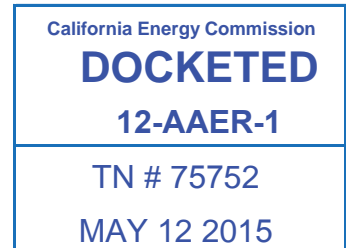


Gary L. Gockel
Comments on CEC Appliance Efficiency Regulations
Docket 12-AAER1
May 12, 2015

California Energy Commission
Dockets Office, MS-4
Docket No. 12-AAER-1
1516 Ninth Street
Sacramento, CA 95814-5512



Docket Number: 12-AAER-1
Subject: Appliance Efficiency Enforcement Rulemaking

Dear Commission:

Thank you for this opportunity to comment on the pending regulation that was to provide for more stringent enforcement of Title 20 pool pump and replacement motors.

This regulation in its current form catastrophically harms the state electric production grid, consumers and pool service industry by allowing all pumps and replacement motors to be added to the Appliance Data list without regard for existing energy efficiency regulations

The language in the pending law as currently written:

1. Is directly opposite of what was intended and needed.
2. There are several loop holes for non-compliance in Table X (page 191) whereby a "Permissive Answer" of NO relating to section 1605 (g) could still allow a non-compliant pump or motor to be included in the Appliance Data base and therefore not be a violation.
3. Doesn't directly acknowledge or reference other applicable and relevant requirements of Title 20 document.
4. Is contrary to the intended reason for having the law which leaves dedicated hardworking pool service technicians who on a daily basis are explaining and attempting to convince pool owners why the higher replacement cost for a new pump or motor is required by Title 20 law and is in their best interest.
5. Further promotes and now allows for non-compliant Title 20 replacement pumps and motors to be installed.
6. Doesn't take into consideration the vast amount of sales being conducted on the internet.
7. Doesn't address "Installer" who for this discussion are persons who don't hold contractor licenses and install products purchased by the homeowner/pool owner.

The current pending regulation states, "Any person, including a retailer, manufacturer, contractor, importer or distributor, that sells or offers for sale an appliance, which is not listed in the Appliance Efficiency Database, is in violation...".

I alternatively propose, "Any person, including a retailer, manufacturer, contractor, installer, importer of distributor, that sells or offers for sale an appliance, which is not listed in the Appliance Efficiency Database **and/or is affected by the relevant provisions of the Appliance Regulations**, is in violation...." *Further, I propose that purchasers of non-compliant products (single speed with a motor capacity of 1 THP or greater) be required to sign a statement that they will not be used on residential filtration applications. This statement would be required to be retained by the vendor and be subject to CEC enforcement audit or inspection.*

Since the first requirements for pool pumps and motors become law in 2008, the utilities, manufacturers and trade organizations have promoted Title 20 energy efficiency regulations. As many of us in the industry have known for years and has been reported in the national trade magazines since 2012, the current statewide Title 20 pool pump upgrade program is a dismal failure.

The "failure" is that the requirements are NOT being followed and that the expected energy savings, reduction in GHG and monthly operating dollars savings are not being realized by the pool customer and state electrical grid. The lack of any real enforcement of the law has in many ways been detrimental to the program.

It has become a common frustration for pool professionals who encourage their regular service customer to upgrade to a variable speed pump only to find a new single speed pump or motor having been installed since their last visit. Frequently the answer was, "Your estimate was too high so I found a unit elsewhere. Another frustration is when a Home Warranty company installs a new motor without regard to Title 20 regulations.

In ground residential swimming pools consume the power of 6 medium size power plants. Some CEC studies indicate that the usage is approximately the same as residential air conditioning or about 7% respectfully of all residential electrical used in the state. One of the goals of the Title 20 founders was that based on an average life of 10 years for pumps and motors, that 100% of all pumps and motors would be replaced during the 10 years with high efficiency units. With the new technology variable flow pumps, additional and substantial energy savings could also be realized. Unfortunately, it is estimated that only 30% of this goal has been realized.

The pending enforcement regulation with revised language will allow for the intended outcome and be a great tool toward advancing pool industry efforts.

Today's sudden interest and response has been due to the discovery of the "Loop holes" in Table X (included below) that drastically curtails Title 20 pool energy efficiency efforts.

I have been following this agenda item by monitoring the CEC Appliance Data Base web-site looking for a new category type "Residential Pool Pump Motors" which today doesn't yet exist.

Search – Category "Pool Products",

Type – "Residential Pool Pumps"

Select by – "Manufacturer", "Brand" or "Neither".

There is NO mention or opportunity to know that “Replacement Pool Pump MOTORS” are included. The inference is that the data base is only for pumps. The website is inconsistent in only showing pumps and not including motors. Further, the motor testing as described in section 1604(3) is only for “Residential Pool Pumps”. The CEC is working on a revised standard for Pool motors.

The existing language doesn’t address this section:

1605.3

(g) Pool Heaters, Portable Electric Spas, Residential Pool Pump and Motor Combinations, and Replacement Residential Pool Pump Motors.

(5) Residential Pool Pump and Motor Combinations, and Replacement Residential Pool Pump Motors.

(A) Motor Efficiency. Pool pump motors manufactured on or after January 1, 2006 may not be split-phase or capacitor start - induction run type.

(B) Two-, Multi-, or Variable-Speed Capability.

1. Residential Pool Pump Motors. Residential pool pump motors with a pool pump motor capacity of 1 HP or greater which are manufactured on or after January 1, 2010, shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate. The pump motor must be operated with a pump control that shall have the capability of operating the pump at least at two speeds.

2. Pump Controls. Pool pump motor controls manufactured on or after January 1, 2008 that are sold for use with a two- or more speed pump shall have the capability of operating the pool pump at least at two speeds. The control's default circulation speed setting shall be no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one 24-hour cycle without resetting to default settings.

Table X Continued - Data Submittal Requirements

	Appliance	Required Information	Permissible Answers
G	Residential Pool Pump and Motor Combinations and Replacement Residential Pool Pump Motors	Motor Construction	PSC, Capacitor Start-Capacitor Run, ECM, Capacitor Start-induction run, split-phase
		Motor Design	Single-speed, dual-speed, multi-speed, variable-speed
		Frame	
		Speed (in RPM)	
		Motor has Capability of Operating at Two or More Speeds with the Low Speed having a Rotation Rate that is No More than One-Half of the Motor's Maximum Rotation Rate	Yes, no
		Unit Type	Residential Pool Pump and Motor Combination, Replacement Residential Pool Pump Motor
		Pool Pump Motor Capacity	
		Motor Service Factor	
		Motor Efficiency (%)	
		Nameplate Horsepower	
		Pump Control Speed (compliance with Section 1605.3(g)(5)(B)3.)	Yes, no
		Flow for Curve 'A' (in gpm)	
		Power for Curve 'A' (in watts)	
		Energy Factor for Curve 'A' (in gallons per watt-hour)	
		Flow for Curve 'B' (in gpm)	
		Power for Curve 'B' (in watts)	
Energy Factor for Curve 'B' (in gallons per watt-hour)			
Flow for Curve 'C' (in gpm)			
Power for Curve 'C' (in watts)			
Energy Factor for Curve 'C' (in gallons per watt-hour)			

*Ultra

My energy efficiency efforts and participation include CPUC "Party Status" for R-09-11-014 proceedings.

I strongly urge the commission to preserve and improve the 7 years of effort put forth by the utilities, manufacturers and pool industry professionals to greatly reduce energy use, greenhouse emissions, and electrical operating costs for pool customers by correcting this massive unintended loop-hole in the current language.

Thank you for your consideration.

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