

Background

- ➤ 2014 Reviewed TRC exceptions for all gas measures, which resulted in guidance from OPUC in UM 1622
- Outcome: Existing multifamily windows in gas heated buildings determined to be not cost-effective and removed from portfolio

- ➤ 2015 Conducted review of all electric measures with new avoided costs and attention to Non-Energy Benefits where applicable
- Outcome: Windows in electrically heated large (5+ dwelling units) existing multifamily buildings determined to be not costeffective

Process and timing

- November CAC initial presentation of proposed changes
- December follow up conversations and additional information assessments
- January Trade Ally Forums additional discussions and feedback gathering
- February CAC updated proposed changes presented
- April CAC presentation on final incentive changes
- June 1 changes go into effect
- Through 2016 continued assessment of additional information as it comes available

Proposed 2016 changes

Effective June 1, 2016:

Small Multifamily (2-4 dwelling units) - align with Existing Homes windows incentives

- U-Value 0.28 0.30: \$1.75 per square foot
- U-Value 0.27 or less: \$4.00 per square foot
- For electric <u>and</u> gas heat (current multifamily windows incentives only offered for electric heat)

Large Multifamily (5+ dwelling units) - discontinue windows incentives

What we heard at CAC

Important things to consider:

- What is the magnitude of the problem?
- Are we using the right assumptions?
- How would factoring in DOE commercial tax credits impact the cost-effectiveness?
- Is this an appropriate measure to request an exception from the OPUC?

Tax credit impacts

Cost effectiveness with tax credits factored in:

		Measur e Life	Savings		Increment al Costs (\$)	Maximu m Incentiv e (\$)	Utility BCR at Max Incentiv e	TRC BCR
#	Measure	(yrs)	kWh	therms				
1	single pane (aluminum frame) to U < 0.30	45	5.1		\$13.50	\$10	1.00	0.71
2	single pane (aluminum frame) to U < 0.30	45		0.34	\$13.50	\$3	1.00	0.25
3	single pane (wood frame) to U < 0.30	45	3.9		\$13.50	\$7	1.00	0.54
4	single pane (wood frame) to U < 0.30	45		0.26	\$13.50	\$3	1.00	0.19
5	single pane (aluminum frame) and storm window to U < 0.30	45	4.0		\$19.37	\$7	1.00	0.38
6	single pane (aluminum frame) and storm window to U < 0.30	45		0.26	\$19.37	\$3	1.00	0.13
7	double pane (aluminum frame) to U < 0.30	45	2.8		\$19.37	\$5	1.00	0.27
8	double pane (aluminum frame) to U < 0.30	45		0.19	\$19.37	\$2	1.00	0.10

Additional information to consider

- RTF revisiting Multifamily windows savings estimates (estimated March 2016)
- What's being sold in the market?
- Heating loads and billing data analysis
- What are the differences between different market segments, property types?

Discussion & Questions



