

Going Big on Solar in Austin: What Does This Mean For Our Bills & Next Steps?



Tuesday, September 29, 2015

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The Austin Energy Generation Resource 2025 Plan commits Austin Energy to reaching a goal of 750 MWs of non-local solar by 2025. Austin Energy already has an existing commitment of 150 MWs with Recurrent Energy expected to be online next year. That contract has a reported price in the \$48 to \$50 per MWh range.

The Resource Plan also stipulates that Austin Energy would issue an RFP in 2015 for up to 600 MW, and if they found the solar prices to be available and affordable, they could go ahead and take advantage of these prices early, and contract all 600 MW now, meeting their 2025 goals essentially eight years earlier. The RFP issued by Austin Energy led to available MWs at generally favorable prices in the \$38 to \$45 dollar range according to Austin Energy and press reports. In fact, some 1300 MWs was offered at prices below the Recurrent price. Because "affordable" was not specifically defined, it is up to City Council with input from Austin Energy and stakeholders to determine affordability.

Austin Energy has delivered two options to City Council on moving forward on additional acquisitions of solar power. Each option is divided into two parts.

Option A. Up to 300 MW now (by 2017), and 300 MWs later (not defined, but in 2017-2025 period)

Step 1. As part of this option, Austin Energy has presented an RCA to the RMC (approved), EUC (approved) and to City Council's Austin Energy Oversight Committee. Thus far, many stakeholders, including CCARE, have endorsed this first RCA.

The RCA is for up to 300 MW with at least two different companies. From information presented to the RMC, EUC and Council, the proposed contracts are available at a very favorable price. Austin Energy is estimating that the expected cost (PPA cost minus revenues from sale of energy) would only impact the Power Supply Adjustment by an average of between 0.26 and 0.41 percent depending on the rate class. Even assuming a worst case scenario the average impact on PSAs would be at most one percent for a few rate classes. Thus, all rate classes would only see a very small initial PSA increase, but over time as wholesale

energy prices rise – which are largely driven by natural gas prices -- the solar contracts will actually save ratepayers money. **Sierra Club endorses approving this contract.**

Step 2. Future contracts or ownership or contracts would be explored later but before 2025.

Austin Energy has consistently maintained that given the large contracts that would be secured by Step 1 – as well as existing contracts with Recurrent – they would prefer to wait for additional contracts or ownership potentials. Thus, they believe that solar prices will fall even further in the future and it would be to their and ratepayers advantage to wait until the future. Sierra Club believes this is a valid position, but further analysis is needed.

Option B. Secure all 600 MWs through contracts in 2015 for operation by 2017.

Step 1. Approve contract for up to 300 MWs (Item 4). Sierra Club endorses.

Step 2. Examine and potentially approve contracts for additional 300 to 350 MWs presented by Austin Energy (Item 5 on Oct 1, 2015 council meeting agenda).

The additional contracts presented by Austin Energy would secure up to an additional 350 MWs of solar at generally favorable pricing. Austin Energy is estimating that these contracts would be at a slightly higher price than the first contracts mentioned as Step 1. Based upon our analysis it appears that these contracts are in the \$42-45 range, as opposed to the \$38-40 range for the first contracts. Thus, they are lower priced than the existing Recurrent Contract but higher than those recommended by Austin Energy. These contracts AE estimates could raise the PSA by an additional one percent on average, and by slightly more (up to 2.6% for some rate classes) in a worst case scenario. Again, Austin Energy believes the second set of contracts would initially raise the PSA but over time would save ratepayers money.

Table 1. Expected 2017 Average Annual Short-Term Power Supply Adjustment Costs to Solar Contract, According to AE

Rate Class	150 MW Recurrent Contract (1)	300 MW RCA (Item 3)	Additional RCA (up to 350 MWs – Item 4)	Total Annual PSA Impact, 2017
Residential	0.20%	0.26%	0.89% (1.49% Max for 600)	1.35% (1.69% Max)
Small Office	0.17%	0.23%	0.78% (1.30% Max for 600)	1.18% (1.47% Max)
Convenience	0.27%	0.36%	1.22%	1.85%

Store			(2.05% Max for 600)	(2.32% Max)
Large Grocery Store	0.25%	0.34%	1.12% (1.90% Max for 600)	1.71% (2.15% Max)
Medium Tech Firm	0.26%	0.35%	1.4% (2.21% Max for 600)	2.01% (2.47% Max)
Large Tech Firm	0.31%	0.41%	1.63% (2.57% Max for 600)	2.35% (2.89% Max)
Extra Large Tech Firm	0.29%	0.39%	1.56% (2.46% Max for 600)	2.33% (2.62% Max)
Transmission	0.30%	0.40%	0.71% (1.63% Max for 600)	1.31% (1.93% Max)
Average on rate classes	0.25%	0.34%	1.16% (1.95% Max for 600)	1.75% (2.20% Max for 600)

(1) This is an estimate by Sierra Club based upon the expected cost of acquiring 150 MWs of solar at \$50 per MWh compared to acquiring 250 MWs of solar at \$40 per MWh reported in the third column. We estimate such a contract should cost about 75% of the second contract since it is higher priced but for less energy.

Option 3. A hybrid approach?

There may be an option to do a hybrid and approve the RCA for 300 MWs, approve an additional RCA for less than 300 MWs based on the best prices, and then direct Austin Energy to explore ownership for the remaining MWs. Austin Energy could report back on best timing for ownership, but it probably could occur by 2019, assuming some time to develop interconnect agreements, and find a suitable piece of land –including that owned by Austin Energy -- and contract with a third-party for actual build-out. The potential advantage of owning the resource should be explored since the resource itself – the sun – is essentially free and the construction costs could be spread out over the whole rate base, as opposed to only covered within the PSA itself.

(2) Table 2. Potential Third Option (Example Only)

Solar Resource	MWs	Type	Time Estimate	Estimated 2017 PSA Cost (see cost table)

Recurrent	150 MWs	PPA -Contracted	In service 2016-2017	0.25%
RCA for up to 300 MWs	300 MWs	PPA –Approved by EUC and RMC and before Council, October 1st	In service 2016-2017	0.34 to 1 % percent
Best of RCAs for up to 300 MWs	100-150 MWs	PPA – only choose best prices	In Service 2016-2017	0.25% to 0.50%
Remainder	150-200 MWs	Explore Ownership Option as well as PPAs	2018-2019 (18 month interconnection study, 18 month build-out)	None in 2017, cost or savings later

Sierra Club Recommendation.

Move this RCA forward by sending it to the Electric Utility Commission and Resource Management Commission for further analysis in October. The contracts appear slightly less favorable than the initial contracts, but are still worth further investigating. RMC and EUC could seek further clarifications if some of the contracts would be superior to others. While the PSA impact appears not to be too great, there may be some concern as both contracts would be on top of the existing 150 MW contract, meaning total impacts from all three tranches could raise the PSA for some rate classes by about three percent in the short-term (in the worst case), which means about one percent of rates. This could be a concern both for low-income residential customers and also larger customers who have high volumes of energy use. These concerns should be addressed. The RMC and EUC could recommend denying the RCA, could recommend that City Council approve all 300 MWs or some subset of the contracts and this could occur before a special meeting was called slightly after the October 22nd Austin Energy Oversight Committee for final City Council consideration.