

NATIONAL ENERGY ISSUES TO WATCH:

1. **U.S. Department of Energy Issues New Lamp Efficiency Rules** - In July 2009, the Department of Energy issued new energy efficiency standards for commercial general-service fluorescent lamps and incandescent (and halogen) reflector lamps. The new rules take effect July 14, 2012 and will basically eliminate products with the lowest efficiency and lowest cost. In the case of fluorescent lamps, equivalent-performance products are readily available, such as T8 lamps, and the market is expected to shift to that and other technologies. In the case of incandescent reflector lamps, only a few equivalent-performance products are readily available that comply, such as infrared-coated halogen lamps, and manufacturers are expected to develop new substitutes. By Craig DiLouie: http://www.aboutlightingcontrols.org/education/papers/2009/2009_doe-lamp-rules.shtml

2. **NEMA Publishes LL 9-2009 Dimming of T8 Fluorescent Lighting Systems** - This new standard is the first coordinated guidance from industry on the dimming of T8 fluorescent lighting systems; LL 9 covers ranges between 100% and approximately 35% output (60mA lamp current). The publication was a result of discussions between numerous manufacturers and end-users as well as years of data gathering, testing, and analysis. LL 9 may be downloaded at no charge, or a hardcopy purchased for \$36, by visiting www.nema.org/stds/ll9.cfm

3. **Energy Efficiency Programs Are Expanding** - Thanks in part to the The American Recovery and Reinvestment Act of 2009, more and more areas of the country have rebates available for commercial lighting upgrades. Organizations in 42 of the states now offer rebate programs for commercial lighting. These programs provide customers with incentives to upgrade inefficient lighting systems which significantly reduce the initial cost. The incentives range anywhere from \$.50 per lamp to \$450 per fixture and include popular technologies like T8 lamps, ceramic metal halide fixtures, hardwired compact fluorescent fixtures, LED exit signs, sensors and much much more. <http://www.briteswitch.com/newsletter/Sept09-1.html>

4. **H.R.2454 - American Clean Energy and Security Act of 2009** - On June 26, the US House of Representatives passed the American Clean Energy and Security Act of 2009, commonly referred to as the Waxman-Markey Clean Energy Bill, by a vote of 219 to 212. The bill now is in the Senate for final passage, where Republican Senators are attacking the bill as a form of taxation that will pass intolerable costs to American taxpayers. This ACES energy bill includes a cap-and-trade global warming reduction plan designed to reduce economy-wide greenhouse gas emissions. It amends the Public Utility Regulatory Policies Act of 1978 (PURPA) to establish a combined efficiency and renewable electricity standard that requires utilities to supply an increasing percentage of their demand from a combination of energy efficiency savings and renewable energy (6% in 2012, 9.5% in 2014, 13% in 2016, 16.5% in 2018, and 20% in 2021-2039). Other provisions include new renewable requirements for utilities, studies and incentives regarding new carbon capture and sequestration technologies, energy efficiency incentives for homes and buildings, and grants for green jobs, among other things. <http://www.opencongress.org/bill/111-h2454/show>

5. **Rebate Programs Getting Ready for LEDs** - With long life and high energy efficiency, LED is the new buzzword when customers are looking to upgrade to efficient lighting. While not a viable option in the past, the efficiency and cost of LED fixtures are now reaching more acceptable levels. From wall washers to accent lighting in stores and restaurants, LEDs are making their way into mainstream applications. Utilities and government agencies have noticed this trend and they are starting to provide rebates for LED products. <http://www.briteswitch.com/newsletter/Sept09-1.html>

6. **Revised Draft of Integral LED Lamp Criteria** -The DOE has just released the revised draft of the ENERGY STAR Integral LED Lamp criteria. DOE is providing for a third stakeholder comment period, particularly on the life and reliability testing requirements detailed in this third draft. Comments must be provided no later than October 16, 2009 to ssl@energystar.gov DOE anticipates publication of the final criteria in early November, with an effective date for the Integral LED Lamp criteria 270 days later (approximately August 2010). <http://drintl.com/HtmlEmail/SSL/IntegralLampsDRAFT3-18Sep09.pdf>

7. Breakthrough Design Cuts Cost of LED Light Bulbs by 40 Percent - LED lighting is still too expensive for the vast majority of consumers despite the 80% energy savings that LEDs give over traditional incandescent lighting. The LED light bulbs that are currently available use similar designs with expensive and heavy metal heatsinks to stay cool that keep the costs of LED bulbs impractical. These types of bulbs generally don't pay for themselves until after 3-4 years of typical usage. Eternaleds Inc. has introduced the world's first LED flood lights, the Quanta-9 and Quanta-18, to use a new manufacturing design process that reduces build costs by 40% and allow the bulbs to pay for themselves in less than 2 years at 8 hours usage a day. The Eternaleds Quanta-9 uses 9W to provide the light equivalent of 50W incandescent floodlights while the Quanta-18 uses 18W to provide the light equivalent of 100W incandescent floodlights. Both have a rated lifetime of 35,000 hours.

<http://www.eternaleds.com>

8. ENERGY STAR Concerned About the Gains Made in CFLs - The market for CFLs is far from transformed. DOE has been monitoring and reporting on the CFL market as reflected in the first edition of the ENERGY STAR CFL Market Profile. Based on additional data and analysis that DOE has continued to gather, it's apparent that the market is headed in the wrong direction.

http://www.energystar.gov/ia/products/downloads/CFL_Market_Profile.pdf

9. Climate Change Bill Faces Uphill Battle - Climate-change legislation now faces an uphill battle in the Senate. Though it was originally slated to be considered in late 2009, prospects for it reaching the floor before 2010 are dim. Privately, Democratic Senate staffers admit they're taking their cues from the White House, which is signaling to senators that once health care is done, reform of the financial sector is President Obama's next priority. 09/24 Washington Post

10. Senate Climate Bill Tougher Than House Version - A Senate climate bill will require a 20 percent cut in greenhouse gases by 2020, deeper than the reductions mandated by the House, according to a draft of the bill. 09/29 AP

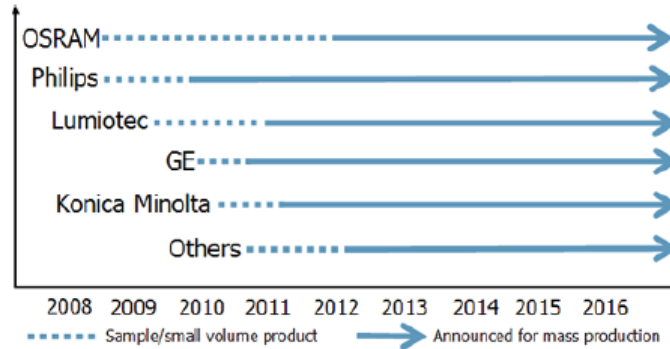
11. Agriculture Announces \$62.5 Million for Renewable Energy and Energy Efficiency Loans and Grants - Agriculture Secretary Tom Vilsack today announced that the department is providing \$62.5 million in loans and grants for 705 renewable energy and energy efficiency projects in 45 states and Puerto Rico under the Rural Energy for America Program (REAP), an important initiative to help rebuild and revitalize rural America. REAP loan guarantees and grants can be used for renewable energy systems, energy efficiency improvements, feasibility studies and energy audits. More information on the REAP program, which was authorized under the 2008 Farm Bill, is at: www.rurdev.usda.gov/rbs/farbill/index.html. 09/24 USDA News

12. Feds Offering \$50 to \$200 Incentives on Energy-Efficient Appliances - The federal government will dangle more cash in front of recession-weary Americans soon in the hope they will get out and spend money at stores around the country. The DOE is making available \$300 million to consumers for the purchase of new, energy-efficient, home appliances in the latest variation of Cash for Clunkers. Money for the program comes from the federal stimulus legislation approved by Congress in early 2009. The program will be administered by the states, which are still developing plans for releasing money through the appliance rebate program. The program will start in some states before Thanksgiving, offering consumers from \$50 to \$200 on a wide array of products. 09/21 Providence

13. Postings from Jim Brodrick postings@lightingfacts.com - Earlier this week, the DOE published the Solid-State Lighting Manufacturing R&D Roadmap. The roadmap identifies key findings and recommendations for manufacturing improvements in three areas: LED luminaires, packaged LEDs, and OLEDs. It is intended to guide DOE planning and future solicitations related to the new SSL manufacturing initiative. In addition, it will act as a guide for equipment and material suppliers, to reduce the risk and, ultimately, the cost of entering into SSL manufacturing.

14. **OLED Lighting Status** - Several companies are working towards white OLED light products. Here's a nice chart by DisplaySearch, showing the leading companies and their announced OLED lighting plans:

http://www.displaysearch.com/cps/rde/xchg/displaysearch/hs.xsl/oled_info_program.asp



15. **Philips Sees Tunable Color and Transparent OLEDs in 3-5 Years, Flexible Ones in 5-8** - Philips has published several press releases today regarding OLEDs. They are already shipping samples of their OLED lighting panels, and hope to bring these to market in 2010. Philips is also discussing three new types of OLEDs.

- Tunable-Color OLEDs: in these kind of panels, the user can change the color of the panel. Philips expects these in 3-5 years.
- Transparent OLEDs, and now they say that these too might be available in 3-5 years.
- Flexible OLEDs - these might only appear in 5-8 years.

<http://www.oled-info.com/philips-sees-tunable-color-and-transparent-oleds-3-5-years-flexible-ones-5-8>

16. **Fifth Annual Meeting of the Clinton Global Initiative (CGI)** - President Bill Clinton was joined by Secretary of State Hillary Clinton to close the Fifth Annual Meeting of the Clinton Global Initiative (CGI) held on September 22-25, 2009 at the Sheraton New York Hotel and Towers. In his remarks, President Clinton announced that by the end of the meeting, CGI members in 2009 have made 284 new commitments valued at more than \$9.4 billion dollars. In total, these commitments are projected to improve more than 200 million lives. Since 2005, members of the CGI have made nearly 1,700 commitments valued at \$57 billion dollars.

<http://www.clintonglobalinitiative.org/>

17. **Is Clean Energy Bill Bad for Business?** - While millions of Americans are paying close attention to health-care reform, another policy is quietly moving forward. The American Clean Energy and Security Act barely passed through the House of Representatives in June and is now headed to the Senate. The bill could cost taxpayers up to \$200 billion a year, according to documents released by the Competitive Enterprise Institute, a group critical of the proposal. Broken down, the average utility cost per household would be an extra \$1,761 a year. 09/24 St. Joseph News-Press, MO

18. **Lighting for Tomorrow 2009 Winners Announced** - Winners of the seventh annual Lighting for Tomorrow competition were announced at the American Lighting Association (ALA) Annual Conference in Palos Verdes, California. Organized by the ALA, the Consortium for Energy Efficiency (CEE), and the U.S. Department of Energy, the competition aims to increase market acceptance and awareness of energy-efficient lighting by recognizing the best designed energy-efficient lighting products in the residential market. The judges selected two Grand Prize Winners:

- Cree LED Lighting High Output Six Inch Downlight
- Phillips Color Kinetics eW Cove Powercore

The judges also recognized five other entries with Special Focus Awards for their successful incorporation of important design considerations:

- Light Distribution—MaxLite LED Architect Flat Panel
- Versatility—Lightolier Calculte Solid-State
- Ease of Installation—Creative Systems Lighting Eco Counter
- High Efficiency—Cree LED Lighting High Efficacy Six Inch Downlight
- Technical Innovation—Cree LED Lighting SSL Track Fixture

More information on all the winning entries is available at www.lightingfortomorrow.com

STATE ENERGY ISSUES TO WATCH:

1. DOE Announced More Than \$354 Million in Funding for States - 09/14, 15, 17, 24, 29, 30 AP

- Georgia gets more than \$21 million
- In addition, Georgia colleges get \$27M in stimulus funding
- Illinois to receive \$21.8 million
- Nebraska gets \$9.5 million
- Agency gives Louisiana \$13.8 million
- Indiana to get \$11 million in energy grants
- Mississippi gets \$9 million federal energy grant
- DOE to give Missouri \$12.5 million for energy projects
- WVU gets \$100K grant for energy project
- Arkansas gets \$9.5 million to promote energy efficiency
- Oklahoma to receive \$18 million in fed funding
- Arizona gets \$9.5 million for energy projects
- Michigan gets \$19.6 million for energy projects
- Wyoming agency gets \$9.6 million stimulus for efficiency
- North Carolina to get \$21 million
- Iowa getting \$9.5 million in green energy funds
- Minnesota gets \$3 million in renewable energy aid
- Ohio will receive more than \$30 million in federal funds
- Oregon likes its chances of being chosen to receive up to \$100 million
- Colorado will get more than \$34 million
- Massachusetts offering \$15 million in federal stimulus dollars for proposals for super-energy efficient buildings. The ultimate goal: The "zero net" building. <http://www.mass.gov/doer>
- Including Alabama too.....etc. etc. etc.

2. **NY Fund Would Make Energy-Saving Home Loans** - Middle-class New Yorkers may soon be able to hire contractors to do \$13,000 worth of home improvements like adding insulation and buying new furnaces, storm windows and water heaters - and never cut a check to the contractor. The innovative bill awaiting action by Gov. David Paterson would create a revolving loan fund that allows consumers to pay off the project costs over time through their residential and business utility bills, benefiting at the same time from savings from the energy efficiencies. Contractors would be paid from the loan fund, which the Legislature wants to prime with \$112 million of state proceeds from selling carbon emission permits to businesses that pollute. It won't start this winter. Passed recently by the Senate 50-8, the bill gives the New York State Energy Research and Development Authority six months to start the program. 09/20 AP

3. **CPC Launches \$1 Billion Lending Program to Retrofit as Many as 15,000 Apartments Energy Efficient over 2 to 3 Years** - The Community Preservation Corporation (CPC), www.communitycp.com a non-profit affordable housing lender, is leading a new public/private partnership to provide \$1 billion in construction and mortgage loans to NY owners of affordable multifamily rental and coops for energy efficient upgrades and property retrofits. 09/30 BUSINESS WIRE

4. **Lighting Project Finished** - City street lights are shining brightly at a much cheaper cost to taxpayers these days. Pittsfield has "substantially completed" a \$350,000 project of installing more energy efficient high pressure sodium lamps in all 2,832 light fixtures, two years after the city bought the street lights from W. MA Electric Co. (WMECO) for \$535,000. 09/24 The Berkshire Eagle

5. **New Hampshire Dark Sky Legislation Passes HB585** - The legislation will require:

- Utility companies to use full cutoff streetlights for all new installations and replacements
- The Public Utility agency to set new rates for streetlights that are turned off at midnight
- Restricts purchases using state funds to fully shielded streetlights
- Directs the New Hampshire DOT to "Explore how energy and maintenance costs can be reduced by replacing existing luminaries with lower-wattage, fully shielded luminaries or by eliminating roadway lighting altogether where appropriate."

<http://www.gencourt.state.nh.us/legislation/2009/HB0585.html>

6. **DOE Delivers More Than \$36 Million to Pennsylvania Communities for Energy Efficiency Projects** - At a Clean Energy Economy Forum with Governor Rendell in Bensalem today, U.S. Energy Secretary Steven Chu announced that DOE is awarding more than \$36 million in funding from the American Recovery and Reinvestment Act to support energy efficiency and conservation projects in communities across Pennsylvania. Under DOE's Energy Efficiency and Conservation Block Grant (EECBG) Program, these funds are being awarded to Pennsylvania's State Energy Office and local cities and counties to help lower energy use, reduce carbon pollution, and create green jobs across the Keystone State. 09/17 AP

7. **Governor Rendell Announces \$22.2 Million for Small Government Energy Efficiency Projects** - Governor Edward G. Rendell today announced a new grant program for local government and non-profit entities seeking to conserve or reduce energy use. PA Conservation Works! will provide up to \$250,000 for individual projects and \$500,000 for joint projects designed to increase energy efficiency, reduce energy consumption and reduce energy costs by at least 25 percent. To find out more about Gov. Rendell's initiatives and to sign up for his newsletter www.governor.state.pa.us 09/14 PRNewswire-USNewswire

8. **VA Governor Kaine Announces Loan Program for Energy Efficiency Projects** - Governor Kaine today announced the recapitalization of the Commonwealth's Energy Leasing Program, a loan program to finance energy efficiency projects in state agencies. The Commonwealth has secured \$40 million in financing for the projects, including \$10 million in capital from Grant Capital Management, a state-certified SWAM vendor. The loans are expected to be repaid by agencies from energy savings generated by the projects. The first loan from the program will be \$6.6 million to George Mason University for a series of upgrades at their Fairfax and Prince William campuses, including improvements to lighting, irrigation, metering, and heating and cooling of facilities. 09/28 M2 PRESSWIRE <http://www.governor.virginia.gov>

9. **State of Idaho Awards Micron \$5 Million Stimulus Grant** - The state is awarding Micron Technology Inc. with a \$5 million grant to help the company develop a line of energy efficient lighting products. Micron is working to develop new light-emitting diode technology, which uses a fraction of the energy needed to power standard lighting sources. Micron's LED project was one of four selected in May by the Idaho Office of Energy Resources with the best chances for bolstering the state economy. 09/24 AP

10. **Michigan Utility Programs Aim to Reduce Energy Use** - Both Traverse City Light & Power and Cherryland Electric Cooperative launched programs to help their customers reduce energy use in response to state Public Act 295 signed into law last year. Light & Power customers can obtain free coupons worth up to \$8 toward purchase of Compact Fluorescent Light (CFL) bulbs. Commercial customers also can apply for up to \$10,000 to offset the installation of new energy-efficient lighting and other energy equipment. Those incentives are tied to the availability of funding for the program. Information on Light & Power's "Energy Smart" incentives is available at www.tclp.org For Cherryland's energy efficiency incentives www.cherrylandelectric.com 09/15 The Record-Eagle

11. **Oncor LED Lighting Program Delivers Major Savings for American Airlines** - American Airlines and Oncor are completing a major new project that will see the airline replace more than 1,600 traditional lighting fixtures with energy-efficient LED (light-emitting diode) lighting in one of the largest single installations of its kind in the United States. Oncor's Take A Load Off, Texas® LED Lighting Program will help offset some of the cost of installing the new lighting system with incentives that will help save enough electricity to power approximately 150 average US homes for a year. The installation, which is currently underway at two multi-story parking garages near American Airlines' corporate headquarters, will allow American Airlines to receive an aggregate of \$362,887 in financial incentives from Oncor. American Airlines' corporate headquarters are located at 4333 Amon Carter Boulevard, Fort Worth, Texas. 09/23 BUSINESS WIRE

12. **Big Tex Goes Green with Energy-Efficient LEDs Donated by Oncor** - Big Tex and Oncor care about the environment. Not only will Big Tex announce energy efficiency tips from Oncor's Take A Load Off, Texas® program along with his usual welcomes, but he will also be lit up by Oncor with some of the most energy-efficient lighting available today, helping him to achieve 67 percent energy savings from his previous lighting system. Oncor is illuminating Big Tex with LED (light-emitting diode) lighting fixtures specifically designed by the Lighting Science Group, an LED manufacturer out of Satellite Beach, Fla., for the Texas State Fair giant. Big Tex's energy savings will come from replacing the previous two, 1,000-watt metal halide spotlights with 12 new LED fixtures designed to illuminate Big Tex like never before. Oncor is donating the lights to the State Fair of Texas. Because of the efficiency of the LED lighting and the amount the lighting will be used each year, Big Tex can potentially be lit by the Oncor-donated lights for some 50 years to come without replacing the bulbs. 09/23 BUSINESS WIRE

13. **OG&E Seeks Regulatory Approval of Conservation, Efficiency Programs** - Oklahoma Gas & Electric (OG&E) has filed an application with the Oklahoma Corporation Commission seeking approval of a Comprehensive Demand Program portfolio designed to promote energy efficiency and conservation for each class of OG&E customers. Eight separate programs are proposed, ranging from residential weatherization to commercial lighting, promoting fluorescent lighting and new lighting technologies. If approved, OG&E would expect to implement the Demand Programs in January 2010. 09/17 PRNewswire-FirstCall

14. **More Than One-Fourth of New Colorado Homes are ENERGY STAR** - The Governor's Energy Office (GEO) announced today that ENERGY STAR New Homes accounted for more than 26 percent of the new homes built in the first half of 2009 in Colorado. Market penetration for efficient ENERGY STAR New Homes (ESNH) continues to grow in Colorado, a sign that homebuilders are a strong partner in Colorado's New Energy Economy. www.coloradoenergystarhomes.com

15. **AEP-PSO Touts Energy Efficiency Program** - AEP-PSO officials predicted that customers could realize savings of more \$100 million over three years if they use the energy efficiency program that the utility company filed Thursday with the Oklahoma Corporation Commission. The Energy Efficiency and Demand Response program includes 16 new or updated programs -- from rebates for newer appliances to weatherization and lighting incentives -- that ultimately could save 70 million kilowatt hours in power generation over the three years. American Electric Power-Public Service Co. of Oklahoma estimated the programs' cost at \$80 million with potential customer benefits topping \$186 million, according to a company release. 09/17 - Tulsa World

16. **Los Angeles LED Street Light Program Estimated to Save \$10M Annually** - The City of Los Angeles approved LEDway™ streetlights from BetaLED® to replace modern cobrahead fixtures in local and residential neighborhoods as part of the green streetlight program. The City's plan includes retrofitting a total of 140,000 high-pressure sodium (HPS) luminaires to LED technology over the next five years. It's estimated LED streetlights will reduce the City's energy usage by 40 percent and lower carbon dioxide emissions by 40,500 tons per year or the equivalent of taking 6,700 cars off the road. The City will save approximately \$10 million annually from a combination of reduced energy usage and lower maintenance costs. 09/15 BUSINESS WIRE www.LEDwayStreetlights.com

17. **Green LBM Store to Open Near San Jose** - A startup company that hopes to build a chain of green LBM showrooms has announced the site of its first store, called "New Home," in Dublin, Calif., just north of San Jose. The initial 30,000-sq.-ft. store will be located in a former Good Guys electronics unit. New Home will offer more than 200,000 eco-friendly products in 38 categories, according to a press release. The retailer hopes to model itself after Home Depot and Lowe's, in terms of low prices and shopping convenience, it said. Ultimately, New Home is planning 25 stores throughout California, many of them occupying vacant class A retail buildings. The Dublin store is scheduled to open in January 2010. 09/17 HCN

18. **SCE Applauds CPUC's Landmark Energy Efficiency Decision** - Southern California Edison (SCE) will be able to significantly enhance its industry-leading energy efficiency programs with a new commitment from the California Public Utilities Commission (CPUC). The Commission approved a three-year, \$3.1 billion budget for SCE and the state's other investor-owned utilities. SCE's portion is \$1.2 billion. The budget, which spans 2010 to 2012, is the largest commitment to energy efficiency by any state. The programs include rebates for customers when they purchase energy efficient appliances and lighting, free energy-efficiency surveys, and free energy-efficient appliances for lower-income customers. More on SCE's energy incentives. www.sce.com/rebatesandsavings

19. **PSE's Rock the Bulb Rocks!** - Puget Sound Energy today announced that at the half-way point of its 16-week Rock the Bulb Tour, the utility is exceeding its goal of giving 400,000 free compact fluorescent light bulbs to its residential electric customers. Since kicking off the campaign in July, PSE has handed out more than 227,000 energy-saving CFL bulbs, which use one-quarter of the energy of equivalent traditional light bulbs. For more information about PSE's Rock the Bulb Tour, visit www.PSE.com or www.rockthebulb.pse.com 09/10 BUSINESS WIRE

MONTHLY SPECIAL FEATURE... www.nema.org posted July 28, 2009

Summary: New 2012 Standards for General Service Fluorescent Lamps (GSFL)

Effective Date of new DOE standards: July 14, 2012

Current exemptions continue (For example, lamps with CRI \geq 87, cold temp. (CT), UV, etc.)

Impact for 4' & 8' Fluorescent Lamps \leq 4500K and $>$ 4,500K and \leq 7,000K

- T12 4-ft. & 2-ft U-lamps with medium bi-pin bases
 - **Majority of F40 and F34T12 lamps and all FB40 and FB34T12 U-lamps FAIL.**
 - 4-ft. requires 3560 lumens @ 40W and 3030 lumens @ 34W to pass @ 89 LPW.
 - 2-ft. U-lamps require 3360 @ 40W and 2856 @ 34W to pass @ 84 LPW.
 - CWX/DX/DSGN50/C50 are exempt due to CRI.
- T12 8-ft. Slimline with single pin bases
 - **All 75W F96T12 lamps FAIL.**
 - **All 60W F96T12/ES FAIL** except for the 800/SPX Series & some 700/SP long life Series.
 - CWX/DX/DSGN50/C50 are exempt due to CRI.
- T12 8-ft. 800mA HO with RDC bases
 - All 110W F96T12 HO lamps FAIL. Requires enhanced coatings with 10,120 lumens to pass.
 - All 95W F96T12/ES/HO FAIL except for enhanced 800 Series. Requires 8740 lumens to pass.
 - CWX/DX/DSGN50/C50 are exempt due to CRI; CW/CT & D/CT are exempt.
- T8 4-ft. & 2-ft. U-lamps with medium bi-pin bases
 - **All 4-ft. T8 basic 700/SP Series lamps @ 2800 lumens FAIL.** Requires 2850 lumens to pass.
 - All other 4-ft. pass.
 - All 2-ft. 800/SPX Series U-lamps pass. Some 700/SP Series pass.
- T8 8-ft. Slimline with single pin bases
 - All pass except some 700/SP Series. Requires 5723 lumens @ 59W to pass.
- T8 8-ft. HO with RDC bases
 - All pass except some 700/SP Series. Requires 7912 lumens @ 86W to pass.
- T5 4-ft with miniature bi-pin bases
 - All pass.

Summary: Energy Conservation Standards for Incandescent Reflector Lamps (IRL)

Effective Date of new DOE Standards: July 14, 2012

Impact: Only a few of today's halogen reflector lamps, e.g. PAR20, PAR30 and PAR38, can meet the standards in the Final Rule. In order to meet the new standards, reflector lamps will need to use new technologies such as advanced infrared (IR) coatings and optimized reflector coatings. IR coatings redirect wasted heat energy emitted by the lamp filament back to the filament, increasing the temperature of the filament, and thus enabling it to produce more light without increasing wattage. Optimized reflector coatings will more efficiently direct light produced by the lamp out of the lamp and into the space being illuminated. The few existing lamps that meet the new standards are more expensive than the standard halogen lamps on the market today. While the initial cost of the new higher efficiency reflector lamps will be higher, the consumer should see a pay-back through reduced electrical bills depending on the amount of time the lamps are "on".