



## Regulation Review

# Energy Efficiency Standards for Commercial and Industrial Electric Motors

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The steady stream of energy efficiency regulations continues. Recently, the Department of Energy (DOE) released its proposed rule establishing standards for “commercial and industrial electric motors.” In one of the more expansive sets of efficiency standards, DOE plans to extend regulations to 14 kinds of engines. This set of standards will cost \$11.7 billion. The pre-publication, [unofficial version](#) of the proposal is 353 pages.

The proposal’s extensive costs cannot be understated. At nearly \$12 billion, it’s the second most expensive set of efficiency standards since 2009. It would also be the second most expensive rulemaking published this year. According to the American Action Forum’s (AAF) [running tally](#), agencies have already published \$96.3 billion in regulatory costs. While it is unclear exactly when this proposal will be published in the Federal Register, it will push this year’s total cost tally well past the \$100 billion mark.

In terms of additional burdens, DOE admits that the rule “may require expenditures of \$100 million or more on the private sector,” and thus may meet the threshold of the Unfunded Mandates Reform Act. Additionally, the Department has prepared an Initial Regulatory Flexibility Analysis (IRFA), and cannot certify that that it “will not have a significant economic impact on a substantial number of small entities.” The IFRA contains some interesting findings.

It focuses on the impact the rule will have on NAICS Code 335312, or the “Motor and Generator Manufacturing” industry. According to Census data, more than 72 percent of establishments in that industry employ fewer than 50 workers. The following states would be most affected.

State	Percentage of Establishments
California	10 percent
Ohio	7.7 percent
Texas	6.4 percent
Wisconsin	6 percent
Michigan	5.7 percent

For this rule however, there are apparently 60 affected entities. DOE finds that 13 out of 60 affected manufacturers can be considered small businesses. Of those 13, the Department finds that five “would likely be the most impacted by” because of their inability to scale their operations easily.

The impact on these manufacturers is extremely acute. DOE estimates that the conversion costs equal 188 percent of their “annual capital expenditures,” 490 percent of their “annual R & D expenses,” and **75 percent of their annual revenue**

. While DOE takes great lengths to note that this is a relatively small portion of the market, a portion of it faces tremendous regulatory pressure under these regulations. It is difficult to see how any business survives a set of additional costs equal to three-fourths of its revenue.

The acute effect upon particular entities is not the only concern. As rules – and their costs – continue to pile up, it is not always one regulation that causes economic harm, but rather the cumulative effect of having to maneuver layer after layer of red tape and additional engineering requirements. DOE actually acknowledges this in the [Technical Support Document \(TSD\)](#). In the TSD section on “Cumulative Regulatory Burden,” DOE notes:

*Manufacturers expressed concern about the 2015 compliance date for small electric motors being within three years of this rulemaking’s effective date. Manufacturers stated that adopting these two regulations in a short timeframe would strain research and development for motor manufacturers.*

The [small electric motors rule](#) referenced brings roughly \$263 million in annualized costs, and thus is a major rule. Although the above statement concentrates more on the capital concerns, the finding expressed in the TSD echoes [recent AAF research](#) that found a statistically significant correlation between multiple major, economically significant regulations affecting an industry and a decrease in that industry’s employment.

As with past efficiency standards, DOE claims these regulations will result in substantial benefits in the form of long-term consumer savings and reduced carbon emissions. However, these benefits come with significant costs. On the individual firm level, costs could potentially consume three-quarters of total revenues. And on the industry level, this proposal adds yet another layer to an already heavily-regulated industry.