DOCKETED

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Project Title:	Appliance Efficiency Rulemaking for Toliets, Urinals, Faucets, HVAC Air Filters, Fluorescent Dimming Ballasts, and Heat Pump Water Chilling Packages
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Heat Pump Water Chilling Packages correction

Additional submitted attachment is included below.

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Docket #15-AAER-01

Attn: CEC Dockets Unit

Re: "Heat Pump Water Chilling Packages"

I have brought this up several times already. There is no such thing as a "Heat Pump Water Chiller". If a unit only cools water it is a Chiller. If it can heat and/or cool water it is a Heat Pump. I have enclosed the definition from AHRI 550/590 that appears to be the CEC's source for this definition. This definition is for a "***Heat Pump Water-heating Package***", NOT a chiller. Please fix this.

Actually, why would the CEC want to define either term? What is required is the addition of an Air to Water Heat Pump section to the normal Appliance Directory. There is no reason for keeping this type of equipment listed separately from other similar Heat Pump equipment. Also, the Commission has not yet developed minimum heating & cooling efficiencies for this equipment, as required by the Warren-Alquist Act.

Note: I have attached the section of AHRI 550/590 referenced in this document.

"AHRI STANDARD 550/590 (I-P)-2015.

3.15 *"Shall" or "Should"*. "Shall" or "should" shall be interpreted as follows:

3.15.1 *Shall.* Where "shall" or "shall not" is used for a provision specified, that provision is mandatory if compliance with the standard is claimed.

3.15.2 *Should,* "Should" is used to indicate provisions which are not mandatory but which are desirable as good practice.

3.16 *Total Input Power (W input)-* Combined power input of all components of the unit, including Auxiliary Power and excluding integral pumps.

3.17 *Turn Down Ratio.* The ratio of the maximum to the minimum instrument measurement value in the range over which the measurement system meets the specified accuracy. Applicable only to measurements using a scale with an absolute zero value (negative values not allowed).

3.18 *Unit Type.*

3.18.1 *Configurable Unit.* A chiller that has been selected to run at a full load point less than its maximum possible capacity

3.18.2 *Packaged Unit.* A chiller that has been selected to ran at full load at its maximum capacity.

3.19 *Water-chilling or Water-heating Package.* A factory-made and prefabricated assembly (not necessarily shipped as one

package) of one or more compressors, condensers and evaporators, with interconnections and accessories designed for the purpose of cooling or heating water. It is a machine specifically designed to make use of a vapor compression refrigeration cycle to remove heat from water and reject the heat to a cooling medium, usually air or water. The refrigerant condenser may or may not be an integral part of the package.

3.19.1 *Heat Recovery Water-chilling Package.* A factory-made package, designed for the purpose of chilling water and containing a condenser for recovering heat. Where such equipment is provided in more than one assembly, the separate assemblies are to be designed to be used together, and the requirements of rating outlined in this standard are based upon the use of matched assemblies. It is a package specifically designed to make use of the refrigerant cycle to remove heat from the water source and to reject the heat to another fluid for heating use. Any excess heat may be rejected to another medium, usually air or water.

3.19.2 *Heat Pump Water-heating Package.* A factory-made package, designed for the purpose of heating water. Where such equipment is provided in more than one assembly, the separate assemblies are to be designed to be used together, and the requirements of rating outlined in this standard are based upon the use of matched assemblies. It is a package specifically designed to make use of the refrigerant cycle to remove heat from an air or water source and to reject the heat to water for heating use. This unit can include valves to allow for reverse-cycle (cooling) operation.

3.19.3 *Modular Chiller Package.* A modular chiller is a package that is made up of multiple water-chilling units that can function individually or as a single unit.

3.19.4 *Condenserless Chiller.* A factory-made package designed for the purpose of chilling water but is not supplied with a condenser. A separate air, water or evaporatively cooled condenser will be supplied to interface with the condenserless chiller.

3.20 *Water Pressure Drop.* The reduction in static water pressure associated with the flow through a water-type heat exchanger."

Please let me know if further explanation is needed.

Warm regards,

Patrick Splitt

Patrick Splitt

PRESIDENT