

BOARD AGENDA SUMMARY SHEET

Committee or Board: Board	Date: March 8, 2019	Board Meeting Date: March 20, 2019
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For All Board Voting Items:

Title of Agenda Item: Authorization to Execute Power Purchase Agreement with American Organic Energy, LLC

Consent Agenda: Yes No

Accompanying Presentation: Yes No

Recommendation from Committee: N/A F&A; GP&P; Oversight & REV

LIPA Presenter: Rick Shansky

PSEG Long Island Presenter: N/A

For Contract Approvals Only:

RFP: Yes No

Term: 20 years

Effective Date: COD by December 31, 2020

Requested Action:	The Board of Trustees is requested to approve and adopt a resolution authorizing the Chief Executive Officer, or his designee(s), to execute a Power Purchase Agreement between the Long Island Power Authority and American Organic Energy LLC (“AOE”); and to take such other actions as may be reasonably necessary to implement arrangements to purchase electricity and renewable attributes from AOE, located near the Town of Brookhaven’s Yaphank Landfill .
Summary: (include proposed amendments to Board Policies, if applicable)	The Project is an innovative model of how clean, on-site power can significantly reduce Greenhouse Gas (“GHG”) Emissions and support sustainable communities. The proposed anaerobic digester Project will be the most sophisticated food waste processing facility in the world. The Project is proposed to be built in the Yaphank facility, where Long Island Compost currently resides, and process ~180,000 tons of local food waste per year. AOE will collect, separate, pre-process, break down, and transform Long Island’s food waste into convertible energy, vehicle fuel, electricity, fertilizer, and nutrient-rich water.

FOR CONSIDERATION

March 20, 2019

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Authorization to Execute Power Purchase Agreement with American Organic Energy, LLC

Requested Action

The Board of Trustees is requested to approve and adopt a resolution authorizing the Chief Executive Officer, or his designee(s), to execute a Power Purchase Agreement (“PPA”) between the Long Island Power Authority (“LIPA”) and American Organic Energy LLC (“AOE”); and to take such other actions as may be reasonably necessary to implement arrangements to purchase electricity and renewable attributes from AOE, located near the Town of Brookhaven’s Yaphank Landfill (“Project”).

Background

The Project is an innovative model of how clean, on-site power can significantly reduce Greenhouse Gas (“GHG”) Emissions and support sustainable communities. The proposed anaerobic digester Project will be the most sophisticated food waste processing facility in the world. The Project is proposed to be built in the Yaphank facility, where Long Island Compost currently resides, and process ~180,000 tons of local food waste per year. AOE will collect, separate, pre-process, break down, and transform Long Island’s food waste into convertible energy, vehicle fuel, electricity, fertilizer, and nutrient-rich water.

LIPA has an existing PPA and an existing Interconnection Agreement (“EIA”) with the Town of Brookhaven for a small generating facility utilizing landfill gas from the Yaphank landfill; however, the proposed facility never became operational. The Project intends to utilize methane captured from the landfill to supplement its fuel supply.

Although the Project was not eligible to apply for any existing renewable procurements, it represents a source of clean energy that would help meet LIPA’s Clean Energy Standard goals. Accordingly, PSEG Long Island negotiated with AOE and reached agreement on a price that reflects LIPA’s long-run avoided costs, including the value of all the renewable attributes associated with the Project’s generation of electricity and reduction of GHG¹. The price is also competitive with pricing of other comparable clean energy facilities under contract to LIPA.

¹ The Project will reduce GHG emissions by over 85,000 tons of CO₂/year and reduce truck traffic on Long Island roads (1.4 million miles per year) as compared to current landfill disposal practice. In addition, Long

Economic Development Benefits

The Project will create at least 10 full time jobs and help retain more than 100 full time jobs related to current operations at the Yaphank location. The Project will also provide a lower cost waste disposal option for food service businesses such as supermarkets, bakeries, restaurants, commercial food processors, cafeterias, catering halls and hotels. In recognition of the unique benefits of the Project, AOE was awarded grants from the New York State Energy Research and Development Authority (“NYSERDA”) and Empire State Development.

Basic Terms

Under the proposed terms of the PPA, LIPA will purchase all of the electricity and renewable attributes produced by the Project for a 20-year term at a fixed price, commencing with commercial operation that is projected to occur by December 31, 2020. The PPA will also establish annual and hourly limits on the delivery of energy to LIPA. The estimated total expenditure under the PPA is \$84 million over 20 years.

Recommendation

Based on the foregoing reasons, I recommend that the Trustees approve a PPA with AOE and adopt a resolution in the form attached hereto.

Attachment

Exhibit “A” Resolution

Exhibit “B” Letters of Support

Island Compost will convert certain stationary equipment from diesel to electricity as a result of the Project – expected to reduce diesel fuel consumption by an estimated 200,000 gallons/year.

AUTHORIZATION TO ENTER INTO POWER PURCHASE AGREEMENT WITH AMERICAN ORGANIC ENERGY, LLC FOR THE PURCHASE OF ELECTRICITY AND RENEWABLE ATTRIBUTES FROM THE AMERICAN ORGANIC ENERGY, LLC PROJECT

WHEREAS, American Organic Energy, LLC ("AOE") has proposed to build, own and operate an anaerobic digester electricity generation facility to be located near the Town of Brookhaven's Yaphank Landfill ("Project"); and

WHEREAS, the Project represents a source of clean energy that would help the Long Island Lighting Company d/b/a LIPA ("LIPA") meet its Clean Energy Standard goals; and

WHEREAS, the proposed purchase price for electricity and renewable attributes from the Project under a proposed power purchase agreement ("PPA") reflects LIPA's long-run avoided costs and is competitive with pricing of other comparable clean energy facilities under contract to LIPA;

NOW, THEREFORE, BE IT RESOLVED, that the Chief Executive Officer and his designee be and hereby are authorized to execute and effect a PPA and other related agreements and arrangements, consistent with the terms of the accompanying memorandum, and to perform such further acts and deeds as may be necessary, convenient or appropriate, in the judgment of the Chief Executive Officer or his designee, to implement LIPA's purchase of electricity and renewable attributes from AOE.



Long Island Association, Inc.
300 Broadhollow Road • Suite 110W
Melville, NY 11747-4840

March 19, 2019

Board of Trustees
Long Island Power Authority
333 Earle Ovington Boulevard
Uniondale, NY 11553

Re: Approval of a Power Purchase Agreement between the Long Island Power Authority and American Organic Energy

Dear Long Island Power Authority Board of Trustees:

The Long Island Association ("LIA") supports the approval of a Power Purchase Agreement between the Long Island Power Authority ("LIPA") and American Organic Energy ("AOE") for an anaerobic digester project in Yaphank that will be the most sophisticated food waste processing facility in the world.

As regional leaders consider the future of recycling and waste management on Long Island, it is important that we consider projects like this which can help transform the manner in which refuse is managed. Designed as a new, fully enclosed multimillion-dollar facility, this technology will digest food waste taken from supermarkets, restaurants and hospitals and turn this material into a source of energy which will not only help power the operation, but also provide fuel for the trucks that pick up the leftovers. With the capacity to convert 180,000 tons of organic waste into renewable energy, compost and fertilizer, among other sustainable byproducts, estimates predict this digester could reduce the region's greenhouse gas emissions by 40,000 tons per year.

The LIA's "Federal, State and Local Priorities and Initiatives for 2019" include support for this project which will benefit Long Island's economy, environment and energy portfolio. Thus, the LIA urges the LIPA Board to move forward with a Power Purchase Agreement with AOE.

Sincerely,

A handwritten signature in black ink that reads "Kevin S. Law". The signature is written in a cursive, flowing style.

Kevin S. Law
President & CEO
Long Island Association

Leading Long Island Since 1926



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March 19, 2019

Thomas Falcone, CEO
Long Island Power Authority
333 Earle Ovington Blvd.
Uniondale, NY 11553

RE: Letter of Support for March 20, 2019 Approval of a Power Purchase Agreement with American Organic Energy

Dear Mr. Falcone,

The New York League of Conservation Voters (NYLCV) is supportive of efforts to deploy technology and solutions that can help New York State to achieve its ambitious climate, clean air, and economic development goals. This includes the increased utilization of anaerobic digesters to capture and productively reuse the methane produced from the State's vast decomposing organic waste streams. Therefore, we are pleased to write this letter in support of the Power Purchase Agreement (PPA) with American Organic Energy which is on the agenda at the LIPA Board Meeting for March 20, 2019.

According to the New York State Energy Research and Development Authority, approximately 3.9 million tons of food waste is generated each year as municipal solid waste in New York State, of which only three percent is currently diverted from landfills or combustion. This PPA will divert 180,000 tons of local food waste per year, more than doubling what is currently diverted statewide. Furthermore it will produce up to six megawatts of clean energy, reduce greenhouse gas emissions by 85,000 tons per year (the equivalent of removing 18,000 cars from the road), and reduce landfill truck traffic on Long Island roads by 1.4 million vehicle miles traveled per year. Finally, it will also provide an opportunity for Long Island's food service industry to deal with rising solid waste disposal costs in an economically sustainable way.

We applaud LIPA for this PPA and we look forward to LIPA's continued efforts to help Long Island develop a robust organic waste-to-fuel industry to minimize the negative environmental and economic impacts of organic waste management.

Sincerely,

Julie Tighe, President

cc: LIPA Board of Trustees



COUNTY OF SUFFOLK



OFFICE OF THE COUNTY EXECUTIVE

Steven Bellone
SUFFOLK COUNTY EXECUTIVE

March 19, 2019

LIPA Board of Trustees
333 Earle Ovington Blvd. 4th Floor,
Uniondale, NY 11553

Re: American Organic Energy Anaerobic Digester Project

LIPA Board:

Suffolk County is well aware of American Organic Energy's plan to build Long Island's first anaerobic digester at Yaphank and strongly supports this regionally significant environmental and economic development initiative. This project will remove 180,000 tons from the waste stream annually, saving millions of dollars in disposal costs, and will help to reduce greenhouse gas emissions by significantly reducing truck traffic on the roads of Suffolk County, while creating clean energy.

An estimated 40 percent of the food produced in the United States goes uneaten or is spoiled from harvest to table. Fortunately, New York State is taking important steps to reduce overall food waste. Food waste reduction strategies include increased coordination and donations to emergency food relief organizations, increased food scrap recycling and composting operations, and, most recently, increased investments in converting food waste into bio-energy.

This is a complex project that intersects with many levels of government on Long Island, and will need many approvals and agreements to succeed. The initial question of whether the power generated by the facility will be purchased by our public utility is the linchpin to the project's success.

The American Organic Energy anaerobic digester project will be a transformative project for the entire region. Suffolk County strongly supports this project.

Thank you for your consideration.

STEVE BELLONE
Suffolk County Executive



Power Purchase Agreement with American Organic Energy

March 20, 2019

Key Takeaways

- 01** Long Island's first energy producing food waste facility is part of **New York's Reforming the Energy Vision (REV)** – a nation leading clean energy and jobs agenda
- 02** LIPA's proposed Power Purchase Agreement will help LIPA cost-effectively meet our clean energy goals
- 03** Through a natural process, the anaerobic digester breaks down food waste **and converts it into biogas used to produce clean energy**
- 04** The anaerobic digester will **reduce carbon emissions by 85,000 tons** per year—equivalent to removing 18,000 cars off the road

DIGESTER PROJECT HELPS MEET NEW YORK'S CLIMATE GOALS



100% Carbon-Free

Mandate for New York's power to be 100% carbon free by 2040



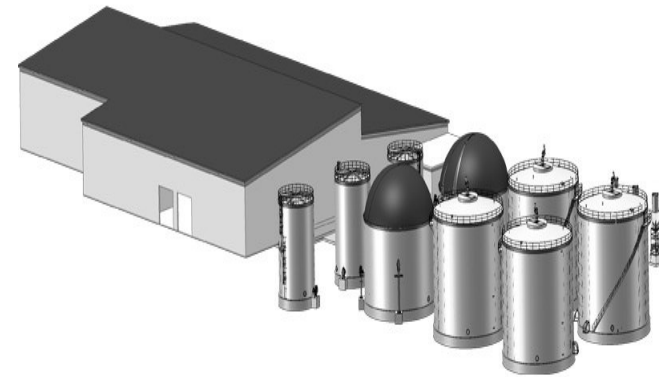
70% X 2030

70 percent of electricity generated in New York to come from renewable energy by 2030



LONG ISLAND'S FIRST ENERGY PRODUCING FOOD WASTE FACILITY

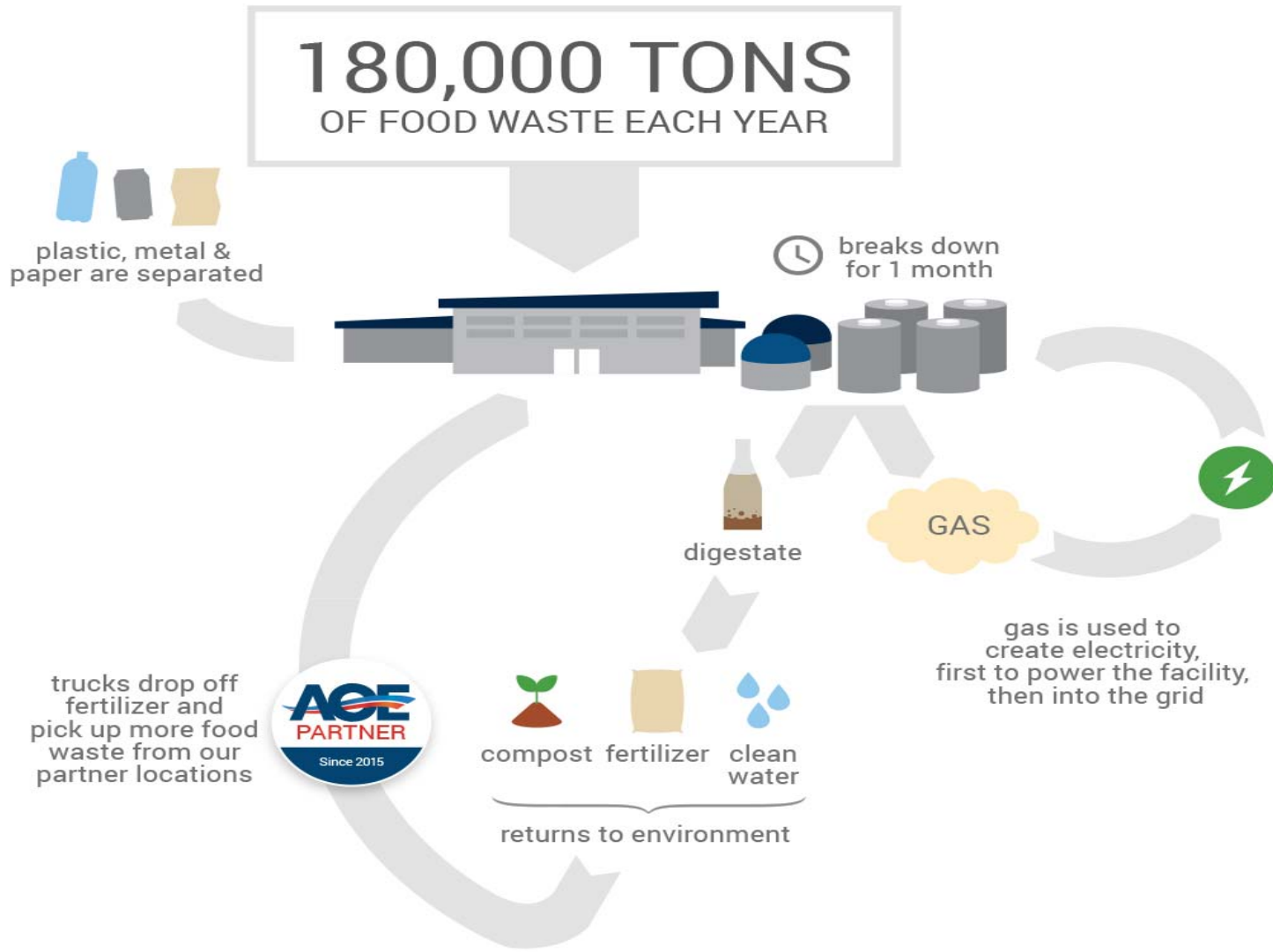
- First stand-alone, large-scale **anaerobic digester** converts 180,000 tons of Long Island **food waste** into **clean energy**
- Diverts food waste from landfills and provides lower cost waste disposal option for Long Island's food service businesses
- Produces up to six megawatts of clean energy
- Reduces Greenhouse Gas Emissions by **85,000 tons per year**—the equivalent of removing 18,000 cars from the road
- Eliminates landfill truck traffic on Long Island roads totaling **1.4 million miles per year**
- Project supported by New York State Energy¹ and Research Development Authority (NYSERDA) and Empire State Development



Courtesy of AOE

¹ American Organic Energy

ANAEROBIC DIGESTOR: HOW IT WORKS



PROPOSED CONTRACT

- ✓ LIPA will purchase the electricity delivered by the facility through a pay-for-performance contract
- ✓ 20-year term
- ✓ Fixed-price consistent with other recent renewable procurements
- ✓ Bill impact: \$0.10 per month for the average residential customer
- ✓ Target Commercial Operation Date: December 31, 2020



Key Takeaways

- 01** Long Island's first energy producing food waste facility is part of **New York's Reforming the Energy Vision (REV)** – a nation leading clean energy and jobs agenda
- 02** LIPA's proposed Power Purchase Agreement will help LIPA cost-effectively meet our clean energy goals
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Questions?