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The Impact of Localized Energy Resources on SCE's Distribution and Transmission System

Staff Integrated Energy Policy Report (IEPR) Workshop

August 22, 2013

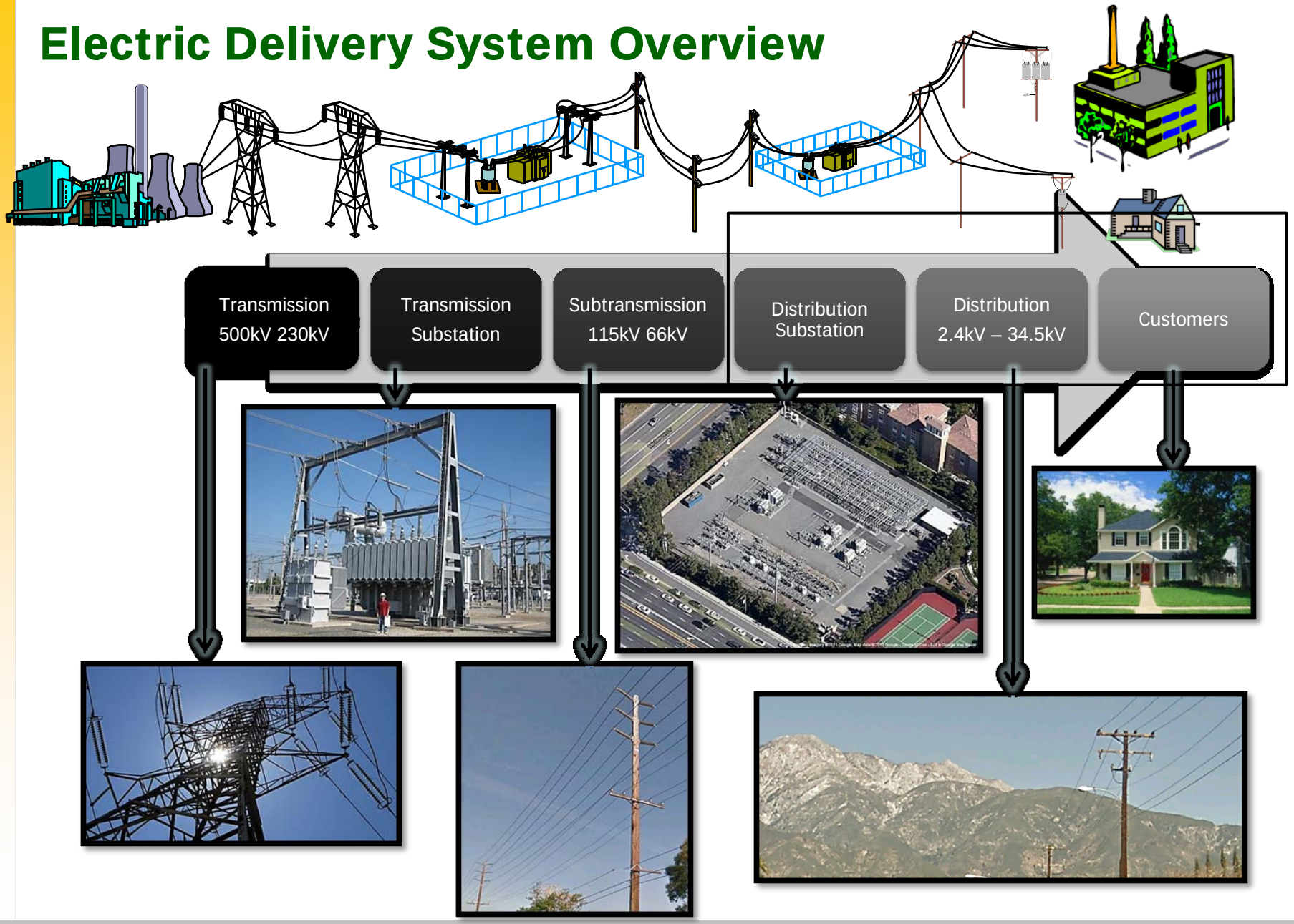
Presentation Overview

- History and Purpose of SCE's Study
- Overall Findings
- Areas not Covered by the LER Study
- Next Steps

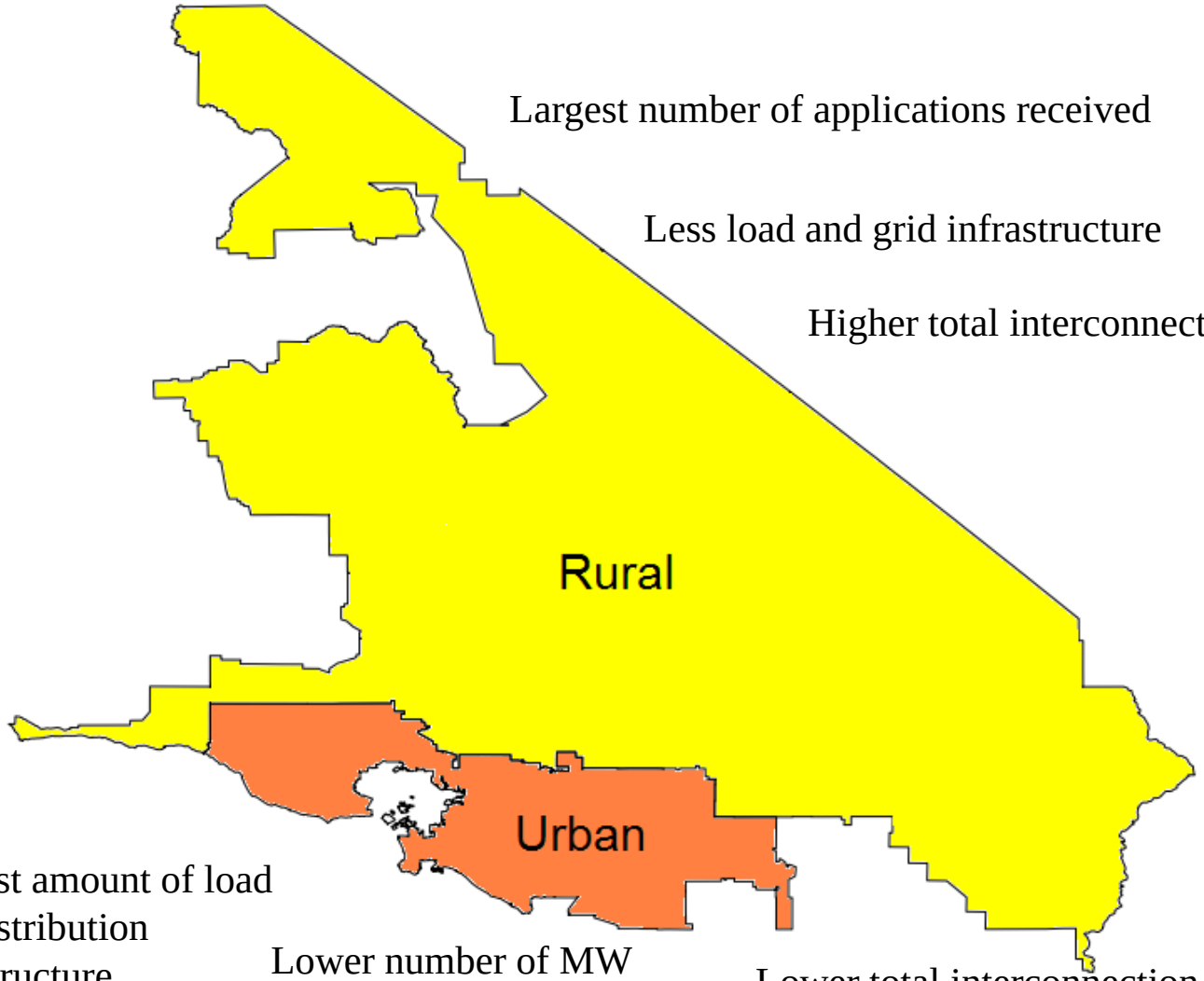
History and Purpose

- Published in May 2012 in response to 12,000 MW goal and SCE's desire to support
- Modeled feeders and reviewed results of over 120 system impact studies
- To further understanding in cost impact of current trajectory of LER penetration
- Findings to be used to inform stakeholders and policy makers, identify further areas of study

Electric Delivery System Overview



Summary of Findings



Largest number of applications received

Less load and grid infrastructure

Higher total interconnection costs

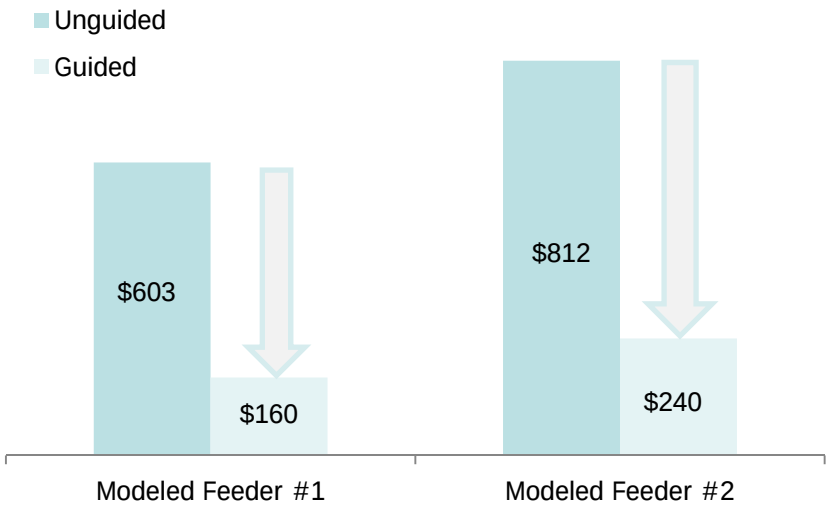
Highest amount of load and distribution infrastructure

Lower number of MW being applied for

Lower total interconnection costs

Location of LER can significantly affect system impacts and costs

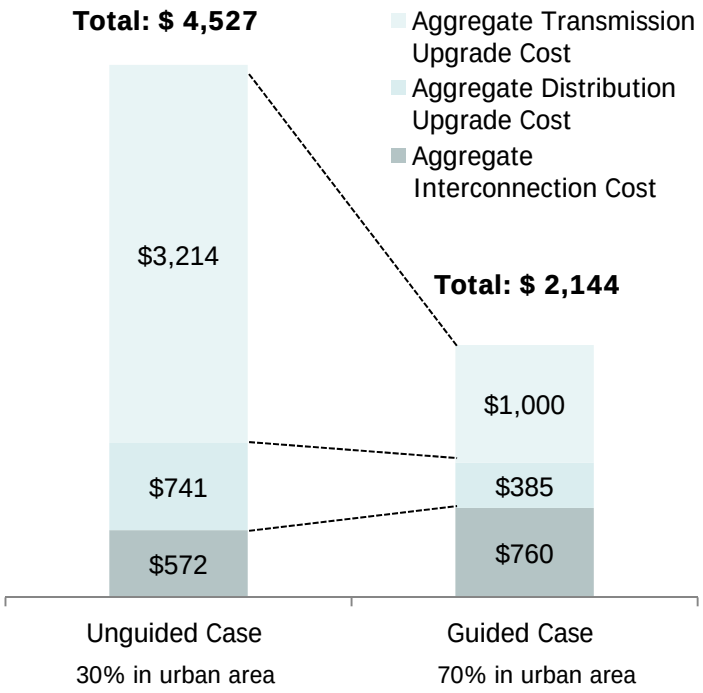
Distribution and Interconnection
Average Cost in $000/MW



Proper siting and location of LER will result in significant reduction in interconnection costs

Extrapolating the circuit level results to the entire system illustrates a significant cost avoidance if the LERs are more strategically placed

Aggregated System Costs of LER
($Million)



* See page 15 in Appendix for detail on study methodology

Areas Not Covered By the Study

- System benefits of LER
- Long term need for rate reform
- Impacts to procurement costs

Next Steps

- SCE is looking forward to the results of the Navigant study to further understanding of impacts and costs to add LER
- More work is required to understand the broad range of impacts of adding high amounts of LER