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<td><strong>Docket Number:</strong></td>
<td>20-FDAS-01</td>
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<td><strong>Project Title:</strong></td>
<td>Flexible Demand Appliance Standards</td>
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<td>239868</td>
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<td><strong>Document Title:</strong></td>
<td>Intermatic Comments on Flexible Demand Appliance Standards</td>
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<tr>
<td><strong>Description:</strong></td>
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<td><strong>Filer:</strong></td>
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<td><strong>Organization:</strong></td>
<td>Intermatic Inc.</td>
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Comment Received From: Alex Lopez
Submitted On: 9/29/2021
Docket Number: 20-FDAS-01

Intermatic Comments on Flexible Demand Appliance Standards

Additional submitted attachment is included below.
September 29th, 2021

Commissioner J. Andrew McAllister, Ph.D.
California Energy Commission
Dockets Office, MS-4
Re: Docket # 20-FDAS-01
1516 Ninth Street
Sacramento, California 95814

Regarding: Request for Comments on California Energy Commission’s Flexible Demand Appliance Standards [Docket Number 20-FDAS-01]

Dear Commissioner McAllister:

Intermatic Inc. supports and appreciates the work being performed by the California Energy Commission (CEC) and the opportunity to provide comments regarding the Lead Commissioner Workshop on Senate Bill 49 Flexible Demand Appliance Standards (FDAS).

Pool Pump Controls

Pool pump controllers inherently offer the ability to customer implementation of pump start delays, advanced scheduling, and timer capabilities. All of which are beneficial by reducing costs the customer incurs due to improved energy efficiency. Pool pump controls can be categorized as either controls integral to the pump or those supplied as a separate device. Integral controls are considered a non-replaceable assembly directly connected to a pool pump, which is sold as a packaged unit by the manufacturer. Separate device controls can be categorized by those sold from the pump manufacturer as an optional accessory that can be quickly installed and removed from the pool pump; or a controller that gets installed external to the controlled pump, other than the electrical wiring (Ex: Installed on a post or control panel).

For the CEC’s flexible demand standards to be successful it is crucial to communicate with pool pump manufacturers as well as the end-use control consumers. If requirements are implemented for pool pump controls to be solely integral to the pump there are several key factors to consider:

• A manufacturer will have additional implementation and safety certification complexity for new pumps. The manufacturers pump safety certification will need to be expanded with their Certified Body (CB) such as UL or CSA, to have their device evaluated to additional standards based on the new pump capabilities such as timing or IoT connectivity. If the proposed FSAS are outside the manufacturers capabilities they will have to partner with a third-party vendor that specializes in...
controllers, internet connectivity, and OpenADR commands just to produce a new product.

- Requirements for integral pool pump controllers with advanced functionality will severely limit the quantity of different controller choices and their interchangeability for customers.
- Customers will have increased difficulty or cost for repairs and/or replacement of malfunctioning components within their system.
  
  Example: If the customers pump motor dies, they will be required to purchase a new assembly (pump and integral controller), even though the previous unit’s controller was still fully functioning. The same ideology can be applied if the controller malfunctions; replace entire unit or pay for a field service technician.

- Approach does not account or offer a solution for pumps that are currently used in the market; therefore, energy efficiency improvement and flexible demand implementation will be staggered until all current units are replaced.

- Manufacturers of third-party pool pump controls that are currently on the market will no longer be able to sell their product to end-users for new pumps. This would reduce their revenue thus driving third party controller manufacturers out of California.

Countless benefits come to mind if the FDAS implemented for pool pump controls are scoped to include both integral controls and controls supplied as a separate device. Several of the notable benefits are captured below:

- OEM and third-party manufacturers selling products in California maintain the flexibility to strictly produce pool pumps, pool pump controllers, or a combined assembly.

- Simplifies or resolves some of the negative key factors that were previously mentioned if the requirements only allow integral pool pump controls.

- Customers maintain a plentiful amount of purchase options for pool pump controls and the ability to easily incorporate their controls into a control panel system, which could be used for other applications outside the scope of Docket 20-FDAS-01.

**Flexible Demand Feasibility**

The CEC shall consider and receive residential insight for steps that can be taken to ease the utility control for demand response and time of use options. Notifications can be provided to customers for predetermined time of days and advanced notice from utilities for potential times control due to response demand. Customer notice will be crucial as will restrict when customers and pool service technicians can maintain or work on their pool. Pool maintenance can range from pool system troubleshooting, adjusting water chemistry, and pool vacuuming, which all require a pump to circulate water.
Cost Effectiveness

According to Senate Bill 49 (Skinner, Chapter 697, Statutes of 2019) (SB 49), the CEC shall take into consideration any additional costs that may affect consumers and California businesses. As stated previously, there are several key factors that should be given insight prior to implementation of any pool pump control standard. If pool pump manufactures currently do not produce controls with advanced functionality, they will need adequate time to develop, test, and implement controllers into their pumps; or come to an agreement with a third-party control manufacturer. This process will increase the overall cost by the pump manufacturers, who will likely be pushed to the customer. Additionally, the integral controllers are not easily repaired or replaced by the customer, which will increase their long-term pool maintenance expense. The sole use of integral pool pump controls would negatively impact profitability for companies of any size that provide third party pool pump controls to the California market.

Careful consideration is required as to not negatively impact the low to median income families that currently own a pool, may purchase a pool, or purchase a home with a pool that is not compliant to the proposed CEC standard.

Conclusion

Intmatic appreciates the opportunity to provide comments to the CEC for Flexible Demand Appliance Standards. We look forward to continuing to work with the CEC in the future. We believe the best option for California customers for ease of functionality, and cost savings is to provide requirements for both integral controls and controls provided as a separate device.

Sincerely,

Alexander Lopez
Regulatory Compliance Engineer
ALopez@Intmatic.com