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# On Request for the Promotion of Regulatory Compliance in the Installation of Central Air Conditioning and Heat Pump Systems

Additional submitted attachment is included below.

#### Submitted via E-Mail:

Andrew McAllister Commissioner, California Energy Commission Dockets Unit, MS-4 1516 Ninth Street Sacramento, CA 95814-5512

RE: <u>Docket No. 2017-EBP-01</u>: Comments on CEC's Request for the Promotion of Regulatory Compliance in the Installation of Central Air Conditioning and Heat Pump Systems,

#### Commissioner McAllister:

Johnson Controls (JCI) respectfully submit the following comments towards Docket Number 2017-EBP-01, to the California Energy Commission (CEC) on its proposal for the Promotion of Regulatory Compliance in the Installation of Central Air Conditioning and Heat Pump Systems. These comments address not only the impact to manufacturers but also other key stakeholders including distributors, contractors and homeowners who are directly impacted by the proposed permitting and inspection regulations.

<u>JCI opposes</u> the agency proposal of a statewide digital tracking system (collection of manufacturers' and distributors' data to address permit compliance issues) as discussed during the July 20, 2018 CEC staff workshop. The comments clarify JCI's reason for opposition and provide alternative ideas for improving compliance.

As the primary goal of these new regulations is to improve permitting compliance, the CEC should direct its efforts toward improving the current inefficient, time consuming permitting process rather than implementing additional regulations (to track sales and installations) imposed on a broader stakeholder group which includes manufacturers such as JCI. Adding additional tracking systems on top of the existing permitting requirements does not enhance or improve the existing permitting process, but will only add complexity thereby worsening the very problem it is intending to solve.

The CEC should focus its resources on creating a new, streamlined process, which is easily accessible (i.e. on-line) that is developed in conjunction with key stakeholder input and does not burden the channel with additional cost. The true cost (first cost as well as operational cost) of any new process or database system should be well understood before being implemented. Any such cost should not be passed on to manufacturers, distributors or contractors.

New installation and tracking requirements will impose a significant impact to not only manufacturers such as JCI who currently do not play any role in permitting process but will also negatively impact distributors, contractors and other industry stakeholders. Imposing additional regulatory compliance cost onto the HVAC supply chain will only result in those cost being passed onto consumers.

The data reporting protocol will be especially onerous due the standard industry distribution model which currently follows a multi-step process: Manufacturers selling to Distributors, Distributors selling to Contractors/Dealers and finally Contractors/Dealers selling to homeowners and end users. Distributors with locations outside California (i.e. Johnstone Supply, US Air-conditioning, etc. for JCI) frequently transfer inventory between their locations. Distributors in turn have numerous contractors they sell to who may also operate in many geographic areas including across state lines. Therefore manufacturers such as JCI do not have clear knowledge as to where our products ultimately get sold or installed and as such would make the reporting process complex, cumbersome and time consuming.

As a HVAC manufacturer, JCI does not track equipment sales to the extent California is proposing (i.e. contractor's license number, equipment installation location, etc.). While JCI does track certain sales data, it is limited, minimized, and summarized to the greatest extent possible in order to protect our business interests and to limit liability. There is specific information around distributor and consumer sales JCI has chosen not to track for legal reasons; of specific concern is California's Digital Privacy Law. This law grants consumers the right to know what personal information is being collected, why it's being collected, whom it's shared with and ultimately the right to tell data collectors not to share the data or even to delete it.

Given today's low permit compliance rates, it's questionable if consumers who are not complying with current regulations and who constitute the vast majority of the consumers, will provide their consent to providing this data. As this law is slated to go into effect in January 2020; CEC would need to clearly address these legal issues prior to mandating and implementing any such a data collection procedure.

As it is not clear how the CEC mass collection of data will be used and secured in both the short and long term, JCI has **significant** concerns that its confidential business data could be exposed as well as the data being used in unintended ways. This applies not only for manufacturers such as JCI but for the HVAC industry in general. CEC has not provided any specifics or assurances as to how this data will be secured, stored and utilized.

We question if CEC truly understands what the cost and timing of scoping, developing and maintaining a comprehensive sales, installation and consumer database will be. Such as system will include the hiring and training of multiple staff positions, the development of new processes and protocols, hardware investments, etc. As we commented above, data confidentiality and security concerns complicate the data processes required. Lessons learned from similar industry database development programs have shown this is not a simple undertaking and when not scoped and executed properly become s an ongoing burden.

The cost that JCI would incur for support staff, software / hardware investments, and to develop operating procedures and processes to implement the proposed data collection system is significant as one currently does not exist today. Given the proposed requirements of such a system and JCI's experience with other, large scale software projects, it will be a costly endeavor in terms of time and money.

The following are JCl's proposed solutions.

## **Improved Permitting Process**

It's well known that the current permitting process is burdensome,-time consuming and one of the primary reasons for today's low compliance rates. Today's current, inefficient permitting system, when followed, causes delays which results in consumers going without cooling or heating during an

unplanned failure. These emergency, unplanned failures constitute the majority of sales in the market and as such the market has found its own solution; "not" pulling permits. CEC needs to focus its efforts on developing an easy to use, efficient, consistent, and auditable process. One that does not require the physical submitting of forms at an agency office, with less than flexible office hours.

Any new permitting process should support emergency replacements and be executed completely online with the "minimum" amount of supporting data. It's important to note that just because a process should happen to move on-line, it cannot remain as onerous as the previous inefficient process. There should be sufficient data provided for audits with quick or even automated approvals with only "exemptions" rejected for further investigation or comments. Any such system should be uniform and statewide and avoid proliferation of different programs as has been the case in California with the current Ultra Low NOx labeling and incentive programs whereby various air quality districts have different labeling and requirements for the very same regulation (South Coast Air Quality Management District Rule 1111, San Joaquin Valley Air Pollution Control District Rule 4905).

## **Contractor Training – Permit Process**

Given today's low permitting compliance rates, it is clear contractor training is paramount to any improvement in the permitting process. Contractors need to be fully trained and made aware of their obligations as it pertains to regulations governing the permitting and inspection process. Training should also encompass a broader review of their responsibilities and duties to consumers. Any such training program should follow the same premise as previously mentioned for the permitting process itself; a simple, on-line, standardized format available 24/7 and not require multiple trips to a government office or agency (only exceptions would require an office visit).

## <u>Contractor Education – Equipment Installation</u>

Manufacturers, distributors and home owners rely on contractors to properly installed and service HVAC equipment as a piece of the overall quality picture. Manufacturers can produce a perfect piece of equipment as it leaves the factory however if the equipment is installed improperly, the contractor / dealer and sometimes the distributor will often blame the manufacturer. Thus contractor education and training is critical to ensure equipment is operating properly at its peak efficiency potential as well as its long term reliability. One of the largest challenges the HVAC industry faces today is that there is no universal requirement for contractors to continue their personal development and education as it relates to retaining their license. Other professions such as professional engineers, union journeyman, etc. have realized the importance of this requirement and have mandated it as a condition of doing business. Products in the HVAC industry continue to advance at an accelerated rate to include such technologies as variable speed compressors and drives, ECM motors, micro-channel heat exchanges, Internet of Things (IoT) / Advanced Controls, etc. and as such contractors need to stay up to date in their knowledgebase. This in turn will lead to better installations that reduce energy and maintenance cost for consumers and utilities.

#### **Consumer Education**

Efforts need to be made to educate the consumer on the importance of proper HVAC installation and service which is best achieved by hiring a licensed and properly trained contractor. Consumers will often go with the least costly or best response time contractor who may not be the most qualified or knowledgeable. A targeted consumer marketing campaign with focused messaging around the benefits of hiring a licensed contractor such as increased safety, lower life cycle cost and environmental benefits is badly needed else consumers will continue with present behaviors.

#### Incentives

If the CEC truly wants to change contractor permitting practices and decrease energy consumption of HVAC equipment through proper installation by licensed contractors, then incentives need to be considered at key points in the distribution supply chain where such choices are made. Incentives at the consumer level need to reward consumers for the hiring of licensed contractors either through direct rebates, enhanced warranties and / or guaranteed lower energy cost. Distributors also need to be incentivized to sell to licensed contractors through similar rebates. Licensed contractors tend to be better trained on manufactures equipment which results in fewer warranty claims and more satisfied customers. Utilities can continue to play a primary role in providing and administering incentives as they will also benefit from proper installation and service over the life to the product. Most consumers have some knowledge around utility rebates and when incentivized at the proper level will utilize them accordingly.

#### **Enforcement**

Another area of concern from JCl's perspective is that CEC lacks the current resources to enforce regulations already in place. Adding additional regulations to require tracking of sales and installations without understanding the enforcement process will not lead to the expected benefits. Enforcing current or new permitting rules will not change the future behavior of homeowners, contractors or distributors increased resources by the CEC. CEC should simplify and streamline its current permitting process and provide improve compliance coverage before adding additional regulation for which it does not have the means to enforce.

## **About Johnson Controls**

Johnson Controls is a global diversified technology and multi industrial leader serving a wide range of customers in more than 150 countries. Our 130,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities.

We appreciate the opportunity to provide comments on this critical issue.

Regards,

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