Cl **00** *SC* **0** *P* **0** *L* **0** # 8

Turner, Michelle

Comment Type **ER** *Comment Status* **X**

This document has met all editorial requirements.

SuggestedRemedy

Proposed Response *Response Status* **O**

Cl **00** *SC* **00** *P* **127** *L* **38** # 32

Landry, David Silicon Laboratories

Comment Type **E** *Comment Status* **X**

The reference to 802.1AB is not correct, in that the year contains "XX"

SuggestedRemedy

Add an editor's note (to be removed prior to publication) that the year should be updated by the staff editor after 802.1ABREV is ratified.

Proposed Response *Response Status* **W**

EDITORS NOTE: comment against 79.4, had to change to 00 to facilitate import.

Cl **01** *SC* **1.4** *P* **17** *L* **26** # 1

Darshan, Yair Microsemi Corporation

Comment Type **ER** *Comment Status* **X**

In the Iport definition the word "power" is redundant and not correct since we define Iport current

SuggestedRemedy

Delete the word "power"

Proposed Response *Response Status* **O**

Cl **01** *SC* **1.4** *P* **17** *L* **46** # 37

Vetteth, Anoop Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

During the last commenting cycle two comments were accepted. One was to define Vport in section 1.4 and another was to change Vport all over the document to VPSE.

SuggestedRemedy

Change Vport to VPSE here. Also change the definition to "<snip> Voltage at the PSE PI <snip>".
Strike definition of VPSE in Eq 33-3 and 33-4 and reference Section 1.4
For sake of completeness, define VPD also in Section 1.4. Strike the present definition of VPD from page 71 line 26 and reference Section 1.4

Proposed Response *Response Status* **O**

Cl **25** *SC* **25.5.4.4** *P* **22** *L* **33** # 9

Schindler, Frederick Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

This PICS is incomplete.
FYI: A 10^9 bits take 1,000 s to transfer (~17 minutes).

SuggestedRemedy

Add to the end of this PICS,
with a bit error ratio of less than 10^-9 after link reset completion.

Proposed Response *Response Status* **O**

Cl **25** *SC* **25.5.4.5** *P* **23** *L* **35** # 10

Schindler, Frederick Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

This PICS is incomplete.
FYI: A 10^9 bits take 1,000 s to transfer (~17 minutes).

SuggestedRemedy

Add to the end of this PICS,
with a bit error ratio of less than 10^-9 after link reset completion.

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.2.5** *P* **0** *L* **0** # 35

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

802.1AB mandates unnecessary requirement to implement the complete LLDP Local and Remote Package when the entity is in the relevant transmit/receive mode. All attributes in the packages need to be implemeted even when the corresponding TLVs are not sent/received. This does not make sense.

SuggestedRemedy

Split the LLDP Local/Remote Packages into 4 distinct Local/Remote packages: Configuration Status, Power vis MDI, Link Aggregation and Frame Size. Update Page 14, lines 24-26 of IEEE 802.3bc D2.1 to reflect this change. Update the last paragraph page 25 of IEEE 802.3at D4.1 such that both classification and power via MDI packages are mandated with the entity implements data link layer classification

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.2.5** *P* **25** *L* **53** # 15

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

IEEE 802.3BC is transfering material from IEEE802.1AB to cover LLDP. As a result the requirement for a package is retained. See page 14 of IEEE 802.3BC, LldpXdot3LocSystemsGroup managed object class (30.12.2). Type 2 PD are required to support LLDP for power classification. The package require places an unnecessary burden on PD.

SuggestedRemedy

Create new packages by spliting up the existing IEEE 802.3 packages. This should be done in IEEE 802.3at and 802.3bc. The clause 33 power should exist by itself.

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.2.5** *P* **26** *L* **2** # 49

Jones, Chad — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

It is mandatory to implement the complete local and remote LLDP package in 802.1AB - even when the TLVs are not sent.

SuggestedRemedy

Split the local and remote packages.

Proposed Response *Response Status* **O**

Cl **30** *SC* **30.2.5** *P* **28** *L* **46** # 36

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

The attributes aLldpXdot3LocResponseTime, aLldpXdot3LocReady and aLldpXdot3LocReducedOperationPowerValue do not belong to this package since they are not fields in the LLDP TLV.

SuggestedRemedy

Move them to the appropriate oPSE/oPD managed object class.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.1** *P* **44** *L* **12** # 23

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

"... it initiates and successfully complete a new ..." is grammatically incorrect

SuggestedRemedy

Make "complete" plural

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.4** *P* **45** *L* **19** # 7

Darshan, Yair — Microsemi Corporation

Comment Type **ER** *Comment Status* **X**

The reason for this variable was "PI ramp voltage".

SuggestedRemedy

Change from "PI voltage"
to: "PI ramp voltage"

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.4** *P* **46** *L* **30** # 12

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

This is not clear.

SuggestedRemedy

Replace "is operating beyond" with
"has successfully completed."

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.4** *P* **46** *L* **48** # 13

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

The accepted change was not made--see D4.0 comment 129.

SuggestedRemedy

Add the following sentence immediately after the variable name.
A variable that is set in an implementation-dependent manner.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.4** *P* **46** *L* **49** # 39

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

Typo "This variables" should be "This variable"

SuggestedRemedy

Change this

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.4** *P* **46** *L* **50** # 24

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

"This variables is provided ..." is grammatically incorrect

SuggestedRemedy

Make "variables" singular

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.4.4** *P* **46** *L* **8** # 11

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

Because Table 33-11 was had "Static" removed and dynamic was not ever shown the text "static and dynamic operating ranges" may confuse the reader.

SuggestedRemedy

Strike occurrence of the phrase:
"static and dynamic operating ranges"
throughout out the document.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.5.1** *P* **53** *L* **38** # 3

Darshan, Yair — Microsemi Corporation

Comment Type **TR** *Comment Status* **X**

The detection voltage and current is specified in Table 33-4 and not in Table 33-11. During detection, only the detection time and the PSE capacitance during detection are specified in Table 33-11.

SuggestedRemedy

Change from Table 33-11 to Table 33-4.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.5.1** *P* **53** *L* **38** # 2

Darshan, Yair — Microsemi Corporation

Comment Type **GR** *Comment Status* **X**

Error in the Table number.
Voltage and current during detection are in Table 33-4 and not in Table 33-11.
The 2nd occurrence of "Table 33-11" that addresses the PSE output capacitance is correct.

SuggestedRemedy

Change line 38 (1st occurrence of "Table 33-11") from Table 33-11 to Table 33-4.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.5.2** *P* **54** *L* **2** # 25

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Equation 33-2 improperly places braces around the entire equation to denote units.

SuggestedRemedy

Adjust braces to only encapsulate only the formula portion.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.5.2** *P* **55** *L* **1** # 26

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Table 33-6 splits an enumerated list from its lead-in. This hinders readability.

SuggestedRemedy

Make Table 33-6 appear at the end of 33.2.5.3 (Rejection criteria).

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.5.5** *P* **55** *L* **38** # 27

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Extraneous use of "then" in sentence ("... then it may optionally ...").

SuggestedRemedy

Strike "then."

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.6.2** *P* **58** *L* **32** # 28

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Font too small for, "This measurement is referenced ..."

SuggestedRemedy

Increase font size to match the rest of the paragraph.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.6.2** *P* **58** *L* **35** # 14

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

Vport was replaced by "Vport_PSE."
Vport_PSE is the allowable range of operation shown in table 33-11.
VPSE is the present PSE PI value.

SuggestedRemedy

Replace occurrences of "Vport" referring to the PSE PI voltage range with "Vport_PSE."
Replace occurrences of "Vport" referring to the PD MDI voltage range with "Vport_PD."
Include Figure 33-25, and the PICs in this replacement policy.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.7** *P* **60** *L* **19** # 16

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

This term does not exist.

SuggestedRemedy

Replace "Vport_min " with "Vport_PSE_min."

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.7.4** *P* **62** *L* **18** # 22

Darshan, Yair — Microsemi Corporation

Comment Type **E** *Comment Status* **X**

33.2.7.4 is part of Table 33-11 item , Continuous curent however the content is addressing the ac waveforme of this current so simple connecting sentence will help to clarify the intent

SuggestedRemedy

1. Add the following sentence prior to line 19:
"In addition to Icon as specified in Table 33-11,"
2. Line 19: Change from "The PSE shall ..."
to "the PSE shall ..."

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.7.5** *P* **63** *L* **5** # 4

Darshan, Yair — Microsemi Corporation

Comment Type **E** *Comment Status* **X**

Figure 33-14: The 50A label is located too far from the Iport axis.

SuggestedRemedy

Move the 50A label closer to the Iport axis.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.2.9** *P* **66** *L* **31** # 5

Darshan, Yair — Microsemi Corporation

Comment Type **T** *Comment Status* **X**

After last changes in figure 3-11, the text "overload current, short circuit" is not relevant.

SuggestedRemedy

Delete "overload current, short circuit" from lines 31-32.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.4** *P* **73** *L* **27** # 29

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Equation 33-8 should have braces indicating units

SuggestedRemedy

Add braces around formula, ohms as units

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.4** *P* **74** *L* **10** # 30

Landry, David — Silicon Laboratories

Comment Type **T** *Comment Status* **X**

In table 33-14, Voltage at the PI entry, "2.7V" does not have enough significant digits.

SuggestedRemedy

Change "2.7" to "2.70"

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.4** *P* **74** *L* **31** # 31

Landry, David — Silicon Laboratories

Comment Type **T** *Comment Status* **X**

In figure 33-18, VI slope annotation does not denote the correct min and max values for the slope per table 33-14.

SuggestedRemedy

Change 23.75 to 23.7 and 26.25 to 26.3

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.4** *P* **74** *L* **32** # 17

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

Replace "23.75 kohms to 36.25 kohms" with Rdetect.

SuggestedRemedy

See problem statement.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.5.1** *P* **75** *L* **33** # 18

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

What is drawing the power is not clear.

SuggestedRemedy

Add to the end of this sentence,
, Pclass_PD.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.7.1** *P* **78** *L* **36** # 38

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

The PD should turn on without oscillation when fed by the entire Vport_PD voltage range.

SuggestedRemedy

Vport_PSE min with series resistance = Rch; Vport_PSE_max with series resistance = 0 ohms and Rch.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.7.2** *P* **78** *L* **49** # 50

Jones, Chad — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

Comment 185 and 216 from D4.0 was not completely implemented. "When the PD is fed by VPort_PD min to VPort_PD max" -- this should be Vport_PSE in the two spots.

SuggestedRemedy

change to "When the PD is fed by VPort_PSE min to VPort_PSE max"

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.3.7.3** *P* **78** *L* **47** # 6

Darshan, Yair — Microsemi Corporation

Comment Type **E** *Comment Status* **X**

The stability test conditions are true for 33.3.7.3 and also for 33.3.7.1 lines 36-38 so the label of 33.3.7.3 should reflect this fact.

SuggestedRemedy

Change from "33.3.7.2.1 System stability test conditions"
to:
"33.3.7.2.1 System stability test conditions during startup and steady state operation"

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.4.4** *P* **86** *L* **28** # 19

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

This compliance requirement is not worst-case and may not ensure interoperability.

SuggestedRemedy

Place Rch in series with figure 33-23 Vsource. Replace the existing text with:
For a PD, the PI that require power shall be terminated as illustrated in Figure 33-23.
Vsourcel in Figure 33-23, is adjusted to 36 Vdc and 57 Vdc, while measuring Ecm_out the PI.
Instruct the Editor to adjust affect PICs to match these requirements.
On page 78, table 33-18, item 10, additional information column, add: "Balanced source impedance; Rch."
See a related comment on PIs, page 87.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.4.4** *P* **87** *L* **3** # 20

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

The accepted action on comment 211 for D4.0 was not made.

SuggestedRemedy

"Change 'PI A' to read 'PI' and delete 'PI B' from the figure, join the two dotted lines to form one single dotted line."
Complete the above by joining the dotted line and removing the lower "PI" text.
Scan for text referring to this figure and "PIs" and change "PIs" to "PI."
This is related to a comment made on page 86.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.5.1.1.2** *P* **94** *L* **34** # 45

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

Second sentence of first paragraph is not correct. Bit 12.14 does not show support. It shows status of the variable pse_dll_enabled

SuggestedRemedy

Strike it.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.5.1.1.2** *P* **94** *L* **41** # 46

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

Only a PSE that supports DLL and allows the capability to be disabled is bound by the requirement on the last sentence.

SuggestedRemedy

A PSE that supports Data Link Layer classification and supports the ability to disable .....

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.3.2** *P* **99** *L* **34** # 33

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Indentation of "pd_max_power" is different from instance below

SuggestedRemedy

Move "pd_max_power" so that it lines up with sentence above

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.3.3** *P* **101** *L* **52** # 34

Landry, David — Silicon Laboratories

Comment Type **E** *Comment Status* **X**

Reference to Table 33-27 is incorrect. Table 33-27 doesn't even exist.

SuggestedRemedy

Change "Table 33-27" to "Table 33-23"

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.3.3** *P* **102** *L* **1** # 40

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

The object names in Table 33-23 are wrong

SuggestedRemedy

Add a column for entity: PSE and PD.
Both PSE and PD entities have two object classes: oLldpXdot3LocSystemsGroup and oLldpXdot3RemSystemsGroup
Move the attributes to appropriate row PSE+oLldpXdot3LocSystemsGroup, PD+oLldpXdot3LocSystemsGroup, PSE+oLldpXdot3RemSystemsGroup and PD+oLldpXdot3RemSystemsGroup

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.3.4** *P* **104** *L* **12** # 42

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

Transition from RUNNING to PD POWER REALLOCATION 2. Typo "PDMaxPowerValuej"

SuggestedRemedy

Fix this

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.3.4** *P* **104** *L* **18** # 41

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

Transition from RUNNING to PD POWER REVIEW. We moved away from using CHANGED

SuggestedRemedy

Replace MirroredPSEAllocatedPowerValue CHANGED with MirroredPSEAllocatedPowerValue != TempVar

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.3.5** *P* **104** *L* **18** # 21

Schindler, Frederick — Cisco Systems, Inc.

Comment Type **ER** *Comment Status* **X**

The accept solution to comment 165 on D4.0 was not made.

SuggestedRemedy

ER Editor: make this change after making other chagnes to PD SM.
In the INITIALIZE state, add TempVar <- PD_INITIAL_VALUE
change "MirroredPSEAllocatedPowerValue CHANGED" to
"MirroredPSEAllocatedPowerValue != TempVar"

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.4.1** *P* **105** *L* **20** # 43

Vetteth, Anoop — Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

There are several minor corrections to this subclause based on the changes to the SM during the last commenting cycle

SuggestedRemedy

Change the sub-clause to the following:
"A PSE is considered to be in sync with the PD when the value of the PSEAllocatedPowerValue matches the value of MirroredPSEAllocatedPowerValueEcho. When the PSE is not in sync with the PD, the PSE is only allowed to decrease its power allocation.
During normal operation, the PSE is in the RUNNING state. If the PSE wants to initiate a change in the PD allocation, the local_system_change is asserted and the PSE enters the PSE POWER REVIEW state where a new power allocation value PSE_New_Value is computed. If the PSE is in sync with the PD or if PSE_New_Value is smaller than PSEAllocatedPowerValue, it enters the MIRROR UPDATE state where PSE_New_Value is assigned to PSEAllocatedPowerValue. It also updates PDRequestedPowerValueEcho and returns to the RUNNING state.
If the PSE machine sees a change to the previously stored MirroredPDRequestedPowerValue, it recognizes a request by the PD to change its power allocation. It entertains this request only when it is in sync with the PD. The PSE examines the request by entering the PD POWER REQUEST state. A new power allocation value PSE_New_Value is computed in this state. It then enters the MIRROR UPDATE state where PSE_New_Value is assigned to PSEAllocatedPowerValue. It also updates PDRequestedPowerValueEcho and returns to the RUNNING state."

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.6.4.2** *P* **105** *L* **37** # 44

Vetteth, Anoop Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

There are several minor corrections to this subclause based on the changes to the SM during the last commenting cycle

SuggestedRemedy

A PD is considered to be in sync with the PSE when the value of the PDRequestedPowerValue matches the value of MirroredPDRequestedPowerValueEcho. The PD is not allowed to change its maximum power draw or the requested power value when it is not in sync with the PSE.
During normal operation the PD is in the RUNNING state. If the PD sees a change to the previously stored MirroredPSEAllocatedPowerValue or local_system_change is asserted by the PD so as to change its power allocation, it enters the PD POWER REVIEW state. In this state, the PD evaluates the change and generates an updated power value called PD_New_Value. If PD_New_Value is smaller than the PDMaxPowerValue, it updates the PDMaxPowerValue in the PD POWER REALLOCATION 1 state. The PD state machine finally enters the MIRROR UPDATE state where PD_New_Value is assigned to PDRequestedPowerValue. It also updates PSEAllocatedPowerValueEcho and returns to the RUNNING state.
In the above flow if PD_New_Value is greater than PDMaxPowerValue then the PD state machine waits until it is in sync with the PSE and the PSE grants the higher power value. When this condition arises the PD enters the PD POWER REALLOCATION 2 state. In this state the PD state machine assigns PDMaxPowerValue to PDRequestedPowerValue and returns to the RUNNING state.

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.8.2.4** *P* **110** *L* **19** # 47

Vetteth, Anoop Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

What classification is this - DLL or PL

SuggestedRemedy

Clarify this

Proposed Response *Response Status* **O**

Cl **33** *SC* **33.8.3.2** *P* **115** *L* **18** # 48

Vetteth, Anoop Cisco Systems, Inc.

Comment Type **TR** *Comment Status* **X**

Value/Comment says Ihild_min. This should be Ihold_max

SuggestedRemedy

Fix this

Proposed Response *Response Status* **O**