result in the inaccessibility of unique and needed sites (and consequent destruction of vegetation a carbon sink) given the islands limited developed land mass.
- 2. I agree with the transfer of the 1MW from the DER program as it will keep the local distributed RE industry moving forward in agreement with the NEP. The lack of uptake of DER over an extended period would appear to be proof positive that the price of RE resources has not made it an economic proposition for more than the 3 customers to date and perhaps given the small number of customers, economics was not their concern.
- 3. I expect that this could result in the degradation of both the quality and quantity of industry participants and resources to support the roll-out of distributed RE resources as envisioned by CUC's IRP. Greater competition in the space is good for consumers so loss of competition would not be in Consumers' best interests.
- 4. I am uncertain what is meant by "levelized cost of energy" in this context as it has not been scoped in the consultation document (e.g. time horizon, discount rate). My understanding of levelisation is the discounting of future periodic costs (e.g. annual or monthly) which if it involves fossil fuels will be estimates, over a specified investment horizon (say 25-35 years) at a selected discount rate. My view is that this is necessarily an estimate and will suffer the same deficiency from a "bankability" perspective as the DER option. Moreover, the fact that no parameters for levelisation have been given in the consultation document makes answering this question impossible in my view. I would add that avoided cost of energy will similarly be indeterminate as the future is not known with certainty and such a tariff, if it is contemplated, could result in overpaying for renewable resources (e.g. if significant carbon taxation to address climate change becomes a reality) in the future. My view is that neither is an appropriate tariff at this point in time and determinate tariffs that are adjusted as technology evolves is a better approach using judicious deployment of capacity over time. Perhaps we will get to a point in time where an indeterminate return will be sufficient to incentivize investors but it does not appear to me that we have yet reached that point. OfReg should also be careful not to adopt a system of setting a

tariff that could result in the payment of unnecessarily high compensation for RE resources (e.g. avoided costs) that greatly outstrip the fair cost of production.

- 5. I do not agree that capacity limits should be introduced based on location and feeder capacity. It will frustrate the efficient deployment of resources and may result in scarce developed sites being eliminated. The necessary upgrading of the T&D should be undertaken. As an alternative, differentiated tariffs could be useful in addressing additional T&D costs. However, the differentiated tariff should not be misused to in effect enact a cap and eliminate what could be attractive RE siting options. If the tariff truly reflects the cost of accessing the site, perhaps it could be useful. It would seem however, that the possible cost cross subsidy being addressed already exists across the grid and introducing a differentiated tariff would probably be overly burdensome to the efficient roll out of RE in pursuit of the NEP goals. On balance I am inclined to think it is an unnecessary complexity. Public acceptance would also be challenging I suspect. So my view is no sub-grid caps and no differentiated tariffs at this time.
- If it is not already being promoted, allowing roof-top solar to be accessed with local battery support as an alternative to standby fossil fuel generation could act as an incentive to greater deployment.
- 7. I think it is equitable from the perspective that the opportunity exists across the grid but as pointed out by the consultation paper the required investment means that only a select number of consumers can participate. However, it is an investment made by such consumers and it would seem equitable that they be the ones compensated. I don't think that a consumer who does not make an investment has a right to expect a financial benefit. Although, to the extent that the rooftop solar reduces T&D expenditure by CUC, all consumers benefit by lower future tariffs. All consumers will of course share in the non-financial benefits such as better air quality and climate change mitigation. On balance I think the situation is equitable across the grid.
- 8. This is an unknown. Currently the costs might appear to outweigh the benefits but future costs of fossil fuels (spectre of a carbon tax) could just as easily result in reduced costs for non-CORE consumers. Solar energy investments endure for 25-30 years and there is an excellent likelihood that the cost of energy from these resources over their lifetimes is a benefit to non-CORE consumers although it is not possible to make such a conclusion with certainty. This lack of certainty should not be used as an argument for halting the deployment of rooftop solar although I believe the rollouts of capacity at a specific tariff should be somewhat parsimonious in order that the grid/consumers benefit from reduced future costs under a review of tariff regime. It would be helpful if now that CUC has an IRP, a plan for the rollout of these "capacity buckets" could be formulated. Any such plan would necessarily be subject to review in concert with the IRP reviews.
- 9. No response.

Cam?\_



### Senergy Solar Cayman Ltd

20 May 2020

To: Utility Regulation and Competition Office 3rd Floor, Alissta Towers, 85 North Sound Rd. Grand Cayman, CAYMAN ISLANDS

FROM: Senergy Solar Cayman, Ltd

372a Shamrock Road Prospect Park, Patricks Island Cayman Islands

To whom it may concern. As a small and fairly new solar company in the Cayman Islands, we have found the CUC Core program has worked well for us and our customers. It provides for a reasonable rate of return for their investment. Under the CUC Core program we find ourselves and our workers to maintain a good work load.

We have found the DER program does not present any real investment benefit, at least for smaller residential customers. We ourselves have not deployed any PV system under this program. We feel the current allocation allotted for the CORE program is not enough. The DRE allocation should be shifted into the CORE program as additional allocation. This will be beneficial for the residents looking to install PV solar, and to the local solar companies to maintain its staff employed.

Sincerely,

Nigel Berry

Arturo Ramirez

**Principles** 



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May 20, 2020

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## Re: E&U 2020 - 2 - Consultation Proposed Renewable Energy Capacity Reallocation and Tariff Setting

We refer to the above captioned consultation. Please find below the consultation response from Caribbean Utilities Company, Ltd. (CUC). This response uses the same headings, acronyms and defined terms as the consultation document (Consultation). This response refers to the numbered paragraphs of the Consultation using the symbol §, so §1 refers to paragraph 1.

#### B. Legal Framework

§ 10 CUC notes the legal framework outlined in the Consultation, and further provides that in addition to the legislative provisions referred to in the Consultation, the framework also stipulates, by Section 6(1)(c) of the URC Law, that one of the principal objectives of the Office is to: "protect the short and long term interests of consumers in relation to utility services and in so doing: 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;"

Also of note is subsection (a) in Section 6(1) of the URC Law. Subsection (a) speaks to the promotion of Government Policy as a principal duty. CUC is of the view that this consultation and any determination from it should be mindful of subsections (a), (b) and (c). The Government's National Energy Policy (NEP) has an aggressive target of 70% of energy production in the Cayman Islands from renewable energy by 2037. CUC has



committed significant resources to developing and implementing an integrated resource plan (IRP) that guides its investment in a manner to meet NEP targets. For large utility-scale renewable energy, the IRP sets a target of 100 MW by 2025. For small customer-sited renewable energy – the focus of this consultation – the IRP targets 10 MW by 2020 and 70 MW by 2040. There is considerable ongoing growth required for customer-sited RE. Accordingly, and in addition to objectives in subsections (b) and (c), the determination from this consultation should be mindful of – and not in any way impede – steady and timely progress required to reach IRP and NEP targets.

CUC further notes that the legal framework also comprises the Electricity Transmission and Distribution Licence granted to CUC on 3 April 2008, containing an exclusive licence for the Service Territory for 20 years and the Electricity Generation Licence granted to CUC on 20 November 2014 containing a non-exclusive licence for 25 years.

#### § 2, §4, §15

CUC recognizes the importance of stakeholders and other individuals with an interest in contributing to the consultation process. The outcome of this consultation will directly impact the ability to meet the timelines put forward by the NEP. Timely regulatory decisions permit CUC to more effectively plan and execute a seamless transition from fossil fuels to cleaner alternative fuel sources, at least cost for the company and its customers.

#### C. Background

§ 24. CUC notes the background provided on the Infusion Study outlined in the Consultation Document. CUC would like to clarify in 2015, subsequent to the ERA approving CUC's request to conduct an Infusion Study and RE Capacity Study, CUC's infusion study indicated that up to 29 MW could be added to the grid without significant operational difficulties; however, once an initial 12MW limit is exceeded fuel efficiency will decrease. CUC recommended a limit of 17MW, as at this level the fuel efficiency is minimally impacted.

#### D. Consultation Questions

Question 1: What are your views on the appropriateness of the aforementioned reallocation? Are there any other criteria that you consider a priority? Please explain why.

CUC Response: CUC supports increased renewable energy penetration on Grand Cayman in line with the National Energy Policy (NEP) objectives. Both the CORE and DER programs were introduced as part of a variety of initiatives to achieve the objectives set out in the NEP in a cost effective and efficient manner. If customer preference indicate the previously supported CORE is



a preferred method of achieving this, CUC supports the RECRTS reallocation, provided the rates of the reallocation do not result in an increased cross-subsidization by non-CORE customers. As highlighted in the response to more specific questions below, there are considerations in costs, timing and technical implementation, which should be taken into account when considering the appropriateness. CUC supports deploying customer-owned RE in a manner that promotes effective and fair competition. This aligns with subsection (b) in Section 6(1) of the URC Law. For customer-owned RE, CUC would be encouraged to see a reallocation that promotes greater participation from its customers that are currently underrepresented in both the CORE and DER programs. Specifically, single family homes, small businesses and lower consumption customers.

## Question 2: State, giving reasons, whether you agree that 1 MW of the DER programme capacity should be transferred to the CORE programme?

CUC Response: CUC as the T&D Licensee has an obligation to supply customers and ensure continuity by dispatching sufficient generating capacity to meet system requirements. It is also under an obligation to procure "adequate generation supply, in terms of required energy, capacity and ancillary services to fully meet the needs of its Consumers." This means that it must be able to specify capacity and operating characteristics of all resources on its grid. Additionally, the T&D Licensee has responsibility for the efficient, safe and reliable operation of the grid and therefore must be able to control high-level specifications and operating criteria of all resources connected to its grid. Accordingly, the responsibility and management of triggering and specifying incremental renewable energy capacity on the grid should be that of the T&D Licensee much in the same way that it does for firm generating capacity. Of course, that is not to say that the T&D Licensee would be performing this task without regard to the Office or to the NEP targets for securing an increasing proportion of electricity from renewables. The Office itself has a near identical interest because one of its principal functions under section 6 of the URC Law is to: "ensure that utility services are satisfactory and efficient."

If rates for the CORE program are reduced to a rate that does not entail cross-subsidization and an increase in the cost of electricity, CUC will support transfer of capacity in line with the capacity amount of 1MW, which falls within the overall system capacity constraints described in the Renewable Energy Infusion Study.

## Question 3: What would the impact be of not allowing the RE 1 MW capacity reallocation to the CORE programme? Please provide evidence.

CUC Response: CUC notes the DER program has had limited uptake since its initiation, there are currently only 4 DER commercial customers with a connected load of 494kW since its inception. Conversely, the CORE program has seen consistent subscription, particularly by residential customers, and is well understood. As of 1 January, 2020 there are 633 approved customer applications with a total load of 7,234.13 kW. It is likely that if the reallocation were not allowed,



there would continue to be a delay in uptake of the DER program allocation relative to the previous CORE program and this would lead to a longer timeline in Grand Cayman's transition from fossil fuel-fired generation to renewable energy.

## 4. Do you agree that the new tariff should be the levelized cost of energy rates for this 1 MW of capacity?

CUC Response: Pursuant to OfReg's obligations under subsection (c) in Section 6(1) of the URC Law and pursuant to § 41, it should establish a new tariff that generates consumer interest at the lowest possible pass-through cost for CUC's customers. There are numerous methodologies in calculating tariff structures. CUC is of the view it is critical that a tariff be utilized which will not negatively affect consumers by increasing cross-subsidization. Solar generation has additional power system supporting infrastructure and fuel efficiency costs that are not represented when using the current methodology of avoided fuel costs as the main basis for the tariff construction. CUC agrees however with use of the LCOE as established during the IRP as practical and expedient solution for any reallocation of capacity to continue a FITS structure in manner that minimizes potential cross-subsidization.

CUC would like to request an example of the suggested calculation, as there are multiple methodologies and assumptions for LCOE calculation that can lead to significantly differing outcomes. This calculation should be evaluated from time to time as appropriate to consider changes in technology costs (i.e. decreased solar panel, balance of system and installation pricing), reductions in fuel use efficiency, supporting infrastructure costs and other alternative sources of energy.

# 5. Do you agree that capacity limits for RE systems, that are differentiated based on location and feeder capacity, should be implemented for the grid as a stability safeguard?

CUC Response: CUC as the T&D Licensee is obligated to supply electricity to customers within regulated power quality standards. No additional RE should be installed on any particular feeder where it might cause damage to other customers' equipment, reduce power quality outside of regulated standards, or reduce the reliability of electrical services for other customers. CUC is therefore obligated to limit RE installations on a case-by-case basis depending on the technical limitations of each feeder. Any infrastructural upgrades that would facilitate additional RE feeder capacity should be borne by the installer, to avoid cross-subsidization within the rate base.

CUC as the T&D Licensee has an obligation to supply customers and ensure continuity by dispatching sufficient generating and spinning reserve capacity to meet system requirements. Diversely located solar capacity across multiple feeders will reduce the effects of cloud impacts and therefore reduce the risk of grid instability and the cost of additional RE supporting infrastructure, in particular spinning reserves. However, at this point in time we do not see solar being concentrated in particular locations reducing stability due to cloud impacts, and therefore



stability is not seen to be an issue in the immediate future. In the longer term, it may become prudent to encourage locational diversity in order to keep spinning reserve requirements (costs) down.

## 6. Are there alternative mechanisms (other than changes to FITS) that could be used to incentivize and reward the installation of rooftop solar generation?

CUC Response: CUC is continuously evaluating alternative mechanisms to support increasing renewable penetration from rooftop solar generation and will approach OfReg as soon as it considers these feasible. It is imperative any further proposed mechanisms are carefully balanced to achieve policy objectives. Simultaneously, any proposed mechanisms should be carefully evaluated to ensure the policy objectives could not currently be served better by utility scale solar projects or other measures.

CUC would also like to point out there are alternative incentive mechanisms to reward the installation of rooftop through further reduced rates of customs and excise duties on renewable energy technologies and its ancillary systems, utilizing public funding (fiscus) to directly subsidize FITS or provide specific subsidized loans.

## 7. Are the opportunities to benefit from rooftop solar available equitably across the community?

CUC Response: Pursuant to OfReg's obligations under subsection (b) in Section 6(1) of the URC Law, the program should be more accessible to more diverse socio-economic customer classes. The "first come, first served" basis of prior iterations was not an equitable manner of achieving benefits across the community. Currently even with the availability of financing for a FIT rooftop solar rooftop system, the predominant opportunity to benefit from rooftop solar is for those with the financial means to afford the investment upfront or to qualify for the financing terms. This directly excludes lower-income or indebted residential home owners who might most benefit from the decrease in net energy costs. The cost of the current scheme is carried in part by those without the financial means or the inclination to install rooftop solar.

### 8. Do the costs of incentivizing further solar installations outweigh the benefits to non-CORE consumers?

CUC Response: If FIT incentives continue to be solely-borne by CUC's non-CORE customers, it is likely the costs to the non-CORE customers could outweigh the benefits to the non-CORE customers. Given that the marginal cost to install utility scale solar is materially less than for rooftop RE, until the relative costs increase for large scale plant increases (i.e. potentially due to limited space), continued subsidization of rooftop RE will raise the total cost of energy to all consumers if there are more economically competitive utility scale solar project alternatives available.



9. Any other relevant matters that the person or group submitting would like to raise for consideration.

**CUC Response:** CUC has submitted the draft 20MW Utility Scale Storage Project RFP to OfReg for approval. In the interests of all parties involved, CUC would note that the approval of the document will allow for further increases in capacity allocations and as such, the implementation of the same will directly impact the timeline of renewable energy implementation and the likelihood of meeting the NEP objectives.

#### 10. Conclusion

CUC wishes to encourage increased renewable energy penetration on Grand Cayman; however, we are concerned that cross subsidisation will continue to increase electricity costs for the customers who are least able to carry them. In summary, CUC is of the view new generation should not increase customer prices or lead to a reduction of customer power quality and reliability.

We acknowledge that solar has additional power system costs and therefore avoided fuel costs do not represent the true value of solar. With the desire to encourage solar we propose that the levelized cost of energy is a pragmatic approach to value solar until solar rooftop costs are competitive with alternatives.

Yours faithfully,

May 20 2020 10:28 AM

Tibbetts, Sacha

Docu Sign

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VP Customer Service & Technology



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May 20<sup>th</sup> 2020

To:

Utility Regulation and Competition Office

P.O. Box 10189

Grand Cayman KY1-1002 CAYMAN ISLANDS

RE: E&U 2020 - 2 -

Consultation Proposed Renewable Energy Capacity Reallocation and Tariff Setting

Dear OfReg,

On behalf of 360 SOLAR, please see our response below to the public consultation on the proposed energy capacity reallocation and tariff setting.

#### **Consultation Questions**

1. What are your views on the appropriateness of the aforementioned reallocation? Are there any other criteria that you consider a priority? Please explain why.

We believe that it is quite appropriate to proceed with the aforementioned reallocation.

Generally, we think it's better for the industry to retain its momentum by offering and delivering on Programmes that work well. Programmes with no or low subscription levels create a chilling effect on the industry and I think beyond the industry frustration, it stalls the broader overall customer interest in a green future as well.

2. State, giving reasons, whether you agree that 1MW of the DER programme capacity should be transferred to the CORE Programme?

We agree with the 1MW reallocation to the CORE Programme. It could be argued that even more could be transferred to the CORE Programme. We have found that the DER Programme presents a number of challenges as follows:-

- It is not as easy to understand and communicate the structure and the benefits
- The lack of an incentive results in a rather underwhelming response from customers who are a anticipating a 'CORE-like' programme
- · It has a longer payback period and is thus less appealing to customers

If this capacity is transferred to the CORE Programme, it will undoubtedly reach full subscription in a short period.

### 3. What would the impact be of not allowing the RE 1MW capacity reallocation to the CORE Programme? Please provide evidence.

Despite the recent reallocation of some CIG CORE capacity, our view is that if this DER capacity is not reallocated, sales and installations will be significantly impacted this year.

This transfer will allow the industry to continue with sales, design and installations. At this unprecedented juncture, it will help to minimize the impact of potential job losses at a time when we need to focus on buoying the local economy. While some companies have diversified interests and can adjust their resources accordingly, there are undoubtedly a number of employees who rely almost exclusively on a viable solar business.

### 4. Do you agree that the new tariff should be the levelised cost of energy rates for this 1 MW of capacity?

We believe that given Cayman's still relatively small growth thus far in renewables, that this capacity should be transferred utilizing the current CORE FITS/rates. Going forward, as new RE capacity is released, the rates could be re-visited with a view towards further reducing the CORE FIT rate.

## 5. Do you agree that capacity limits for RE systems, that are differentiated based on location and feeder capacity, should be implemented for the grid as a stability safeguard?

From a design and engineering standpoint, I agree that there should be capacity limits on RE to safeguard the grid.

# 6. Are there alternative mechanisms (other than changes to FITS) that could be used to incentivise and reward the installation of rooftop solar generation?

I don't think it's wrong for the entire country to help share the cost towards Cayman's renewable future. However, there should be tangible and preferably some more immediate benefit(s) even for non-solar customers. One mechanism that could be considered is as follows:-

- · Government should re-introduce garbage fees for every household and business.
- A percentage of the collected fees should be reserved for solar cash rebates which would apply to the cost of new installations.
- Solar cash rebates should be allocated to customers ensuring that lower income households and small businesses receive the most significant rebates. Individuals or entities with income levels of a certain value could be prevented from accessing such a programme.
- Such a fund could also be used to help offset the added costs of the consumer subsidized CORE programme that are being passed on to all customers now as well.
- · Lastly, this could be billed through regular CUC bills for ease of administration on Government.

Overall, each consumer may pay more under this program, but less affluent households for example would now have easier access to renewables.

## 7. Are the opportunities to benefit from roof top solar available equitably across the community?

The general view is that this is not the case as it is still a somewhat significant long-term investment. However, with the proper sales approach, the deferred cost of utility payments helping to offset the financing of a solar system will still make sense for most customers; provided they are able to meet the financing criteria and have a home with a 'solar-ready' roof.

#### 8. Do the costs of incentivizing further solar installations outweigh the benefits to non-CORE consumers?

In the longer term, this has to evolve. However, as it is unlikely that any utility will readily absorb the direct cost of such initiatives, I think the ultimate solution(s) must move towards incentives structured and managed by government.

In my view the adoption level and general size of the industry is still too small to argue convincingly that further incentivizing solar installations outweighs the benefits to non-CORE customers but if the industry shrinks, I suspect there will be some indirect costs through Government that we will probably all share. (e.g. un-employment and under-employment)

### 9. Any other relevant matters that the person or group submitting would like to raise for consideration.

We have nothing else to add at this time.

Sincerely,

Anthony Ritch