

In response to the Consultation on the Regulatory Authority (Transitional Measures for Bermuda Electric Light Company Limited Solar Net Metering Scheme) Emergency General Determination (the "Consultation"), the Regulatory Authority (the "Authority") has received communication outside of the formal process set forth in the Consultation ("ex parte communication").

Section 73 of the Regulatory Authority Act 2011 ("RAA") provides, in part, that where a party makes an ex parte communication to the Authority during the course of a public consultation, the ex parte communication shall be published on the Authority's website.

From: Ron & Lorraine Lucas [mailto:lluxton@rogers.com]

Sent: Sunday, April 09, 2017 2:01 PM

To: Renewables < Renewables @RAB.bm>; eggibbons@bov.bm

Subject: Emergency Determination Solar Net Metering Consultation Attention Nigel Burgess Snr Manager Analysis

& Planning - Regulatory Authority

Dear Mr. Burgess and Mr. Gibbons

I am writing to voice my deep concern and disappointment at the instruction to BELCO to implement a transitional FIT of 0.1736 kWh as of January 1st 2017 for all existing and presumably new residential customers of solar PV installations.

Either the regulatory authorities are confused as to what exactly BELCO guaranteed to the first 300 or so residential installers or there has been a deliberate turn around by Government so as to actively discourage further installations of solar PV installations in Bermuda. This I am sure is not a deliberate Government policy as custom's relief is granted on import of PV equipment which does help a little but really merely offsets some of the import costs.

Existing Residential customers should have continued to enjoy the feed in rates promised to them by BELCO i.e. one for one for units supplied to BELCO or purchased from BELCO at least up to the net utility bill. The effects of reversing the policy is that pay back periods for solar installations have in most cases more than doubled. There are to my knowledge no residential installations in Bermuda that were installed by residents with the intent of making money from BELCO.

As an example a family member of mine who is struggling to bring up her young family in Bermuda decided, prior to Ascendant / BELCO decision to end their voluntary agreements for PV installations and following consultation with myself - an ex senior manager of BELCO, to invest approx. \$25,000 of hard earned savings into 24 solar PV units. With the then existing arrangement her electricity bill reduced to approximately \$200 per month on average giving her a payback period of less than 8 years. With the new policy her electricity bill will have doubled to approximately \$400 per month extending her payback period to 15 years which may well be beyond the working life of her installation, especially considering the unique corrosion problems of our island environment.



This is now clearly unacceptable as she could have invested the monies in financial markets and received a substantial return over the last 2 years. In addition to economic reasons the decision was made to support her very real concerns to reduce the family environmental footprint in Bermuda - i.e. reduction of CO2 and other gasses and as her contribution to reduce global warming. However the feel good element does not offset the impact on budget by the decision when raising a family in expensive Bermuda.

If the decision is not reversed for existing installations and net metering not reintroduced in some viable form for new installations for residents, not only will persons who have installed solar PV systems be adversely affected, the number of new installations will obviously be dramatically reduced and I can also see Installers going out of business or at minimum lay off staff. It will only become economically viable for residents to consider installing PV solar capacity up to the amount to meet minimum daytime needs as a means of offsetting the highest usage charge by BELCO.

This transitional FIT would seem to fly in the face of the Government declared policy to encourage residents to install PV solar installations.

You should know that as well as a retiree of BELCO I am a share holder of Ascendant. I do understand that we need to support BELCO but am convinced that net metering will continue to do this as well as meet BELCO's needs. I do not feel the Government should subsidize Solar PV commercial installations which should obviously be treated differently. I feel very let down and disillusioned for Bermuda by the policy.

I am frequently asked by friends and others as to whether they should invest in Solar PV installations and up to recently encouraged this but until the current situation changes I am afraid that this will no longer be the case. I have been considering it myself as well but this obviously will no longer be feasible for retirees - my wife and I would probably not survive to see any return.

For your consideration.

Yours sincerely

Ron Lucas tel 236-7155

PO Box DV 271

Devonshire DVBX

David and Sarah Cooke 3 Bellevue Drive Paget, PG06

17 April 2017



Dear Mr. Burgess,

RE: Response to Consultation Document 17 - 0316: Comments on Regulatory Authority Emergency General Determination

The recent decision by the Regulatory Authority to change the rules for people who invested tens of thousands of dollars in clean solar energy is outrageous. It is outrageous from the perspective of individuals who made the investment based on Government policy and from the perspective of the broader Bermuda community that benefits from the use of clean energy.

In considering whether to install solar power, my husband and I focused on the clean nature of the energy supply and on the long-term economic benefits offered by solar and promoted by Government by the pricing structure. Like many other middle aged people, we attempted to plan for and minimize future expenditure. We were planning ahead and believed what we were told, and now we face the prospect of being penalized for that.

As I have said, a major factor in our decision to invest a substantial amount of money in solar energy was the Government agreed billing scheme that actively sought to incentivise our long-term investment. The proposed change removes that incentive after the fact and, in my view, is short-sighted, unfair and unethical. It also sends a message to people that the Government is untrustworthy/unreliable - it will not adhere to policies/rules which it puts in place to encourage people to take particular action and which people then rely on.

My husband and I strongly object to this proposal and feel it should not be allowed to stand.

Yours sincerely,

From: Eugene Joell [mailto:ejoell@northrock.bm]

Sent: Thursday, April 20, 2017 8:52 PM **To:** Renewables < Renewables@RAB.bm > Subject: Rate Clarification Order-Belco

Dear Mr. Burgess,

My name is Eugene Joell, my wife Barbara and I have invested a considerable amount of money for our solar panels which we brought from Tim Madeiros at AES,

We have had our solar panels since 2015 and do not see why we have to be penalized with the new metering rate from Belco.

As residential clients we were under the impression that the excess energy generated would be consumed by Belco and not us.

If we had not been selling to Belco we would not of invested into solar panels which is suppose to been energy of the future.

Kind Regards,



Eugene and Barbara Joell

From: Barroso, Jose [mailto:jbarroso@sompo-intl.com]

Sent: Friday, April 21, 2017 9:24 AM

To: L. Nigel Burgess CEng < NBurgess@RAB.bm; Renewables < Renewables@RAB.bm; Monique Lister

<<u>MLister@RAB.bm</u>> **Cc:** eggibbons@gov.bm

Subject: Solar Power Rate Changes

God Day Mr. Burgess,

I am writing to you with concerns relating to the decisions that are being made to change the way current solar energy providers are being penalized over and above what BELCO itself has applied for.

Below are three examples of net metering.

For the purpose of this exercise lets say that a solar system **generates** 1200kWhs for the month. During the daytime hours the energy **consumed** within the home is 200kWhs for the month. Therefore 1000kWhs have been **exported** to the grid during the month. The energy **imported** from the grid in the evenings is 900kWhs

Scenario 1. Net Metering – in this scenario (which existed prior to August 16th 2016) 1000kWh exported would have a value of \$400 (assuming \$0.40/kWh). The 900kWhs imported would have a value of \$360 so the client would receive a **credit of \$40** on their bill. I will keep the calculations simple and not include facilities charges.

Scenario 2. Avoided Cost for Energy Excess of Net(ACEEN) - In this scenario the client receives 1-for-1 billing for the 900kWhs that they net import and export. The extra 100kWhs exported would have a value of \$0.1736/kWh. Therefore under this scenario the client would receive a **credit of \$17.36** on their bill.

Scenario 3. Avoided Cost Rate. The 900kWhs imported energy would have a value of \$360 and the 1000kWhs exported energy would have a value of \$173.60. The client would receive a bill of \$186.40

Prior to August 16th 2016 every solar client fell under Scenario 1, Net Metering. The notification on August 16th stated that Belco was terminating their Net Metering solar initiative for new customers effective August 15th. **Existing customers were to remain on the existing net metering tariff plan**; new customers were to fall under the proposed new scheme and be compensated for their "excess generation" (over and above their net generation/consumption) at a Belco's avoided cost rate of \$0.1736 – this would be Scenario 2 for new customers.

I have been in regular communication with Tim Maderios regarding this and am quite disappointed on how this is being handled. It is my understanding that:-

On September 1st you launched an enquiry into BELCO's proposal to adjust the rate and on October 11th 2016 the Energy Commission made its recommendations that:

1. The original net metering scheme is to be terminated on December 31st 2016 and all original (existing) PV producers should be migrated over to the avoided cost program effective January 1st 2017 – **Scenario 3.**



2. And "traditional solar PV power purchase program should be adopted for both residential and commercial solar producers with the Belco avoided cost proposed rate of 0.1736 per kWh for new solar PV systems going forward" This is a Scenario 3 recommendation and actually penalizes solar clients by awarding belco more than they had applied for.

On October 28th 2016 the new Energy Act came into force and all responsibility for the regulation of electricity transferred from the Energy Commission to the Regulatory Authority of Bermuda and also establishes a framework by which future investments in the production and sale of electricity will be evaluated and regulated

On the 13th February 2017 Tim received a letter from Belco stating in part:

"As you will be aware, on 28 October 2016, the Electricity Act 2016 (the "Act") became operative, and the Regulatory Authorityfor Bermuda (the "Authority") began to regulatethe electricity sectorin place of the former regulator, the Energy Commission (the "EC"). Pursuant to the Act, BELCO's request for approval of its new feed-in-tariff for new solar PV customers (the "Approval Request"), which had been pending before the EC, was transferred to the Authority for consideration.

The Authority has only governed the electricity sector for a short time and is currently in transition. It is aware of BELCO's Approval Request, butto date, BELCO has not been grantedary necessary approvals in connection with the Approval Request or the Matter and is unable to proceed with any schemes relating to either. We understand that the Authority is required to give due consideration to the Matter and the Approval Request before reaching any related decisions"

On the 3rd March 2017 the RA issued an Emergency General Determination that orders Belco to pay the owners of residential and commercial solar photovoltaic system for electricity any such systems puppy to Belco. The determination has immediate effect. Even though the letter states that full details are available on the RA website, nothing was found on the website until the 16th March. The Consultation document was issued on the 16th March.

During Tim's call with Shelly she informed him that the RA had communicated to Belco on the 3rd March instructing Belco to adjust their billing structure to reflect Scenario 2 (ACEEN) but because they have a 30 day notice period they could not apply the new rates until Aprils billing cycle. This allowed Belco time to engage with their vendor to write new scripts and programming to capture the ACEEN billing structure into their billing system. I am told that this adjustment to their billing system cost Belco a lot of time and money.

On Tuesday April 18th 2017 the RA issued the Clarification Order. This order reflects Scenario 3 and is in direct conflict with the instructions given to Belco on how to bill their clients. This clarification comes 5 weeks after numerous emails from me to the RA asking for clarification of rates and terminology on behalf of my clients. It was always my feeling that the language of the Emergency General Determination was unclear and ambiguous because the terms as I described above were not being used correctly.

As a result of the instructions that were given to Belco by the RA on how to bill, it has now come to light that Belco has dispensed incorrect information to clients and other members of the public on the actual Scenario that has been applied, therefore, the public and some of my clients who have taken the time to engage with Belco to seek clarity currently find themselves misinformed.



I am having extreme difficulty understanding how the RA grants Belco (effectively a monopoly) more rate relief then they themselves are asking for! This is counter intuitive and stifles completion, something that the RA should be promoting!

Looking forward to your reply explaining your thought process.

Regards,

Jose Barroso

Senior Vice President | Head of Americas Catastrophe Reinsurance Waterloo House, 100 Pitts Bay Road, Pembroke, HM08, Bermuda

Phone: 441.278.0411 Mobile: 441.533.7568

e-mail jbarroso@sompo-intl.com

www.sompo-intl.com

From: Kane, Ronan [mailto:ronan.kane@argore.com]

Sent: Friday, April 21, 2017 12:10 PM **To:** Renewables < Renewables @RAB.bm >

Cc: Tim Madeiros < tim.madeiros@aes.bm >; Jenny.Kane@Butterfieldgroup.com

Subject: Solar Net Metering

To whom it may concern,

Regarding the recent changes to the Net Solar Metering I wish to communicate our concerns and issues as solar customers regarding the proposed changes to this.

Initially it was proposed that any changes to the programme would take effect after August 15th 2016. We had our solar approved on July 7th 2016 and therefore should not have been affected by any changes to the programmes.

In the subsequent documentations that have been distributed by the RA it is clear that the intent is to have the new rates applied to ALL solar customers going forward. The clarity surrounding this has been extremely poor to say the least. As a renewable energy source we have made a commitment to this cause by investing a substantial amount of money into our solar at the pre agreed conditions. To now apply changes to the agreement is not only disingenuous but also opens up a significant amount of liability issues on the part of the RA and BELCO, not only for the initial costs of the solar hardware itself but for the loss of income going forward. Needless to say this amount will quickly rise given the amount of solar customers affected by these new arrangements. I would therefore suggest that this is looked at extremely closely and that considerations are taken into account.

As a solar customer we are being unfairly penalized now and the directives from the RA on this matter to date have raised more questions than answers. As a result of these actions by the RA there needs to be further consultation and dialogue in order to clarify this matter and I look forward to receiving an update with regards to how this progresses so that we can continue to be involved.



Please be assured that we will continue to move with forward with our concerns as it raises a number of legal issues on the matter as a whole.

I look forward to hearing from you.

Regards,

Ronan Kane

Ronan Kane Underwriter

Argo Re Argo House 110 Pitts Bay Road Pembroke HM 08 Bermuda

Mailing Address:

T +1 (441) 278-3714 C +1 (441) 300-3714 E ronan.kane@argore.com



Proud Sponsor of America's Cup challenger Artemis Racing

TO: Nigel Burgess

Senior Manager Electricity Analysis and Planning Regulatory Authority 1st Floor Craig Appin House 8 Wesley Street, Hamilton, HM11 Bermuda

nburgess@rab.bm

April 21, 2017

Dear Mr. Burgess,

As a solar PV participant, I am very disappointed by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17, 2017 and I am writing to voice my support of the proposed new tariff outlined in section I.C of BELCO's letter to the RA, dated September 16th 2016.

This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on an avoided cost methodology. There will be no limit in the size of the installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation."



Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid and avoided cost price for the excess power."

The new proposed feed in tariff/net billing scheme outlined by the RA will not only de-incentivize investing in solar, it will negatively impact the return on investment that solar we were expecting when we invested in the this non-polluting, low maintenance form of renewable energy.

I also believe that existing solar net metering customers on the scheme should be honored and grandfathered in. Hundreds of Bermuda homeowners have made significant investment in solar energy systems based on the financial performance provided by the net metering program. It was understood that new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th 2016. BELCO had also proposed to grandfather all of these customers in their September 16th 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 year plus term agreement, with sensible inflation rates applied, would assist with de-risking the longer term adaptation of solar energy in Bermuda.

As an island that is heavily reliant on its beauty to attract visitors one would think that the government and its agencies would do everything within its powers to encourage protection of the environment in order to maintain that beauty; the changes that the RA is planning on implementing will do the exact opposite in that these new policies will de-incentivize residents to invest in alternative energy a proven way to help protect and improve environmental conditions.

In this day and age, we need more collaboration and less resistance to clean energy adaptation, in order to keep more money in our local economy while reducing our contribution to the drastic effects of climate change. This is about the sustainability and the future of our country and our people.

Sincerely, Donna Heslop 536-6707

From: Lorraine Lipschutz [mailto:lipschutz@hfi.bm]

Sent: Friday, April 21, 2017 5:53 PM

To: L. Nigel Burgess CEng < NBurgess@RAB.bm>

Subject: Solar Tariffs

Hi Nigel,

I hope you are well! I'm sure you will be receiving many responses regarding the recent order issued today for solar participants, and I have filed a formal response to the website.

However, we wanted to emphasize how angry and disappointed we are in the RA. It is completely and utterly outrageous for the RA to not only discourage investment in clean energy, but to negatively impact those customers who have invested tens of thousands of dollars under an existing system which continues to be supported by Belco!



Per the RA website: "The new regulatory structure is designed to liberalize the electricity market, **protect end users** and ensure that opportunities exist for all credible entities willing to participate in the planning and deliver of Bermuda's energy future and to modernize the electricity sector."

This order achieves none of those goals. It fails to incentive clean energy, actively discourages investments for credible entities, and most of all, FAILS to protect end users and actually causes significant financial harm.

I urge the RA to reconsider this order and consider fairness for existing customers who, at the very least, should be grandfathered in. I will also be sharing my concerns with Dr. Gibbons, Minister of Economic Development.

Best,

Lorraine

From: Frank Raines [mailto:fdraines@aol.com]

Sent: Friday, April 21, 2017 4:37 PM

To: L. Nigel Burgess CEng < NBurgess@RAB.bm>

Subject: Solar Rates

I write to protest the recent order which would change the rates paid to residential solar producers without providing a grandfather provision. We invested in a solar array with the understanding that the rate setting approach would not be changed subsequently to our disadvantage. Should the Government decide to change its approach to rate setting it should do so in a manner that does not harm those who made investments based on the prior approach. Grandfathering current residential installations would achieve that goal. To do otherwise would turn the rate setting process into a bait and switch scheme.

We appreciate your consideration of these views.

Very truly yours,

Franklin D. Raines

From: Noah Fields [mailto:noah.l.fields@gmail.com]

Sent: Friday, April 21, 2017 4:34 PM

To: L. Nigel Burgess CEng < NBurgess@RAB.bm >

Subject: Response to Consultation Document 17-0316: Comments on Regulatory Authority Emergency General

Determination

Dear Mr. Burgess,

As a solar PV participant, I am very disappointed by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17, 2017 and I am writing to voice my support of the proposed new tariff outlined in section I.C of BELCO's letter to the RA, dated September 16th 2016.



This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on an avoided cost methodology. There will be no limit in the size of the installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation.

Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid and avoided cost price for the excess power."

The new proposed feed in tariff/net billing scheme outlined by the RA will not only de-incentivize investing in solar, it will negatively impact the return on investment that solar PV participants were expecting when they invested in the this non-polluting, low maintenance form of renewable energy.

I also believe that existing solar net metering customers on the scheme should be honored and grandfathered in. Hundreds of Bermuda homeowners have made significant investment in solar energy systems based on the financial performance provided by the net metering program. It was understood that new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th 2016. BELCO had also proposed to grandfather all of these customers in their September 16th 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 year plus term agreement, with sensible inflation rates applied, would assist with de-risking the longer term adaptation of solar energy in Bermuda.

It is paramount that the RA considers these elements and implements a sensible tariff and term so as to encourage the installation of more solar PV systems and support those consumers who have made investments in renewable technology and our environment already.

In this day and age, we need more collaboration and less resistance to clean energy adaptation, in order to keep more money in our local economy while reducing our contribution to the drastic effects of climate change.

This is about the sustainability and the future of our country and our people.

Sincerely,

Noah Fields
"Stonycroft"
#1 Fairyland Road
Pembroke HM06



From: Stephen Dunkley [mailto:sdunkley@ibl.bm]

Sent: Friday, April 21, 2017 5:46 PM

To: L. Nigel Burgess CEng < NBurgess@RAB.bm>

Subject: The new proposed feed and tariff/net billing scheme.

Good Day Nigel Burgess.

This is very discouraging, not only for people who feel it's important and want to invest in Bermuda's future of clean energy, but to have a situation when many people have already made large investments in solar panels only to have their return on their investment diminished because the rules of the game have suddenly changed. This does not seem like a viable way to move forward in creating a clean energy environment for Bermuda, or do I dare ask that the Regulatory Authority not take this into consideration?

Please see attached letter.

I look forward to a timely response from you.

Regards

Stephen Dunkley

From: Willem Mulder [mailto:sbmulder@ibl.bm]

Sent: Saturday, April 22, 2017 9:51 AM

To: L. Nigel Burgess CEng < NBurgess@RAB.bm>

Subject: NEW TARIFFS

Dear Mr. Burgess,

May this communication serve to express our profound disappointment by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17th, 2017. We are writing to voice our support of the proposed new tariff outlined in Section 1.C of Belco's missive to the RA, dated September 16th, 2016.

This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on a avoided cost methodology. There will be no limit in the size of the installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation.

Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will



pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid an avoided cost price for the excess power.

The new proposed feed in tariff/net-billing scheme outlined by the RA will, in our opinion, not only de-incentivize investing in solar, it will negatively impact the return on investment (ROI) that the PV participants were expecting when they invested in the this non-polluting, low maintenance form of renewable energy.

We also are of the opinion that existing solar net metering customers on the scheme should be honoured and grandfathered in. Numerous of Bermuda homeowners, like ourselves, have made significant and substantial investments in solar energy systems based on the financial performance provided by the net metering program. It was understood that the new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th, 2016. BELCO had also proposed to grandfather al of these customers in their September 16th, 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 (twenty) year plus Agreement, with sensible inflation rates applied, would assist with the de-risking the longer term adaption of solar energy in Bermuda.

It is of paramount importance that the RA considers these elements and implements a sensible tariff and term so as to encourage the installation of more solar PV systems and support those consumers who have made investments in renewable technology and our environment already.

We strongly support the need for more collaboration and less resistance to clean energy adaption, in order to keep more funds in our local economy while reducing our contribution to the drastic effects of climate change.

In closing, we believe that this issue is about the sustainability and the future for our country and its people.

Yours faithfully,

Shirley and Willem Mulder

April 23rd,2017

Nigel Burgess
Senior Manager Electricity Analysis and Planning
Regulatory Authority
1st Floor Craig Appin House
8 Wesley Street, Hamilton, HM11
Bermuda
nburgess@rab.bm

Dear Mr. Burgess,



As a solar PV participant, I am very disappointed by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17, 2017 and I am writing to voice my support of the proposed new tariff outlined in section I.C of BELCO's letter to the RA, dated September 16th 2016.

This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on an avoided cost methodology. There will be no limit in the size of the installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation.

Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid and avoided cost price for the excess power."

The new proposed feed in tariff/net billing scheme outlined by the RA will not only de-incentivize investing in solar, it will negatively impact the return on investment that solar PV participants were expecting when they invested in the this non-polluting, low maintenance form of renewable energy.

I also believe that existing solar net metering customers on the scheme should be honored and grandfathered in. Hundreds of Bermuda homeowners have made significant investment in solar energy systems based on the financial performance provided by the net metering program. It was understood that new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th 2016. BELCO had also proposed to grandfather all of these customers in their September 16th 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 year plus term agreement, with sensible inflation rates applied, would assist with de-risking the longer term adaptation of solar energy in Bermuda.

It is paramount that the RA considers these elements and implements a sensible tariff and term so as to encourage the installation of more solar PV systems and support those consumers who have made investments in renewable technology and our environment already.

In this day and age, we need more collaboration and less resistance to clean energy adaptation, in order to keep more money in our local economy while reducing our contribution to the drastic effects of climate change.

This is about the sustainability and the future of our country and our people.

Sincerely,

Miranda Fountain-Rayner 8 East Shore Road, Sandys MA 02



From: Donna Heslop [mailto:dheslop@transact.bm]

Sent: Monday, April 24, 2017 11:29 AM

To: L. Nigel Burgess CEng <NBurgess@RAB.bm> Subject: Regulatory Authority re: solar tariffs

Good day Mr. Burgess

I was disappointed to hear of the proposed changes relative to the BELCO's tariffs for solar clients.

Having invested in solar energy given the payback that was in place, I don't believe that a change mid-stream is fair.

Further, for potential new investors in this clean energy source the new tariffs will be a disincentive at a time that we should be encouraging clean energy in the community.

I have attached a letter for your consideration.

Regards

Donna Heslop

536-6706

From: Richard Hartley [mailto:Richard.Hartley@acumengroup.com]

Sent: Tuesday, April 25, 2017 12:33 PM

To: L. Nigel Burgess CEng <NBurgess@RAB.bm>

Subject: Response to Consultation Document 17-0316: Comments on Regulatory Authority Emergency General

Determination

Dear Mr. Burgess,

As a solar PV participant, I am astonished by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17, 2017 and I am writing to voice my support of the proposed new tariff outlined in section I.C of BELCO's letter to the RA, dated September 16th 2016.

This doesn't appear to give homeowners any credit for the capital they have invested in renewable resources in Bermuda – something the rest of the world appears to be encouraging!

This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on an avoided cost methodology. There will be no limit in the size of the



installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation.

Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid and avoided cost price for the excess power."

The new proposed feed in tariff/net billing scheme outlined by the RA will not only de-incentivize investing in solar, it will negatively impact the return on investment that solar PV participants were expecting when they invested in the this non-polluting, low maintenance form of renewable energy.

I also believe that existing solar net metering customers on the scheme should be honored and grandfathered in. Hundreds of Bermuda homeowners have made significant investment in solar energy systems based on the financial performance provided by the net metering program. It was understood that new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th 2016. BELCO had also proposed to grandfather all of these customers in their September 16th 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 year plus term agreement, with sensible inflation rates applied, would assist with de-risking the longer term adaptation of solar energy in Bermuda.

It is paramount that the RA considers these elements and implements a sensible tariff and term so as to encourage the installation of more solar PV systems and support those consumers who have made investments in renewable technology and our environment already.

In this day and age, we need more collaboration and less resistance to clean energy adaptation, in order to keep more money in our local economy while reducing our contribution to the drastic effects of climate change.

Kind regards

Richard Hartley
7 Savannah Road, Hamilton Parish, Bermuda
Richard Hartley
Acumen
Burnaby Building
16 Burnaby Street
Hamilton HM 11
Bermuda
+1 441 400 6000



+1 441 400 6001 (direct)

+1 441 505 7667 (cell)

www.acumengroup.com

From: Summer Wood [mailto:summerwood@mac.com]

Sent: Wednesday, April 26, 2017 10:05 AM **To:** L. Nigel Burgess CEng <NBurgess@RAB.bm>

Subject: Response to Consultation Document 17-0316: Comments on Regulatory Authority Emergency General

Determination

Dear Mr. Burgess,

As a solar PV participant, I am extremely disappointed by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17, 2017 and I am writing to voice my support of the proposed new tariff outlined in section I.C of BELCO's letter to the RA, dated September 16th 2016.

This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on an avoided cost methodology. There will be no limit in the size of the installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation.

Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid and avoided cost price for the excess power."

The new proposed feed in tariff/net billing scheme outlined by the RA will not only de-incentivize investing in solar, it will negatively impact the return on investment that solar PV participants were expecting when they invested in the this non-polluting, low maintenance form of renewable energy.

I also believe that existing solar net metering customers on the scheme should be honored and grandfathered in. Hundreds of Bermuda homeowners have made significant investment in solar energy systems based on the financial performance provided by the net metering program. It was understood that new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th 2016. BELCO had also proposed to grandfather all of these customers in their September 16th 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 year plus term agreement, with sensible inflation rates applied, would assist with de-risking the longer term adaptation of solar energy in Bermuda.



It is paramount that the RA considers these elements and implements a sensible tariff and term so as to encourage the installation of more solar PV systems and support those consumers who have made investments in renewable technology and our environment already.

We need more collaboration and less resistance to clean energy adaptation, in order to keep more money in our local economy while reducing our contribution to the drastic effects of climate change.

This is about the sustainability and the future of our country and our people.

Sincerely,

Summer Wood

From: Stuart Kriendler [mailto:stuart@besolar.bm]

Sent: Wednesday, April 26, 2017 5:03 PM

To: Stuart Kriendler <stuart@besolar.bm>; Travis Burland <travis@besolar.bm>; Alan Burland <AlanBurland@bcmmca.bm>; Stratton Hatfield <stratton@besolar.bm>; John Adcock <john@besolar.bm>; Jared Pearman <jared@besolar.bm>; Hattie Armstrong <accounts@besolar.bm>; Joshun Stovell <josh@besolar.bm>; nandi@besolar.bm; Kyle Fisher <Kyle@besolar.bm>; Randy Roberts <randy@besolar.bm>; Jurgen Dale <Jurgen@besolar.bm>; Clare Russell <clare@besolar.bm>; David Barber <david@besolar.bm>; Phillip Worboys <Phil@besolar.bm>; Tre Govia <tre@besolar.bm>; L. Nigel Burgess CEng <NBurgess@RAB.bm>; Michael Wells <mwells@RAB.bm>; info <info@RAB.bm>

Cc: Gordon Johnson, Greenrock <execdir@greenrock.org>; Gibbons, E. Grant <eggibbons@gov.bm>; Energy <energy@gov.bm>; mdunkley@gov.bm; Richards, Everard T. <etrichards@gov.bm>; stuart hayward <stuarthayward@northrock.bm>; Leman, Michelle (Shelly) <sleman@ascendant.bm>; Denton Williams <dwilliams@ascendant.bm>

Subject: Updated comprehensive urgent RA submission response

Good day valued BE Solar clients and supporters, honorable Ministers and the Regulatory Authority of Bermuda,

Please find our response to the Regulatory Authority (RA) '17_03_16_Consultation on Emergency General Determination (EGD) Solar Net Metering' document' attached to this email. (This response has also been submitted officially on the RA website - http://www.rab.bm/index.php/consumers/submit-a-consultation-reponse-consumer)

This response answers each of the eight questions in the RA's Consultation document (also attached to this email). We respectfully request that the responses are carefully considered by the RA when the solar netmetering program is formally updated.

We expect the responses from ourselves, our clients and other stakeholders to ultimately result in the RA making swift updates to the current Emergency General Determination (EGD) rate scheme.

The Solar PV rate schemes have been characterized by much confusion and ambiguity over the last six months. It is very important that examples are laid out and considered carefully before crucial rate change decisions are



made. It is vital to ensure our community understands very clearly what the repercussions to rate changes will be to all stakeholders involved.

With this in mind, in the attached response, an example was given when answering question 4, (as seen on pages 10-11). This example makes it very clear how the EGD has monumental economic implications for everyone involved in the Bermudian Solar PV industry, especially Solar PV system owners and the employees whose livelihoods depend on them.

Our team has been inundated with emails and phone calls regarding this current untenable situation we are in. We trust our response is helpful for everyone in highlighting the importance of updating the rules of the EGD to a more sensible rate scheme immediately.

Thank you for your time and consideration and we request you act as soon as possible to update the EGD while the longer term rate schemes are developed for implementation after consultation.

Sincerely,

Stuart Kriendler & The Team at BE Solar

PS - For clarification this email and the attached documents are for public use and can be made public.

From: Nick Duffy [mailto:nduffy@bac.bm]
Sent: Wednesday, April 26, 2017 12:50 PM

To: L. Nigel Burgess CEng <NBurgess@RAB.bm>; Matthew Copeland <mcopeland@RAB.bm>; Michael Wells

<mwells@RAB.bm>; Nakia Smith <nsmith@RAB.bm>

Cc: Chris Nash <cnash@bac.bm>

Subject: Preliminary Report Submitted to Minister Grant Gibbons on 25th April, 2017

Members of the RAB,

Please see below the content of our correspondence to Minister Gibbons yesterday evening, 25th April, 2017, which attempts to summarise some of the content and implications of our earlier conversation.

"I don't know if you are familiar with the update that was issued by the Regulatory Authority(RA) on 17th April, 2017 to the Emergency General Determination document of 16th March, 2017. It has taken us a few days of research and correspondence to understand the full implications of the update however this afternoon I was able to have a lengthy conversation with a representative of the RA and can confirm the following preliminary implications:

- i) The RA has determined that there will be no 'netting' of imported electricity against exported electricity over the monthly billing period, as has always been the case, and as was proposed by BELCO in their submission to the Energy Commission (EC) in September, 2016. Thus;
- ii) All electricity exported during the day (while the majority of solar owners are out of the house and at work) will be sold to BELCO at the 'temporary proposed' Avoided Fuel Cost of \$0.1736 per kWh;



- iii) All electricity imported during the day and night will be charged at the retail rate, \$0.41 for the tail block.
- iv) BELCO agreed to 'grandfather' the 325 installed customers under the original Net Metering scheme in their August, 2016 submission but the RA has also revoked the program for all of these participants leaving them with a greatly diminished investment. Many of our customers purchased their systems as part of their retirement planning process to control their fixed expenses with a stable ROI;
- v) The RA representative articulated that the rate system is 'interim' but that the likely timeframe for full resolution could be Q1 or Q2 2018 as the RA has other priorities. In our opinion, in this timeframe the resolution will be irrelevant as there will be no renewable energy industry left in Bermuda by then;
- vi) The new 'no netting' regulation also appears to be backdated to January 2016, although no public announcements have been made to the general public by either the RA or BELCO;

These decisions by the RA, were not requested by BELCO, or anyone else that we are aware of, and have singlehandedly killed the financial incentive to purchase a solar PV system and put the Return on Investment (ROI) back to around 2008/2010 rates. It has also put all of us (the installers) in the highly embarrassing and financially critical position of having negotiated and sold systems in various states of installation, with totally inaccurate ROI calculations. The information is slowly seeping out to the public and we have already had customers who are in the process of installing who are cancelling their systems. In essence, the situation, which was bad in August 2015 when BELCO revoked the original net metering program is now much, much worse thanks to the actions of the RA.

In the next few days we believe there is going to be a resounding and vociferous outcry from the approximately 400 families who have made significant long term investments in clean and renewable energy systems, at an average cost that we estimate to be around \$35,000. These investments were made in good faith based on clearly articulated government policies encouraging the growth of distributed solar systems in the residential sector and have now been usurped by a quasi-governmental department .

It is singularly ironic that the massive devaluation of their investments has been implemented at the hands of the very agency that was supposedly established to protect their interests and provide a fair and competitive electricity environment in a country where a total electricity monopoly has been the norm for well over 100 years!

We are pleading that commonsense may prevail and a political storm be avoided by directing the RA to immediately revert to a financially workable model with monthly netting of energy as an <u>absolute minimum</u>.

I would be most grateful if you would give me a call so we can discuss this in further detail as I'm trying to document more than a one hour conversation in a brief email and there are many other significant points that need to be discussed. We have also discussed our telephone conversation and the overall situation with our colleagues at Bermuda Engineering and I am copying Alan Burland as their representative."

Regards,





Nick Duffy
Divisional Manager
Bermuda Alternate Energy
BAC Group of Companies

(441) 297-3639 Tel. (441) 704-0657 Cell n.duffy@bac.bm 9 Mill Creek Road Pembroke, HM 05 Bermuda



TO: Nigel Burgess

Senior Manager Electricity Analysis and Planning

Regulatory Authority

1st Floor Craig Appin House

8 Wesley Street, Hamilton, HM11

Bermuda

nburgess@rab.bm

April 27, 2017

Dear Mr. Burgess,

As a solar PV participant, I am very disappointed by the recent order issued by the Regulatory Authority of Bermuda (RA) on April 17, 2017 and I am writing to voice my support of the proposed new tariff outlined in section I.C of BELCO's letter to the RA, dated September 16th 2016.

This section specifically states:

"Under the new tariff, all non-utility scale solar PV installations, residential or commercial, will be compensated for their excess generation based on an avoided cost methodology. There will be no limit in the size of the installation for inclusion in the rate for residential customers; any installation above a capacity of 0.5 MW by a commercial customer will be deemed an independent power producer outside this rate and subject to individual negotiation.

Residential customers will be paid avoided costs for their power after netting the power used and sold by those customers each month. So, for example, if they used 600 kWh and self-generate 500 kWh in a month, they will pay for the 100 kWh at retail price. Conversely, if they use 500 kWh and self-generate 600 kWh, they will be paid and avoided cost price for the excess power."

The new proposed feed in tariff/net billing scheme outlined by the RA will not only de-incentivize investing in solar, it will negatively impact the return on investment that solar PV participants were expecting when they invested in the this non-polluting, low maintenance form of renewable energy.



I also believe that existing solar net metering customers on the scheme should be honored and grandfathered in. Hundreds of Bermuda homeowners have made significant investment in solar energy systems based on the financial performance provided by the net metering program. It was understood that new rates would not impact solar clients that had installed, or were proven to be engaged in a residential solar PV contract prior to August 15th 2016. BELCO had also proposed to grandfather all of these customers in their September 16th 2016 submission to the RA.

Furthermore, a sensible term should also be implemented, so as to assure those who invest in renewable energy cannot have their initial investment disrupted by changes in the rates or implementation of unanticipated tariffs, as defined by the situation we are currently in. A 20 year plus term agreement, with sensible inflation rates applied, would assist with de-risking the longer term adaptation of solar energy in Bermuda.

It is paramount that the RA considers these elements and implements a sensible tariff and term so as to encourage the installation of more solar PV systems and support those consumers who have made investments in renewable technology and our environment already.

In this day and age, we need more collaboration and less resistance to clean energy adaptation, in order to keep more money in our local economy while reducing our contribution to the drastic effects of climate change.

This is about the sustainability and the future of our country and our people.

Sincerely,

Robert & Robin Peters

5 Windy Ridge road

Warwick

Anthony Coleman 21 Hinson Island 27 April, 2017

Regulatory Authority of Bermuda Hamilton

RE: Response to Matter17-03-16 Transitional Measures for Bermuda Electric Light Company Solar Net Metering Scheme.

Buying my PV system was a great expense for me.



But with the promise of being able to cover the costs over a known timeframe, I went ahead with the purchase.

Being paid less for the electricity that I produce, than the cost I pay to buy it, can be likened to stealing! Especially as there were promises for a firm rate at the onset that made the purchase of a PV system a worthwhile investment for me.

It is very surprising, and somewhat strange, that the RAA (who's job it is to represent, and make meaningful, and fair regulation for the man in the street) would seem to lean towards Belco's bottom line and not that, of the general population of Bermuda.

Surely the RAA should be embellishing the idea of PV installations, and improving the environment, not putting a damper on it, by backing decreased returns for the households that have PV systems, and those of future installations.