



Austin Energy Utility Oversight Committee

September 24, 2015
Utility Scale Solar Briefing

Recommendation and Plan for new Utility Scale Solar Additions



- AE recommends Council approve the addition of 200 – 300 Megawatts (MW) of new utility scale solar at its October 1, 2015 meeting.
- We recommend procuring the additional solar after 2017 to balance risks and preserve the option of ownership if the Investment Tax Credit is not extended at current levels.
- We will also review a plan to procure 600 MWs by 2017 and its associated costs and risks



200 – 300 Solar MW Recommendation

Provides a substantial increase for solar but balances risk:

- Takes advantage of current investment tax credit but allows for better pricing in the future
 - Indicators suggest solar costs will continue to improve
 - Tax credit could be extended at current levels similar to the wind tax credit which has been extended multiple times
 - If tax credit isn't extended at current levels AE can move to a build, own, operate model which can offset the reduction

200 – 300 Solar MW Recommendation

- Projected to increase PSA up to 1% during the first 4 years (2017 - 2020)
- Specific impacts vary by customer type:

Customer Type	2017 Bill Difference - 200 to 300 MW Solar Addition			
	<u>Range - Annual Increase</u>		<u>Range - % Change</u>	
Average Residential	\$3	\$7	0.30%	0.60%
Small Office	\$4	\$8	0.20%	0.50%
Convenience Store	\$43	\$90	0.40%	0.80%
Large Grocery Store	\$1,486	\$3,078	0.30%	0.70%
Medium Tech Firm	\$2,904	\$6,017	0.40%	0.70%
Large Tech Firm	\$10,892	\$22,564	0.40%	0.90%
Extra Large Tech Firm	\$65,350	\$135,384	0.40%	0.80%
Transmission	\$9,558	\$19,802	0.40%	0.80%

- 2017 range reflects expected to high cost outcomes
- Impacts in later years expected to become neutral to slightly positive but may be higher or lower depending on market conditions

600 MW Solar Addition by 2017 Increases Costs and Risks



- Rate impacts scale up proportionally
- AE rates do not compare favorably in the current low cost market leaving no head room for increases
 - A discretionary increase risks widening the gap
- The increase in cost will use up a portion of the 2% Affordability Measure and further challenge the Competitiveness Measure
 - *AE's Competitiveness Measure is to be within the lower half of retail rates in the state*
- The competitive gap can be improved by:
 - A rise in power market prices which makes AE look better
 - Reduction in AE operating expenses
 - New sources of revenue
 - A combination of the above

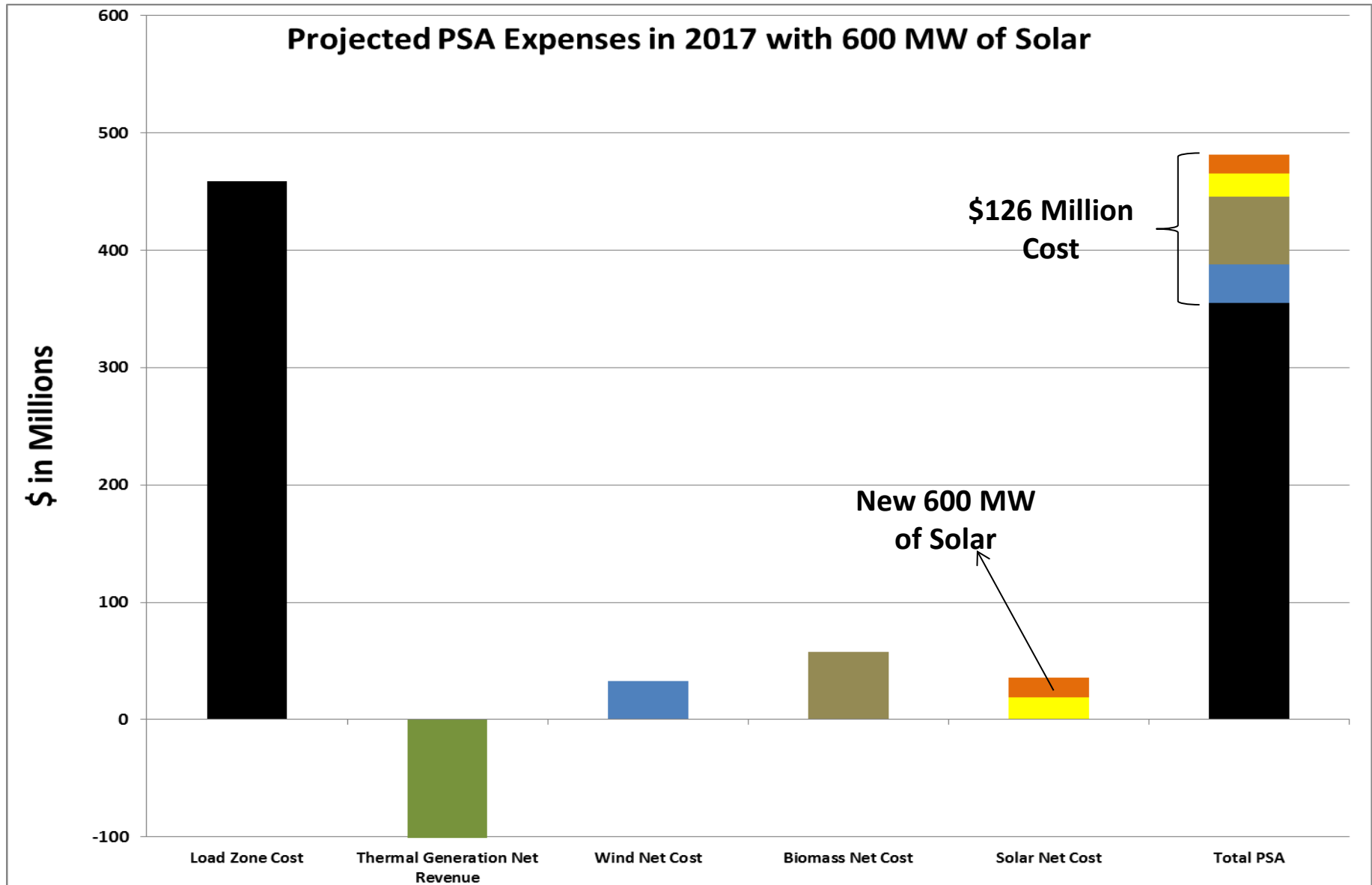
Potential Impact of 600 MW of Solar by 2017

- Projected to increase PSA up to 2.6 % during the first 5 years (2017 - 2021)
- Specific impacts vary by customer type:

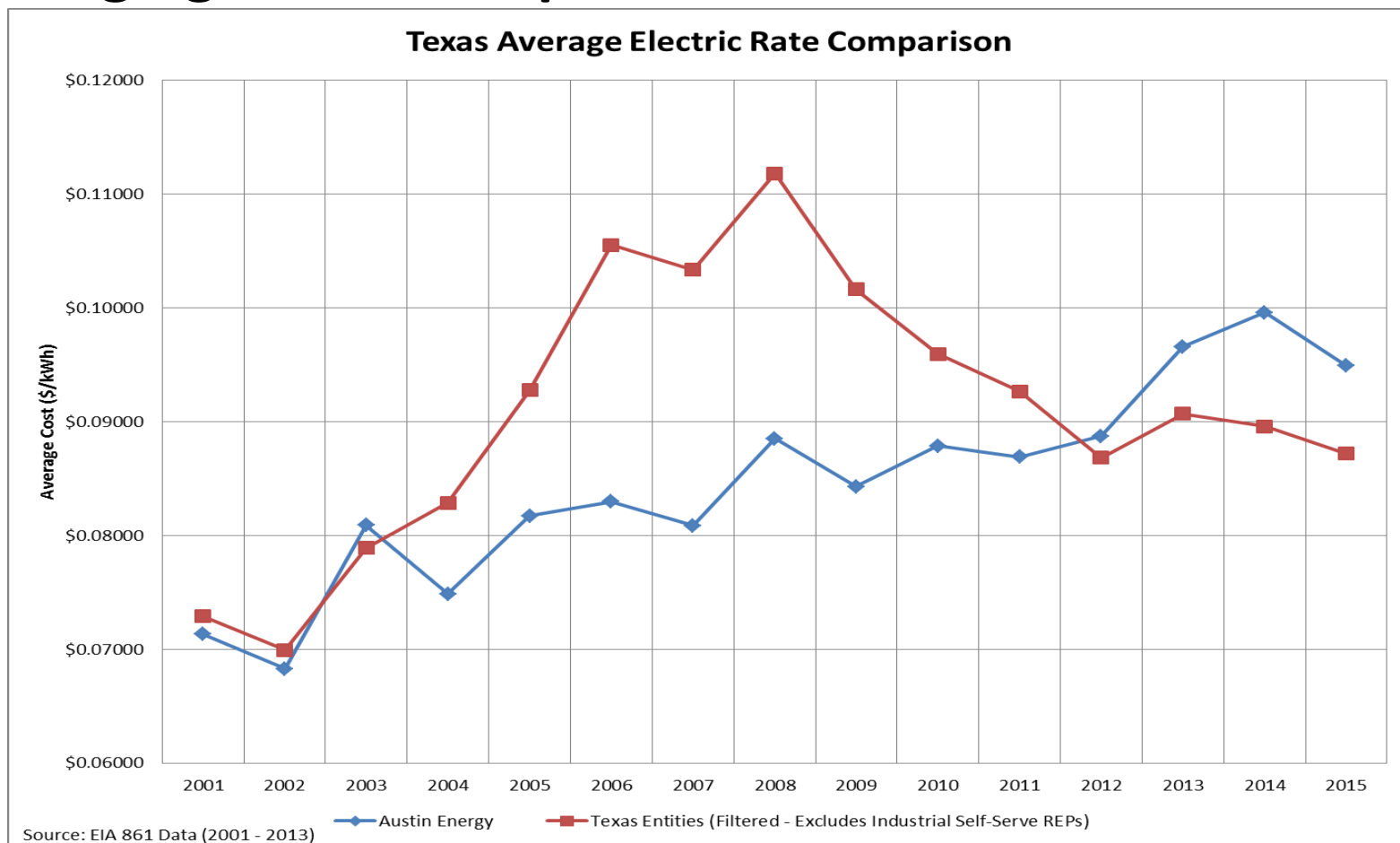
Customer Type	2017 Bill Difference - 600 MW Solar Addition			
	<u>Range - Annual Increase</u>		<u>Range - % Change</u>	
Average Residential	\$15	\$19	1.15%	1.49%
Small Office	\$16	\$21	1.01%	1.30%
Convenience Store	\$188	\$244	1.58%	2.05%
Large Grocery Store	\$6,459	\$8,370	1.46%	1.90%
Medium Tech Firm	\$14,386	\$18,140	1.75%	2.21%
Large Tech Firm	\$53,949	\$68,025	2.04%	2.57%
Extra Large Tech Firm	\$323,692	\$408,148	1.95%	2.46%
Transmission	\$26,077	\$38,209	1.11%	1.63%

- 2017 range reflects expected to high cost outcomes
- Impacts in later years expected to become neutral to slightly positive but may be higher or lower depending on market conditions

Managing Risk - PSA Impact



Managing Risk - Competitive Position



- We expect average Texas Electricity rates to increase at a rate of approximately 1.2% per year – an amount that is unlikely to improve the competitive gap
- Any cost additions on AE's part risks further erosion of our competitive position and could invite legislative intervention



Managing Risk - Competitive Position

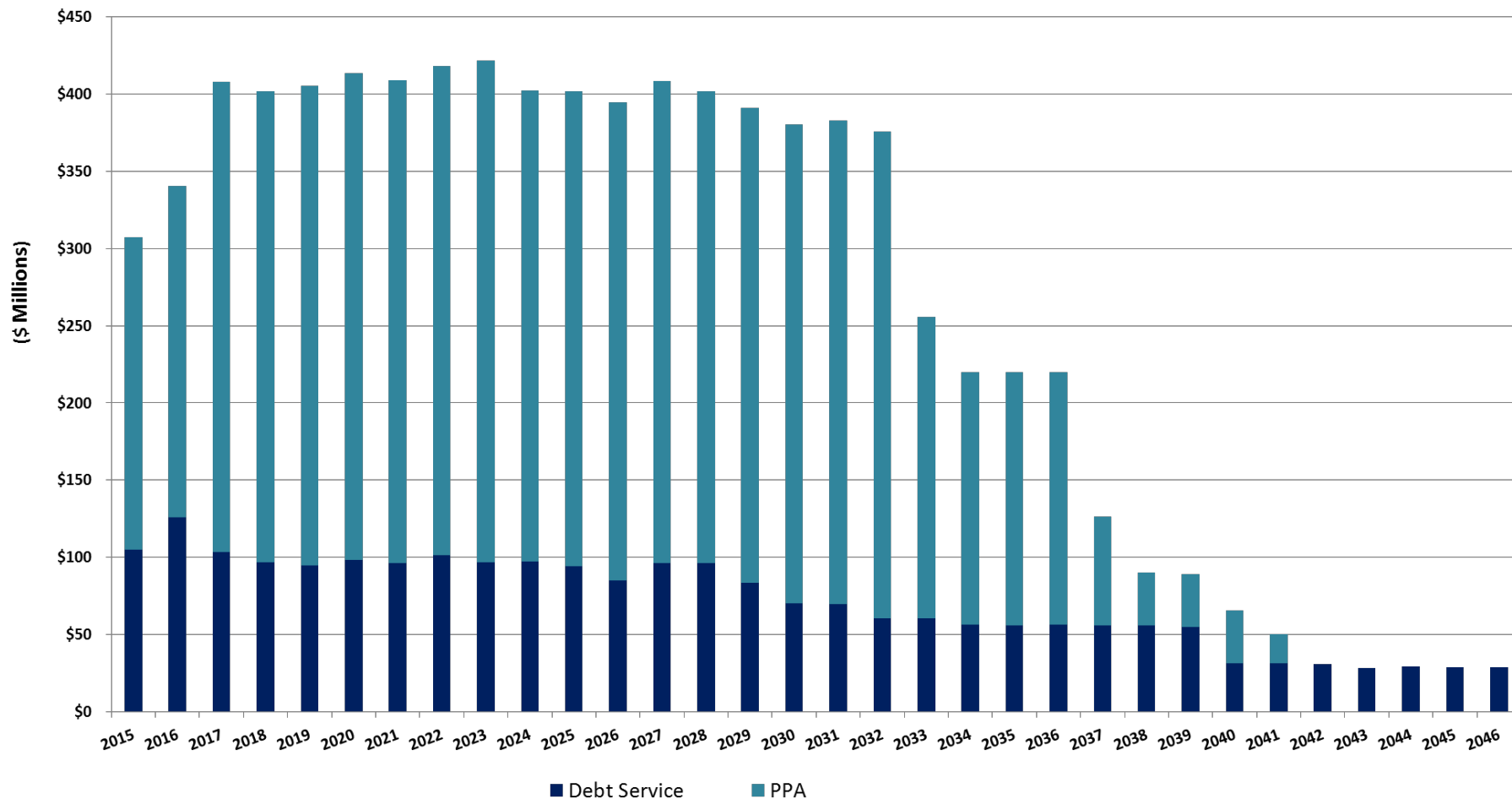
- AE is no longer meeting its Competitive Measure of being in the lower 50% of Texas Rates
 - Nearly ½ of AE's portfolio will have a fixed price and won't track the market for better or worse

2013 Average Texas Electricity Price by Customer Class (cents/kWh)				
	Residential	Commercial	Industrial	Total
Austin Energy	11.09	10.03	6.88	9.66
Texas Average	11.35	8.02	6.36	8.98
2014 Average Texas Electricity Price by Customer Class (cents/kWh) - Preliminary				
	Residential	Commercial	Industrial	Total
Austin Energy	11.31	10.41	7.00	9.96
Texas Average	11.80	8.12	6.17	8.96
2015 (thru June) Texas Average Electricity Price by Customer Class (cents/kWh) - Preliminary				
	Residential	Commercial	Industrial	Total
Austin Energy	10.89	9.92	6.49	9.49
Texas Average	11.84	7.93	5.65	8.72

Source:
 EIA - 2013 ANNUAL ELECTRIC POWER INDUSTRY REPORT
 2014 - 2015 Preliminary costs are based on EIA Monthly Reports.
 Industrial totals exclude REPs serving industrial customers only.

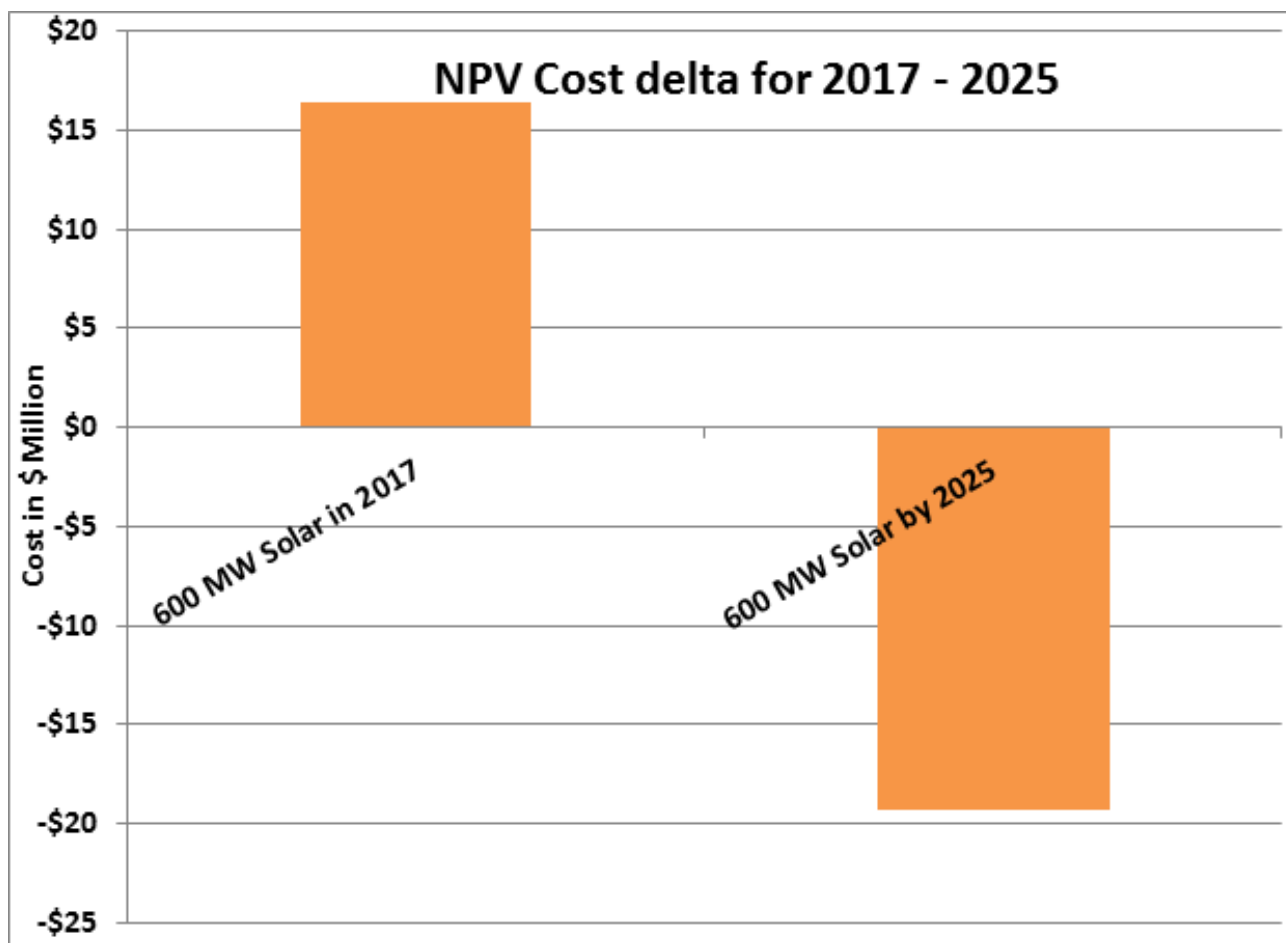
Managing Risk - Credit Risk

Debt Service and PPA Commitments with 600 MW Solar addition



Potential Cost of Accelerated Adoption

- A difference of \$36M on a Net Present Value basis
- Reflects:
 - Timing and cost differences for 600 MW of solar by 2017 or 300 MW by 2017 with an additional 300 MW staged in from 2020 to 2025
 - We assume ownership for solar additions after 2017





Risk Factors

- Future gas, power and solar prices
- Competitive Position
- Deregulation / Potential Stranded Assets
- Financial / Balance Sheet
- Status of the solar Investment Tax Credit after 2017
- Loss of EPA Clean Power Plan Early Action Credits available to renewable projects built *after* 2017
- Incomplete analysis
 - Navigant Study
 - Impact of other potential changes in AE's portfolio



Summary

- **Staff Recommendation:** Approval of up to 300 MW of utility scale solar by 2017
 - Later additions timed and sized to address Risk Factors
 - Maintains AE's leadership position with 480 MW of Utility Solar in total by 2017

Plan for 600 MW of Solar by 2017

- Today's briefing of potential impacts is the first step
- If Oversight Committee recommends 600 MW:
 - AE will prepare a second Request for Council Action (RCA) for an additional 300 – 350 MW for approval by Council in October
 - 1st opportunity for Council consideration would be October 1
 - Latest opportunity will be October 22
 - Allows the Navigant Report to be factored into the decision
 - Requires a Special Called Meeting to follow the Utility Oversight Committee

Next Steps

October 1

- Council Reviews 1st RCA for 200-300 MW of Solar by 2017
- Possible 2nd RCA for additional 300 – 350 MW of Solar by 2017

October
1 - 15

- AE and EUC to receive draft Navigant Report

October
15 - 18

- AE receives final Navigant Report

October 19

- EUC is briefed on final Navigant Report

October 22

- Council briefed on Final Navigant Final Report
- Possible Special called Meeting for an additional 300 MW of solar by 2017



End