



**Industrial Energy Consumers of America**  
*The Voice of the Industrial Energy Consumers*

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U.S. Department of Energy  
Electric Motors Rulemaking  
Docket No. EERE-2010-BT-STD-0027  
(RIN) 1904-AC28

**COMMENTS OF  
INDUSTRIAL ENERGY CONSUMERS OF AMERICA (“IECA”) ON THE  
PRELIMINARY TECHNICAL SUPPORT DOCUMENT (“TSD”)**

The Industrial Energy Consumers of America (“IECA”) submits the following comments on the preliminary technical support document (“TSD”) in the above-referenced docket.

**SUMMARY**

**IECA finds that the TSD falls short of a reasonable basis for economic justification of a change in existing industrial electric motor standards.** In particular, factors in the determination that need to be addressed include: a) economic impacts on customers of equipment subject to the standards; and b) total projected amount of energy savings likely to result from imposition of the new standards. Because of apparent reliance in the TSD on pre-Great Recession manufacturing data, IECA claims that the projected benefits (Table ES.3.27) are overstated. Cost projections may be understated. Data to support baseline industrial energy use characterization appear inadequate. Inadequate baseline industrial energy use data along with 2006 (pre-Great Recession) manufacturing electricity consumption data could further distort impacts (e.g., energy savings). DOE needs to do a better job of outreach to secure involvement by industrial electricity consumers.

**INDUSTRIAL ENERGY CONSUMERS OF AMERICA**

The Industrial Energy Consumers of America (IECA) is a nonpartisan association of leading manufacturing companies with \$710 billion in annual sales and with more than 930,000 employees nationwide. It is an organization created to promote the interests of manufacturing companies through research, advocacy, and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of manufacturing companies from NAICS 31, 32, 33 (i.e., chemicals, plastics, cement, paper, food processing, brick, fertilizer, steel, glass, industrial gases, pharmaceutical, aluminum and brewing).

IECA is strongly in support of cost-effective energy efficiency improvements. IECA members have experience in the subject matter of this rulemaking and have a direct interest in the outcome of this proceeding.

The manufacturing sector employs 12 million people directly and indirectly an additional 5 million. In 2011, we accounted for 86.1 percent of exports totaling \$1.27 trillion. The industrial sector consumes about one-third of U.S. electricity and natural gas. Subject to global competition, IECA members have consistently made investment in energy efficiency that includes electric motors and automated systems. Energy efficiency investments can lower manufacturing costs thereby improving competitiveness, jobs and exports. Importantly, energy efficiency investments are subject to site-specific challenges and economics that dictate investment in energy efficiency.

Until now, IECA has not participated in the resource-intensive, time-consuming, and long-running electric motor efficiency standards process under this docket; and to its knowledge, no IECA member has participated directly in this docket. IECA notes that while Joint Stakeholders claim that industrial energy savings through the TSD is among one of the most significant opportunities for the greatest energy saving impact, the actual users of electric motors cannot make that claim. It also appears that there is little or no participation in this docket from industrial motor users.

## **COMMENTS**

### **1. The TSD lacks adequate analysis of impact to consumers of electric motors and overstates the benefits.**

Energy use characterization of motor applications is based on surveys conducted between 2005 and 2011. There is no explanation of effects of the Great Recession on these surveys (See TSD 7.2.4).

Derived sector-specific average electricity prices appear to ignore differences within the four census regions where industrial activity is concentrated. Alternative methods of electricity price determination should be explored (e.g., organized markets). Estimated regional shares of motors were based on sector specific indicators (See TSD 2.8.2). Current inventories of motors could be a far better basis than indicators. Inventories may help validate indicators.

Life-Cycle Costs and Payback Period Analysis (See TSD 8.2.2.2, p. 19) relies on manufacturer energy consumption data and the data is from a 2006 EIA Data Table (footnote 9). This was before The Great Recession (2008-2009) that caused manufacturing facilities to shut-down in the tens of thousands across the U.S. Consequently, unless these changes have been taken into account, the base scenario is likely erroneous and projected energy savings are overstated. The thirty-year assessment of projected national benefits (Table ES.3.27) should be reconsidered in light of reliance on pre- Great Recession manufacturing data.

Lastly, and very importantly, the TSD indicates that benefits of various Candidate Standard Levels result in payback periods multiple times greater than the two or three years that manufacturing requires (See TSD ES.3.6.1). For clarity, the manufacturing industry will not invest in very many projects with a greater than three year pay back which means the TSD benefits are overstated.

**2. Costs are likely understated.**

Commodity material costs for high efficiency motors are very volatile and cannot be reliably projected from a simple five-year average (e.g., 2007 through 2011). As a result, high efficiency motor material costs may be highly underestimated (See TSD 2.5.4). A range of material costs rather than point averages could better inform a range of life-cycle costs and payback periods for each CSL.

**3. DOE must do more to ensure that industrial consumers of electric motors are included in the stakeholder process.**

To our knowledge, manufacturer end-use consumers of industrial electric motors have not participated in the DOE electric motor standards process. We urge the DOE to provide an outreach effort to ensure that the voice of those who are going to buy and use the motors are participating.

Respectfully submitted,

On behalf of Industrial Energy Consumers of America

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Dated: September 7, 2012