



PACIFICORP CPA DEMAND-SIDE RATES POTENTIAL

Draft Results – January 12, 2021

AGENDA

Methodology

Results

Key Findings

Comparison

Questions

DSR PROGRAMS & IMPACTS

Summer and Winter Potential in 2040

Rate Option	Summer Potential (MW)	Winter Potential (MW)
Residential TOU	77.4	40.7
Residential TOU with EV	17.1	7
Residential CPP	105.7	68.2
Residential Behavioral DR	18.5	9.3
C&I TOU	0.3	0.2
C&I CPP	91	39.5
C&I RTP	16.2	6.9
Irrigation TOU	4.3	-
Irrigation CPP	17.4	-

METHODOLOGY

Calculating Impacts and key assumptions

*Program Impact*_{year,program}

= *Per Customer Peak Impact*

* *Eligible Participants* * *Participation Rate*

where:

Year= forecasted year between 2022 and 2040

Program= each program option & class

Per-customer peak impacts are calculated as a percent of peak load reduction and are based on estimates from The Brattle Group developed in a previous study.

Eligible participants are determined by rate class and saturation of AMI.

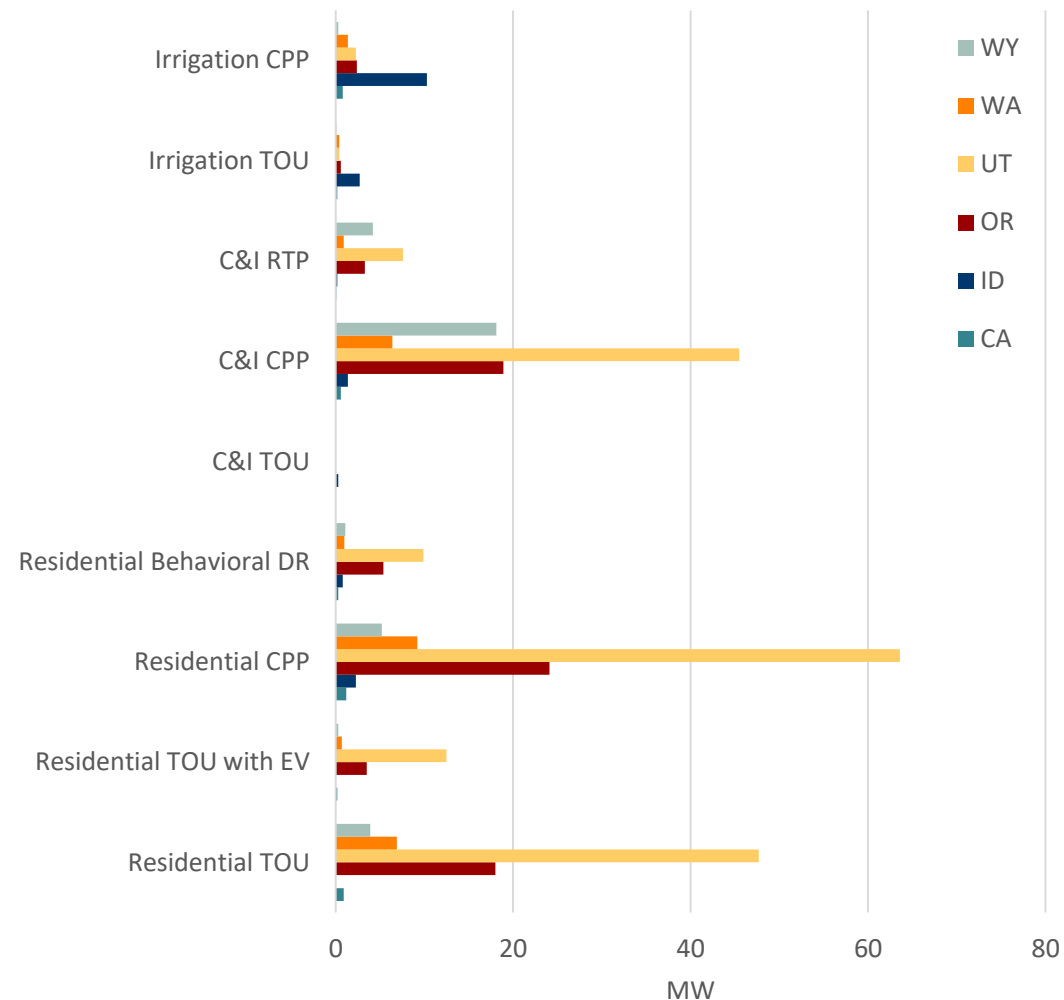
Participation rates are determined based on actual participation that we see within the industry for similar programs.

- These are standalone estimates not integrated with Demand Response (class 1)
- Intended to represent independent roll outs of the various rates

SUMMER DSR IMPACTS

Incremental Impacts (MW) 2040

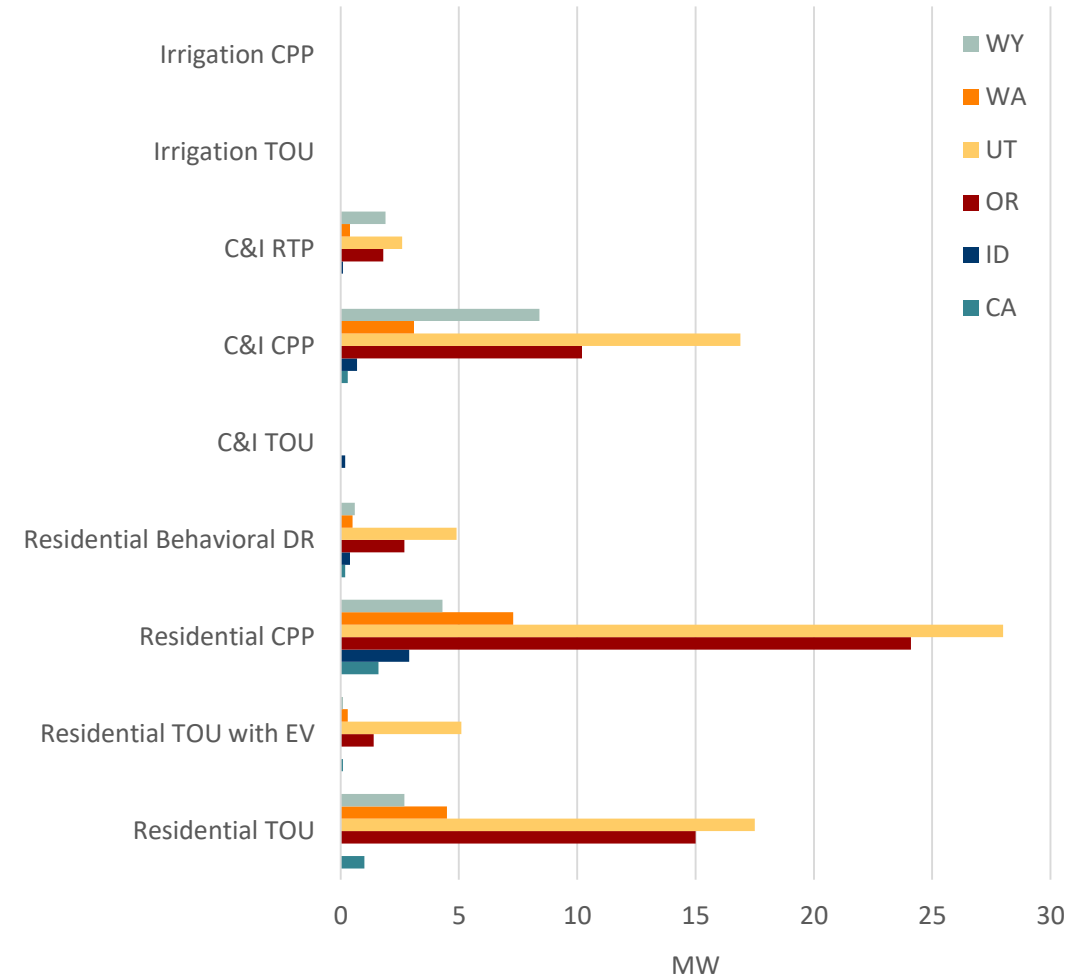
Rate Option	CA	ID	OR	UT	WA	WY	Total
Residential TOU	0.9	-	18	47.7	6.9	3.9	77.4
Residential TOU with EV	0.2	-	3.5	12.5	0.7	0.3	17.1
Residential CPP	1.2	2.3	24.1	63.6	9.2	5.2	105.7
Residential Behavioral DR	0.3	0.8	5.4	9.9	1	1.1	18.5
C&I TOU	-	0.3	-	-	-	-	0.3
C&I CPP	0.6	1.4	18.9	45.5	6.4	18.1	91
C&I RTP	0.1	0.2	3.3	7.6	0.9	4.2	16.2
Irrigation TOU	0.2	2.7	0.6	0.4	0.4	0.1	4.3
Irrigation CPP	0.8	10.3	2.4	2.3	1.4	0.3	17.4



WINTER DSR IMPACTS

Incremental Impacts (MW) 2040

Rate Option	CA	ID	OR	UT	WA	WY	Total
Residential TOU	1	-	15	17.5	4.5	2.7	40.7
Residential TOU with EV	0.1	-	1.4	5.1	0.3	0.1	7
Residential CPP	1.6	2.9	24.1	28	7.3	4.3	68.2
Residential Behavioral DR	0.2	0.4	2.7	4.9	0.5	0.6	9.3
C&I TOU	-	0.2	-	-	-	-	0.2
C&I CPP	0.3	0.7	10.2	16.9	3.1	8.4	39.5
C&I RTP	0	0.1	1.8	2.6	0.4	1.9	6.9
Irrigation TOU	-	-	-	-	-	-	-
Irrigation CPP	-	-	-	-	-	-	-



KEY TAKEAWAYS – BY STATE

California - residential sector constitutes nearly half the total savings potential

Idaho - roughly half of the savings opportunities are in the irrigation sector

Oregon – 2nd highest in terms of potential with residential pricing (TOU, TOU Demand Rate w/EV, and CPP) contributing more than half

Utah – 1st in terms of potential with residential CPP contributing the most, the three C&I pricing options combined roughly equal residential CPP

Washington - residential sector constitutes nearly half the total savings potential

Wyoming – 3rd in terms of potential, most of which is derived from C&I customers, particularly large industrial customers

KEY TAKEAWAYS – BY CLASS

Residential - customers in Utah and Oregon represent substantial savings opportunities. For most states, approximately half of the potential is derived from residential customers, except for Idaho.

Extra Large C&I - customers provide the highest savings opportunities in Wyoming, where there is a larger base of high-demand customers.

Medium and large C&I - customers have moderate levels of potential across all states

Small C&I - customers have minimal contribution to potential.

Irrigation – customers have small contributions in most states except Idaho where more than half of the potential is likely to be realized from irrigation customers.

COMPARISON TO THE PREVIOUS STUDY

DSM Options	Summer Potential in Year-20	
	Previous Assessment	Current Assessment
Res TOU Demand Rate	37.3	N/A
Res TOU Demand Rate with EV	7.9	N/A
Res TOU	65.9	77.4
Res TOU with EV	15.4	17.1
Res CPP	89.8	105.7
Res Behavioral DR	17.1	18.5
C&I TOU	0.3	0.3
C&I CPP	76.8	91
C&I RTP	13.7	16.2
Irrigation TOU	3.5	4.3
Irrigation CPP	14.3	17.4

Meaningful increase in CPP is mostly attributable to large increase in the load forecast in UT

- Other states also have more modest increases

Moderate increases across other programs due to overall load and customer growth across states



THANK YOU!

Kelly Marrin, Managing Director

kmarrin@appliedenergygroup.com

Eli Morris, Senior Director

emorris@appliedenergygroup.com