

Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
Natural Resources Defense Council

August 15, 2019

Mr. Pete Cochran
U.S. Department of Energy
Appliance and Equipment Standards Program
Mailstop EE-5B
1000 Independence Ave, SW
Washington, DC 20585-0121

Docket Number: EERE-2019-BT-PET-0017

Dear Mr. Cochran:

The following comprises the comments of the Appliance Standards Awareness Project, the American Council for an Energy Efficient Economy, and the Natural Resources Defense Council in response to a petition from Atlas Copco North America, Inc. requesting that the US Department of Energy (DOE) allow compressor manufacturers to determine the applicable full-load package isentropic efficiency, part-load package isentropic efficiency, package specific power, maximum full-flow operating pressure, full-load operating pressure, full-load actual volume flow rate, and pressure ratio at full-load operating pressure using either the DOE test procedure for compressors or the consensus industry test method, International Organization for Standardization 1217:2009(E).

When basing federal test procedures on accepted industry test procedures DOE must adapt and improve them as necessary to meet regulatory needs.

We support DOE's use of accepted industry test procedures as a starting point in the development of the agency's test procedures, with the recognition that industry energy consumption test procedures are generally intended to allow the comparison of product performance, while DOE energy consumption test procedures are used to determine product compliance with regulations. DOE has a statutory duty under the Energy Policy and Conservation Act of 1975 (EPCA)¹ to fully analyze industry test procedures and to make any changes necessary to improve the representativeness of the test procedure (e.g., repeatability) and not to simply accept industry test procedures.

During DOE's rulemaking for test procedures for compressors (EERE-2014-BT-TP-0054) Atlas Copco provided extensive comments describing the same concerns contained in the company's recent petition. DOE responded to those concerns in detail during the rulemaking and provided reasonable estimates of the cost impacts of the federal test procedure on manufacturers. The following excerpts (*in italics*) from

¹ 42 U.S.C. § 6314(a)(1)(A)(i)

DOE's January 4, 2017 Test Procedures for Compressors; Final Rule (the Rule, as published in the federal register) addressed the concerns raised in Atlas Copco's petition.

Atlas Copco's petition (the Petition) claims that the DOE test procedure is "unreasonably burdensome" within the meaning of section 343(a)(2) of EPCA.² However, DOE clearly addressed burdens to industry in the Rule:

DOE has also reviewed the burdens associated with conducting the test procedure established in this final rule, including ISO 1217:2009(E), as amended, and, based on the results of such analysis, has found that the test procedure would not be unduly burdensome to conduct. (82 FR 1054)

The petition claims that in adopting the test procedure for compressors DOE ignored section 12(d) of the National Technology Transfer and Advancement Act of 1995 mandating the use of ISO 1217:2009(E) as a consensus industry standard, absent compelling reasons to depart from it. However, DOE did provide compelling reasons as follows:

DOE further noted that additions and modifications to the test method described in ISO 1217:2009(E) would be necessary in order to determine the package isentropic efficiency of applicable compressors and improve repeatability and reproducibility of the ratings. Consequently, in the test procedure NOPR DOE proposed to incorporate by reference ISO 1217:2009(E) with a number of modifications. (82 FR 1074)

Later in the Rule DOE indicated its intent to closely align the federal test procedure with the accepted industry test procedure:

However, DOE proposed several modifications and additions to the methods specified by ISO 1217:2009(E), as these are required to provide the necessary specificity and repeatability. Even with the proposed modifications and additions, DOE stated in the test procedure NOPR that its intent was to propose a test procedure that would remain closely aligned with existing and widely used industry procedures to limit testing burden on manufacturers. (82 FR 1076)

Additionally, in following arguments DOE clearly justified the need to adapt the industry test procedure to ensure it meets DOE's requirements for specificity and repeatability:

In the test procedure NOPR, DOE stated that ISO 1217:2009(E) is an appropriate industry testing standard for evaluating compressor performance, with the caveat that ISO 1217:2009(E) is written as a customer acceptance test, and as such it required several modifications and additions in order to provide the specificity and repeatability required by DOE. Consequently, DOE proposed several modifications and additions to ISO 1217:2009(E) and proposed to incorporate by reference only the sections of ISO 1217:2009(E) that are relevant to the equipment within the scope of applicability of DOE's proposed test procedures. DOE stated that by proposing to incorporate by reference much of ISO 1217:2009(E) into the proposed DOE test

² 42 U.S.C. § 6314(a)(2)

procedures, DOE believed that the resulting DOE test procedures would remain closely aligned with existing and widely used industry procedures and limit the testing burden on manufacturers. (82 FR 1094)

In the same section of the Rule DOE further acknowledged industry's concerns about the use of legacy ISO 1217:2009(E) test data, and provided specific details in that regard:

*DOE acknowledges the commenters' general concerns that the test procedures, as proposed in the test procedure NOPR, differed enough from ISO 1217:2009(E) that, if adopted, manufacturers may need to retest all units in order to continue making representations. However, DOE reiterates that, as stated in the test procedure NOPR, DOE's intent is to propose test procedures that remain closely aligned with existing and widely used industry procedures and limit testing burden on manufacturers. In response to the commenters' concerns, in this final rule, DOE is making many modifications to the methods proposed in the test procedure NOPR, in order to align as closely as possible to ISO 1217:2009(E), as amended. (44) A complete discussion of these modifications is found in section III.E of this final rule. With these modifications, the test methods established in the final rule are intended to produce results equivalent to those produced historically under ISO 1217:2009(E). **Consequently, if historical test data are consistent with values that are generated when testing with the test methods established in this final rule, then manufacturers may use this data for the purposes of representing any metrics subject to representations requirements.** (82 FR 1094, emphasis added)*

In an earlier section of the Rule, DOE specifically addressed Atlas Copco's concerns:

DOE acknowledges Atlas Copco's concerns that its test method, as proposed in the test procedure NOPR differed from ISO 1217:2009(E). However, as discussed in sections III.B and III.E, in this final rule DOE is modifying its NOPR proposal to reduce scope and better align with ISO 1217:2009(E). (82 FR 1090)

Accepting Atlas Copco's petition is not the most effective way for DOE to address the company's concerns regarding compressor testing.

The Petition claims that DOE's compressor test procedure forces manufacturers to incur the costs of duplicative testing to satisfy state energy efficiency mandates. The Petition notes that DOE had provided clarity on the acceptability of legacy ISO 1217:2009(E) test data to document compliance with DOE regulation in the Rule, however "This deferral by DOE of the enforcement sampling plan and its subsequent failure to publish a final efficiency standard have created great confusion among compressor manufacturers about how DOE will address testing results, permissible tolerances with the ISO 1217 test method, and related matters."

At the time that DOE issued the final rule establishing the compressors test procedure, the federal standard for compressors was expected to follow in short order. Few could have anticipated that the agency would withhold the completed federal standard for more than two years or that several states would eventually adopt energy conservation standards for air compressors. The most effective way for

DOE to resolve Atlas Copco's concerns regarding DOE's test procedure for air compressors would be for the agency to publish the final rule establishing federal energy efficiency standards for air compressors. Publication would provide compressor manufacturers like Atlas Copco with greater regulatory certainty, and help mitigate the "great confusion among compressor manufacturers" referenced above.

DOE should deny Atlas Copco's petition.

DOE's test procedure for air compressors was developed through the agency's normal rulemaking process and included extensive opportunities for industry involvement. Atlas Copco's petition was submitted without the apparent support of other compressor manufacturers or of the Compressed Air and Gas Institute (CAGI) industry group. If DOE grants Atlas Copco's petition, after the issuance of the test procedure final rule and the pre-publication standards final rule, it would undermine the agency's test procedure final rule and energy conservation standards rulemaking process in general. For all these reasons we recommend that DOE deny Atlas Copco's petition.

We appreciate the opportunity to provide these comments.

Sincerely,



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