

DOE Public Meeting
Notice of Proposed Rule for Energy
Conservation Standards for Packaged
Terminal Air Conditioners and Packaged
Terminal Heat Pumps

Wednesday, October 29, 2014

Docket Number EERE-2012-BT-STD-0029



we make life better™

Certified Efficiencies vs Proposed DOE Minimum Efficiencies

Current and Proposed DOE Minimum Efficiency Standards for PTAC and PTHP

Equipment class			Minimum Efficiency requirements*
Equipment	Category	Cooling capacity (Btu/hr)	
PTAC	Standard Size **	<7,000	EER = 11.7
		7,000–15,000	EER = 13.8 - (0.300 × Cap ††)
>15,000		EER = 9.3	
	Non-Standard Size †	<7,000	EER = 9.4
		7,000–15,000	EER = 10.9 - (0.213 × Cap ††)
		>15,000	EER = 7.7
PTHP	Standard Size **	<7,000	EER = 11.9 COP = 3.3
		7,000–15,000	EER = 14.0 - (0.300 × Cap ††) COP = 3.7 - (0.052 × Cap ††)
>15,000		EER = 9.5 COP = 2.9	
	Non-Standard Size †	<7,000	EER = 9.3 COP = 2.7
		7,000–15,000	EER = 10.8 - (0.213 × Cap ††) COP = 2.9 - (0.026 × Cap ††)
		>15,000	EER = 7.6 COP = 2.5

← Current DOE Requirement

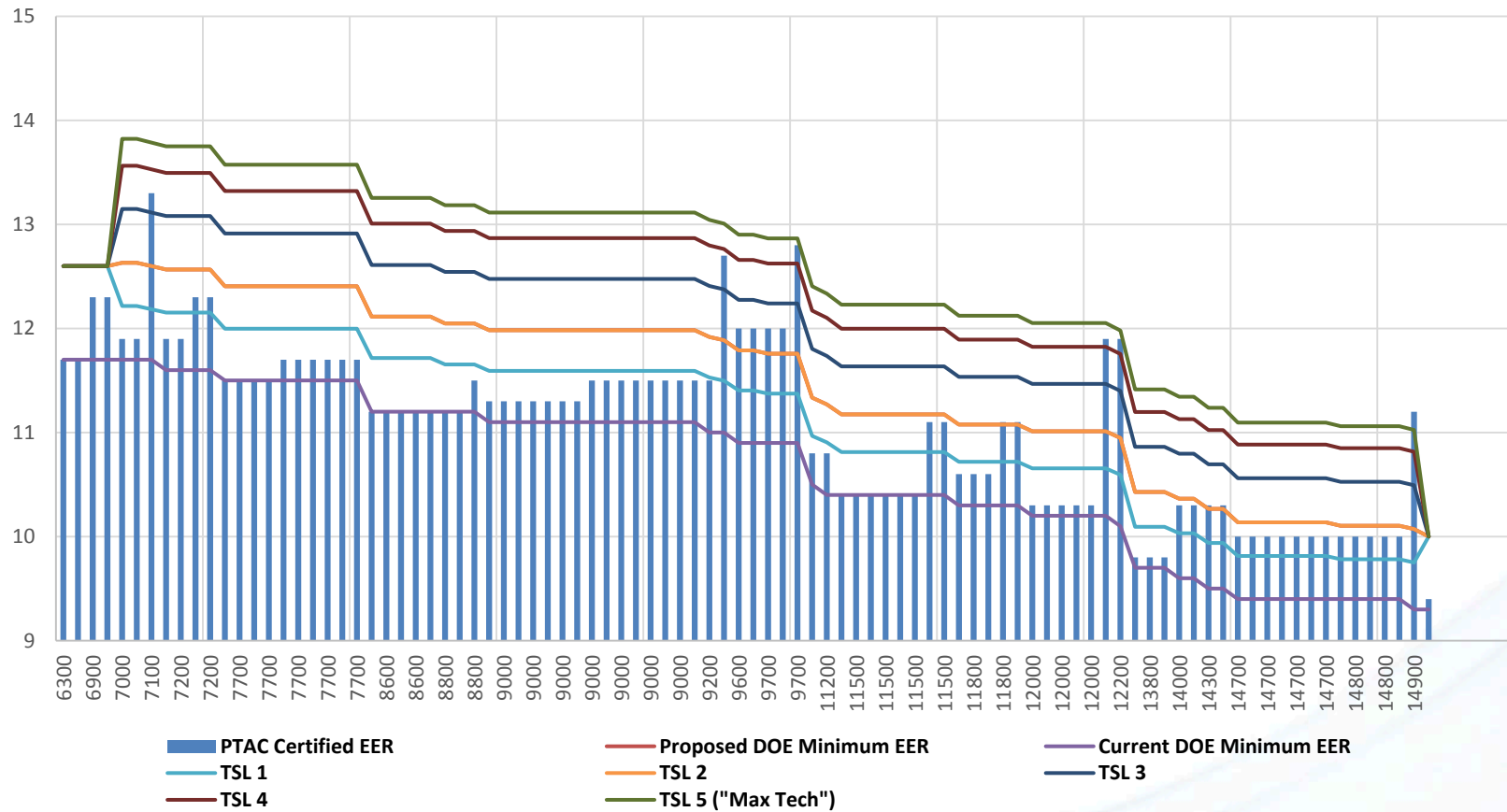
Proposed minimum levels

Table I.1—Proposed Energy Conservation Standards for PTACs and PTHPs

Equipment class	Equipment	Category	Cooling capacity	Proposed energy conservation standards *
PTAC	Standard Size **	<7,000 Btu/h		EER = 12.6
		≥7,000 Btu/h and ≤15,000 Btu/h		EER = 14.9 - (0.324 × Cap ‡)
		>15,000 Btu/h		EER = 10.0
PTHP	Standard Size **	<7,000 Btu/h		EER = 12.6 COP = 3.5
		≥7,000 Btu/h and ≤15,000 Btu/h		EER = 14.9 - (0.324 × Cap ‡) COP = 4.0 - (0.064 × Cap ‡)
		>15,000 Btu/h		EER = 10.0 COP = 3.0

PTAC: Certified EER vs DOE's Proposed EER

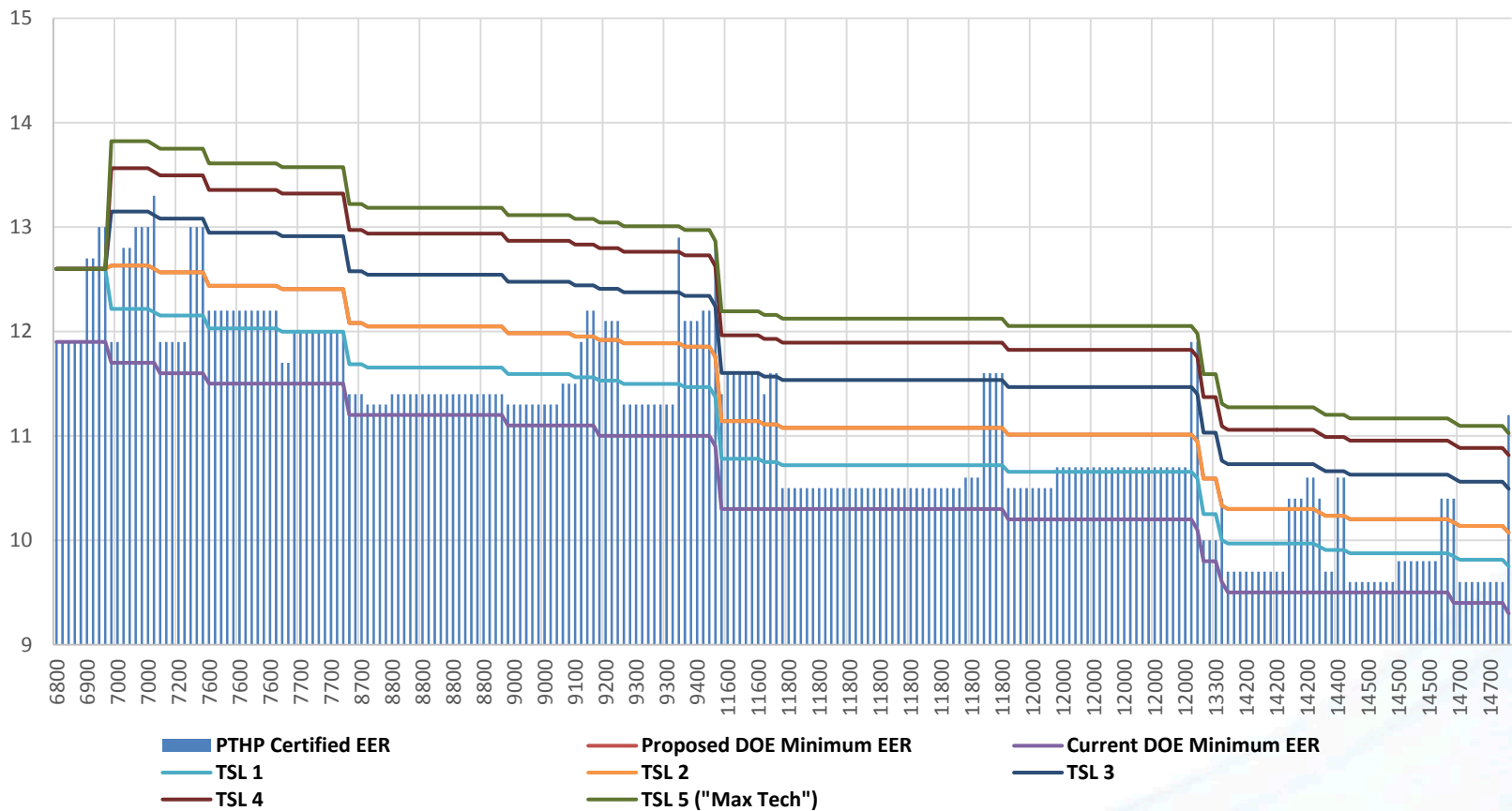
Impact Analysis of Proposed DOE Minimum Efficiency Levels for PTAC
(EER only)



*Note: TSL2 is the Proposed DOE Minimum EER

PTHP: Certified EER vs DOE's Proposed EER

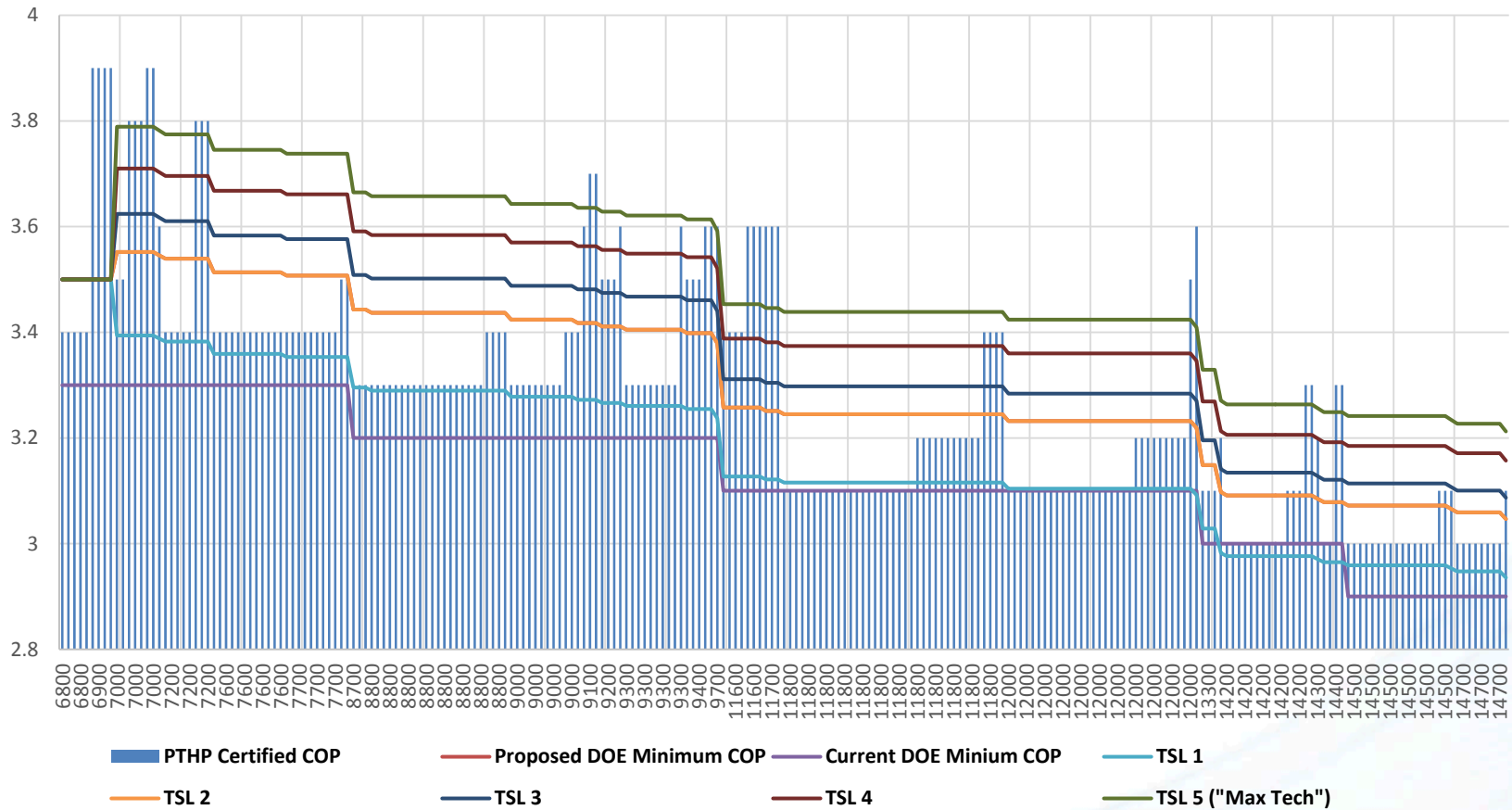
Impact Analysis of Proposed DOE Minimum Efficiency Levels for PTHP (EER)



*Note: TSL2 is the Proposed DOE Minimum EER

PTHP: Certified COP vs DOE's Proposed COP

Impact Analysis of Proposed DOE Minimum Efficiency Levels for PTHP (COP)



*Note: TSL2 is the Proposed DOE Minimum EER

Certified PTAC and PTHP with EER and/or COP Below DOE's Proposed Minimum Levels

Models with Efficiencies Below the Theoretical Minimum Level

		TSL 1	TSL 2 (Proposed)	TSL 3	TSL 4	TSL 5 ("Max Tech")
PTAC EER (94 Active Models)	Number Eliminated	62	80	88	90	93
	Percent of Total models Certified	66%	85%	94%	96%	99%
PTHP EER (239 Active Models)	Number Eliminated	140	185	223	230	234
	Percent of Total models Certified	59%	77%	93%	96%	98%
PTHP COP (239 Active Models)	Number Eliminated	48	183	190	198	212
	Percent of Total models Certified	20%	77%	79%	83%	89%

Questions?



we make life better™