MEMO

CITY MANAGER'S OFFICE

DATE: September 21, 2018

TO: Zach Walker, City Manager

FROM: Mark Randall, Assistant City Manager

SUBJECT: Community Solar Program Cost Clarification



On September 6, 2016, the Public Utility Advisory Board and Indy Energy hosted a public meeting on the Energy Master Plan report, which was presented earlier to the City Council. One of the citizens speaking at the meeting asked several questions about the Community Solar Program. Recent reports in the media and on social media had understandably raised her level of concern. Since the focus of the public meeting was on the Master Plan, not solar, I took down her questions and promised to answer them after the meeting. The PUAB members asked that they also be provided with the answers to her questions, and the information below was presented to them at the 9/20/18 PUAB meeting.

Coincidentally, at the last City Council meeting, Councilman Huff also requested a staff report to clear up the misinformation regarding the Community Solar Program. I would therefore offer for Council consideration the following information which I provided to the PUAB and the citizen who made the initial request:

The questions posed at the public meeting hosted by the PUAB and Indy Energy included the following:

- 1. How much did Independence Power & Light pay for the solar farm?
- 2. Did Independence Power & Light get bids on solar?
- 3. Will IPL lose \$15 million on the solar farm as reported in the media/social media?
- 4. Will this have a significant fiscal impact on IPL?

In response, I would like to offer the following:

- 1. **How much did Independence Power & Light pay for the solar farm?** The City didn't pay for the construction of the solar arrays. They are owned by a private company, MC Power. The City has a 25 year contract to purchase the energy produced.
- 2. **Did Independence Power & Light get bids on solar?** The City went through a procurement process to select MC Power as solar energy provider. This included the energy produced at the original solar farm on Bundschu Rd. Later, the City exercised an option for a second phase with MC Power, which built a second phase to the solar farm, part of which was constructed near the Bundschu Rd. site, and the rest at the Rockwood site.
- 3. Will IPL lose \$15 million on the solar farm as reported in the media/social media? Much of the reporting on this issue has been technically inaccurate. To be quite honest, much of the misunderstanding stems from one of several power point slides from a presentation made by IPL staff to the Public Utility Advisory Board on August 23, 2018. In an attempt to answer Board questions about the community solar program, it appears we didn't communicate very well the type and extent of the fiscal impact to IPL of the Community Solar Program.

I personally heard it reported that IPL will suffer a \$15 million loss which would have to borne by the taxpayers, and it was suggested that this could bankrupt IPL. This statement is inaccurate in several ways:

- First, our utilities, including IPL, operate strictly on revenue from sales to customers.
 Taxes are not involved in revenues. All costs of providing electricity are recovered through utility rates.
- Second, what is being called a "loss" actually doesn't meet the definition of a loss in either the field of Accounting or the field of Economics. If you pay \$2 for something and then sell it for \$1, you have a loss of \$1. That is not the case here. The energy purchased from the solar provider by IPL is sold to IPL customers for more than we pay for it. By definition, then, this is not a "loss". The fact that it would be possible to purchase cheaper energy elsewhere which could be sold to customers is called an "Opportunity Cost". To be specific, in 2018, IPL purchased energy from the grid for about 3 cents per kilowatt hour, and purchased solar energy for 8 cents. The 8 cents was reduced to about 6 ½ cents thanks to voluntary subscriptions from customers wishing to support clean energy. Both the energy purchased from the grid at 3 cents, and the solar energy acquired for 6 ½ cents, were sold to customers at retail for 14 cents. The theoretical difference between the higher and lower sources of energy establishes the "Opportunity Cost", which is estimated to be about \$500,000 in 2018. In any case, IPL always recovers all its costs for energy from whatever source from customers, and no money is "lost".
- Third, in addition to not being a true "loss" the \$15 million figure is an exaggeration. This came not from a single year's "Opportunity Cost", but a less than accurate guess of what it might be over the next 25 years. The fact is, no one knows what the cost of energy on the grid will be over the next 25 years, so it's impossible to accurately state what the difference will be between the grid price and the Community Solar price. Without doubt, the cost of energy from the grid will rise going forward, and get ever closer to the cost of solar. How soon it will even out depends on a variety of factors. If high gas predictions from the Department of Energy hold true, the gap will close before 2040, and the total opportunity cost will be closer to half the \$15 million figure. Regulations limiting natural gas fracking or other changes in the years ahead might completely alter energy markets and eliminate the "Opportunity Cost" entirely long before 25 years have passed. At the time the decision was made by the Council to add solar to our energy portfolio, energy cost estimates indicated that solar energy, subsidized by voluntary subscriptions, would be no more expensive to IPL than power purchased from the grid. While that assessment does not currently hold true, it may yet prove correct in the years ahead.
- **4. Will this have a significant fiscal impact on IPL and electric rates?** As mentioned previously, some wild statements have been made to the effect that IPL's purchase of solar energy might somehow bankrupt the utility. The fact is, the "Opportunity Cost" representing the theoretical difference between buying 19,973 MWh from the solar provider versus buying the same amount on the grid, has almost no impact on rates or IPL's financial health. As a percentage of annual revenue, it would amount to no more than about 1/3 of 1%.

Finally, I would like to mention that even though the amount of solar purchased is only a small fraction of the energy purchased or produced annually by IPL, it represents an effort by the City Council to look to the future by developing community-based, "green" energy in Independence.

The City Council has, by Resolution, established guidelines for including renewable energy in our portfolio consistent with Missouri Proposition C Renewable Energy guidelines. Our goal is to have 10% of our energy from renewables by 2018, and 15% by 2021. Inherent in those objectives is having at least a portion of renewable energy sources located in Independence, just as we do with traditional energy sources. Independence is meeting its goals in this regard, and in this and other respects, is pursuing a vision of being a truly "Green" community.