

**Discussion Guide for Proposed Edits to Versions 3.0 and 4.0
ENERGY STAR[®] Program Requirements for
Cable, Satellite, and Telecom Service Providers**

**Stakeholder Conference Call
July 7, 2010, 1:00 PM ET**

The ENERGY STAR Program Requirements for Cable, Satellite, and Telecom Service Providers (“Service Provider Agreement”) was established by EPA in 2008 with the following objectives in mind:

1. Garner additional energy savings on a national basis by incentivizing Service Providers to deploy ENERGY STAR qualified products.
2. Ensure that product qualification is maintained after STB hardware is deployed to consumers.
3. Increase opportunities for consumer education by ensuring that labeling and marketing of ENERGY STAR takes place at the consumer’s primary point of contact with the STB market.

Over the past several years, manufacturers, Service Providers, electric utilities, and various other stakeholders have provided constructive feedback on potential improvements to the existing STB program structure. In response, EPA is proposing a series of enhancements and modifications to the existing Partner Commitments for STB manufacturers and Service Providers, to be included in the Version 3.0 specification.

Service Provider Fleet/Purchase Requirements:

With the next version of the STB specification, EPA would like to encourage more Service Providers to partner with ENERGY STAR. Increased partnership will serve to provide more consumers with energy efficient set top boxes and to provide a platform for providers to help educate consumers about the benefits of efficiency and their role in the delivery of those benefits. The following options are under consideration:

1. Annual new purchase requirements shall be pro-rated for new Service Provider partners who join ENERGY STAR after the start of the calendar year. Requirements will be pro-rated on a monthly basis. Thus, if a provider begins their partnership in August, the requirement for 50% ENERGY STAR new purchases will be measured against the total number of STB purchases made during the last five months of the calendar year. The purchase/fleet requirement will reset in January of the first full calendar year, such that all partnerships align to the same schedule.
2. Service Providers that deploy products with capability for advanced energy efficiency features (e.g., a “Deep Sleep Button” on the face of the STB) will receive an additional 50% credit towards annual purchase/fleet requirements for each deployment (e.g., each STB with this capability counts as 1.5 units towards the annual goal). Specifics of each implementation must be approved in advance and on a case-by-case basis by EPA, but in general it is expected that advanced features will have the potential to reduce STB power consumption to 2 watts or less for at least 4 hours per day. Note that EPA intends to make advanced energy efficiency features a requirement for qualification in the Version

4.0 specification, and welcomes further stakeholder comment on this topic, including thoughts on how to identify and reward those products that deliver the greatest savings potential.

Testing, Qualification, and Labeling:

Since the ENERGY STAR program for STBs was reestablished in 2008, the responsibility for testing and submitting products for qualification has belonged to the party (manufacturer or Service Provider) responsible for final configuration of a product before its deployment to an end-user. EPA intends to maintain this requirement for both leased and retail STBs in the next revision of the specification. Further, EPA recognizes that the energy performance of some leased STBs cannot be altered in any way by changes in firmware, network interactions, etc. These STBs are considered “independent” and can be tested, submitted, and labeled by the OEM regardless of whether they are sold and distributed by a Service Provider partner. EPA is proposing the following:

1. Direct-to-Retail STBs:
 - Product Testing & Submission is the responsibility of the OEM.
 - Labeling & Periodic Reporting is the responsibility of the OEM.
2. Leased STBs whose energy performance is independent of configuration/usage:
 - Product Testing & Submission may be performed by the OEM or the Service Provider.
 - Labeling & Periodic Reporting may be performed by the OEM or the Service Provider.
3. Leased STBs whose energy performance is dependent upon configuration/usage:
 - Product Testing & Submission is the responsibility of the Service Provider, but may be performed by the OEM at the request of the Service Provider.
 - Labeling & Periodic Reporting is the responsibility of the Service Provider.

Reporting:

EPA has identified the need for more detailed data collection on features and configurations of qualified STB deployments across Service Provider territories, in order to aid in future specification evaluations. As a result, EPA is proposing some changes to Service Provider reporting requirements and the STB qualified product list (QPL), including:

1. Each qualified product configuration on the QPL will be associated with a specific Service Provider partner.
2. For multi-room configurations:
 - a. Both the server STB and remote STB must be independently qualified for ENERGY STAR to be used in a qualifying multi-room configuration.
 - b. Each multi-room configuration (server STB with each type of remote STB) must be submitted for qualification as a unique “qualified product” and will be listed as individual line-items on the QPL.
 - c. As per existing practice, testing of a server STB and any one remote STB will be sufficient for qualification of all multi-room combinations.
3. Test data collection will include version numbers for all STB and head-end software used for qualification testing.

- Service Provider partners must report additional sales data about deployments and installation/usage of various home-networking protocols.

Following the release of the Version 3.0 specification, EPA intends to continue to work closely with energy efficiency program sponsors to assist with the development of incentive programs for the promotion of energy efficient STB installations.

Energy Efficiency Criteria:

EPA proposes incorporating some changes to the previously discussed Version 3.0 and Version 4.0 energy efficiency criteria for STBs as a result of stakeholder feedback. Proposed changes are highlighted in yellow in the following table in an effort to allow for more thoughtful discussion in the context of the proposed changes to the Service Provider requirements:

BASE FUNCTIONALITY	Version 3.0 (kWh/yr)	Version 4.0 (kWh/yr)
Cable	50	42
Satellite	50	42
DTA	35	24
IP	36	24
Terrestrial	22	18
Thin Client / Remote	22	18

ADDITIONAL FUNCTIONALITY	Version 3.0 (kWh/yr)	Version 4.0 (kWh/yr)
Multi-stream	16	13
Multi-stream Terrestrial/IP	8	6
Advanced Video Processing	12	10
DVR	45	36
High Definition	25	16
Removable Media Player	8	8
Removable Media Player / Recorder	10	10
Multi-room	40	35
CableCARD	15	15
DOCSIS	20	15
Home Network Interface	10	8

The following modifications have been applied:

- The “Advanced Video Processing” and “Home Network Interface” allowances have been separated from the base type allowances for Cable/Satellite/IP. The allowances have been adjusted accordingly. The “Home Network Interface” allowance will also be made available for use with the Thin Client base type.
- The proposed “Multi-room” allowance has been increased to 40 kWh/year, compared to the Draft 1 proposal of 25 kWh/year. Data analysis has shown that an increase in this allowance (vs. increased base type or other additional functionality allowances) aligns with EPA’s goal of promoting multi-room deployments and reducing the total number of installed DVRs.
- The “Additional Tuner” allowance has been re-named “Multi-stream,” and is available for use with IP base types that process multiple simultaneous video streams without a physically separate tuner.

Enhanced Testing and Verification:

EPA has proposed enhanced testing and verification requirements for ENERGY STAR qualification for all products. By the close of the year, all ENERGY STAR products must be tested for qualification in an EPA-recognized, accredited laboratory. Further, EPA has proposed that all product partners participate in a certification program for qualification and verification. Final accreditation body and lab requirements and draft certification body requirements are posted at www.energystar.gov/testingandverification.

Questions and Comments:

Please direct questions and comments on this document to STBs@energystar.gov.