



Date: October 17, 2022
To: Councilman Kazy
From: Sarah O'Keefe, Director, Sustainability and Climate Justice
Mayor's Office of Sustainability
Subject: Energy use numbers for city facilities (owned and leased) – Natural Gas & Electricity

Councilman,

Please note answers below on questions pertaining to energy usage, # of accounts and facilities, etc. for the city of Cleveland's Natural Gas and Electricity procurement legislation.

We look forward to our meeting with you on Thursday, October 20th.

Thank you,
Sarah O'Keefe

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Natural Gas

- City facilities – owned vs. leased
 - # of facilities impacted by contract: 139 distinct facilities for Natural gas supply
 - # owned: 133,
 - # leased: 10 leased; pay for natural gas at 6 (including Justice Center where city also pays for electricity, but not chilled water or steam)
 - # accounts that we pay: 172 active accounts
- Amount of contract \$: Natural Gas supply contract costs from Direct Energy were \$3,251,564 between Jul 2021 and Jun 2022 (12 months)
 - Exposure to increased costs if contract expires in November, due to the following:
 - *The significant ups and downs of the natural gas market pricing, globally*
 - *Dominion utility's requirement for having to redirect gas accounts with over annual 200 Mcf usage (which are the majority of the City's accounts) to other 3rd Party suppliers (termed 'MMR' rates) after the 1st two months after exiting a supplier contract*
 - *Timing - winter months*
 - *Result: estimated \$10s of thousands of additional costs for natural gas supply to the City.*
- Contract term and projected time of year end date: will want to see a contract that ends in March / April - Cannot have contract end in November going forward



City of Cleveland Memorandum
Justin M. Bibb, Mayor

- Can do a 2.5 years + two 1-year options or some version with a 6 month period that puts us in May for renewal/contract expiration; the introduced legislation as written provides the administration to enter into contracts with this flexibility.
- RFP timing - How long going to have the RFP out on the street? Once the legislation authorizes an RFP to be issued, the administration will keep it open for approximately 2-3 weeks for responses + 1 week for short-listing & request for refreshed pricing. Will want responders to hold price for 24 hour window, during which Finance will be able to act and sign a contract.

Questions & answers given: added some additional detail

- How authorization as outlined in the legislation will allow procurement to be more competitive –
 - Will allow the Finance / Sustainability team to get the Request for Proposals in front of multiple energy suppliers with help of our energy supply consultants – Amerex. Currently only 1 supplier – Direct Energy, has been willing to bid on the city’s traditional invitation to bid (ITB) process for several years.
 - The process will be structured so that we can interview and short-list proposers based on their ability to provide the supply needed, then request refreshed pricing from short-listed proposers and allow the Director of Finance to enter into a contract within 24/hours of getting pricing.
 - Cost savings compared to ITB model is also anticipated. Our energy supply consultants estimate that the sole supplier’s price for the contracted supply component cost the City over **\$300,000** on an annual basis during the past year alone, compared to average of market prices being charged by other natural gas suppliers for the same size load. (*market price is not same as tariff)
- Aggregating load during RFP with other public entities in order to get a better overall price/ MCF of natural gas. EX: NEORSD – have been meeting regularly with NEORSD’s sustainability and finance team throughout 2021/2022. Legislation as written would give the City the authority to aggregate/combine loads during the RFP process, if the timing and market conditions are right; would be structured in a way that each entity still had its own contract terms and relationship with the natural gas supplier. The city would not enter into a combined contract for natural gas supply.
 - What is their timeframe for renewal? *EX: NEORSD – similar; if not exactly the same, would not aggregate or could go alone for first X number of months, then aggregate load for pricing remainder of contract term.*
- Renewables - Will renewable natural gas cost more, here?
- Renewable natural gas (RNG) generally comes from landfills that are exhausting methane gas from rotting materials – those gases are captured and then used as fuel. It can also come from capturing the methane gas waste from large animal farms – pig or dairy. We will find out more from the RFP process if the cost for renewable natural gas is additional. Other large customers are also asking for RNG, the Dominion utility itself is moving in this direction and trying to source some from areas in Ohio, so RNG may just be a part of the standard product for some suppliers. In that case, RNG is not likely to cost more, especially if the resources are local / regional.
- If higher cost than other natural gas supply, will residents pay for that? This supply procurement is for city facilities, rather than for residents. The city’s approach continues to be to decrease energy use through energy efficiency projects, improvements in HVAC systems, etc. in order to save on cost.



Electricity – non-CPP city facility accounts. NOTE: While the number of natural gas accounts are similar in number to the number of buildings using natural gas, electricity accounts include non-building accounts.

- Number of **Facilities** (facilities w/ assigned sq.ft. -- excludes radio antennas, traffic lights, automated meter reads - AMRs or parks w/ no sq.ft or built structures & such): For Context: with all active Electric accounts: **365**
 - Number of Active Non-CPP (First Energy – supply procurement) electric Accounts (includes those water dept AMRs, parks and such): 425
 - **Breakdown by facility types - Anand / Tim will provide**
 - Number of Facilities (with sq ft) impacted by future contract (those with **active Non-CPP (First Energy) electric accounts: 120**
 - # owned – 118
 - # leased – 2
- Amount of contract costs \$: Electricity supply cost for non-CPP supplied accounts from Direct Energy: 2021 (12 months): **\$5,964,389.16**
 - 2021 Non-CPP (First Energy) **electric use in kWh: 122,977,096**
 - Supplier Cost: **\$0.0485/kWh (Most recent supply contract w/ Direct Energy)**
 - Exposure to cost increase when do not have electricity supply contract: Not having a consistent electricity supply under contract exposes the city to the ups and downs of the energy market. Electricity prices have been especially volatile due to the natural gas market being volatile.
 - NOTE: if had not been on supplier contract from Sept 2021 – August 2022, would have cost the city **\$1.2M additional**
 - At this moment – the city declined a 6 mo contract extension in order to have temporary savings by going to price to compare (PTC) for electricity. However, this is a very temporary situation in the electricity market and costs will go up for PTC electricity from First Energy, potentially by 130%, judging from auction price increase (article in paper – <https://www.cleveland.com/news/2022/10/firstenergy-electricity-rates-may-rise-next-year-after-wholesale-auction-price-more-than-doubles.html>)
 - *FirstEnergy agreed to pay an average price of \$122.30 per megawatt-hour for delivery between June 1, 2023, and May 31, 2024) - increase of \$69/MWh, or 130% increase in cost over the current energy cost for First Energy, which is \$53 per megawatt-hour. First Energy could choose to pass this additional cost on to customers and have accounts pay \$0.1223/kWh for electricity supply.*
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- Aggregating non-CPP electricity load of city facilities with non-CPP electricity load of other public entities during RFP would get a better overall price/ kWh of electricity --- BENEFITS FOR ELECTRICITY AGGREGATION WOULD BE VERY SIMILAR AS FOR NATURAL GAS AGGREGATION-
 - ADDITIONAL BENEFIT – could help build pathway to renewable electricity supply for non-CPP buildings – First Energy is unlikely to provide renewable electricity in their PTC portfolio in near term. Larger electricity load would also bring better pricing for renewable energy credits and potentially other forms of renewable energy supply, potentially including new renewable developments in the state of OH.

***Renewable Energy Credits: RECs = a quality or attribute of electric power that is separate from the actual electrons. Each MW of power generated by a renewable source (solar, wind, hydro, etc – not nuclear) is given a “REC” that holds all of the renewable quality of that power. The REC can be sold separately from the electrons; purchasers of RECs get the renewable benefit of the electrons; sellers of the RECs give up the renewable benefit of the electrons.*

***New renewable developments in the state of OH – because OH does not have a state-level Renewable Portfolio Standard, there is less of a renewables market compared to coal or nuclear, which are more supported by subsidies, riders, etc., within the state. This makes OH renewable energy difficult to buy. However, when electricity customers have larger demand for renewables, and are willing to commit to longer supply contracts, then renewable developers are more willing to build and supply electricity at a price that can be competitive with coal-powered electricity. Inflation Reduction Act also provides production and investment incentives to lower the cost of producing solar energy.*

- Renewable energy
 - Will it cost more than brown electricity? We would find this out through the RFP process itself – don’t know for sure if we don’t ask. Asking will also signal the OH market that large purchasers of electricity are interested in renewable energy.
 - If higher cost than brown electricity supply, will residents pay for that? SIMILAR TO NATURAL GAS – this procurement is for city facilities, not for residents. City’s approach is to decrease electricity use, overall – cleanest electron is the one never used/needed in the first place. Any facilities that would have on-site solar would also be reducing electricity load for that site.