Additional questions and responses received from City Council and the Public

- Is the solar power source integrated into the existing power system in McCleary? If so, how would it power City Hall, Police, Fire, and the Clinic separately if there was a loss of power? Would it need to bypass to reach those places?
    - City Hall, Police, Fire, and Light and Power all have generator backup systems to support operations during an outage. To provide additional power to serve these facilities, as well as the Clinic, would require some form of dedicated line to be achievable. This is being considered with the IGA as more cost analysis is needed to determine the feasibility.
    - The solar system built with this grant will not provide power when the grid is down. To do that would require a microgrid, and the solar system is a necessary component of that. In addition to the solar a microgrid would require battery storage and dedicated lines to the buildings attached to the microgrid. We can get good information about what it will take to complete the microgrid which will be a huge help in applying for additional grants. Solar systems like this shut down automatically during a grid outage for safety reasons.

- The city talks about growing the system if other grant opportunities are presented? Is this plug and play? Like, do you just add more panels to increase capacity, or would there be other work to be done to increase capacity?
    - Yes, this would be as simple as plug and play to add additional mounting and panel systems if the initial construction is done with that in mind (example: installing extra conduit for future panel/mount additions). The switchgear (circuit breakers, fuses, power conductors, etc.) would need to be sized for future expansion and is likely achievable with the proposed budget, but again, the IGA would evaluate exact costs to confirm.

- Is our current power system capable of handling this? Would there need to be upgrades that would be out of the scope of the grant/proposal?
    - Yes. No upgrades outside of the grant scope are anticipated.

- Is the proposed location large enough to handle the proposed system, additional growth, and still be used for its intended purpose?
    - Yes. The site is 8.3 acres. The proposed solar array and appurtenances should take up about 40% to 50% of the site area leaving ample room for a future fire hall.

- How is this process unbiased when the same vendor applied for the grant, is the project manager, contractor, and energy audit author? The grant money is going to the vendor directly, so why would I trust that they aren't looking out for their best interests, and not the City's. Will we have any third-party objective input to what our needs are/will be?
    - The grant funds do not go directly to the contractor. Any grant reimbursements are given to the city to administer. The IGA, ESP, Design, and Construction have oversight from the State Department of Enterprise Services. ESCO contracts and contractors are

overseen by the state to assure fairness and pricing of projects. Ameresco has been a preferred contractor for the ESPC program for more than 20 years. They go through a process to be reapproved every two years with DES. The DES energy office assigns a project manager to the project who acts on behalf of the city.

- With how fast technology is changing, are there more efficient systems than others? What are we investing in (i.e. are we buying a base model)? Low-end? High-end? How obsolete will this system be in 5 years? 10 years? 20 years?
    - Right now we are about at the limit of efficiency for silicon solar panels. We know that different materials can increase efficiency, but nobody has developed a way to manufacture those panels yet. We've been told we are likely 10 years away from graphene panels that will be more efficient. We plan on using the most cost-effective design for this project. We could get the top-of-the-line panels that would be a tiny bit more efficient, but they are much more expensive. That would only make sense in a situation where space is the limiting factor. That isn't the case here. We want to maximize the power produced for the City with the grant funds available.

    - Some panels are warrantied for 30 years now, and the banks consider solar systems a 40-year asset and will loan on them accordingly. The reality is that if something goes wrong it almost always happens in the first year, so manufacturers have little risk with giving long warranties. The inverters are usually warrantied for 10 or 15 years, but you can buy an extended warranty and we can evaluate the pros and cons of that during the IGA.

- I hesitate to believe there is little to no maintenance with this system. The city is not equipped nor trained to provide extensive maintenance to new technology without additional cost. We are already on a shoestring budget. The longer the system is in place, it's reasonable to assume the maintenance cost will go up. How can we be assured the city will be able to afford the maintenance moving forward.
    - There will be maintenance required of the facility, just like any other new facility after construction. The benefit to this project is that the construction of the facility is being paid from a grant source. This changes the return on investment dramatically. On-going costs should be minimal and will be analyzed with the Investment Grade Audit to determine any on-going costs that would offset any revenues generated by the solar array. A maintenance contract can be incorporated into the project if desired. That could also include making sure all the warranties are kept in good order.

- What is the cost of disposal in current dollars? Is the replacement a simple plug and play, or would the entire system need to be replaced as technology improves?
    - Until the facility is designed, it is indeterminate to establish what disposal costs could be. The solar panels themselves will require replacement after 40 years of performance but depends on any degradation of the panels over time and outside of warranty periods. Life span of the panels will be evaluated during the IGA to establish longer term costs and any future maintenance costs (including disposal).

- Is our light and power group trained to provide technical work to the system?
    - Some additional training for public works and light and power crews will be required. Public works would be required to maintain the facilities grounds, while light and power will need to receive some basic inspection training. Training typically comes from the contractor and/or manufacturer and can be specified in the contract.

- Who would be incorporating the system into our current power system? Is integration of the panels included in the installation, or is that a separate scope of work?
    - Incorporation, or connection, to our existing system would be completed by the general contractor on the project. Some assistance from our Light and Power crew may be required for the interconnection to the existing system. Panels are included in the installation scope.

- The city is claiming this will reduce cost to consumers. If we are still charging consumers for their consumption, as well as proposing utility increases in the coming years, how will this benefit consumers?
    - The benefit of this project starts with the need to offset future rate increases from BPA. Until the IGA is completed, it is hard to establish exactly what operating cost savings will look like through power generation. The goal of the project was to add a revenue stream to help bolster the light and power utility, and to assist with reducing any future rate increases. Assuming someone's power bill will automatically be reduced with the addition of a solar array is misleading as the utility does not control how the end user consumes power.

- What are our means for repairs should it be damaged, and if the system is damaged, how would it affect our current system? Would this be taken 'offline' while our current system would maintain power to the community during maintenance/damage repair?
    - The system proposed will be able to operate offline. If the system is damaged, an assessment would be needed to determine impacts to operations of the facility and repairs scheduled accordingly. Our current system would not be affected as it can function as a distribution system with or without the solar array online. Down time should be very limited during operations of the facility.

    - The system can be designed so that damage to one panel or a few panels will have a minimal impact of the system overall. Often with a system this size the panel replacement due to damage is just scheduled for every year or every five years.

- The FAQ page states there is a 25-year maintenance warranty, but we were told there was a 1-year warranty at the meeting; which is it?
    - The solar panels, which are the main component that does age out after several decades, will have a 25-year warranty for parts and labor. The one-year warranty was

referring to the standard one-year contractor warranty that is required for the actual construction/installation.

- The FAQ page states there will be community engagement? Seems a little late for that – community engagement should have started months ago (as well as council engagement).
    - As of 8/28/24 we are now two months into the discussion on this topic with council. A webpage has been generated with multiple notifications on Facebook to customers to guide them to the information and FAQs on the City's website. Staff reports contained updates on the grant status prior to the initial detailed presentation on 7/10/24. We are also having the former President of Solar WA come to the library in the next few weeks for a community forum on solar if the IGA moves the project forward.

- The FAQ page states there will be job opportunities? What operations are required? Who would provide the operation of the system? I thought these things ran on their own with little to no maintenance. You've stated it's a quick installation (about a year) and minimal maintenance. How will this employ locals?
    - The goal of the statement regarding job opportunities is meant through the construction phase of the project. The construction would bring prevailing wage work opportunities and the city can specify to utilize local contractors to the maximum extent possible.

- Just to be clear – we need to accept the grant to move forward with the IGA. The IGA will be performed by Ameresco. If the IGA supports the solar project and the city moves forward with installation, the cost of the IGA is reimbursable. If the City decides not to move forward with the installation, the city will not be reimbursed for the cost of the IGA. If the IGA determines solar is not in the City's best interest, the IGA would be reimbursed. Please clarify.
    - The city could move forward with the IGA without the grant being accepted if it wanted to. For the IGA cost to be reimbursed, the city would need to enter a contract with the Department of Commerce and accepting the $2,745,000 grant funds. It is an accurate statement that the city would not be reimbursed for the cost of the IGA if it <u>electively</u> decides not to proceed. If the IGA demonstrates that there is savings (or revenues) to be had, and the city still says no, the city will have to pay for the IGA. The Energy Savings Proposal that goes along with the IGA will help to outline what financial benefits the project will have as it can only be estimated generally at this point based on industry standards.

- Would the solar rate be charged a different rate than the BPA rate? How would the two sources be separated for separate billing? How would we know how much we would need to purchase from BPA?
    - The two sources would not be separated for billing purposes, as the billing rates for power are set based on utility overall funding needs, not just the costs of BPA power. The solar array could have a battery system to store energy and release it during the peak demand periods for power consumption, also known as load shaping, a rate design we currently have with BPA to help keep our rates down by using averaging vs. actuals.

The power we generate would be credited to the city through an interconnection agreement with BPA. Basically, we generate the power and then sell it back to BPA.