

Regulatory Authority (Renewable Energy Metering Scheme) General Determination

Responses to the Renewable Energy Metering Scheme Preliminary Report, Decision and Order (Second Round Consultation)

Date: 02 March 2018



Barrett Lightbourne

- 1. Analysis of the table provided by the RA indicates that there are inconsistencies in the variables used to determine the cost-effectiveness of solar PV installations. The two variables are the annual PV production rate per installed capacity (i.e. annual kWh/kW) and the installed cost per Watt (i.e. \$/Watt). The kWh/kW rate should be the same for all scenarios it isn't. For the \$/Watt installation rate, the numbers used are not logical. They should either be the same for all scenarios or scaled such that smaller systems cost more per Watt than larger systems.
- 2. As a result of the analysis of the RA's analysis, a number of comments and questions for the RA arise. These, which are related to either the RA's table or the "modified" table, are listed below:
 - a. why are the kWh produced/kW different for all four system sizes?
 - b. why are the installed costs/Watt inconsistently different?
 - c. how is the total value of production calculated?
 - d. the daily load profile of the residence, and the daily solar production profile, will significantly affect the daily amount of exported kWh. How does the RA account for these variables in their analysis of the feed-in tariff? (n.b. predictions using monthly net-metering are going to be more accurate as the residence's daily load profile is no longer a factor)
 - e. the simple payback is best for the largest consumer (1500 kWh/month) because all the saved kWh come off the "tail" block (@ \$0.34/kWh). The smallest consumer (400 kWh/month) only gets the benefit of tier 2 reductions (@ \$0.24/kWh). This fact, and the fact that smaller PV systems have a higher installed cost per Watt, cause the simple payback of a small consumer PV system to be 38% to 42% longer than that for the large consumer. Is this fair? And does it "encourage electricity conservation and the efficient use of electricity" as stated in Clause 4 (2) (b) of Appendix B?
- 3. If it is believed that the simple payback for any installed system should be approximately equivalent no matter whether a small or large consumer, then another tariff should be developed for customers that adopt solar PV. This rate should ensure that energy cost savings/kWh not purchased (i.e. PV production consumed, not exported) should be equivalent across all customers.

- 1. The annual photovoltaic ("PV") production rate per installed capacity (i.e. annual kWh/kW) and the installed cost per watt (i.e. \$/watt) are identical in each scenario. The nominal/nameplate capacities and annual kWh/kW of each system are as follows:
 - 2kW 2.217 kW 1503kWh/kW
 - 5kW 4.989 kW 1503kWh/kW
 - 10kW 10.08 kW 1503kWh/kW
 - 15kW 14.966 kW 1503kWh/kW
- 2. The installed cost per watt with the nominal/nameplate capacities listed above are all 4.18\$/W.
- 3. Production is calculated using the analysis tool System Advisor Model ("SAM"), which is a performance and financial model designed to facilitate decision making in the renewable energy industry.
- 4. Bermuda's typical meteorological year ("TMY2") weather data was used in the SAM program. TMY2s are data sets of hourly values of solar radiation and meteorological elements for a one year period. Their intended use is for computer simulations of solar energy conversion systems and building systems to facilitate performance comparisons of different system types, configurations and locations. Load models were used from Augusta, Georgia, which is on the same latitude as Bermuda with a similar climate and coastal properties.
- 5. For likely scheme participants that wish to maximise the economic incentives of solar PV, the General Determination ("GD") encourages participants to seek an appropriate sized system to meet their load requirements.
- 6. The export tariff ("FIT") is equivalent for all costumers. The Authority does not agree that an additional tariff should be developed to equalise the value of production that is self-consumed. Section 36 of the Electricity Act 2016 ("EA") sets the methodology for determining the feed-in tariff.

BE Solar

- 1. The future BE Solar's ability to promote renewable energy resources and empower end-users to obtain more affordable electricity is jeopardised by the proposed unsustainable feed in tariff model.
- 2. All of Bermuda's generation can be met through solar electricity and the use of renewable resources should be maximised to the extent it is cost effective and fair to both BELCO and solar producers.
- 3. An equitable tariff proposed by BELCO on September 16, 2016 is an appropriate "win-win" scenario for both BELCO and solar producers.

- 1. As set forth in the Proposed Report, Decision and Order, the avoided cost rate still provides a benefit to solar PV owners and thus still provides an incentive to install solar PV.
- 2. The Authority has a responsibility to comply with all applicable legislation and ministerial policy, which may mean balancing competing objectives. Section 36 of the Electricity Act 2016 ("EA") requires the Authority to set a feed-in tariff that is based on the transmission, distribution and retail ("TD&R") licensee's avoided costs.
- 3. The Authority cannot approve BELCO's proposed tariff, as it is not in accordance with the EA.
- 4. The Authority notes the comments; however, the Authority cannot set rates to guarantee investments. Rates are set in accordance with the EA and government policy.





- 4. Bermudian investors require a payback on their initial investment in a maximum of 7 years or less, some require payback of less than 5 years. Subsequently, the RAB's current GD rate is completely out of touch with the reality of business in Bermuda.
- 5. The proposed EGD creates economic inequity between large home owners with solar PV and small home owners with solar PV. BE Solar's analysis shows that the rate only benefits the rich and penalises the middle to lower income homes and business owner that have invested in solar PV. The difference is between a small low to middle income household (that is not home in the day) compared to a large home where that either spouses or staff are home during the day to maximise self-consumption.
- 6. The current EGD creates discriminatory inequalities for solar PV interconnection to the grid. The RAB's current FIT scheme rewards larger wealthier users of energy and makes it harder and more expensive for more efficient and lower income earning houses and business to invest in solar.
- 7. Analysis of the table provided by the RA indicates that there are inconsistencies in the variables used to determine the cost-effectiveness of solar PV installations. The two variables are the annual PV production rate per installed capacity (i.e. annual kWh/kW) and the installed cost per Watt (i.e. \$/Watt). The kWh/kW rate should be the same for all scenarios and it isn't. For the \$/Watt installation rate, the numbers used are not logical. The \$/kW rate should be scaled such that smaller systems cost significantly more per Watt than larger systems.

- 5. The GD treats all solar PV owners equally by mandating that they all receive the same rate. When determining feed-in tariffs, the Authority's assessment of non-discriminatory access relates to equal treatment, not necessarily equal outcomes. Furthermore, all solar PV owners will benefit from the avoided cost rate, as it is above their cost of production.
- 6. Any homeowner who self-consumes their production will maximise the value of their PV system production, however those that export production to the TD&R licensee will receive compensation. Exporters of electricity will be receiving compensation for their exports. The Emergency General Determination ("EGD") was issued to allow new renewable energy entrants to have access and interconnection to the grid which had been closed by BELCO. The FIT scheme is most beneficial to customers that have their system sized to fit their maximum daily load.
- 7. The annual PV production rate per installed capacity (i.e. annual kWh/kW) and the installed cost per Watt (i.e. \$/Watt) are identical in each scenario.

The nominal/nameplate capacities and annual kWh/kW of each system are as follows:

- 2kW 2.217 kW 1503kWh/kW
- 5kW 4.989 kW 1503kWh/kW
- 10kW 10.08 kW 1503kWh/kW
- 15kW 14.966 kW 1503kWh/kW

The installed cost per watt with the nominal/nameplate capacities listed above are all 4.18\$/W. The Authority notes that the \$/kW should be scaled such that smaller systems cost more per watt than larger systems.

BELCO

1. 1The Authority alleges that the Authority's intervention by way of an emergency general determination relating to BELCO's solar photovoltaic program was necessitated by BELCO's, "failure to implement the Energy Commission's recommendation on 'net metering' (as stated in the Energy Commission's Net Metering Inquiry Response presented to the Minister of Economic Development on 11th October 2016) by 1 January 2017." This allegation is repeated in Paragraph 10(b) of the Executive Summary that states, "On 26th October 2016, the Minister of Economic Development (the "Minister") requested that BELCO implement the Energy Commission's recommendation on 'net metering', as stated in the Energy Commission's Net Metering Inquiry Response presented to the Minister on 11th October 2016."

The Authority is well aware that any suggestion that BELCO was requested to do anything or failed to do anything is categorically false and defamatory. BELCO did not fail to implement an Energy Commission ("EC") recommendation, as no such recommendation or request was made to BELCO. Recommendations were made to the Minister of Economic Development and did not constitute any directive to BELCO. In fact, the press release on the EC's inquiry into the net metering scheme issued on 26 October 2016 stated:

The Minister...noted that due to the limitations of the existing Energy Act 2009, the Energy Commission is precluded from issuing Directives on any matter other than the rates that BELCO charges to its customers and is therefore unable to implement these specific recommendations. The rate that BELCO pays for the purchase of power is outside the authority of the Energy Commission. However, the Minister noted that the transfer of responsibility for electricity regulation from the Energy Commission

- 4. The Authority notes BELCO's comments on the historical background of the Authority's intervention via the EGD and disagrees that its statements are defamatory. The Authority has reviewed BELCO's comments and modified the Final Decision where appropriate.
- 5. The Authority notes that the deadline for responses to the initial Consultation Document was extended in response to requests from the general public for more time to submit responses.
- 6. The Authority has reviewed BELCO's suggested amendments and incorporated them where appropriate.





to the Regulatory Authority is imminent and that he will shortly be issuing a Commencement Notice for the Electricity Act 2016. Since the new Electricity Act gives the Regulatory Authority the full scope of powers to regulate all aspects of the electricity sector, it is the Minister's hope that the Authority will, as a matter of public interest, address this issue as one of its first orders of business and issue a final decision as soon as is practically possible.

Given the above, if anything, the intervention was necessitated by the Authority's initial failure to act – as soon as possible after 28 October 2016 or when it was repeatedly prompted to do so by BELCO as early as 16 December 2016. The Authority failed to address the issue until 2 March 2017.

BELCO implores the Authority to cease and desist from maligning BELCO through the publication of incorrect information in relation to the issue.

At Paragraph 16 of the Commentary, the Authority states, "Prior to the EGD, BELCO had proposed to grandfather the previous net metering scheme to all PV participants who had begun construction (i.e. submitted their development application to the Dept. of Planning) prior to 26 August 2016, and to develop a new feed-in tariff based on avoided costs. However, BELCO had since that date halted the program to new participants, pending an inquiry by the Minister of Economic Development [emphasis added]. In response to this, the Authority issued the EGD." This Paragraph misstates the position, as BELCO had closed the program to new entrants, pending the approval of a transitional rate.

Throughout the Commentary, the Authority is inconsistent in its description of the background to the proposed general determination, and BELCO repeats here its thorough historical account provided in the First Round Response.

- 2. Despite statements to the contrary throughout the Second Round Consultation Document, it is to be noted that the Authority updated the consultation document issued in the First Round on several occasions, such that the ultimate response due date was shifted from 27 April 2017 to 12 May 2017.
- 3. Given the uncertainty and disappointment that has befallen solar photovoltaic customers since the Authority's issuance of its emergency general determination on 2 March 2017, BELCO believes that the general determination imposing any transitional rate should be as certain as possible. BELCO is of the view that the Draft General Determination is presently not drafted as clearly as possible, and as such, in the Appendix to this letter, BELCO provides a marked version containing suggested amendments.

Charles Kempe

- 1. Energy produced by residential photo voltaic (PV) sources should not be supplied to BELCO at BELCO's avoided cost as this will almost certainly ensure the extinction of new installations of pv equipment on residential premises.
- 2. The 'avoided cost' basis of remuneration will provide a positive disincentive to customers to install pv equipment as the return on investment will be extremely unattractive compared with alternative investment returns. This is no doubt driving BELCO's insistence on this basis of remuneration as BELCO is in the business of making a profit on generating and selling electricity. Multiple other parties eating

- 1. Section 36 of the EA requires the Authority to set a feed-in tariff that is based on the TD&R licensee's avoided costs.
- 2. BELCO does not profit from nor have costs associated with the renewable energy metering scheme, as the costs of the feed in tariff are passed directly to the ratepayers. Therefore, the tariff setting methodology does not affect BELCO's profit margins.
- 3. The Authority notes this comment.





into their profit margins with a competing production of electricity is something they will work hard to extinguish.

- 3. I have an interest in a residential pv installation. In the month of June 2017 the gross consumption by the residence was 1486 kwh and the kwh supplied to the grid by the pv installation was 555kwh. The customer supplied energy equalled 37% of the gross consumed. The charge for the gross consumption was \$574. The credit to the customer on the 'avoided cost' basis was \$96. Simply put the customer supplied 37% of the total energy consumed but received credit for only 16% of the value of that consumption.
- 4. The 'avoided cost' valuation of energy produced by BELCO's customers is fundamentally an absolute rip off. BELCO not only avoids the costs of the fuel and lubricants to produce the product the customer generates. It also avoids depreciation on generators which are idle when customers produce their own electricity. Generators wear out after a certain number of hours of operation. They do not depreciate when they are idle. In addition, BELCO's grid absorbs customer produced kilowatt hours at a rock bottom cost and then resells that energy on the grid at a very significant profit.
- 5. Finally in this extremely brief submission: Currently, no one in their right mind would, under this 'avoided cost' basis of valuation, ever voluntarily install residential pv equipment. The installation to which I refer above is an example of why. The installation cost was \$24,000. Its projected life is 25 years. If it earns its owner \$96 per month (amounting to \$1,150 annually) this will amount to a simple ROI of 4.8% if one ignores straight line depreciation of 4%. Further, if one ignores the costs of giving up an alternate return on the \$24,000, the remaining 0.8% return to the investor provides zero incentive to acquire, maintain and service pv equipment residentially. So that's the end of Bermuda's effort to involve individual members of society in buying into the production of renewable energy. Killed by a utility which wants no competition and is willing to swing its weight to redesign the playing field.
- 6. Unless an incentive to invest in alternate energy sources is real and not illusionary (as some seem to believe is just fine), Bermuda is not going to get citizens to buy in on an individual level as is essential

- 4. The FIT rate is inclusive of avoided fuel costs, avoided lubricating oil, avoided capital construction, and avoided transmission line losses. BELCO's tariffs are comprised of its capital costs, administrative costs, operational and maintenance costs, metering and billing costs and return on investment. The FIT is set at the same rate at which it costs BELCO to generate electricity itself. Therefore, purchasing energy from solar PV system at the avoided cost rate does not increase BELCO's profits when compared to BELCO generating the electricity itself. Currently, BELCO cannot allow generators to be idle due to solar PV production. This is because solar PV production is an intermittent source of power and therefore generators must carry sufficient spinning reserve (additional capacity) to adjust for PV production swings, i.e. decrease in sunlight intensity from cloud cover or systems going offline. Therefore, purchasing solar PV production does not provide additional benefits to BELCO other than their avoided costs.
- 5. The Authority cannot set rates to guarantee investments. Rates are set according to the EA and government policy. Further, the Authority's analysis and analysis provided by solar installation companies show that there is still an incentive to install solar PV at the avoided cost rate.
- 6. The Authority cannot determine subsidies, as this is to be determined by government policy.

for progress to be made.

Chris Jansma

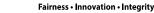
1. The RA's emergency decree of March 2017 was done without public consultation and is very unclear. Even after the clarifying order, it is very difficult to understand. The government should be promoting renewable energy initiatives and in fact did so until recently through the subsidy program.

1. The Authority's EGD was issued on an emergency basis to allow new renewable energy entrants to have access and interconnection to the grid, which had been closed by BELCO. The Authority notes that the government has the ability to set policies that mandate subsidies for renewal energy in determining the FIT, but the Authority does not have this power due to the requirements of the EA.

Chris Nash/Nicholas Duffy/BAE

1. BAE takes offense to the Authority's statement ion the Executive Summary that "The Authority is concerned that the solar installation industry in Bermuda failed to provide any analysis or data to support its claims as to the financial impact of the EGD."

1. The Authority notes the comment and clarifies its initial statement. BAE was the only solar industry representative to submit financial analysis on the impacts of the scheme changes. However, the Authority could not verify BAE's data and analysis as no justification or description of the data was provided.





- 2. Rate setting in the electricity sector is a complex process and requires a very specific set of skills. To succeed, it must be sensitive to achieving governmental policy objectives as well as satisfying legislative requirements. What specific level of electricity sector rate setting expertise was utilised in the preparation of both the original EGD and Preliminary Report Documents?
- 3. Section 31 of the RAA lays out the rules for participation by a Commissioner or member of staff in a decision making or advisory capacity in any adjudication or public consultation. We would like to ask the RAB, if any 'Conflicts of Interest' have been declared, which relate to this EGD process and if so, we request copies of the relevant declarations pursuant to Section 31 (8) of the RAA.
- 4. The RAB has proposed a FIT that is based on the one-year old avoided cost to the Bulk Generation Licensee (BGL), which does not comply with what the EA requires. The EA requires the FIT to be based on the avoided cost to the Transmission, Distribution and Retail Licensee (TDRL). The EA also requires the establishment of auditable separate account for the BGL and TDRL to verify there is no cross subsidization and therefore to be able to verify the true avoided cost.
- 5. Not only does the proposed FIT not include the fuel customs duty hike and related other higher fuel costs this year, as seen in the much higher fuel adjustment for July 2017 compared to July 2016. Furthermore, it does not include any amortization costs, overhead, profit etc. of the BGL, which all form part of the TDRL's avoided costs.
- 6. In addition to the avoided cost to the TDRL, the EA also requires the FIT to include an economic benefit cost. Yet in spite of many of the public and solar industry responses to the EGD pointing out the economic benefits, the RAB has both failed to include for any economic benefit and failed to provide their reasons for doing so.

- 2. The methodology to determine the FIT is set in Section 36 of the EA. The Authority adopted the recommendations of the Energy Commission ("EC") as per the Minister's Inquiry into Solar Net Metering to determine the price of the FIT. The Authority deemed the EC's recommendations to be in accordance with the Section 36 of EA and served as sufficient rate setting expertise until the Authority conducted is own study on FITs.
- 3. Declarations of interest are provided by each Authority member of staff and Board. No conflicts of interest exist with the issuance of the GD. Requests for information must be made through the official Public Access to Information (PATI) process.
- 4. The current FIT serves as an interim rate based on cost information provided by BELCO until the Authority can conduct its own cost of service study of the TD&R licensee to determine the actual avoided cost of the TD&R licensee. The FIT rate is inclusive of both generation and transmission avoided costs. The components are avoided fuel costs, avoided lubricating oil, avoided capital construction, and avoided transmission line losses. BELCO's tariffs also have consideration for capital costs, administrative costs, other operational and maintenance costs, metering and billing costs and return on investment. These costs are not considered in the FIT as they are not avoided.
- 5. The Authority notes the comment on fuel prices and costs. The Authority agrees that the FIT does not include any amortization costs, overhead, profit etc. of BELCO, however it disagrees that these are part of the avoided costs.
- 6. The Authority cannot estimate the economic benefit until a comprehensive study has been performed on the valuation of the economic benefits or the government provides an indicator of economic benefit in the form of carbon pricing.

Christopher Heslop

- 1. I am extremely resentful of the fact that the Regulatory Authority have chosen to implement an "emergency order," even against what BELCO said they were willing to support, (ie the first, I believe they said 350 customers), in reducing the amount for the buyback of excess power even though this is clearly a breach of contract between the primary parties, (BELCO and ourselves) and the assumed secondary party, the Bermuda Government who stated on many occasions what the terms of the agreement would be.
- 2. I would advise the RA to really take a look at their decision for the first customers who made a financial decision on investing in renewable energy based on what they were told and promised but also if the RA wants to promote alternative and clean energy in Bermuda there must be incentives for residents to make the large investment.

- 1. The Authority does not agree with the comments. The Authority regulates independently of the government and BELCO, and its Decisions and Orders are statutory instruments.

 The government has always indicated through its official website that the rate is subject to
 - change in the future, subject to regulatory approval, and the goal of government is to ensure a fair rate.
- 2. Although the Authority is sensitive that its decisions may have external effects on the general public, the Authority has a responsibility to act in accordance with the EA and RAA. The Authority cannot consider investment decisions of individual customers above such responsibility. The Authority is not responsible for determining issues of subsidies, as this is to be determined by Government Policy or instructions by the Minister.

Dr David Mallon

1. I'm greatly disturbed by the plan to revoke the grandfathering of domestic solar producers for net metering. In most cases people made a significant investment (in our case > \$100k) to support the environment and help move Bermuda forward. Net metering is not just about off-setting investment

1. The Authority notes the comment. The previous scheme of net metering is not in accordance with Section 36 of the EA. Therefore, grandfathering existing customers was not possible.





cost (we won't make back our costs for 30 years), but also has a profound impact on the way a solar system is configured. I understand that situations change and decisions must alter with them. But with so few domestic solar producers, to go against an earlier promise of net metering seems dishonest. It also hardly sets up an environment of trust between consumers, government agencies and the monopolistic Belco.

Department of Energy (DOE)

- 1. Without adequate explanation of how the Authority fulfilled all of their relevant responsibilities under the Electricity Policy and the Act, the Department does not agree that the EGD is "appropriate". It appears that only purposes 6(d), 6(e) and 6(f) were considered, and then only in part.
- 2. It is also not clear if and how the Authority has considered all of the relevant policy goals of the Electricity Policy and the Act. For example, the Government's vision to transform Bermuda's electricity matrix is tied to indicative targets set out in Section 4.1 Vision (Section 4.1) in the National Electricity Policy 2015. Setting the tariff rate at \$0.1736 per KWh will have a negative impact on the uptake of renewable energy (RE) technologies due to the investment being less attractive to consumers. Any deleterious impacts to the uptake of RE will in turn affect the achievement of the Government policy goals of transforming the electricity matrix into one that provides a least cost and high-quality electricity service.
- 3. Under the prior net metering scheme BELCO subsidized the renewable energy customers directly. The non-renewable energy BELCO customers did not provide or underwrite any subsidy.
- 4. The Department does not believe that ALL of the negative consequences of removing the prior net metering scheme (a form of cross subsidy according to the Authority) have been considered in the EGD. Reducing one cross subsidy, as is proposed under the EGD, cannot be achieved without having a possible negative effect on other stakeholders within the RE industry, including ratepayers. For example, removing the current Government concession of 0% duty rate to BELCO on specific business-related supplies would likely result in higher electricity prices for all rate payers. Removing Artificial Economic Returns (by changing the tariff scheme) should not be done without considering all the effects on all stakeholders and on the Government's policy goals. The Authority has not shown in this EGD that this has been done.
- 5. The Department of Energy is aware via its own communication with consumers and the RE industry, that change was both anticipated and calculated (including by BELCO) but not to the extent the Authority is proposing to change it through the EGD.
- 6. The new rate will be less attractive and possibly discourage new investment in RE systems whilst encouraging current RE system owners to install electricity storage technologies, reducing their use of the grid, resulting in fewer BELCO customers supporting the grid which will lead ultimately to higher grid electricity prices for all BELCO customers. The proposed new scheme could also negatively affect current RE customer's consumption habits. It will encourage RE system owners to consume more electricity in the day to take advantage of the cheaper electricity production rates of their own systems at the time of production. This electricity would have otherwise been exported to the grid under the

1. The Authority notes that the purposes of the EA contain high level principles that may sometimes be in conflict. For example, section 6(e) of the EA requires the Authority to consider the interests of end-users with respect to prices and affordability as well as the adequacy, reliability and quality of electricity service. These two sets of aims may be in contrast, as an increase in the reliability and quality of electricity service often requires a corresponding decrease in affordability. The Authority's role as a regulator is to balance these overarching purposes while also meeting any specific legislative requirements set forth in the EA or any other applicable legislation. In particular, section 36 of the EA requires the Authority to set a feed-in tariff based on BELCO's avoided costs. In making these trade-offs, the Authority will need to exercise its judgement and to ensure that any judgments it makes are based on consistent principles.

Further, the EGD is in line with the aims of the National Electricity Sector Policy of Bermuda (the "Electricity Policy"), in ensuring that all generation has a fair opportunity to connect to the grid and can sell power on commercially competitive terms. In accordance with the Electricity Policy, the Authority has operated under the law, specifically the EA, and has maintained an armslength relationship with private interests throughout the EGD process.

- 2. The methodology to determine the FIT is set forth in Section 36 of the EA. The Authority adopted the recommendations of the Energy Commission, as per the Minister's Inquiry into Solar Net Metering to determine the price of the FIT. The Authority deemed the EC's recommendations to be in accordance with the Section 36 of EA and served as a sufficient outcome for the renewables industry until the Authority conducted is own study on FITs. The FIT also complies with the Electricity Policy, in that it still provides an incentive for solar PV production, as the FIT is above the cost of solar PV production.
- 3. While BELCO "absorbed" the cost of the renewable energy program in its initial stages, these costs are part of BELCO's operating costs which would be utilised in subsequent rate case applications, which would then lead to higher base rates.
- 4. While the Authority is aware that removing the previous net metering scheme may have negative externalities, the Authority is required to comply with the EA's mandates on setting feed in tariffs. The Authority does not have the ability to determine subsidies as it relates to feed in tariffs. This is to be determined by the government policy.
- 5. Indication from the solar customers and sales representatives in the solar industry have indicated during the consultation process that they were not aware that a change in the rates and methodology could happen. It has been indicated by a solar sales representative that the current methodology was "promised to our clients." The Authority believes that the industry





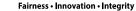
old monthly Net Metering scheme and been used to offset the use of BELCO's more expensive gas turbine peaking engines.

- 7. The Department requests clarification on how electricity produced during peak hours (worth more than \$0.1736 per KWh due to BELCO having to run Gas Turbines) was calculated into the rate by the Authority.
- 8. Public comments received so far indicate that the feed-in tariff based on BELCO's avoided costs is greater than the cost of solar PV generation of \$0.10-0.15 per kWh. How was the cost of solar PV generation of \$0.10-0.15 per kWh quoted calculated?
- 9. What analysis if any was done on the proposed new BELCO feed in tariff scheme of August 15th 2016? Why was it not considered as the scheme of choice by the Authority? What would have been the financial impact on BELCO's non-RE customers? Was the impact substantial?
- 10. Based on the analysis provided and the avoided cost model of the tariff proposed, unless consumption is undertaken at the same time as production, all RE system owners will be negatively impacted by the EGD. What is being proposed is a FIT not a net monthly metering scheme as stated.
- 11. The assumption about 'Self-consuming' PV scheme participants is incorrect. A majority of PV scheme participants will not be consuming at the same time that they are producing (i.e. in the daytime when most self-consumption is low) so will not be able to take advantage of the more favourable rate of production of their own PV systems.
- 12. The DOE appreciates the Authority's motivation of protecting the public interest (i.e. all BELCO rate payers), "public interest" in the context of regulation encompasses far more than simply the price of a commodity. Regulation is meant to ensure that wider issues are taken into consideration, apart from those tangibles supported by financial analysis ("economic efficiency") alone.

- and customers should have been aware of a pending change in the methodology and rates. The methodology set forth in EA was passed in February 2016 and enacted October 2017, the industry has had of this time to anticipate the change in the methodology and rates.
- 6. The Authority is required to set the FIT based on an avoided cost rate in compliance with the EA. to the Authority notes that the current rate is interim, based on cost information provided by BELCO, until the Authority conducts its own rate review study. The Authority believes that the FIT provides commercially competitive terms to the solar producers and remains attractive as an alternative to purchasing battery storage.
- 7. BELCO's cost of service study which was used to determine BELCO's avoided costs was submitted to the Energy Commission as part of the Ministers Inquiry and subsequent approval and recommendation of the Energy Commission. The avoided fuel cost which makes up the largest portion of the avoided costs is BELCO's project weighted average marginal cost of fuel for 2016 which is 15.74 cents/kWh, which includes the FAR and \$30/Bbl included in the retail tariff.
- 8. The cost of solar PV generation of \$0.10-0.15 per kWh was quoted by a local solar PV installation company. This cost is based on the lifecycle cost of the system and the expected lifecycle production.
- 9. The Authority did not consider the proposed BELCO scheme as it is not in compliance with the requirements of the EA as they relate to feed in tariffs. The impact was not specifically calculated as the EA does not allow the Authority to require non-renewable energy customers to subsidise the purchase of renewable energy ("RE") based on electricity pursuant to a FIT set higher than avoided cost.
- 10. The GD was never intended to be a net monthly metering scheme, as it implemented the former Energy Commission's decision to remove net metering. All solar customers may be affected by the GD depending on their system design, consumption patterns and levels of consumption.
- 11. The Authority disagrees with the comment about self-consuming scheme participants to be incorrect. Some customers will have the majority of their production consumed in-house, and these customers will be minimally affected.
 - The Authority cannot make a decision based on individual customer investments or system design considerations.
- 12. In enacting the EGD, the Authority has taken the wider public interest into account. However, the Authority is required to comply with the EA which does not allow it to place a tangible price on any benefits outside of economic benefits when setting a feed in tariff.

Douglas De Couto

 "The EA shall allow compensation for an estimate of the economics benefits from distributed generation." The avoided cost of 17 cents fails to do this, for many reasons outlined in some of the public submissions, including the fact that BELCO can immediately resell fed-in electricity at the 1. The Authority cannot estimate the economic benefit until a comprehensive study has been performed on the valuation of the economic benefits or the government provides an indicator of economic benefit in the form of carbon pricing in the case for environmental considerations.





maximum marginal rate; PV users already pay a facilities cost to BELCO to cover infrastructure and other costs; in addition to pure fuel costs, the ability of PV to reduce BELCO's load at peak daylight hours further reduces their costs in areas such as centralized infrastructure load as well as the fact that the cost avoided by BELCO at this time is much higher than the average 17 cents cited by the RAB.

- 2. "By removing artificial economic returns from renewable energy installations, the EGS promotes economic efficiency". In fact, the RAB has consistently depicted PV users as making money at the expense of BELCO and the general public. While this may be true for a handful of users, most users including myself have systems that are appropriately sized for our consumption and do not, on a daily basis, send more energy back to BELCO than is consumed. So the economic returns are not artificial. In addition, the EGD will in fact decrease economics efficiency be incentivizing PV users to install battery systems and generally reduce their reliance and integration with BELCO, thereby reducing the base of customers to share BELCOs' fixed costs.
- 3. "The question of 'subsidization' an issue for Government". In fact I agree that this is indeed an issue for Government. And it was in an environment of Government subsidies and promotion of renewable energy such as PV that myself and many affected persons undertook investment in PV, with the good faith assumption that key parameters about the role of PV in Bermuda would not be unilaterally changed by the RAB, which is not the Government.

The comments in reference to BELCO reselling exported energy to retail customers are conceptually incorrect. The FIT is set at the same rate at which is cost BELCO to make the power themselves, therefore BELCO does profit from or have expenses relating to the generation of the electricity.

- Customers with systems appropriately sized for daily consumption will be the least affected by the change in the Scheme.
 Artificial economic returns relate to the previous rate setting methodology which was subsidy-
 - Artificial economic returns relate to the previous rate setting methodology which was subsidy-based. This subsidy-based methodology was initially introduced by BELCO to assist the industry in its infancy stages.
- 3. The Authority has a responsibility to comply with the EA as an independent regulatory body. This responsibility was bestowed upon the Authority by government when the EA was enacted.

Elspeth A. Weisberg

- 1. You attempt to make a case that solar PV system owners are somehow "getting a better deal" and that non-solar producers in the general rate-paying population are effectively subsidizing us. This is couched in the language used as "non-discriminatory access". This is an erroneous assumption and the continued use of this misperception and similar language in your report has heavy socialist undertones.
- 2. Solar PV producers have invested heavily in the purchase and installation of their systems no other BELCO rate payer was obliged to contribute and the BELCO rates/costs <u>did not increase</u> for those NOT having any self-production; the BELCO rates remained the same for the households that did not invest in the solar PV technology. Apart from the limited government incentive payment of \$5,000, there was no subsidy and there is no subsidy for on-going production.
- 3. By eliminating net metering, you are effectively creating a subsidy of those without solar PV installations by those of us who do. I no longer receive any credit* for the surplus electricity that I produce into the grid on a sunny day and can no longer offset this surplus generation against what I must draw from the gird during the hours of darkness or on rainy days. THIS ELIMINATION OF NET METERING FUNDAMENTALLY CHANGED THE WHOLE ECONOMIC CASE FOR INVESTING IN SOLAR PV GENERATION.
- 4. Hence, based on your emergency determination and on the methodology that you propose to implement now, the excess generation that goes from my roof on a sunny day is free to BELCO and they then charge other, non-solar BELCO customers at their own production rates to use it. This is

- 1. Net metering is a subsidy-based methodology. BELCO had indicated that the subsidy-based methodology was initially implemented to assist the industry in its infancy stages. When determining feed-in tariffs, the Authority's assessment of non-discriminatory access relates to equal treatment of customers, not necessarily equal outcomes.
- 2. While BELCO "absorbs" the cost of the renewable energy program in its initial stages, these costs are part of BELCO's operating costs which would be utilised in subsequent rate case applications, which would then lead to higher base rates.
- 3. The Authority disagrees with the comment that solar PV customers subsidise non-solar customers. The net metering concept is a subsidy-based methodology. BELCO had indicated that the subsidy-based methodology was initially implemented to assist the industry in its infancy stages. The Authority has a responsibility to act in compliance with the EA, not the investment decisions of individual customers. The Authority is not responsible for determining issues of subsidies, this is to be determined by Government Policy or instructions by the Minister.
- 4. Compensation is provided for all energy delivered to the BELCO grid by renewable energy customers. The FIT is set at the same rate at which it costs BELCO to generate electricity itself. Therefore, purchasing solar PV at the avoided cost rate does not increase BELCO's profits compared to BELCO generating the electricity itself.
- 5. The FIT rate is inclusive of avoided fuel costs, avoided lubricating oil, avoided capital construction, and avoided transmission line losses. Currently, BELCO cannot allow generators to be idle due to solar PV production. This is because solar PV production is an intermittent source





<u>nothing other than a gift to BELCO shareholders.</u> You are allowing them the ability to sell power to their customers that they have not paid to generate.

- 5. Your report also ignores the fact that without the excess generation produced by solar-PV producers, BELCO would have to repair and upgrade their own generators sooner and more often the cost of this will not be bourn solely by BELCO shareholders but will be spread through the rate-paying base so that everyone contributes.
- 6. What you are also ignoring is that by taking away net metering and so altering the economic case for self-production, you are encouraging those of us who already have production capacity to invest further in storage capacity and disconnect from the grid altogether.
- 7. By your windfall to BELCO by not allowing them to grandfather existing solar PV producers and continue with net metering you are giving them the ability to make increased returns for their shareholders at the expense of Bermuda consumers who are solar PV producers.
- 8. Bermuda's population is too small to have competition in the energy space and any business case that seeks to encourage that is flawed. Anyone with any energy industry experience can see that and hence it impacts the credibility of the RA that it seeks to advocate such a course of action. What Bermuda needs right now is a RA that is working with the local utility, demonstrating competence and instilling confidence none of which is in evidence from the recent actions of the RA.

of power and therefore generators must carry sufficient spinning reserve (additional capacity) to adjust for PV production swings, i.e. cloud cover or systems going offline.

- 6. The Authority cannot set rates to guarantee investments. Rates are set in accordance with the EA and government policy. The Authority believes that the FIT provides commercially competitive terms to the solar producers and remains attractive as an alternative to purchasing battery storage.
- 7. The Authority's decision treats all solar PV owners equally by mandating that they all receive the same rate. When determining feed-in tariffs, the Authority's assessment of non-discriminatory access relates to equal treatment, not necessarily equal outcomes. Furthermore, all solar PV owners will benefit from the avoided cost rate, as it is above their cost of production. Purchasing solar PV at the avoided cost rate does not increase BELCO's profits compared to BELCO generating the electricity itself. BELCO is revenue neutral when buying exported energy.
- 8. The Authority acts in compliances with applicable law, as set forth in the EA, and applicable government policy.

George Masters

- 1. In light of the current consultation, I would like to request the RAB to have an open public forum so that all users who are not familiar with the technicalities of solar can voice their opinion. Writing a counter to these decisions is counterproductive as a majority of users are unfamiliar with the technical terms discussed within these documents. A public forum would be in the best interest to solar users and the general public going forward. Would the RAB consider this proposal?
- 2. The current decision lacks the ability for solar users to attain power independence.
- 3. Solar users are subsidizing power to Belco's power requirements and allowing Belco to profit from this power in return. If a solar user produces more than they consume, and when Belco purchases this at the 0.17 reduced rate, solar users are essentially subsidizing Belco's power requirements and allowing Belco to resell this power at higher rates. This essentially allows Belco to profit from solar user's power.
- 4. Impact to solar industry companies. The analysis does not provide any data or analytical insight on how this rate/scheme could affect adoption of solar power and the companies operating within this market. The analysis does however, allude that there is an assumption that by choosing this rate and scheme, solar users will benefit and still find it financially feasible for adoption.
- 5. Finally, as it appears that the RAB has created a bias decision that benefits Belco over solar users, I wish to ask the following question. Are any RAB employee's shareholders of the Ascendant group / Belco that worked on, consulted for advice, or aided or influenced the decision of the RAB for solar energy pricing and this decision? If so, to avoid conflict of interests, the RAB should disclose this information accordingly to the public.

- 1. The Authority values input from the public and also has a responsibility to educate the public on its regulated sectors. Therefore, it considering various methods of seeking public input and educating the public, including via public forums.
- 2. The GD has removed technical barriers that existed under the previous residential net metering program. Renewable energy customers can now install a maximum capacity of the Licence Threshold (as set by the Minister) under the current scheme, as opposed to 15kW under the previous. In this sense, the Authority has enabled customers to have greater power independence.
- 3. The FIT rate is inclusive of avoided fuel costs, avoided lubricating oil, avoided capital construction, and avoided transmission line losses. BELCO's tariffs are comprised of its capital costs, administrative costs, operational and maintenance costs, metering and billing costs and return on investment. The FIT is set at the same rate at which it costs BELCO to generate electricity itself. Therefore, purchasing solar PV energy at the avoided cost rate does not increase BELCO's profits compared to BELCO generating the electricity itself.
- 4. The Authority has a responsibility to comply with all applicable legislation and ministerial policy, which may mean balancing competing objectives. Section 36 of the EA requires the Authority to set a feed-in tariff that is based on the TD&R licensee's avoided costs.



Greenrock

- 1. We believe there should be a straight kilowatt for kilowatt swap or credit for solar power generated during the day in excess and BELCO power used over the night. The simplest way here would be for a monthly accounting of the meter. It is only excess kilowatt capacity (that sold back to the grid in excess of this swap should the home generate self-sufficiency and subsequent excess) that should be financial, as in the avoided cost suggested (but qualified).
- 2. For that excess kilowatt, we agree in principle with the avoided cost concept however we disagree with the calculation of the avoided cost as presented. It is far too narrow and doesn't factor in additional avoided cost in terms of:
 - (i) environmental costs (greenhouse gases, using carbon equivalent and carbon pricing; but also public health costs in terms of particulate matter);
 - (ii) transmission & distribution capacity savings (in terms of reducing peak loading on the system delaying the need for capital investments);
 - (iii) fuel price hedge value (PV generation has no fuel price uncertainty);
 - (iv) fixed capital avoided costs (encouraging distributed PV generation reduces the need for investing massively in new fixed capital for the utility to meet increased demand).

The avoided cost value estimated by BELCO (and proposed subsequently by the RA) to us represents the absolute minimum or floor for the avoided cost value. Working out the exact actual avoided cost incorporating the above is not something we have had the capacity to determine as yet. However, we favour a high value for the price of carbon, noting the challenges in meeting the Paris Agreement targets as is, and the associated costs to humanity (or to Bermuda more narrowly). We suspect that the actual avoided costs far exceed BELCO's existing retail rate for kilowatt hours as a result. We can provide some starting positions for calculating the full true avoided costs, which we feel the RA can build on. In the interim we believe that the existing retail rate of kilowatts should be maintained pending such a calculation - or the proposed avoided cost be introduced with the understanding that once the proper value is determined incorporating the above, that a transition is introduced to compensate accordingly (so an even higher rate of avoided cost be implemented until the deficit is reached).

- 5. Declarations of interest are provided by each Authority member of staff and Board. No conflicts of interest exist with the issuing of the GD. Requests for information must be made through the official PATI process.
- 1. Section 36 of the EA requires the Authority to set a feed-in tariff that is based on the TD&R licensee's avoided costs.
- 2. The current FIT is based on costs provided by BELCO and serves as an interim rate until the Authority can conduct its own Cost of Service Study of the TD&R licensee to independently determine the avoided cost of the TD&R licensee. The FIT rate is inclusive of both generation and transmission avoided costs. Its components are avoided fuel costs, avoided lubricating oil, avoided capital construction, and avoided transmission line losses.

 Currently, there is no pricing regime to quantify the environmental cost in Bermuda, as there is

Currently, there is no pricing regime to quantify the environmental cost in Bermuda, as there is no carbon pricing or valuation on air pollutants or valuation leading to public health costs relating to fossil fuel fired plants.

Jan Card

1. Para 3) Section 6 of the EA as the foundation for the RA's rate setting authority and quotes sections d, e, and f but ignores sections a, b, and c. As the order implies the EA actually puts supply sustainability and promoting "the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources" AHEAD of interconnection access, affordability and efficiency. On this basis and others it is clear that the RA is free to depart from a pure calculated "avoided cost" number in creating a feed-in tariff. You should have the courage to do so. in 12) Missing from the RA's "overarching" responsibilities are any of the objectives of sections 6a, b, and c of the EA, not to mention the others mentioned in section 12 of it's own act.

1. The Authority notes that the purposes of the EA contain high level principles that may sometimes be in conflict. For example, section 6(e) of the EA requires the Authority to consider the interests of end-users with respect to prices and affordability as well as the adequacy, reliability and quality of electricity service. These two sets of aims may be in contrast, as an increase in the reliability and quality of electricity service often requires a corresponding decrease in affordability. The Authority's role as a regulator is to balance these overarching purposes while also meeting any specific legislative requirements set forth in the EA or any other applicable legislation. In particular, section 36 of the EA requires the Authority to set a feed-in tariff based on BELCO's avoided costs. Further, the EGD is in line with the aims of the Electricity Policy, in ensuring that all generation has a fair opportunity to connect to the grid and can sell power on commercially competitive terms. In accordance with the Electricity Policy, the





- 2. Para 5) This appears an attempt to justify the avoided cost as an upper limit on the feed-in tariff. Particularly in the case of small, privately built PV systems at this early stage of implementation there is clear room to set rates above avoided cost in order to accelerate early adoption and increase the installed distributed generation capacity, section 36.a.ii is included specifically for this purpose.
- 3. In 6) The elimination of a "cross-subsidy" is in fact a red herring. There is no reason to eliminate such cross-subsidies when the objective is to finance a transition from a monopoly supplier to a regulated supplier and distributor utilising small, distributed private inputs. There is conceptually no difference between setting a high feed-in rate and simply mandating a renewable fraction in cases where it is known that the renewables cost will be higher than the non-renewable cost. This latter case is also "cross-subsidisation" and is accepted everywhere. It is not inherently evil as your paragraph implies.
- 4. in 7) With due respect to the brevity of this paragraph; What nonsense! At the levels of implementation we have currently and at the system sizes we now see there is no appreciable effect on economic "efficiency". Similarly, given the state of flux of the technology (both in terms of cost and technology) payback periods of 8 years are hardly indicative of "artificial economic returns" the removal of which need to be the focus of RA action. A premium on avoided cost is universally accepted as the most effective way to stimulate adoption and capacity growth.
- 5. in 9) it is mentioned that the RA has used, as a premiss for it's analysis, that private PV systems would be sized on the basis of providing for self consumption. This is wrong and is inconsistent with the RA's obligations under the EA to promote the use of renewables. The RA should, at lest, be agnostic to system size and should actually be actively maximising installed capacity.
- 6. in 10) In a) This is, respectfully, a misreading of the RA's responsibilities. In b) The RA seeks to explicitly avoid making any decisions on what it calls "subsidisation". This based on the Minister's having requested that BELCO implement the Energy Commission's 2016 Recommendations. This is a cowardly abrogation of responsibility. It is clearly one of the intentions of the EA and RA Act that the RA is the chosen instrument at the cutting edge of change in the way we generate and distribute electricity. It is also clear that this change is intended to lead in the direction of increased renewables use in general as well as increased Distributed Generation, a Smarter Grid and more PV in particular. For the RA to take the position that it cannot use its rate-making authority to set rates which incentivise and accelerate development in these directions, including cross-subsidisation, is derelict. If the RTA insists on explicit quantified legislative instruction for such action, paralysis will result and we will find ourselves with a single monopoly supplier, a dumb grid and criminal levels of carbon emissions in 20 years time. Just as we are now. This Clear Regulatory and Legislative Framework will have achieved only stasis!

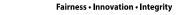
Authority has operated under the law, specifically the EA, and has maintained an arms-length relationship with private interests throughout the EGD process.

- 2. At this time, the Authority cannot estimate an economic benefit until a comprehensive study has been performed on the valuation of the potential economic benefits.
- 3. The Authority is required to comply with the EA's mandates on setting feed in tariffs. The Authority does not have the ability to determine subsidies as it relates to feed in tariffs. This is to be determined by the government policy.
- 4. The Authority has a responsibility to comply with all applicable legislation and ministerial policy. Section 36 of the EA requires the Authority to set a feed-in tariff that is based on the TD&R licensee's avoided costs. The Authority cannot set rates to guarantee investments.
- 5. The GD has removed technical barriers that existed under the previous residential net metering program. Renewable energy customers can now install a maximum capacity of the Licence Threshold (as set by the Minister) under the current scheme, as opposed to 15kW under the previous. In this sense, the Authority has enabled customers to have greater power independence.
 - The Authority's analysis show that the maximum financial benefit to the customer is granted when the majority of the renewable energy system's production is self-consumed, however this does not preclude or limit potential system owners from maximising their installed capacity to the Licence Threshold.
- 6. The Authority is required to comply with the EA's mandates on setting feed in tariffs. The Authority does not have the ability to determine subsidies as it relates to feed in tariffs. This is to be determined by the government policy.

Peter Parker

1. Your decision to maintain your preliminary position is based as much on faulty mechanics as on faulty rationale. For example, in the computation of the "avoided cost" it appears that you have accepted BELCO's computation of \$0.17 as fair and accurate. Belco has informed me of the elements they have considered in computing that value (and you also showed those components in the Report) and I

1. The current FIT is based on costing information provided by BELCO and serves as an interim rate until the Authority can conduct its own Cost of Service Study of the TD&R licensee to independently determine the avoided cost of the TD&R licensee. The FIT rate is inclusive of both generation and transmission avoided costs. Its components are avoided fuel costs, avoided lubricating oil, avoided capital construction, and avoided transmission line losses.





 submit that Belco (and the RAB) have grossly understated the avoided cost by failing to included some of the most important elements. 2. A general comment on the quality of your Report. Although perhaps technically correct, the report is written in what some would call "legalese" making it difficult to understand and follow the logic. When reading the Report and the Appendices, one sees an overabundance of repetition of both words and numerical tables. It makes one wonder if the report if written to confuse rather than enlighten. 3. In Section 6. you discuss the Responses to the first Report. Apart from the tone of the discussion, which I found to be arrogantly dismissive of the legitimate and sincere concerns of the respondents, your paragraph 50 states "the transitional measures do not actively disincentivise the adoption of renewable energy installations in future". Whether or not this will disincentivise future installations is a judgement call which I do not believe you are entitled to make, and in any event I think you called it wrong 	 The Authority has a responsibility to both consult with and educate the public. As such, it has attempted to produce consultation documents that are clear and understandable for the general public. The reference statement refers to the Authority's analysis showing that there is still an incentive to install solar PV at the avoided cost rate. The cost of solar PV generation of \$0.10-0.15 per kWh, quoted by a local solar PV installation company, confirms the avoided cost rate is above production costs.
it wrong. Stratton Hatfield	
 The EGD does not promote economic efficiency nor sustainability in the generation, transmission and distribution and sale of electricity. I have sold over 500kW of solar electricity in a two years period as Director of Development focusing on sales and marketing on the premise that our clients would be under a net metering or net billing arrangement. The EGD goes against what was promised to our clients and has negatively impacted their feelings towards BE Solar and the renewable energy industry. 	 The Authority's EGD was issued on an emergency basis to allow new renewable energy entrants to have access and interconnection to the grid which had been closed by BELCO. The Authority notes that the government has the ability to set policies that mandate subsidies for renewal energy in determining the FIT; the Authority does not have this ability due to the provisions of the EA. The initial scheme was never intended to be permanent by BELCO or the Bermuda government. The tariff setting methodology is set forth in the EA which was passed in February 2016 and enacted in October 2017. Therefore, the electricity sector has had this time to anticipate a change in the methodology and rates.
Taran Card	
 I also think that you are in correct in your assumption that the purpose of putting a PV installation on your roof is to mitigate your daytime use. When I am doing the calculation for how much PV installation I need on my house, my goal is to have a zero electric bill. This will also be my justification when I go to the bank to get a loan for the equipment. If I do the installation and still have to pay for the electricity at night making a net payment to Belco there is no point to me. Belco will always be required to provide base load electricity at night, however, their own statistic show that their peak loads are daytime summer. These loads could be drastically reduced his large amounts of PV installations are installed in a distributed fashion. This would lower the overall footprint of Belco, reduce our reliance on fossil fuel, and foster small businesses throughout the island. The rate for electricity should be one rate regardless of how the electricity is produced! I remain available should you wish to discuss anything further, my sincere regrets for missing your initial consultation. I do not helious that your surrent order is in the best interest of the island as a whole. 	 The Authority does not agree with the comment. The Authority's analysis concludes that the greatest financial benefit of having a PV system is obtained when the customer consumes their own production. However, neither the GD nor the Authority's analysis assumes that the purpose of putting a PV system on a roof is solely to mitigate daytime use. The Authority does not agree that large PV installations would lower the capacity requirements of the TD&R licensee and thus the overall footprint of BELCO. Capacity requirements and footprints will remain unchanged until alternative sources of baseload capacity are implemented. During times of low solar PV production, firm capacity must still be available. Section 36 of the EA requires the Authority to set a feed-in tariff that is based on the TD&R licensee's avoided costs.
consultation. I do not believe that your current order is in the best interest of the island as a whole, in the long term.	
Thomas Hands	
I believe that once you reduce the price at what Belco buys back the solar, you will reduce all incentives for home owners to move towards solar. Although solar is not a total solution to Bermuda's energy	 Section 36 of the EA requires the Authority to set a feed-in tariff that is based on the TD&R licensee's avoided costs.
issues, it is a good start.	The previous net metering scheme is not in compliance with the EA. Therefore, the Authority cannot consider the previous approach. BELCO's retail tariffs are not considered under this GD.



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 My preference is for the RAB to leave the prices as they were. As Belco has costs to recover for powerline and other maintenance, I could live with say a 5 to 10 cent reduction in what Belco purchases electricity. 	