

May 7, 2012

Via Email

Office of Air and Radiation  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

**Re: Comments of e-Radio USA on the U.S. Environmental Protection Agency  
(EPA)  
Draft 3 Version 1, Energy Star Program Requirements for Residential  
Climate Control**

e-Radio USA Inc. (ERU) respectfully submits the following comments representing our view on the subject document. ERU currently participates in and supports the Consumer Electronics Association (CEA) subcommittee R7.8 working group WG1 efforts toward developing the "Modular Communication Interface for Energy Management" (MCI). The resulting specification will become CEA 2045 and will be submitted to the NIST Smart Grid Interoperability Panel (SGIP) to review for inclusion in the NIST SGIP Catalog of Standards.

In our view, the CEA 2045 solution, utilizing existing FM radio broadcasting stations and networks employing a communications system based on the FM RDS radio, is an excellent candidate for addressing the following stated objectives of ENERGY STAR "connected" Program Requirements:

1. Near term value, jump start the industry
2. Consumer centric options
3. Ease of use (plug and play) with little or no installation steps needed

In fulfillment of the stated objective above, ERU's FM based CEA 2045 solution has the following characteristics:

- a. Single standard nation wide
- b. Complete nation wide transmitter network already in place and can be activated within months not years
- c. Optional connectivity to HEM
- d. Real time Demand Response (DR) with little latency (a few seconds)
- e. Unlimited number of simultaneous listeners (no network congestion)
- f. End User Privacy is preserved
- g. Ease of installation procedure and use: just plug it in; self-install
- h. Interoperable and Plug & Play - desired by the consumer
- i. Flexibility of "connected" solution – desired by appliance OEMs

- j. Lowest cost overall for the consumer, appliance OEM, the utility and ISO
- k. Simplicity of the entire system

e-Radio has specific comments to Draft 3 Version 1 of subject document as follows:

1. Ease of installation and operational use (line 369), suggest simple indicator light to indicate “connected” status, with optional degree of signal strength.
2. Receiver only (via modular communication interface) hardware has the lowest Phantom power possible along with Synchronous reception option (sleep and wake up only to receive update)(line 279-283)
3. Develop and define maximum power allowed for ANY communication module (other wise the additional costs of the communication) in large numbers can significantly add to the Phantom (standby) power consumption.

### **Conclusions**

e-Radio USA respectfully requests that these comments be considered carefully by the EPA in formulating Requirements for Residential Climate Control. We believe the CEA 2045 efforts should be harmonized as much as possible with the ENERGY STAR program requirements and thereby facilitate broader electrical power system benefits to achieve efficient cost-effective implementation of Smart Grid technology.

Please do not hesitate to contact the undersigned should you have any questions.

Respectfully submitted,

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