ORACLE

Opower Behavioral Load Shaping

Case study on helping customers get the most from variable rates

David Siddiqui

Senior Manager, Regulatory Affairs and Market Development Oracle Energy and Water

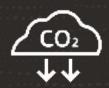
Presented at Midwest Energy Efficiency Alliance (MEEA) Midwest Energy Solutions Conference January 31, 2023



Customer action is key to delivering fast, affordable decarbonization results



By 2040, utility customer action can reduce nearly 2x more GHG emissions than clean supply.



534 MMT Avoided CO2 in 2040 as a result of customer actions – the equivalent of **retiring 135 coal plants**

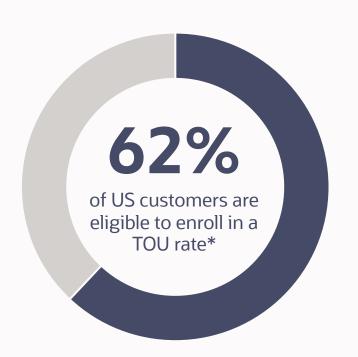


Demand flexibility programs will be critical, as they:

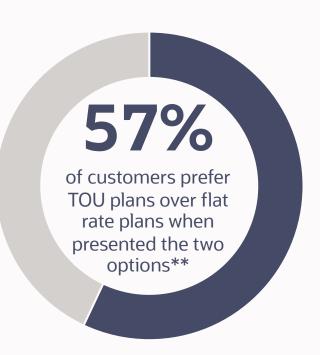
- Facilitate the integration of renewable energy resources
- Reduce renewable energy curtailment
- Mitigate the need for system upgrades to serve rising peak demand



There's huge opportunity to enroll customers in Time-of-Use rates





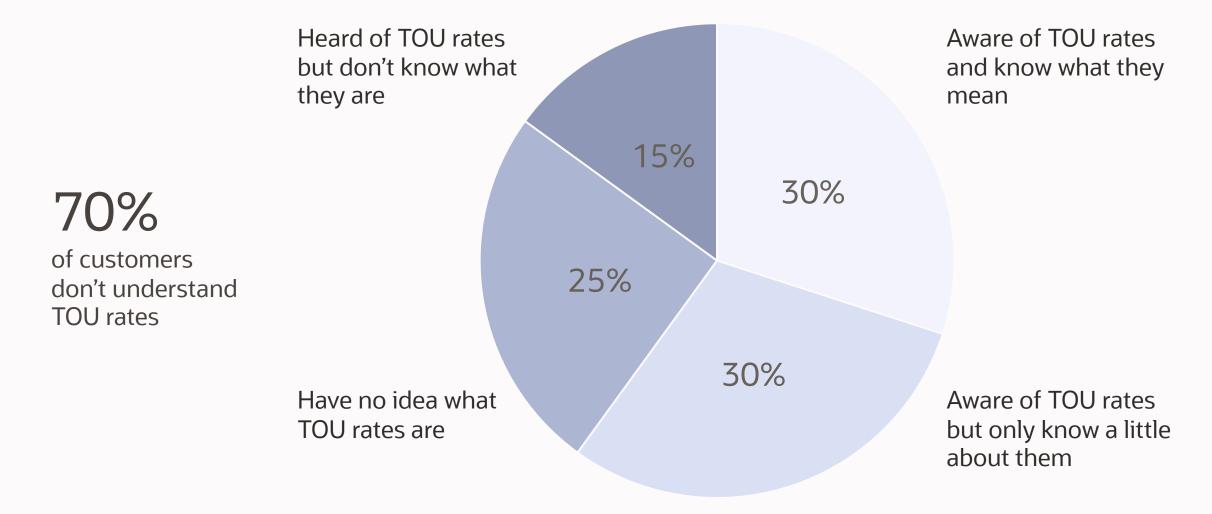




^{*} https://www.utilitydive.com/spons/the-4-universal-truths-of-a-successful-tou-rate-transition/624255/

^{**} BrandSpark Brand Health Tracking Research, Q2 2020

Customers need better education and engagement



Opower engages customers along the entire journey

Educate Enroll Engage

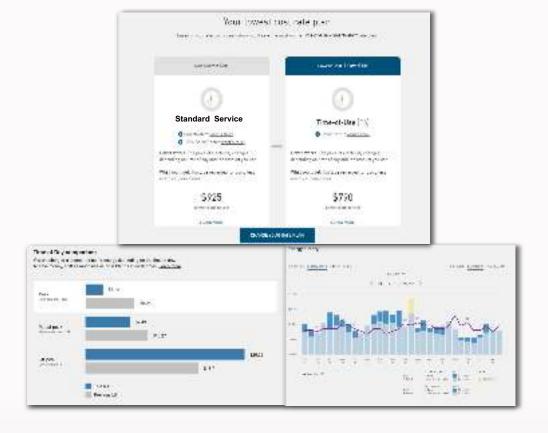
Rate Education Reports

Customers receive proactive, personalized rate education with shadow billing



Rate Analysis and TOU Cost Insights

Customer explores rate options and TOU usage online



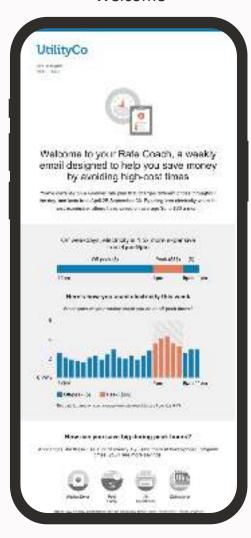
Behavioral Load Shaping

Weekly Communications to help customers adapt to TOU and avoid High Bills

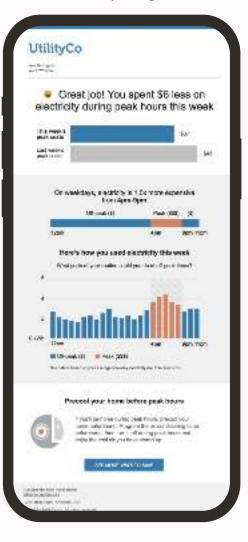


BLS communications help customers shift & save to get the most from TOU

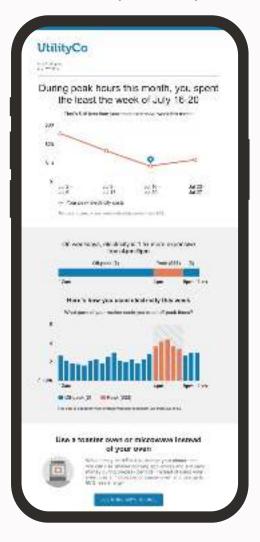
Welcome



Weekly Progress



Monthly Summary



Seasonal Changes



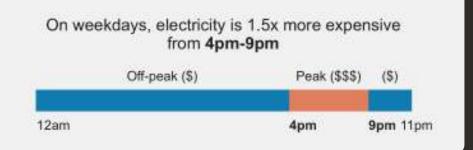
UtilityCo

Ana Rodriguez Accl ****1234



Welcome to your Rate Coach, a weekly email designed to help you save money by avoiding high-cost times

You're currently on a summer rate plan that charges different prices throughout the day, and lasts from April 25-September 30. By using less electricity when it's most expensive, others have saved on average \$5 to \$30 a month.



Welcome Email

Help customers understand their new rate

Improve rate literacy with clear, helpful information

Explain how peak pricing works with engaging visuals



Weekly Email

67%

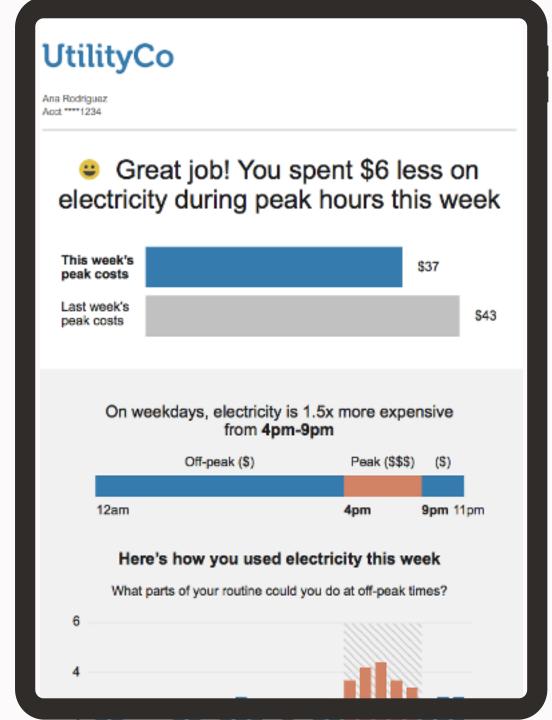
Customers who prefer the weekly cadence of communications

Disaggregation-powered recommendations help customers shift large loads

"I'm finding this really valuable. I'm finding that things change week to week more than I thought they would."



Amanda, UX research subject

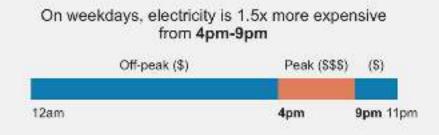


UtilityCo

Ana Rodriguez Apot **** 1234

During peak hours this month, you spent the least the week of July 16-20





Monthly Summary

Keep service costs low with proactive billing insights

Scale up device automation programs with targeted marketing

"These emails give the customer some power and control in the process, so they don't end up with a surprisingly large bill."

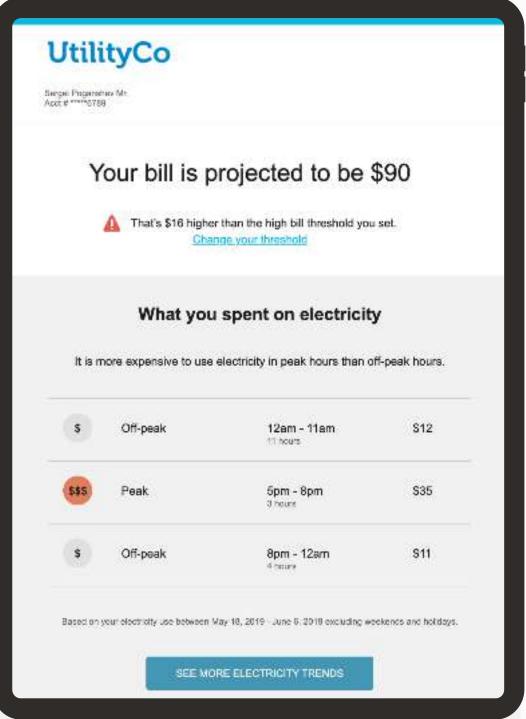


High-Bill Alerts

19% reduction in high bill calls

5% increase in overall satisfaction

3X opens and **9X** clicks compared to utility industry emails



Opower Behavioral Load Shaping Case Study

Western Utility

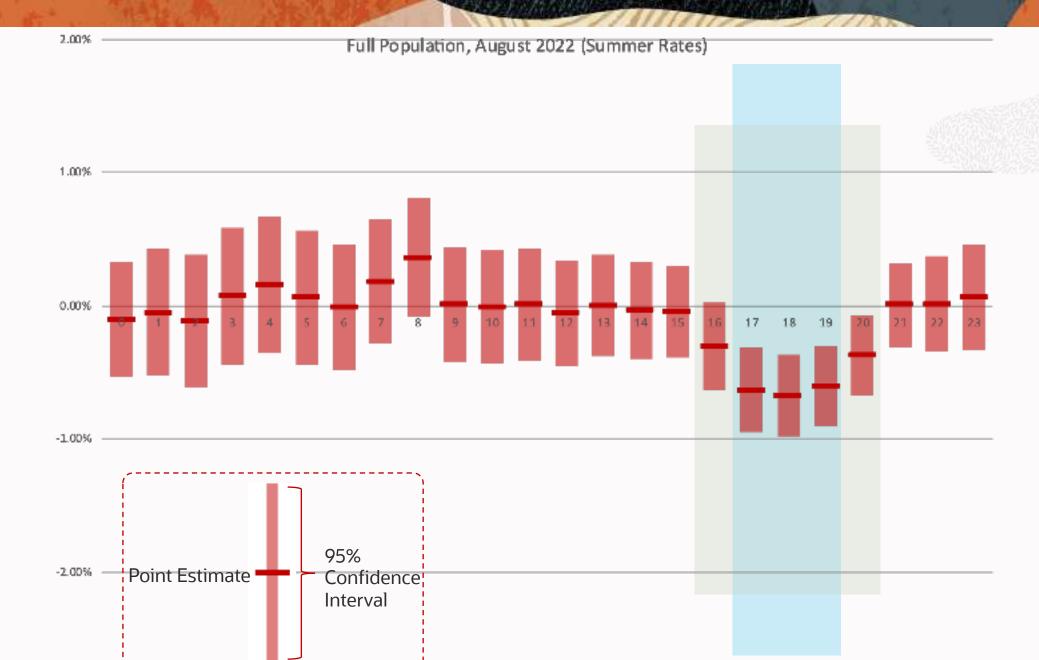


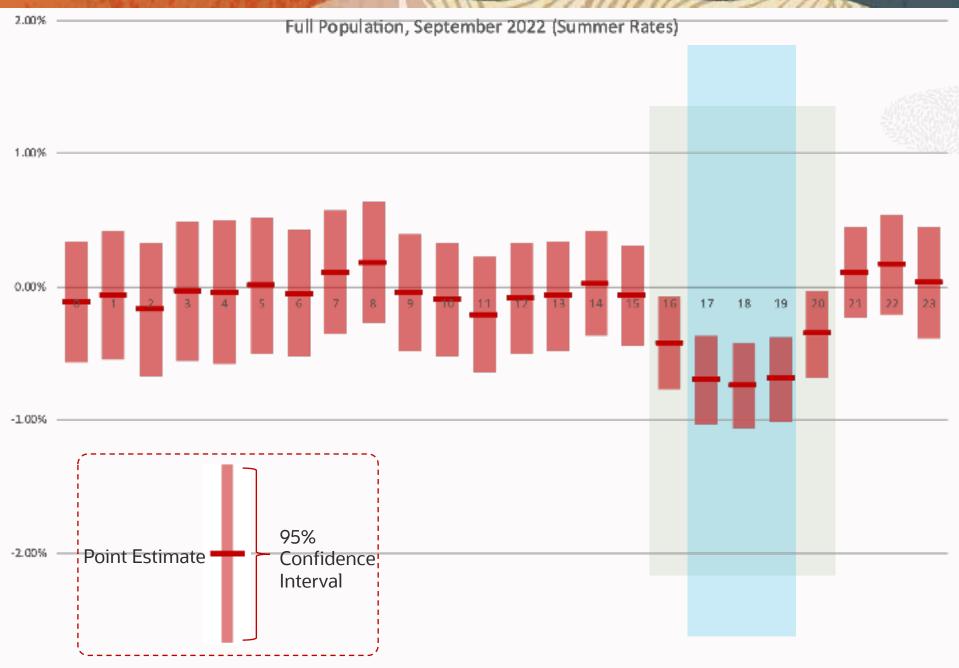
Rate Plan Coach Deployment Summary

- First communications sent on July 28, 2022
- Measurements for months of August, September, & October
- 812k new households included in the 2022 Rate Plan Coach wave

Rate Plan	Treatment HHs	Control HHs	Totals
5pm-8pm TOU	394,301	31,578	425,879
4pm-9pm TOU	417,885	33,422	451,307
Totals	812,186	65,000	877,186

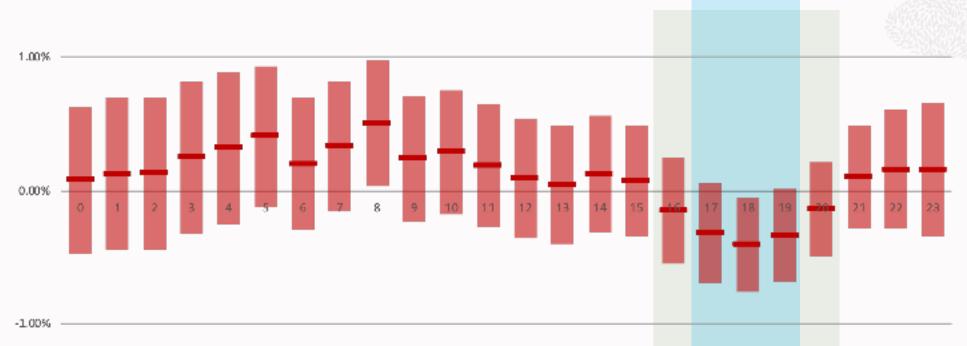
Around 55k households from the 2021 Rate Plan Coach pilot were also included in the program this
year

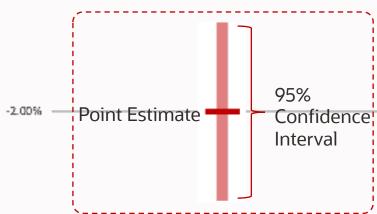


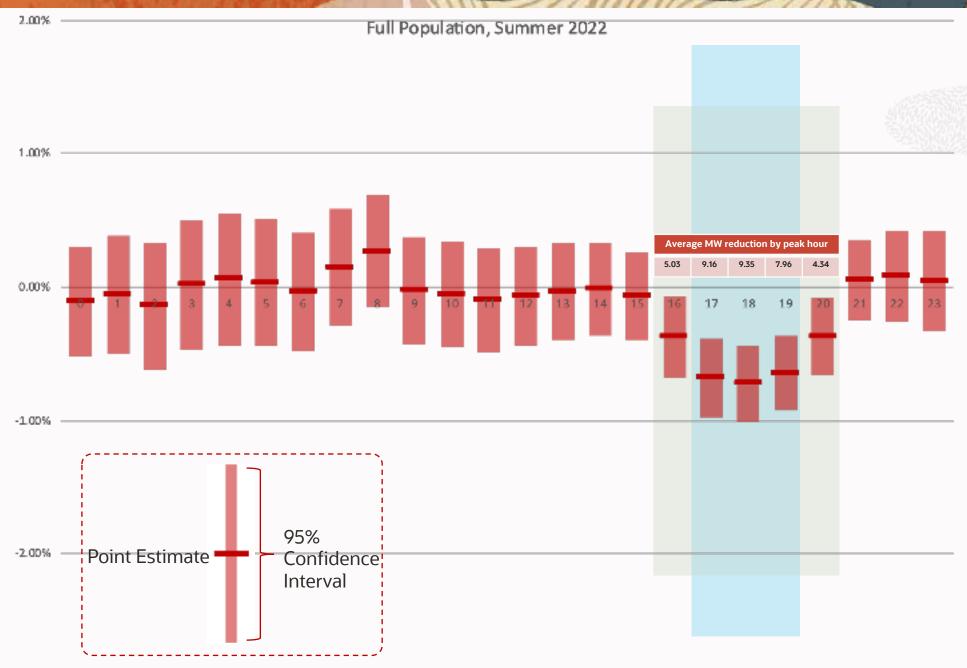


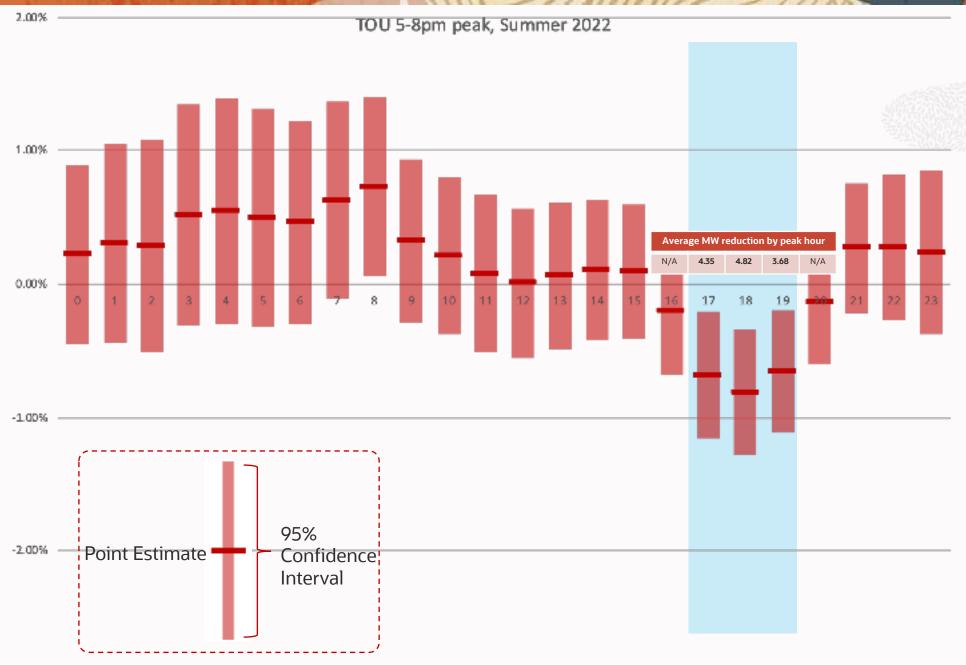


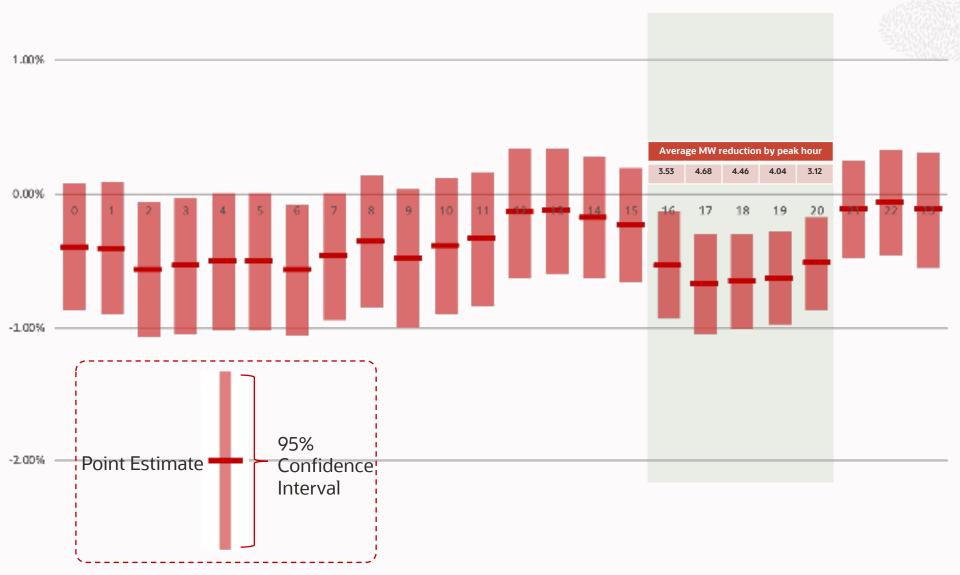
Full Population, October 2022 (Winter Rates)





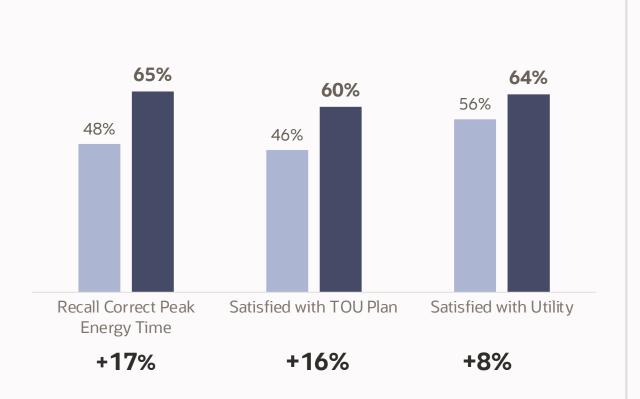








BLS customers are more engaged and satisfied



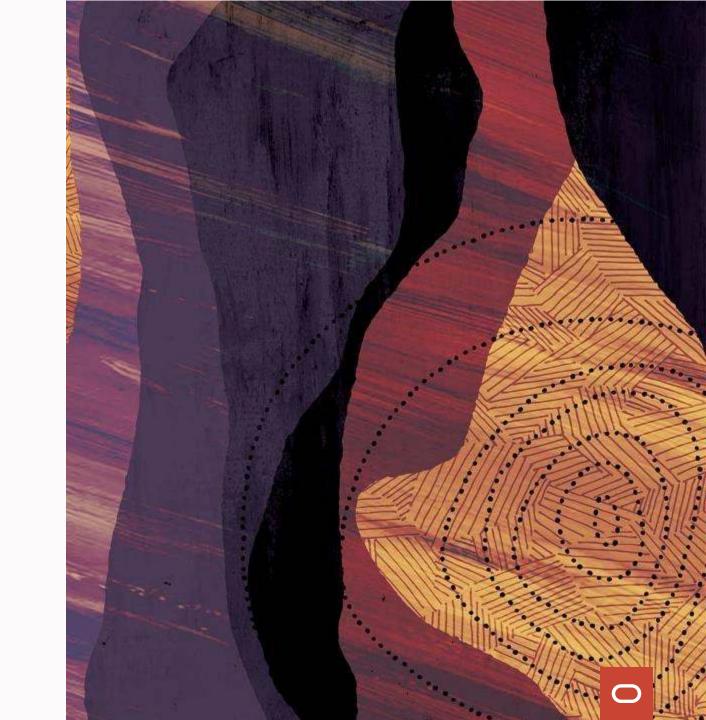
1 to 2%

Peak load shift across five utility deployments

60%

Digital engagement at one southwest utility among BLS recipients

"With this information we talk and strategize as to how we can reduce energy usage during these hours. We talk about what we did the previous week if we did use more energy that the week before. These emails help."



David Siddiqui

+1 510 908 4092 david.siddiqui@oracle.com

ORACLE