

Appendix K
General Service Lamps

***K-2: Status and Potential Outcomes of the
Energy Independence and Security Act (EISA) Legislation,
Applied Energy Group***

To: Laura Martel, Efficiency Maine
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Subject: Status and Potential Outcomes of the EISA Legislation
Date: July 7, 2021

Efficiency Maine contracted with Apex Analytics to review the current status of federal efficiency standards for general service lamps to inform program planning for its efficiency plan that will take effect on July 1, 2022. As part of its review, Apex drew on public regulatory and court documents, as well as existing industry analysis, as well as personal communication with:

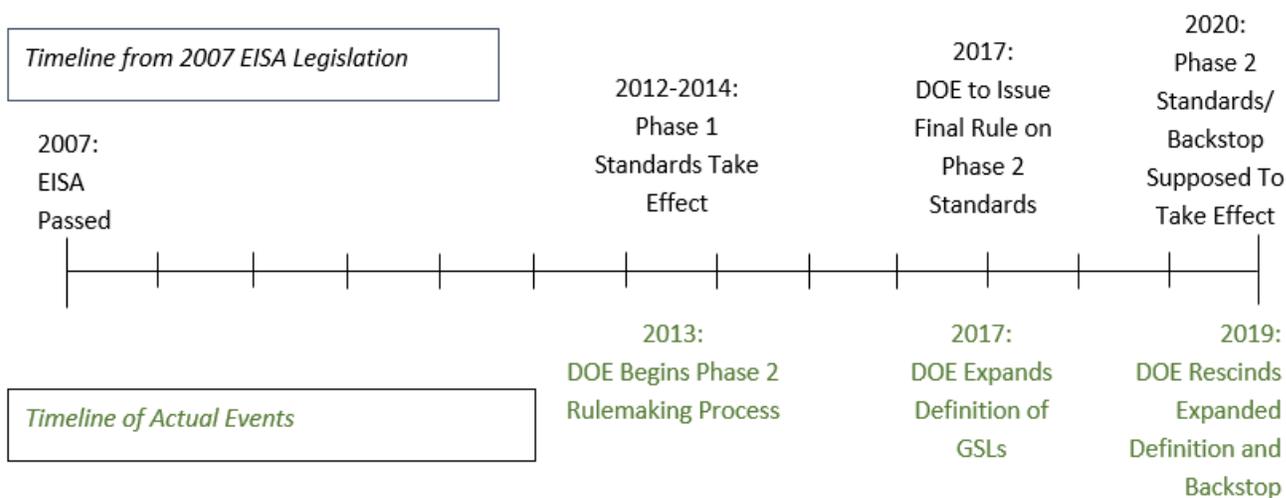
- › 11 corporate lightbulb retailers and manufacturers
- › Staff from the National Electrical Manufacturers Association (NEMA)
- › Environmental groups advocating for more stringent efficiency standards

This memo begins with a summary of background on the EISA legislation, describes recent developments under the Biden administration, and presents stakeholder perspectives on potential outcomes. Finally, Apex draws conclusions regarding if and when the EISA “backstop” (discussed further below) might be reinstated, making LEDs the effective baseline technology, based on the range of views considered.

Background on the EISA Legislation

The Energy Independence and Security Act (EISA), passed in 2007, defined changes to standards for general service lamps (GSLs) in two phases. Figure 1 provides a timeline of events, both as laid out in the EISA legislation and as have occurred. The remainder of this section provides additional information on the history of EISA.

Figure 1: EISA Timeline



The first phase of standards came into effect between 2012 and 2014 and required A-lamp lightbulb manufacturers to reduce A-lamp energy consumption by approximately 28% below common incandescent wattages. Manufacturers met these requirements with halogen bulbs, while retailers were allowed to continue to sell incandescent lamps already in inventory until those supplies were exhausted. EISA set a path for a second phase of standards to take effect in 2020, which would have further increased efficiency requirements for GSLs to a level equivalent to CFLs (45 lumens/Watt (lm/W)) and prohibited retailer sales of lower efficiency lamps by January 1, 2020 if the rules were not modified before that.

The 2007 EISA Legislation required DOE to conduct a rulemaking to consider two questions that would inform the second phase of lighting standards:

- › Whether DOE should amend the energy conservation standards for GSLs to be more stringent than the legislation’s minimum standard of 45 lm/W.
- › Whether DOE should maintain or discontinue the exemptions for certain types of incandescent lamps specified in the GSL definition in the EISA legislation.

The EISA legislation required DOE to publish a final rule addressing these questions by January 1, 2017. If DOE failed to meet this deadline, the Act provided that a so-called “backstop” would take effect, prohibiting sales of GSLs that did not meet the 45 lm/W standard as of January 1, 2020.

DOE began this rulemaking process at the end of 2013. In 2016, however, DOE determined that it could not conduct the analysis necessary to determine whether it should amend energy conservation standards for GSLs (the first question above) because of an Appropriations Rider passed that year. The rider prohibited DOE from using funds to enforce standards, including maximum wattage and minimum rated life requirements, for general service incandescent lamps and minimum lamp efficiency ratings for incandescent reflector lamps; DOE interpreted these restrictions to also prohibit analysis related to the need to

amend standards. The rider remained in effect until May of 2017. In response to the question of whether it should maintain or discontinue the exemptions in the GSL definition (the second question above), DOE (under the Obama administration) published a final rule expanding the definition of GSLs in January of 2017.

Following the transition to the Trump administration, in September of 2019, DOE published a new final rule rescinding the expanded GSL definition from 2017 and imposing additional exemptions (e.g., three-way and rough service lamps).¹ Separately, DOE published another final rule in December of 2019 addressing the question of whether it should amend energy conservation standards.² DOE (under the Trump administration) argued that energy conservation standards for GSLs did not need to be amended, effectively rescinding the EISA backstop provision. This allowed manufacturers to keep producing, and retailers to continue selling, halogen bulbs that meet the minimum efficiencies for most A-lamps and other bulb types included in EISA's original, narrower definition of GSLs. Incandescent bulbs remain available as an option for types not covered by the original EISA definition (e.g., globes and candelabras).

On February 25, 2020, two groups, the Natural Resources Defense Council and a coalition of environmental organizations,³ as well as attorneys general of 13 states, the District of Columbia, and the City of New York filed lawsuits seeking to reverse both of DOE's 2019 final rules (which rescind the expanded definition of GSLs and the 45 lm/W backstop).⁴ In March 2020, the court consolidated the two suits into a single case.⁵

Recent Developments Regarding EISA Under the Biden Administration

President Biden issued an executive order on his first day in office (January 20, 2021) directing heads of federal agencies to review existing regulations, orders, and other policies that conflict with efforts to address climate change.⁶ In response, the DOE identified 13 specific actions, including both of the 2019 final EISA rules.⁷ On March 5, 2021, DOE and the litigants in the lawsuit agreed to a 60-day abeyance, putting the proceedings on hold to give DOE time to review the rules and determine its next steps.⁸ The abeyance was extended on June 1, 2021 for another 60 days.

DOE (under the Biden administration) also released a semi-annual regulatory agenda on March 31, 2021 with Energy Conservation Standards for General Service Lamps as the first

¹ <https://www.federalregister.gov/documents/2019/09/05/2019-18941/energy-conservation-program-energy-conservation-standards-for-general-service-incandescent-lamps>

² <https://www.regulations.gov/document/EERE-2019-BT-STD-0022-0120>

³ <https://ecf.ca2.uscourts.gov/n/beam/servlet/TransportRoom?servlet=CaseSummary.jsp&caseNum=20-699&incOrigDkt=Y&incDktEntries=Y>

⁴ <https://ecf.ca2.uscourts.gov/n/beam/servlet/TransportRoom?servlet=CaseSummary.jsp&caseNum=20-743&incOrigDkt=Y&incDktEntries=Y>

⁵ <https://ecf.ca2.uscourts.gov/docs1/00207502861>

⁶ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>

⁷ <https://energycentral.com/c/ee/doe-eere-2021-02-19-memo-review-actions-prior-administration>

⁸ https://energycentral.com/system/files/ece/nodes/475624/16-3652_motion_to_hold_in_abeyance_for_review.pdf

item.⁹ The agenda states that “DOE will issue a Supplemental Notice of Proposed Rulemaking (NOPR) that includes a proposed determination with respect to whether to amend or adopt standards for general service light-emitting diode (LED) lamps and that may include a proposed determination with respect to whether to amend or adopt standards for compact fluorescent lamps.”

On May 20, 2021, DOE issued a Request for Information (RFI) regarding the EISA backstop provision. In particular, DOE requested information on availability of lamps (those both defined as GSLs and those not defined as GSLs, according to EISA), market share for these lamps, ability to create lamps that meet the 45 lm/W requirement, sell through periods for existing stock, and expectations around potential stranded inventory.¹⁰

The agenda item and RFI imply that the Biden administration plans to take action on GSL standards in the next six months. Although the exact timing of a NOPR is unclear, a final rule could follow the Supplemental NOPR relatively quickly; roughly seven months passed between the Trump DOE’s NOPR on the expanded definition of GSLs and the final rule, and there were less than four months between the NOPR and the final rule rescinding the backstop.¹¹ It is not yet clear how this proposed rulemaking might interact with the EISA standards, which the Trump administration defined narrowly as applying only to incandescent lamps in their justification for rescinding the EISA backstop.

Retailer and Manufacturer Perspective on Potential Outcomes

Apex interviewed 11 corporate retailers and manufacturers in fall 2020. The respondents, in general, expressed uncertainty about if and when EISA or equivalent standards for lighting could be reinstated. Interestingly, however, the responses were slightly different from before to after the 2020 presidential election. Prior to the election, interviewees simply said “I have no idea” to the question about whether they can predict the outcome. After the election, suppliers were comfortable believing the standards would return, but felt there would be some lead time to prepare. One corporate retailer indicated it did not really matter when it happened as they could accommodate changes as needed. “We will have a massive sale on halogens to get rid of existing stock before we get stuck with it”. The general consensus for those respondents interviewed after the election was that there would be some lead time to prepare for enforcement of any standards, possibly up to two years.

Potential Strategies the Biden Administration Could Pursue

One of the litigants in the environmental organizations’ lawsuit against DOE (under the Trump administration) described a variety of strategies that the Biden administration could pursue, along with the potential outcomes of each. As Table 1 describes, the timing with which the 45 lm/W backstop might be restored varies with each strategy.¹² Another

⁹ <https://www.govinfo.gov/content/pkg/FR-2021-03-31/pdf/2021-05662.pdf>

¹⁰ <https://www.energy.gov/sites/default/files/2021-05/gsl-backstop-rfi.pdf>

¹¹ The NOPR regarding the definition of GSLs was published on February 10, 2019 and the final rule was published on September 4, 2019. At the same time as the final rule on the definition of GSLs, DOE issued its Notice of Proposed Determination on the backstop. The final rule on the backstop was published on December 27, 2019.

¹² The recent issuance of the RFI, as described above, would imply that DOE is most likely to take the rule-making approach.

standards advocate further noted that DOE (under the Biden administration) could use its discretion on enforcement to allow a sell-through period for retailers to clear their existing inventory of non-compliant lamps.

Lighting manufacturers, through the National Electrical Manufacturer Association (NEMA) trade group, are likely to oppose any action DOE takes to restore the expanded GSL definition or the 45 lm/W backstop (the first potential outcome above), and are preparing to do so.¹³ For example, the light bulb manufacturing industry could pursue legal challenges to any rules DOE (under the Biden administration) made without a decision from the court invalidating the Trump administration’s previous actions. As part of those legal challenges, manufacturers could seek an injunction to prevent DOE from implementing revised rules while the lawsuit was decided. Efficiency advocates speculated that, for manufacturers, losing this injunction would effectively end lightbulb manufacturers’ efforts, noting that manufacturers dropped their suit against the State of California over its decision to implement the broader definition of GSLs when a judge denied their injunction.

Table 1: Potential DOE Actions and Outcomes

DOE Actions		Likely Result	Comment period?	Timeline for backstop and expanded definition to be approved
DOE conducts a rulemaking (i.e., NOPR and Final Rule) to restore the Obama-era scope and impact of the backstop.		Manufacturers pursue legal action, including injunction to block implementation of rule	Yes	Months (without injunction) / Years (if injunction is granted)
DOE admits attempt to block standard was unlawful		DOE contends it needs to incorporate backstop into Code of Federal Regulations; Manufacturers may then pursue legal action to block enforcement	No	Weeks
Proceed in seeking a decision from the court	DOE loses: Court throws out challenged rules	Restores status quo prior to rules	No	Immediate (following lawsuit)
	DOE wins	Trump rules stand, no backstop and reduced GSL definition remain	No	N/A

Conclusion

It appears likely that the Biden administration will take action before the end of 2021 to restore the Obama-era lighting standards, including both the expanded GLS definition as well as the 45 lm/W efficiency standard. There remains uncertainty, however, as to the approach the administration will take to reinstate the standards – whether through a

¹³ In correspondence, one industry actor referred to the industry’s analysis and preparations as “wargaming.”

rulemaking process or through the existing litigation process. Depending on the strategy, the standards could be adopted in as short as a few weeks or as long as a few months, and potentially could take years if the DOE pursues new rulemaking and NEMA pursues litigation and wins an injunction against the DOE.

There is additional uncertainty as to the length of time DOE will allow between adoption of the standards and the time it begins enforcing compliance. Lightbulb manufacturers will likely argue a period of years is necessary, while efficiency advocates believe six months would be generous. A 12-month sell-through period would represent a compromise between the matter of months efficiency advocates support and the years lightbulb manufacturers will likely seek, recognizing that the Biden administration appears motivated to restore these standards.

With all of this uncertainty in mind, it appears reasonable to assume that the expanded GSL definition and 45 lm/W efficiency standard will be in effect by the beginning of 2023.