



# **ENERGY STAR**

## **Imaging Equipment**

### **Version 2.0 Final Draft**

### **Modifications**

Stakeholder Webinar  
February 22, 2013

# Call-in Information



- Audio provided via conference call in:

<b>Call in:</b>	+1-877-423-6338 (in the US, Canada)
	+1-571-281-2578 (outside the US, Canada)
<b>Code:</b>	198-920

- Phone lines will remain during the presentation to allow for open discussion
- Please keep phone lines on mute (\*6) unless speaking

# Agenda

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- 1. Introduction**
2. Digital Front Ends (DFEs)
3. TEC Requirements
4. Timeline of Next Steps

# Introduction

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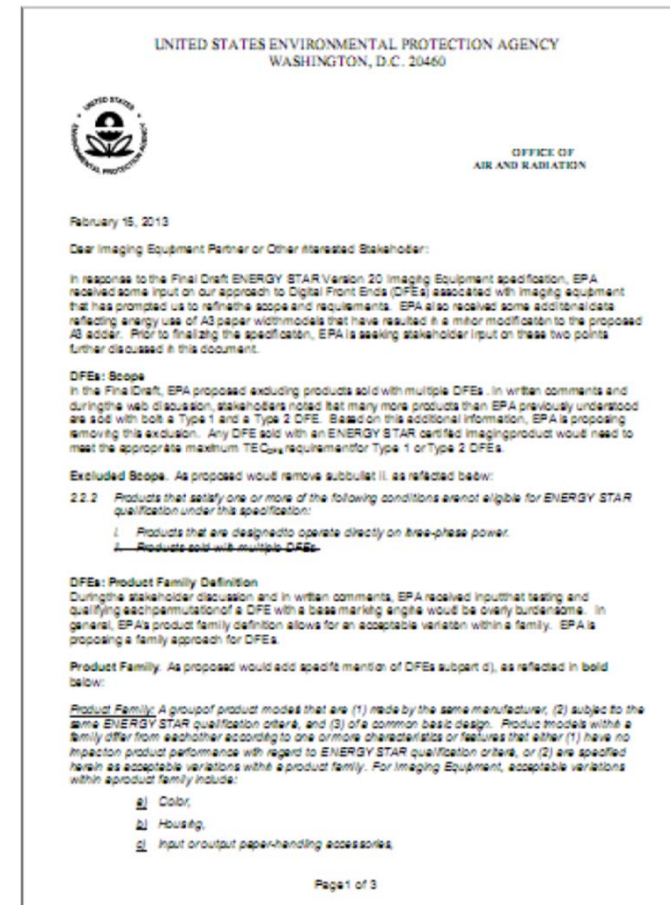


- EPA thanks all stakeholders for participating in the specification revision
- EPA appreciates stakeholders' feedback on the Final Draft
  - Stakeholders raised additional important issues following the publication of the Final Draft

# Introduction



- EPA reviewed stakeholder comments and is proposing further modifications to the specification to ensure a successful launch
- Proposed modifications were outlined in a letter provided to stakeholders on February 15
  - Available at [www.energystar.gov/RevisedSpecs](http://www.energystar.gov/RevisedSpecs)



# Meeting Objectives

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1. Discuss proposed changes due to stakeholder data and comments
2. Discuss timeline to finalization

# Agenda

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1. Introduction
2. **Digital Front Ends (DFEs)**
3. TEC Requirements
4. Timeline of Next Steps

# Removing Exclusion for Multiple DFEs



- Stakeholders commented that many current products are sold with both Type 1 and Type 2 DFEs

Type 2 DFE



Xerox<sup>®</sup> Integrated  
Fiery<sup>®</sup> Color Server

Type 1 DFEs



EX Print Server,  
Powered by Fiery<sup>®</sup>

CX Print Server,  
Powered by Creo<sup>®</sup> Color  
Server Technology

Xerox<sup>®</sup> FreeFlow<sup>®</sup>  
Print Server



# Removing Exclusion for Multiple DFEs



- EPA is therefore proposing to remove the exclusion for Multiple DFEs from Section 2.2.2:

2.2.2 Products that satisfy one or more of the following conditions are not eligible for ENERGY STAR qualification under this specification:

- i. Products that are designed to operate directly on three-phase power.
- ~~ii. Products sold with multiple DFEs.~~

# Qualifying Models with Multiple Type 1 DFEs



- Stakeholders commented that qualifying each permutation of Type 1 DFE with a base marking engine would be overly burdensome.
- Therefore, EPA is proposing to allow qualification of additional Type 1 DFEs through a product family approach
  - Manufacturers would test a representative model including the highest energy consuming Type 1 DFE
  - Additional Type 1 DFEs and Type 2 DFEs would be acceptable variations within the product family



# Representative Model

- Stakeholders commented in favor of testing the “most popular” Imaging Equipment-DFE configuration, but difficult to define
- Instead, EPA proposes testing highest energy using configuration:
  - Highest energy using Imaging product
  - +
  - Highest energy using Type 1 DFE
- Additional Type 1 DFEs can be included if they consume less energy
  - Do not need to be tested with Imaging product
  - Only DFE-specific data to be reported
  - However, subject to verification in conjunction with Imaging Equipment

# DFE Qualification Scenarios



An Imaging Equipment product is qualified without a Type 1 DFE  
Later, it is bundled with a Type 1 DFE

The Imaging Equipment product sold with a Type 1 DFE must be qualified as a separate product family.

1. CB tests and certifies Imaging Equipment without Type 1 DFE as one model or family, submitting data via QPX
2. CB then tests and certifies Imaging Equipment with Type 1 DFE as a separate model or family, submitting data via QPX
3. CB also submits model name/number, ready mode, sleep mode,  $TEC_{DFE}$  power data for any other Type 1 DFEs to be sold with the Imaging Equipment product.

These values shall be self-reported by the Imaging Equipment partner and are not subject to CB certification (but are subject to future CB verification).

# DFE Qualification Scenarios



Imaging Equipment product is qualified as bundled with a Type 1 DFE. Later, it is bundled with a new Type 1 DFE that consumes more power than the representative Type 1 DFE



The original representative model would no longer be representative and this new configuration would have to be re-qualified to redefine the product family. Failure to re-qualify this product family would result in the Imaging Equipment product not being ENERGY STAR qualified when sold with the new Type 1 DFE.

1. Imaging Equipment Partner submits new configuration to CB as representative model for certification.
2. CB tests and certifies new configuration, submitting data via QPX.
3. CB informs EPA that this configuration will replace the previous representative model on the qualified product list (QPL).

# DFE Qualification Scenarios



One of the Type 1 DFEs sold with a product is discontinued



This process operates the same as the current process for having Imaging Equipment products that are no longer available on the market removed from the qualified product list (QPL).

1. Imaging Equipment Partner notifies CB
2. CB requests that EPA remove the DFE's data from the QPL

# DFE Qualification Scenarios



Imaging Equipment product is qualified as bundled with a Type 1 DFE  
Later, it is bundled with a new Type 1 DFE that consumes less power than the representative Type 1 DFE

Imaging Equipment partner notifies CB and they can add the model and required data to the ENERGY STAR database.

1. Stakeholder will provide the following information to their CB: New Type 1 DFE model name/number, ready mode, sleep mode, and  $TEC_{DFE}$  power

These values shall be self-reported by the Imaging Equipment partner and are not subject to CB certification (but are subject to future CB verification)

2. CB submits these data via QPX

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# A3 Adder Allowance



- Stakeholders commented that the proposed A3 adder of 0.2 kWh/week was insufficient
- Stakeholder data showed zero qualification for Mono Printers at 20–29 ipm:

Print Speed (ipm)	<u>Qualification Rate (%) for A3 Mono Non-MFDs</u>		
	Copiers	Printers	All
0–9	NA	NA	<b>NA</b>
10–19	67%	NA	<b>67%</b>
20–29	14%	<b>0%</b>	<b>6%</b>
30–39	10%	14%	<b>13%</b>
40–49	100%	100%	<b>100%</b>
<b>All</b>	<b>27%</b>	<b>13%</b>	<b>18%</b>

# A3 Adder Allowance



- EPA is therefore proposing to increase the A3 adder allowance to 0.3 kWh/wk
  - Will ensure availability of Mono A3 Printers
  - Will not significantly affect overall qualification rates

Print Speed (ipm)	<u>Qualification Rate (%) with 0.3 kWh/wk Allowance</u>				<b>All TEC</b>
	All Mono Non-MFD	All Color Non-MFD	All Mono MFD	All Color MFD	
0–9	32%	0%	0%	0%	<b>20%</b>
10–19	20%	46%	41%	39%	<b>37%</b>
20–29	51%	30%	46%	42%	<b>43%</b>
30–39	18%	32%	41%	46%	<b>36%</b>
40–49	16%	26%	38%	56%	<b>35%</b>
<b>All Speeds</b>	<b>38%</b>	<b>38%</b>	<b>42%</b>	<b>48%</b>	<b>42%</b>

# Dataset Issues

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- Stakeholders also commented that there were continuing issues with the dataset:
  - Not current
  - Contains duplicates/product family qualifications
  - Contains some incorrect data
- EPA pulled data from the February 4, 2013, Qualified Product List (QPL) and re-ran the analysis
  - List should include most current and correct data

# Dataset Issues



- EPA also removed duplicates/product families:

	Print Speed (ipm)	Qualification Rate (%) with 0.3 kWh/wk Allowance				
		All Mono Non-MFD	All Color Non-MFD	All Mono MFD	All Color MFD	All TEC
Full Dataset from 2012.02.04	0-9	32%	0%	0%	0%	<b>20%</b>
	10-19	20%	46%	41%	39%	<b>37%</b>
	20-29	51%	30%	46%	42%	<b>43%</b>
	30-39	18%	32%	41%	46%	<b>36%</b>
	40-49	16%	26%	38%	56%	<b>35%</b>
	All Speeds	<b>38%</b>	<b>38%</b>	<b>42%</b>	<b>48%</b>	<b>42%</b>
Duplicates Removed	0-9	17%	0%	0%	0%	<b>9%</b>
	10-19	33%	44%	36%	41%	<b>38%</b>
	20-29	37%	29%	43%	40%	<b>38%</b>
	30-39	20%	33%	37%	47%	<b>35%</b>
	40-49	23%	20%	27%	35%	<b>27%</b>
	All Speeds	<b>34%</b>	<b>35%</b>	<b>38%</b>	<b>42%</b>	<b>37%</b>

# Dataset Issues

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- As these analyses revealed minimal differences in the qualification rate, EPA is not making any further changes to the TEC requirements.
- EPA is also not proposing changes to any other requirements.

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# Qualified Product Data Exchange



- XML-based qualified product exchange (QPX) system for CBs to submit information on products certified as ENERGY STAR via web services
  - Update qualified product listings using real time data
  - In place for Version 1.2—update to reflect changes in Version 2.0
  - More info available here: [www.energystar.gov/QPX](http://www.energystar.gov/QPX)
- EPA will soon be posting Version 2.0 Imaging draft data requirements for a limited testing period
  - Looking forward to your review and input!

# Qualified Product Data Exchange



- For Version 2.0:
  - Every product must be third-party certified using the updated test method
  - Products may be certified to Version 2.0 once the specification is finalized
  - Only products certified to Version 2.0 will be included on the Qualified Products List (QPL) on the effective date



# Timeline



Stage	Date
<i>Final Draft Published</i>	<i>December 5, 2012</i>
<i>Final Draft Webinar</i>	<i>December 18, 2012</i>
<i>Comments due</i>	<i>December 28, 2012</i>
<b>Specification Finalized (Can begin certification)</b>	<b>April 1, 2013</b>
<b>Effective Date (All products must be certified to Version 2.0)</b>	<b>January 1, 2014</b>

# Written Comments



- Thank you to everyone for your helpful feedback on the Draft 2 specification.
- In addition to making verbal comments during today's call, stakeholders are encouraged to submit written comments to [imagingequipment@energystar.gov](mailto:imagingequipment@energystar.gov)

**Comment Deadline**

**Friday, March 1, 2013**

# Contact Information

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For questions related to specification development, qualification and other topics please contact

Christopher Kent  
EPA, ENERGY STAR  
(202) 343-9046

[Kent.Christopher@epa.gov](mailto:Kent.Christopher@epa.gov)

Matt Malinowski  
ICF International  
(202) 862-2693

[Matt.Malinowski@icfi.com](mailto:Matt.Malinowski@icfi.com)

For questions related to Imaging Equipment test method

Bryan Berringer  
DOE ENERGY STAR Program  
[Bryan.Berringer@ee.doe.gov](mailto:Bryan.Berringer@ee.doe.gov)



**Thank You!**