

U. S. Department of Energy  
Office of the General Council  
1000 Independence Ave., SW  
Room 6A245  
Washington, DC 20585

May 30, 2016

Subject: Regulatory Burden RFI

The following content was created in response to the Federal Register, Vol. 81, No.90 published May 10, 2016 in regards to reducing regulatory burden via a Request for Information (RFI). This is part of the implementation of Executive Order 13563. The stated purpose of the notice is to look at DOE Rules and Regulations for consideration of modification, streamlining, expanding or repealing.

My name is Rodney Beever. I do not represent any company on this topic. However, I spent 45 years in the HVAC industry working for both large and small companies. These companies either manufactured equipment or a component that went into the equipment. During the last portion of my career I was tasked with attempting to stay abreast of the DOE Rules and Regulations as they may have applied to a small HVAC manufacturer. At the same time I was also involved with some activities associated with establishing standards within AHRI and ASHRAE.

Approximately 55 to 56 million Americans are working for small companies. This is almost half of the workforce. I do not know how many of these are in the small HVAC businesses. These are the mothers, fathers, sons, daughters, aunts, uncles, grandparents, friends and neighbors we all live with.

The cost for compliance with government rules and regulations is higher for small businesses. Some statistics show that the numbers of existing small businesses are declining and new ones are not being started. The economic growth in small companies is smaller.

It is easy to understand that the general aim or intent of the rules and regulations put into place is to protect us or improve our lives in some manner shape or form. Unfortunately those rules that are not well thought out and justified on all levels often do more harm than good. The lack of awareness of how the small businesses function and survive is often the demise of the small business entities.

The points that will follow are thoughts about the impacts of the DOE Rules and Regulations on the small businesses in the HVAC industry. I feel that it is important to note that most small HVAC companies are not staffed for this type of activity. I felt that I needed to step up to make some of the issues visible.

1. Small companies typically do not have a voice in the establishment of rules, regulations and standards within the HVAC industry. These small companies are not members of ASHRAE, AHRI or AHAM. Therefore, they are not part of the committees or the processes that result in the rules, regulations and standards they must comply with.

2. There is a group known as the Appliance Standards and Rulemaking Advisory Committee (ASRAC). It looks like this committee is currently made up by the following people:
  - a. Co-Chair – Mr. Andrew deLaski; Appliance Standards Awareness Project
  - b. Ms. Ashley Armstrong; U. S. Department of Energy
  - c. Mr. John Caskey; National Electrical Manufacturers Association
  - d. Ms. Jennifer Cleary; Association of Home Appliance Manufacturers
  - e. Mr. Mark Connelly; Consumer Reports
  - f. Mr. Thomas Eckman; Northwest Power and Conservation Council
  - g. Mr. Charles Hon; True Manufacturing Company
  - h. Dr. David Hungerford; California Energy Commission
  - i. Dr. Diane Jakobs; Rheem Manufacturing Company
  - j. Mr. Patrick Keal; Big Ass Solutions
  - k. Ms. Kelly Kline; General Electric, Appliances
  - l. Ms. Deborah Miller; National Association of State Energy Officials
  - m. Mr. Michael Wolf; Greenheck Fan Corporation

Under this ASRAC Group there was a Working Group that was created. It consisted of the following individuals:

John Cymbalsky (U.S. Department of Energy)  
Marshall Hunt (Pacific Gas & Electric Company, San Diego Gas & Electric Company, Southern California Edison, and Southern California Gas Company)  
Andrew deLaski (Appliance Standards Awareness Project)  
Louis Starr (Northwest Energy Efficiency Alliance)  
Meg Waltner (Natural Resources Defense Council)  
Jill Hootman (Trane)  
John Hurst (Lennox)  
Karen Meyers (Rheem Manufacturing Company)  
Charlie McCrudden (Air Conditioning Contractors of America)  
Harvey Sachs (American Council for an Energy Efficient Economy)  
Paul Doppel (Mitsubishi Electric)  
Robert Whitwell (United Technologies Corporation (Carrier))  
Michael Shows (Underwriters Laboratories)  
Russell Tharp (Goodman Manufacturing)  
Sami Zendah (Emerson Climate Technologies)  
Mark Tezigni (Sheet Metal and Air Conditioning Contractors National Association, Inc.)  
Nick Mislak (Air-Conditioning, Heating, and Refrigeration Institute)

Each of these members (ASRAC and the Working Group) has a specific place and position in the overall scope of the HVAC industry. Some of these individuals represent organizations that do not manufacture any goods that must comply with the rules and regulations as placed upon the industry. In addition, a more critical observation must also be noted that there is no representation for the small HVAC manufacturers, either on ASRAC or the Working Group.

Several large companies are included, but no small company or an agent working on their behalf.

One of the recent comments included with reporting for the Working Group efforts made a reference to having any unique interests that have been identified and by context being acted upon. For the small HVAC manufacturers of the "niche" type products this appears to have still not been accomplished.

3. The small companies within the HVAC industry, for the most part, are involved in fabricating "niche" type products. These are systems that have a small market presence. The large companies cannot justify being involved with these units. In some cases the large companies will have the small companies make the units for them and name brand them.

There are several issues that are associated with this point:

- a. The small companies do not have the staffing to keep abreast of all the rules and regulations as they are promulgated.
- b. There are often questions as to whether or not the rules, regulations and standards actually apply to some units (i.e. the product definitions are based on the main stream products versus "niche" products). As such, the small companies do not know how or where to go to get clarification. Along with this issue is the fact that a small manufacturer may have a more difficult time explaining to a customer that their product is not covered by a specific rule, regulation or standard. This takes time away from actually selling and consumes scarce resources from marketing, sales and survival.
- c. Small companies often provide commercial applied products. These aren't the type of units that are built for inventory. They are designed and fabricated for specific applications.
- d. Small companies have limited resources:
  - i. Small companies will have one or two engineers, while the large companies will have a staff of engineers, some large companies have one engineer per product line. In the small companies the engineers must also help with:
    1. Production questions
    2. Sales activity
    3. Marketing topics
    4. Field Service issues
    5. Product design
    6. Product applications
    7. Purchasing requirements
  - ii. Small companies will have limited sales / marketing staffs – perhaps one or two people. As with the engineers in the small companies the focus is primarily on everyday survival. Sell enough to cover the bills and try and make some profit. Large companies have a Product Manager for each product line. Again the small

company sales and marketing personnel are involved in a multitude of day-to-day activities that are not directly associated with sales or marketing.

- iii. Small companies have limited purchasing power. New rules, regulations and standards often require them to phase into new coils, compressors and components. Their limited purchasing power means that they pay premium prices for these components. They may have to buy a skid of a component and that inventory may last several months (increased carrying costs). Large companies have better purchasing power or may fabricate their own coils, for example. Therefore, the impact of the updated rules, regulations and standards has less of an impact on the large companies.
  - iv. Since the small companies have limited purchasing power, they may not actually have access to the newest technologies that they need in order to achieve the new standards for efficiency or unit performance. The small companies with their limited engineering and purchasing resources may not even be aware of a new technology. At the same time they may not be able to obtain the technology due to their low volume requirements. The lower purchasing requirements means that they will most likely pay a premium for the components or may have to take a minimum quantity that exceeds what their demand is.
4. Small companies may have to outsource some efforts. When they do this they are paying for the labor, overhead, employee benefits, buildings, taxes, equipment, etc., along with profit for the vendor services. The small company has no control over these costs. The cost is higher than the large companies that have the resources in-house.
  5. Time lines are critical for the small companies. When rules, regulations and standards are released that impact several different product lines for a small company that creates enormous difficulties. The limited resources within a small company can very quickly be overwhelmed. Again, the focus must be maintained on the day-to-day survival and if multiple product lines have to be re-engineered during the same time period it sometimes cannot be accomplished. Unfortunately the DOE will never know this for a number of reasons, but mostly because the small companies won't or can't voice their concerns.
  6. Small companies do not know how to deal with the DOE. Since the small companies have limited staffing and resources and do not deal with the DOE or any of the industry associations, they do not have the knowledge about the processes and procedures to go for any type of exclusion or exemption. They don't know the language that the DOE uses and what phrases could make a difference in a request for consideration. The small companies do not know how to present their case and what, if any, appeals can be made. To go outside the company and hire this expertise may cost too much and in most cases is not a viable option.
  7. The small businesses can't evolve fast enough. Small business is people intensive and they do not typically have all the newest NC machines, automated brazing, etc. When the rules,

regulations and standards change, it may impact the small companies and how they must change their production processes. This is time consuming and is a painful disruption for the small business.

8. Companies that can't afford to use technology to streamline their business will fall by the wayside. The small HVAC businesses need the opportunity to be able to embrace and exploit new manufacturing technology. Not having this opportunity will send the small HVAC companies along the same path as the Mom & Pop stores and small grocers. The products will simply go away, period. Big companies don't want or need what the small companies provide and will therefore not come to the rescue and buy these companies or their products.
9. Small businesses cannot be multi-optic. Again, the limited resources that must cover the national, state and local rules, regulations and standards is overwhelming. The DOE rules and regulations appear to have expanded over the years and become more frequent. The size of the DOE has grown to accommodate what it feels it must do, but the small companies do not have this luxury.
10. The need for higher and higher efficiencies has caused the size of the units to grow physically. This has created several problems:
  - a. Not all HVAC units are placed outside. Therefore, the units that do go inside are up against space constraints.
  - b. Replacement units may no longer be possible. The newer higher efficiency units are too large to now fit into the same location and space. They may require major building alterations just to get them physically into the space. The higher cost for the units and the higher costs for installation may also drive some systems from the market. The small companies that make these units had requested some relief several years ago and were denied. The products and the companies will eventually go away.
  - c. One particular type of product had a range of units that went from 1-ton up through 15-tons. That product type now runs from 2-tons up to 8-tons. The 8-ton unit is as large as or larger than the original 15-ton. Needless to say the small companies that make these products will be going away (one already did).
  - d. There needs to be some consideration for old buildings that need replacement units versus the new structures. The new structures are designed to accommodate the newer higher efficiency equipment. However, the old buildings that need replacement units may not be able to accommodate the higher efficiency equipment, especially those units that placed inside the structure.

The following are some thoughts about what the DOE may need to consider going forward:

- a. Must change the focus on the subjects and issues. Cannot continue with the one size fits all approach.

- b. The DOE needs to find a way to identify the small HVAC companies. Along with this, the DOE then needs to find an appropriate channel for effective communication. (If this cannot be accomplished then consider point "q" below.)
- c. The decision making process and the formulation of the rules, regulations and standards needs to engage those actually in small HVAC businesses, not advocacy groups / special interest groups that do not have any skin in the game. Is there any way to get a voice within ASRAC or the working group for the small HVAC companies? (i.e. does ASRAC or the working group need to be restructured?)
- d. The DOE needs to answer the question across the entire industry company population - Is the science and technology to move to the next level available to the small businesses?
- e. The DOE needs to answer the question across the entire industry company population – Do the small companies have the resources to design into a unit and acquire the technology needed to get to the higher efficiency level?
- f. Are the energy savings sufficient to justify or allow the increased costs for small business to survive with niche products?
- g. There is a need for an open and honest consideration for all businesses, but especially for the small niche manufacturers. Clarification is needed in each rule that the impact on the niche companies has been taken into consideration. The problem is that if the DOE has not identified the small companies, their issues and their products how do they do this?
- h. There has to be awareness developed and recognized that the impacts are disproportionately larger on the small businesses.
- i. There has to be an understanding that the costs for compliance are higher for small companies. The price increases required to re-coup the costs may take them out of the market.
- j. The niche products have unique application parameters that when they are forced to comply with the rules, regulations and standards will eliminate the products from the market or diminish their usability. Some form of realistic consideration needs to be formulated to help these companies achieve some relief or exemption. In the real scope of things the quantity of these units does not make much of a dent in the energy usage for the nation.
- k. There has to be some recognition that the rules, regulations and standards tend to insulate the larger companies, but overwhelm the small companies.
- l. A better effort needs to be put into place to demonstrate the cost / benefit analysis and make it visible. This needs to include all product types (main stream as well as the niche).
- m. The DOE needs to find out what the true distraction is for the small companies. Is it the DOE rules, regulations and standards or is it the need for the small companies to take care of business and survive?
- n. Would there be some simple way to have an Ombudsman to help address any problems or issues for the small HVAC manufacturers?
- o. Concerns had been expressed related to EPCA by the Attorney General's office that there may be a lessening of competition. To some extent this has happened and will probably escalate going forward.
- p. Is there any way to use the DOE grant dollars to help small HVAC businesses acquire assets or to help engineer / reengineer products that are closer to what the market needs?

- q. Can there be any consideration for a blanket exemption for small HVAC manufacturers with fewer than 150 employees?

In closing I would like to express gratitude for providing this opportunity to provide input for the DOE. It is realized that there is a lot of content included here for consideration. The main point that needs to come out of this is that some means of identifying, including and providing some form of relief for the small HVAC businesses needs to be found and implemented. All that can be asked is that some real and honest consideration be given to each of the topics.

Thank you,

A handwritten signature in cursive script that reads "Rod Beaver".

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