

ENERGY STAR® Program Requirements for Set-top Boxes, DRAFT 2 - Version 2.0, Corrected October 22, 2007

Line #	Current Language	Alternative Language	Comment/Reason
NA	STB	Global comment: replace the term STB with "set-top box" throughout document	Clearer terminology.
127-128	Any information used will be masked by EPA so as to protect the confidentiality of the Partner.	Any information used will be masked and aggregated by the EPA and will not reveal information specific to the Partner, its customers, or its specific industry segment.	To protect the confidentiality of manufacturers and the service providers participating in the program.
223	CableCARD, POD and Downloadable Conditional Access System (DCAS) are examples of this technology.	CableCARD™ and Downloadable Conditional Access System (DCAS) are examples of this technology.	The term "POD" has been superseded by CableCARD™.
226-227	[DOCSIS]: An international standard that defines the communications needed to transfer data over the cable infrastructure.	[DOCSIS]: An international suite of standards that define interface requirements for cable modems involved in high-speed data and video/audio content distribution over cable television systems.	Clearer definition.
245	Out-Of-Band tuners for DOCSIS and other similar types of technologies are not considered additional tuners for the purposes of this specification.	Out-Of-Band tuners built in compliance with standards ANSI/SCTE 55-1 2002 and ANSI/SCTE 55-2 2002 and other similar types of technologies are not considered additional tuners for the purposes of this specification.	To clarify that DOCSIS modems may be considered additional tuners.

251	Advanced Video Processing: MPEG-4 encoding, transcoding and decoding	Advanced Video Processing: Advanced methods for video encoding, transcoding and decoding. Examples include, but are not limited to, H.264/MPEG 4 and SMPTE 421M.	To clarify that advanced video processing is not limited to "MPEG-4."	
268-269	Tuners used to gain access to data channels outside of the audio/video source signal. These tend to be bi-directional in nature and allow the box to....	Tuners compliant with standards ANSI/SCTE 55-1 2002 and ANSI/SCTE 55-2 2002 and other similar types of technologies used to gain access to data channels outside of the audio/video source signal. These may facilitate two-way communication and allow the box to...	To clarify cable OOB tuner definition.	
391	Table 1	Annual Energy Allowance should be changed to 92 kWh/year.	The annual energy allowance for Tier 1 does not appear to take into account the kWh/year annual energy allowance needed for the CableCARD - a component required by FCC regulations.	
391	Table 1	Tier 2 Annual Energy Allowances should be deleted.	Set-top box technology and features will change dramatically over the next several years. Therefore, we believe it would be premature for the EPA to assign Tier 2 values at this time. EPA and Stakeholders should instead periodically re-examine set-top box annual energy allowances and adjust accordingly.	

410	Table 2	Tier 2 Annual Energy Allowances should be deleted.	Same comment as above.	
410	Table 2	Add "Home Network Interface" after DVR and assign a value of 35 kWh/year under the current Tier 1 column. Add a definition for Home Network Interface under Additional Functionalities (text TBD).	To account for the energy contribution of a variety of home network interfaces used in set-top boxes today.	
410	Table 2	Add "Base DOCSIS" to Additional Functionalities and assign a value of 35 kWh/year under the current Tier 1 column.	To account for the energy contribution of a DOCSIS modem.	
410	Table 2	Add "DOCSIS Transmitter" to Additional Functionalities and assign a value of 35 kWh/year under the current Tier 1 column.	To account for the additional energy necessary for each additional DOCSIS transmitter used to support DOCSIS channel bonding.	
410	Table 2	Add "DOCSIS Tuner" to Additional Functionalities and assign a value of 26 kWh/year under the current Tier 1 column.	To account for the additional energy necessary for each additional DOCSIS tuner used to support DOCSIS channel bonding.	

549-552	ENERGY STAR qualified STBs may exit Standby mode in order to scan for program and system information or private data (PSIP). In order to qualify for ENERGY STAR, STBs may exit the Standby mode for no longer than one hour in an eight hour period that the device would otherwise remain in Standby mode.	ENERGY STAR qualified set-top boxes may exit Standby mode in the event of an EAS message or for no longer than the time required to scan for program and system information, private data, or any other maintenance activity. For purposes of ENERGY STAR qualification, the set-top may exit the Standby mode for no longer than one hour in an eight hour period that the device would otherwise remain in Standby mode.	To clarify that when deployed, the set-top is constrained to the period of time necessary to perform maintenance activities and respond to EAS messages (required by FCC regulation). However, for purposes of manufacturer testing for ENERGY STAR qualification, this period of time is constrained to no longer than one hour in an eight hour period. We also suggest that the term "PSIP" be deleted because it is a specific protocol and many other forms of data transfer are likely to be used by service providers in normal operation.	
568-571	The STB may exit an automatically-initiated Standby mode in order to scan for program and system information, scheduling information, or any other maintenance activity. If this occurs, the STB may exit the Standby mode for no longer than two hours in a twenty-four (24) hour period that the device would otherwise remain in Standby mode.	ENERGY STAR qualified set-top boxes may exit automatically-initiated Standby mode in the event of an EAS message or for no longer than the time required to scan for program and system information, private data, or any other maintenance activity. For purposes of testing for ENERGY STAR qualification, the set-top may exit the automatically-initiated Standby mode for no longer than two hours in a twenty-four (24) hour period that the device would otherwise remain in Standby mode.	To clarify that when deployed, the set-top is constrained to the period of time necessary to perform maintenance activities and respond to EAS messages (required by FCC regulation). However, for purposes of manufacturer testing for ENERGY STAR qualification, this period of time is constrained to no longer than two hours in a twenty-four (24) hour period.	

588-592	The date the manufacturers may begin to qualify products as ENERGY STAR under this Version 2.0 specification will be defined as the <i>effective date</i> of the agreement. The ENERGY STAR specification for STBs (Version 2.0) Tier 1 is effective September 1, 2008. Tier 2 will become effective on January 1, 2010. Any previous executed agreement on the subject of ENERGY STAR qualified set-top boxes terminated effective February 2, 2005.	The date the manufacturers may begin to qualify products as ENERGY STAR under this Version 2.0 specification will be defined as the <i>effective date</i> of the agreement. The ENERGY STAR specification for STBs (Version 2.0) is effective July 1, 2009. Any previous executed agreement on the subject of ENERGY STAR qualified set-top boxes terminated effective February 2, 2005.	We believe this to be a more realistic schedule given the time needed to manufacture and test set-top hardware/software meeting the new ENERGY STAR requirements. This assumes that a final specification is available in January 2008 and that the Tier 2 requirements are removed.	
595		Change date to July 1, 2009	Maintain consistent effective dates.	
600-602		This text should be eliminated	Consistent with the comments made above, we believe it would be premature for the EPA to establish Tier 2 at this time.	
613-614	In keeping with current policy, revisions to the specification will be discussed with stakeholders.	In keeping with current policy, revisions, if any, to the specification will be discussed with stakeholders in advance of those revisions.	To clarify change management process.	

ENERGY STAR® Program Requirements for Cable, Satellite, and Telecom Service Providers, DRAFT 2 - Version 1.0

Line #	Current Language	Alternative Language	Comment/Reason
NA	STB	Global comment: replace the term STB with "set-top box" throughout document	Clearer terminology.
20	purchase and deploy:	of purchased and deployed:	To clarify that the percentage of set-tops is based on the total number purchased.
21	TBD % of ENERGY STAR qualified STBs to subscribers by January 1, 2009;	TBD % ENERGY STAR qualified set-top boxes to subscribers by January 1, 2010;	We believe this to be a more realistic schedule given the time needed to manufacture and test set-top hardware & software meeting the new ENERGY STAR requirements. This assumes that a final specification is available in January 2008 and that the Tier 2 requirements are removed.
22	TBD % of ENERGY STAR qualified STBs to subscribers by April 1, 2010;	TBD % ENERGY STAR qualified set-top boxes to subscribers by April 1, 2011;	We assume this percentage is not cumulative.
23	TBD % of ENERGY STAR qualified STBs to subscribers by April 1, 2011;	TBD % ENERGY STAR qualified set-top boxes to subscribers by January 1, 2012;	We assume this percentage is not cumulative.
36	ensure that ENERGY STAR qualified set-top boxes continue to meet or exceed ENERGY STAR technical requirements for the duration of their deployment.	ensure that ENERGY STAR qualified set-top boxes continue to meet or exceed ENERGY STAR technical requirements in effect at the time of their purchase for the duration of their deployment.	To clarify that set-tops purchased and deployed before revised requirements are in effect are not expected to meet the newer requirements.

37	This is confirmed by testing for ENERGY STAR qualification while the product is connected to the headend.	Suggest eliminating this text.	We believe it is sufficient to rely on the manufacturers' statement of compliance.	
54	The ENERGY STAR mark must appear for a duration not less than five seconds at power up...	The ENERGY STAR mark must appear for a duration not less than five seconds at initial power up...	To clarify that the mark appears at initial power up and not for a duration of five seconds every time the set-top returns from standby mode.	
64-67	deploy user interface software features that inform {...}.	Suggest eliminating this text.	We believe this requirement is out-of-scope and urge the EPA to delete it. Service providers should not be required to use software to inform subscribers of the efficiency opportunities within the set-top product. Requiring that software be deployed in this manner dramatically raises the cost for service providers to participate in the program.	
92-93	Any information used will be masked by EPA so as to protect the confidentiality of the Partner.	Any information used will be masked and aggregated by the EPA and will not reveal information specific to the Partner or its specific industry segment.	To protect the confidentiality of the service provider and the industries participating in the program.	