Cl **FM** *SC* **FM** *P* **12** *L* **53** # 205

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *10BASE-T1S*

"and optional provision of power over single balanced pair multidrop mixing segments based on the 10BASE-T1S specified in Clause 147 of IEEE Std 802.3-2022" doesn't read right, it sounds like the Provision of power is based on clause 147

SuggestedRemedy

Replace Amendment description with "Amendment X- This amendment includes changes to IEEE Std 802.3-2022 and adds Clause 168 and Clause 169. This amendment adds Physical Layer specifications and management parameters for enhancement of multidrop 10 Mb/s operation based on the 10BASE-T1S PHY specified in Clause 147 of IEEE Std 802.3-2022, and specifies optional provision of power over single balanced pair mixing segments."

Response *Response Status* **C**

ACCEPT.

Cl **45** *SC* **45.2.1.234** *P* **30** *L* **3** # 267

Baggett, Tim Microchip

Comment Type **E** *Comment Status* **A** *10BASE-T1S*

Change 10BASE-T1M/T1S to 10BASE-T1S/T1M.
I expect that users of the 802.3 specification will make extensive use of the search function. The current use of 10BASE-T1M/T1S breaks this ability, even if it is alphabetical.

SuggestedRemedy

Change 10BASE-T1M/T1S to 10BASE-T1S/T1M throughout the document.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Commenter's proposed change, except to allow both searches to work.
Change "10BASE-T1M/T1S" to "10BASE-T1M / 10BASE-T1S" globally. (note to include spaces)

Cl **90** *SC* **90.1** *P* **38** *L* **7** # 213

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T** *Comment Status* **A** *10BASE-T1S*

"The TSSI is defined for 10BASE-T1S (see Clause 147) in full- duplex and point-to-point half-duplex modes of operation, as well as Clause 168 in half-duplex operation, and for other PHY types in full- duplex mode." - if it works for clause 168, it works for clause 147 in multidrop mode;   I believe the reason 802.3de did not add in multidrop here was because of the project being scope-limited to point-to-point.

SuggestedRemedy

Change sentence to read "The TSSI is defined for 10BASE-T1S (see Clause 147) in full-duplex and point-to-point half-duplex modes
of operation, as well as 10BASE-T1S / M (Clause 147 and Clause 168) in half-duplex multidrop operation, and for other PHY types in full- duplex mode.."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
Response changed to align with usage of "half duplex" rather than "half-duplex" and spelling out of 10BASE-T1S / 10BASE-T1M

Change sentence to read "The TSSI is defined for 10BASE-T1S (see Clause 147) in full-duplex and point-to-point half-duplex modes of operation</UL>, as well as 10BASE-T1S and 10BASE-T1M (Clause 147 and Clause 168) in half duplex multidrop operation,</UL> and for other PHY types in full-duplex mode."

Cl **90** *SC* **90.1** *P* **38** *L* **9** # 251

Brandt, David Rockwell Automation

Comment Type **E** *Comment Status* **A** *10BASE-T1S*

Clause 168 ONLY operates in half-duplex.

SuggestedRemedy

Change from "Clause 168 in half-duplex operations" to "Clause 168".

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Consider with comment 213.
OBE by new wording

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **10BASE-T1S** Page 1 of 24
6/14/2024 8:07:44 AM

Cl **168**　　*SC* **168.1.1**　　　　*P* **55**　　*L* **16**　　# **253**

Brandt, David　　　　　　　　　Rockwell Automation

Comment Type **T**　　*Comment Status* **R**　　　　*10BASE-T1S*

Figure 168-1 shows no PMD in the stack, wheras Figure 22-1 shows a PMD. OPEN Alliance invented a PMD as a preferred implementation.

SuggestedRemedy

Group to discuss whether we want a PMD definition as an "enhancement" in Clause 168.

Response　　　　　*Response Status* **C**

REJECT.
Discussion highlighted potential uses for a PMD for different isolation environments, but no consensus to establish different PMDs at this time.

Cl **FM**　　*SC* **FM**　　　　*P* **13**　　*L* **3**　　# **268**

Baggett, Tim　　　　　　　　　Microchip

Comment Type **E**　　*Comment Status* **A**　　　　*DPLCA*

Should the 802.3da amendment description include the addition of Dynamic PLCA to Clause 148?

SuggestedRemedy

Consider adding to the end of the 802.3da amendment paragraph:
"Additionally, this amendment includes changes to Clause 148 introducing Dynamic PLCA."

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
(Commenter's response with description of dynamic PLCA):
Add the following to the description of the 802.3da amendment:
"Additionally, this amendment includes additions and changes to Clause 148 to automatically allocate node IDs (Dynamic PLCA)."

Cl **79**　　*SC* **79.3.9.3**　　　　*P* **37**　　*L* **8**　　# **249**

Brandt, David　　　　　　　　　Rockwell Automation

Comment Type **E**　　*Comment Status* **A**　　　　*DPLCA*

Table 79-21, Bit 1 is described as "status", but refers to AdminState.

SuggestedRemedy

Change "Notes" for Bit 1 to: "30.16.1.2" (i.e., aPLCAStatus)

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
(corrected pointer reference from 30.16.1.2 PLCA device actions to 30.16.1.1.2 PLCA status)
Change "Notes" for Bit 1 to: "30.16.1.1.2"

Cl **79**　　*SC* **79.3.9.3**　　　　*P* **37**　　*L* **10**　　# **269**

Schreiner, Stephan　　　　　　　Rosenberger Hochfrequenztechnik

Comment Type **E**　　*Comment Status* **A**　　　　*DPLCA*

Table 79-21: Bit 0 and Bit 2 as well as Bit 1 and Bit 3 have the same Field definitions.

SuggestedRemedy

Bit 2 and Bit 3 should be D-PLCA instead of PLCA

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Accomodated by comments 247 and 250. Note that Bit 3 isn't just D-PLCA status, bt points to the aDPLCAAdminState. Comment 250 corrects the description too.

Cl **79**　　*SC* **79.3.9.3**　　　　*P* **37**　　*L* **11**　　# **247**

Brandt, David　　　　　　　　　Rockwell Automation

Comment Type **E**　　*Comment Status* **A**　　　　*DPLCA*

Table 79-21, Bit 2 should refer to DPLCA per 30.16.1.1.14

SuggestedRemedy

Change "Field definitions" for Bit 2 to: "Bit 2- DPLCA supported"

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

(function is called D-PLCA in almost all places, not DPLCA. The management object omits the - (presumably for syntax).)

Change "Field definitions" for Bit 2 to: "Bit 2- D-PLCA supported"

Cl **79**　　*SC* **79.3.9.3**　　　　*P* **37**　　*L* **13**　　# **248**

Brandt, David　　　　　　　　　Rockwell Automation

Comment Type **E**　　*Comment Status* **A**　　　　*DPLCA*

Table 79-21, Bit 3 should refer to DPLCA per 30.16.1.1.11

SuggestedRemedy

Change "Field definitions" for Bit 3 to: "Bit 3- DPLCA..."

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
(function is called D-PLCA in almost all places, not DPLCA. The management object omits the - (presumably for syntax).)

Change "Field definitions" for Bit 3 to: "Bit 3- D-PLCA..."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **DPLCA**　　Page 2 of 24
6/14/2024 8:07:44 AM

Cl **79**   *SC* **79.3.9.3**   *P* **37**   *L* **13**   # 250

Brandt, David   Rockwell Automation

Comment Type **T**   *Comment Status* **A**   *DPLCA*

Table 79-21, Bit 3 is described as "status", but refers to AdminState. Additionally, there is no aDPLCAStatus to reference because plca_status is common with DPLCA.

SuggestedRemedy

Change Bit 3: "Field definitions" to "Bit 3- DPLCA admin state" and "Value/Values" to "1 = enabled" and "0 = disabled".

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(function is called D-PLCA in almost all places, not DPLCA. The management object omits the - (presumably for syntax).)

Change Bit 3: "Field definitions" to "Bit 3- D-PLCA admin state" and "Value/Values" to "1 = enabled" and "0 = disabled".

Cl **1**   *SC* **1.3**   *P* **21**   *L* **3**   # 206

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *Editorial*

Noone has suggested new normative references.

SuggestedRemedy

Delete Section 1.3 and editing instruction (lines 3 to 7) from the draft.

Response   *Response Status* **C**

ACCEPT.

Cl **1**   *SC* **1.4**   *P* **21**   *L* **21**   # 178

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *Editorial*

We need a definition for MPI.

SuggestedRemedy

add a new 1.4.405b (and renumber existing 1.4.405b to 1.4.405c): Multidrop Power Interface (MPI): The mechanical and electrical interface between the Multidrop Power Sourcing Equipment (MPSE) or Multidrop Powered Device (MPD) and the transmission medium.
This purely copies the PI definition. do we need to replace "transmission medium" with "mixing segment"?

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Implement commenter's suggested text with "transmission medium". The mixing segment may or may not be the transmission medium for the power, but transmission medium fits both.

add a new 1.4.405b (and renumber existing 1.4.405b to 1.4.405c): Multidrop Power Interface (MPI): The mechanical and electrical interface between the Multidrop Power Sourcing Equipment (MPSE) or Multidrop Powered Device (MPD) and the transmission medium.

Cl **45**   *SC* **45.2.1.214.2**   *P* **29**   *L* **35**   # 209

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *Editorial*

The new text here is just a duplicate of the table. The change is good, as the paragraph is clunky, but perhaps we can do better. Suggest we do not duplicate the contents of Table 47-178.

SuggestedRemedy

Replace "The mapping of bits is as follows:..." (and subsequent list)" with "See description in Table 45-178 for the mapping of bits."

Response   *Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Editorial**   Page 3 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:44 AM
SORT ORDER: Topic

Cl **79** *SC* **79.3.9.2**   *P* **36**   *L* **45**   # 211

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T** *Comment Status* **A**   *Editorial*

"of the local IEEE 802.3 LAN" - what is the "local LAN" I think this should say the "local IEEE 802.3 LAN station" as 79.3.9.1 says, but I'm still not sure what "local LAN station" is.

SuggestedRemedy

Insert "station" after LAN on line 45. Consider whether the word "local" (is needed on lines 41 and 45

Response   *Response Status* **C**

ACCEPT.

Cl **90** *SC* **90.1**   *P* **38**   *L* **7**   # 163

Maguire, Valerie   Copperopolis; aff'l w/ CME Consulting

Comment Type **E** *Comment Status* **A**   *Editorial*

"Half duplex" appears 282 times in 802.3-2022 and "half-duplex" appears 37 times.

SuggestedRemedy

Grant Editor's license to replace all occurances of "half-duplex" with "half duplex". Locations found with a search include: P38 - L8, P38 - L9, P54 - L24, P56 - L10 (2 locations)

Response   *Response Status* **C**

ACCEPT.

Cl **148** *SC* **148.4.4.6**   *P* **42**   *L* **4**   # 265

Baggett, Tim   Microchip

Comment Type **E** *Comment Status* **R**   *Editorial*

Cl 1.2: Qualifiers described by short phrases are enclosed in parentheses. The Term "!dplca_en" should be enclosed in parenthesis.
More examples are identified in the PDF related to this comment.

SuggestedRemedy

See Baggett_3da_D1p2_CL148_StateDiagrams.pdf and enclose highlighted terms with parenthesis.

This change applies to:
Fig 148-3 P42
Fig 148-4 P43
Fig 148-8 P50

In general, if the transition contained only a single boolean term such as "!variable" or "variable = CONST" I then left it alone and unhighlighted as this seemed to be consistent and more readable.

Response   *Response Status* **C**

REJECT.
While the commenter is correct that this is the guidance in clause 1.2, the style in most of IEEE Std 802.3 does not follow this. This goes way back, see, e.g. Figures 33-9, 36-5, 36-7, 46-11, 48-8, 55-15, 97-12, etc..

Cl **148** *SC* **148.4.4.6**   *P* **42**   *L* **26**   # 166

Jones, Chad   Cisco Systems, Inc.

Comment Type **E** *Comment Status* **R**   *Editorial*

off page connectors are not consistent. On page 42, they have arrows into the pentagon, on page 43 they do not. Looking at Clause 145, the convention should be to have the arrow head. Therefore, they need added to Figure 148-4 part b in 4 places
We could decide to remove the arrows, but that means all my follow on comments will have to be AIP and swapped to give instructions to remove the arrowheads that I am not commenting on.

SuggestedRemedy

add arrowheads to the lines going to the off page connectors in 4 places:
pg 43, line 18 ("C"); line 22 ("B"); line 29 ("D"); line 52 ("B")

Response   *Response Status* **C**

REJECT.
This is in the base standard. Convention is arrowhead into inverted pentagon. (point up).
See, e.g., clause 82 (40GBASE-R) or similar optical "Pete Anslow" clauses…

Suggest we don't change, but can do it on revision, or if figure is redrawn.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Editorial** Page 4 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:44 AM
SORT ORDER: Topic

Cl **148** *SC* **148.4.7.1** *P* **47** *L* **8** # 264

Baggett, Tim Microchip

Comment Type **E** *Comment Status* **A** *Editorial*

Second sentence of paragraph should probably refer to "nodes" in plural.
"D-PLCA enables node to select a unique node ID..."

SuggestedRemedy

Change: "D-PLCA enables node to select a unique node ID..."

To: "D-PLCA enables nodes to select a unique node ID..."
Or: "D-PLCA enables a node to select a unique node ID..."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
(first option, but correcting plural construction)

Change: "D-PLCA enables node to select a unique node ID..."

To: "D-PLCA enables nodes to select unique node IDs..."

Cl **168** *SC* **168.4.2.7** *P* **65** *L* **4** # 168

Jones, Chad Cisco Systems, Inc.

Comment Type **E** *Comment Status* **R** *Editorial*

this off page connector is a circle. Should be a pentagon? Does the circle mean something different?
Also, the pentagons on this page "point" the wrong way. The tip of the pentagon should point the same way as the arrow?

SuggestedRemedy

fix the off page connectors in Fig 168-5, part a (pg 65): B (line 4) is a pentagon pointing in, C (line 22) and A (line 51) are pointing out
part b (pg 66): A (line 1) and C (line 9) pentagon pointing in, B (line 34) pentagon pointing out

Response *Response Status* **C**

REJECT.
Convention is arrowhead into inverted pentagon. (point up). See, e.g., clause 82 (40GBASE-R) or similar optical "Pete Anslow" clauses…

Cl **168** *SC* **168.4.3.7** *P* **70** *L* **6** # 169

Jones, Chad Cisco Systems, Inc.

Comment Type **E** *Comment Status* **R** *Editorial*

off page connectors, circles and pentagons pointing the wrong way

SuggestedRemedy

fix the off page connectors in Fig 168-7, part a (pg 70): B (line 6) is a pentagon pointing in, D (line 17) and A (line 48) are pointing out
part b: A (line 1) and D (line 26) pentagon pointing in, B (line 22), B (line 35), B (line 44) pentagon pointing out

Response *Response Status* **C**

REJECT.
Convention is arrowhead into inverted pentagon. (point up). See, e.g., clause 82 (40GBASE-R) or similar optical "Pete Anslow" clauses…

Cl **168** *SC* **168.6.3** *P* **77** *L* **32** # 256

Brandt, David Rockwell Automation

Comment Type **T** *Comment Status* **A** *Editorial*

Figure 168-13 measurement should be confirmed at both TC1 and TC2. See NOTE in Figure 168-17.

SuggestedRemedy

Add note similar to line 21 at line 31 "Testing at TC2 shown, Balun connections interchange with load for testing at TC1)"

Response *Response Status* **C**

ACCEPT.

Cl **168** *SC* **168.12.4.6** *P* **94** *L* **16** # 244

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *Editorial*

No need for TBD in Value/Comment since the section is referenced.

SuggestedRemedy

Delete TBD from Value/Comment.

Response *Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Topic* **Editorial** Page 5 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn 6/14/2024 8:07:44 AM
SORT ORDER: Topic

Cl **169**   *SC* **169.1**   *P* **96**   *L* **9**   # 175

Jones, Chad   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status* **A**   *Editorial*

"MPoE is intended to provide a single pair Ethernet Physical Layer device with an interface to both the power and data." - we have a way to power SPE devices in clause 104. This is powering multidrop SPE devices, so we need to add multidrop to this sentence.

SuggestedRemedy

add multidrop to sentence: MPoE is intended to provide a MULTIDROP single pair Ethernet Physical Layer device with an interface to both the power and data.

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(remove statement of intent, and also fix case of MULTIDROP in suggested remedy)

Change "MPoE is intended to provide a single pair Ethernet Physical Layer device with an interface to both the power and data."

to "MPoE provides a multidrop single pair Ethernet Physical Layer device with an interface to both the power and data."

Cl **169**   *SC* **169.1.2**   *P* **96**   *L* **41**   # 176

Jones, Chad   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status* **A**   *Editorial*

"MPoE is an optional power entity to be used in conjunction with supported single pair Ethernet Physical Layers." - do we need multidrop in this sentence?

SuggestedRemedy

add multidrop to sentence: MPoE is an optional power entity to be used in conjunction with supported MULTIDROP single pair Ethernet Physical Layers.

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(correct case in response)

Change "supported single pair" to "supported multidrop single pair"

Cl **169**   *SC* **169.1.2**   *P* **96**   *L* **43**   # 177

Jones, Chad   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status* **A**   *Editorial*

We've added MPI and the first appearance is in Fig 169-1 but we don't define it.

SuggestedRemedy

Add a new second-to last-sentence in the first paragraph of 169.1.2: The power is applied to the Multidrop Power Interface (MPI).

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(add cross reference to definition, if comment 178 is accepted).

Add a new second-to last-sentence in the first paragraph of 169.1.2: The power is applied to the Multidrop Power Interface (MPI)"

If new definition is added by comment 178, also add "(See 1.4.405b)"

Cl **169**   *SC* **169.1.2**   *P* **97**   *L* **19**   # 229

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type   **T**   *Comment Status* **A**   *Editorial*

The Editor's note should be represented in the figure.

SuggestedRemedy

Delete editor's note at P97 L18-22, add a note similar to that on Figure 169-2 to Figure 169-1, "NOTE - The MPI may not be exposed. If it
is not exposed, limits are calculated from values at TC1 and TC2."

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(improved language)
Delete editor's note at P97 L18-22, add a note similar to that on Figure 169-2 to Figure 169-1, "NOTE - The MPI may not be exposed. If it is not exposed, specified values are calculated from values observed at TC1 and TC2."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Editorial**   Page 6 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:44 AM
SORT ORDER: Topic

Cl **169**　　*SC* **169.3**　　　　　*P* **98**　　*L* **4**　　　# 195

Jones, Chad　　　　　　　Cisco Systems, Inc.

Comment Type **T**　　*Comment Status* **A**　　　*Editorial*

"An MPSE may transition between Type 0 and Type 1 during IDLE". no reason to enumerate type 0 and type 1 in this sentence. Genericizing this prepares the text for added types, in case we expand votlage or current.

SuggestedRemedy

change: "An MPSE may transition between Type 0 and Type 1 during IDLE"
to: "An MPSE may transition between types during IDLE"

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.4.4.5**　　　*P* **103**　　*L* **52**　　　# 181

Jones, Chad　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　*Editorial*

More off page transitions without arrowhead on the connecting lines.

SuggestedRemedy

add arrowhead in 5 places: Pg 103 A (line 52) and C (line 52); page 104 A (line 41), D (line 43), D (line 52)

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Per convention, editor to ensure all entry blocks are circles, pentagons are inverted (point up), arrowheads go into the pentagons' points

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Cl **169**　　*SC* **169.4.5**　　　*P* **105**　　*L* **14**　　　# 182

Jones, Chad　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　*Editorial*

Should we point the readers where to find info about overload, short circuit, or other fault? Additionally, we remove power because of the absence of MPS (or TPS). Add that here too.

SuggestedRemedy

change to: "Additionally, while voltage is applied, the MPSE monitors the current drawn and removes power if it detects an overload (see 169.4.9), short-circuit or other fault (see 169.4.10), or for the absence of MPS (See 169.4.11)" [or TPS - dependent on other decisions].

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
change to: "Additionally, while voltage is applied, the MPSE monitors the current drawn and removes power if it detects an overload (see 169.4.9), short-circuit or other fault (see 169.4.10), or for the absence of TPS (See 169.4.11)"
(see comment 194)

Cl **169**　　*SC* **169.4.8**　　　*P* **106**　　*L* **51**　　　# 186

Jones, Chad　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　*Editorial*

P{MPSE_16U} is awfully specific. Do we need to be that specific? Can it just be P{MPSE}?

SuggestedRemedy

Change P{MPSE_16U} to P{MPSE}. Also on pg 107, line 9 and line 30. further, editors given license to fix any other occurrences (search finds one more on page 98, line 30)

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.5.3.2**　　　*P* **109**　　*L* **37**　　　# 233

Zimmerman, George　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**　　*Comment Status* **A**　　　*Editorial*

V_Discovery_th is missing from the constants

SuggestedRemedy

Add V_Discovery (in alphabetic order) to 169.5.3.2 with definition "Mark discovery threshold voltage (see Table 169-7)"

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.5.3.3**　　　*P* **110**　　*L* **51**　　　# 241

Zimmerman, George　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　*Editorial*

MPD TC should be MPD MPI.

SuggestedRemedy

Change MPD TC to MPD MPI.

Response　　　　　*Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　*Topic* **Editorial**　　Page 7 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn　　6/14/2024 8:07:44 AM
SORT ORDER: Topic

Cl **169**   *SC* **169.5.3.6**   *P* **113**   *L* **51**   # 191

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *Editorial*

More off page transitions without arrowhead on the connecting lines.

SuggestedRemedy

add arrowhead in 56 places: part a page 113, C (line 51), A and B line 53;
part b page 114, A (line 47), B (line 52);
part c page 115, B (line 38)

Response   *Response Status* **C**

ACCEPT.

Cl **169**   *SC* **169.5.5.3**   *P* **118**   *L* **24**   # 194

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *Editorial*

last cycle we changed MPS to TPS (likely an attempt to prevent confusing MPS and MPSE). I don't mind either term but we need to pick one and be consistent. The PSE section had MPS.

SuggestedRemedy

Either search document for MPS and replace with TPS, with editorial license to adjust any text around (i.e. to replace "maintain" with "transmit" as needed)
OR
replace transmit with maintain and TPS with MPS in this section, with editorial license to adjust any other occurrences of TPS outside of 169.5.5.3. (search implies TPS is only found in 169.5.5.3)

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(we did agree to go with TPS)
search document for MPS and replace with TPS, with editorial license to adjust any text around (i.e. to replace "maintain" with "transmit" as needed)

Cl **168**   *SC* **168.8**   *P* **81**   *L* **28**   # 219

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *Editors Note*

Editor's note has been answered by text, no longer needed.

SuggestedRemedy

Delete editor's note below 3rd paragraph of 168.8 (lines 27-32)

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.8.2**   *P* **83**   *L* **3**   # 172

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *Editors Note*

Didn't we agree to delete this editors note last cycle?
Regardless, this note has served it's purpose and is no longer needed. Delete

SuggestedRemedy

Delete the editors note on pg 83, line 3

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.8.2**   *P* **83**   *L* **3**   # 223

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Editors Note*

147.7.2 is no longer starting point - delete note

SuggestedRemedy

Delete editor's note at P83 L2-6

Response   *Response Status* **C**

ACCEPT.

Cl **30**   *SC* **30.16.1.1.14**   *P* **26**   *L* **33**   # 208

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Editors Notes*

Editor's note has served its purpose of evaluation by several cycles.

SuggestedRemedy

delete editors note

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168**   *P* **54**   *L* **7**   # 214

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *Editors Notes*

After having reviewed the draft, Delete item 3 in editor's note - no longer needed.

SuggestedRemedy

Delete item 3 in editor's note

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Remove the entire editors note at the beginning of clause 168 (P54 L2-10)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Editors Notes**   Page 8 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:44 AM
SORT ORDER: Topic

Cl **168** *SC* **168.2** *P* **56** *L* **3** # 165

Maguire, Valerie Copperopolis; aff'l w/ CME Consulting

Comment Type **E** *Comment Status* **A** *Editors Notes*

A short description of the operation of 10BASE-T1M is provided.

SuggestedRemedy

Delete Editor's note on line 3-7.

Response *Response Status* **C**

ACCEPT.

Cl **168** *SC* **168.2** *P* **56** *L* **3** # 215

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *Editors Notes*

Note has been answered with text and is no longer needed

SuggestedRemedy

Delete Editor's note at 168.2

Response *Response Status* **C**

ACCEPT.

Cl **168** *SC* **168.5** *P* **73** *L* **35** # 170

Jones, Chad Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *Editors Notes*

Didn't we agree to delete this editors note last cycle?
Regardless, this note has served it's purpose and is no longer needed. Delete

SuggestedRemedy

Delete the editors note on pg 73, line 35

Response *Response Status* **C**

ACCEPT.

Cl **168** *SC* **168.5** *P* **73** *L* **35** # 217

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *Editors Notes*

Note has served its purpose for several cycles

SuggestedRemedy

Delete editor's note at 168.5 below Figure 168-10.

Response *Response Status* **C**

ACCEPT.

Cl **169** *SC* **169.1.2** *P* **96** *L* **35** # 227

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *Editors Notes*

Editor's note has been answered by text, no longer needed.

SuggestedRemedy

Delte editor's note at 169.1.2 (P96 L35-39)

Response *Response Status* **C**

ACCEPT.

Cl **FM** *SC* **FM** *P* **8** *L* **12** # 245

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *EZ*

"Task Force name" should not be in Chair's title…

SuggestedRemedy

Delete "Task Force name" on P8 L12 from chair's title

Response *Response Status* **C**

ACCEPT.

Cl **FM** *SC* **FM** *P* **9** *L* **1** # 204

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *EZ*

Stds board secretary is now Alpesh Shah

SuggestedRemedy

Change Konstantinos Karachalios to Alpesh Shah

Response *Response Status* **C**

ACCEPT.

Cl **1** *SC* **1.4.405a** *P* **21** *L* **19** # 207

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E** *Comment Status* **A** *EZ*

Multidrop Powered Device and Multidrop Powe Sourcing Equipment definitions need to be bold.

SuggestedRemedy

Change format so the words defined in 1.4.405a and 1.4.405b are bold.

Response *Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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Cl **148** *SC* **148.4.4.6** *P* **43** *L* **44** *#* 167

Jones, Chad Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *EZ*

the transition from COMMIT to ABORT, the arrowhead does not touch the boundary of ABORT

SuggestedRemedy

make arrowhead for the transition from COMMIT to ABORT touch the boundary of ABORT.

Response *Response Status* **C**

ACCEPT.

Cl **148** *SC* **148.4.7.5** *P* **50** *L* **2** *#* 262

Baggett, Tim Microchip

Comment Type **E** *Comment Status* **A** *EZ*

Transition into DISABLED state has misspelled variable "ldplca_en" in second term. Term should refer to variable "dplca_en"

SuggestedRemedy

Change "plca_reset + !ldplca_en + !plca_en"
to "plca_reset + !dplca_en + !plca_en"

Response *Response Status* **C**

ACCEPT.

Cl **148** *SC* **148.4.7.5** *P* **50** *L* **29** *#* 263

Baggett, Tim Microchip

Comment Type **E** *Comment Status* **A** *EZ*

Second entry in LEARNING state refers to DPLCA_AGING in caps. This is a variable (defined in 148.4.7.2 P47L52) and not a constant. As such it should be in lower case letters.

SuggestedRemedy

Change "DPLCA_AGING" to "dplca_aging"

Response *Response Status* **C**

ACCEPT.

Cl **168** *SC* **168.2** *P* **56** *L* **9** *#* 266

Baggett, Tim Microchip

Comment Type **E** *Comment Status* **A** *EZ*

Sentence incorrectly refers to the "10BASE-T1S PHY defined in Clause 148". Clause 148 is PLCA. The 10BASE-T1S reference should be to Clause 147.

When corrected, the sentence will still be awkwardly repetitive referring to the "10BASE-T1S PHY defined in Clause 147 when the Clause 147 PHY is running half-duplex in multidrop mode". Delete repetition.

Finally, "operation ON the" is awkwards and should probably be "operation OF the".

SuggestedRemedy

Change: "The 10BASE-T1M PHY builds on the operation on the 10BASE-T1S PHY defined in Clause 148 when the Clause 147 PHY is running half-duplex in multidrop mode."

To: "The 10BASE-T1M PHY builds on the operation of the 10BASE-T1S PHY defined in Clause 147 when running half-duplex in multidrop mode."

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.
(align with usage of half duplex)

Change: "The 10BASE-T1M PHY builds on the operation on the 10BASE-T1S PHY defined in Clause 148 when the Clause 147 PHY is running half-duplex in multidrop mode."

To: "The 10BASE-T1M PHY builds on the operation of the 10BASE-T1S PHY defined in Clause 147 when running half duplex in multidrop mode."

Cl **168** *SC* **168.2** *P* **56** *L* **12** *#* 254

Brandt, David Rockwell Automation

Comment Type **E** *Comment Status* **A** *EZ*

Units should have space.

SuggestedRemedy

Change "50m" to "50 m".

Response *Response Status* **C**

ACCEPT.
(note to editor - nonbreaking space)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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Cl **168**   *SC* **168.6.3**   *P* **77**   *L* **29**   # 171

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *EZ*

rouge "0" and "180" floating in the drawing. Delete these.

SuggestedRemedy

Delete the "0" and "180" that seem to have no purpose in Fig 168-13

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
OBE - see comment 255.

Cl **168**   *SC* **168.6.3**   *P* **77**   *L* **32**   # 255

Brandt, David   Rockwell Automation

Comment Type **E**   *Comment Status* **A**   *EZ*

Figure 168-13, 180 is misplaced from the BALUN.

SuggestedRemedy

Move "180" to just below "0".

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.9.2**   *P* **85**   *L* **23**   # 259

Brandt, David   Rockwell Automation

Comment Type **E**   *Comment Status* **A**   *EZ*

Missing word.

SuggestedRemedy

Change "determined Equation" to "determined using Equation".

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.9.4**   *P* **85**   *L* **41**   # 173

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *EZ*

Table 168-4 allowed to span across pages. This table is not that big that it needs to span pages. Can we force it to stay together?

SuggestedRemedy

change table attributes to disallow spanning pages.

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.10.2.1**   *P* **86**   *L* **48**   # 174

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *EZ*

Text is awkwardly spaced, looks like spacing setting is set to "justify" instead of "align left". Also on page 87, line 5

SuggestedRemedy

change line spacing attributes to match the surrounding text, i.e. "align left" instead of "whole line justify".

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.12.4.7**   *P* **94**   *L* **27**   # 271

Schreiner, Stephan   Rosenberger Hochfrequenztechnik

Comment Type **T**   *Comment Status* **A**   *EZ*

Item TCI1 Feature says without PMA loading. This is in contradiction to e.g. 168.9.1 " PMA loads specified for the TCI are to be connected if the
DTE is electrically disconnected from the TCI.". Similiar for TCI3

SuggestedRemedy

Remove TCI1 and TCI3 from table

Response   *Response Status* **C**

ACCEPT.

Cl **169**   *SC* **169.3**   *P* **98**   *L* **19**   # 230

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *EZ*

The top row of Table 169-1 got messed up. The word contact should not be there, and System type should not be bold.

SuggestedRemedy

Delete header "Contact" in first column (leaving header blank), Make first body row (System type) not bold.

Response   *Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **EZ**   Page 11 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **169**　　*SC* **169.4**　　　　*P* **98**　　*L* **42**　　# 179

Jones, Chad　　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　　*EZ*

item e), we added react in the last cycle. Reading again it should have been "react to".

SuggestedRemedy

Add "to" in item e): "To sense, react TO, and recover from…"

Response　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Add "to" in item e): "To sense, react to, and recover from…"

Cl **169**　　*SC* **169.4.3**　　　*P* **99**　　*L* **18**　　# 180

Jones, Chad　　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　　*EZ*

PI should be MPI.

SuggestedRemedy

replace PI with MPI.

Response　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.4.6**　　　*P* **105**　　*L* **34**　　# 184

Jones, Chad　　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　　*EZ*

two errors on this line. An extra "it" after MPSE that isn't needed.
V_{Discovery} looks like a cut paste error where _{Discovery} should be subscript without the curly brackets or underscore.

SuggestedRemedy

delete "it" after MPSE and make V_{Discovery} match Table 169-3 item 2

Response　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.4.6**　　　*P* **105**　　*L* **36**　　# 185

Jones, Chad　　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　　*EZ*

three things on this line:
DISCOVERY_LOW again
need "the" before discovery event current
and need a comma after discovery event current

SuggestedRemedy

change to: "entrance of a DISCOVERY_LOWx state and measurement of the discovery event current, IDiscovery."

Response　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.4.10**　　*P* **107**　　*L* **46**　　# 187

Jones, Chad　　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　　*EZ*

PI should be MPI.

SuggestedRemedy

change PI to MPI

Response　　　　*Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **EZ**

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Cl **169**   *SC* **169.4.11**   *P***107**   *L***53**   #   188

Jones, Chad   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status*   **A**   *EZ*

need an "if" before "short_circuit_detected is true" but I think this is better as a bulletized list.

SuggestedRemedy

either add to "…if overload_detected is TRUE, IF short_circuit_detected is TRUE, or if…"
OR
bulletize:
full operating voltage shall be removed from the TCI for any of the following reasons:
*in the absence of the MPD MPS
*if overload_detected is TRUE
*if short_circuit_detected is TRUE
*if commanded to do so by a management entity.

Response   *Response Status*   **C**

ACCEPT IN PRINCIPLE.
Change to read:
full operating voltage shall be removed from the TCI for any of the following reasons:
*in the absence of the MPD MPS
*if overload_detected is TRUE
*if short_circuit_detected is TRUE
*if commanded to do so by a management entity.

Cl **169**   *SC* **169.5**   *P***108**   *L***22**   #   189

Jones, Chad   Cisco Systems, Inc.

Comment Type   **E**   *Comment Status*   **A**   *EZ*

"Where the MPD PI is not exposed" either this is MPD MPI (which we just said two words earlier) or this is MPI. I'd suggested the latter.

SuggestedRemedy

change MPD PI to MPI

Response   *Response Status*   **C**

ACCEPT.

Cl **169**   *SC* **169.5.3.2**   *P***109**   *L***47**   #   232

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type   **T**   *Comment Status*   **A**   *EZ*

I believe V_MPD is a variable, not a constant.

SuggestedRemedy

Delete V_MPD and definition at P109 L47-48

Response   *Response Status*   **C**

ACCEPT.

Cl **169**   *SC* **169.5.3.3**   *P***110**   *L***42**   #   234

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type   **T**   *Comment Status*   **A**   *EZ*

V_Mark_th, V_Off_MPD, V_Reset_th, V_type0_th, and V_type1_th are constants, they are listed in the constant section. They can't also be variables.

SuggestedRemedy

Delete V_Mark_th, V_Off_MPD, V_Reset_th, V_type0_th, and V_type1_th from the variables section (along with their descriptions - (P110 L42 through P111 L5, except P110 L49-51 (V_MPD)…)

Response   *Response Status*   **C**

ACCEPT.

Cl **169**   *SC* **169.5.3.6**   *P***115**   *L***17**   #   235

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type   **E**   *Comment Status*   **A**   *EZ*

Nomenclature in state diagrams is "=" for an equality condition, not "=="

SuggestedRemedy

Replace == with = on output branches from PON_EVAL and PON_LOAD_ON in Figure 169-8 (8 instances)

Response   *Response Status*   **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic*   **EZ**   Page 13 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **169**　　*SC* **169.5.3.6**　　　*P* **115**　　*L* **17**　　# 236

Zimmerman, George　　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ*

Vtype1_th should be have type1_th in subscript

SuggestedRemedy

Change Vtype1_th to V_type1_th (subscript type1_th) on output branches of PON_EVAL and PON_LOAD_ON (6 instances)

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.5.4**　　　*P* **116**　　*L* **1**　　# 192

Jones, Chad　　　　　　　　Cisco Systems, Inc.

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ*

three things here:
need a comma after TRUE in the first paragraph.
Need a comma after FALSE in the second paragraph.
Two periods at the end of the second paragraph.

SuggestedRemedy

add comma after TRUE on line 1. add comma after FALSE on line 4. delete extra period at end of line 5.

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.5.5**　　　*P* **117**　　*L* **25**　　# 238

Zimmerman, George　　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ*

V_TYPE0_TH and V_TYPE1_TH have case inconsistent with variables in state diagrams

SuggestedRemedy

Make V_TYPE0_TH and V_TYPE1_TH V_type0_th and V_type1_th as in state diagrams

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **169**　　*SC* **169.5.5**　　　*P* **117**　　*L* **39**　　# 239

Zimmerman, George　　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ*

I_MPD_DISABLED has case inconsistent with other values

SuggestedRemedy

Change I_MPD_DISABLED to I_MPD_Disabled in Table 169-8 and 169.5.5.1 (P118 L2)

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **79**　　*SC* **79.3.9.3**　　　*P* **36**　　*L* **19**　　# 210

Zimmerman, George　　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ-out*

Editing instruction is imprecise. The new section will not be right after 79.3.8, but rather, after the last subsection in 79.3.8, which is 79.3.8.3

SuggestedRemedy

Change 79.3.8 to 79.3.8.3 in editing instruction.

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Insert "(and its subclauses)" after 79.3.8 in the editing instruction. Editor to check other Editing instructions and implement this change as needed.

Cl **169**　　*SC* **169.4.3**　　　*P* **99**　　*L* **31**　　# 231

Zimmerman, George　　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ-out*

Figure 169-2 text is in the wrong font - should be sans-serif like other figures (Arial or similar - editor to check)

SuggestedRemedy

Change fonts in figure 169-2 to align with Figure 169-1.

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

Change fonts in Figure 169-2 and Figure 169-5 to align with Figure 169-1.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　*Topic* **EZ-out**　　Page 14 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn　　6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **169**　　*SC* **169.5**　　　　*P* **108**　　　*L* **22**　　　# 164

Maguire, Valerie　　　　　　　Copperopolis; aff'l w/ CME Consulting

Comment Type **E**　　*Comment Status* **A**　　　　　　*EZ-out*

This condition is an event in time, not in location.

SuggestedRemedy

Replace "Where the MPD PI…" with "When the MPD PI…"

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "Where" to "If"

Cl **168**　　*SC* **168.8.1**　　　　*P* **82**　　　*L* **39**　　　# 272

Brandt, David　　　　　　　Rockwell Automation

Comment Type **T**　　*Comment Status* **A**　　　　　　*LATE*

Equation 168-3 has an error in transcribing what was adopted. The sign is wrong for the first term for the upper frequency range. +27 should be -27, otherwise the IL is allowed to be 54 dB larger.

SuggestedRemedy

Change "27 - (53log10(f))…" to "-27 - (53log10(f))…".

Response　　　　　*Response Status* **C**

ACCEPT.
OBE by 273 which fixes the same issue

Cl **168.8**　　*SC* **168.8.1**　　　　*P* **82**　　　*L* **39**　　　# 273

DiMinico, Christopher　　　　　　PHY-SI/SenTekse/MC Communications

Comment Type **TR**　　*Comment Status* **A**　　　　　*LATE*

Equation 168-3 [27] should be [-27]

SuggestedRemedy

change [27] to [-27]

Response　　　　　*Response Status* **C**

ACCEPT.

Cl **168.9**　　*SC* **168.9.1.1**　　　　*P* **85**　　　*L* **9**　　　# 274

DiMinico, Christopher　　　　　　PHY-SI/SenTekse/MC Communications

Comment Type **TR**　　*Comment Status* **A**　　　　　*LATE*

Error in equation 168-5

SuggestedRemedy

Change equation 168-5.
IL $\leq$ 0.16 dB 1 $\leq$ f <10
-0.454+(0.22/f)+0.63*SQRT(f)-0.18*f+0.004*f^2 10 $\leq$ f $\leq$ 24

IL $\leq$ 0.3 $\leq$ f < 1 (TBD)
　　24 < f $\leq$ 40 (TBD)

f=MHz

See diminico_SPMD_01_0624.pdf for TBD

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.

Change Equation 168-5 to read:
IL $\leq$ 0.6 dB　　0.3 $\leq$ f < 1
IL $\leq$ 0.16 dB　　1 $\leq$ f <10
IL $\leq$ -0.454+(0.22/f)+0.63*SQRT(f)-.18*f+0.004*f^2　　10 $\leq$ f < 24
IL $\leq$ 0.145*(f) - 2.86　　　　　　　　　　24 $\leq$ f $\leq$ 40

where f is the frequency in MHz.

Cl **168.9**　　*SC* **168.9.2**　　　　*P* **85**　　　*L* **27**　　　# 275

DiMinico, Christopher　　　　　　PHY-SI/SenTekse/MC Communications

Comment Type **TR**　　*Comment Status* **A**　　　　　*LATE*

Equation 168-6 is TBD

SuggestedRemedy

Use RL equation slide 11
https://www.ieee802.org/3/da/public/0524/diminico_SPMD_01_0524.pdf

Response　　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Use RL equation slide 11
https://www.ieee802.org/3/da/public/0524/diminico_SPMD_01_0524.pdf

and
Remove editor's note P85 L17-21.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general　　　　*Topic* **LATE**　　　Page 15 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn　　6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **169**   *SC* **169.5.3.4**   *P***111**   *L***12**   # 276

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *LATE - inrush*

As part of proposing responses for D1.2 comment resolution, the editorial team found that pon_holdoff_timer does not have a duration. Add a duration to the timer.

SuggestedRemedy

add "; see T{Inrush_backoff} in Table 169-8" after 'threshold' on line 12.

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Commenters suggestion with Editorial license to conform to style, plus additional edits to resolve state diagram and duplicative shalls in text…

add "; see T{Inrush_backoff} in Table 169-8 for duration" after 'threshold' on line 12.
And in Figure 169-8
change output condition (3rd line) of PON_EVAL to PON_LOAD_ON to be:
((mpd_type == mixed) & (V_MPD >= V_type0_th))
And in Figure 169-8
add editor's note to Figure 169-8 - "Editor's Note (to be removed after D1p3) - Commenters to consider condition from PON_EVAL to PON_MISMATCHED_TYPE when V_MPD < V_type0_th"

In 169.5.5.1 change "shall" to "does" in first paragraph (2 instances)

Cl **79**   *SC* **79.3.9.3**   *P***36**   *L***49**   # 212

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **D**   *LLDP*

"An LLDPDU shoulld contain no more than one PLCA TLV" - can it contain more than one? If so, how is that represented? I thought one node has one PLCA node ID…

SuggestedRemedy

Change "should contain no more than one" to "shall contain no more than one"

Proposed Response   *Response Status* **Z**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **168**   *SC* **168.8.1**   *P***82**   *L***33**   # 270

Schreiner, Stephan   Rosenberger Hochfrequenztechnik

Comment Type **E**   *Comment Status* **A**   *Loading*

Text uses the word "dummy load". However, 168.9.1 introduces the word PMA load for the same type of load.

SuggestedRemedy

Replace "dummy load" by PMA load within document

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Loading is not just the PMA, but the DTE as a whole. Suggest global replacement of "dummy load" and "PMA load" with "Simulated DTE load"

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Loading**   Page 16 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **168**   *SC* **168.4.4**   *P* **36**   *L* **36**   # 216

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Management*

Register 45.2.3.1.2 doesn't reference clause 168 or even clause 147. This needs fixing.

SuggestedRemedy

Add 45.2.3.1.2 to the draft, with an instruction to change as follows: (<UL> indicates underline start or stop)
"When the <UL>10BASE-T1M/S, <UL>100BASE-T1, any MultiGBASE-T, or the 5/10GBASE-R mode of operation is selected for the
PCS using the PCS type selection field (3.7.3:0), the PCS shall be placed in a loopback mode of operation
when bit 3.0.14 is set to a one. When bit 3.0.14 is set to a one, the <UL>10BASE-T1M/S, <UL>100BASE-T1, 5/10GBASE-R, or any PCS
in the MultiGBASE-T set shall accept data on the transmit path and return it on the receive path. The speed
of the loopback is selected by the PCS control 1 (register 3.0) defined in 45.2.3.1.
<UL>The specific behavior of the 10BASE-T1S PCS during loopback is specified in 147.3.4.
The specific behavior of the 10BASE-T1M PCS during loopback is specified in 168.4.4.<UL>
the 100BASE-T1 PCS during loopback is specified in 96.3.5. The specific behavior of the 5/10GBASE-R
PCS during loopback is specified in 49.2. The specific behavior for the 10GBASE-T PCS during loopback is
specified in 55.3.7.3. The specific behavior for the 25GBASE-T and 40GBASE-T PCS during loopback is
specified in 113.3.7.3. The specific behavior for the 2.5GBASE-T or 5GBASE-T PCS during loopback is
specified in 126.3.7.3. For all other port types, the PCS loopback functionality is not applicable and writes to
this bit shall be ignored and reads from this bit shall return a value of zero."

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Editorial license to align with comment to change 10BASE-T1M/S to 10BASE-T1M / 10BASE-T1S (check order) per other comments.
Editorial license to align with other comments not listed here.

Add 45.2.3.1.2 to the draft, with an instruction to change as follows: (<UL> indicates underline start or stop)
"When the <UL>10BASE-T1M / 10BASE-T1S, <UL>100BASE-T1, any MultiGBASE-T, or the 5/10GBASE-R mode of operation is selected for the
PCS using the PCS type selection field (3.7.3:0), the PCS shall be placed in a loopback mode of operation
when bit 3.0.14 is set to a one. When bit 3.0.14 is set to a one, the <UL>10BASE-T1M / 10BASE-T1S, <UL>100BASE-T1, 5/10GBASE-R, or any PCS
in the MultiGBASE-T set shall accept data on the transmit path and return it on the receive

path. The speed
of the loopback is selected by the PCS control 1 (register 3.0) defined in 45.2.3.1.
<UL>The specific behavior of the 10BASE-T1S PCS during loopback is specified in 147.3.4.
The specific behavior of the 10BASE-T1M PCS during loopback is specified in 168.4.4.<UL>
the 100BASE-T1 PCS during loopback is specified in 96.3.5. The specific behavior of the 5/10GBASE-R
PCS during loopback is specified in 49.2. The specific behavior for the 10GBASE-T PCS during loopback is
specified in 55.3.7.3. The specific behavior for the 25GBASE-T and 40GBASE-T PCS during loopback is
specified in 113.3.7.3. The specific behavior for the 2.5GBASE-T or 5GBASE-T PCS during loopback is
specified in 126.3.7.3. For all other port types, the PCS loopback functionality is not applicable and writes to
this bit shall be ignored and reads from this bit shall return a value of zero."

Cl **168**   *SC* **168.6.2**   *P* **76**   *L* **9**   # 218

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *Management*

TBDs are not needed, name of the register is 10BASET1M/S test mode register, and the location should be 45.2.1.236

SuggestedRemedy

Delete TBDs (2 places), change "10BASE-T1M test mode control" to "10BASE-T1M/S test mode control", and change 45.2.1.186f.1 to an active xref to 45.2.1.236

Make same changes in PICS PMAE2 (168.12.4.5.2, P92 L9)

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Commenter's resolution, but align with other comment on 10BASE-T1M/S, if they are accepted.

Delete TBDs (2 places), change "10BASE-T1M test mode control" to "10BASE-T1M / 10BASE-T1S test mode control", and change 45.2.1.186f.1 to an active xref to 45.2.1.236

Make same changes in PICS PMAE2 (168.12.4.5.2, P92 L9)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **Management**   Page 17 of 24
6/14/2024 8:07:45 AM

Cl **168**   *SC* **168.8.3**   *P* **83**   *L* **9**   # **224**

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Mixing Segment*

Mode conversion needs to be constrained.

SuggestedRemedy

Insert Mode conversion loss specification from 147.7.3, including Equatioin 147-5. (insert text for review, not just a reference)

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Delete TBD and associated editor's note (lines 9-16)
Insert Mode conversion loss specification from 147.7.3, including Equation 147-5. (insert text for review, not just a reference)

Cl **168**   *SC* **168.8.4**   *P* **83**   *L* **17**   # **225**

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Mixing Segment*

No contributions have offered a need or a strawman coupling attenuation requirement.

SuggestedRemedy

Delete section 168.8.4 including editor's note.

Response   *Response Status* **C**

ACCEPT.

Cl **169**   *SC* **169.1.2**   *P* **96**   *L* **43**   # **228**

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Power - General*

an MPSE or MPD doesn't have to have data on the wires it delivers power to. We should describe that.

SuggestedRemedy

Add at end of paragraph, "An MPSE or MPD may or may not be co-located with a DTE, and the power may be conferred over the same pairs as data or over dedicated pairs. "

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.

Add at end of paragraph, "An MPSE or MPD may or may not be co-located with a DTE, and the power may be provided over the same pairs as the data or over dedicated pairs with power only. "

Cl **169**   *SC* **169.3**   *P* **98**   *L* **26**   # **198**

Jones, Chad   Cisco Systems, Inc.

Comment Type **T**   *Comment Status* **A**   *Power - General*

Table 169-1. See related presentation.
With the change to 1A for both types, several items in this table change.

SuggestedRemedy

for 26V min PSEs, VMPDmin is 14V, PMPSE(min) is 14W, new item PMPSE(max) is 24.8W
for 45V min PSEs, VMPDmin is 33V, PMPSE(min) is 33W, new item PMPSE(max) is 43.8W

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change PMPSE(min) row to 45 W for "50V Max MPSE column"

Cl **169**   *SC* **169.3**   *P* **98**   *L* **28**   # **196**

Jones, Chad   Cisco Systems, Inc.

Comment Type **T**   *Comment Status* **A**   *Power - General*

Table 169-1. As the channel is the same for each type, there is no reason one could supply 1A and the other could not.
Also, typo in variable name: ITCI_MSPE(min) - MSPE should be MPSE.

SuggestedRemedy

Change 941 to 1000 in ITCI_MSPE(min)
Change ITCI_MSPE(min) to ITCI_MPSE(min)

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change I_TCI_MSPE(min) to I_MPSE(min)
Editorial license to search and make replacement globally (note MSPE should be MPSE and the replacement is not just on the "min")

Change 941 to 1000 in I_MPSE (min) row.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic

Topic **Power - Genera**   Page 18 of 24
6/14/2024 8:07:45 AM

Cl **169**   *SC* **169.4.3**   *P* **99**   *L* **30**   # **246**

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **A**   *Power - General*

when TC1 and TC2 differ in voltage, and the MPI is not accessible, we need clarity on how to determine voltage.

SuggestedRemedy

Change "For compliance, voltage specifications shall be met at both TC1 and TC2 independently." to "For compliance, voltage specifications shall be met at both TC1 and TC2 independently. When the MPI is not accessible, compliance to voltage specifications for a minimum or maximum of the voltage at TC1 and TC2, depending on whether the specification in question is for a maximum value or a minimum threshold value, respecitvely."

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "For compliance, voltage specifications shall be met at both TC1 and TC2 independently." to
"For compliance, voltage specifications shall be met at both TC1 and TC2 independently. When the MPI is not accessible, compliance to voltage specifications shall be met for a minimum or maximum of the voltage at TC1 and TC2, depending on whether the specification in question is for exceeding dropping below a threshold, respectively."

Cl **169**   *SC* **169.4.6**   *P* **105**   *L* **33**   # **183**

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *Power - General*

the text "is presenting a discover low event voltage in a DISCOVERY_LOW …"we have several DISCOVERY_LOW states. Should we be more explicit?
Seems to be a convention in the next paragraph to simply put an "x" at the end.

SuggestedRemedy

change DISCOVERY_LOW to DISCOVERY_LOWx

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
change DISCOVERY_LOW to DISCOVERY_LOW_X

change "When the MPSE is presenting a discover low event voltage in a DISCOVERY_LOW state, as shown in the state diagram of Figure 169–3 and Figure 169–4, the MPSE it shall supply V_{Discovery} voltage to the TCI subject to the TDiscovery_low timing specification."

to
"When the MPSE is presenting a discover low event voltage in any of the DISCOVERY_LOW states (e.g., DISCOVERY_LOW_TARE or DISCOVERY_LOW_TYPE0), as shown in the state diagram of Figure 169–3 and Figure 169–4 MPSE shall supply V_{Discovery} voltage to the TCI subject to the TDiscovery_low timing specification."

Cl **169**   *SC* **169.5**   *P* **108**   *L* **22**   # **190**

Jones, Chad   Cisco Systems, Inc.

Comment Type **E**   *Comment Status* **A**   *Power - General*

"Where the MPD PI is not exposed, current values are calculated from observable currents at TC1 and TC2." Don't we also need to know the voltages?

SuggestedRemedy

change to: "Where the MPD PI is not exposed, values are calculated from observable voltages and currents at TC1 and TC2."

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
change to: "Where the MPD MPI is not exposed, values are calculated from observable voltages and currents at TC1 and TC2."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Power - Genera**   Page 19 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **169**　　*SC* **169.5.3.6**　　　*P***115**　　*L***36**　　# 237
Zimmerman, George　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem
Comment Type **T**　　*Comment Status* **A**　　　*Power - General*
V_reset is not defined, probably should be V_Reset_th

SuggestedRemedy
Change V_reset to V_Reset_th

Response　　　　　*Response Status* **C**
ACCEPT.

Cl **169**　　*SC* **169.5.5**　　　*P***117**　　*L***36**　　# 242
Zimmerman, George　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem
Comment Type **E**　　*Comment Status* **A**　　　*Power - General*
MPD TC3 capacitance should be MPD MPI capacitance

SuggestedRemedy
Change MPD TC3 to MPD MPI

Response　　　　　*Response Status* **C**
ACCEPT.

Cl **169**　　*SC* **169.5.5.1**　　　*P***117**　　*L***49**　　# 193
Jones, Chad　　　　　Cisco Systems, Inc.
Comment Type **E**　　*Comment Status* **R**　　　*Power - Inrush*
the text "...until VMPD crosses Vtype0_th and Tinrush_backoff time...", the table above has Vtype0_th and Vtype1_th. Need to genericize.

SuggestedRemedy
change "Vtype0_th" to "VtypeX_th"

Response　　　　　*Response Status* **Z**
REJECT.

This comment was WITHDRAWN by the commenter.

(need to specify that the threshold is appropriate for the MPD type)
(TFTD - presentation?)

change "Vtype0_th" to "VtypeX_th appropriate to the MPD type"

Cl **169**　　*SC* **169.6.1**　　　*P***119**　　*L***5**　　# 260
Potterf, Jason　　　　　Cisco
Comment Type **T**　　*Comment Status* **A**　　　*Power - Missing section*
Isolation clause is absent. The proposed isolation clause is adapted from 4-Pair PoE Clause 145.4.1 Electrical isolation and PoDL 104.6.1 Isolation.

SuggestedRemedy
Adopt isolation clause in attached document - SPMD_Potterf_D1P2_Comment_Sub-Clause_169p6p1_Isolation_2024-06-07.docx

Response　　　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.
Insert editor's note in 168.10 (to be removed prior to Working Group ballot) - Reviewers to consider whether an additional isolation requirement is needed when Clause 169 powering is not used with the PHY.

Recommend accept updated document:

SPMD_Potterf_D1P2_Comment_Sub-Clause_169p6p1_Isolation_2024-06-13.pdf.

Cl **169**　　*SC* **169.7**　　　*P***119**　　*L***19**　　# 261
Potterf, Jason　　　　　Cisco
Comment Type **T**　　*Comment Status* **A**　　　*Power - Missing section*
Environmental Clause is absent. The proposed isolation clause is adapted from 4-Pair PoE Clause 145.6 Environ,ental and PoDL 104.8 Enivronmental.

SuggestedRemedy
Adopt environmental clause in attached document - SPMD_Potterf_D1P2_Comment_Sub-Clause_169p7_Environmental_2024-06-07.docx

Response　　　　　*Response Status* **C**
ACCEPT IN PRINCIPLE.
Accept updated text with editorial license as indicated in the referenced submission. SPMD_Potterf_D1P2_Comment_Sub-Clause_169p7_Environmental_2024-06-13.pdf

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic　　　　　*Topic* **Power - Missin**　　Page 20 of 24　6/14/2024 8:07:45 AM

Cl **169**   *SC* **169.3**   *P* **98**   *L* **9**   #   197

Jones, Chad   Cisco Systems, Inc.

Comment Type   **T**   *Comment Status* **R**   *Power - Types*

having the unit loads set to 1 and 2 W means systems cannot fully allocate the available power. Need to lower this to a something that allows finer adjusts.

SuggestedRemedy

Change "For Type 0 MPDs, one unit load represents 1W. For Type 1 MPDs, one unit load represents 2W.
To: "For all MPD Types 1, one unit load represents 0.5W." AND change last row of Table 169-1 to from 1 and 2 to one merged cell of 0.5.

Response   *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **169**   *SC* **169.3**   *P* **98**   *L* **22**   #   199

Jones, Chad   Cisco Systems, Inc.

Comment Type   **T**   *Comment Status* **R**   *Power - Types*

Suggest NOT naming system types a generic 0 or 1. Expansion will not be logical (i.e. in order from lowest to highest). If this is successful, we WILL be asked to add more types. I recommend we name the type based on the minimum PSE voltage followed by the current.

SuggestedRemedy

Table 169-1 system type row.
Change "0" to "26-1"
Change "1" to "45-1"
editors given license to change throughout clause 169 in case some are not captured by subsequent comments.

Response   *Response Status* **C**

REJECT.
This is going to need specific guidance. Recommend that commenter resubmit to realign nomenclature after all power types are stable.

Cl **169**   *SC* **169.4.8**   *P* **107**   *L* **9**   #   200

Jones, Chad   Cisco Systems, Inc.

Comment Type   **T**   *Comment Status* **A**   *Power - Types*

PMPSE_16U is specific to only allowing 16 unit loads per mixing segment. A previous comment recommended changing this. If that was rejected, this should also be rejected.

SuggestedRemedy

if comment against pg 98 line 22 was accepted, change Type column: "0" to "26-1", "1" to "45-1"
item 2: change P{MPSE_16U} to P{MPSE}
item 2: change 26 to 14, change 42 to 33, change 100 for type 0 to 24.8, change 100 for type 1 to 43.8

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Change P{MPSE_16U} to P{MPSE},
do not change types (unless comment 199 is accepted)
item 2: change change 42 to 45

Cl **169**   *SC* **169.5.1**   *P* **108**   *L* **27**   #   201

Jones, Chad   Cisco Systems, Inc.

Comment Type   **T**   *Comment Status* **R**   *Power - Types*

if comment against pg 98 line 22 was accepted, change: "Type 0" to "Type 26-1", "Type 1" to "Type 45-1"

SuggestedRemedy

if comment against pg 98 line 22 was accepted, change: "Type 0" to "Type 26-1", "Type 1" to "Type 45-1"

Response   *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

This is going to need specific guidance. Recommend that we realign nomenclature after all power types are stable.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Power - Types**   Page 21 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **169**   *SC* **169.5.5**   *P* **117**   *L* **10**   # 202

Jones, Chad   Cisco Systems, Inc.

Comment Type **T**   *Comment Status* **R**   *Power - Types*

Table 169-1 needs updates if previous comments were accepted.

SuggestedRemedy

change Type column: "0" to "26-1", "1" to "45-1"
Item 1: change "16" to "14"; "34" to "33"
item 2: change 1 and 2 to one merged cell of 0.5
item 6: change "16" to "14"
item 7: change "34" to "33"
item 4: change min to 0.5W. Change max from "16" and "32" to "14" and "33"

Response   *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

Cl **169**   *SC* **169.5.5.2**   *P* **118**   *L* **11**   # 203

Jones, Chad   Cisco Systems, Inc.

Comment Type **T**   *Comment Status* **D**   *Power - Types*

If lowering PSE unit load to 0.5W was accepted, need the same change here.

SuggestedRemedy

change: "For Type 0 MPDs, one unit load represents 1W. For Type 1 MPDs, one unit load
represents 2W.
A mixing segment can support up to 16 unit loads. Each MPD is allocated a minimum of 1
unit load and may consume no more than 16 unit loads. The MPD system type and unit
load level should be clearly indicated so users can track loading on a mixing segment. The
sum of unit loads on a mixing segment shall not exceed 16."
to:"One unit load represents 0.5W for all MPD types.
Each MPD is allocated a minimum of 1 unit load and may consume no more than 28 unit
loads for a Type 26-1 and 66 unit loads for a Type 45-1. The MPD system type and unit
load level should be clearly indicated so users can track loading on a mixing segment. The
sum of unit loads on a mixing segment shall not exceed the maximum allowed by the
MPSE type."

Proposed Response   *Response Status* **Z**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **22**   *SC* **22.1**   *P* **22**   *L* **22**   # 252

Brandt, David   Rockwell Automation

Comment Type **T**   *Comment Status* **A**   *TCI*

Figure 22-1 shows 10BASE-T1M with an MDI, wheras Figure 168-1 shows the new TCI.
(We do later state that the TCI is an MDI.)

SuggestedRemedy

Suggest changing "MDI" between PMD and MEDIUM to "MDI or TCI" and having 2 lists
below MEDIUM "TCI: 10BASE-T1" and "MDI: 10BASE-T1L, 10BASE-T1S, …"

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Add note in underline and adjust editor's note to Figure 22-1
New text is below existing text:

"NOTE - the MDI for 10BASE-T1M is referred to as the TCI (see Clause 168)."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **TCI**   Page 22 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic

Cl **168**　　*SC* **168.8**　　　　*P* **81**　　　*L* **18**　　　# 221

Zimmerman, George　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**　　*Comment Status* **A**　　　　　*TCI*

Rewrite to make it clear that a stub is not part of the mixing segment:

SuggestedRemedy

Change "where each TCI has two
connections on the mixing segment, one facing in the direction of left edge termination of the mixing
segment (TC1), and one facing in the direction of the right edge termination of the mixing segment (TC2),
and a two-conductor connection facing the PMA (and any associated stub or service loop) (TC3) (see
Figure 168–18)."
to
"where each TCI has two
connections on the mixing segment, one facing in the direction of left edge termination of the mixing
segment (TC1), and one facing in the direction of the right edge termination of the mixing segment (TC2),
and a two-conductor connection facing the PMA (see Figure 168-18).
If implemented with an associated stub or service loop, that wiring is specified specifically to the DTE, and compliance of the attached DTE specified at points TC1 and TC2, including the stub or service loop."

Response　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Change "where each TCI has two
connections on the mixing segment, one facing in the direction of left edge termination of the mixing
segment (TC1), and one facing in the direction of the right edge termination of the mixing segment (TC2),
and a two-conductor connection facing the PMA (and any associated stub or service loop) (TC3) (see
Figure 168–18)."
to
"where each TCI has two
connections on the mixing segment, one facing in the direction of left edge termination of the mixing
segment (TC1), and one facing in the direction of the right edge termination of the mixing segment (TC2),
and a two-conductor connection facing the DTE (see Figure 168-18).
If implemented with an associated stub or service loop, that wiring is part of the DTE, and compliance of the attached DTE is specified at points TC1 and TC2, including any effects of the stub or service loop."

Cl **168**　　*SC* **168.8**　　　　*P* **81**　　　*L* **21**　　　# 220

Zimmerman, George　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**　　*Comment Status* **A**　　　　　*TCI*

We no longer specify anything to TC3. Referencing it here has no purpose.

SuggestedRemedy

Delete "(TC3)" from 2nd paragraph of 168.8 (P81 L21), also delete TC3 from Figure 168-17

Response　　　　*Response Status* **C**

ACCEPT IN PRINCIPLE.
Editor's comment - TFTD

Cl **168**　　*SC* **168.8**　　　　*P* **82**　　　*L* **10**　　　# 222

Zimmerman, George　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**　　*Comment Status* **A**　　　　　*TCI*

Figure shows stub external to device but considered specific to device. Would be clearer if DTE were shown as including the stub.

SuggestedRemedy

Remove TC3 from figure 168-17 (2 places) and draw dotted line box around left most DET and stub. Move label "DTE" outside solid box, but inside new dotted box, and place label PMA within solid box.

Response　　　　*Response Status* **C**

ACCEPT.

Cl **168**　　*SC* **168.9**　　　　*P* **83**　　　*L* **52**　　　# 226

Zimmerman, George　　　　　CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**　　*Comment Status* **A**　　　　　*TCI*

No need to mention TC3 here, nothing is specified there.

SuggestedRemedy

Delete (TC3) in first sentence of 2nd paragraph of 168.9 (P83 L52), and in Figure 168-18

Response　　　　*Response Status* **C**

ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed Z/withdrawn
SORT ORDER: Topic　　　　　　*Topic* **TCI**　　　Page 23 of 24
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Cl **168**   *SC* **168.9**   *P* **84**   *L* **30**   # 258

Brandt, David   Rockwell Automation

Comment Type **E**   *Comment Status* **A**   *TCI*

Possibly I don't understand the examples. It is stated that "[1] The TCI may physically be implemented as a two-conductor connection to the DTE or [2] as an adapter separate from the DTE's PMA assembly or [3] the TCI and the PMA of the DTE may be located within a single assembly." then we state "The latter configuration presents a negligible stub length when the PMA attachment is open circuit." It is unclear how in [3], the PMA can be separated. I would read [1] as a T with some drop to the DTE, [2] as a kind of DTE plug with TC1/TC1 and no drop, and [3] as TC1 and TC2 built into the DTE.

SuggestedRemedy

Suggest "The second configuration may present a negligible stub length when the PMA attachment is open circuit."

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
(note - this changes "latter" to "second", rewriting the sentence with number labels as the commenter has done in the comment to improve clarity):

Change P84 L30-33 to read:
"The TCI may physically be implemented as: (1) a two-conductor connection to the DTE, or
(2) an adapter separate from the DTE's PMA assembly, or
(3) integrated, where the TCI and the PMA of the DTE are located within a single assembly.
The second configuration presents a negligible stub length when the PMA attachment is an open circuit. The third configuration must be replaced to allow connectivity when the DTE is not present. Either..."

Cl **168**   *SC* **168.9.2**   *P* **85**   *L* **19**   # 243

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **T**   *Comment Status* **R**   *TCI*

Adopt proposal for TCI return loss in zimmerman_3da_01_06112024 (pending presentation)

SuggestedRemedy

Delete editor's note, adopt proposal in presentation and incorporate into equation 168-6.

Response   *Response Status* **Z**

REJECT.

This comment was WITHDRAWN by the commenter.

OBE by 275.

Cl **169**   *SC* **169.5.3.3**   *P* **110**   *L* **35**   # 240

Zimmerman, George   CME Consulting/ADI, APL Gp, Cisco, Marvell, OnSem

Comment Type **E**   *Comment Status* **A**   *TCI*

Reference point for power is MPI, not TC3.

SuggestedRemedy

Change TC3 to MPI (5 instances) P110 L35-41)

Response   *Response Status* **C**

ACCEPT.

Cl **168**   *SC* **168.6.4**   *P* **77**   *L* **45**   # 257

Brandt, David   Rockwell Automation

Comment Type **T**   *Comment Status* **A**   *Testing*

It is not clear that it is required to test transmitter electrical specifications at both TC1 and TC2 for PMAE11 through PMAE14

SuggestedRemedy

Suggest adding at line 45: "Transmitter electrical specifications shall be measured at both TC1 and TC2."

Response   *Response Status* **C**

ACCEPT IN PRINCIPLE.
Commenters suggestion expanded to indicate that the 50 ohm load specified is not 50 ohms at each TC, but 100 ohms on each, which are in parallel.

Add at line 45: "Transmitter electrical specifications shall be measured at both TC1 and TC2.
When both TC1 and TC2 are terminated, the 50 /Ohm resistive differential load should be implemented as a 100 /Ohm termination on each of TC1 and TC2."

(/Ohm is ohm-symbol)

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Topic* **Testing**   Page 24 of 24
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed Z/withdrawn   6/14/2024 8:07:45 AM
SORT ORDER: Topic