



2023 CONSUMER SYMPOSIUM

FEB 6, 2023, SAN DIEGO

EMPOWERING CONSUMERS THROUGH THE ENERGY TRANSITION

#SECC2023

Co-located with *DISTRIBUTECH International*

Empowering Consumers Through the Energy Transition

#SECC2023



How to Get More Customers on TOU Rates

A Southern California Edison Case Study

Scott Engstrom
GridX CCO

February
2023

Company overview

ABOUT US



GridX is the leading provider of Big Data Billing & Analytics technology for the new energy economy. Our technology enables utilities to better design, promote, operationalize, and drive adoption of emerging energy products and programs.

THE VALUE WE PROVIDE

- We enable the clean energy transition.
- We empower energy suppliers to swiftly design & deploy new rates & business models.
- We accelerate the adoption of renewables with billing-grade conversion tools

UNMATCHED SCALE

26M

Meters Under Contract

1T

Intervals Under Management

49M+

Bills Calculated Each Day

>500

Tariffs Modeled & Validated

COMPANY

11+

Large Utility Customers



Backed by EIP

120

Employees

2010

Founded

RPS and decarbonization goals are aggressive

- **CA Muni** – “Our goal is to reach zero carbon emissions in our power supply by 2030”
- **Northwest IOU** – “By 2030: At least an 80% reduction in greenhouse gas emissions from power served to customers”
- **Southeast Multi-state IOU** – “actively advancing a net zero by 2050 goal”

How do these goals get achieved?

CA Muni	NW IOU	SE Multi-State IOU
Proven clean technology	More renewable generating facilities through wind and solar	Growth in our portfolio of zero-carbon resources
New technology and business models	Battery storage	Enhanced EE initiatives
Natural gas generation repurposing	New, innovative programs that offer a variety of choices to customers	Investment in R&D of clean energy technologies

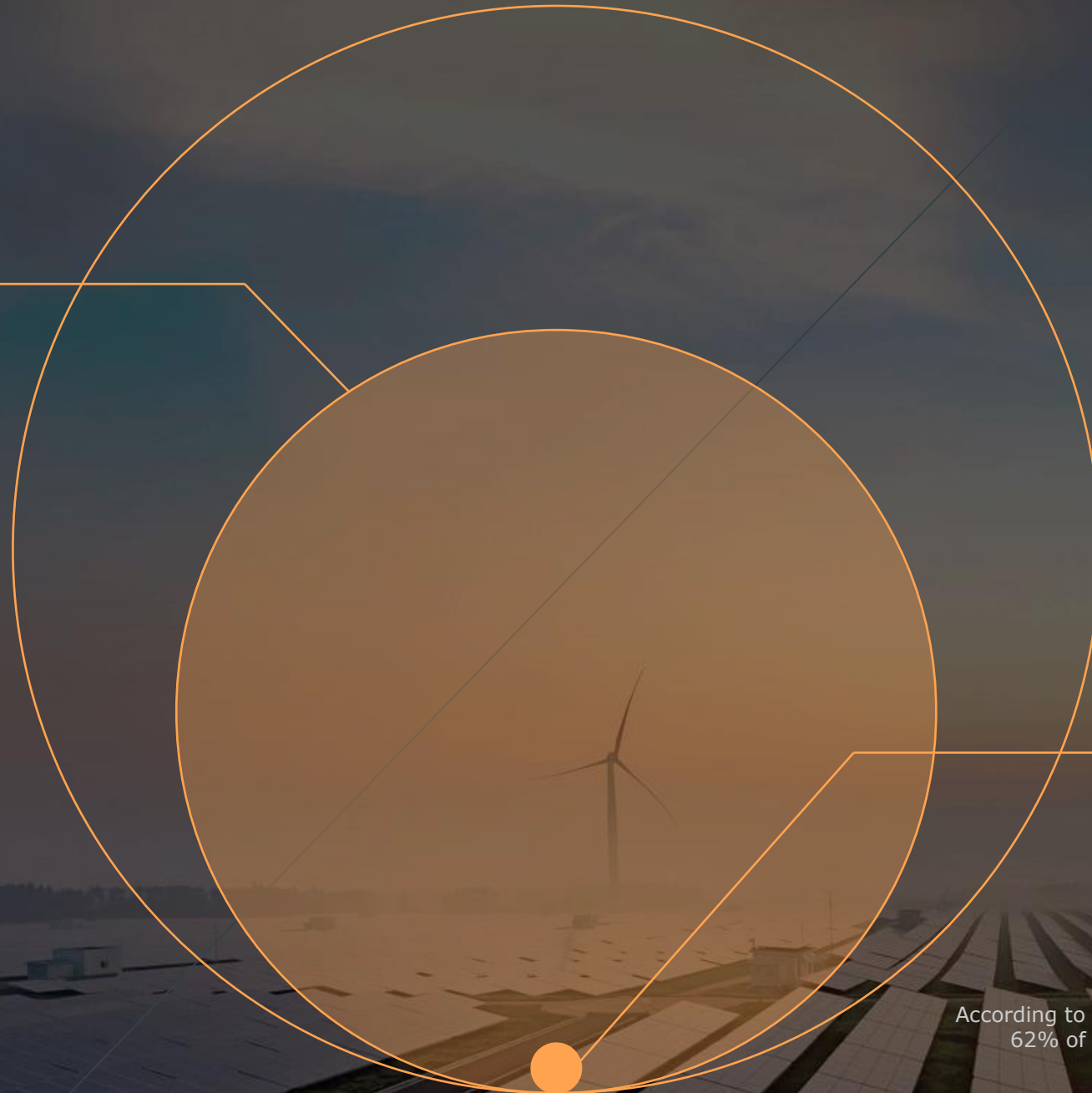
62%

TOU rates are
available to 62% of
U.S. residential
customers

7.3%

Only 7.3 of are
enrolled

According to EIA data, while TOU rates are available to 62% of U.S. residential customers, only 7.3% are enrolled in these plans.



SCE Case Study

Transitioning customers to TOU rates



Realizing a promise of smart meters

- ◇ The rollout of digital “smart” meters in California enabled customers to enroll in TOU rates but there was limited uptake
- ◇ In 2015, the CPUC issued a decision providing steps for SCE to shift its residential customers to TOU rates
- ◇ The transition began with an opt-in TOU pilot in July 2016 and a default pilot of 400k customers in 2018
- ◇ The full rollout started in Oct 2020 and ran through June 2022, with over 1.9M customers defaulted

Engaging and educating customers

- ◇ SCE required to provide a rate analysis prior to customers defaulting to a TOU rate
- ◇ Analyses display customers’ historical usage over the last 12 months and how each rate could impact their bill
- ◇ Effort culminated in an online rate tool (RPCT) that allowed consumers to compare savings under different rates and select their desired rate
- ◇ Benefits of partnering with GridX include accuracy, scalability, more timely and relevant data, and an internal user interface that enabled what-if scenarios on both an individual and batch level

The path to self service

- ◇ SCE discovered 5 key items that are needed by Res and Non-Res customers in order to transact via digital, self-service vs calling SCE
- ◇ These items centered around the core concepts of simplicity, personalization, and flexibility

Listed by
most important

- 1 Annual Cost
- 2 Cost Difference
- 3 Make it clear this is my usage
- 4 Clarify how long they have to commit to the new rate
- 5 What is the peak time when it comes to selecting a TOU rate

Current Plan	Option 1	Option 2	Option 3
TIERED	TOU-D-A	TOU-D-B	TOU-D-T
\$1,350 / year	\$1,196 / year	\$1,267 / year	\$1,396 / year
	Savings \$154	Savings \$83	Cost Increase \$46
This is your current rate plan. You will keep this plan unless you choose to switch to another.	Based on your usage history, we estimate that this is the lowest cost plan for you.	This may not be the right option for you based on your history. Consider changing how you use energy if you want this plan.	This may not be the right option for you based on your history. Consider changing how you use energy if you want this plan.
	Hours of Highest Rates 2 P.M. to 8 P.M. Weekdays	Hours of Highest Rates 2 P.M. to 8 P.M. Weekdays	Hours of Highest Rates 2 P.M. to 6 P.M. Weekdays
	1 Year Bill Protection	1 Year Bill Protection	
Plan Details	Plan Details	Plan Details	Plan Details
Keep This Plan >	Switch to This Plan >	Switch to This Plan >	Switch to This Plan >
	You Can Switch at Anytime	Requires 12 Month Commitment	Requires 12 Month Commitment

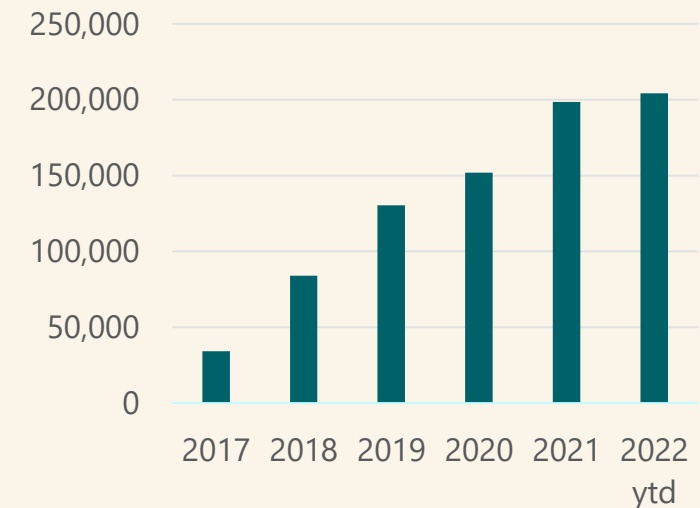
The results

TOU participation remains strong

- ◇ At the peak August load in 2022, Residential TOU (4-9PM and 5-8PM peak) was expected to provide up to **75MW of load reduction**
 - ◇ In their demand response line-up, this is equivalent to SCE's third largest program
- ◇ One of SCE's fastest growing rates is TOU-D-PRIME, which is for customers with an EV, heat pump water or space heater, or battery storage
 - ◇ EV customers who move to the Prime rate tend to **shift 20% of their energy usage** away from peak times, which helps to support the move to renewable energy, which is more abundant during the day

◇ RPCT use remains high

- ◇ Residential use of RPCT is strong and continues to grow – even despite the TOU rollout ending in June, customers continue to access and view the tool



Thank you!



Scott Engstrom
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M-Power Overview



Salt River Project, or SRP, is a community-based, not-for-profit organization, providing affordable water and power to more than 2 million people in central Arizona



It Starts with Our Vision

SRP Mission Statement

SRP serves our customers and communities by providing sustainable, reliable and affordable water and energy



Customer Operations Culture Statements

Safety

We work safely for our families,
our health and each other

Employee Engagement

We support each other by
communicating transparency,
collaborating with inclusion,
and operating as One SRP

Customer Experience

We provide the ultimate customer
experience in every interaction that
demonstrates our care and
commitment to our customers and
community



Delivering water and power™

As of January 2023

14

Customer Service is our focus – but Safety trumps the customer

Customer Expectations Constantly Evolve

The Energy Industry Is Changing Fast, and Most Utilities Aren't Ready

When it comes to adapting to changing customer demands with new technology, utilities risk falling behind, PwC survey finds.

by **Bob Keaveney**
Bob is the managing editor of *BizTech* magazine.

By Corrie (June 21, 2016)

The "twin forces of changing customer expectations and rapid technological evolution" are forcing a

to the
the future

220 19th Street, NW,
ategy Officer at the

sons

ERS



Delivering water and power™

As of January 2023

A Culture of UCE



Our Target is Always Moving

UCE Today

Growth Mindset



**UCE
Tomorrow**



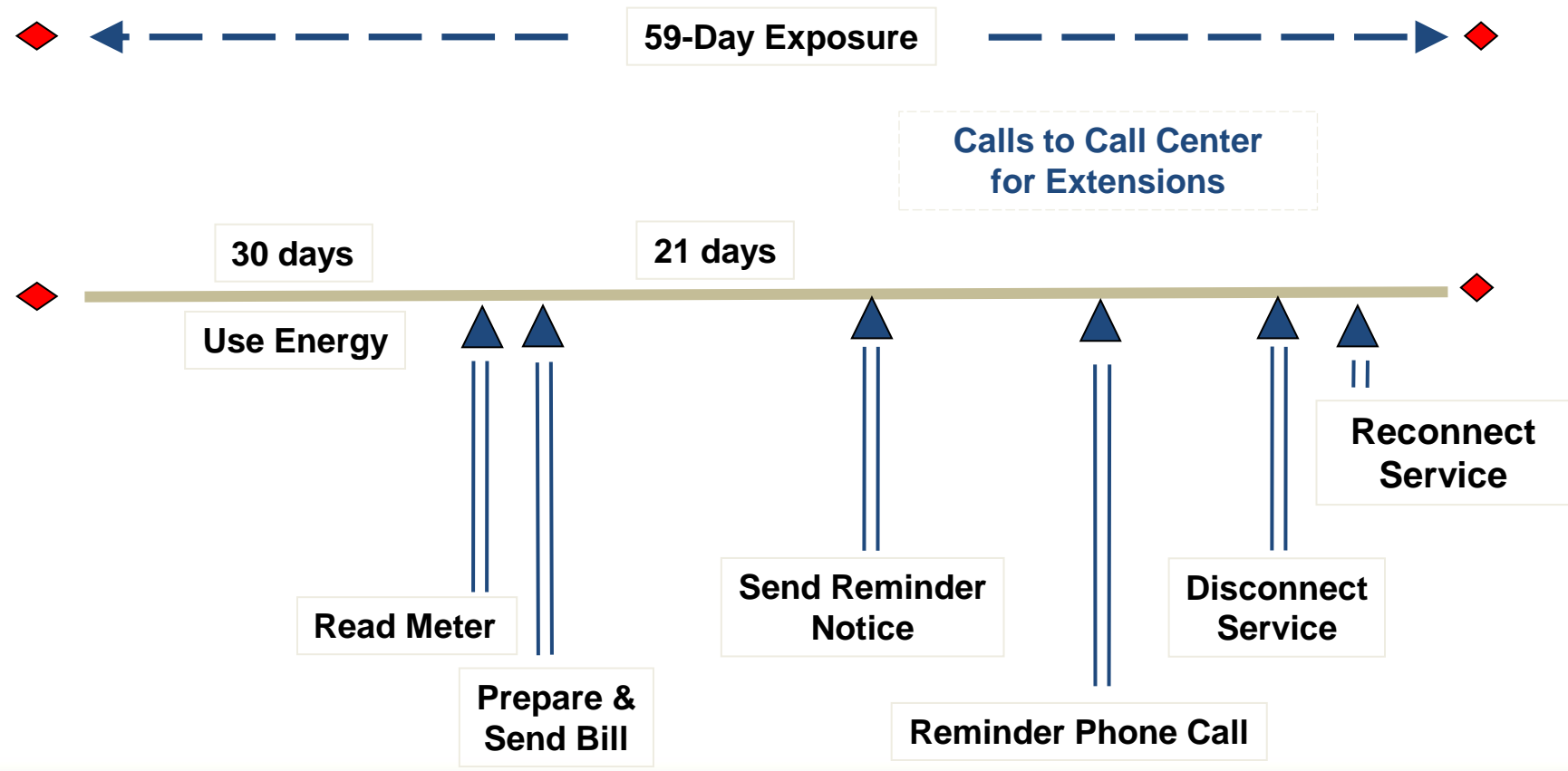
M-Power – SRP's Prepay Program

- Largest prepayment program in North America with 150,000+ active customers
 - Residential
 - Commercial
- Represents 15% of our customer base
- Provided as a voluntary alternative to standard residential Price Plans
- M-Power has been in existence over 25 years

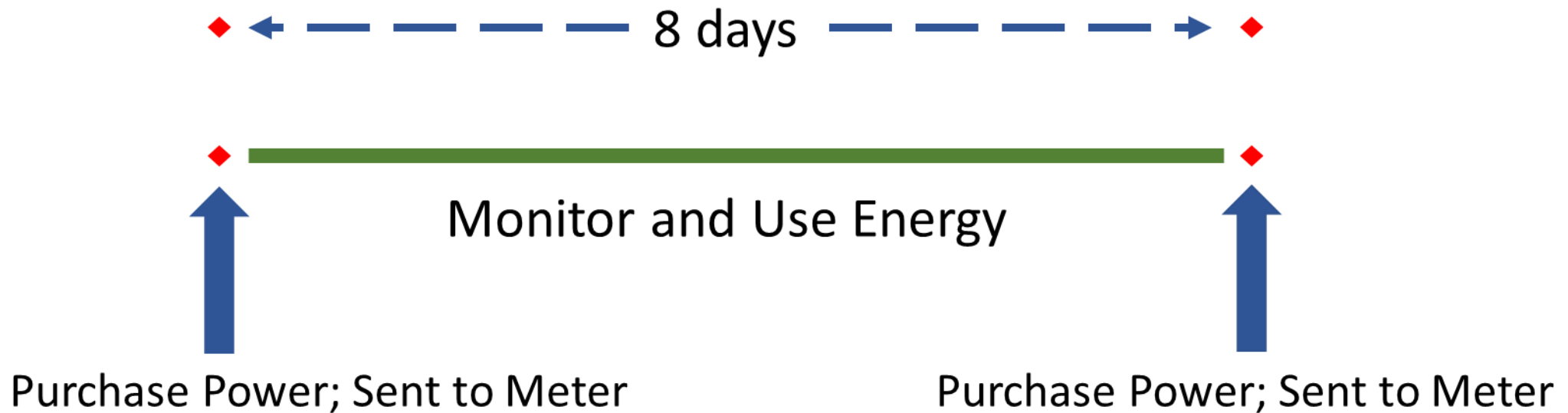
Customer Benefits of M-Power

- Lower startup cost: \$114 plus tax, paid overtime not upfront
 - Compared to \$290
- Save energy: 12% average annual savings
- User friendly
 - Pay for electricity as you choose
 - Customer is in control of disconnects
- No upfront costs or late fees.
- Better control over budget and cash flow
- Ability to pay down past due and remain in power
- No surprise bills or late charges
- Better manage your energy use with up-to-date information
- Easily share costs with other household members

Traditional Billing Cycle



Average M-Power Cycle



Average Customer Purchases \$39 Every 8 days

M-Power: How it works

- All logic is in meter
- Communicates via Power Line Carrier technology
- UDT displays energy in kWh and dollars
- Smart Cards are used for data communication and purchases
- Smart Cards load energy credit to the meter via UDT
- System and usage information is written to card

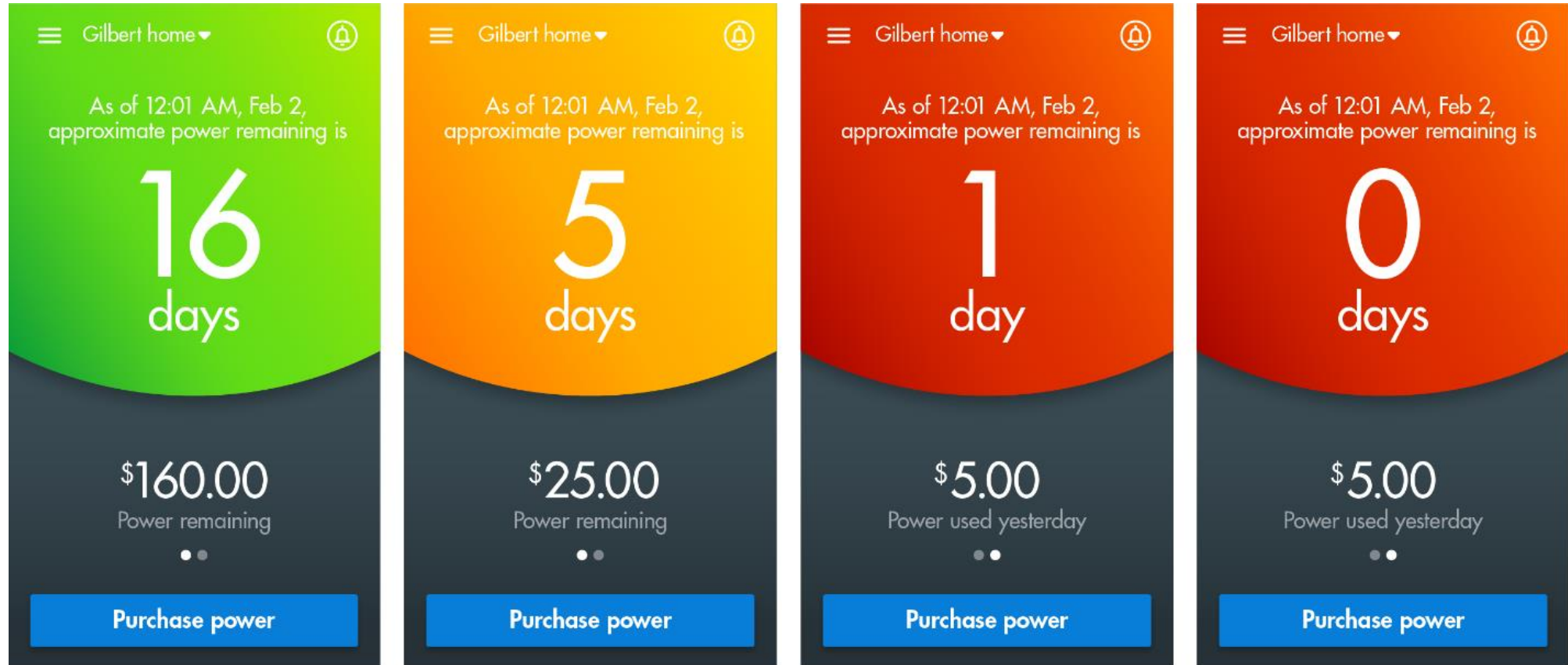


Information on the M-Power Box

- Remaining Credit Balance
- Enough credit for XX day(s)
- Cost per hour is \$X.XX
- Cost today is \$X.XX
- Cost yesterday was \$X.XX
- Cost this month is \$X.XX
- Cost last month was \$X.XX



M-Power App



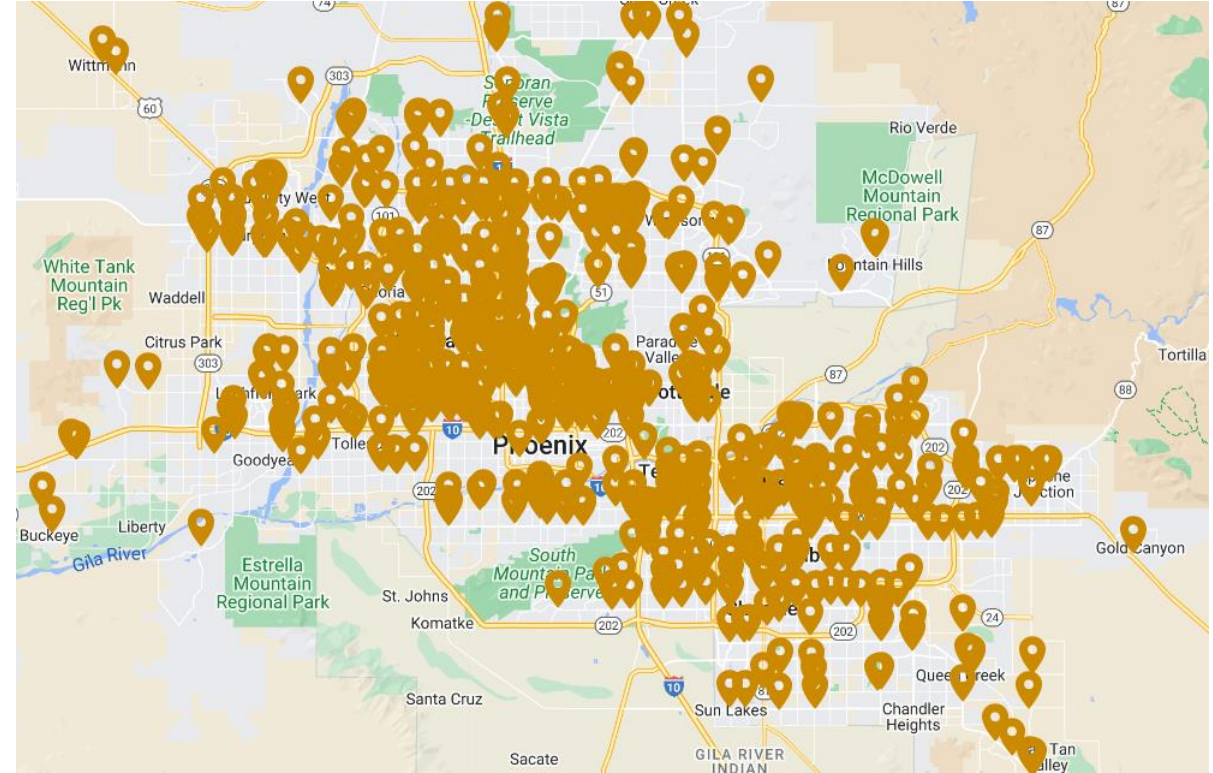
M-Power App

- Notifications
 - 'Purchase applied' to meter
 - 'Balance remaining' less than 2 days
 - 'Credit waiting'
 - 'Outages' – sent at the start of the outage and when power is restored
 - Returned checks – notification is hidden and always set to yes
 - If a customer has disabled push notifications for the M-Power app, they won't receive any notifications regardless of whether they are turned on or off.

SRP Fiserv solution

As of April 25, 2022, SRP customers can make cash payments at Fiserv locations (approximately 500 in service territory, over 4500 nationwide)

- Guest Services (Account number and (Power) house number
- In-Lane with their unique barcode




SRP Fiserv solution

SRP customers will have access to their individual barcode in multiple ways

- Mobile apps
- My Account
- Bill stubs
- Individual mailing

Printable cash payment card example





Go to a participating retail location or PayCenter and present your cash payment card. If you are paying at a checkout lane, you will be asked for your barcode (maximum payment of \$999). If you are paying at guest services or an SRP PayCenter, you will be asked for your account and house number.

For payments at guest services or a PayCenter:

Account Number **123-456-789** Street Number **12345**

For payments at checkout:



799366433580006371682812410390

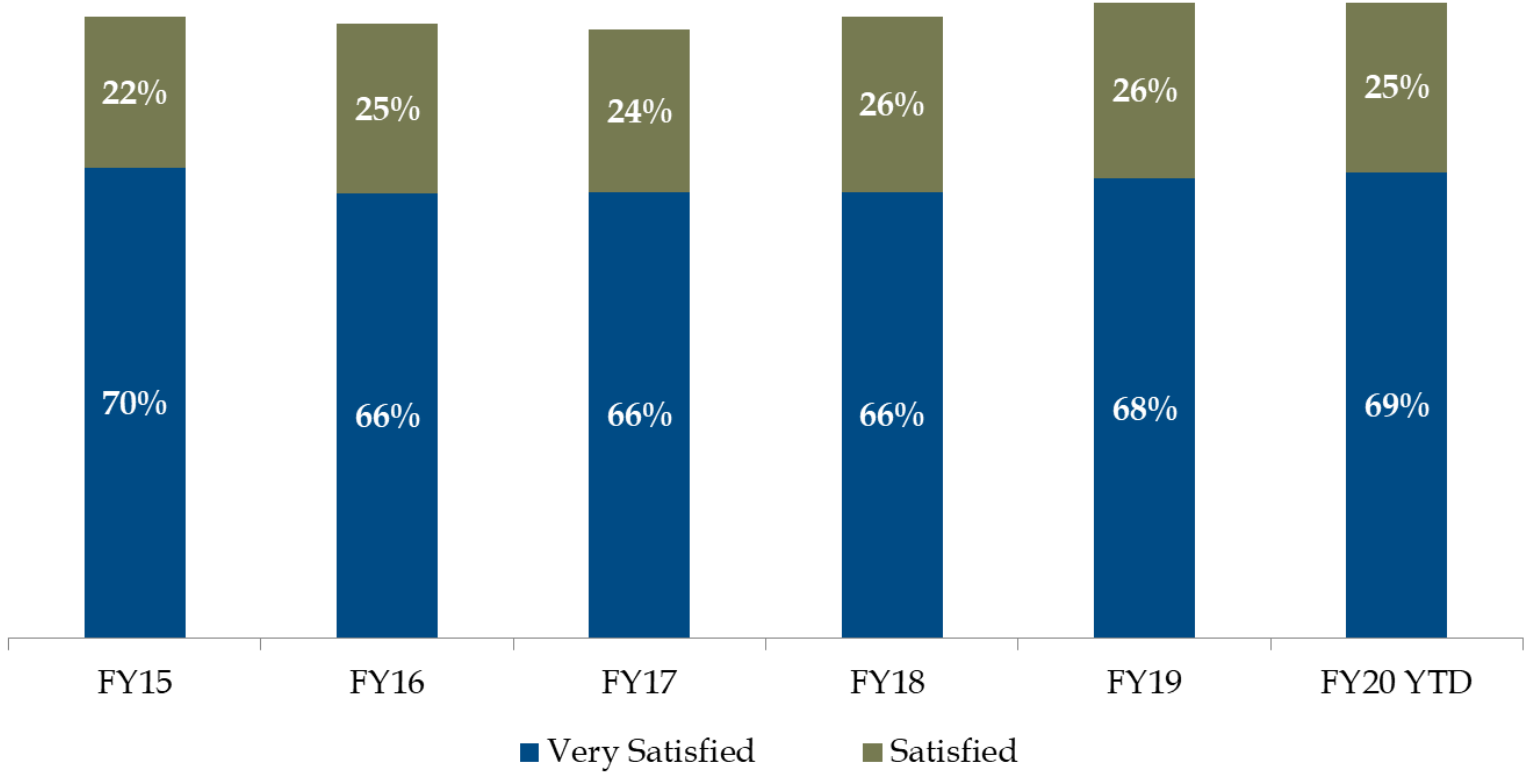
By using barcode to make cash payments (limit \$1-\$999), you agree to full terms at www.vanilladirect.com/pay/terms ;
access e-receipt at www.vanilladirect.com/pay/ereceipt.

Continued Challenges

- Unexpected changes and not understanding customer behavior
- Learning curve for new M-Power customers
- How best to communicate to our customers
- How best to help customers that need help

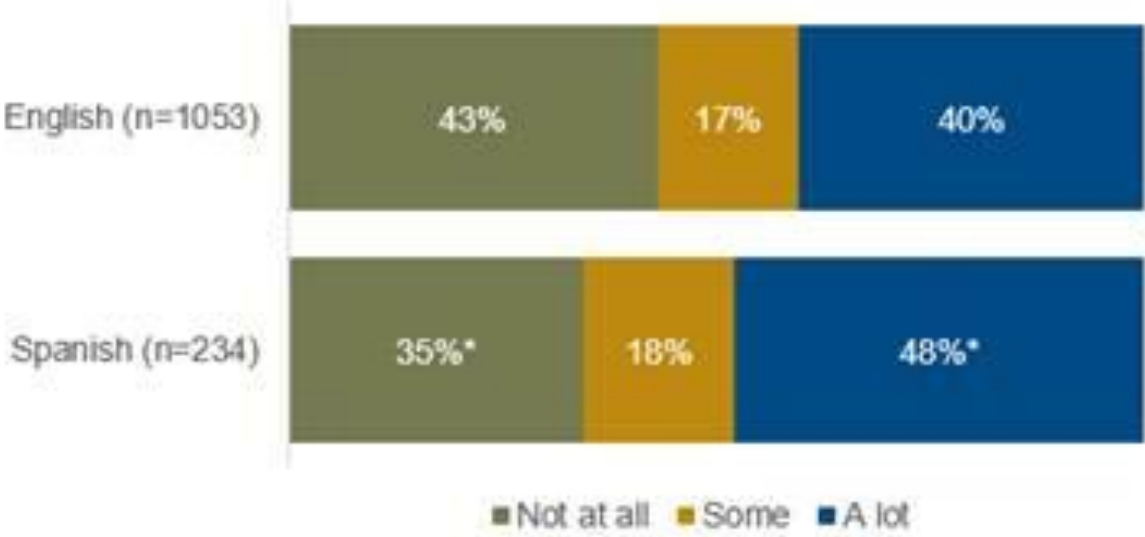
Satisfaction with M-Power Program

Satisfaction with M-Power remains high. The vast majority (94%) of M-Power customers continue to report being very satisfied/satisfied with the M-Power program during this year.

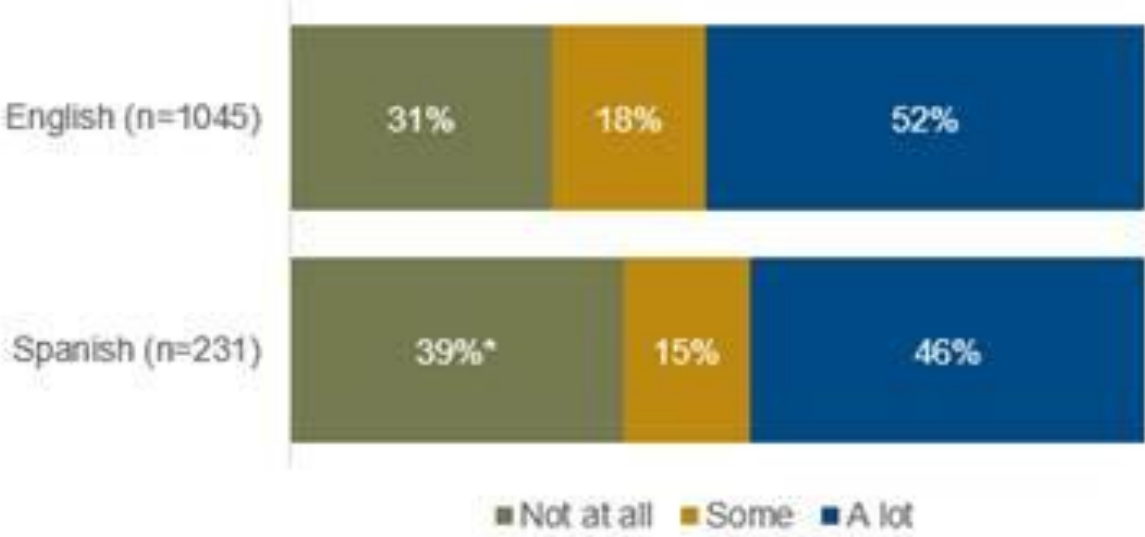


Reasons for Signing Up for M-Power

Personal Recommendation of Program



To Avoid Late Fees or Disconnection

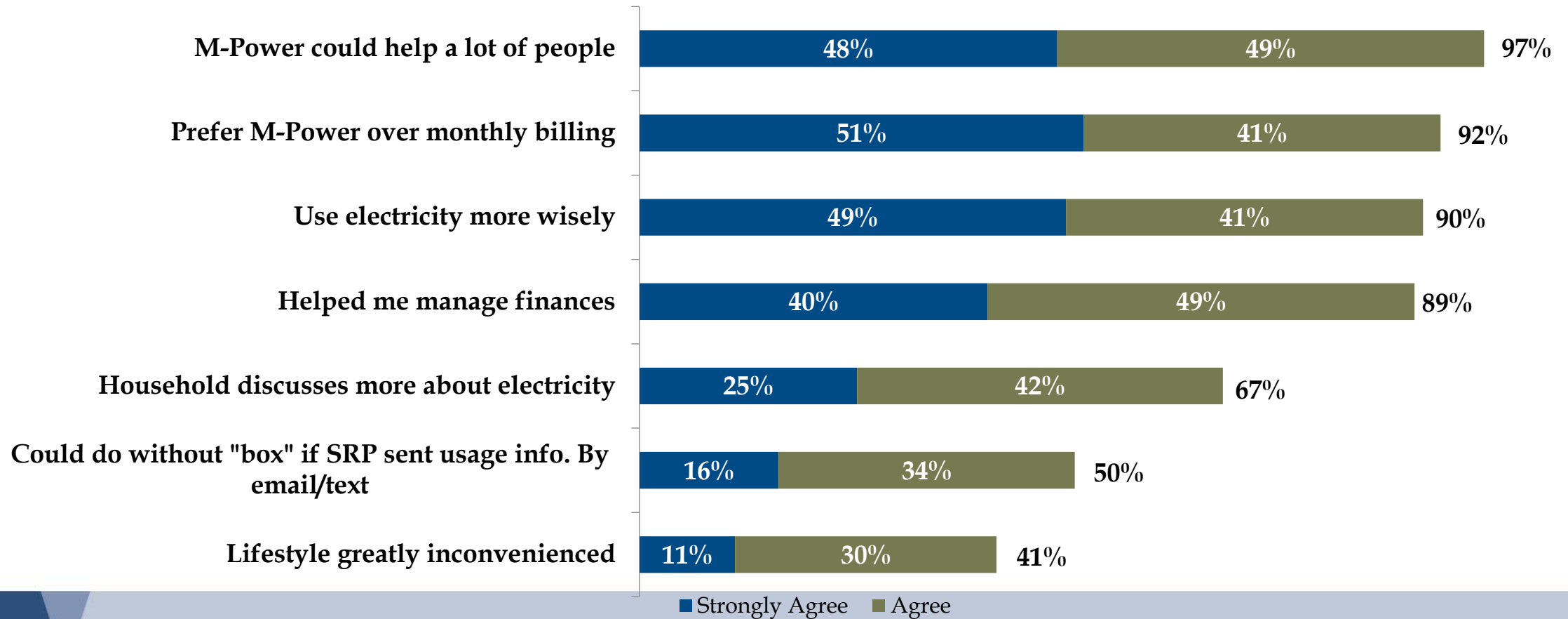


For each one I read, please indicate if this had a lot, some or not at all to do with you enrolling in the M-Power program.

M-Power Opinions


-FY20 Q2

Nearly all (97%) M-Power customers stated *M-Power could help a lot of people if they were aware of its benefits*. Fewer customers (41%) feel their lifestyles are greatly inconvenienced by M-Power.



Promotion of M-Power

- Reminder notice – in the letter and with an attachment
- Turn-On
- Help with paying bill calls
- In home display unit
- srpnet.com/payment/mpower/



SRP Delivering water and power®

**SAY GOODBYE
TO HOME ENERGY BILLS.**

TAKE CONTROL OF YOUR ENERGY BUDGET WITH SRP M-POWER.

You know your finances better than anyone. So who better to manage your budget than you? SRP M-Power® is a prepaid price plan that gives you control over your energy budget.

It's easy to get started on M-Power. After enrolling, you'll receive M-Power smart cards to purchase power from an SRP PayCenter®. There are more than 120 locations across the Valley. You'll also get an M-Power in-home display to track energy use.

WHY SRP CUSTOMERS LOVE M-POWER

- No upfront costs* or late fees.
- Decide how to budget your energy use.
- No monthly home energy bills.
- Know how much you're spending in real time.
- Easily share costs with others in your home.

On average, M-Power customers reduce their energy use by 12% each year by monitoring and managing electricity use.** For more information and to enroll, visit srpnet.com/mpower or call (602) 236-8855.

*Program restrictions may apply.
**Based on annual research by SRP Load Research.

SRP Delivering water and power®

Printed on recycled paper 339519-002 10/21

Newsletter

- Mailed quarterly
 - App upgrades
 - Program improvements
 - Seasonal reminders
 - Scam warnings
- Annual preparedness letter
 - Excessive Heat Warning Operation
 - Monitor Credit & Make Purchases
 - Energy Saving Tips





Empowering Consumers Through the Energy Transition

Duke Energy Florida

Nick Tumilowicz, Director of Product Management
Itron Distributed Energy Resources

Biggest Challenge in Current Energy Landscape?



The greatest challenge is the proliferation of DERs coming onto the grid:

- How will utilities accurately predict and control additional demand?
- Consumers can play a key role in crowd-sourcing DER data if they feel empowered through utility programs

Off-Peak Charging Credit Program

Overview

- 4-year program at Duke Energy Florida which launched January 1, 2022
- Enrollment goal is 1,000 participant per year
 - 4,000 participants total over 4 years
- \$10 per month bill credit for participants that charge during off-peak hours
 - 2 off-peak charging exceptions per month (3 strikes, you're out)
 - Only at-home charging monitored/incentivized
 - Max of 2 EV's per participating household

Results to Date

- Very well-received by Duke Energy Florida's customers
- Achieved 2022 target enrollment within 12 months of program launch
 - ~450 customers on waitlist at year end

Ensure Broad & Equitable Program Access

- Duke Energy Florida designed the program to be accessible by ANY residential customer with Level 1 and Level 2 chargers installed
 - Simplifies program education and messaging
 - Eliminates detailed eligibility restrictions
- Itron enabled this program design by leveraging both EV telematics and AMI analytics to monitor EV charging sessions
 - Takes advantage of vehicle telematics systems and cellular connectivity native to newer EVs
 - Allows older EVs without telematics or cellular connectivity to also participate

Educating Consumers

Grid-Utility Challenge

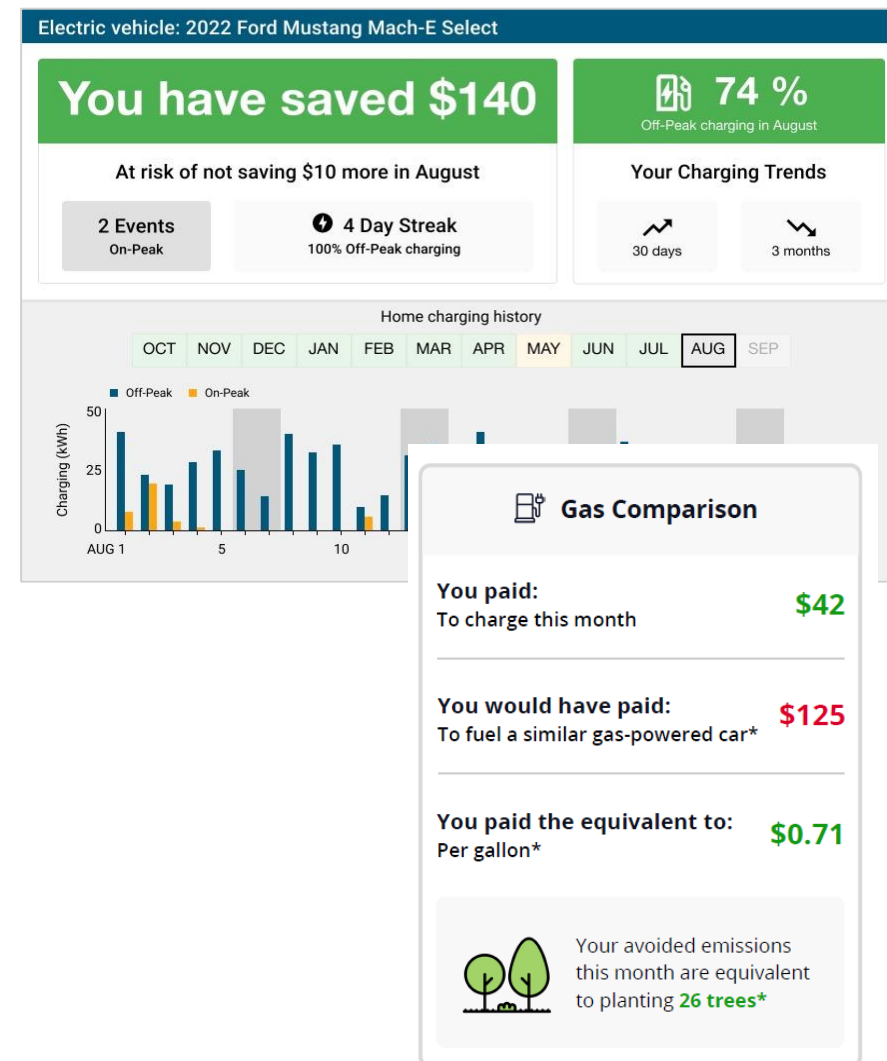
- EV mandates from Federal and State governments
- Additional electricity draw due to increase in electric vehicles

Consumer Data Rights

- Consumers “own” their EV data (charging location, state of charge, capacity)
- Consumers must opt-in to share their EV charging data

Value of Gasoline V. Electricity

- Provide consumers with metrics demonstrating savings by charging
- Provide consumers with an environmental savings perspective



Thoughts from Our Experience

Make the enrollment requirements and process as easy as possible

- Currently the application rate is 50 per week with some in the pending queue for approval as they lag in providing documentation to complete enrollment

EV charging management is a nascent industry so be ready for outsiders

- EV manufacturer apps, 3rd party EV assessment diagnostic apps, and EV charging network apps will all vie for the consumer's data
- Your customer needs to be confident that you are using their data to support your utility for an important purpose



Thank you



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