

December 11, 2009

Kathleen Vokes  
ENERGY STAR Set-Top Box Program  
U.S. Environmental Protection Agency  
1310 L Street, NW  
Washington, DC 20460

Subject: Set-top Box Specification Revision Kick-off Conference Call 03 December 2009

Dear Kathleen:

DIRECTV appreciates the opportunity to comment on the ENERGY STAR Set-top Box Specification Revision Kick-off Conference Call presentation, dated 03 December 2009.

### **Introduction**

DIRECTV is the largest pay-TV provider in the world with more than 24 million subscribers. DIRECTV's service area includes every corner of the U.S., plus (through subsidiaries and affiliates) Brazil, Mexico and most other Latin American countries. Our commitment to be more environmentally friendly has many facets. For example, DIRECTV refurbishes and reuses millions of set-top boxes and access cards, and DIRECTV encourages paperless billing. At the outset of this year, we added another important facet: participation in ENERGY STAR®.

Responsible for the design and development of its set-top boxes, DIRECTV is a Product Manufacturer Partner in the ENERGY STAR® Set-Top Box product category (DIRECTV is proud to be an ENERGY STAR Service Provider partner as well). All DIRECTV set-top box receivers produced since DIRECTV joined the Set-Top Box program upon its reinstatement in January 2009 comply with current ENERGY STAR guidelines. This includes the full range of customer devices, including our basic standard definition (SD) boxes, Digital Video Recorder (DVR), High Definition (HD) and HD-DVR products.

By the end of 2009, DIRECTV will have manufactured and deployed more than 10 Million ENERGY STAR qualified set-top boxes in customer homes, and by the end of 2010 that total is expected to exceed 20 Million.

### **Comments**

The DIRECTV comments that follow address both the Kick-off Conference Call presentation as well as information shared during the call, in particular how the STB program's structure affects planning of joint energy utility and service provider energy efficiency programs.

**Version 3.0 Effective Date.** DIRECTV is in full agreement with the industry-wide comments provided by Bill Belt of the Consumer Electronics Association (CEA) regarding the effective date of Version 3.0. Both the effective month that is chosen and the year that is chosen must be set so that the V3.0 program can be successful.

For any service provider such as DIRECTV, an effective date in January is difficult to work with. The latter part of the third quarter and the entire fourth quarter of each calendar year are our periods of greatest subscriber growth due to marketing pushes associated with sports programming and the year-end holidays. DIRECTV's internal company resources, including our customer service and home services teams in particular, must be focused on meeting the demand during this period of intense activity. To help ensure success, non-essential activities are curtailed in these months, including changes to our broadcast centers, business systems, set-top box software and set-top box hardware. For this reason, the first and second quarter of each year is the time frame for making changes, and as such DIRECTV recommends that the ENERGY STAR deadline for completing the roll-out of more energy efficient hardware and software should be July 1.

There are a number of reasons why the effective year for V3.0 cannot be 2011. The first, one, which is shared with the rest of the industry, is that silicon is only now becoming widely available that has built-in the power management capabilities which allow for necessary reductions in energy use. Silicon of this type and that also meets DIRECTV's performance requirements is currently in a sampling phase, meaning that the best case availability of the first set-top boxes based on this new silicon is the latter part of 2011. The transition to high volume purchasing of these set-top boxes from multiple original equipment manufacturers requires an additional six months or more beyond that.

The second reason is more specific to DIRECTV, inasmuch as the next 2-3 years represent a sea change for DIRECTV's product deployments. In this time frame, DIRECTV will be integrating advanced home networking into its HD set-top boxes, introducing a whole home HD-DVR architecture using the newly introduced RVU technology (see [www.rvualliance.org](http://www.rvualliance.org)), and beginning to phase out our SD-only set-top boxes. The benefits of this shift accrue first to DIRECTV's customers, who will be able to enjoy both live and DVR content streamed in high-quality HD throughout their connected digital homes. The near-term energy efficiency benefit is clear, as DIRECTV is eliminating the need for an HD-DVR for each television. There is a long-term energy efficiency benefit as well: by adopting the RVU technology, DIRECTV is allowing for the elimination of set-top boxes throughout the home as clients supporting the RVU technology begin to be built into televisions and other consumer electronics. All of these changes represent a monumental effort on the part of DIRECTV's engineering and development teams, however, to ensure that all of these changes occur without sacrificing service quality and reliability. In the long run, this sea change represents DIRECTV's best opportunity for improved energy efficiency in the home and we are very excited about this possibility.

**Service Provider Purchase/Fleet Requirements.** As all of DIRECTV's new set-top boxes are ENERGY STAR qualified, DIRECTV is at a purchase level of 100%. This is no accident: one of the internal criteria for DIRECTV's voluntary participation as an ENERGY STAR Service Provider was that no consumer confusion should be allowed. In other words, DIRECTV would not join with ENERGY STAR unless we could be confident that our customers can get compliant products regardless of their service package (e.g. DVR services, HD services).

DIRECTV agrees with EPA that minimum purchase and fleet requirements are an essential element of the Service Provider program. It is DIRECTV's intention to maintain a purchase level of 100%, and DIRECTV urges the EPA not to relax the current requirements. DIRECTV and other current Service Provider program participants have made significant commitments in qualifying, labeling and promoting our respective set-top boxes. Lowering the bar below the current 50% level would greatly diminish the "star" status that current program participants have earned and that future program participants must earn.

**Utility Programs.** At the December 3 meeting, there was some discussion of possible energy utility programs designed to encourage increased energy efficient set-top boxes in homes. One program model would require a Service Provider to have available an ENERGY STAR qualified model and a non-ENERGY STAR qualified model in every category (e.g. DVR, HD-DVR). A utility would then offer the Service Provider an incentive to deploy the more efficient ENERGY STAR model to customers in the areas it serves. During the call, it was pointed out that it seemed impossible for a Service Provider to launch a program such as this, as the volumes of ENERGY STAR set-top boxes deployed in this manner would not approach the 50% fleet requirement thus precluding the Service Provider from participating in ENERGY STAR.

DIRECTV believes that there are many possibilities for partnerships with energy utilities, some of which would have a basis in ENERGY STAR and which can be readily launched by a Service Provider. Examples that Service Providers can and should explore include:

- Replacement programs targeting the removal of the oldest generation set-top boxes, many of which use twice the energy that current ENERGY STAR qualified boxes use.
- Delivery of software upgrades to fielded set-top boxes of new "green" software features. A program like this could result in millions of older set-top boxes consuming less energy.
- Service provider installers might be able to provide in-home "energy tune-ups" during service calls. For example, with a customer's permission, the brightness settings on their TVs could be adjusted to reduce energy use.

There is plenty of room for creative programs between energy utilities and service providers. The EPA should not modify the ENERGY STAR Set-top Box and Service Provider programs in anticipation that a particular program model will be used.

## **Conclusion**

DIRECTV requests that the V3.0 effective date be July 2013, and no sooner than July 2012. With this effective date, DIRECTV expects to continue to maintain a 100% purchase of ENERGY STAR qualified set-top boxes, and urges EPA to not reduce the current purchase or fleet requirements. Finally, DIRECTV is excited about developing programs with energy utilities that result in additional energy savings in our customers' homes.

Please note that, as the EPA had requested comments by December 11, these comments may seem somewhat abbreviated. DIRECTV is eager to engage more fully with the EPA in upcoming weeks to provide more details with respect to these comments and to answer additional questions the EPA may have.

Sincerely,

Steve Dulac  
Director, Engineering