

Amendment to the Agreement for a Microgrid Demonstration System



September 20, 2018

Emma Walton, Deputy Director of Engineering Resources

OUR FUTURE IN EVERY DRÖP

Agenda



The Background

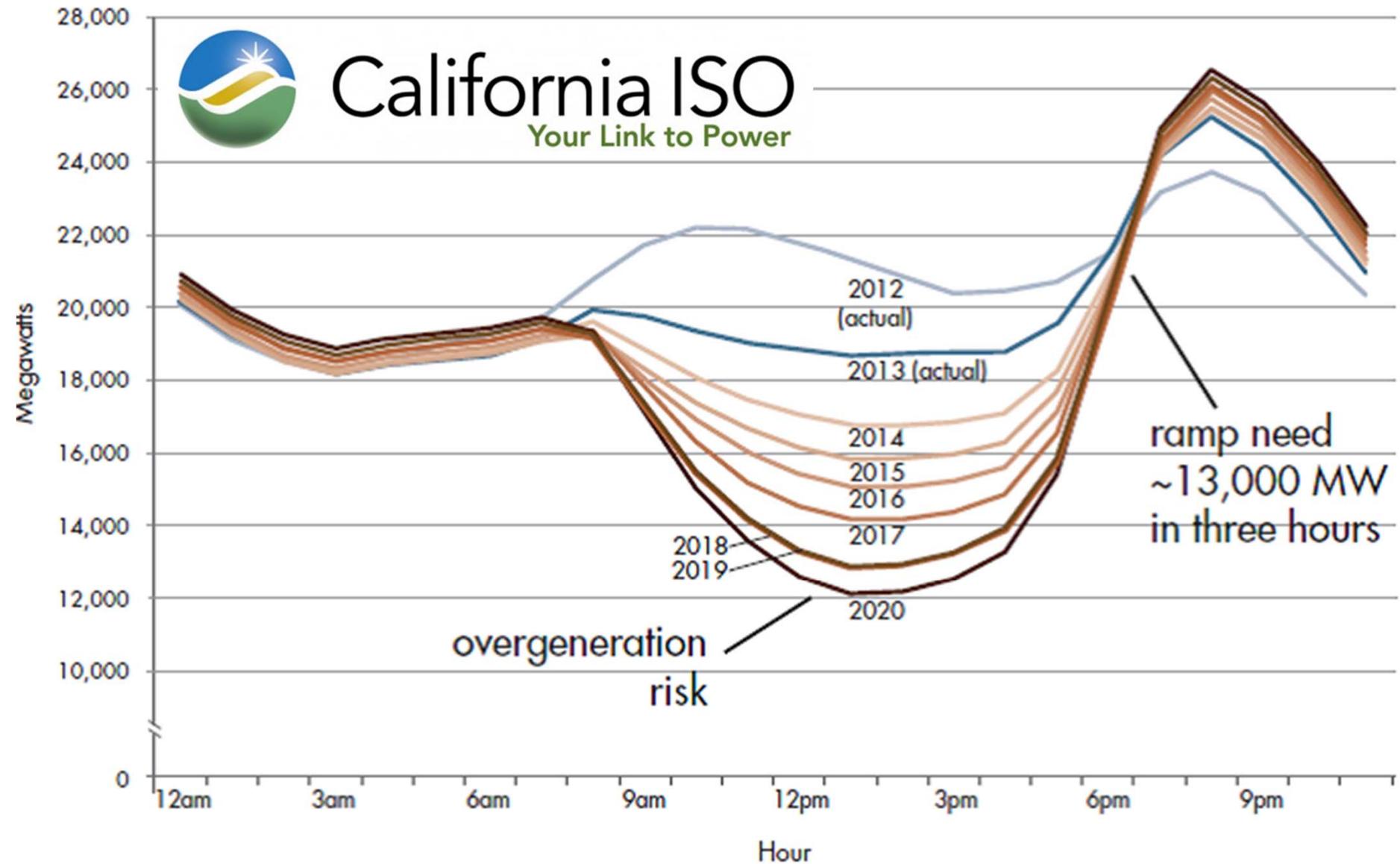


The Project



The Amendment

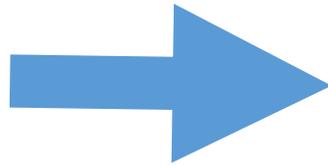
The Background - The Solar Problem



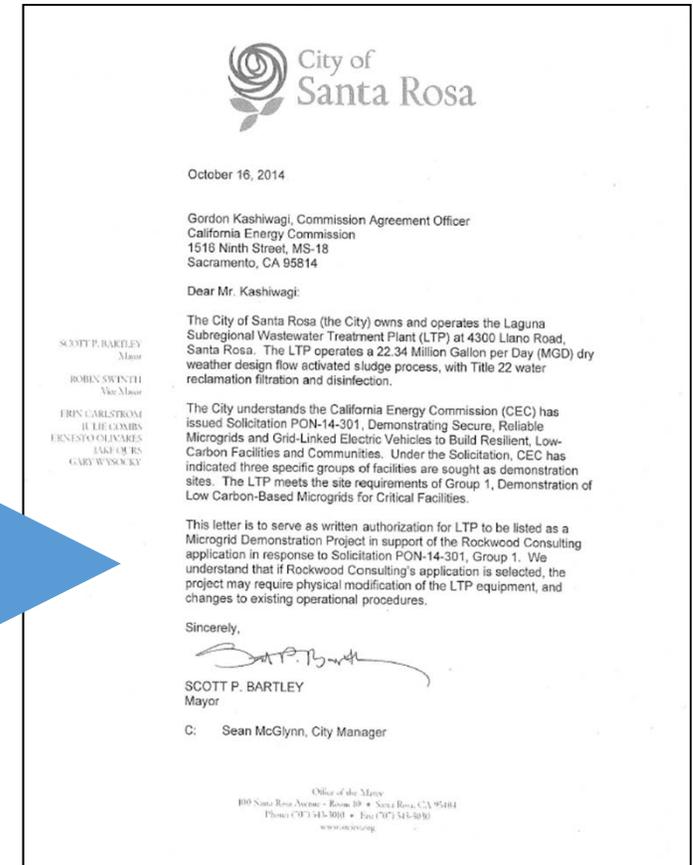
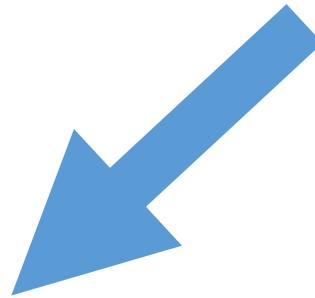
The Background - The Grant



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The Project – What is it?



The Project – The Solar Array



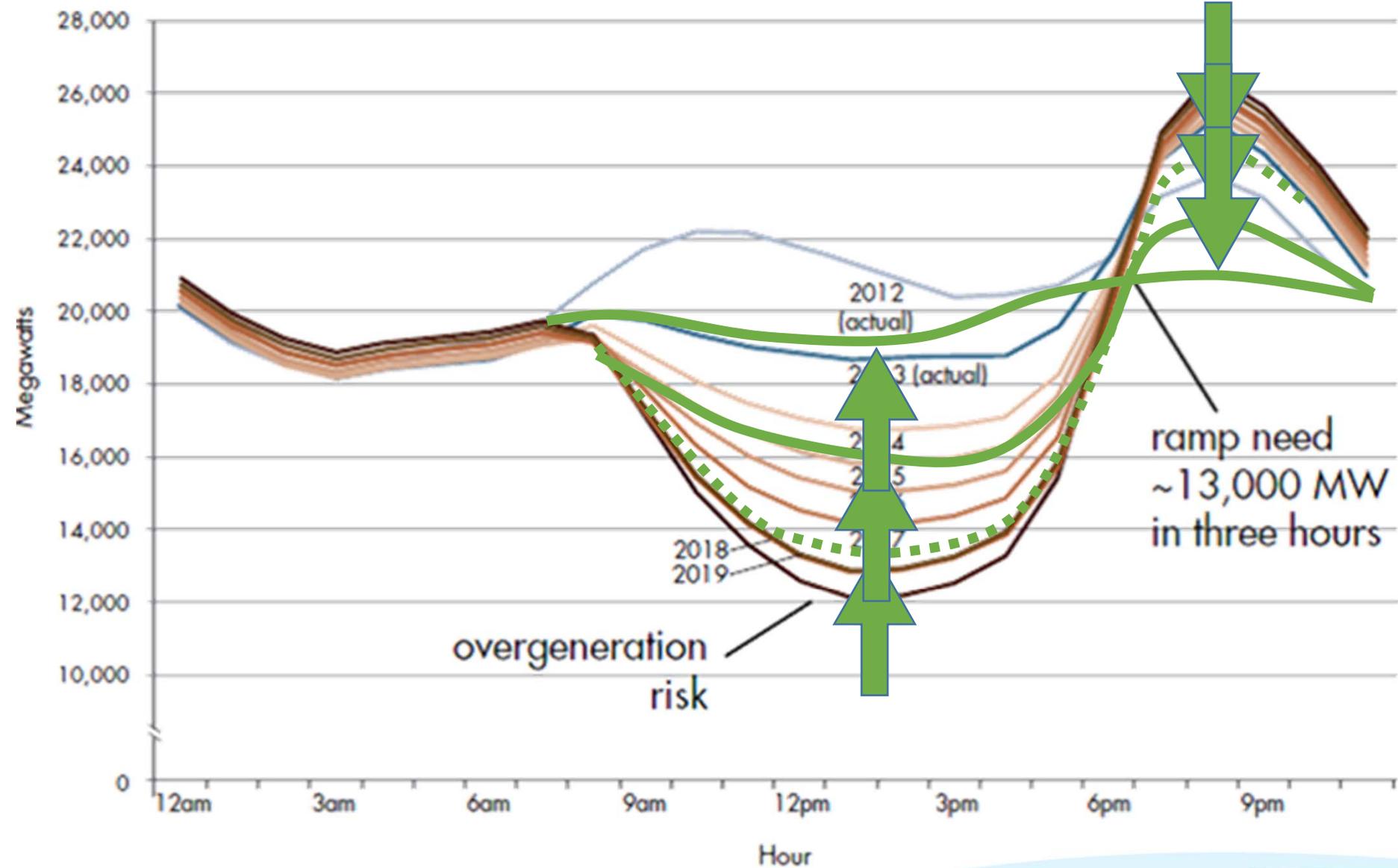
The Project – The SCRs



The Project – The Battery



The Project – How does it help?



The Project – Costs

Estimated Capital Costs Incurred by the City

Matching Funds	\$750,000
Infrastructure Upgrades	\$968,000
Project Implementation	\$500,000
City's Capital Costs	\$2,218,000

Costs Incurred by Others

CEC Grant	\$4,999,804
Trane's Matching Funds	\$2,200,000

The Project – Benefits

Estimated Ongoing Costs/Benefits

Electrical Cost Savings	\$1,000,000/year
Solar System Savings	\$13,000/year
Potential Revenue	\$150,000/year
Increased O&M	(\$480,000/year)
Net Savings	\$520,000/year

City's Capital Costs **\$2,218,000**

Simple Payback - 4 years

The Amendment – Costs and Benefits

Estimated Capital Costs

Upgraded Meter (Amendment)	\$13,478
SGIP Application/PDP Services	\$24,780
Total Costs	\$38,258

Estimated Benefits

Rebate at Installation	\$80,000
Over next 5-years	\$16k - \$32k/year
Total Rebate	\$160k - \$240k

Recommendation

It is recommended by the Water Department that the Board, by motion, approve the First Amendment to the Agreement for the Design, Installation, Operation and Ownership of a Microgrid Demonstration System.

Questions?