



February 27, 2015

VIA EMAIL ([DistributionTransformers@energystar.gov](mailto:DistributionTransformers@energystar.gov))

United States Environmental Protection Agency  
Washington, D.C. 20460

Dear Sir or Madam:

On behalf of AK Steel Corporation and Allegheny Technologies Incorporated (ATI), we are writing to submit comments on the U.S. Environmental Protection Agency's ("EPA") December 9, 2014, draft Energy Star specification framework for distribution transformers. AK Steel is a leading domestic producer of specialty steel, including the grain-oriented electrical steel that comprises the core material for most distribution transformers. AK Steel and its subsidiaries employ approximately 8000 men and women in six states: Ohio, Michigan, Pennsylvania, Kentucky, Indiana and West Virginia. Allegheny Technologies Incorporated is one of the largest and most diversified specialty materials and components producers in the world. ATI has approximately 9,700 full-time employees world-wide who use innovative technologies to offer global markets a wide range of specialty materials solutions. ATI produces grain-oriented electrical steel in Pennsylvania, and other specialty metals in Pennsylvania, California, Connecticut, Indiana, Kentucky, Massachusetts, New York, North Carolina, Ohio, Oregon, South Carolina, Utah, Washington, and Wisconsin.

In summary, AK Steel and ATI encourage EPA to terminate this Energy Star proceeding. The Department of Energy ("DOE") recently promulgated new energy efficiency standards that are set to take effect in January 2016. See 78 Fed. Reg. 23,336 (Apr. 18, 2013). These energy conservation standards constitute DOE's determination that any "more efficient" standard -- including EPA's suggested Energy Star standard in its draft specification framework -- would not be beneficial. EPA should, as it has in the past, defer to DOE's conclusions. In addition, we expect that there will be limited interest in Energy Star standards among key stakeholders, including distribution transformer manufacturers and electric utility consumers. Finally, the draft specification framework suggests that EPA's Energy Star process may lack appropriate transparency standards, being predicated on non-public materials and on questionable information provided by entities and persons with a direct financial interest in EPA's proposed standards.

In determining whether to proceed with the Energy Star standard-setting process for distribution transformers, EPA historically has taken into account two key factors. The first factor is whether DOE has recently considered the issue of energy efficiency in setting energy conservation standards. That is because a final energy conservation standard, promulgated under the Energy Conservation and Policy Act, is set "to achieve the maximum improvement in energy efficiency . . . which the Secretary [of Energy] determines is technologically feasible and economically justified." 42 U.S.C. § 6295(o) (2) (A). In other words, DOE considers whether the benefits of a higher standard are justified by the burdens the higher standard would impose. See, e.g., 78 Fed. Reg. at 23,413-23,414. Owing both to the DOE's superior expertise in the area of energy

efficiency and to the respect that should be afforded to the DOE's efforts, EPA has deferred to the Department of Energy's conclusions in determining whether it was appropriate to set Energy Star standards for distribution transformers. Notably, in 2007, EPA discontinued the Energy Star distribution transformers program "because the recent DOE activity and expected new national standard supersedes the historical ENERGY STAR program." Letter of November 15, 2006, from Rachel Schmeltz, ENERGY STAR Program Manager (Ex. A.); Letter of January 3, 2007, from Rachel Schmeltz, ENERGY STAR Program Manager (Ex. B.).

The second factor that EPA has considered is whether stakeholders are interested in the Energy Star process. Previously, EPA discontinued the Energy Star distribution transformers program, in part, "because EPA feels that the current and expected levels of interest do not justify the cost of maintaining the program." Ex. A. Without stakeholder buy-in, EPA will lack the necessary technical information to make an informed decision on an Energy Star standard for distribution transformers. Similarly, absent stakeholder buy-in, it is unlikely that there will be significant adoption of the Energy Star standard by manufacturers and consumers. As a result, EPA should not use its limited resources to adopt an Energy Star standard absent significant stakeholder commitment.

The situation as it stands today is much like it was in 2007 when EPA discontinued the prior distribution transformers Energy Star project. Starting in January 2016, newly manufactured distribution transformers sold in the United States must comply with a new set of energy conservation standards that are more ambitious than the standards implemented in 2010. These standards were set as part of a multiyear process where DOE received input from all affected stakeholders, including transformer manufacturers, electric utilities, public interest groups, trade associations, and transformer component manufacturers. The result of this process was a conclusive determination by DOE that the adopted energy conservation standards constituted the highest level of efficiency that was justified in light of the burdens of the standard. See, e.g., 78 Fed. Reg. at 23,418 (stating DOE conclusion for liquid-immersed distribution transformers). In contrast, DOE concluded that at the efficiency level that EPA is considering for the Energy Star program, TSL 4, "the benefits of energy savings, positive [net present value] of customer benefit, positive average customer [life cycle combined] savings, generating capacity reductions, emission reductions, and the estimated monetary value of the CO<sub>2</sub> emissions reductions would be outweighed by the capital and engineering costs that could result in a large reduction in [industry net present value] for manufacturers, and the risk that manufacturers may not be able to obtain the quantities of amorphous steel required to meet standards." 78 Fed. Reg. at 23,417. In light of this careful analysis, EPA should respect DOE's conclusions that the production of more efficient transformers is not in the interests of stakeholders and of society as a whole, whether those standards are mandatory (like energy conservation standards) or voluntary (like Energy Star standards).

Similarly, AK Steel and ATI expect that there will be little stakeholder interest in new Energy Star standards. In many cases where EPA is considering Energy Star standards, higher levels of efficiency are readily available without significant technological and informational barriers, and the process and operational changes necessary to achieve the Energy Star standards are available to most manufacturers. Increasing efficiency standards for distribution standards beyond the ambitious levels that DOE recently adopted as energy conservation standards would require the use of

amorphous metal as a core transformer material. Only one company in the United States has the technological capability of producing amorphous metal: Metglas, which is a subsidiary of another U.S. company that is wholly owned by Hitachi Metals, Ltd., a Japanese company. Contrary to the information that EPA appears to have received from Metglas and EPA consultants who have a financial interest in Hitachi Metals, there are tremendous technological barriers to the production of amorphous metal by other producers and to any but the largest transformer manufacturers producing transformers with amorphous metal cores. As a result, the Energy Star standards that EPA is currently considering should be viewed as a franchise for Metglas, which unquestionably is not the purpose of the Energy Star program.

Relatedly, there are significant transparency concerns with EPA's current Energy Star actions with regard to distribution transformers. The first transparency concern arises from EPA's use of non-public technical information for calculating the putative benefits of higher efficiency standards, including a technical analysis conducted by the Lawrence Berkley National Laboratory working with the consulting firm, Optimized Program Services. While it may have been appropriate for DOE to use this model in the energy conservation standard-setting process, given the DOE's legal obligation to set energy conservation standards, it is not appropriate for EPA to engage in the discretionary Energy Star standard-setting process using this non-public information. The second transparency concern arises from EPA's heavy reliance for technical support on entities and persons with a direct financial interest in EPA's proposed Energy Star standards. It is our understanding that during a recent webinar on this topic, EPA's primary consultant, Mahesh Sampat, acknowledged that his consultancy has had a business relationship with Metglas and/or Hitachi in the past that has remained ongoing through today, including the time of the current Energy Star proceeding.

Similarly, EPA's supporting documentation contains contestable (and possibly incorrect) justifications for the Energy Star standards that are supported by nothing more than the statements of Metglas personnel. See ENERGY STAR Distribution Transformers, Draft Specification Framework (Dec. 9, 2014) (Ex. C.). For example, the draft specification framework states that "EPA has learned that production capacity can be scaled up to increase the domestic supply of amorphous steel used to create the most efficient medium-voltage, liquid-immersed transformers." Ex. C, p. 2. EPA's only support for this statement is a reference to an ex parte telephone interview with Metglas personnel: "D. Millure, J. Allen (Metglas), and P. Ryan (Hitachi Metals America Ltd.), Interviewees, Telephone Interview with Matt Malinowski (ICF International), 28 March 2014." Ex. C, p. 2. n.8. But DOE made a formal determination to the contrary during the energy conservation standard process: "[T]he available supply of amorphous steel is well below the amount that would likely be required to meet the U.S. liquid-immersed distribution transformer market demand. . . . Therefore, setting a standard that requires amorphous material would expose the [transformer] industry to enormous risk with respect to core steel supply." 78 Fed. Reg. at 23,417.

These transparency issues go to the heart of the justification for the Energy Star proceeding and threaten its legitimacy. If EPA were to determine that it is desirable to consider Energy Star standards for distribution transformers, EPA should abandon the current process and "go back to the drawing board" by conducting an independent evaluation without relying on questionable information supplied by Metglas and persons with a financial interest in it.

For the foregoing reasons, AK Steel and ATI request that EPA terminate this Energy Star proceeding.

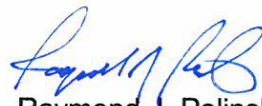
Sincerely,



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