



Frequently Asked Questions (FAQs) on the Version 2.0 ENERGY STAR® External Power Supply (EPS) Specification

In April 2008, EPA finalized the Version 2.0 ENERGY STAR EPS Specification, which includes effective dates for EPS and electronics products as early as November 1, 2008. Following release of the specification, EPA has received a number of questions regarding these new requirements and wished to make the questions and EPA responses available to all affected stakeholders. This FAQ document includes five sections—General FAQs, EPS Partner FAQs, Telephony Partner FAQs, Computer and Imaging Partner FAQs, and Primarily Portable Products with Qualifying EPSs FAQs—to allow stakeholders to easily identify the responses that may be of key interest to them. Please direct further questions or concerns to Andrew Fanara, US EPA, at Fanara.andrew@epa.gov or Robin Clark, ICF International, at rclark@icfi.com.

General FAQs

- Q1: Is a revised version of the International Efficiency Marking Protocol available to stakeholders, which includes updated information on the level V requirements?
- A1: EPA, in coordination with other implementers of the Protocol, is in the process of updating the International Efficiency Marking Protocol with the new ENERGY STAR Version 2.0 EPS requirements for level V. Once finalized, the document will be made available to stakeholders on the ENERGY STAR Web site at: www.energystar.gov/powersupplies.
- Q2: If an AC EPS has a rated output load of 90W (which would exceed 100W input power if the full rated load was placed on the AC EPS), but the end-use product it is packaged with only draws 85 W (which would result in less than 100W input power), would the below PFC requirement apply to the EPS supplied with the ENERGY STAR qualified end-use product?

From the Version 2.0 EPS specification:

Power Factor Correction (PFC)

In addition to the Active Mode efficiency requirements found above, power supplies with greater than or equal to 100 watts *input* power must have a true power factor of 0.9 or greater at 100% of rated load when tested at 115 volts @ 60Hz.

- A2: The EPS requirements apply based on the rated output power of the EPS, not on the actual power draw of the intended device. End-use products and EPSs are covered in this way because many EPSs might be sold with multiple products, and the EPSs need to be tested in a reliable and repeatable way to ensure they meet the ENERGY STAR requirements in any possible loading condition and with any appropriate end-use product.

The power factor cutoff was included to make sure that higher power devices have a high power factor. EPA realizes that many devices with input power greater than 100W (based on the input power at the 100% load condition) will often operate at lower wattages, below the cutoff, but EPA believes that high power quality will also lead to power savings at these lower wattages. For these reasons, it is EPA's intention that any EPS that operates at > 100W input power at 100% rated output power is covered by the requirement, including the end-use product described above, in Q2.

- Q3: The ENERGY STAR Version 2.0 specification takes effect November 1, 2008; does this change the July 1, 2008 effective date stated in the Energy Independence and Security Act of 2007 (EISA)?

A3: No. ENERGY STAR's EPS specification is a part of EPA's voluntary energy-efficiency program designed to recognize the best energy performers; EISA provides a new federal mandatory minimum standard for EPSs. For questions regarding the EPS mandatory standard, please contact Victor Petrolati at the US Department of Energy (DOE); he can be reached by email at victor.petrolati@ee.doe.gov.

EPS Partner FAQs

Q1: Will the Online Product Submittal (OPS) tool continue to accept EPS models that meet level IV of the International Efficiency Marking Protocol, i.e., ENERGY STAR Version 1.1 EPS requirements, as of November 1, 2008?

A1: No; as of November 1, 2008, only those EPS models that meet or exceed level V of the International Efficiency Marking Protocol, i.e., ENERGY STAR Version 2.0 EPS requirements, will be accepted through OPS. Additionally, only those EPS models that qualify under the Version 2.0 EPS specification will be displayed on the ENERGY STAR Web site as of November 1, 2008.

Q2: Where can current EPS Partners find the new Commitment Form that needs to be completed to maintain their partnership status under the recently finalized Version 2.0 specification?

A2: Additional information will be provided to all partners in the near future about how to recommit under the Version 2.0 specification and remain an ENERGY STAR EPS partner. This information will be accompanied by an updated Commitment Form and related instructions.

Q3: Are multi-voltage EPS models covered under the Version 2.0 specification?

A3: The EPS specification states that power supplies covered under ENERGY STAR must be *able to convert to only one dc output voltage at a time*. The specification does not currently address EPSs that convert AC to *multiple* DC outputs *simultaneously*. The EPS Test Procedure does not currently cover units with multiple output voltages and this would likely take some time to develop. EPA would consider participating in discussions regarding these products in the coming months.

On a related note, EPA is familiar with EPS models that convert line voltage AC into multiple USB (Universal Serial Bus) 5V outputs in parallel. These devices are being marketed for use with a growing number of small consumer electronic devices designed to charge through computer USB ports. To clarify, single voltage EPSs with multiple outputs of the same voltage are eligible for the ENERGY STAR provided that they meet the Version 2.0 specification when tested as indicated in the ENERGY STAR EPS Test Procedure. Information on testing single voltage EPSs with multiple output wires can be found in the ENERGY STAR Test Procedure on page 6, "5. Measurement Approach" under "a. Preparing UUT for Test."

Telephony Partner FAQs

Q1: Will existing ENERGY STAR Telephony Partners who need to use EPSs that meet the Version 2.0 requirements of that specification in their products as of November 1, 2008 need to recommit to ENERGY STAR to continue their partnership?

A1: ENERGY STAR Telephony Partners will not have to recommit to continue as partners after October 31, 2008.

Q2: Will Telephony Partners be required to submit new data (for currently qualified telephony models) to verify that products incorporate EPSs that meet the Version 2.0 requirements of that specification as of November 1, 2008?

A2: Given that EPS data is not required to be submitted under the Version 2.0 telephony specification, EPA will not require manufacturers to re-submit any power supply data voluntarily provided when qualifying telephony models for ENERGY STAR. However, telephony manufacturers will have to de-list any models that do not incorporate EPSs that meet the Version 2.0 EPS specification as of November 1, 2008.

EPA will follow a process similar to when the telephony specification transitioned from Version 1.0 to Version 2.0 in 2006 to aid manufacturers in de-listing their non-compliant models. In late September/early October, telephony manufacturers will receive communication from EPA that includes an Excel listing of their currently qualified telephony products. Manufacturers will be asked to indicate which models will incorporate EPSs that meet the Version 2.0 requirements of that specification as of November 1, 2008. Only those telephony models will subsequently remain listed on the ENERGY STAR Web site as qualified as of November 1, 2008.

Q3: Does the November 1, 2008 effective date for the Version 2.0 EPS specification apply only to the date of manufacture of the EPS, or also to the date of manufacture of the telephony product?

A3: For telephony partners, November 1, 2008 refers to the date of manufacture of the actual telephony product. Telephony models manufactured starting November 1, 2008 must ship with EPS models that meet the Version 2.0 requirements of that specification – irrespective of the EPS model's date of manufacture – in order for the telephony models to be sold as ENERGY STAR qualified. In other words, on November 1, 2008, any telephony product manufactured on or after that date must meet the system level requirements and include a Version 2.0 EPS (regardless of when the EPS was manufactured).

To clarify, telephony models manufactured prior to November 1, 2008 that include EPSs meeting the Version 1.1 EPS specification can continue to ship as qualified after November 1, 2008.

Computer and Imaging Partner FAQs

Q1: Please provide some examples to clarify the relationship between EPS manufacture dates and specification effective dates for end-use products. (Examples below are based on an anticipated effective date of July 2009 for both the Version 5.0 Computer specification and the Version 1.1 Tier 2 Imaging specification.)

A1: Example 1: Both a notebook computer and its EPS have a manufactured date of July 30, 2009. Thus, the notebook would need to meet the forthcoming Version 5.0 computer specification and the EPS would need to meet the Version 2.0 specification.

Example 2: A printer has a manufactured date of July 15, 2009 while its EPS was manufactured on June 15, 2009. Once the new imaging specification (Version 1.1 Tier 2) is in effect on July 1, 2009, imaging partners will need to meet the Version 2.0 EPS specification. In other words, on July 1, 2009, any printer manufactured on or after that date must meet the system level requirements and include a Version 2.0 EPS (regardless of when the EPS was manufactured).

Q2: Would an EPS mounted inside an end-use product to power a subassembly (e.g., a stapler) and where the EPS' power is drawn from the main product's power supply be considered an EPS for purposes of qualifying computer and imaging models as ENERGY STAR?

A2: Yes, as long as the EPS meets the ENERGY STAR definition and is capable of being tested per the ENERGY STAR Test Procedure. The ENERGY STAR EPS specification, which is intended to be a horizontal specification crossing many product categories, does not dictate or provide exemptions based on the placement of the EPS (e.g., under the main product covers, often for cosmetic reasons), the amount of power converted, and/or the purpose/function of the EPS (i.e., to power a component of the system versus the system as a whole). Partners are welcome to share unique cases with EPA for review and to ensure full compliance with the ENERGY STAR requirements.

Primarily Portable Products with Qualifying EPSs FAQs

Q1: Will existing ENERGY STAR partners in the “Primarily Portable Products with Qualifying EPSs” category (who need to use EPSs that meet the Version 2.0 requirements in their products as of November 1, 2008) need to recommit to ENERGY STAR to continue their partnership?

A1: No, ENERGY STAR partners in the “End-Use or Primarily Portable Products with Qualifying EPSs” category will not have to recommit to continue as partners as of November 1, 2008. EPA has revised the qualified product information (QPI) form, available now on the ENERGY STAR Web site, to include new Version 2.0 EPS requirements. As of November 1, only models with Version 2.0 EPSs will be considered ENERGY STAR and listed on the ENERGY STAR Web site. Partners will have to de-list any models that do not incorporate EPSs that meet the Version 2.0 EPS specification as of November 1, 2008.