

To: Finance & Operations Committee

From: Frank Fanelli, Director of Project Management

Subject: Proposed Agreement with Dalkia Energy Solutions for Cogeneration Capabilities

for pool heating at District Schools

This proposed agreement between the district and Dalkia Energy Solutions, aimed at enhancing the energy efficiency and sustainability of heating systems in pools located at our schools. This initiative involves the implementation of upgrades to the cogeneration capabilities, the current systems within the schools are outdated and need these upgrades to provide efficiency. Dalkia currently manages the cogeneration system and has advised the district of these upgrades that should be implemented. This implementation is a significant step forward in our commitment to reducing the district's carbon footprint while also realizing considerable costs savings overtime.

Conte School
Hillhouse High School
Cross High School
Martinez School
Career High School
Sound School

Cogeneration also known as Combined Heat and Power (CHP), is an efficient method of generating electricity and capturing usable thermal energy that would otherwise be considered waste. In a conventional energy generation process the heat produced during electricity generation is released into the environment unused. However, cogeneration captures this "waste heat" and repurposes it in this instance for heating the pools at our schools. This dual-purpose approach significantly increases the efficiency of energy use.

#### **Energy Efficiency and Cost Savings**

By utilizing waste heat for pool heating, we reduce the need for additional energy sources, leading to a substantial reduction in utility expenses overtime. The efficiency of cogeneration means less fuel consumption for the same amount of energy output, directly translating into costs savings for the district.

#### **Reduction of the District Carbon Footprint**

Cogeneration is a greener alternative to traditional energy generation methods. By maximizing the utility of generated heat, we significantly lower greenhouse gas emissions, contributing to our environmental goals closely align with the district Climate Resolution passed in 2022 regarding the footprint and energy savings.

Cogeneration systems are known for their reliability and can provide a consistent energy supply. This ensures that our pools are heated efficiently throughout the year, enhancing the sustainability of our operations. The introduction to cogeneration capabilities represents a forward-thinking approach to managing our district's energy needs. It aligns with our broader objectives of operational efficiency, financial savings, and environmental responsibility. We believe this partnership with Dalkia will serve as a model for sustainable energy management with our district.



# **Operations Memorandum**

**To:** New Haven Board of Education Finance and Operations Committee

From: Frank Fanelli, Director of Project Management

Date: February 25, 2024

Non-Financial Agreement with Dalkia Solutions for the shared energy

**Re:** savings agreement for replacement of heating units for pools at Conte,

Hillhouse, Cross, Martinez, Career and Sound Schools.

Answer all questions and have a representative ready to present the details of each question during the Finance & Operations meeting or this proposal may not be advanced for consideration by the full Board of Education.

Company Information					
Vendor Name:	Dalkia Energy Solutions				
Doing Business as: (DBA)					
Vendor Address:	59 Jackson Street, Holyoke, MA 01040				
Vendor Contact Name:					
Vendor Contact Email:	413-536-1156				
Is the contractor a minority or women owned small business? No					
Agreement/Contract Information					
New or Renewal Agreement/Contract?		Agreement			
Effective Dates: (mm/dd/yy) Multi-yrs. require Board of Aldermen approval	From 03	/11/2024	То	06/30/2024	
Total Amount: If Multi-yr. include yr. to yr. breakdown	-				
Funding Source Name: Acct. #:					
Contract #: (Local or State)					



### **Key Questions:**

## 1. What specific service will the contractor provide:

For the shared energy savings agreement for replacement of heating units for pools at Conte, Hillhouse, Cross, Martinez, Career and Sound School. Cogeneration, also known as Combined Heat and Power (CHP), simultaneously produces both electricity and useable heat from a single fuel source, natural gas. By capturing the heat that is typically wasted in a conventional plant, CHP can provide usable hot water for your building's heating systems, while at the same time, providing off-grid power. In addition to experiencing dramatic energy cost reductions, you will be decreasing harmful emissions and carbon footprint.

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2. How was the contractor selected? *Attach appropriate supporting documents
☐ Quotes
☐ Sealed Bid #
☐ Sole Source #
□ <b>RFP</b> #
☐ State Contract #
☐ Exempt Professional
☐ Accountant
☐ Actuary
☐ Appraiser
☐ Architect
☐ Artist
□ Dentist
☐ Engineer
☐ Land Surveyor
□ Lawyer
☐ Physician/Medical Doctor
3. If the vendor was selected through Solicitation (Bid/RFQ/RFP) process; answer
the following:
a. Please explain how the vendor was chosen? *Attach Vendor Proposal
N/A
b. Who were the members of the selection committee? (Minimum 3 members required)
N/A



4.	If this is a renewal with a current vendor, has the vendor has met all obligations under the existing agreement/contract?
N/A	
5.	If this agreement/contract is a Renewal, has the cost increase? If yes, by how much? *Attach Renewal Letters
N/A	
6.	If this new agreement/contract, has cost for service increased from previous years? If yes, by how much?
decrea	s a non financial agreement with Dalkia Energy Solution for cogeneration which will use energy cost reductions, and decreasing harmful emissions and carbon footprint to the heating of the pools at the schools indicated.
7.	Is this a service that existing staff could provide? Why or why not?
No thi	s is a service that will be provided by experienced in cogeneration on a large scale.



## **Agreement/Contract Processing Checklist**

To ensure timely processing of the submitted Agreement/Contract it is imperative to collect and provide all of the required documentation noted below and provide with submission to board.

Forms/Documents are available in: Drive <u>G:\F&O Agenda Minutes\Agreement\_Contract\_Checklist\2022-2023</u>