Invitation to Participate
Game Consoles

2013 Appliance Efficiency Rulemaking
California Energy Commission

April 3, 2013

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The California Energy Commission

- The state's primary energy policy and planning agency, created by the Legislature in 1974
- Responsibilities include promoting energy efficiency and conservation by setting minimum appliance and building efficiency standards, and other cost-effective measures
- The Commission's appliance and building energy efficiency standards have saved Californians more than $74 billion in reduced electricity bills since 1975

Appliance Efficiency – A Statutory Mandate

Warren-Alquist State Energy Resources Conservation and Development Act

Public Resources Code Section 25402(c)

Requires the Commission to adopt minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy and water efficient appliances whose use requires a significant amount of energy or water on a statewide basis.

Scoping Workshop

August 31, 2011

- The Commission held a Public Workshop to seek comments about the proposed scope of potential new appliance efficiency measures.
- Interested parties
  - gave technical presentations
  - provided comments
  - submitted proposals for various appliances

Order Instituting Rulemaking

March 14, 2012

- The Commission issued an Order Instituting Rulemaking (OIR) to begin the process of considering standards, test procedures, labeling requirements, and other efficiency measures for a number of appliances.

- The rulemaking was divided into three phases based on the information provided by stakeholders and staff analysis.

- More information related to this proceeding is available online.
  http://www.energy.ca.gov/appliances/2012rulemaking/

Purpose of Invitation to Participate

- The Commission is gathering information to determine how to proceed with products listed in Phase 1 of the OIR.
- The ITP is an opportunity for stakeholders to inform the Commission's policy, direction, and process.
- ITP requests product, market, and other relevant information.
- All interested parties are encouraged to take advantage of this important opportunity to shape the development of draft efficiency standards and measures.

Phase 1 Appliances

- **Consumer Electronics**
  (computers, displays, game consoles and set-top boxes)

- **Lighting**
  (fluorescent dimming ballasts, light-emitting diodes and multifaceted reflector lamps)

- **Water Appliances** (faucets, toilets, urinals, and water meters)

- **Other Appliances** (commercial clothes dryers, air filter labeling, residential pool pumps & motors and portable electric spa labeling)

Basic Information

Basic Information Requested:

- Product Definition and Scope
- Existing Test Procedures
  - Across all modes
- Sources of Test Data
- Existing Standards and Standards under Development
- Product Lifetime
- Product Development Trends
  - Redesign Cycle

Operations, Functions & Modes

What are the operating modes of game consoles?

- Game Play, Media Play, Navigation, Networked Standby, and Standby/Off?
- How much power is used in each mode for each model current in the market?
- How much time is spent in each operating mode?
- Has usage changed from the past to present and how is it anticipated to change in the future?

Operations, Functions & Modes

(Continued)

What are the factory default display and console power management settings?

- What are the other power management settings?
- What storage size is required to hold operations in a sleep state?
- How much does it cost to implement an automatic sleep function on a per-unit basis? Are these costs associated with hardware or software?

Operations, Functions & Modes

(Continued)

- Are all game console models currently in the market shipped with auto power down enabled by default in all modes?
- Which setting do consumers typically choose when overriding the factory default auto power down setting?
  - Is the option to disable auto power down available in the out-of-the-box initial set up menu?
  - What is the language do manufacturers use to offer users the option of disabling auto power down?
- To what extent do game consoles save games prior to auto power down?

Operations, Functions & Modes

(Continued)

What are the energy use and performance characteristics of the media playback function of a game console?

- How does media playback energy use compare with that of a standalone media player (e.g. DVD players, Blu-Ray Players, etc.)?

Energy Saving Features & Technologies

- What energy saving technologies or features are currently included in game consoles?
  - How much energy does each save?
  - How much does each cost the manufacturer to implement on a per-product basis?
  - How common are they?

- Which energy saving technologies or features could potentially be incorporated in game consoles?
  - How much energy does each save?
  - How much does each cost the manufacturer to implement on a per-product basis?

Hardware Technology

How efficient are the power supplies of game consoles currently in the market (e.g. power input versus output)?

- How efficient are they during Game Play mode?
- Are there challenges involved with using more efficient power supplies for game consoles? If so, what are they?

To what extent do manufacturers take advantage of existing performance scaling capabilities in console processors?

- Do manufacturers engineer processors to adjust operating speed and energy consumption in relation to computing demand?

Market Characteristics

- How many game consoles were sold in California in 2006 through 2011 and projected for 2012 through 2015 by brand and model?
- To what extent is the game console market uniform or different in the state, country, continent, and world?
- What is the current estimated number of units in existing California stock by brand and model?
- If California-specific figures are unavailable, please provide U.S. figures.
- How many small businesses are involved in the manufacture, sale, or installation of these products?

Market Competition for Efficient Products

- What are the current market drivers initiating the improvement of game console efficiency?
- How are consumers identifying the most and least efficient products on the market?
- Which game console models currently meet the EPA Recognition Program 1.0 criteria (organized through ENERGY STAR)?

How to Submit Data & Information

- Responses to the Invitation should be submitted in writing to the Dockets Unit by 4:00 p.m. (Pacific Daylight Savings Time) on May 9, 2013
- The Commission encourages interested parties to send information **up to 5 MB** by e-mail at docket@energy.ca.gov
- To comment on game consoles, please include docket number 12-AAER-2A in the subject line.

How to Submit Data & Information

(Continued)

- If the file size is more than 5 MB, if the information includes an application for confidential designation, or if you prefer, paper copies of responses with electronic information provided on a CD or DVD may be sent to:

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 12-AAER-2A
1516 Ninth Street
Sacramento, CA 95814-5512

Confidentiality of Data

If interested parties need to maintain the confidentiality of specific data or information, they should contact Jared Babula in the Commission's Chief Counsel's Office *before* submitting a response to this Invitation. Otherwise, all responses received will become publicly available.

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California Energy Commission
Chief Counsel's Office
1516 Ninth Street, MS 14, Sacramento, CA 95814-5512
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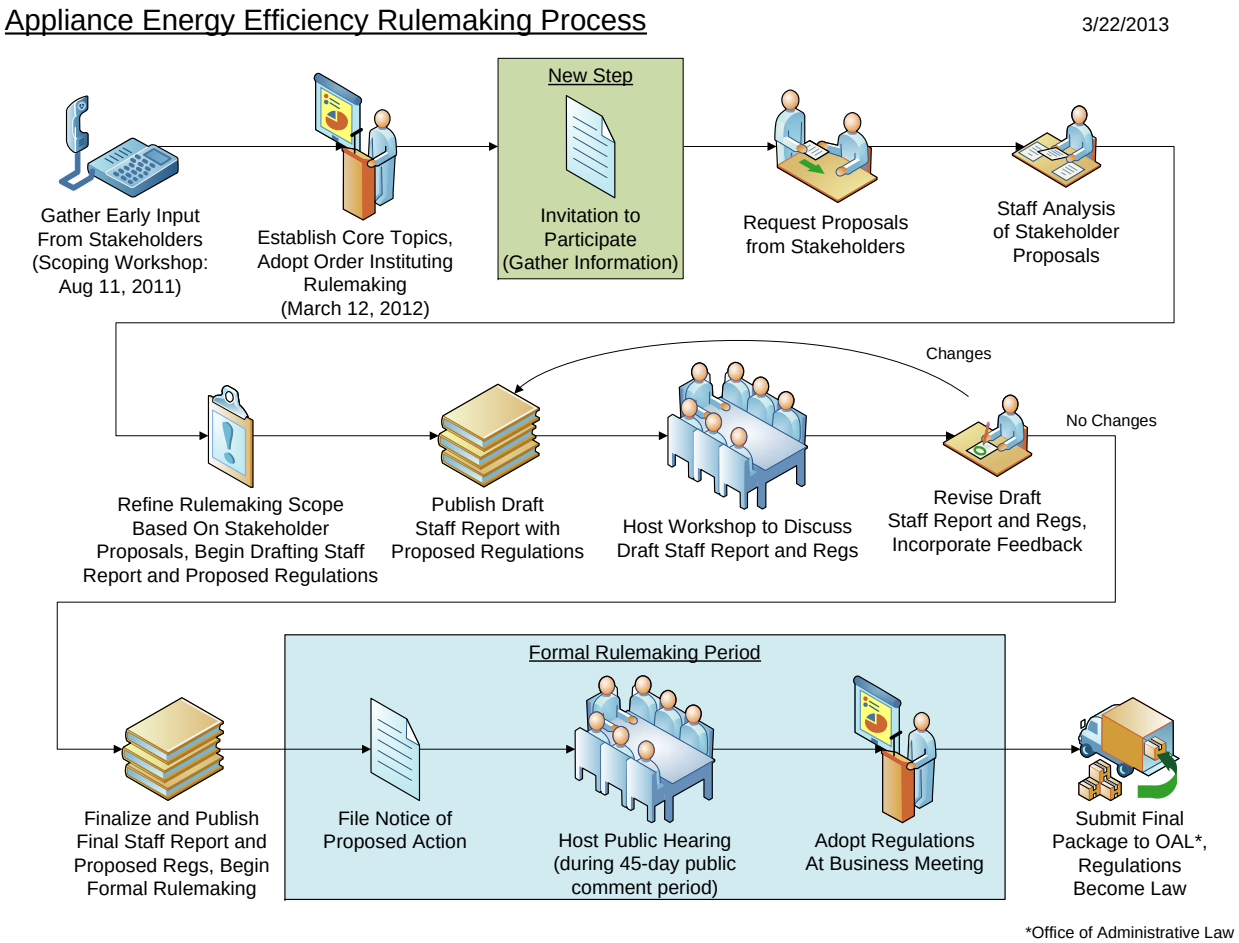
Next Steps

- Public workshop after the close of the ITP comment period to consider the merits of information and data received.
- Following the workshop, the Commission will request proposals for updated efficiency standards or measures.
- These proposals should be based on the information received through the ITP.
- Commission staff are available to discuss questions and concerns at anytime during the proceeding.

Public Participation



Q&A

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Please submit data and information to

Docket #12-AAER-2A

at docket@energy.ca.gov

The ITP is available online:

http://www.energy.ca.gov/appliances/2013rulemaking/