Direct Testimony

of

Timothy Hebert, Chief Operating Officer
Energy New England

For

Block Island Utility District d/b/a Block Island Power Company

Docket No. _____

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Q. Please state your name and qualifications.

A. My name is Timothy J. Hebert. I am the Chief Operating Officer ("CCO") at Energy New England ("ENE"). I have worked in the energy industry for 26 years. I served as Power Supply Planning Engineer for the Taunton Municipal Lighting Plant in Taunton, Massachusetts for nearly four years. There, I was responsible for short- and long-term energy procurement, developing cost-based bidding for fossil fueled generating resources, interface with and reporting to the New England Power Pool, and developing renewable energy project purchase power agreements.

Since October 1998, I have been employed by ENE, serving in a number of capacities. My positions ranged from Power Market Analyst to Energy Operations Manager, and later three Vice President positions. In those capacities, I have led the effort to manage utility power requirements over both short- and long-term horizons.

I was named COO in mid-2017, and in my current capacity I directly oversee a staff of 12 who manage both utility demand and supply resources in the New England wholesale marketplace. This includes administration and management of all involvement with ISO New England, managing generation assets, and establishing power supply contracts. We represent more than two dozen public power entities in the NEPOOL participants and ISO committee process that serve around 5 million MWH of customer load annually with a peak of around 1,300 MW. Under my direction, we have developed innovative solutions in power contracting from traditional

as well as renewable energy sources, and peak load management through customer side reductions as well as through the operation of distributed energy resources and energy storage.

I have provided testimony to electricity market regulatory bodies in Rhode Island and Vermont, including the Rhode Island Public Utilities Commission, the Vermont Department of Public Service, and the Vermont Public Service Board.

Q. Please describe the proposed supply acquisition plan of the Block Island Utility District ("BIUD") to obtain competitively priced wholesale power supply.

A. BIUD has contracted with ENE to assist it with power procurement, energy efficiency, and related services. BIUD now has EEI Master Power Purchase and Sale Agreements ("EEI Agreements") in place with BP Energy Company, a Texas based provider of natural gas, power, and risk management services; Shell Energy, a North American energy trading and marketing company and subsidiary of Royal Dutch Shell; and PSEG Energy Resources & Trade, a risk management and energy trading company located in New Jersey. ENE has and will continue to attempt to identify other wholesale suppliers with whom BIUD can contract with for power supply.

To manage the price risk associated with serving BIUD's retail customers and help BIUD provide stable rates to its customers, ENE has conducted three (3) solicitations. To date those solicitations have resulted in 3 transactions, each with a term of 18 months. The solicitation terms have been limited to 18 months while BIUD seeks to periodically continue its exemption from retail competition. The

results can be seen below.

Table 1: BIUD Purchases

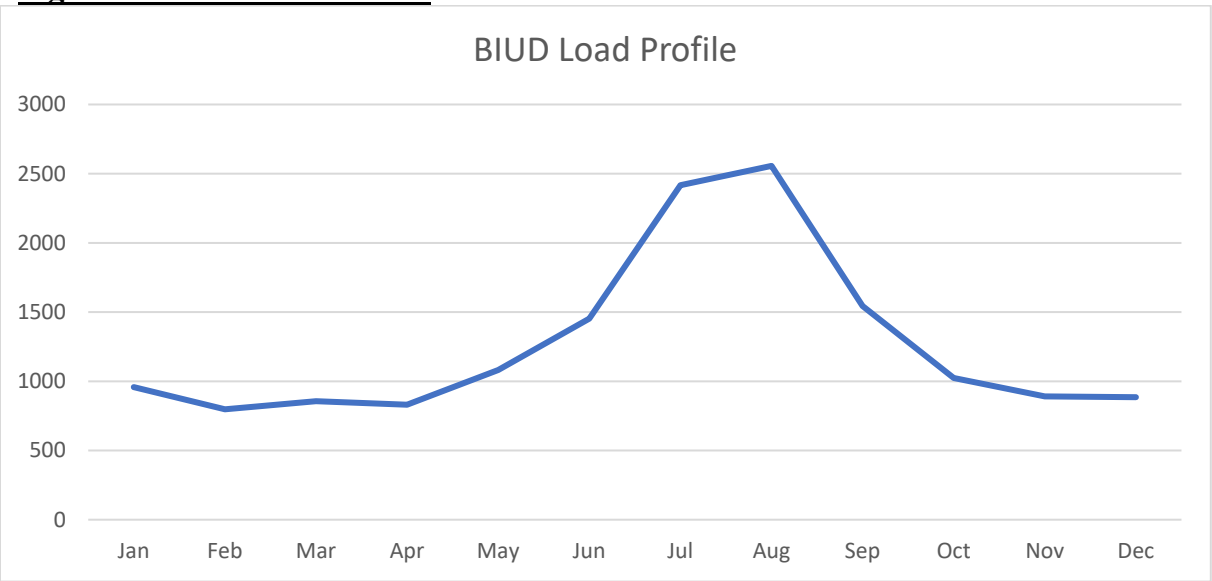
Date	Supplier	Product	Term	Price $/MWh
Apr25, 2017	Shell	Energy 100% Load Following	May 1, 2017 - Oct 31, 2018	$36.77
Feb20, 2018	Shell	Energy 100% Load Following	Nov 1, 2018 - Apr 30, 2020	$42.20
Dec19, 2019	Shell	Energy 90% Load Following	May 1, 2020 - Oct 31, 2021	$34.85

Note: the February 2018 purchase included two winter periods where energy prices are the highest.

In each solicitation, BIUD has requested that suppliers submit offers for load following energy delivered to the Massachusetts Hub and the Rhode Island load zone. In each case BIUD, with advice from ENE, decided to purchase at the Rhode Island load zone which eliminates BIUD's risk of locational price differences impacting its energy cost. While there is little local congestion on the wholesale system in Rhode Island, February 2013 brought cold weather, high natural gas prices, and transmission outages that caused short term but costly movements in energy and ancillary market costs. Electing Rhode Island contract delivery and minimizing BIUD’s open spot market position greatly mitigates the potential for such short-term disruptions to materially impact BIUD’s wholesale market costs. Additionally, load following serves to reduce BIUD's volumetric market risk since it will purchase an exact percentage of BIUD’s load each hour, allowing BIUD’s purchase to move along with its hourly needs. As a smaller wholesale market participant, it is challenging for BIUD to pursue multiple tranches of energy, therefore BIUD bundles its entire requirement as a single purchase.

The fact that energy prices have remained at or near historic lows has allowed BIUD the opportunity to lock in very competitive rates for load following service, which is driven in part by the consumption profile of the island load in total. BIUD's seasonal load requirements result in relatively low demand in the higher priced winter months and higher demand in the lower cost summer months, as shown in Figure 1 below.

Figure 1: BIUD Load Profile



This shape results in lower average energy prices to all ratepayers on the island. In BIUD's most recent purchase on December 19, 2019, BIUD purchased 90% load following energy. This 10% reduction from the prior two purchases reflects that commencing on September 1, 2019, BIUD began receiving preference hydro power from the New York Power Authority. BIUD receives 17.66% of Rhode Island's neighboring states allocation of this cost-based, low-cost power. That allocation is equivalent to approximately 10% of BIUD's load requirements. The term of this most recent load following contract is May 1, 2020 through October 31, 2021. For the upcoming procurement, it is anticipated that BIUD will continue to purchase load

following energy, which provides maximum risk and price volatility mitigation. However, unlike the past 3 purchases in which we purchased an equivalent percentage of load following energy in each month, we will look to adjust the percentage amount on a seasonal basis to take into account BIUD's unique load shape which is driven by the substantial tourism driven influx from May through September.

Adjusting the load follow purchase seasonally better allows BIUD to participate in opportunities to purchase renewable and other non-carbon emitting resources without selling energy purchased from these resources back to ISO-NE at the spot market price when renewable generation is high. Table 2 below provides an illustration of the analysis necessary to determine the purchase percentage necessary to bring BIUD to the point where it is on average 90% hedged for the purchase term of 18 months beginning November 1, 2021. The reason for the difference between the 76% load follow recommendation for November and December 2021 and 59% load follow recommendation in the "Non-Summer" months (January-May, October-December 2022) is that beginning in January 2022 BIUD begins purchasing additional carbon-free hydropower pursuant to a contract dated October 30, 2020 with FirstLight Power Management, LLC. That contract is further described later in this testimony.

Table 2

BIPCO Position - Monthly Details																		
Input Monthly Hedge Target:	90%																	
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
BIPCO Current Monthly Open %:	85%	86%	71%	68%	66%	61%	72%	81%	90%	90%	86%	75%	70%	70%	73%	68%	65%	60%
BIPCO Current Monthly Hedged %:	15%	14%	29%	32%	34%	39%	28%	19%	10%	10%	14%	25%	30%	30%	27%	32%	35%	40%
% Purchase needed for Hedge Target	75%	76%	61%	58%	56%	51%	62%	71%	80%	80%	76%	65%	60%	60%	63%	58%	55%	50%
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
	Nov-21	Dec-21	"Non Summer"					Summer				"Non-Summer"						
Seasonal Purchase LF % Recommendation	76%	76%	59%	59%	59%	59%	59%	78%	78%	78%	78%	59%	59%	59%	59%	59%	59%	59%
Monthly Hedge Position After Seasonal Purchase	91%	90%	87%	90%	93%	98%	86%	96%	88%	87%	92%	83%	88%	88%	86%	91%	93%	98%

In the future, BIUD plans to explore longer term load following contracts of up to three (3) years in duration. The percentage of load following volume purchased will continue to consider NYPA power and other renewable purchases. During each purchase term, the forward energy market is monitored by ENE on a daily basis and reported to BIUD weekly to enable informed decisions on future purchases well before contracts end. As a general guide, BIUD strives to have its next commodity purchase finalized within 3-6 months of the expiration of the current contract, to avoid having to purchase during short term run ups in market prices.

Q. Did BIUD participate in the Rhode Island second renewable energy solicitation in 2019?

A. Yes. BIUD, together with National Grid and Pascoag Utility District, participated in Rhode Island's second renewable energy solicitation, and after an extended negotiation amongst all parties, BIUD signed an agreement to purchase up to 100 KW of energy and environmental attributes from a 50 MW solar project in Connecticut. The project entity is named Gravel Pit Solar II, LLC, located in East Windsor, Connecticut. The price bid in

this solicitation by Gravel Pit Solar for energy and renewable energy credits ("RECs") is $52.95/MWh which makes the price for renewable energy very competitive with many fossil-based power transactions. It should be noted that this price is very low for a large solar project in New England and is fixed for 20 years. This power will cost the same in 2042 as it does in 2023. Typically, for terms beyond 5 years into the future, most suppliers escalate offer prices by 2-2.5% annually. Thus, locking in a flat 20-year price is quite attractive at this level. Including the renewable credits makes this transaction even more valuable, since those credits carry a market value of $40-45/MWh currently.

While the REC market ebbs and flows with supply and demand, it is meant to represent an approximation of the difference between the forward energy market commodity prices and the cost required to support building new, renewable resources. In comparison to the market-based purchase of $34.85/MWh, between the inclusion of RECs and the fact that the Gravel Pit energy will only be received during daytime hours and not in the evening when energy prices are lower, this transaction holds significant value to BIUD's ratepayers. In fact, taking title to the RECs allows BIUD the option to sell or retire the RECs, providing further opportunity to support new clean energy developments while protecting ratepayers. BIUD is pleased that its participation in this project will support Rhode Island's goal to decarbonize power purchased or generated for Rhode Island ratepayers by 2030.

Q. Did BIUD purchase any other long-term renewable energy under a competitive solicitation?

A. Yes, subsequent to the signing of the Gravel Pit Solar II deal discussed above, BIUD was able to secure a second allocation of solar energy through Gravel Pit Solar III, LLC, under a solicitation run by Energy New England on behalf of numerous consumer-owned entities in Massachusetts and Rhode Island, including BIUD. BIUD signed an agreement to purchase up to 150 KW of energy and environmental attributes from this additional 50 MW solar facility in Connecticut. The price bid into this solicitation was an extremely competitive $51.95, which makes this price for renewable energy very competitive with many fossil-based power transactions and the lowest price ENE has seen in the market to date for southern New England solar energy resource for energy and renewable energy certificates. This transaction is slightly lower priced since it has a term of 25 years, continuing through 2047 or so, depending on the final commercial operation date, which is expected in late 2022. Longer term purchase commitments allow projects to spread their costs over longer periods of time, leading to lower purchase prices for BIUD's ratepayers. As with the Gravel Pit II project, the fact that this purchase includes renewable certificates makes it a very cost effective means to deliver renewable energy for BIUD's ratepayers.

Q. Would you please describe any additional power contracts recently executed by BIUD?

A. BIUD recently signed an agreement to purchase green hydropower through a contract with FirstLight Power Resources that runs for 10 years. The start date of taking power for

eighteen (18) purchasers of this power is January 1, 2021. For BIUD, and two (2) other purchasers, the contract begins on January 1, 2021 but BIUD does not begin taking power until January 1, 2022. Since BIUD requires very little supply in the winter months, and considering preexisting contractual obligations, ENE's recommendation was to defer the start of deliveries a year compared with other purchasers. The source of this clean energy is the Turner Falls and Cabot hydroelectric generating units on the Connecticut River in Montague, Massachusetts. This addition to BIUD's portfolio provides additional renewable energy to replace electricity produced by fossil fuels such as natural gas and oil. The energy is priced very competitively. On-peak power prices start at $44.00/MWh and escalate to less than $50.00/MWh by 2030. Off-peak prices begin at $37.00/MWh and escalates to less than $42.00/MWh over the 10-year period. In all, BIUD will purchase energy at an average price of around $46.00/MWH over 9 years, allowing it to add additional carbon-free energy while minimizing rate impacts to its customers.

It should be noted that the prices for this power are a function of when the generation is produced, on a monthly and seasonal basis, and considering the on and off-peak forward energy commodity prices that fit that profile. ENE conducted an analysis of the generation profile, the variability in historical monthly deliveries, the delivery period through 2030 and the relative value to BIUD since power is delivered at the plant location in Western Massachusetts where the project is located compared to spot market prices in Rhode Island to support negotiating prices with FirstLight. This purchase also includes Class 2 RECs, which carry a value of $1-2/MWh. This fixed price contract will provide incremental protection to BIUD's ratepayers against market price volatility. As a

run-of-river hydro facility with a small amount of storage capability, its seasonal production profile is complementary to the Gravel Pit solar projects, since hydro production is higher in the winter and spring periods and the solar resources deliver more energy in the summer period. This balance helps BIUD reduce its buying in the shorter term, higher priced winter period. ENE conducts this type of unbundled analysis of each green energy and commodity energy purchase that BIUD considers, taking into account term, delivery profile, production seasonality, historical production data when available and proforma projected production profiles for new projects, delivery location, and whether additional attributes such as capacity or RECs are included.

Q. Are there other products in the market that BIUD could potentially utilize to service its unique load shape and feel confident that its load requirements are appropriately managed?

A. Besides load following products, shaped blocks are a useful tool in managing the unique load shape of BIUD. The block products offer flexibility not only in sizing but also in when the power is to be delivered. On Peak is generally defined as Monday-Friday Hours Ending 0800-2300, and Off Peak is Monday-Friday Hours Ending 0100-0700 and 2400, as well as all day Saturday, Sunday, and NERC holidays. These volumes can be set on a month to month basis, which may fit well in the future as additional renewable resources are entertained and pursued, or if BIUD's load profile begins to change due to factors like additional air conditioning load and greater though limited solar resource build out on the island. Utilizing shaped blocks of power may provide a better alternative to buying load following service, to meet the complex nature of BIUD's load. Shaped blocks may also

provide additional potential suppliers for BIUD, since not all power suppliers offer load following service either at all or at the volume levels required by BIUD. These alternatives will be reviewed for each BIUD power purchase.

Q. Does BIUD intend to invest in additional non-carbon emitting resources?

A. BIUD does intend, with the assistance of Energy New England, to investigate and evaluate new opportunities to purchase renewable and/or non-carbon emitting resources. Those resources that prove to be environmentally and economically beneficial without being a burden to BIUD ratepayers will receive appropriate consideration.

Q. Does this conclude your testimony?

A. Yes, it does.