



The Reliable One[®]



Empowering people with new ways
to think about and use energy
A Community-Optimized Energy System

OUC PeakSHIFT
Pending Board Approval

November 2024 Update

The OUC PeakSHIFT Program



- A multi-year program to better align costs equitably with how we all use electricity, empowering our customers with better information and more choices to create a more affordable, reliable, resilient, and sustainable grid
- Designed to encourage conservation, reduce peak demand, and help OUC achieve its clean energy goals to achieve net zero carbon emission by 2050
- Initial program recommendations presented in June 2024 at the Pricing Workshop

June 13 Original PeakSHIFT Proposal

SunChoice *Community Solar*

OUC will relaunch an optional community solar program that helps build new utility-scale solar generation and gives everyone access to solar energy

**Implemented
October 2024**

TruNet Solar *Net Metering*

OUC will change the billing process for all rooftop solar array owners to address cost inequalities created by current net metering

DemandLevel *Fixed Distribution*

OUC will reduce the variable cost per kWh of electricity and begin charging residential and small commercial customers a fixed amount based on each customer's use of the grid

Shift & Save *Time-of-Day Pricing*

OUC will introduce an industry-proven time-of-day pricing plan that enables customers to save money by shifting their electricity use into "off-peak" periods



Workshop Feedback on Original PeakSHIFT Program

Feedback By The Numbers

(as of September 30, 2024)



285,000 OUC's customer base



10,300 Net metering customers



143

Comments received
Most comments are focused on net metering changes.



29

Links, articles, and studies
Sent to OUC for consideration.

Positive Residential Customer Feedback

This sounds like a great idea! I would love to learn more about the program.

I look forward to the changes and if there's another trial period of testing, I'd be willing to try it out!

Yes I'm liking the idea 💡 my bill comes about \$500 dollars per month and I only get \$1,770 so anything would help with the cost of living. Thanks

Great idea! Can I opt in now for the on-demand pricing?

Great plan - excited to see how it goes.

OUC engaged with a broad range of Central Florida stakeholders and consulted industry experts

OUC met with stakeholders from the following

Community & Social Activist Groups

- Central Florida Foundation
- American Association of Retired People (AARP)
- Osceola Council on Aging
- NAACP of Orange County, FL
- Grassroot Impact
- PoderLatinx
- African American Council of Christian Clergy
- Lake Sunset Neighborhood Association
- Lift Orlando
- Shepherd's Hope
- Career Source
- Alianza for Progress / Alianza Center
- Seniors First
- United Way

Government Partners

- City of Orlando
- City of St. Cloud
- Orange County Government

Environmental, Renewable Energy, and Utility Industry Groups

- Solar United Neighbors
- The CLEO Institute
- Florida Clinicians for Climate Action
- Florida Solar Energy Industries Association (FlaSEIA)
- Esource
- SEPA

Economic Development Partners

- Orlando Economic Partnership
- Downtown Orlando Partnership
- GoSports
- Indian American Business Association
- Greater Haitian American Chamber of Commerce Orlando
- St. Cloud Chamber of Commerce
- National Entrepreneur Center

OUC provided information and sought feedback from the following

Economic Development & Chambers of Commerce

- East Orlando Chamber of Commerce
- Lake Nona Chamber of Commerce
- African American Chamber of Commerce
- Asian American Chamber of Commerce
- Prospera

Community & Social Activist Groups

- Sierra Club
- Central Florida Jobs With Justice
- Hispanic Federation
- Mayor's Veteran's Advisory Council
- Central Florida HANDS



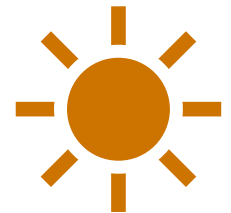
Senior, Environmental & Social
Advocacy Groups, Community
Groups, more

General Sentiment: Continued engagement and community meetings will help customers understand how shifting peak demand keeps prices affordable and how to take advantage of existing energy efficiency opportunities. Concerns about potential cost impacts alleviated by Shift & Save opt-out alternative.

Stakeholder's Recommended Alternative: Suggests OUC continue expanding access to energy efficiency and solar energy resources for low-income customers.

General Sentiment: People with rooftop solar or a business interest strongly oppose any change in solar compensation. DemandLevel saw some opposition but not from all solar stakeholders.

Stakeholder's Recommended Alternative: If Shift & Save is introduced with a higher cost differential and paired with battery storage, it would shift enough to avoid net metering changes. Support exists for energy storage rebates with the recommendation that a virtual power plant program be included in the PeakSHIFT program as soon as possible.



Solar Advocacy Groups,
Solar Installers &
Solar Customers

Updated Recommendations

PeakSHIFT: TruNet Solar Program Update

TruNet Solar

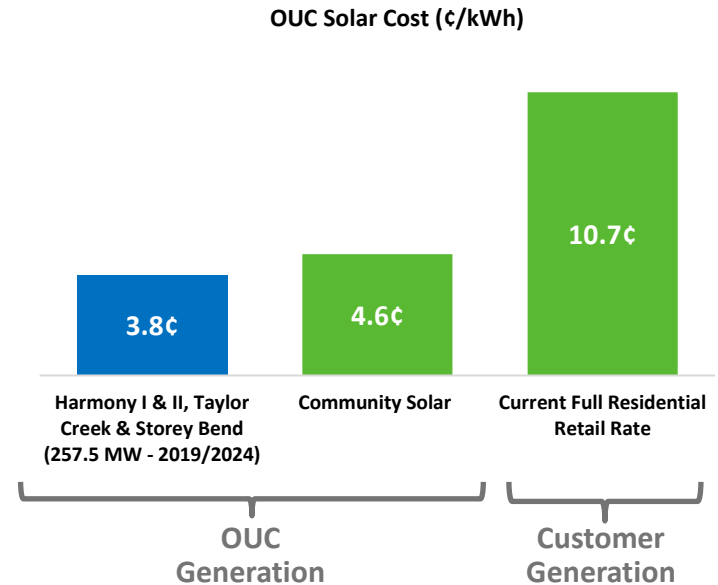
Net Metering
(10,300 customers)

Proposal provided for a separate charge for all energy supplied by OUC and a credit for customer exported energy to transition over a seven-year period from the full electric retail rate to the retail electric fuel rate

- Customer feedback focused on the lack of a grandfathering provision, the value assessed for the exported energy credit rate, and the lack of support for solar for all grant funding

Updated TruNet Solar:

- Grandfathered existing rooftop solar customers at the applicable full retail energy rate for twenty years
 - Currently 10.7¢/kWh credit for exported energy
 - Interconnection agreements received by June 30, 2025
- New rooftop solar customers credited for exported energy equivalent to the community solar farm rate for a five-year period
 - Currently 4.6¢/kWh
 - Interconnection agreements received on July 1, 2025 and after
- All rooftop solar customers will continue receiving full retail value for solar generation they consume themselves



PeakSHIFT: TruNet Solar Revenue Shortfall

- One-size fits all pricing does not equitably provide for full cost recovery
 - Results in an under-recovery of \$63.33 per month per roof-top solar customer or 42% of the cost to serve
- PeakSHIFT pricing proposal provides for the recovery of a portion of these costs and enhances customer equity

	Cost of Service ("COS")					Revenue ²			COS vs Revenue
	Units ¹			Unit Cost	Total	(Current Net Metering)			
	Gross	Solar Adj	Net			kWh	c/kWh	Total	
Customer (\$/month)									\$ 18.50
Fixed Demand (\$/kW)									
Production	15.3	(2.2)	13.1	\$ 3.69	48.34				
Transmission	15.3	(2.2)	13.1	\$ 1.39	18.21				
Distribution	15.3	-	15.3	\$ 2.36	36.11				
Non-fuel energy (¢/kWh)									
All kWh	1,690	(1,040)	650	0.685¢	4.45	650	6.783¢	44.09	
1st 1,000 kWh						-	9.283¢	-	
All additional kWh									
Fuel (¢/kWh)	1,690	(1,040)	650	3.867¢	25.14	650	3.867¢	25.14	
Total (Rooftop Solar Customer)									\$ 87.73
Customer without rooftop solar									\$ 151.06
									\$ 209.57
									\$ 215.74
									\$ (6.16)

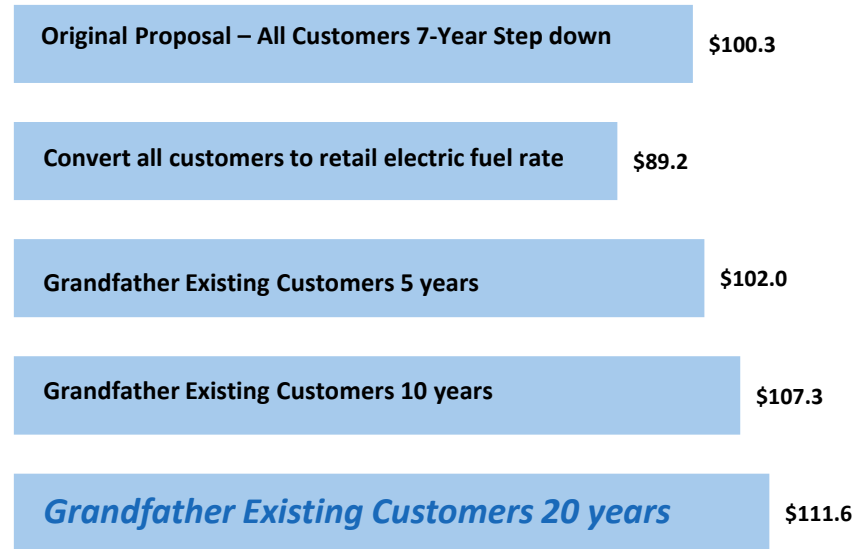
\$63 / month / rooftop solar customer shifted to non-rooftop solar customers

(1) Units:
 • Gross demand (kW) calculated using average residential load factor of 15.1%
 • Solar adjustment: 8.9 kW_{DC} rooftop solar system is assumed to be 25% coincident with OUC's system peak

(2) Revenue calculated using proposed rates effective October 1, 2024

- Net present cost of current net metering policy over a 20-year period is \$185.8 million
 - Represents 4.6% of total residential customers
 - 6.8% and 12.1% of single family homes in Orange and Osceola counties
- Net present cost assumption based on National Realty data and homeowner turnover every 9-years
- Grandfather provision does not extend to the premise

TruNet Solar 20-Year Net Present Cost
(\$ in millions)



PeakSHIFT: DemandLevel Program Update

DemandLevel Fixed Distribution (280,000 Customers*)

Proposal provided for a reduction in the non-fuel variable energy rate per kWh offset by a new fixed charge based on each customer's use of the grid

- Customer feedback focused on the fixed charge being set for a 12-month period

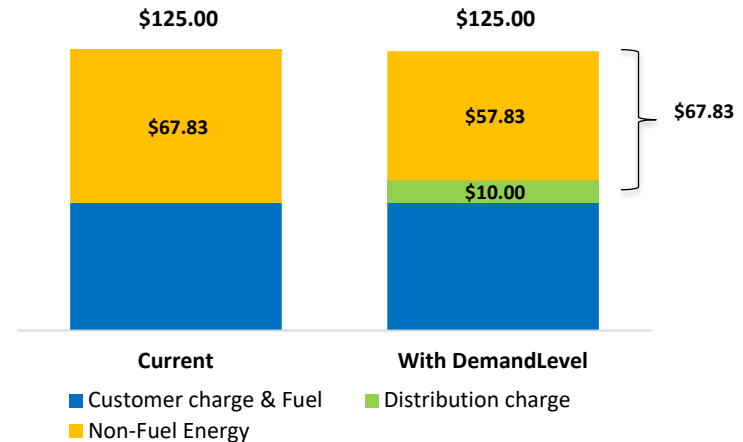
Updated DemandLevel: Continues to be revenue neutral

Residential	Original	Revised
Non-Fuel Energy Rate	~ 1 cent / kWh REDUCTION	~ 1 cent / kWh REDUCTION
Tiers based on maximum 15-minute kW demand	Reset annually	Reset monthly
Tier Level 1 - \$ 5.00	≥0 and <11 kW	≥0 and <8 kW
Tier Level 2 - \$10.00	≥11 and <16 kW	≥8 and <12 kW
Tier Level 3 - \$15.00	≥16 kW	≥12 kW

* Includes residential and small commercial customers

Revenue Neutral - Monthly Residential Bill

(1,000 kWh \$10 Tier 2 offset by \$10.00 lower Non-Fuel Energy)



Initial DemandLEVEL pricing based on FY2025 electric cost of service recovers 42% of distribution costs

Shift & Save

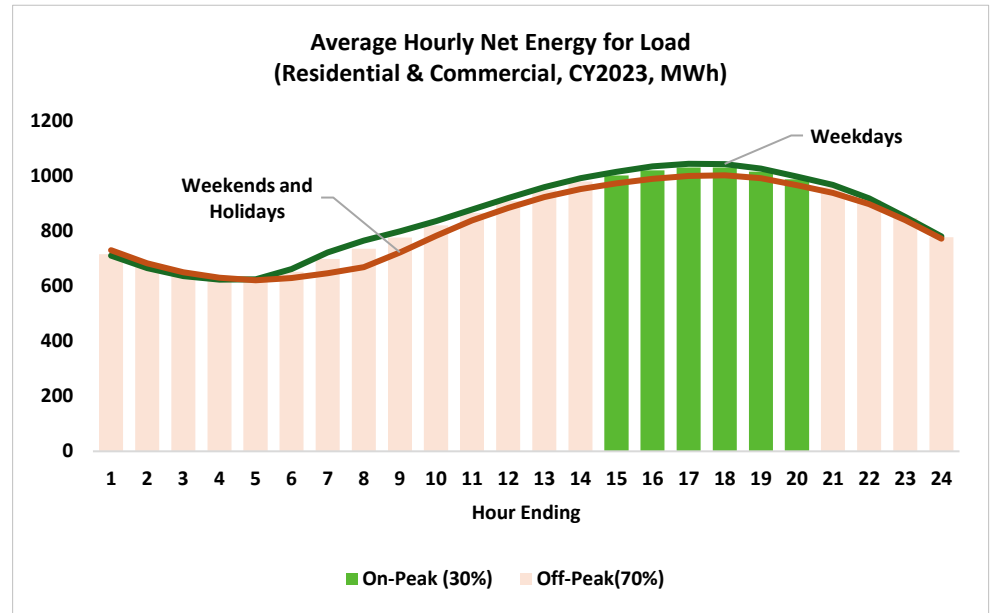
*Time-of-Day Pricing
(280,000 Customers*)*

Proposal provided for the implementation of time-of-day pricing plan with an introductory price differential of 2.0¢/kWh between the on-peak and off-peak periods

- Customer feedback focused on the pricing differential and the peak period

No Program Changes

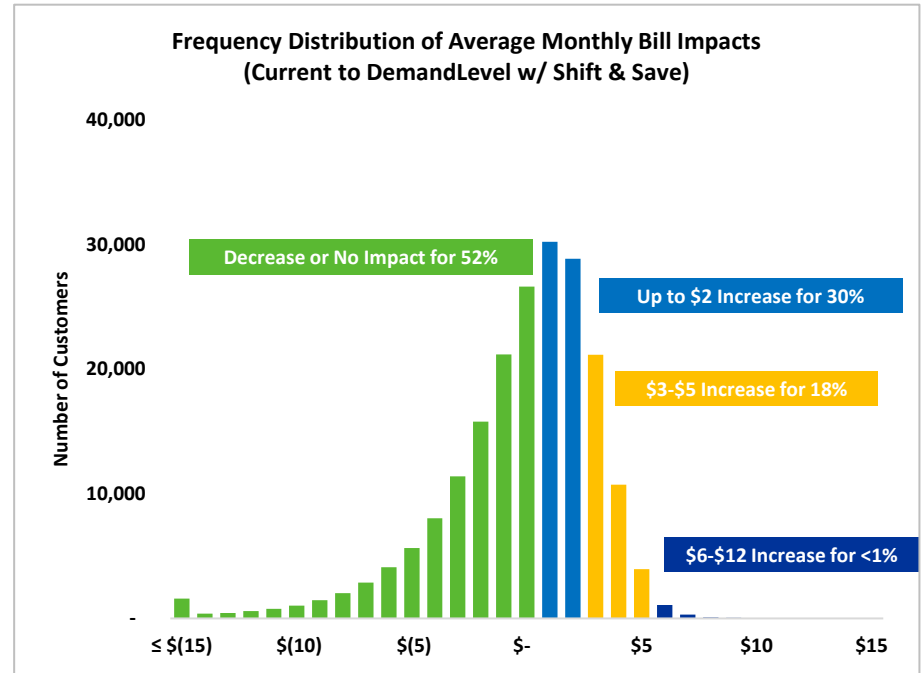
- Customers will have the option to opt-out at pricing based on higher annual on-peak usage
- Opt-out (levelized) pricing is projected to be \$3/month higher than the average monthly bill or \$128/month



* Includes residential and small commercial customers

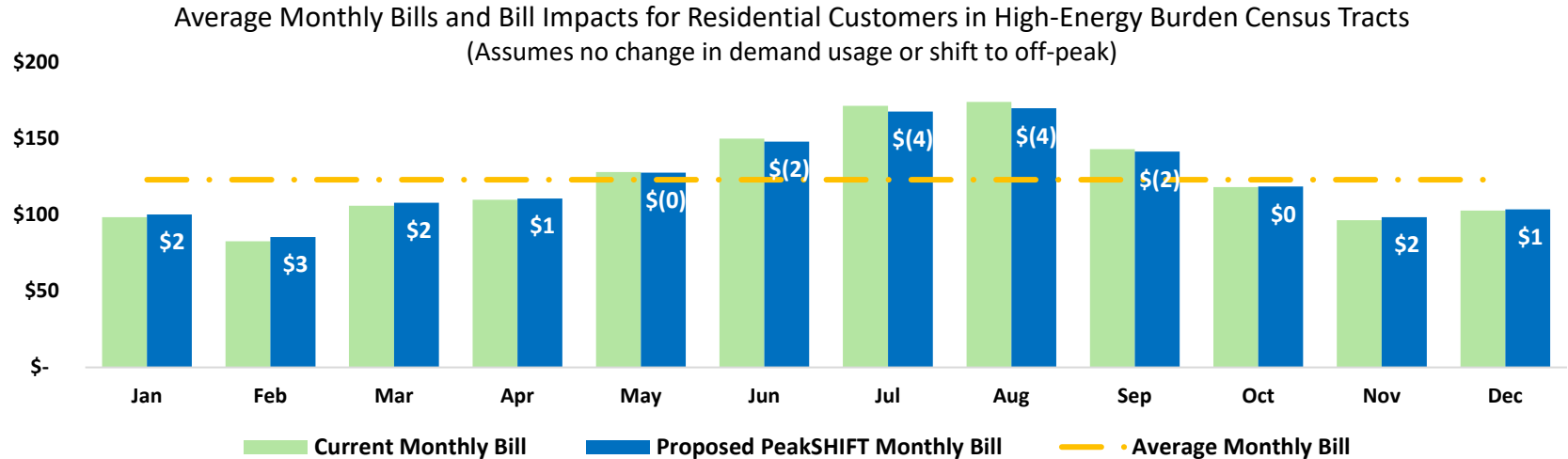
Minimal Projected Residential Bill Impacts

- Overall impact is revenue neutral
 - Assumes no change in behavior to shift peak usage or lower demand
- Analyzed monthly bills for all residential customers comparing current rates to proposed **DemandLevel with Shift & Save**
 - Average monthly change for 80% of residential customers is +/- \$3.00
- Reviewed samples for customers on medical alert, with energy storage and living in urban heat zones
 - Projected average monthly savings of \$2.70 and \$2.35 for medical alert and energy storage respectively
 - Projected average monthly increase of 30 cents for urban heat zones



Based on 2023 calendar year 15-minute interval data (approximately 9 billion records)

Average monthly bill remains consistent at \$123 with lower monthly variability



Based on actual 15-minute interval data from 2023 for 78 randomly chosen customers in the high-energy burden census tracts

1898 & Co. Feedback on Stakeholder Material Provided

1898 & Co., part of Burns & McDonnell Engineering Company, is a global business, technology, and security consultancy serving critical infrastructure industries

- The 1898 & Co. Utility Finance and Rate Advisory Team provides consulting services to electric, gas, water, and wastewater utilities in the areas of cost of service and rate design, financial planning and forecasting, regulatory support, and guiding policy on emerging trends
- Engagement was limited to reviewing stakeholder feedback provided in response to the pricing workshop held in June 2024
 - Stakeholder feedback was focused on valuing solar generation, rate design for distributed energy resources (DERs), and customer demand response and energy efficiency programs
 - 35 websites, articles, and studies were evaluated and aligned with the updated PeakSHIFT program (1,400 pages of materials)
 - Some articles dated prior to 2018 were excluded as the industry has changed significantly since this time

Value of DER and California's Net Metering policies

- Materials focused on the need to ensure all customers are considered when structuring rates, the continued need to educate customers on the changing energy landscape, and the need to continue to move to eliminate subsidies across rate segments

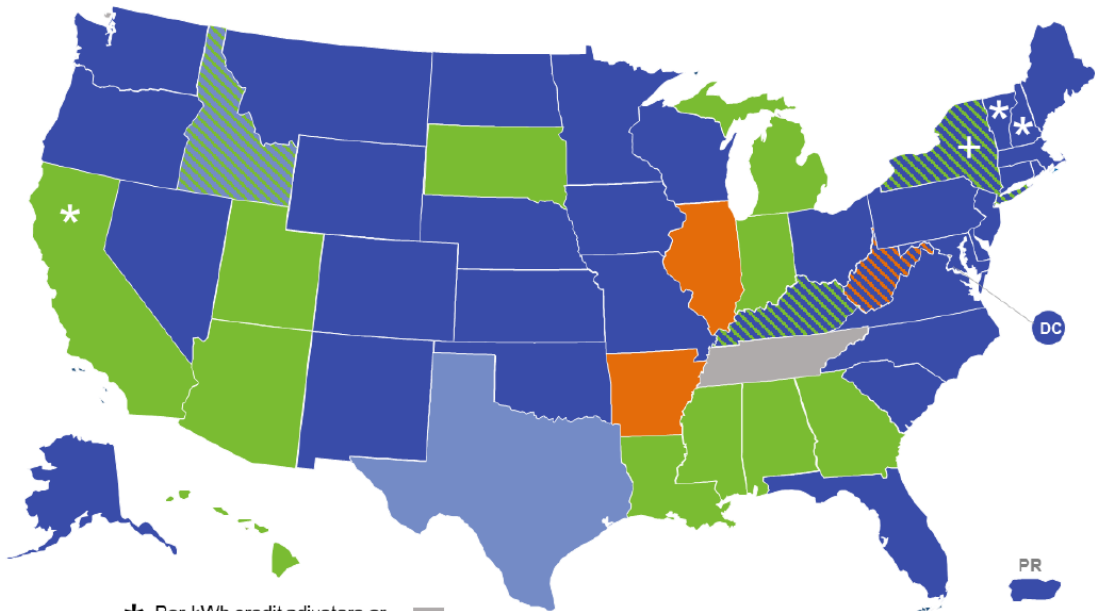
Value of Solar

- Materials focused on the fact that there are multiple approaches to determine the value of solar rate ranging from avoided costs (energy or fuel costs, generation, transmission, etc.) to costs associated with environmental and societal benefits






Customer Programs

- Materials focused on a wide-range of current customer programs to promote energy efficiency, reduce usage, and lower demand during peak periods including pilot programs to evaluate new technologies

OUC's PeakSHIFT program is aligned with the recommendations outlined in the articles while also preparing for the future with advanced grid technologies and distributed resources



- * Per-kWh credit adjusters or non-bypassable charges
- + Other DG compensation rules are for large customer-generators

-  No statewide DG compensation rules
-  Statewide DG compensation rules other than net metering
-  In transition from net metering to other statewide DG compensation rules
-  No statewide mandatory net metering rules, but some utilities offer net metering
-  State-developed mandatory net metering rules for certain utilities


While just a few years ago dramatic changes to net metering policies were being discussed in only a handful of states, in 2023 major reforms were under consideration or already adopted in more than half of U.S. states, including California, the largest state solar market.

Source: NC Clean Energy Technology Center, *The 50 States of Solar: Q1 2024 Quarterly Report*, April 2024

NEM 3.0 Driver

In 2023, California approved NEM 3.0 to address structural issues with its existing net metering framework that failed to account for the *growing infrastructure costs* of the green energy transition, *peak demand misalignment* with solar generation and *equity concerns* around the perception of rate subsidization for solar-equipped homes.

NEM 2.0
Exported energy paid back at retail rate based on Time-Of-Use
Small one-time interconnection fee
Mandated time-of-use pricing

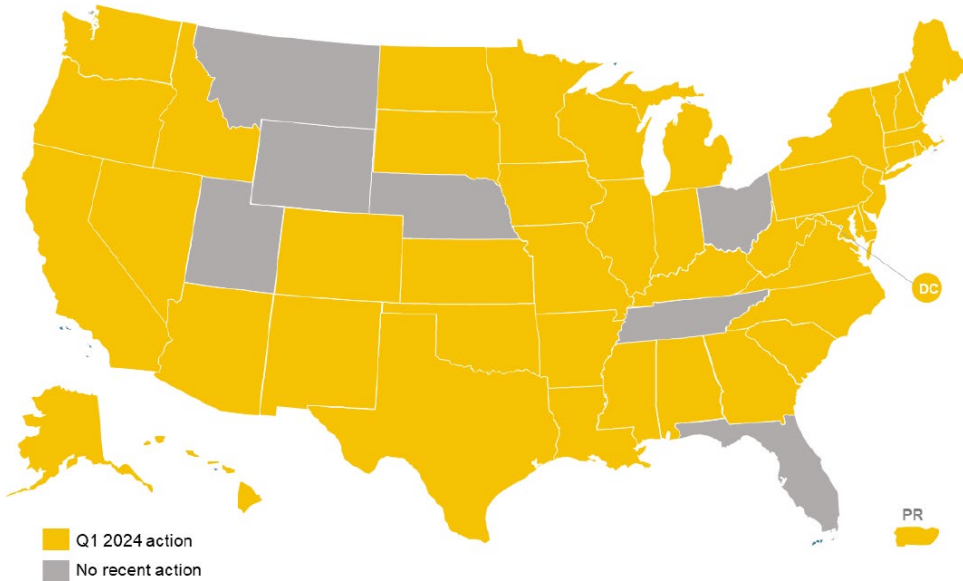
NEM 2.0 has 20 Year Grandfathering 

Effects of Shift to NEM 3.0

- Reduce export costs by between 50-75%
- Increase solar PV installation repayment timeline 2-5x without battery

NEM 3.0
Avoided Cost rate – how much utility saves by not producing energy itself
Monthly grid access fees
Greater time-of-use price differentials - larger gap between on and off peak

Net Billing combined with a time-of-use rate structure provides a strong signal for homeowners to consider installing battery storage with solar under the NEM 3.0 program



Policy Type	# of Actions	% by Type	# of States
DG Compensation Rules	56	34%	24 + DC, PR
Residential Fixed Charges	42	26%	28 + DC
Community Solar	37	23%	20 + DC
DG valuation or net metering	15	9%	12 + DC, PR
Third-Party ownership of solar	8	5%	6
Residential demand or solar charge	3	2%	2
Utility-led rooftop PV programs	2	1%	2
Total	163	100%	43 + DC, PR

A great majority of states have made some type of policy change regarding utility customer solar programs

Source: NC Clean Energy Technology Center, *The 50 States of Solar: Q1 2024 Quarterly Report*, April 2024

Stakeholder Feedback on Proposed Changes

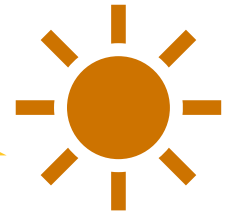
Stakeholder Feedback on Proposed Changes



Senior, Environmental & Social
Advocacy Groups, Community
Groups, more

- Support for the objective of the program
- OUC should continue to provide and create new energy efficiency programs
 - Ensure those who have already invested in efficiency and are low users are not negatively impacted
 - Proactively offer programs for any customers who fall into the margins to help ensure they can attain savings
- Customer education and outreach is necessary before the DemandLevel and Shift & Save roll-out

- Some appreciation for the 20-year grandfather period from majority
- Five-year step down at community solar rate is worse than original proposal
- Continued concern that OUC does not want to leverage Solar for All federal grant funds
- Proposed energy storage rebate is too low and will not be available to enough customers
- Some remain concerned about DemandLevel impacts to customers but appreciate the change to monthly tiering



Solar Advocacy Groups,
Solar Installers &
Solar Customers

Customer, Employee and Community Engagement to Navigate Change

Lessons Learned

- Customer requested TOD rate comparisons to standard rates
- Satisfaction improved through the course of the program as customers used tools and adapted behavior
- TOD customer call volume was higher than control but call handle times were comparable
- Savings across customer segments varied

Recommendations

- Provide individualized communications including bill comparisons and relevant alerts
- Enhance and develop new education, videos, tools, and technology used during the pilot
- Invest in call center training and development -- ensure representatives also have meaningful tools to use
- Consider various roll-out approaches to limit customer change and call volume



Key Constituencies for Project Success

Employees



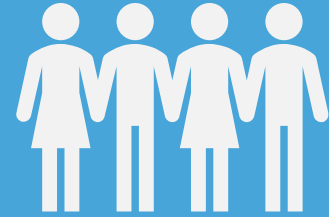
Implementing internal change management and education to embrace and lead changes

Customers



Delineating most impacted customers for each program to focus communications and solutions

Community



Engaging to build strong two-way communications to improve program delivery and enduring relationships

Stakeholder Engagement / External Change Management Process



Engage community-based organizations



Host in-person events in customers' neighborhoods



Hold online educational workshops



Work with community planning groups



Conduct ongoing surveys to identify customers' needs



Provide new educational tools and technologies to enable behavior change



Maintain *OUCPeakSHIFT.com* as a customer resource

Supporting Programs

- **Energy Storage Rebate**

- Rebate program will be paired with participation in the TruNet Solar program with the Community Solar Energy Export Rate
 - Grandfather customers may elect to opt-in to the rebate program in tandem with opting-out of the grandfather program
- Rebate based on \$150 / kWh up to a maximum of \$2,000 per premise
- July 2025

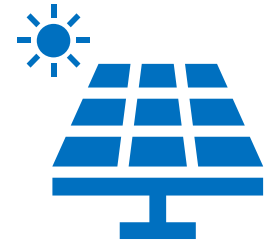
- **Efficiency Delivered for Renters**

- Refresh and new program modifications specifically targeting customers who live in rental properties
 - Offering \$2,500 in home energy and water conservation upgrades via OUC's 'Efficiency Delivered' program for as little as \$375 – payable on bill over 24 months for income qualified individuals
- Expected in 2026



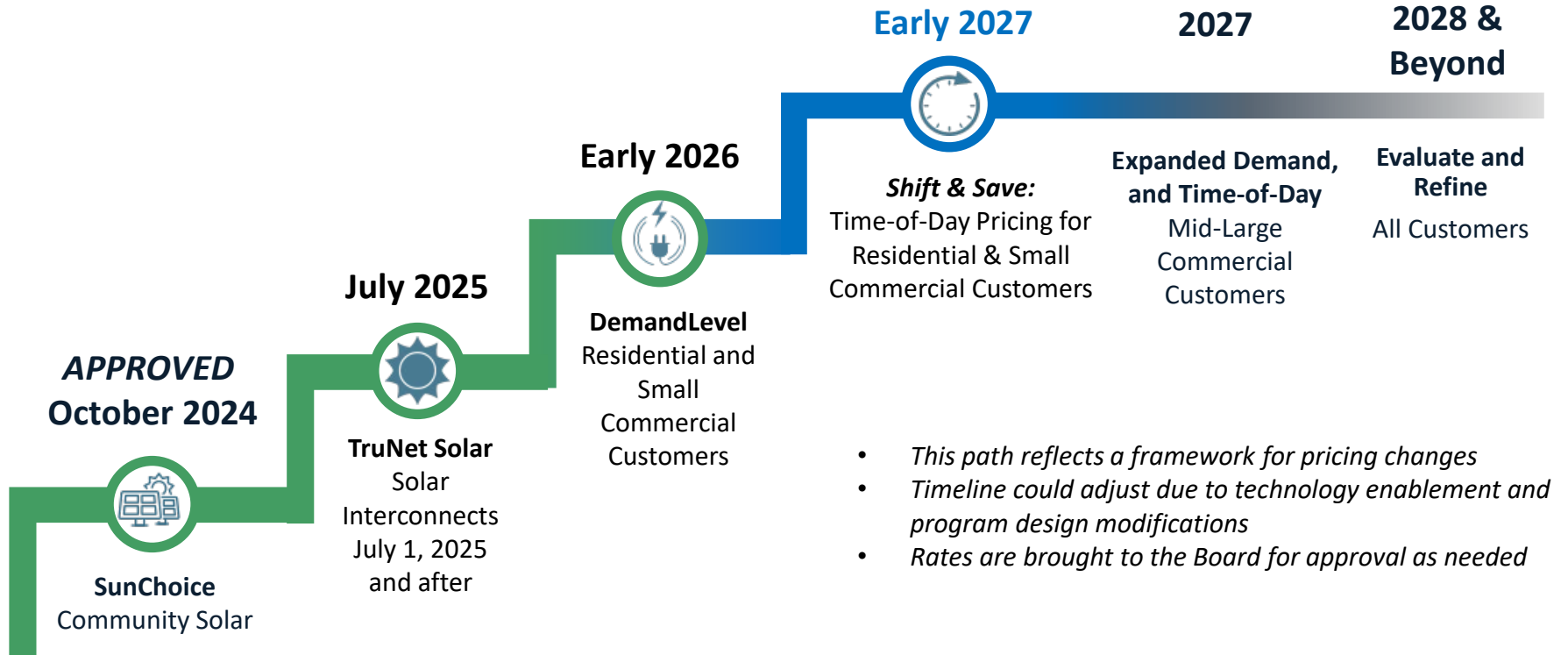
PeakSHIFT
synergies with
ongoing OUC
initiatives

- **Low- to Moderate- Income Community Solar Program**
 - Considering the creation of a Low- to Moderate- Income Solar Fund to develop projects
- **Virtual Power Plant (VPP)**
 - Program is complex, requires many technology advancements, and is currently in the pilot phase at a limited number of utilities nationwide
 - Short-term and long-term strategic roadmap plans are being developed to fully facilitate distributed energy resources, energy storage systems, controllable loads, and information and communication technologies



PeakSHIFT Timeline & Approvals

PeakSHIFT Timeline



- **November 2024**
 - Update at Commission Meeting, No Board Action
- **December 2024**
 - Commission Adoption of PeakSHIFT Pricing program and supporting tariffs including:
 - TruNet Solar (Revised Net Metering Policy)
 - DemandLevel
 - Shift & Save

OUC PEAK SHIFT