

LIGHTING	GE 20W CFL SPIRAL 3230216	3230216	47 Standard	0.80	0.60	0.40
LIGHTING	GE 20W SUNSHINE 71764	71764	47 Standard	0.80	0.60	0.40
LIGHTING	GE 20W SPIRAL 74200	74200	47 Standard	0.80	0.60	0.40
LIGHTING	GE 20W T3 2PK 74201	74201	47 Standard	0.80	0.60	0.40
LIGHTING	GE 20W DAYLIGHT 89094	89094	47 Standard	0.80	0.60	0.40
LIGHTING	Harmony 20w Lightwiz H20027S	1100.842	47 Standard	0.80	0.60	0.40
LIGHTING	LITETRONICS E2052AK 20W SPIRAL	E2052AK	47 Standard	0.80	0.60	0.40
LIGHTING	Feit 23w Daylight BPESL23TM/D	BPESL23TMD	66 Standard	0.80	0.60	0.40
LIGHTING	GLOBE 23W LOW MERC 140270	140270-	66 Standard	0.80	0.60	0.40
LIGHTING	GLOBE 23W LOW MERC SFT WH 4PK	314305-	66 Standard	0.80	0.60	0.40
LIGHTING	GLOBE 23W LOW MERC DAY LITE	2672068	66 Standard	0.80	0.60	0.40
LIGHTING	GLOBE 23W LOW MERC NAT LITE	273663	66 Standard	0.80	0.60	0.40
LIGHTING	LITETRONICS E2352AK 23W SPIRAL	E2352AK	66 Standard	0.80	0.60	0.40
LIGHTING	LITETRONICS E2352AK3-WM 23W 3P	E2352AK3WM	66 Standard	0.80	0.60	0.40
LIGHTING	LOA 23W T2 MINI TWST WARM 2824	2824	66 Standard	0.80	0.60	0.40
LIGHTING	MEIJER 23W CFL 140270	140270	66 Standard	0.80	0.60	0.40
LIGHTING	MEIJER 23W CFL 4PK 314305	314305	66 Standard	0.80	0.60	0.40
LIGHTING	PHILIPS 23W TWISTER 227694	227694	66 Standard	0.80	0.60	0.40
LIGHTING	PHILIPS 23W TWISTER 4PK 227868	227868	66 Standard	0.80	0.60	0.40
LIGHTING	SYLVANIA 23W TWIST 3PK 29613	29613	66 Standard	0.80	0.60	0.40
LIGHTING	SYLVANIA 23W TWIST 3PK 29694	29694	66 Standard	0.80	0.60	0.40
LIGHTING	SYLVANIA 23W TWIST 29712	29712	66 Standard	0.80	0.60	0.40
LIGHTING	SYLVANIA 23W T2 SPRL 2PK 29729	29729	66 Standard	0.80	0.60	0.40
LIGHTING	SYLVANIA 23W DAYLIGHT 29784	29784	66 Standard	0.80	0.60	0.40
LIGHTING	TCP 23w (100w) 2-pack b/w	160-740	66 Standard	0.80	0.60	0.40
LIGHTING	TCP 23w (100w) 2-pack s/w	161-301	66 Standard	0.80	0.60	0.40
LIGHTING	TCP 23W SPIRAL 4PK 475-110	475-110	66 Standard	0.80	0.60	0.40
LIGHTING	TCP 23W SPIRAL 12PK 567-365	567-365	66 Standard	0.80	0.60	0.40
LIGHTING	TCP 23w (100w) single s/w	738-704	66 Standard	0.80	0.60	0.40
LIGHTING	TCP 23W SPIRAL 12PK 8CP2312	8CP2312	66 Standard	0.80	0.60	0.40
LIGHTING	Harmony 25w Lightwiz H25027	1100.859	64 Standard	0.80	0.60	0.40
LIGHTING	GE 26 W Spiral 3166485	3166485	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26 W CFL Spiral 3230182	3230182	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26W SUNSHINE 71765	71765	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26W SPIRAL 74202	74202	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26W T3 2PK 74203	74203	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26W DAYLIGHT 89095	89095	63 Standard	0.80	0.60	0.40

LIGHTING	GE 26W CFL 6PK	47709	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26 WATT OUTDOOR FLOODLIGHT - 90 W	889279	63 Standard	0.80	0.60	0.40
LIGHTING	GE 26WATT CFL SPIRAL	700169	63 Standard	0.80	0.60	0.40
LIGHTING	TCP 27W SPIRAL 599-526	599-526	41 Standard	0.80	0.60	0.40
LIGHTING	Harmony 30w Lightwiz H30027	1100.874	59 Standard	0.80	0.60	0.40
LIGHTING	LITETRONICS E3052AE 30W SPIRAL	E3052AE	59 Standard	0.80	0.60	0.40
LIGHTING	LITETRONICS E3052AK 30W SPIRAL	E3052AK	59 Standard	0.80	0.60	0.40
LIGHTING	LITETRONICS E3362AN 30W SPIRAL	E3362AN	57 Standard	0.80	0.60	0.40
LIGHTING	TCP 42w (150w) single s/w	772-720	92 Standard	0.80	0.60	0.40
LIGHTING	GLOBE 7W FAN W/ CONVRTR 2PK	146751	15 Specialty	0.80	0.80	0.80
LIGHTING	GLOBE 7W B-TYPE W/CONVRTR 2PK	148679-	15 Specialty	0.80	0.80	0.80
LIGHTING	MEIJER 7W B-TYPE 2PK 148679	148679	15 Specialty	0.80	0.80	0.80
LIGHTING	GE 9 watt Candle 16106	1100.079	21 Specialty	0.80	0.80	0.80
LIGHTING	GE 9W A19 ALL GLASS 74436	74436	26 Specialty	0.80	0.80	0.80
LIGHTING	GLOBE 9W G25 3PK	104699	21 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 9W G25 GLOBE 29495	29495	21 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 9W FAN 2PK 29526	29526	21 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 9W GLOBE 2PK 29528	29528	26 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 9W FAN 3PK 29764	29764	26 Specialty	0.80	0.80	0.80
LIGHTING	TCP 9w G25 Globe 1G2509	1100.755	26 Specialty	0.80	0.80	0.80
LIGHTING	TCP 9w (40w) A-bulb 2-pack	963-699	26 Specialty	0.80	0.80	0.80
LIGHTING	TCP 9w (40w) G-25 s/w 2-pack	964-790	26 Specialty	0.80	0.80	0.80
LIGHTING	FEIT 11W R20 DIM BPESL11R20/DM	BPESL11R20	24 Specialty	0.80	0.80	0.80
LIGHTING	GE 11W R20 24691	24691	24 Specialty	0.80	0.80	0.80
LIGHTING	GE 11W R20 CFL 3992286	3992286	24 Specialty	0.80	0.80	0.80
LIGHTING	GE 11W G25 GLOBE 47484	47484	24 Specialty	0.80	0.80	0.80
LIGHTING	GE 11W R20 4 Pk 294086	294086	24 Specialty	0.80	0.80	0.80
LIGHTING	GE 11 WATT ROUND GLOBE - 40 WATT REP	294100	24 Specialty	0.80	0.80	0.80
LIGHTING	Maxlite 13w MiniBulb A19 SKB13EA	1100.91	40 Specialty	0.80	0.80	0.80
LIGHTING	LITETRONICS E145218 14W A19	E145218	39 Specialty	0.80	0.80	0.80
LIGHTING	LITETRONICS E145236 14W G25	E145236	39 Specialty	0.80	0.80	0.80
LIGHTING	Philips 14w Bug-A-Way 203711	1100.439	39 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 14W A19 3PK 20106	20106	39 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 14W A19 29485	29485	39 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 14W R20 29587	29587	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w (65w) R-30 2-pack s/w	158-653	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w R30 160-374	160-374	39 Specialty	0.80	0.80	0.80

LIGHTING	TCP 14w (65w) R-30 single pack s/w	207-798	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w (50w) R-20 s/w	230-565	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w G25 Globe 2G2514	1100.784	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14W (65W) R-30 2-pack	565-172	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w R20 Flood 2PK 598-833	598-833	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14W ALAMP 2PK 599-163	599-163	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w G25 White 2PK 599-262	599-262	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14W R30 SW 6PK 791-552	791-552	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w (60w) G-25 s/w 2-pack	964-196	39 Specialty	0.80	0.80	0.80
LIGHTING	TCP 14w (60w) A-bulb 2-pack	967-034	39 Specialty	0.80	0.80	0.80
LIGHTING	Feit 15W A-Shape BPESL15ATMM	BPESL15ATM	38 Specialty	0.80	0.80	0.80
LIGHTING	FEIT 15W R30 BPESL15R30/DM	BPESL15R30	38 Specialty	0.80	0.80	0.80
LIGHTING	FEIT 15W DIM TWIST BPESL15T/DM	BPESL15TDM	38 Specialty	0.80	0.80	0.80
LIGHTING	FEIT 15W R30 4PK ESL15BR30/R/E	ESL15BR304	38 Specialty	0.80	0.80	0.80
LIGHTING	FEIT 15W BR30 ESL15BR30/ECO	ESL15BR30E	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W R30 20708	20708	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W DIM FLOOD 2PK 21709	21709	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W R30 DIM 21710	21710	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W INDOOR FLOOD 3PK 28909	28909	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15 W R30 CFL 3138120	3138120	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W R30 47478	47478	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W G25 GLOBE 47485	47485	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W ALL-GLASS 3PK 680346	680346	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W ALL GLASS 74437	74437	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W COV SPIRAL 3PK 74857	74857	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15 W R30 2PK	8872101	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15W DIM 89623	89623	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15 WATT DIMMABLE INDOOR FLOODLIG 25312		38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15w R-30 Dimmable Flood FLE15/2/DV/R30 1160.607		38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15w R30 Soft White Flood FLE15/2/R30XL 1160.611		38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15 WATT INDOOR FLOODLIGHT - 65 WA 167248		38 Specialty	0.80	0.80	0.80
LIGHTING	GE 15 WATT STANDARD SHAPE - 60 WATT F217078		38 Specialty	0.80	0.80	0.80
LIGHTING	GLOBE 15W R30 2PK 0112601	112601	38 Specialty	0.80	0.80	0.80
LIGHTING	GLOBE 15W R30 2PK 699450	699450	38 Specialty	0.80	0.80	0.80
LIGHTING	GLOBE 15W R30 2PK 8872101	8872101	38 Specialty	0.80	0.80	0.80
LIGHTING	LITETRONICS E155250 15W R30	E155250	38 Specialty	0.80	0.80	0.80
LIGHTING	LOA 15W R30 REFLECTOR 2915-L1	2915-L1	38 Specialty	0.80	0.80	0.80

LIGHTING	MEIJER 15W R30 2PK 233113	233113	38 Specialty	0.80	0.80	0.80
LIGHTING	PHILIPS 15W R30 406207	406207	38 Specialty	0.80	0.80	0.80
LIGHTING	PHILIPS 15W R30 2PK 406215	406215	38 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 15W DIMM 29667	29667	38 Specialty	0.80	0.80	0.80
LIGHTING	GE 16W R30 73042	73042	37 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 16W BR30 3PK 29773	29773	37 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 16W BR30 3PK 29998	29998	37 Specialty	0.80	0.80	0.80
LIGHTING	TCP 16w Dimmable R30	785-283	37 Specialty	0.80	0.80	0.80
LIGHTING	Feit 18w PAR-38 WPK LBP18PAR2	LBP18PAR2	49 Specialty	0.80	0.80	0.80
LIGHTING	GE 20W ALL GLASS 74438	74438	47 Specialty	0.80	0.80	0.80
LIGHTING	GE 20W ALL GLASS 3PK 74858	74858	47 Specialty	0.80	0.80	0.80
LIGHTING	LOA 20W R40 REFLECT 2920-R/40	2920-R/40	47 Specialty	0.80	0.80	0.80
LIGHTING	MaxLite 20w MiniBulb A20 SKB20EAWW/SP	1100.927	47 Specialty	0.80	0.80	0.80
LIGHTING	Sylvania 20w R40 Reflector Flood 29399	1160.022	47 Specialty	0.80	0.80	0.80
LIGHTING	FEIT 23W DIM TWIST BPESL23T/DM	BPESL23TDM	66 Specialty	0.80	0.80	0.80
LIGHTING	Feit 23w PAR-38 EcoBulb Flood ESL23PAR38T	1160.08	66 Specialty	0.80	0.80	0.80
LIGHTING	LITETRONICS E235252 23W R40	E235252	66 Specialty	0.80	0.80	0.80
LIGHTING	LITETRONICS E235266 23W PAR38	E235266	66 Specialty	0.80	0.80	0.80
LIGHTING	PHILIPS 23W PAR38 227918	227918	66 Specialty	0.80	0.80	0.80
LIGHTING	PHILIPS 23W PAR38 2PK 228007	228007	66 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 23W BR40 29442	29442	66 Specialty	0.80	0.80	0.80
LIGHTING	TCP 23w (90w) PAR38 2-pack s/w	159979	66 Specialty	0.80	0.80	0.80
LIGHTING	TCP 23w (90w) PAR38 2-pack s/w	159-979	66 Specialty	0.80	0.80	0.80
LIGHTING	TCP 23w (120w) R-40 single pack s/w	207-810	66 Specialty	0.80	0.80	0.80
LIGHTING	TCP 23w Dimmable spiral	362-283	66 Specialty	0.80	0.80	0.80
LIGHTING	TCP 23W R40 2PK 780-758	780-758	66 Specialty	0.80	0.80	0.80
LIGHTING	GE 26 W R40 3 PK 294079	294079	63 Specialty	0.80	0.80	0.80
LIGHTING	GE 26W R40 CFL 3992245	3992245	63 Specialty	0.80	0.80	0.80
LIGHTING	GE 26W PAR OUTDOOR 3992260	3992260	63 Specialty	0.80	0.80	0.80
LIGHTING	GE 26W R40 47479	47479	42 Specialty	0.80	0.80	0.80
LIGHTING	GE 26W OUTDOOR PAR 47483	47483	42 Specialty	0.80	0.80	0.80
LIGHTING	GLOBE 26W 3-WAY	262679-	63 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 28W 3WAY TWIST 29785	29785	40 Specialty	0.80	0.80	0.80
LIGHTING	GE 29W 3-WAY 47448	47448	60 Specialty	0.80	0.80	0.80
LIGHTING	Earthmate 33w 3-way ES3362AN	1100.333	57 Specialty	0.80	0.80	0.80
LIGHTING	Harmony 33w Lightwiz Three-Way H33327S-B	1100.928	57 Specialty	0.80	0.80	0.80
LIGHTING	SYLVANIA 33W 3WAY TWIST 29913	29913	57 Specialty	0.80	0.80	0.80

LIGHTING	GE 39W 3-WAY 3PK 79455	79455	95 Specialty	0.80	0.80	0.80
LIGHTING	MEIJER 15/26/40W 262679	262679	94 Specialty	0.80	0.80	0.80

Measure Name	Facility
CMH Integral Ballast Lamps	Office
CMH Integral Ballast Lamps	Medical
CMH Integral Ballast Lamps	Restaurant
CMH Integral Ballast Lamps	Grocery
CMH Integral Ballast Lamps	School (K-12)
CMH Integral Ballast Lamps	College/University
CMH Integral Ballast Lamps	Warehouse
CMH Integral Ballast Lamps	Retail
CMH Integral Ballast Lamps	Manufacturing
CMH Integral Ballast Lamps	Hotel/Motel
CMH Integral Ballast Lamps	Other
Controls for H.I.D. Systems	Office
Controls for H.I.D. Systems	Medical
Controls for H.I.D. Systems	Restaurant
Controls for H.I.D. Systems	Grocery
Controls for H.I.D. Systems	School (K-12)
Controls for H.I.D. Systems	College/University
Controls for H.I.D. Systems	Warehouse
Controls for H.I.D. Systems	Retail
Controls for H.I.D. Systems	Manufacturing
Controls for H.I.D. Systems	Hotel/Motel
Controls for H.I.D. Systems	Other
Controls for T5 and High Performance T8 Systems	Office
Controls for T5 and High Performance T8 Systems	Medical
Controls for T5 and High Performance T8 Systems	Restaurant
Controls for T5 and High Performance T8 Systems	Grocery
Controls for T5 and High Performance T8 Systems	School (K-12)
Controls for T5 and High Performance T8 Systems	College/University
Controls for T5 and High Performance T8 Systems	Warehouse
Controls for T5 and High Performance T8 Systems	Retail
Controls for T5 and High Performance T8 Systems	Manufacturing
Controls for T5 and High Performance T8 Systems	Hotel/Motel
Controls for T5 and High Performance T8 Systems	Other
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Office
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Medical
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Restaurant
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Grocery
Controls for T5 and High Performance T8 Systems - BONUS VERSION	School (K-12)
Controls for T5 and High Performance T8 Systems - BONUS VERSION	College/University
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Warehouse
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Retail
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Manufacturing
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Hotel/Motel
Controls for T5 and High Performance T8 Systems - BONUS VERSION	Other
Fluorescent U-bend Relamp and reballast	Office
Fluorescent U-bend Relamp and reballast	School (K-12)
Fluorescent U-bend Relamp and reballast	College/University
Fluorescent U-bend Relamp and reballast	Medical
Fluorescent U-bend Relamp and reballast	Restaurant
Fluorescent U-bend Relamp and reballast	Grocery

Fluorescent U-bend Relamp and reballast	Warehouse
Fluorescent U-bend Relamp and reballast	Retail
Fluorescent U-bend Relamp and reballast	Manufacturing
Fluorescent U-bend Relamp and reballast	Hotel/Motel
Fluorescent U-bend Relamp and reballast	Other
Hard-Wired CFL Fixtures <30 Watts	Office
Hard-Wired CFL Fixtures <30 Watts	Medical
Hard-Wired CFL Fixtures <30 Watts	Restaurant
Hard-Wired CFL Fixtures <30 Watts	Grocery
Hard-Wired CFL Fixtures <30 Watts	School (K-12)
Hard-Wired CFL Fixtures <30 Watts	College/University
Hard-Wired CFL Fixtures <30 Watts	Warehouse
Hard-Wired CFL Fixtures <30 Watts	Retail
Hard-Wired CFL Fixtures <30 Watts	Manufacturing
Hard-Wired CFL Fixtures <30 Watts	Hotel/Motel
Hard-Wired CFL Fixtures <30 Watts	Other
Hard-Wired CFL Fixtures >30 Watts	Office
Hard-Wired CFL Fixtures >30 Watts	Medical
Hard-Wired CFL Fixtures >30 Watts	Restaurant
Hard-Wired CFL Fixtures >30 Watts	Grocery
Hard-Wired CFL Fixtures >30 Watts	School (K-12)
Hard-Wired CFL Fixtures >30 Watts	College/University
Hard-Wired CFL Fixtures >30 Watts	Warehouse
Hard-Wired CFL Fixtures >30 Watts	Retail
Hard-Wired CFL Fixtures >30 Watts	Manufacturing
Hard-Wired CFL Fixtures >30 Watts	Hotel/Motel
Hard-Wired CFL Fixtures >30 Watts	Other
LED cooler/ freezer lighting	Grocery
LED cooler/ freezer lighting controls/ sensors	Grocery
LED Exit Signs	Office
LED Exit Signs	Medical
LED Exit Signs	Restaurant
LED Exit Signs	Grocery
LED Exit Signs	School (K-12)
LED Exit Signs	College/University
LED Exit Signs	Warehouse
LED Exit Signs	Retail
LED Exit Signs	Manufacturing
LED Exit Signs	Hotel/Motel
LED Exit Signs	Other
LED Lamps	Office
LED Lamps	Medical
LED Lamps	Restaurant
LED Lamps	Grocery
LED Lamps	School (K-12)
LED Lamps	College/University
LED Lamps	Warehouse
LED Lamps	Retail
LED Lamps	Manufacturing
LED Lamps	Hotel/Motel
LED Lamps	Other
New Fluorescent Fixtures	Office

New Fluorescent Fixtures	School (K-12)
New Fluorescent Fixtures	College/University
New Fluorescent Fixtures	Medical
New Fluorescent Fixtures	Restaurant
New Fluorescent Fixtures	Grocery
New Fluorescent Fixtures	Warehouse
New Fluorescent Fixtures	Retail
New Fluorescent Fixtures	Manufacturing
New Fluorescent Fixtures	Hotel/Motel
New Fluorescent Fixtures	Other
New Fluorescent Fixtures	Office
New Fluorescent Fixtures	School (K-12)
New Fluorescent Fixtures	College/University
New Fluorescent Fixtures	Medical
New Fluorescent Fixtures	Restaurant
New Fluorescent Fixtures	Grocery
New Fluorescent Fixtures	Warehouse
New Fluorescent Fixtures	Retail
New Fluorescent Fixtures	Manufacturing
New Fluorescent Fixtures	Hotel/Motel
New Fluorescent Fixtures	Other
New Fluorescent Fixtures - BONUS VERSION	Office
New Fluorescent Fixtures - BONUS VERSION	School (K-12)
New Fluorescent Fixtures - BONUS VERSION	College/University
New Fluorescent Fixtures - BONUS VERSION	Medical
New Fluorescent Fixtures - BONUS VERSION	Restaurant
New Fluorescent Fixtures - BONUS VERSION	Grocery
New Fluorescent Fixtures - BONUS VERSION	Warehouse
New Fluorescent Fixtures - BONUS VERSION	Retail
New Fluorescent Fixtures - BONUS VERSION	Manufacturing
New Fluorescent Fixtures - BONUS VERSION	Hotel/Motel
New Fluorescent Fixtures - BONUS VERSION	Other
New Fluorescent Fixtures - BONUS VERSION	Office
New Fluorescent Fixtures - BONUS VERSION	School (K-12)
New Fluorescent Fixtures - BONUS VERSION	College/University
New Fluorescent Fixtures - BONUS VERSION	Medical
New Fluorescent Fixtures - BONUS VERSION	Restaurant
New Fluorescent Fixtures - BONUS VERSION	Grocery
New Fluorescent Fixtures - BONUS VERSION	Warehouse
New Fluorescent Fixtures - BONUS VERSION	Retail
New Fluorescent Fixtures - BONUS VERSION	Manufacturing
New Fluorescent Fixtures - BONUS VERSION	Hotel/Motel
New Fluorescent Fixtures - BONUS VERSION	Other
Occupancy Sensors - BONUS VERSION	Office
Occupancy Sensors - BONUS VERSION	Medical
Occupancy Sensors - BONUS VERSION	Restaurant
Occupancy Sensors - BONUS VERSION	Grocery
Occupancy Sensors - BONUS VERSION	School (K-12)
Occupancy Sensors - BONUS VERSION	College/University
Occupancy Sensors - BONUS VERSION	Warehouse
Occupancy Sensors - BONUS VERSION	Retail
Occupancy Sensors - BONUS VERSION	Manufacturing

Occupancy Sensors - BONUS VERSION	Hotel/Motel
Occupancy Sensors - BONUS VERSION	Other
Occupancy Sensors (switch plate)	Office
Occupancy Sensors (switch plate)	Medical
Occupancy Sensors (switch plate)	Restaurant
Occupancy Sensors (switch plate)	Grocery
Occupancy Sensors (switch plate)	School (K-12)
Occupancy Sensors (switch plate)	College/University
Occupancy Sensors (switch plate)	Warehouse
Occupancy Sensors (switch plate)	Retail
Occupancy Sensors (switch plate)	Manufacturing
Occupancy Sensors (switch plate)	Hotel/Motel
Occupancy Sensors (switch plate)	Other
Remote Mounted Occupancy Sensors	Office
Remote Mounted Occupancy Sensors	Medical
Remote Mounted Occupancy Sensors	Restaurant
Remote Mounted Occupancy Sensors	Grocery
Remote Mounted Occupancy Sensors	School (K-12)
Remote Mounted Occupancy Sensors	College/University
Remote Mounted Occupancy Sensors	Warehouse
Remote Mounted Occupancy Sensors	Retail
Remote Mounted Occupancy Sensors	Manufacturing
Remote Mounted Occupancy Sensors	Hotel/Motel
Remote Mounted Occupancy Sensors	Other
Remote Mounted Occupancy Sensors - BONUS VERSION	Office
Remote Mounted Occupancy Sensors - BONUS VERSION	Medical
Remote Mounted Occupancy Sensors - BONUS VERSION	Restaurant
Remote Mounted Occupancy Sensors - BONUS VERSION	Grocery
Remote Mounted Occupancy Sensors - BONUS VERSION	School (K-12)
Remote Mounted Occupancy Sensors - BONUS VERSION	College/University
Remote Mounted Occupancy Sensors - BONUS VERSION	Warehouse
Remote Mounted Occupancy Sensors - BONUS VERSION	Retail
Remote Mounted Occupancy Sensors - BONUS VERSION	Manufacturing
Remote Mounted Occupancy Sensors - BONUS VERSION	Hotel/Motel
Remote Mounted Occupancy Sensors - BONUS VERSION	Other
T12 to T8 (32 watt) Relamp and Reballast	Office
T12 to T8 (32 watt) Relamp and Reballast	School (K-12)
T12 to T8 (32 watt) Relamp and Reballast	College/University
T12 to T8 (32 watt) Relamp and Reballast	Medical
T12 to T8 (32 watt) Relamp and Reballast	Restaurant
T12 to T8 (32 watt) Relamp and Reballast	Grocery
T12 to T8 (32 watt) Relamp and Reballast	Warehouse
T12 to T8 (32 watt) Relamp and Reballast	Retail
T12 to T8 (32 watt) Relamp and Reballast	Manufacturing
T12 to T8 (32 watt) Relamp and Reballast	Hotel/Motel
T12 to T8 (32 watt) Relamp and Reballast	Other
T12 to T8 (32 watt) Relamp and Reballast	Office
T12 to T8 (32 watt) Relamp and Reballast	School (K-12)
T12 to T8 (32 watt) Relamp and Reballast	College/University
T12 to T8 (32 watt) Relamp and Reballast	Medical
T12 to T8 (32 watt) Relamp and Reballast	Restaurant
T12 to T8 (32 watt) Relamp and Reballast	Grocery

T12 to T8 (32 watt) Relamp and Reballast	Warehouse
T12 to T8 (32 watt) Relamp and Reballast	Retail
T12 to T8 (32 watt) Relamp and Reballast	Manufacturing
T12 to T8 (32 watt) Relamp and Reballast	Hotel/Motel
T12 to T8 (32 watt) Relamp and Reballast	Other
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Office
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	School (K-12)
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	College/University
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Medical
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Restaurant
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Grocery
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Warehouse
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Retail
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Manufacturing
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Hotel/Motel
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Other
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Office
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	School (K-12)
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	College/University
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Medical
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Restaurant
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Grocery
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Warehouse
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Retail
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Manufacturing
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Hotel/Motel
T12 to T8 (32 watt) Relamp and Reballast - BONUS VERSION	Other
T12 to T8 (low wattage 28 watt) Relamp and reballast	Office
T12 to T8 (low wattage 28 watt) Relamp and reballast	School (K-12)
T12 to T8 (low wattage 28 watt) Relamp and reballast	College/University
T12 to T8 (low wattage 28 watt) Relamp and reballast	Retail
T12 to T8 (low wattage 28 watt) Relamp and reballast	Restaurant
T12 to T8 (low wattage 28 watt) Relamp and reballast	Hotel/Motel
T12 to T8 (low wattage 28 watt) Relamp and reballast	Medical
T12 to T8 (low wattage 28 watt) Relamp and reballast	Grocery
T12 to T8 (low wattage 28 watt) Relamp and reballast	Warehouse
T12 to T8 (low wattage 28 watt) Relamp and reballast	Manufacturing
T12 to T8 (low wattage 28 watt) Relamp and reballast	Other
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Office
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	School (K-12)
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	College/University
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Retail
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Restaurant
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Hotel/Motel
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Medical
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Grocery
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Warehouse
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Manufacturing
T12 to T8 (ultra low Wattage 25 watt) Relamp and reballast	Other
T12 to T8 Fluorescent Fixtures with Reflectors	Office
T12 to T8 Fluorescent Fixtures with Reflectors	School (K-12)
T12 to T8 Fluorescent Fixtures with Reflectors	College/University

T12 to T8 Fluorescent Fixtures with Reflectors	Medical
T12 to T8 Fluorescent Fixtures with Reflectors	Restaurant
T12 to T8 Fluorescent Fixtures with Reflectors	Grocery
T12 to T8 Fluorescent Fixtures with Reflectors	Warehouse
T12 to T8 Fluorescent Fixtures with Reflectors	Retail
T12 to T8 Fluorescent Fixtures with Reflectors	Manufacturing
T12 to T8 Fluorescent Fixtures with Reflectors	Hotel/Motel
T12 to T8 Fluorescent Fixtures with Reflectors	Other
T12 to T8 Fluorescent Fixtures with Reflectors	Office
T12 to T8 Fluorescent Fixtures with Reflectors	School (K-12)
T12 to T8 Fluorescent Fixtures with Reflectors	College/University
T12 to T8 Fluorescent Fixtures with Reflectors	Medical
T12 to T8 Fluorescent Fixtures with Reflectors	Restaurant
T12 to T8 Fluorescent Fixtures with Reflectors	Grocery
T12 to T8 Fluorescent Fixtures with Reflectors	Warehouse
T12 to T8 Fluorescent Fixtures with Reflectors	Retail
T12 to T8 Fluorescent Fixtures with Reflectors	Manufacturing
T12 to T8 Fluorescent Fixtures with Reflectors	Hotel/Motel
T12 to T8 Fluorescent Fixtures with Reflectors	Other
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Office
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	School (K-12)
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	College/University
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Medical
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Restaurant
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Grocery
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Warehouse
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Retail
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Manufacturing
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Hotel/Motel
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Other
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Office
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	School (K-12)
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	College/University
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Medical
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Restaurant
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Grocery
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Warehouse
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Retail
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Manufacturing
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Hotel/Motel
T12 to T8 Fluorescent Fixtures with Reflectors - BONUS VERSION	Other

Hours	Lamp Length	kWhSavings	NTG Y4	NTG Y5	NTG Y6
2616		126	0.73	0.73	0.73
6474		291	0.73	0.73	0.73
4816		238	0.73	0.73	0.73
5824		262	0.73	0.73	0.73
1873		84	0.73	0.73	0.73
3433		154	0.73	0.73	0.73
4160		187	0.73	0.73	0.73
4117		189	0.73	0.73	0.73
4290		193	0.73	0.73	0.73
6206		222	0.73	0.73	0.73
4372		195	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73
4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73
4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73
4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2808		115	0.73	0.73	0.73
1873		75	0.73	0.73	0.73
3433		138	0.73	0.73	0.73
8736		361	0.73	0.73	0.73
5278		212	0.73	0.73	0.73
5824		230	0.73	0.73	0.73

3597		133	0.73	0.73	0.73
4306		167	0.73	0.73	0.73
4290		156	0.73	0.73	0.73
4941		197	0.73	0.73	0.73
4489		176	0.73	0.73	0.73
2616		175	0.73	0.73	0.73
6474		436	0.73	0.73	0.73
4816		316	0.73	0.73	0.73
5824		376	0.73	0.73	0.73
1873		123	0.73	0.73	0.73
3433		225	0.73	0.73	0.73
4160		252	0.73	0.73	0.73
4117		261	0.73	0.73	0.73
4290		255	0.73	0.73	0.73
6206		404	0.73	0.73	0.73
4372		280	0.73	0.73	0.73
2616		344	0.73	0.73	0.73
6474		859	0.73	0.73	0.73
4816		623	0.73	0.73	0.73
5824		740	0.73	0.73	0.73
1873		242	0.73	0.73	0.73
3433		444	0.73	0.73	0.73
4160		496	0.73	0.73	0.73
4117		514	0.73	0.73	0.73
4290		502	0.73	0.73	0.73
6206		796	0.73	0.73	0.73
4372		551	0.73	0.73	0.73
0		182.2912	0.73	0.73	0.73
0		196.686	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
8760		342	0.73	0.73	0.73
2616		68	0.73	0.73	0.73
6474		171	0.73	0.73	0.73
4816		124	0.73	0.73	0.73
5824		147	0.73	0.73	0.73
1873		48	0.73	0.73	0.73
3433		88	0.73	0.73	0.73
4160		98	0.73	0.73	0.73
4117		102	0.73	0.73	0.73
4290		100	0.73	0.73	0.73
6206		126	0.73	0.73	0.73
4372		106	0.73	0.73	0.73
2616	4'	40.03	0.73	0.73	0.73

1873	4'	26.24	0.73	0.73	0.73
3433	4'	48.09	0.73	0.73	0.73
6474	4'	125.59	0.73	0.73	0.73
4816	4'	73.95	0.73	0.73	0.73
5824	4'	80.18	0.73	0.73	0.73
4160	4'	46.45	0.73	0.73	0.73
4117	4'	58.23	0.73	0.73	0.73
4290	4'	54.36	0.73	0.73	0.73
6206	4'	68.62	0.73	0.73	0.73
4372	4'	61.25	0.73	0.73	0.73
2616	8'	53.39	0.73	0.73	0.73
1873	8'	34.99	0.73	0.73	0.73
3433	8'	64.14	0.73	0.73	0.73
6474	8'	167.51	0.73	0.73	0.73
4816	8'	98.63	0.73	0.73	0.73
5824	8'	106.94	0.73	0.73	0.73
4160	8'	61.95	0.73	0.73	0.73
4117	8'	77.66	0.73	0.73	0.73
4290	8'	72.5	0.73	0.73	0.73
6206	8'	91.52	0.73	0.73	0.73
4372	8'	81.69	0.73	0.73	0.73
2616	4'	40.03	0.73	0.73	0.73
1873	4'	26.24	0.73	0.73	0.73
3433	4'	48.09	0.73	0.73	0.73
6474	4'	125.59	0.73	0.73	0.73
4816	4'	73.95	0.73	0.73	0.73
5824	4'	80.18	0.73	0.73	0.73
4160	4'	46.45	0.73	0.73	0.73
4117	4'	58.23	0.73	0.73	0.73
4290	4'	54.36	0.73	0.73	0.73
6206	4'	68.62	0.73	0.73	0.73
4372	4'	61.25	0.73	0.73	0.73
2616	8'	53.39	0.73	0.73	0.73
1873	8'	34.99	0.73	0.73	0.73
3433	8'	64.14	0.73	0.73	0.73
6474	8'	167.51	0.73	0.73	0.73
4816	8'	98.63	0.73	0.73	0.73
5824	8'	106.94	0.73	0.73	0.73
4160	8'	61.95	0.73	0.73	0.73
4117	8'	77.66	0.73	0.73	0.73
4290	8'	72.5	0.73	0.73	0.73
6206	8'	91.52	0.73	0.73	0.73
4372	8'	81.69	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73

4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73
4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73
4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2808		0.66	0.73	0.73	0.73
6474		1.53	0.73	0.73	0.73
5278		1.21	0.73	0.73	0.73
5824		1.32	0.73	0.73	0.73
1873		0.43	0.73	0.73	0.73
3433		0.79	0.73	0.73	0.73
4160		2.2	0.73	0.73	0.73
4210		0.93	0.73	0.73	0.73
4290		2.23	0.73	0.73	0.73
4941		1.13	0.73	0.73	0.73
4325		1.33	0.73	0.73	0.73
2616	4'	40.03	0.73	0.73	0.73
1873	4'	26.24	0.73	0.73	0.73
3433	4'	48.09	0.73	0.73	0.73
6474	4'	125.59	0.73	0.73	0.73
4816	4'	73.95	0.73	0.73	0.73
5824	4'	80.18	0.73	0.73	0.73
4160	4'	46.45	0.73	0.73	0.73
4117	4'	58.23	0.73	0.73	0.73
4290	4'	54.36	0.73	0.73	0.73
6206	4'	68.62	0.73	0.73	0.73
4372	4'	61.25	0.73	0.73	0.73
2616	8'	53.39	0.73	0.73	0.73
1873	8'	34.99	0.73	0.73	0.73
3433	8'	64.14	0.73	0.73	0.73
6474	8'	167.51	0.73	0.73	0.73
4816	8'	98.63	0.73	0.73	0.73
5824	8'	106.94	0.73	0.73	0.73

4160	8'	61.95	0.73	0.73	0.73
4117	8'	77.66	0.73	0.73	0.73
4290	8'	72.5	0.73	0.73	0.73
6206	8'	91.52	0.73	0.73	0.73
4372	8'	81.69	0.73	0.73	0.73
2616	4'	40.03	0.73	0.73	0.73
1873	4'	26.24	0.73	0.73	0.73
3433	4'	48.09	0.73	0.73	0.73
6474	4'	125.59	0.73	0.73	0.73
4816	4'	73.95	0.73	0.73	0.73
5824	4'	80.18	0.73	0.73	0.73
4160	4'	46.45	0.73	0.73	0.73
4117	4'	58.23	0.73	0.73	0.73
4290	4'	54.36	0.73	0.73	0.73
6206	4'	68.62	0.73	0.73	0.73
4372	4'	61.25	0.73	0.73	0.73
2616	8'	53.39	0.73	0.73	0.73
1873	8'	34.99	0.73	0.73	0.73
3433	8'	64.14	0.73	0.73	0.73
6474	8'	167.51	0.73	0.73	0.73
4816	8'	98.63	0.73	0.73	0.73
5824	8'	106.94	0.73	0.73	0.73
4160	8'	61.95	0.73	0.73	0.73
4117	8'	77.66	0.73	0.73	0.73
4290	8'	72.5	0.73	0.73	0.73
6206	8'	91.52	0.73	0.73	0.73
4372	8'	81.69	0.73	0.73	0.73
2808		43	0.73	0.73	0.73
1873		28	0.73	0.73	0.73
3433		52	0.73	0.73	0.73
4306		63	0.73	0.73	0.73
5278		80	0.73	0.73	0.73
4941		74	0.73	0.73	0.73
8736		135	0.73	0.73	0.73
5824		86	0.73	0.73	0.73
3597		50	0.73	0.73	0.73
4290		58	0.73	0.73	0.73
4489		66	0.73	0.73	0.73
2808		52	0.73	0.73	0.73
1873		34	0.73	0.73	0.73
3433		62	0.73	0.73	0.73
4306		76	0.73	0.73	0.73
5278		96	0.73	0.73	0.73
4941		89	0.73	0.73	0.73
8736		163	0.73	0.73	0.73
5824		104	0.73	0.73	0.73
3597		60	0.73	0.73	0.73
4290		70	0.73	0.73	0.73
4489		79	0.73	0.73	0.73
2616	4'	40.03	0.73	0.73	0.73
1873	4'	26.24	0.73	0.73	0.73
3433	4'	48.09	0.73	0.73	0.73

6474	4'	125.59	0.73	0.73	0.73
4816	4'	73.95	0.73	0.73	0.73
5824	4'	80.18	0.73	0.73	0.73
4160	4'	46.45	0.73	0.73	0.73
4117	4'	58.23	0.73	0.73	0.73
4290	4'	54.36	0.73	0.73	0.73
6206	4'	68.62	0.73	0.73	0.73
4372	4'	61.25	0.73	0.73	0.73
2616	8'	53.39	0.73	0.73	0.73
1873	8'	34.99	0.73	0.73	0.73
3433	8'	64.14	0.73	0.73	0.73
6474	8'	167.51	0.73	0.73	0.73
4816	8'	98.63	0.73	0.73	0.73
5824	8'	106.94	0.73	0.73	0.73
4160	8'	61.95	0.73	0.73	0.73
4117	8'	77.66	0.73	0.73	0.73
4290	8'	72.5	0.73	0.73	0.73
6206	8'	91.52	0.73	0.73	0.73
4372	8'	81.69	0.73	0.73	0.73
2616	4'	40.03	0.73	0.73	0.73
1873	4'	26.24	0.73	0.73	0.73
3433	4'	48.09	0.73	0.73	0.73
6474	4'	125.59	0.73	0.73	0.73
4816	4'	73.95	0.73	0.73	0.73
5824	4'	80.18	0.73	0.73	0.73
4160	4'	46.45	0.73	0.73	0.73
4117	4'	58.23	0.73	0.73	0.73
4290	4'	54.36	0.73	0.73	0.73
6206	4'	68.62	0.73	0.73	0.73
4372	4'	61.25	0.73	0.73	0.73
2616	8'	53.39	0.73	0.73	0.73
1873	8'	34.99	0.73	0.73	0.73
3433	8'	64.14	0.73	0.73	0.73
6474	8'	167.51	0.73	0.73	0.73
4816	8'	98.63	0.73	0.73	0.73
5824	8'	106.94	0.73	0.73	0.73
4160	8'	61.95	0.73	0.73	0.73
4117	8'	77.66	0.73	0.73	0.73
4290	8'	72.5	0.73	0.73	0.73
6206	8'	91.52	0.73	0.73	0.73
4372	8'	81.69	0.73	0.73	0.73

MeasureID	Measure Name	Description
1		--
2	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
3	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
4	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
5	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
6	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
7	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
8	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
9	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
10	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
11	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 14
13	Air-Cooled Chillers	All sizes
14	Air-Cooled Chillers	All sizes
15	Air-Cooled Chillers	All sizes
16	Air-Cooled Chillers	All sizes
17	Air-Cooled Chillers	All sizes
18	Air-Cooled Chillers	All sizes
20	Air-Cooled Chillers	All sizes
21	Air-Cooled Chillers	All sizes
22	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
23	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
24	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
25	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
26	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
27	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
28	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
29	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
30	Room Air Conditioner	Room Air <8000 btuh (ENERGY STAR qualified)
31	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)

32	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
33	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
34	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
35	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
36	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
37	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
38	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
39	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
40	Room Air Conditioner	Room Air 8000 to 13,999 btuh (ENERGY STAR qualified)
41	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
42	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
43	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
44	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
45	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
46	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
47	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
48	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
49	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
50	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (ENERGY STAR qualified)
51	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
52	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
53	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
54	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
55	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
56	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
57	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)

58	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
59	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
60	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
61	Room Air Conditioner	Room Air >20,000 btuh (ENERGY STAR qualified)
62	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
63	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
64	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
65	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
66	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
67	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
68	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
69	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
70	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
71	Room Air Conditioner	Room Air <8000 btuh (SEHA Tier 1)
72	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
73	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
74	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
75	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
76	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
77	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
78	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
79	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
80	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
81	Room Air Conditioner	Room Air 8000 to 13,999 btuh (SEHA Tier 1)
82	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
83	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
84	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
85	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
86	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
87	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
88	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)

89	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
90	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
91	Room Air Conditioner	Room Air 14,000 to 19,999 btuh (SEHA Tier 1)
92	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
93	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
94	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
95	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
96	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
97	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
98	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
99	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
100	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
101	Room Air Conditioner	Room Air >20,000 btuh (SEHA Tier 1)
102	PTAC/PTHP	All Sizes, retrofit
103	PTAC/PTHP	All Sizes, retrofit
104	PTAC/PTHP	All Sizes, retrofit
105	PTAC/PTHP	All Sizes, retrofit
106	PTAC/PTHP	All Sizes, retrofit
107	PTAC/PTHP	All Sizes, retrofit
108	PTAC/PTHP	All Sizes, retrofit
109	PTAC/PTHP	All Sizes, retrofit
110	PTAC/PTHP	All Sizes, retrofit
111	PTAC/PTHP	All Sizes, new construction
112	PTAC/PTHP	All Sizes, new construction
113	PTAC/PTHP	All Sizes, new construction
114	PTAC/PTHP	All Sizes, new construction
115	PTAC/PTHP	All Sizes, new construction
116	PTAC/PTHP	All Sizes, new construction
117	PTAC/PTHP	All Sizes, new construction
118	PTAC/PTHP	All Sizes, new construction
119	PTAC/PTHP	All Sizes, new construction
120	PTAC/PTHP	All Sizes, new construction
121	PTAC/PTHP	All Sizes, retrofit
122	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
123	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
124	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
125	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
126	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
127	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
128	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
129	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15

130	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
131	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	<65,000 Btuh Minimum SEER 15
132	Variable Frequency Drive	All sizes-Chilled water pump
133	Variable Frequency Drive	All sizes-Chilled water pump
134	Variable Frequency Drive	All sizes-Chilled water pump
135	Variable Frequency Drive	All sizes-Chilled water pump
136	Variable Frequency Drive	All sizes-Chilled water pump
137	Variable Frequency Drive	All sizes-Chilled water pump
138	Variable Frequency Drive	All sizes-Chilled water pump
139	Variable Frequency Drive	All sizes-Chilled water pump
140	Variable Frequency Drive	All sizes-Chilled water pump
141	Variable Frequency Drive	All sizes-Chilled water pump
142	Variable Frequency Drive	All sizes-Fans
143	Variable Frequency Drive	All sizes-Fans
144	Variable Frequency Drive	All sizes-Fans
145	Variable Frequency Drive	All sizes-Fans
146	Variable Frequency Drive	All sizes-Fans
147	Variable Frequency Drive	All sizes-Fans
148	Variable Frequency Drive	All sizes-Fans
149	Variable Frequency Drive	All sizes-Fans
150	Variable Frequency Drive	All sizes-Fans
151	Variable Frequency Drive	All sizes-Fans
152	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
153	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
154	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
155	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
156	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
157	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
158	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
159	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
160	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
161	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
162	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
163	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
164	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
165	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
166	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
167	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
168	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
169	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
170	Variable Frequency Drive - BONUS VERSION	All sizes-Fans
171	Variable Frequency Drive - BONUS VERSION	All sizes-Chilled water pump
172	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
173	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
174	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
175	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER

176	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
177	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
178	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
179	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
180	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
181	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 11.5 EER
182	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
183	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
184	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
185	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
186	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
187	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
188	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
189	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
190	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
191	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=65,000 Btuh and <240,000 Btuh Min. 12 EER
192	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
193	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
194	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
195	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
196	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
197	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
198	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
199	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
200	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER
201	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.5 EER

202	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
203	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
204	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
205	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
206	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
207	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
208	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
209	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
210	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
211	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=240,000 Btuh and <760,000 Btuh Min. 10.8 EER
212	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
213	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
214	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
215	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
216	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
217	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
218	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
219	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
220	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
221	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 9.7 EER
222	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 10.2 EER
223	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 10.2 EER
224	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 10.2 EER
225	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 10.2 EER
226	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 10.2 EER
227	Unitary and Split Air Conditioning Systems and Air Source Heat Pumps	>=760,000 Btuh min. 10.2 EER

Facility	Total Savings- kWH or Therms	NTG Y4	NTG Y5	NTG Y6

Grocery	942.58	0.73	0.73	0.73
Hotel/Motel	1449.9	0.73	0.73	0.73
Manufacturing/Industrial	787.24	0.73	0.73	0.73
Medical	1236.81	0.73	0.73	0.73
Office	766.14	0.73	0.73	0.73
Other	911.34	0.73	0.73	0.73
Restaurant	1031.19	0.73	0.73	0.73
Retail/Service	749.31	0.73	0.73	0.73
Warehouse	489.56	0.73	0.73	0.73
School/College	749.31	0.73	0.73	0.73
Grocery	270.6	0.73	0.73	0.73
Hotel/Motel	457.45	0.73	0.73	0.73
Manufacturing/Industrial	259.46	0.73	0.73	0.73
Medical	360.47	0.73	0.73	0.73
Office	295.77	0.73	0.73	0.73
Other	307.66	0.73	0.73	0.73
Retail/Service	270.6	0.73	0.73	0.73
School/College	239.23	0.73	0.73	0.73
Hotel/Motel	533.77	0.73	0.73	0.73
Manufacturing/Industrial	692.69	0.73	0.73	0.73
Medical	671.31	0.73	0.73	0.73
Office	679.82	0.73	0.73	0.73
Other	450.84	0.73	0.73	0.73
Restaurant	822.52	0.73	0.73	0.73
Retail/Service	607.19	0.73	0.73	0.73
Warehouse	472.61	0.73	0.73	0.73
School/College	450.84	0.73	0.73	0.73
Grocery	904.31	0.73	0.73	0.73

Hotel/Motel	528.82	0.73	0.73	0.73
Manufacturing/Industrial	686.27	0.73	0.73	0.73
Medical	665.1	0.73	0.73	0.73
Office	673.53	0.73	0.73	0.73
Other	446.67	0.73	0.73	0.73
Restaurant	814.9	0.73	0.73	0.73
Retail/Service	601.57	0.73	0.73	0.73
Warehouse	468.24	0.73	0.73	0.73
School/College	446.67	0.73	0.73	0.73
Grocery	912.77	0.73	0.73	0.73
Hotel/Motel	533.77	0.73	0.73	0.73
Manufacturing/Industrial	692.69	0.73	0.73	0.73
Medical	671.31	0.73	0.73	0.73
Office	679.82	0.73	0.73	0.73
Other	450.84	0.73	0.73	0.73
Restaurant	822.52	0.73	0.73	0.73
Retail/Service	607.19	0.73	0.73	0.73
Warehouse	472.61	0.73	0.73	0.73
School/College	450.84	0.73	0.73	0.73
Grocery	1039	0.73	0.73	0.73
Hotel/Motel	607.58	0.73	0.73	0.73
Manufacturing/Industrial	788.49	0.73	0.73	0.73
Medical	764.16	0.73	0.73	0.73
Office	773.84	0.73	0.73	0.73
Other	513.19	0.73	0.73	0.73
Restaurant	936.27	0.73	0.73	0.73

Retail/Service	691.16	0.73	0.73	0.73
Warehouse	537.97	0.73	0.73	0.73
School/College	513.19	0.73	0.73	0.73
Grocery	912.77	0.73	0.73	0.73
Grocery	1143.67	0.73	0.73	0.73
Hotel/Motel	668.8	0.73	0.73	0.73
Manufacturing/Industrial	867.92	0.73	0.73	0.73
Medical	841.14	0.73	0.73	0.73
Office	851.8	0.73	0.73	0.73
Other	564.89	0.73	0.73	0.73
Restaurant	1030.6	0.73	0.73	0.73
Retail/Service	760.8	0.73	0.73	0.73
Warehouse	592.17	0.73	0.73	0.73
School/College	564.89	0.73	0.73	0.73
Grocery	1131.06	0.73	0.73	0.73
Hotel/Motel	661.42	0.73	0.73	0.73
Manufacturing/Industrial	858.35	0.73	0.73	0.73
Medical	831.86	0.73	0.73	0.73
Office	842.41	0.73	0.73	0.73
Other	558.66	0.73	0.73	0.73
Restaurant	1019.23	0.73	0.73	0.73
Retail/Service	752.4	0.73	0.73	0.73
Warehouse	585.64	0.73	0.73	0.73
School/College	558.66	0.73	0.73	0.73
Grocery	1143.67	0.73	0.73	0.73
Hotel/Motel	668.8	0.73	0.73	0.73
Manufacturing/Industrial	867.92	0.73	0.73	0.73
Medical	841.14	0.73	0.73	0.73
Office	851.8	0.73	0.73	0.73
Other	564.89	0.73	0.73	0.73
Restaurant	1030.6	0.73	0.73	0.73

Retail/Service	760.8	0.73	0.73	0.73
Warehouse	592.17	0.73	0.73	0.73
School/College	564.89	0.73	0.73	0.73
Grocery	1279.31	0.73	0.73	0.73
Hotel/Motel	748.11	0.73	0.73	0.73
Manufacturing/Industrial	970.86	0.73	0.73	0.73
Medical	940.9	0.73	0.73	0.73
Office	952.83	0.73	0.73	0.73
Other	631.89	0.73	0.73	0.73
Restaurant	1152.82	0.73	0.73	0.73
Retail/Service	851.03	0.73	0.73	0.73
Warehouse	662.4	0.73	0.73	0.73
School/College	631.89	0.73	0.73	0.73
Grocery	244.18	0.73	0.73	0.73
Hotel/Motel	212.51	0.73	0.73	0.73
Manufacturing/Industrial	212.51	0.73	0.73	0.73
Medical	212.51	0.73	0.73	0.73
Office	180.84	0.73	0.73	0.73
Other	212.51	0.73	0.73	0.73
Restaurant	212.51	0.73	0.73	0.73
Retail/Service	244.18	0.73	0.73	0.73
Warehouse	180.84	0.73	0.73	0.73
Grocery	8.48	0.73	0.73	0.73
Hotel/Motel	7.38	0.73	0.73	0.73
Manufacturing/Industrial	7.38	0.73	0.73	0.73
Medical	7.38	0.73	0.73	0.73
Office	6.28	0.73	0.73	0.73
Other	7.38	0.73	0.73	0.73
Restaurant	7.38	0.73	0.73	0.73
Retail/Service	8.48	0.73	0.73	0.73
Warehouse	6.28	0.73	0.73	0.73
School/College	3.56	0.73	0.73	0.73
School/College	102.37	0.73	0.73	0.73
Grocery	1092.68	0.73	0.73	0.73
Hotel/Motel	1707.83	0.73	0.73	0.73
Manufacturing/Industrial	911.43	0.73	0.73	0.73
Medical	1491.06	0.73	0.73	0.73
Office	908.14	0.73	0.73	0.73
Other	1064.83	0.73	0.73	0.73
Restaurant	1171.37	0.73	0.73	0.73
Retail/Service	864.44	0.73	0.73	0.73

Warehouse	596.8	0.73	0.73	0.73
School/College	864.44	0.73	0.73	0.73
Grocery	850	0.73	0.73	0.73
Hotel/Motel	850	0.73	0.73	0.73
Manufacturing/Industrial	850	0.73	0.73	0.73
Medical	850	0.73	0.73	0.73
Office	850	0.73	0.73	0.73
Other	850	0.73	0.73	0.73
Restaurant	850	0.73	0.73	0.73
Retail/Service	850	0.73	0.73	0.73
Warehouse	850	0.73	0.73	0.73
School/College	850	0.73	0.73	0.73
Grocery	701	0.73	0.73	0.73
Hotel/Motel	701	0.73	0.73	0.73
Manufacturing/Industrial	701	0.73	0.73	0.73
Medical	701	0.73	0.73	0.73
Office	701	0.73	0.73	0.73
Other	701	0.73	0.73	0.73
Restaurant	701	0.73	0.73	0.73
Retail/Service	701	0.73	0.73	0.73
Warehouse	701	0.73	0.73	0.73
School/College	701	0.73	0.73	0.73
Hotel/Motel	850	0.73	0.73	0.73
Manufacturing/Industrial	850	0.73	0.73	0.73
Medical	850	0.73	0.73	0.73
Office	850	0.73	0.73	0.73
Other	850	0.73	0.73	0.73
Restaurant	850	0.73	0.73	0.73
Retail/Service	850	0.73	0.73	0.73
Warehouse	850	0.73	0.73	0.73
School/College	850	0.73	0.73	0.73
Grocery	701	0.73	0.73	0.73
Hotel/Motel	701	0.73	0.73	0.73
Manufacturing/Industrial	701	0.73	0.73	0.73
Medical	701	0.73	0.73	0.73
Office	701	0.73	0.73	0.73
Other	701	0.73	0.73	0.73
Restaurant	701	0.73	0.73	0.73
Retail/Service	701	0.73	0.73	0.73
Warehouse	701	0.73	0.73	0.73
School/College	701	0.73	0.73	0.73
Grocery	850	0.73	0.73	0.73
School/College	865.89	0.73	0.73	0.73
Grocery	972.41	0.73	0.73	0.73
Hotel/Motel	1606.73	0.73	0.73	0.73
Manufacturing/Industrial	866.37	0.73	0.73	0.73

Medical	1409.6	0.73	0.73	0.73
Office	833.59	0.73	0.73	0.73
Other	1026.9	0.73	0.73	0.73
Restaurant	1162.35	0.73	0.73	0.73
Retail/Service	972.41	0.73	0.73	0.73
Warehouse	552.75	0.73	0.73	0.73
Hotel/Motel	1729.24	0.73	0.73	0.73
Manufacturing/Industrial	927.71	0.73	0.73	0.73
Medical	1517.25	0.73	0.73	0.73
Office	894.81	0.73	0.73	0.73
Other	1107.91	0.73	0.73	0.73
Restaurant	1247.78	0.73	0.73	0.73
Retail/Service	1060.22	0.73	0.73	0.73
Warehouse	608.4	0.73	0.73	0.73
School/College	925.56	0.73	0.73	0.73
Grocery	1060.22	0.73	0.73	0.73
School/College	553.63	0.73	0.73	0.73
Grocery	524.27	0.73	0.73	0.73
Hotel/Motel	1205.26	0.73	0.73	0.73
Manufacturing/Industrial	495.54	0.73	0.73	0.73
Medical	886.22	0.73	0.73	0.73
Office	618.09	0.73	0.73	0.73
Other	599.97	0.73	0.73	0.73
Restaurant	485.76	0.73	0.73	0.73
Retail/Service	524.27	0.73	0.73	0.73
Warehouse	106.63	0.73	0.73	0.73

Hotel/Motel	1122.45	0.73	0.73	0.73
Manufacturing/Industrial	517.59	0.73	0.73	0.73
Medical	919.19	0.73	0.73	0.73
Office	808.21	0.73	0.73	0.73
Other	632.13	0.73	0.73	0.73
Restaurant	516.06	0.73	0.73	0.73
Retail/Service	556.19	0.73	0.73	0.73
Warehouse	118.09	0.73	0.73	0.73
School/College	575.14	0.73	0.73	0.73
Grocery	556.19	0.73	0.73	0.73
School/College	499.47	0.73	0.73	0.73
Grocery	457.45	0.73	0.73	0.73
Hotel/Motel	1124.73	0.73	0.73	0.73
Manufacturing/Industrial	448.37	0.73	0.73	0.73
Medical	815.43	0.73	0.73	0.73
Office	712.55	0.73	0.73	0.73
Other	557.31	0.73	0.73	0.73
Restaurant	412.63	0.73	0.73	0.73
Retail/Service	457.45	0.73	0.73	0.73
Warehouse	87.73	0.73	0.73	0.73
Hotel/Motel	1080.15	0.73	0.73	0.73
Manufacturing/Industrial	490.5	0.73	0.73	0.73
Medical	878.4	0.73	0.73	0.73
Office	769.29	0.73	0.73	0.73
Other	597.32	0.73	0.73	0.73
Restaurant	470.5	0.73	0.73	0.73

Retail/Service	518.41	0.73	0.73	0.73
Warehouse	109.61	0.73	0.73	0.73
School/College	540.56	0.73	0.73	0.73
Grocery	518.41	0.73	0.73	0.73
	878	0.73	0.73	0.73

Measure ID	Measure Name	Description
64	Strip Curtain on Walk-in Coolers or Freezers	Strip Curtains on Walk-in Freezers
65	Strip Curtain on Walk-in Coolers or Freezers	Strip Curtains on Walk-in Freezers
66	Strip Curtain on Walk-in Coolers or Freezers	Strip Curtains on Walk-in Freezers
67	Strip Curtain on Walk-in Coolers or Freezers	Strip Curtains on Walk-in Coolers
68	Strip Curtain on Walk-in Coolers or Freezers	Strip Curtains on Walk-in Coolers
69	Strip Curtain on Walk-in Coolers or Freezers	Strip Curtains on Walk-in Coolers
1	Refrigeration Tune-up	Refrigeration tune-up
6	Night Curtain for Open Cooler	Night Curtains for Open Coolers
4	Auto Closer for display case door: Reach-in Cooler Door, or Reach-in Freezer Door	Auto-Closing Doors for Reach-In Freezers
5	Auto Closer for display case door: Reach-in Cooler Door, or Reach-in Freezer Door	Auto-Closing Doors for Reach-In Coolers
2	Door Gaskets	Door Gaskets for Freezers
3	Door Gaskets	Door Gaskets for Coolers
22	EC Motor for Reach-In Freezer	EC Motor for Reach-In Freezer
23	EC Motor for Reach-In Freezer	EC Motor for Reach-In Freezer
27	EC Motor for Reach-In Freezer	EC Motor for Reach-In Freezer
28	EC Motor for Walk-In Freezer	EC Motor for Walk-In Freezer
30	EC Motor for Walk-In Freezer	EC Motor for Walk-In Freezer
31	EC Motor for Walk-In Freezer	EC Motor for Walk-In Freezer
58	Anti-Sweat Heater Control	Anti-Sweat Heater for Freezer Case Door
59	Anti-Sweat Heater Control	Anti-Sweat Heater for Freezer Case Door
60	Anti-Sweat Heater Control	Anti-Sweat Heater for Freezer Case Door
55	High Efficiency Ice Makers	High Efficiency Ice Makers 101-200 lbs
56	High Efficiency Ice Makers	High Efficiency Ice Makers 101-200 lbs
57	High Efficiency Ice Makers	High Efficiency Ice Makers 101-200 lbs
52	High Efficiency Ice Makers	High Efficiency Ice Makers 201-300 lbs
53	High Efficiency Ice Makers	High Efficiency Ice Makers 201-300 lbs
54	High Efficiency Ice Makers	High Efficiency Ice Makers 201-300 lbs
49	High Efficiency Ice Makers	High Efficiency Ice Makers 301-400 lbs
50	High Efficiency Ice Makers	High Efficiency Ice Makers 301-400 lbs
51	High Efficiency Ice Makers	High Efficiency Ice Makers 301-400 lbs
46	High Efficiency Ice Makers	High Efficiency Ice Makers 401-500 lbs
47	High Efficiency Ice Makers	High Efficiency Ice Makers 401-500 lbs
48	High Efficiency Ice Makers	High Efficiency Ice Makers 401-500 lbs
43	High Efficiency Ice Makers	High Efficiency Ice Makers 501-1000 lbs
44	High Efficiency Ice Makers	High Efficiency Ice Makers 501-1000 lbs
45	High Efficiency Ice Makers	High Efficiency Ice Makers 501-1000 lbs

40	High Efficiency Ice Makers	High Efficiency Ice Makers 1001-1500 lbs
41	High Efficiency Ice Makers	High Efficiency Ice Makers 1001-1500 lbs
42	High Efficiency Ice Makers	High Efficiency Ice Makers 1001-1500 lbs
37	High Efficiency Ice Makers	High Efficiency Ice Makers > 1500 lbs
38	High Efficiency Ice Makers	High Efficiency Ice Makers > 1500 lbs
39	High Efficiency Ice Makers	High Efficiency Ice Makers > 1500 lbs
71	Solid Door Freezer	Freezer, Solid Door < 15 cu ft
72	Solid Door Freezer	Freezer, Solid Door 15 < 30 cu ft
73	Solid Door Freezer	Freezer, Solid Door 30 < 50 cu ft
34	Anti-Sweat Heater Control	Anti-Sweat Heater for Refrigerated Case Door
35	Anti-Sweat Heater Control	Anti-Sweat Heater for Refrigerated Case Door
36	Anti-Sweat Heater Control	Anti-Sweat Heater for Refrigerated Case Door
74	Solid Door Freezer	Freezer, Solid Door 50+ cu ft
75	Glass Door Freezer	Freezer, Glass Door 30 < 50 cu ft
76	Glass Door Freezer	Freezer, Glass Door 50+ cu ft
29	EC Motor for Walk-In Cooler	EC Motor for Walk-In Cooler
32	EC Motor for Walk-In Cooler	EC Motor for Walk-In Cooler
33	EC Motor for Walk-In Cooler	EC Motor for Walk-In Cooler
24	EC Motor for Reach-In Cooler	EC Motor for Reach-In Cooler
25	EC Motor for Reach-In Cooler	EC Motor for Reach-In Cooler
26	EC Motor for Reach-In Cooler	EC Motor for Reach-In Cooler
19	Evaporator Fan Controls	Evaporator Fan Controls
20	Evaporator Fan Controls	Evaporator Fan Controls
21	Evaporator Fan Controls	Evaporator Fan Controls
13	Automatic Door Closer for Walk-In Freezer/Cooler (back access door) on Walk-in Cooler Door, Walk-in Freezer Door	Automatic Door Closer for Walk-In Cooler
14	Automatic Door Closer for Walk-In Freezer/Cooler (back access door) on Walk-in Cooler Door, Walk-in Freezer Door	Automatic Door Closer for Walk-In Cooler
15	Automatic Door Closer for Walk-In Freezer/Cooler (back access door) on Walk-in Cooler Door, Walk-in Freezer Door	Automatic Door Closer for Walk-In Cooler
16	Automatic Door Closer for Walk-In Freezer/Cooler (back access door) on Walk-in Cooler Door, Walk-in Freezer Door	Automatic Door Closers for Walk-In Freezers
17	Automatic Door Closer for Walk-In Freezer/Cooler (back access door) on Walk-in Cooler Door, Walk-in Freezer Door	Automatic Door Closers for Walk-In Freezers
18	Automatic Door Closer for Walk-In Freezer/Cooler (back access door) on Walk-in Cooler Door, Walk-in Freezer Door	Automatic Door Closers for Walk-In Freezers
10	ENERGY STAR Vending Machine	ENERGY STAR Vending Machine
11	ENERGY STAR Vending Machine	ENERGY STAR Vending Machine
12	ENERGY STAR Vending Machine	ENERGY STAR Vending Machine
7	Beverage Machine Control	Beverage Machine Control

Facility	TotalKWHSavings	NTG Y4	NTG Y5	NTG Y6
Other	348.25	0.73	0.73	0.73
Restaurant	366	0.73	0.73	0.73
Grocery	330.5	0.73	0.73	0.73
Other	113.75	0.73	0.73	0.73
Restaurant	128	0.73	0.73	0.73
Grocery	99.5	0.73	0.73	0.73
Grocery	552	0.73	0.73	0.73
Grocery	94.5	0.73	0.73	0.73
Grocery	2919	0.73	0.73	0.73
Grocery	1138	0.73	0.73	0.73
Grocery	94	0.73	0.73	0.73
Grocery	18	0.73	0.73	0.73
Other	462	0.73	0.73	0.73
Restaurant		0.73	0.73	0.73
Grocery	462	0.73	0.73	0.73
Other	689.5	0.73	0.73	0.73
Restaurant	748	0.73	0.73	0.73
Grocery	631	0.73	0.73	0.73
Restaurant	409	0.73	0.73	0.73
Grocery	409	0.73	0.73	0.73
Other	409	0.73	0.73	0.73
Other	3614	0.73	0.73	0.73
Restaurant	3614	0.73	0.73	0.73
Grocery	3614	0.73	0.73	0.73
Other	2281	0.73	0.73	0.73
Restaurant	2281	0.73	0.73	0.73
Grocery	2281	0.73	0.73	0.73
Restaurant	1661	0.73	0.73	0.73
Grocery	1661	0.73	0.73	0.73
Other	1661	0.73	0.73	0.73
Grocery	2464	0.73	0.73	0.73
Other	2464	0.73	0.73	0.73
Restaurant	2464	0.73	0.73	0.73
Restaurant	3011	0.73	0.73	0.73
Grocery	3011	0.73	0.73	0.73
Other	3011	0.73	0.73	0.73

Grocery	4106	0.73	0.73	0.73
Other	4106	0.73	0.73	0.73
Restaurant	4106	0.73	0.73	0.73
Other	4380	0.73	0.73	0.73
Restaurant	4380	0.73	0.73	0.73
Grocery	4380	0.73	0.73	0.73
	502	0.73	0.73	0.73
	869	0.73	0.73	0.73
	2109	0.73	0.73	0.73
Other	389	0.73	0.73	0.73
Restaurant	389	0.73	0.73	0.73
Grocery	389	0.73	0.73	0.73
	4181	0.73	0.73	0.73
	4672	0.73	0.73	0.73
	7643	0.73	0.73	0.73
Other	398.5	0.73	0.73	0.73
Restaurant	399	0.73	0.73	0.73
Grocery	398	0.73	0.73	0.73
Restaurant		0.73	0.73	0.73
Grocery	350	0.73	0.73	0.73
Other	350	0.73	0.73	0.73
Other	523	0.73	0.73	0.73
Restaurant	523	0.73	0.73	0.73
Grocery	523	0.73	0.73	0.73
Other	1138	0.73	0.73	0.73
Grocery	1138	0.73	0.73	0.73
Restaurant	1138	0.73	0.73	0.73
Other	2919	0.73	0.73	0.73
Restaurant	2919	0.73	0.73	0.73
Grocery	2919	0.73	0.73	0.73
Other	1576	0.73	0.73	0.73
Restaurant	1576	0.73	0.73	0.73
Grocery	1576	0.73	0.73	0.73
Other	1612	0.73	0.73	0.73

Restaurant	1612	0.73	0.73	0.73
Grocery	1612	0.73	0.73	0.73

		NTG Y4	NTG Y5	NTG Y6
	1780.85	0.73	0.73	0.73
	4962.69	0.73	0.73	0.73
	8273.63	0.73	0.73	0.73
	2991.98	0.73	0.73	0.73
	7904.82	0.73	0.73	0.73
	12878.51	0.73	0.73	0.73
	452.05	0.73	0.73	0.73
	1219.11	0.73	0.73	0.73
	1986.17	0.73	0.73	0.73
	459.1	0.73	0.73	0.73
	1118.48	0.73	0.73	0.73
	2161.16	0.73	0.73	0.73
	129.61	0.73	0.73	0.73
	349.53	0.73	0.73	0.73
	569.46	0.73	0.73	0.73

Measure

Measure

Guest Room Energy Mangement (GREM) Controls

Guest Room Energy Management
(GREM) Controls (PTAC)

Guest Room Energy Mangement (GREM) Controls

Guest Room Energy Management
(GREM) Controls (PTHP)

Eligible Installations	Eligibility Criteria	kWh Savings	NTG Y4	NTG Y5
Electric heat PTAC systems only	Occupancy control must be key activated or sense body heat or motion and must control the HVAC system serving the room.	1211	0.73	0.73
PTHP systems only	Occupancy control must be key activated or sense body heat or motion and must control the HVAC system serving the room.	714	0.73	0.73

NTG Y6

0.73

0.73

Unit Therm savings	NTG Y4	NTG Y5	NTG Y6
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
	0.73	0.73	0.73
493	0.73	0.73	0.73

JLH 2.01

Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 10/28/2010

JLH 2.01

Please refer to Ameren Ex. 1.1, pages 153-155, Ameren's proposed Voltage Optimization program.

- a) Please provide a detailed description of Ameren's proposed Voltage Optimization program. Please thoroughly explain how the Voltage Optimization program would work on an engineering level, taking into consideration and explaining terms such as "resistive load" and the types of items that an average Ameren eligible retail customer has at their home that could be classified as resistive load items (and the corresponding average kW that these items are expected to use with and without voltage reduction). Provide all documentation associated with the effectiveness of the Voltage Optimization program.
- b) Ameren is asking the Commission to deem a Fixed MW Savings per year of 4.50 for the Volt/Var DR Measure. Provide an excel spreadsheet showing all calculations associated with this number. List all assumptions used to make these calculations.

RESPONSE

Prepared By: David M. Costenaro
Title: Sr. Planning Consultant, DSM
Phone Number: 314-554-4550

- a) Ameren Illinois' proposed Voltage Optimization program involves the integrated control of distribution low-voltage substation load tap changing transformers (LTC), line capacitor banks, and voltage regulators to reduce distribution feeder voltages by a target of 2.5% while maintaining the delivery voltage for all customers within acceptable ANSI and regulatory standards. The LTCs, controllable capacitor banks, and voltage regulators will be monitored and controlled through a 2-way communication system integrated with Ameren Illinois' existing supervisory control and data acquisition (SCADA) system. Each device will also monitor system voltage, current, and real and reactive power. System software will analyze voltage and load data and appropriately adjust device settings to ensure delivery voltage remains within regulatory limits. Prior to implementation, an engineering analysis will be done on each distribution feeder to determine appropriate capacitor and regulator placement and control settings.

Ameren Illinois estimates that the 2.5% reduction in feeder voltage will result in an average demand reduction of 2.0%. This estimate is based on a Conservation Voltage Reduction (CVR) Factor of 0.8. The CVR Factor is equal to the % load reduction per 1% voltage reduction. The 0.8 CVR Factor adopted by Ameren Illinois is based on documented results from other utilities that have been effectively using voltage optimization to reduce demand for many years. The table below shows the Conservation Voltage Reduction (CVR) Factor reported by the utilities included in the Northwest Energy Efficiency Alliance's 2005 Distribution Efficiency Initiative Market Progress Evaluation Report No 1.¹

Table 4-3¹
Utility CVR Factors, Based on Implementations of Tests

Utility	CVR Factor	Comments
California IOU's	0.75	
New York State Electric & Gas	0.6	
Central Florida Electric Cooperatives	0.5 - 0.75	0.5 in the summer; 0.75 in the winter
Clay Electric Cooperative (Florida)	1.0	
Progress Energy - Florida	1.0	
Georgia Power	0.8 - 1.7	1.25
Cobb EMC (Georgia)	0.75	
Progress Energy - Carolinas	0.4	
Avista Utilities	1.09	Ongoing pilot project
Clatskanie PUD	1.4	Ongoing pilot project
Inland Power & Light	0.93	Ongoing pilot project
Snohomish PUD	0.65	
Seattle City Light	0.13	Discontinued program
Average	0.8	Mean of all values, equally weighted, with mid point values used for ranges.

In addition to the above utilities, the following utilities are also pursuing energy efficiency / demand response programs through voltage reduction;

- In 2009 Progress Energy Carolinas' Distribution System Demand Response Program (DSDR) was approved by the Public Service Commission of South Carolina. The DSDR program is expected to delivery 250 MW of reduction in peak electricity demand by 2012.²
- As part of the Electric Power Research Institutes' (EPRI) Green Circuits Program, Duke Energy and Alabama Power are piloting different voltage reduction control methodologies to reduce demand and energy, and initial results are promising.³

A customer's total demand is an aggregate of the various types of electric devices the customer operates and varies from customer to customer. Many of the electrical devices a typical customer operates will automatically reduce demand when the voltage is reduced with no detrimental effect on the device or the customer, which allows demand reduction through voltage reduction to work. Typical customer electrical devices that are predominately resistive are those with electric heating elements such as electric ranges, ovens, toasters, and hair dryers. These devices will typically reduce demand by approximately 5% for a 2.5% reduction in voltage. Other typical customer electric devices are incandescent and fluorescent lighting, induction motors, TVs, and heating, ventilation, and air conditioning (HVAC) equipment. A July 2010 Pacific Northwest National Laboratory⁴ study reports that an incandescent light bulb will reduce demand by approximately 3.8% for a 2.5% reduction in voltage, an induction motor (such as those in fans, refrigerators, and other appliances) will reduce demand by approximately 4.6% for a 2.5% reduction in voltage, a typical compact fluorescent light bulb will reduce demand in a range from 1.5% to 4.6% for a 2.5% reduction in voltage. The same study reports that electric devices that contain switching power supplies, such as liquid crystal displays (LCD) and plasma displays used for computers and TVs will have no demand reduction, and in some cases slightly increase demand when voltage is reduced. The study also reports that electric loads associated with HVAC and electric water heating will reduce demand when voltage is reduced similar to stated above since the majority of this load is made up of electric heating elements and induction motors. However, the cumulative effect on a given circuit is more complicated to determine since it is dependent on the run time of the equipment and the load diversity on the circuit.

To account for the complexity and diversity of customer loads mentioned above, and the additional demand reduction from the reduction in system losses, Ameren Illinois' has adopted the CVR Factor of 0.8 as a best estimate of the average measured demand reduction on a system wide basis from voltage reduction.

¹Northwest Energy Efficiency Alliance. Distribution Efficiency Initiative, Market Progress Report, No. 1. Report #E05-139. Prepared by Global Energy Partners, LLC, Lafayette, CA: May 18, 2005.

²Progress Energy, Press Release "PSC approves eight new efficiency programs for Progress Energy S.C. customers", June 10, 2009.

³"Voltage Optimization More Than Pays for Itself", Transmission & Distribution World, August 1, 2010.

⁴"Evaluation of Conservation Voltage Reduction (CVR) on a National Level", PNNL-19596, Prepared by Pacific Northwest National Laboratory for the U.S. Department of Energy, July 2010.

- b) See Ameren Illinois' response to Staff data request JLH 1.04S Attach 1 and 2 from the previously submitted documentation DVD. These files comprise the cost-effectiveness analysis of the Voltage Optimization Demand Response program. JLH 1.04S Attach 2 is designated **CONFIDENTIAL and PROPRIETARY**, as it contains competition-sensitive market forecasts.

JLH 2.02

Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 10/28/2010

JLH 2.02

Please refer to Ameren Ex. 1.1, Appendix C at page AC4, Demand Response program.

- a) Is the Demand Response program referred to on this page the Voltage Optimization program referred to on page 153 of Ameren Ex. 1.1?
- b) Please explain why the Marketing and Education costs for the Demand Response program are necessary.
- c) Please provide all sources to the underlying calculations (estimations) of the Miscellaneous, Administration, Portfolio Administration, and EM&V Costs for the Demand Response program. Please provide line items of the components of these costs and describe what each entails.
- d) Does the Company expect the EM&V contractor to be the same EM&V contractor for the rest of the program? Does the Company expect to conduct some of its own EM&V activities to ensure the program actually works? Please provide all documentation that ensures the Voltage Optimization program will work as expected and proposed. Provide a description of the design for tests that should be conducted to ensure the Voltage Optimization program works.

RESPONSE

Prepared By: David M. Costenaro
Title: Sr. Planning Consultant, DSM
Phone Number: 314-554-4550

- a) Yes.
- b) Program costs are detailed in Appendix C of Ameren Ex 1.1. Incentive Costs and Admin/Implementation cost line items are equivalent to the individual program costs as reflected in budget table 6 on page 94 of the 'Plan' Ameren Ex 1.1. The remaining line item costs in Appendix C (Portfolio Admin, EM&V, Education, and Marketing) are estimates of how the portfolio level costs may be distributed on a program basis. It is anticipated that Marketing and Educational Costs for the Demand Response program will be more informational as opposed to traditional marketing and promotional tactics which are used to acquire participation (since participation in Volt/Var is automatic). As stated in Ameren Ex 1.1 section 2.3.8, page 46, Table 16, Portfolio Level Costs were estimated for each program as follows:

Table 16: Portfolio Level Costs

Portfolio Level Costs	% of Total Program Costs*
Portfolio Admin Costs	5
EM&V Costs	3
Educational Costs	2.5
Marketing Costs	2.5
R&D Costs	3

**Total Program Costs include the Program Administrative Costs (previously mentioned), Incentive Costs (previously mentioned), Implementation Costs, and any Miscellaneous Costs.*

The Demand Response program was not excluded from this exercise. However the portfolio level costs are aggregated by portfolio level cost line items in the total budget as indicated on all budget tables (Ameren Ex 1.1, section 6.1, pp. 87-92, Tables 23-28). Therefore, in the event Marketing and Educational costs are not expended for Demand Response, they may be used for other programs or the portfolio overall as needed.

- c) See response to subpart b) above.
- d) Yes, we do not anticipate hiring a separate EM&V contractor for the Demand Response program.

As described in JLH 2.01 a), demand reduction through voltage optimization has been effectively used by utilities for many years. As Ameren Illinois implements the voltage optimization program, the effectiveness of voltage reduction at the feeder level will be tested and optimized through an iterative process involving the monitoring of feeder demand and voltage as the voltage at the distribution substation is reduced. Adjustments will be made to the control settings as needed to maximize demand reduction while maintaining voltage levels within acceptable standards. Ameren Illinois will use this process to improve subsequent implementations and to verify program results.

JLH 2.03

Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 10/28/2010

JLH 2.03

Please provide the percentage of eligible retail customer load that is pure resistive load that the Voltage Optimization program would actually be able to reduce. Provide all relevant workpapers and documentation.

RESPONSE

Prepared By: David M. Costenaro
Title: Sr. Planning Consultant, DSM
Phone Number: 314-554-4550

Ameren Illinois does not have data on the percentage of eligible retail customer load that is pure resistive load. However, as mentioned in the answer to JLH 2.01subpart a), Ameren Illinois estimates that a 2.5% reduction in feeder voltage will result in an average demand reduction of 2.0%. This estimate is based on a Conservation Voltage Reduction (CVR) Factor of 0.8. The CVR Factor is equal to the % load reduction per 1% voltage reduction. The 0.8 CVR Factor adopted by Ameren Illinois is based on the documented results from other utilities that have been effectively using voltage optimization to reduce demand for many years. This factor represents the average cumulative effect of voltage reduction on an entire system and takes into account the various responses of different types of customer loads, device penetration levels, customer diversity, load diversity, and reduction in system losses, and therefore provides a best estimate of the effectiveness of the Voltage Optimization program. See Ameren Illinois' response to subpart a) of JLH 2.01 for more detail.

JLH 2.04

**Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 10/28/2010**

JLH 2.04

How does Ameren propose to determine what percentage of savings is from eligible retail customers for the Voltage Optimization program?

RESPONSE

**Prepared By: David M. Costenaro
Title: Sr. Planning Consultant, DSM
Phone Number: 314-554-4550**

We anticipate the EM&V contractor to determine this.

JLH 2.05

Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 10/28/2010

JLH 2.05

Please refer to Ameren Ex. 1.1, Appendix C. For each program, please provide a breakdown of the Admin/Implementation costs, Portfolio Admin costs, and Marketing costs; i.e., please describe the components of the costs for each of these programs in depth. Please explain why the Implementation costs may be higher than the Incentive costs for particular programs. Please provide line items of the components of these costs and describe what each entails.

RESPONSE

Prepared By: David M. Costenaro
Title: Sr. Planning Consultant, DSM
Phone Number: 314-554-4550

The breakdown of these costs is explained in Ameren Illinois' response to subpart b) of JLH 2.02. There is no further detail on the components of these costs. Implementation costs exceed incentive costs for four of the fourteen portfolio programs (Energy Efficient Products, Appliance Recycling, Multifamily, and Business New Construction).

Energy Efficient Products is a new program introduced in Cycle 2. The need for significant increases, especially for customer education, is described on page 83 of Ameren Exhibit 1.1. Appliance re-cycling is a tried and true program that incurs substantial costs to pick-up and re-cycle old, inefficient appliances relative to the incentives paid to customers to encourage them to remove their old appliances.

Multi-family is a market transformation program that addresses perhaps the most difficult barrier to energy efficiency – the split market incentive between landlords and tenants. This barrier exists because no one has the incentive to improve energy equipment; the owner does not typically pay the utility bill, and the renter does not have a long interest in the property. Consequently, the multi-family program has significant landlord and customer recruitment, technical services such as audits, and significant implementation costs that in aggregate exceed incentive costs.

Finally, the Business New Construction Program is another market transformation program that will require significant investment in program administration costs in Cycle 2 relative to Cycle 1. Recent activity within the Illinois building code sector has raised the bar for building requirements. IECC 2009 is the new building code, which is 15% more stringent than IECC 2006. Getting designers, architects, and builders to go beyond

these higher efficiency standards entails substantial coordination. Additionally, due to the latest economic fluctuations and the limited access to capital, many companies have delayed new construction or major build-outs. The implementation strategy on page 148 of Ameren Exhibit 1.1 describes the type of program costs required to implement the Business New Construction program.

JLH 3.01

Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 11/1/2010

JLH 3.01

Please refer to Ameren Illinois' response to Staff Data Request JLH 1.05 Attach 2.

- a) Please provide a line item breakout for free-ridership, spillover, and realization rate included in the Total NTG Factor that Ameren is proposing the Commission to have "deemed" in this proceeding.
- b) Please provide Ameren's definition of "realization rate" for the Residential Lighting Program.

RESPONSE

Prepared By: David M. Costenaro
Title: Planning Consultant, DSM
Phone Number: 314-554-4325

- a) There are no further breakdowns available of the Total Net-to-Gross factors identified in JLH 1.05 Attach 2 (also in Table 17 of Exhibit 1.1). Ameren Illinois' development of these numbers focused on observing and estimating the combined effects of free-ridership, spillover, and realization rate.
- b) Ameren Illinois defines realization rate as the proper (according to manufacturer guidelines) installation rate of a measure. For example, a realization rate of 0.95 means that 95% of the measures installed by a customer were actually installed as the manufacturer intended. But Ameren Illinois feels that it is important to consider what happened to the other 5%. One could ask: did they get lost, destroyed, discarded, installed incorrectly and never re-installed correctly again? Did they get installed at a later date? If so, when and how are the energy savings attributed when the remaining 5% of measures are actually installed? Consider realization rates for multi-pack CFLs as one example. Eventually all multi-pack CFLs will be used. If not 100% in the year of purchase, then it is very likely that all bulbs in the multipack will be installed by the year after purchase. This being the case, the realization rates for CFLs should be increased for CFL multi-packs purchased in years 2, and beyond, to reflect the fact that a percentage of year 1 multi-pack bulbs will be placed in service after year 1. This situation is akin to the concept of annualization. The realization rate in year 1 may be less than 1.0 but in year 2 it should be greater than 1.0 to account for CFLs purchased in year 1, but installed in year 2. And so on and so forth. Therefore, it is reasonable to assume that the average realization rates for certain energy efficiency measures such as CFLs across a finite period of years is very close to 1.0.

JLH 3.02

**Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 11/1/2010**

JLH 3.02

Please refer to Ameren witness Mr. Weaver's Revised Direct Testimony, wherein he states "Q. What are the key inputs calculations used to estimate plan savings? A. In general, there are five inputs to savings calculations for any one measure delivered through any one energy efficiency program. These include: A) Participation, or the number of measures installed;" (Ameren Ex. 5.0 (Rev.) at 20:471-474, emphasis added) and "Q. For which of these inputs do you recommend that Ameren Illinois establish fixed values? A. I recommend that Ameren Illinois establish fixed values for all inputs except for participation" (Ameren Ex. 5.0 (Rev.) at 21:494-497, emphasis added).

- a) Please explain how Ameren plans to take into account installation rate of CFLs in the Residential Lighting Program. Does Ameren plan to include those uninstalled bulbs in the energy savings values calculated for future years?

RESPONSE

**Prepared By: Keith A. Martin
Title: Manager, Customer Service & Energy Efficiency
Phone Number: 309-677-5562**

Yes, and if EM&V consultants determine if it is appropriate.

JLH 3.03

Ameren Illinois Company
Response to ICC Staff Data Requests
Docket No. 10-0568
Verified Petition for Approval of Integrated Electric and
Natural Gas Energy Efficiency Plan.
Response Date: 11/1/2010

JLH 3.03

Please refer to Ameren Ex. 1.0 at 13:227-289, where Ameren witness Mr. Martin states “EISA is federal legislation that requires 28% greater efficiency for incandescent light bulbs, phased in from 2012 through 2014. This legislation is transforming the residential lighting market because it effectively eliminates the sale of many incandescent light bulbs, leaving consumers with no option but to purchase more efficient lighting technology. In regards to portfolio risk, this legislation will increase the number of free riders (those who would install the measure regardless of utility incentive), thus, significantly decreasing the savings attributable to the portfolio. The pace at which the market is transformed during the timeframe for this Plan is unknown. Thus, Ameren Illinois’ risk mitigation strategy is to decrease the number of CFLs in this portfolio. In addition, Ameren Illinois is proposing to decrease the recent EM&V NTG results for the Ameren Illinois lighting program (from a program year 1 EM&V result of 1.0 to 0.80, 0.60, and 0.40 for PY4, PY5, and PY6 respectively). To minimize risk, then, Ameren Illinois proposes to alternatively spend a relatively higher portion of the available budget on other efficiency measures not already transformed by federal mandates.” (emphasis added)

- a) Since the pace at which the lighting market is transformed is unknown and since Ameren Illinois has requested NTG ratios to be deemed at 0.80, 0.60 and 0.40 for PY4, PY5 and PY6 respectively, is it Ameren’s position that by deeming the NTG ratios, the Company is effectively insulated from any risk associated with energy savings values from the lighting program? Please explain.
- b) Is it the Company’s position that if Ameren Illinois spends more than the proposed incentive portion of the lighting budget, then when the Commission is determining whether Ameren Illinois has met the statutory energy savings goals, the kWh savings values for bulbs purchased with funds above the approved proposed incentive amount for the lighting program should not be counted toward the energy savings?
- c) To minimize risk (as Mr. Martin suggests), would Ameren Illinois support having the Commission order the incentive portion of the lighting budget to be capped at the proposed budgeted amounts? (i.e., \$2,272,818 for 2012, \$1,965,407 for 2013, and \$1,581,161 for 2014)
- d) Please provide Ameren’s initial CFL and Residential Lighting Program Savings targets for PY1 and PY2 along with the realized CFL and Residential Lighting Program Actual Savings. Based on PY1 and PY2 (the only relevant information available) has Ameren achieved the savings targets in the past for the Residential

Lighting Program? If yes, please describe why this was likely the case and provide the process evaluation relating to this.

- e) Annual kWh savings values (and associated annual operating hours) for lighting technology measures were the only energy savings values that the Commission deemed for the electric energy efficiency Plan 1 (PY123) in ICC Docket No. 07-0539. Please provide an unlocked Excel spreadsheet indicating all discrepancies in kWh savings values for the same lighting technology measures deemed in Docket No. 07-0539 as compared with those proposed Pre-EISA kWh savings values for lighting technologies requested to be deemed in this docket. For any discrepancy, please provide all workpapers related to studies that would lead to these changes (e.g., Ameren Lighting Logger studies).
- f) Please provide a chart showing the CFL package size (# of bulbs within package) by the number of packages sold for the years that the Residential Lighting Program has been in effect.

RESPONSE

Prepared By: Keith A. Martin

Title: Manager, Customer Service & Energy Efficiency

Phone Number: 309-677-5562

- a) No. As indicated in Mr. Weaver's testimony (Ameren Ex. 5.0, line 494-512) Ameren Illinois would be accountable for participation volume and thus be subject to the risk of low participation volume.
- b) No. All kWh savings values for bulbs purchased with funds from the portfolio should be counted towards the energy savings.
- c) No. Ameren Illinois has requested program/portfolio flexibility to minimize risk and for other benefits as stated in Ameren Ex 1.1, pages 8, 18, 50, 70, 81, 95 and specifically the following:

"Ameren Illinois requests that it be given the flexibility to reallocate funding among programs consistent with the performance of the programs to ensure that it is able to meet its proposed annualized energy savings targets within the spending limit using cost-effective programs." (Ameren Ex. 1.1, page 84)

Please also see Mr. Marin's testimony (Ameren Ex. 1.0), lines 77, 144 and 245-253.

- d) Objection. As written, the question is outside the scope of this docket. Notwithstanding this objection, see JLH 3.03 Attach 1. Ameren Illinois provides EM&V results for PY1. EM&V results for PY2 are not yet available.