

BLOCK ISLAND UTILITY DISTRICT



The Block Island Utility District is sponsoring the Block Island Student Council's 2nd Annual Outdoor Holiday Lights Contest. All participants are encouraged to use energy efficiency lighting and to sign up for a free energy audit provided by BIUD's DSM Program. To qualify for the prizes, the winners must meet both criteria.

BOARD OF COMMISSIONERS MEETING

DECEMBER 18, 2021

11:00 AM

Block Island Utility District
Regular Meeting of Board of Commissioners
Saturday, December 18, 2021 @ 11:00 AM – 2:00 PM

THIS MEETING WILL BE HELD IN PERSON
AT THE BLOCK ISLAND COMMUNITY CENTER
LOCATED ON CHAPEL STREET, BLOCK ISLAND, RI 02807

1. Public Input
2. Correspondence
3. Commissioner's Report
4. Approve Meeting Minutes: November 20, 2021
5. President's Report
 - a. National Grid BITS (Submarine Cable) Charge Rate Change
 - b. National Grid Cable Reburial Update
 - c. PASCOAG Net Metering – For Informational Purposes Only
 - d. Home Storage Program Update
 - e. BI Solar Initiative Level 3 Charger Update
 - f. Utility Scale Battery Project (New Proposal from Nexamp)
 - g. Voltage Conversion Project Update
6. Review and Act Upon CFC \$1.5M Loan for Voltage Conversion
7. Review and Act upon 2022 Capital Budget
8. Discussion of BIUD 2022-2025 Strategic Plan

Individuals requesting services for the deaf and hard of hearing must call (401) 466-5851 forty-eight hours in advance of the meeting date.

The meeting location will be set up to maximize outdoor air flow and will allow for adequate social distancing.

AGENDA ITEM 1
PUBLIC INPUT

(THIS PAGE INCLUDED FOR NOTES)

AGENDA ITEM 2
CORRESPONDENCE

I wish that the Board would be more honest with ratepayers who question why the windmills aren't operating. Saying that they are under constant maintenance is Bull. Tell the truth that Nat. Grid is obligated to pay 21¢ per kw hr. when they could buy from other sources for 14¢ - That is less damaging to their reputation than the fabrication that they are under maintenance.

Correspondence re: Wind Turbines

BIPCO

For the Board, accept as correspondence please

To the Town of New Shoreham, Quasi-Town of New Shoreham institutions, and Block Island based Non Profits with Land Stewardship:

I am asking all Town governmental, quasi-governmental institutions, and Block Island non-profits to inventory the land that they have under their responsibility for the sole purpose of identifying land that could potential be developed for affordable rental units to Block Island residents. This inventory should not be preemptively limited by Town, State or Federal law, as perhaps it may be deemed appropriate to modify such laws for this purpose.

The inventory needs to include existing legal restrictions on its development so that the community may fairly assess what are our resources in this area.

For many years, we have all watched the increasingly difficult time residents who rent have in securing housing. The damage to our island is palpable. The stress, the fear, the uncertainty that we all must recognize in these people needs an island wide-effort to address.

We are increasingly becoming a bedroom community for real estate speculators who see Block Island as an investment opportunity, and not as a community. Block Island is no longer a diamond in the rough. The increasing discontinuity in income and taxation policy has only exacerbated this situation. We have seen this reality play out in other island communities: most obviously Nantucket and Martha's Vineyard. It is my observation that we really have taken only very small steps to develop solutions for this critical problem. If it were not for the generosity of several individuals, Block Island would have far less affordable living units than it has. That is scary. It means government has not solved this problem, individuals have, and many of those who gave have left this world and there are few like them now remaining. Depending upon their generosity is not planning, nor is it a housing program.

Would you please place this request as an agenda item for discussion within your next three meetings, but no later than February 28, 2022?

The institutions I have currently as able to participate include:

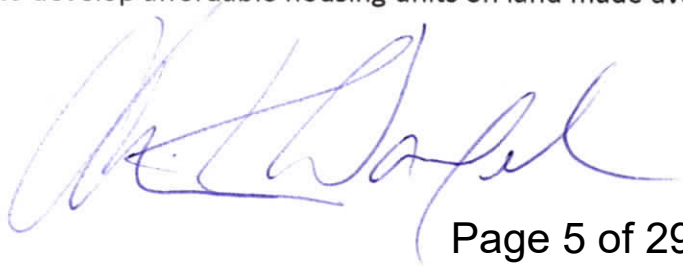
Town of New Shoreham, [★]Block Island Power Company, Town of New Shoreham Water Company, Town of New Shoreham Sewer Company, Block Island Land Trust, Nature Conservancy, Block Island Conservancy, Rhode Island State Airport Corporation (to be approached by the Town of New Shoreham)

Are there others?

I think by June of 2022, we should all have a fair idea of what we have for resources for this purpose. This would put us in line for newly developed Federal funded initiatives that are underway. We need to be prepared and start now. I do think that this needs Town leadership or at least guidance, but not by the same groups that failed to act sufficiently when it was obvious for many years that we had a very real problem. I realize it is not most government's reputation to be innovative, but that is what is needed now. Please think of how you can accomplish this with alacrity. The sole mission of this group is to develop affordable housing units on land made available.

Sincerely, Christopher Warfel

Cc: Block Island Times



AGENDA ITEM 3
COMMISSIONER'S REPORT

AGENDA ITEM 4
APPROVAL OF MINUTES

**Block Island Utility District
Board Meeting Minutes
November 20, 2021**

Board Members: Barbara MacMullan, Maryjane Balser, Tom Risom, John Warfel and Elliot Taubman

Also Present: President Jeff Wright, Tracy Fredericks, Chris Warfel, David Lewis, Wade Ortell

Board Chair, Barbara MacMullan called the meeting to order at 11:03am.

1. Public Input

Chris Warfel asked if BIUD could investigate possible affordable housing.

Chris Warfel asked if BIUD could do a net meter inventory, considering decommissioned projects.

Chris Warfel made several comments regarding the approval process for solar projects, asking for a separate process than the town.

Barbara reminded the group that we came up with an approval process that would be separate from the Town's. Tom added that the town needs Jeff's approval first, and it must ensure the system is not exporting.

2. Correspondence

Chris Warfel email-submitted, in packet.

3. Commissioner's Report

Barbara proposed that BIUD change the enabling legislation to allow the board to be compensated for attending trainings and meeting, similar to Pascoag's legislation.

Tom Risom made a motion to incorporate the lobby to include language similar to Pascoag 45-58-7. The motion was seconded by Maryjane Balser. The motion was approved unanimously.

4. Review and Act upon Mayforth Group Proposal for Lobbying Services

Barbara explained that last year the board hired Mayforth Group to help with the net metering legislation. They were helpful in keeping the board aware of other bills that may affect the BIUD. MacMullan suggested we continue to use them.

Elliot Taubman supported this recommendation but suggested we use District, not Company in the contract wording and add language to include Mayforth helping BIUD track other legislation that could affect BIUD.

Elliot Taubman made a motion to renew the Mayforth Group contract subject to his comments. The motion was seconded by Barbara MacMullan. The motion passed unanimously.

5. Approve Meeting Minutes of August 28, 2021, Annual Meeting and October 26, 2021, meeting

Barbara MacMullan made a motion to approve the meeting minutes of the August 28, 2021 Annual Meeting and the October 26, 2021 meeting. The motion was seconded by MaryJane Balser. The motion passed unanimously.

6. President's report

- a. Cable Outage-National Grid is still scheduling and cancelling the project

The accumulated cost is a concern, and as the weather gets colder the fuel costs will increase. Jeff is going to contact the PUC if necessary.

- b. Battery Storage- Jeff reported that he wants to keep moving forward with this project and that he will schedule a zoom meeting with Craig Kieny.

- c. Review of Net Metering Docket Procedural Schedule – Jeff reported that a procedural schedule was set – included in packet. He went on to explain BIUD's interpretation of Section 12 definition of net metering as regarding zero export is defined as net metering.

Chris Warfel asked the board to look at the statutes, he disagrees with this definition.

- d. Car Charger- Jeff met with Tony Pappas, Will Young and Wade Ortel. Jeff will work on helping the group procure a level 3 charger to be installed at BIUD. They are aiming to have the project completed for next summer. Tom Risom offered to investigate any zoning issues that may be associated with installing the charger.

7. Review and Act upon 2022 Operating Budget

Jeffery Wright presented the 2022 O&M Budget and further explained the relationship with capital, funding it with cash to improve out equity. Once we reach 40% we can work on lowering out rates by increasing our borrowing and using less cash to fund the capital budget.

The 2022 budget is flat compared to last year, funded with current rates.

A motion was made by Barbara MacMullan to approve the budget as presented, seconded by Tom Risom. The motion passed unanimously.

8. Review and Act upon BIUD 2022-2025 Strategic Plan

Jeff Wright said he will look into scheduling a planning session with CFC in February or March. He asked the board to look over the plan and give him feedback. A lengthy and productive discussion ensued.

Barbara MacMullan asked the board to think about incorporating climate change, sea level rise, and other environmental laws that may affect operations and also suggested we develop a community and school level and training program to hire new employees.

Motion to adjourn the meeting was made by Elliot Taubman, seconded by Tom Risom. The motion passed unanimously. The meeting adjourned at 12:25 pm.

AGENDA ITEM 5
PRESIDENT'S REPORT

PRESIDENT'S UPDATE

DECEMBER 18, 2021

National Grid Cable Outage Update/BITS Charge Changes

There are several things going on with the submarine cable worth noting:

- 1) National Grid has postponed the cable outage until Spring of 2022.
- 2) They have come to a settlement with the DPUC on their over-collection from the cable charges. Although the final order has not been released, National Grid has reached out to discuss several changes to their charges that will positively impact BIUD.
 - a. BIUD's monthly BITS costs will decrease approximately 40% from \$3,834.
 - b. National Grid is refunding BIUD (writing a check to) for approximately \$32,000.
 - c. The DPUC has capped what National Grid can charge for the cable at \$144M. (Current NBV + \$30M for Reburial). This is a critical in limiting our risk of exposure to cost overruns from their work.

Pascoag Net Metering Update

Pascoag's new Net Metering Tariff has been approved. Their tariff was modeled from ours and includes the following:

- 1) Dual Meters (Consumption/Generation)
- 2) Their Solar Credit is based on their Standard Offer (Power Supply) Rate.
- 3) PASCOAG is taking responsibility and covering the cost of rewiring the existing net metering systems to transition to the dual-meter system.

Home Storage Battery Program Update

Craig Kieny will be available remotely for our next meeting scheduled for January 27, 2022.

EV Level 3 Car Charger Update

We are having difficulty sourcing a car charger but believe that NUVVE (the EV school-bus company) has a level three car charger option for the BI Solar Initiative and Will Young to consider. Once we select a charger, I will take the lead to start the HDC permitting for installation at the power company.

Utility Scale Battery Storage Proposal

In 2020 we were approached by New England Battery Systems. They are the company installing a large utility scale battery in the PASCOAG system. PASCOAG is doing this to mitigate an expensive transmission upgrade (they currently run a natural gas peaking generator to avoid transmission overloads in peak conditions). I met with their team here on island just before COVID. They began working on a proposal for Block Island in which they would install, own and operate a 5MWH battery system that would be used to peak shave, regulate frequency and be bid into the capacity markets. The concept behind these systems, is that the developer would own and operate the system and then share the savings that the

utility realizes from reduced power supply and transmission costs. After six months of analysis, they could not make the economics work.

About four months ago, I was approached by Nexamp, another reputable company who develops and manages these types of projects. I met several times with them and received their first proposal in October. BIUD's share of the annual savings were approximately \$20K. Realizing that would not satisfy BIUD's interests, they did more work on the analysis and after three subsequent proposals, they have come up with a proposal that I think is worth pursuing.

The annual savings that BIUD would recognize would be \$106,199. The net savings over the 20-year life of the project would be nearly \$3.5M.

To put this into perspective with our current power supply and transmission rate structure, the annual savings would represent a 4.98% rate reduction as shown below:

2021 Power and Transmission Expense	
Total Power Supply/Capcity Costs	\$1,088,865
Total Transmission Cost	<u>\$1,041,346</u>
	\$2,130,211
Proposed Savings	\$106,119
% Savings	4.98%

Current Rates	
Power Supply	\$0.0852
Transmission	<u>\$0.0784</u>
Total	\$0.1636
After 4.98% Reduction	\$0.1555

If the BOD supports pursuing further due diligence, we will engage ENE to assist with the analysis and have Nexamp attend our next meeting to present their latest proposal.

The proposal that I received yesterday is included in the following pages.

Voltage Conversion

We will present an update on the voltage conversion progress in person at the meeting. At this point, we have no materials that will be a barrier and work is progressing on preparations; installing neutral conductor, designing the step transformers, procuring materials and coordinating work in the substation that will be done on the day of the outage.



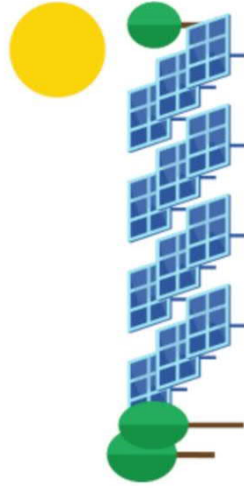
BIUD- Energy Storage Project

December 15th, 2021

Nexamp: Who We Are



Backed by Diamond Generating Corporation, a subsidiary of Mitsubishi Corporation



200 locations with projects built totaling **352+ MW**



140 MWh of Energy Storage under construction

Nexamp Capabilities



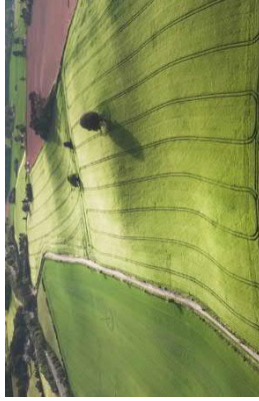
Community Solar

We help residential and commercial energy users lower their electricity costs without installing rooftop panels



Storage

We help solar array owners and Behind the Meter partners lower costs and save on utility bills



Property Development

We help property owners generate revenue through local, renewable energy



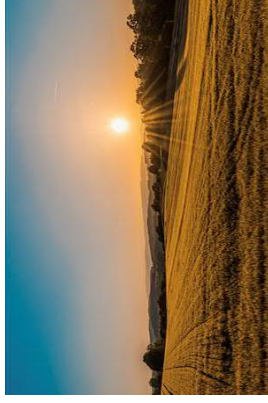
Asset Management and Operation

We help solar asset owners manage and maintain their facilities to drive revenue



Project Acquisition

We purchase and construct projects in development



PPAs and Shared Savings

We help customers stabilize energy costs without the responsibility of ownership

Benefits of Energy Storage to Block Island

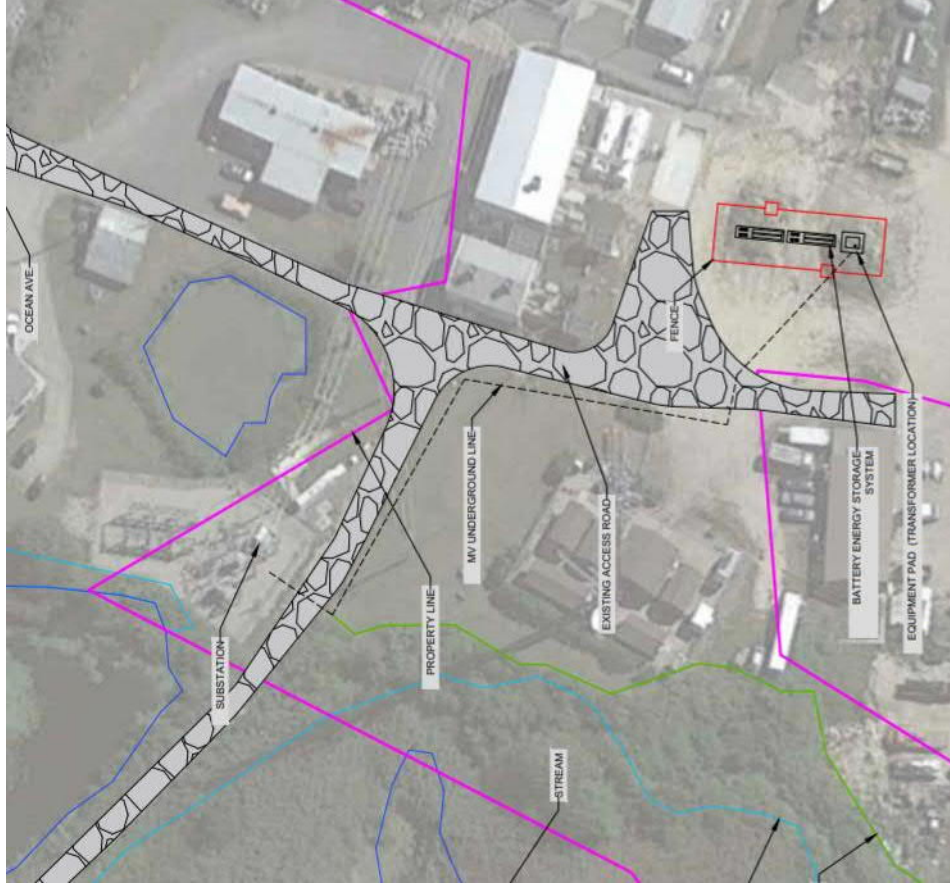
- Optimization of system peaks
 - › Environmental benefits
 - Potential to increase BIPco's net metering cap by mitigating effects of solar oversaturation on grid and preventing export
 - Reduced reliance on fossil fuel "peakers"
 - › Avoided Costs:
 - Transmission (Regional Network Service)
 - Capacity (ICAP)
 - Energy (Arbitrage)
- Additional Storage Benefits:
 - › Enhance grid resiliency
 - Voltage Support & Frequency Regulation
 - Black start capabilities
 - › Potential to pair with renewable energy for dispatchability of an intermittent resource and to bolster savings

Operation of the BESS

- Prior to the system's commercial operation date, Nexamp will devise a dispatching strategy with BIUD's guidance and approval
 - › The Nexamp Energy Center, located at Nexamp's headquarters in Boston, will monitor the operation of the system, ensuring peak system performance through the project life and performing regular maintenance checks
 - › Nexamp will work with a third-party system optimizer and dispatcher to maximize benefits and savings passed on to BIUD

Proposed BESS Solution

- 2.594 MW / 5.190 MWh
Lithium-Ion
Battery Energy Storage
System
- Up to 150 Annual Cycles
- Nexamp handles design,
permitting, construction,
operation and
maintenance



Net Metering and Export Prevention Analysis

- Analyzed scenarios with 300 kW of solar net-metering (current), 800 kW (known future), and 1.4 MW of net metering capacity (possible future)
 - Savings Proposal generated considering the unique operational profile of the Battery in each scenario
- Expanding net metering capacity to 800 kW only results in a single hour where net load dips below 100kW
 - The Battery would prevent a minimum import threshold from being surpassed by charging during these hours, adding load to the system
- Scaling net metering to 1.4 MW results in 11 hours where net load is negative
 - The Battery would be operated to prevent export at these times
 - Maximum export potential is 1/6 the capacity of the Battery

Projected Costs & Savings- Storage

- Operating Year 2
 - Transmission Charge Savings - \$196,540
 - Energy Arbitrage/Charging - \$102,355
 - ICAP Savings - \$52,200
 - *Total Operating Year 2 Savings - \$351,096*
- 20 Year Total
 - Transmission Charge Savings
 - Energy Arbitrage/Charging
 - ICAP Savings
 - ESSA Cost

Year 2 Net Savings
➤ \$106,119

Total Net Savings over 20 Years
➤ \$3,466,752

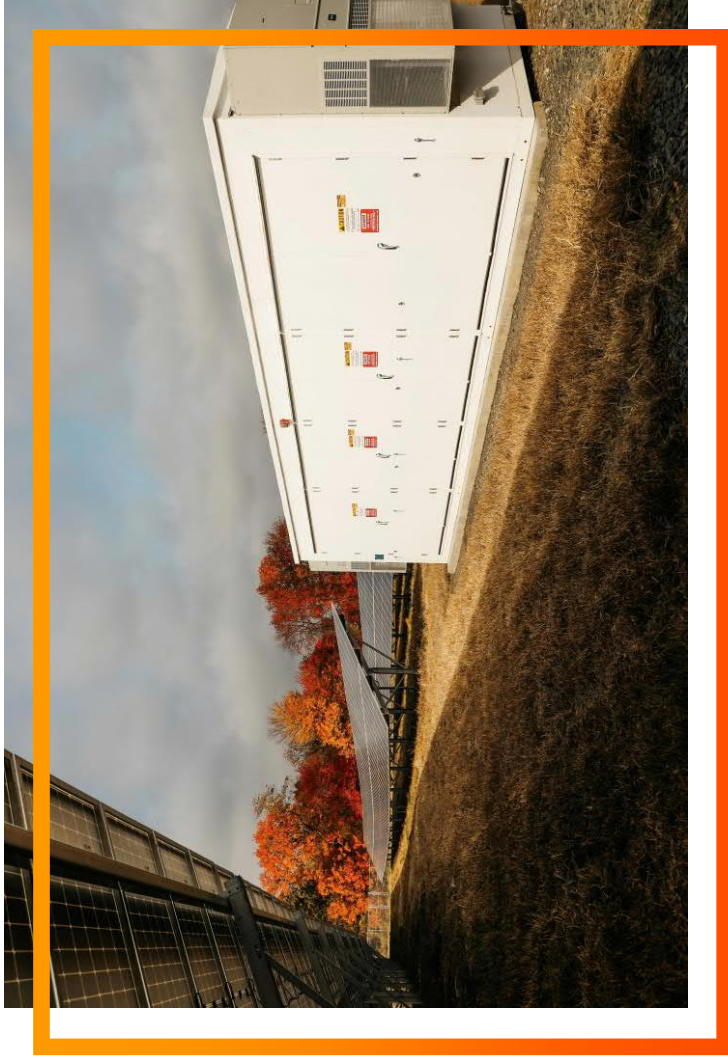
Energy Storage Services Agreement

- Agreement Structure
 - 20 Year Agreement (including battery warranty)
 - \$0 Lease or License
- ESSA Cost
 - \$7.85/kW-month
 - Escalator of 2% annually

Next Steps

- Answering Stakeholder Questions
- Term Sheet
- Nexamp Site Visit

Generate ratepayer savings and
enhance grid resiliency by
partnering with Nexamp to install
a Battery Energy Storage System



AGENDA ITEM 6
APPROVE \$1.5M CFC LOAN
FOR
THE VOLTAGE CONVERSION PROJECT

AGENDA ITEM 7
REVIEW AND ACT UPON 2022 CAPITAL BUDGET

[illegible]

AGENDA ITEM 8
STRATEGIC PLANNING DISCUSSION

Block Island Power Company

Strategic Plan 2022-2025

<div>Mission Statement</div> <div>To serve Block Island with safe, reasonably price and reliable energy.</div>	<div>Safety</div>	<div>GOALS/TARGETS</div>	<div>STRATEGIES</div>
<div>Vision Statement</div> <div>Build on customer and employee engagement to collaboratively transform the Block Island Power Company into a customer focused, customer governed electric utility.</div>	<div>Financial Balance</div>	<div>Experience Mod Rate Goal < 1.0</div> <div>Lost Time Incident Rate Goal 0</div> <div>Equity Level Goal 40% by 2024</div> <div>Operating Budget Goal +/- 5%</div> <div>Outages per Member (SAIFI) Goal <2</div> <div>Construct/Buy Employee Housing</div> <div>Replace Original Garage and Move Office 2023-2024</div> <div>Support EV Deployment</div> <div>Support Home Storage Technology</div>	<div>Conduct Daily Safety Meetings/Field Visits</div> <div>Facilitate WSSI Annual Training Curriculum</div> <div>Fund \$400K Capital 100% Pay Go Until @ 40%</div> <div>Produce Timely Financials for Review</div> <div>Fund Pole Replacement Program (150 poles/year)</div> <div>Adequately Fund Distribution Maintenance Programs</div> <div>Build/Buy Single Family Home in 2022</div> <div>Convert Existing Office into Apartment 2023</div> <div>Develop EV Tariff for Level II Home Chargers</div> <div>Develop Home Storage Program/Rates</div>
	<div>Keeping the Lights On</div>		
	<div>Employee Engagement & Recruitment</div>		
	<div>Innovation</div>		