



February 17, 2012

Via Email

Ms. Amanda Stevens
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 3.0 ENERGY STAR Room Air Conditioner (RAC) Specification**

Dear Ms. Stevens,

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. Point-to-multi-point transmission insures near limitless communication capacity
- 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 Section 4 Connected Product Criteria as follows:

Section 4A. Home Energy Management (HEM) Functionality, consider rephrasing as "Communication Module Functionality". E-Radio proposes that a "Connected" RAC's capabilities be redefined in the following terms:

4A1 – *Energy Consumption Reporting* should be made available on the unit and compatible to optional HEM systems. However, reporting capability to an external device or HEM should be optional. We understand that facilitating consumer choice is a primary goal of the EPA Energy Star program. The emerging CEA 2045 fits into this solution and is compatible with SEP and other NIST standards. HEM home market penetration will not reach 100% in the foreseeable future. Moreover, the requirements of HEM may hinder the consumer uptake due to costs, complexity and privacy issues.

4A2 - *Remote Management* as facilitated by HEM should be optional as the product should not be required to respond to requests that would compromise performance and /or safety as determined by the product manufacturer. i.e. Remote individual control should be optional not mandated.

For the multiple RAC units within a single home, one way broadcast can reach all the units at once by default. On the other hand, HEM would need to be set individually otherwise the non DR units would negate any DR savings.

Another important consideration: If the Energy Star "connected" standard has a large consumer uptake due to attractive initial cost, simplicity and implementation speed, then overall desired impact of a DR program would be theoretically dispersed over a larger user base with the result that individual user impact will be minimized.

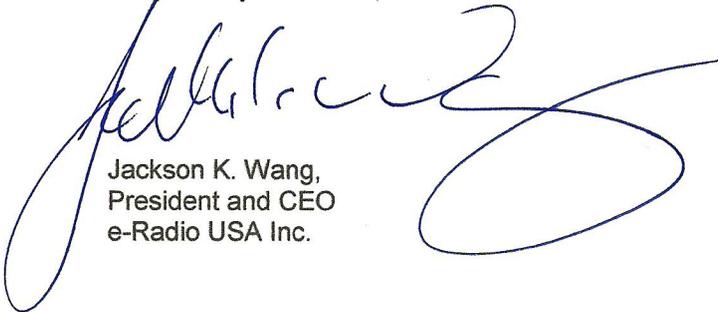
4C2 - Communication Standards, Open Access, and Information to Consumers. Consider substituting "Modular Communication Standards and Open Access" for "HEM Communication Standards and Open Access".

Conclusions

e-Radio USA respectfully requests that these comments be considered carefully by the EPA in formulating Product Specification for Room Air Conditioners, in the evaluation and determination of RAC Demand Response (DR) criteria for the delivery of near term consumer value. 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,



Jackson K. Wang,
President and CEO
e-Radio USA Inc.