USB Power Delivery ENGINEERING CHANGE NOTICE

Title: Chapter 7 Source and Sink Behaviour
Applied to: USB Power Delivery Specification Revision 3.0 V1.1

Brief description of the functional changes proposed:
Correct descriptions left over from earlier versions of specification

Benefits as a result of the proposed changes:
Prevent incorrect assumptions

An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
None.

An analysis of the hardware implications:
None.

An analysis of the software implications:
Only where incorrect assumptions have been made

An analysis of the compliance testing implications:
None

Actual Change

FROM TEXT:

7.1 Source Requirements
7.1.1 Behavioral Aspects
A USB PD Source exhibits the following behaviors:

- ***Shall*** be backward compatible with legacy V_{BUS} ports.
- ***Shall*** supply the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** voltage and current to V_{BUS} when the USB cable is Attached (USB Default Operation).
- ***Shall*** supply the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** voltage and current to V_{BUS} when a Contract does not exist (USB Default Operation).
- ***Shall*** return ***vSafe0V*** for some time then return to ***vSafe5V*** when ***Hard Reset*** Signaling is received.
- ***Shall*** control V_{BUS} voltage transitions as bound by undershoot, overshoot and transition time requirements.

TO TEXT:

7.1 Source Requirements
7.1.1 Behavioral Aspects
A USB PD Source exhibits the following behaviors:

- ~~***Shall*** be backward compatible with legacy V_{BUS} ports.~~
- ~~***Shall*** supply the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** voltage and current to V_{BUS} when the USB cable is Attached (USB Default Operation).~~
- ***Shall*** supply the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** voltage and current to V_{BUS} when a Contract does not exist (USB Default Operation).
- ***Shall*** follow the requirements as specified in Section 7.1.5 ~~return ***vSafe0V*** for some time then return to ***vSafe5V***~~ when ***Hard Reset*** Signaling is received.
- ***Shall*** control V_{BUS} voltage transitions as bound by undershoot, overshoot and transition time requirements.

FROM TEXT:

7.2 Sink Requirements
7.2.1 Behavioral Aspects
A USB PD Sink exhibits the following behaviors.

- ***Shall*** be backward compatible with legacy V_{BUS} ports.
- ***Shall*** draw the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** V_{BUS} current when the USB cable is Attached (USB Default Operation).
- ***Shall*** draw the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** V_{BUS} current when a Contract does not exist (USB Default Operation).
- ***Shall*** return to the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** V_{BUS} when responding to a Hard Reset (USB Default Operation).
- ***Shall*** control V_{BUS} in-rush current when increasing current consumption.

TO TEXT:

7.2 Sink Requirements

7.2.1 Behavioral Aspects

A USB PD Sink exhibits the following behaviors:

- ~~***Shall*** be backward compatible with legacy V_{BUS} ports.~~
- ~~***Shall*** draw the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** V_{BUS} current when the USB cable is Attached (USB Default Operation).~~
- ***Shall*** not draw more than the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** V_{BUS} current when a Contract does not exist (USB Default Operation).
- ~~***Shall*** return to the default ***[USB 2.0]***, ***[USB 3.1]***, ***[USB Type-C 1.2]*** or ***[USBBC 1.2]*** V_{BUS} when responding to a Hard Reset (USB Default Operation).~~
- ***Shall*** follow the requirements as specified in Section 7.1.5 when ***Hard Reset*** Signaling is received.
- ***Shall*** control V_{BUS} in-rush current when increasing current consumption.