OHIO
HUDSON
PUBLIC WORKS ● 1769 Georgetown Road ● Hudson, Ohio 44236 ● (330) 342-1750

MEMORANDUM

Date: May 28, 2024
To: Frank Comeriato
From: Kevin Powell, Director of Public Works
Re: EAC Solar Interconnection Recommandations Staff comment

Purpose: This memo presents an evaluation of the proposed amendments to the Solar Interconnection Policy, as recommended by the Environmental Awareness Committee. After careful consideration, the team has reached a series of conclusions. These are informed by practical field applications, the limitations posed by current utility billing systems, and the anticipated effects these changes would have upon their enactment. In 2022 the Hudson Solar Interconnection Policy was reviewed by a consultant to review aspects of the policy such as system sizing, kW credit rates, battery storage and other components of the policy. The policy was most recently reviewed by American Municipal Power (AMP) staff and general council for legal and operational evaluation. No significant changes were recommended.

Recommendations:

1) **Allow system annual production sizing to cover usage billing:** This would cover the discrepancy between consumption at the retail rate and production at the credit rate. This has no effect on HPP's cost to purchase energy and can increase the percentage of Hudson's zero emission energy sources.

   From: Section 3 Item 1) "...not to exceed customer's annual self-service energy needs, measured in kWh"

   To: Section 3 Item 1) "...not to exceed customer's annual self-service energy needs, measured in dollars"

Response: *The first recommendation requests changing the method units of power are calculated, from a per unit measure to a monetary measure. After discussions with our Finance and Utility Billing Departments, the limitations of the financial billing software would make this function difficult and at this time require manual calculations of each Solar Interconnection Customer on a monthly basis.*

2) **Clarify credit policy:** This allows residents to do their due diligence on their investment. The current policy says, "The credit will be adjusted based on the

currently used power cost adjustment", but the credited adjustment from the retail rate is much larger than the power cost adjustment.
TBD resolution: HPP to determine the average credit rate.
From: Section 3 Item 2) "Deliveries from the City to the customer shall be billed in accordance with the standard applicable rate schedules."
Section 3 Item 3) "…period. ~~The credit will be adjusted based on the currently used power cost adjustment~~. Net. …"
To: Section 2 Item 2) "Deliveries from the City to the customer shall be billed in accordance with the standard applicable rate schedules. Deliveries from the customer to the City shall be credited at the retail rate. (For reference: average credit rate was $TBD/MWh in the years TBD and TBD)" Section 3 Item 3) "…period. Net…"

Response: *This recommendation is asking two base questions. The first portion is requesting a rate schedule to be developed with an average credit rate. Due to the fluctuating costs associated with the purchase of power, creating an average credit would need to be conservative in nature to ensure all costs are being covered. In the second portion of this recommendation, it is requested to credit returned energy at a retail rate. There may be some confusion on this item due to the universally used term "Retail" in the industry. For instance, if you look at FirstEnergy's practice, they credit returned energy at a retail rate. Their retail rate is the cost of energy and does not include the transmission, distribution, and other associated taxes/ fees to deliver power. In Hudson's case, we only show two rates for solar customers, retail and wholesale. As with FirstEnergy, we are providing credit for the cost of the power returned to the system and term it as a "wholesale rate". Additionally, an unintended consequence of providing what we consider a retail rate for energy returned to the electrical system could be an inequity on shared O&M costs on the electrical system.*

3) **Clarify Net Excess Generation policy:** The current wording could use improvement.

   From: Section 3 Item 3) "Net Excess Generation (NEG) represents the amount of electric generation by the customer beyond the customer's own metered usage which is delivered to the City of Hudson during the billing period. The credit to the customer shall not exceed the dollar amount the City of Hudson bills the customer for energy consumption in any billing period. Instead, the net excess dollar amount shall be allowed to accumulate as a net excess generation (NEG) credit to offset the customer's energy charges in the next billing period. The credit will be adjusted based on the currently used power cost adjustment. Net excess generation (NEG) credits, if any, will be carried over from month to month."

   To: Section 3 Item 3) "Credits to the customer in excess of the dollar amount the City of Hudson bills the customer (for energy consumption and fixed service costs) in any billing period shall be converted to Net Excess Generation (NEG) credits. NEG credits shall be allowed to accumulate and carried over to subsequent billing periods.

Response: *The City is doing this currently.*

4) **Update the reset date to a spring month:** The month with the first excess generation is in the spring due to increasing daylight hours. Resetting at the end of December eliminates credits that were saved up for the dark winter months of January and February.

   TBD resolution: HPP (or EAC) to study what would be the ideal zeroing month for current users.

   From: Section 3 Item 3) "Following the customer's December billing cycle, the customer's credit balance will be reset to zero."

   To: Section 3 Item 3) "Following the customer's TBD billing cycle, the customer's credit balance will be reset to zero."

Response: *In a discussion with the Finance department, it was concluded that the proposed alteration is unfeasible with the existing financial software. Additional exploration is necessary to ascertain the availability of alternative solutions. Should such an option be deemed viable, the staff will then need to conduct research to determine the most suitable month for resetting the accounts to zero.*

5) **Study how increases in solar would affect HPP and customers:** As the cost of solar panels comes down, and federal tax credits incentivize installations, the EAC is wondering how increased adoption would affect non-solar customers.

Response: *AMP conducts an annual assessment of the expected increase or decrease in the City's energy demand for the forthcoming year. This evaluation encompasses not just the production from local solar installations but also the total energy usage of the City. By doing so, AMP ensures that sufficient resources are in place to satisfy the future energy requirements of Hudson.*