Cl **00** *SC* **0** *P* *L* # 52

Anslow, Pete Independent

Comment Type **E** *Comment Status* **D** *EZ*

The copyright_year variable is set to 202x for page 13 and Clause 146

SuggestedRemedy

Set the copyright_year variable to 2021 for page 13 and Clause 146

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **FM** *SC* **FM** *P* **1** *L* **2** # 10

Grow, Robert RMG Consulting

Comment Type **ER** *Comment Status* **D** *alignment with revision*

The draft should be written as an amendment to IEEE Std 802.3-20xx, specifically as Amendment 2 per Mr. Law's recommendation to the WGAC.

SuggestedRemedy

Update front matter plus headers and footers. In front matter: update abstract, replace Introduction with Introduction from P802.3/D2.1, add self description from latest draft of P802.3cs to introduction. A search on 2018 should pull up any other locations for update.

Put in amendment number on title pate, boxed note at beginnning of front matter Introduction, and on self description at end of Introduction.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Implement commenter's suggested remedy, noting that the recommendation is that IEEE 802.3dd is Amendment 1 (which is consistent with the remedy, but not with the comment text)

Cl **FM** *SC* **FM** *P* **1** *L* **2** # 6

Zimmerman, CME Consulting/ADI, APL Gp, Cisco, CommScope,

Comment Type **E** *Comment Status* **D** *alignment with revision*

Update front matter to 802.3dc revision d2.1, and reflecting 802.3dd as the first revision of IEEE Std 802.3-202x

SuggestedRemedy

Change header to be amendment to 802.3-202x, change first paragraph on page 1 as per comment, and update pages 3 through 11 to align with 802.3dc D2.1 and reflecting 802.3dd as the first amendment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment #10
Response to comment 10 is:
ACCEPT IN PRINCIPLE.
Implement commenter's suggested remedy, noting that the recommendation is that IEEE 802.3dd is Amendment 1 (which is consistent with the remedy, but not with the comment text)
Commenter's suggested remedy was:
Update front matter plus headers and footers. In front matter: update abstract, replace Introduction with Introduction from P802.3/D2.1, add self description from latest draft of P802.3cs to introduction. A search on 2018 should pull up any other locations for update.

Cl **FM** *SC* **FM** *P* **1** *L* **27** # 58

Marris, Arthur Cadence Design Systems

Comment Type **E** *Comment Status* **D** *alignment with revision*

If 802.3dd is really going to be an amendment to 802.3-2018 you need to include 802.3ct and 802.3cp

SuggestedRemedy

Add IEEE Std 802.3ct-2021 and IEEE Std 802.3cp-2021 here and on page 11 line 6

Proposed Response *Response Status* **W**

PROPOSED REJECT.
802.3dd is going to be an amendment to 802.3-202x. No change required.

Cl **FM** *SC* **FM** *P* **6** *L* **26** # 7

Zimmerman, CME Consulting/ADI, APL Gp, Cisco, CommScope,

Comment Type **E** *Comment Status* **D** *EZ*

missing hyphen "Editor-in Chief"

SuggestedRemedy

per comment

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **FM** *SC* **FM** *P* **11** *L* **1** # 35

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *alignment with revision*

802.3cu is repeated twice. Amendment 12 is 802.3cv.

SuggestedRemedy

Change cu to cv

Proposed Response *Response Status* **W**

PROPOSED REJECT.
802.3dd is going to be an amendment to 802.3-202x. No change required.

Cl **FM** *SC* **FM** *P* **13** *L* **44** # 36

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

"editing instructions have been written to minimize the probability of changes being lost at publication from other IEEE 802.3 amendment projects running in parallel (e.g., IEEE P802.3bj and IEEE P802.3bk)"

bj and bk were completed a long time ago, and were relatively unrelated to each other. This text is probably copied from a draft of 802.3bm that ran in parallel to both. It as not a relevant example ("e.g.") of parallel projects.

In recent projects this text was used to point to other projects running in parallel to the specific projects.

However, to save work in copying this text between projects, it does not need to be specific or give any examples.

SuggestedRemedy

Delete "(e.g., IEEE P802.3bj and IEEE P802.3bk)".

Proposed Response *Response Status* **W**

PROPOSED REJECT.
The editor's note is an example of how editing works. Updating the example drafts neither fixes an error nor adds clarity.

Cl **104** *SC* **104** *P* **14** *L* **5** # 9

Zimmerman, CME Consulting/ADI, APL Gp, Cisco, CommScope,

Comment Type **E** *Comment Status* **D** *Clean-up*

Editor's Note (Expected to be removed by comment during Working Group Ballot)"

SuggestedRemedy

remove all editor's notes so marked.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
TFTD - Review all notes in discussion

Cl **104** *SC* **104** *P* **14** *L* **9** # 37

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *EZ*

In the base standard 104.2 is "Link segment". The subclause labeled "Class power requirements" is 104.3.

SuggestedRemedy

Change to 104.3 in editorial instructions and subclause title.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.2** *P* **14** *L* **12** # 11

Grow, Robert RMG Consulting

Comment Type **TR** *Comment Status* **D** *EZ*

The draft includes bad subclause and table numbers. The aggregate of these errors create a probably of technical errors as a result.

SuggestedRemedy

Update draft using P802.3/D2.1 as the base text. This draft used as the base for this amendment should be close to IEEE Std 802.3-20xx, and it will be easier to track changes to P802.3 in future drafts for any changes that would affect this project than it is to deal with the inconsistencies.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.2** *P* **14** *L* **12** # 12

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "Class Power Requirements" numbered 104.3.

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.2** *P* **14** *L* **16** # 61

Baggett, Tim Microchip

Comment Type **E** *Comment Status* **D** *Editorial*

The organization of the two new paragraphs in 104.2 could be improved such that the first paragraph describes V(PSE) and the second paragraph describes V(PD).

SuggestedRemedy

Move the following sentence from the end of paragraph 1 (Line17) to the beginning of paragraph 2 (line 19)

VPD is the voltage at the PD PI.

Final text should read:

VPSE is the voltage at the PSE PI. VPSE is measured between any positive conductor and any negative conductor
at the PI.

VPD is the voltage at the PD PI. VPD is measured between any positive conductor and any negative conductor at the PI.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.2** *P* **14** *L* **16** # 62

Dawe, Piers Nvidia

Comment Type **E** *Comment Status* **D** *Editorial*

Content is unevenly split between the two new paragraphs

SuggestedRemedy

Move "VPD is the voltage at the PD PI" to the second paragraph. Or, combine the two paragraphs.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment 61
Response to comment 61 is:
ACCEPT.
Move the following sentence from the end of paragraph 1 (Line17) to the beginning of paragraph 2 (line 19)

VPD is the voltage at the PD PI.

Final text should read:

VPSE is the voltage at the PSE PI. VPSE is measured between any positive conductor and any negative conductor
at the PI.

VPD is the voltage at the PD PI. VPD is measured between any positive conductor and any negative conductor at the PI.

Cl **104** *SC* **104.2** *P* **14** *L* **17** # 38

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

Paragraph break is at the wrong place in the middle of the definition of VPD.

SuggestedRemedy

Move "VPD is the voltage at the PD PI." to the beginning of the second paragraph.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment 61
Response to comment 61 is:
ACCEPT.
Move the following sentence from the end of paragraph 1 (Line17) to the beginning of paragraph 2 (line 19)

VPD is the voltage at the PD PI.

Final text should read:

VPSE is the voltage at the PSE PI. VPSE is measured between any positive conductor and any negative conductor
at the PI.

VPD is the voltage at the PD PI. VPD is measured between any positive conductor and any negative conductor at the PI.

Cl **104** *SC* **104.2** *P* **14** *L* **19** # 2

Jones, Chad Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

Not sure why this sentence is it's own paragraph. Works just fine after the last sentence of the previous paragraph (which is only 3 sentences covering two lines). I'd make this all one paragraph

SuggestedRemedy

delete the line feed after the last sentence on line 17, adding the one sentence to the previous paragraph.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment 61
Response to comment 61 is:
ACCEPT.
Move the following sentence from the end of paragraph 1 (Line17) to the beginning of paragraph 2 (line 19)

VPD is the voltage at the PD PI.

Final text should read:

VPSE is the voltage at the PSE PI. VPSE is measured between any positive conductor and any negative conductor
at the PI.

VPD is the voltage at the PD PI. VPD is measured between any positive conductor and any negative conductor at the PI.

Cl **104** *SC* **104.5.3** *P* **14** *L* **23** # 13

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "PD state diagram" numbered 104.5.4.

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.3.3** *P* **14** *L* **25** # 14

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "Variables" numbered 104.5.4.3

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.3.6** *P* **15** *L* **1** # 15

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "State diagram" numbered 104.5.4.6.

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.3.6** *P* **15** *L* **27** # 39

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

It looks as if sscp_reset_pulse is a conditio of arrow A.

SuggestedRemedy

Move the sscp_reset_pulse label near the transition it belongs to.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Move sccp_reset_pulse to right, next to left-hand exit from DO_DETECTION

Cl **104** *SC* **104.5.4.3** *P* **15** *L* **30** # 34

Slavick, Jeff Broadcom

Comment Type **TR** *Comment Status* **D** *State Diagrams*

definition of sscp_reset_pulse states during detection this variable takes on true/false values. Now you're using it in PD_SLEEP as well

SuggestedRemedy

remove "during detection," from both TRUE and FALSE desciprtions for sscp_reset_pulse

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.3.6** *P* **15** *L* **41** # 33

Slavick, Jeff Broadcom

Comment Type **TR** *Comment Status* **D** *State Diagrams*

Which arc is taken if wakeup=0 and sccp_reset_pulse = 1 and Vpd > Vsig_disable

SuggestedRemedy

Add Vpd <= Vsig_disable to transition A criteria from PD_SLEEP

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change exit from PD_SLEEP to branch "A" to:
“(!wakeup) * sccp_reset_pulse * (VPD ≤ Vsig_disable)”

Cl **104** *SC* **104.5.3.6** *P* **15** *L* **41** # 40

Ran, Adee Cisco

Comment Type **T** *Comment Status* **D** *State Diagrams*

The conditions of transitioning from PD_SLEEP are not mutually exclusive. For example, it is posible that (VPD>Vsig_disable), (!wakeup), and sccp_reset_pulse are all true, and It is unclear what transition should occur in that case.

SuggestedRemedy

Maybe add "*(VPD<=Vsig_disable)" to the condition leading to A.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by response to comment 33
Response to comment 33 is:
ACCEPT IN PRINCIPLE.
Change exit from PD_SLEEP to branch "A" to:
“(!wakeup) * sccp_reset_pulse * (VPD ≤ Vsig_disable)”

Cl **104** *SC* **104.5.4** *P* **16** *L* **1** # 16

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "PD signature" numbered 104.5.5.

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.4** *P* **16** *L* **7** # 17

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

The editing instruction and Table number do not agree. P802.3/D2.1 has "Valid PD detection signature characteristics, measured at PD PI" numbered Table 104-9.

SuggestedRemedy

Update editing instruction and Table number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
On page 16
Change editing instruction to "Change Table 104-9 as follows:"
Change table number to 104-9

Cl **104** *SC* **104.5.4** *P* **16** *L* **15** # 41

Ran, Adee Cisco

Comment Type **T** *Comment Status* **D** *Signature*

It is unclear what "Vsig_disable max" means, especially now that Vsig_disable limits depend on class.

SuggestedRemedy

If Isignature_limit conditions are class dependent, break it into two rows and specify the conditions for each row separately.

Otherwise write the condition with a specific voltage.

Alternatively add a table footnote to explain what Vsig_disable max means.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
Text is clear - reader first determines Vsig_disable max from class.

Cl **104** *SC* **104.5.6** *P* **17** *L* **1** # 18

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "PD power" numbered 104.5.4.7.

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Renumber PD Power as 104.5.7

Cl **104** *SC* **104.5.6** *P* **17** *L* **10** # 8

Zimmerman, CME Consulting/ADI, APL Gp, Cisco, CommScope,

Comment Type **E** *Comment Status* **D** *alignment with revision*

Change editing instructions to remove "(as modified by IEEE Std 802.3cg-2019)" since this is an amendment to the revision.

SuggestedRemedy

Remove references to IEEE Std 802.3cg-2019, including: "(as modified by IEEE Std 802.3cg-2019)" *with and without parens* and ", inserted by IEEE Std 802.3cg-2019," from all editing instructions.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6** *P* **17** *L* **10** # 19

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx.

SuggestedRemedy

Change Table 104-11 items 6b, 15, as follows, (unchanged rows not shown):

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6** *P* **17** *L* **14** # 20

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "PD power supply limits" numbered Table 104-11.

SuggestedRemedy

Update table number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6.1** *P* **17** *L* **33** # 21

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "PD discharge" numbered 104.5.7.1.

SuggestedRemedy

Update subclause number., also change editing instruction number at line 39.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6.1** *P* **17** *L* **42** # 3

Jones, Chad Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

"When either there is no PSE or the PSE is not sourcing power…" 'Either' is superfluous.

SuggestedRemedy

delete 'either' making it read: "When there is no PSE or the PSE is not sourcing power…"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6.1** *P* **17** *L* **44** # 51

Huber, Thomas Nokia

Comment Type **E** *Comment Status* **D** *Editorial*

Awkward grammar in "This can cause a current to flow out the PD."

SuggestedRemedy

Change to "This can cause a current to flow from the PD."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6.1** *P* **17** *L* **56** # 42

Ran, Adee Cisco

Comment Type **T** *Comment Status* **D** *PD discharge*

"the voltage(...) shall not exceed (...) at a delay of TOFF max (see Table 104-4) after the removal of PSE power"

"at a delay of TOFF max (see Table 104-4) after the removal of PSE power" is ambiguous - is it only at that specific point in time? Or starting from that point and on? Or until that point?

I assume the intent is "from that point and on".

Also, the first statement describes a situation when there is no power from the PSE, but the "shall" statment as written is not limited to these times.

SuggestedRemedy

Change the last sentence to:

In order to constrain this current, the voltage across a 5 k<Ohm> resistor connected across the PD PI shall not exceed VPUP (see Table 104–8) when the PD is not drawing power from its PI, except possibly within TOFF max (see Table 104-4) from the removal of PSE power from the PD PI.

Change the corresponding PICS item in 104.9.4.1 accordingly.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.5.6.3** *P* **18** *L* **1** # 22

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "Input current" numbered 104.5.7.3.

SuggestedRemedy

Update subclause number., also change editing instruction number at line 7.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.6.1** *P* **18** *L* **23** # 43

Ran, Adee Cisco

Comment Type **T** *Comment Status* **D** *Isolation*

"Compliance with requirements of 104.8 may require greater isolation" - 104.8 has no requirements in its body, but has 7 subclauses. It is unclear what requirements are referred to, and what "greater isolation" means.

The added sentence is too general to be helpful for readers.

SuggestedRemedy

Point to the specific subclause(s) and describe the additional isolation requirements (e.g. 2 MΩ at 500 V as mentioned in zimmerman_3dd_01a_06152021).

Alternatively, delete the added sentence.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change 104.8. to 104.8.1.

Cl **104** *SC* **104.6.2** *P* **18** *L* **33** # 44

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *alignment with revision*

104.6.2 text does not match the 2018 standard. It was hard to find that it was modified by 802.3cg.

SuggestedRemedy

Add to the editorial instruction "as amended by 802.3cg".

Proposed Response *Response Status* **W**

PROPOSED REJECT.
The draft is an amendment to 802.3-202x

Cl **104** *SC* **104.6.2** *P* **18** *L* **37** # 53

Anslow, Pete Independent

Comment Type **E** *Comment Status* **D** *alignment with revision*

The revision of 802.3 has made changes to 104.6.2 and has added item COMEL2 in 104.9.4.4

SuggestedRemedy

Bring the draft into alignment with the changes made in the 802.3dc revision D2.1, particularly in 104.6.2 and 104.9.4.4.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.1.1** *P* **19** *L* **11** # 23

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx.

SuggestedRemedy

Replace Figure 104-10 to remove tCHRG and VCHRG as follows:

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.1.2** *P* **19** *L* **35** # 24

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx.

SuggestedRemedy

Replace Figure 104-11 to remove tCHRG and VCHRG as follows:

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.1.3** *P* **20** *L* **7** # 25

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx.

SuggestedRemedy

Replace Figure 104-12 to remove tCHRG and VCHRG as follows:

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.1.3** *P* **21** *L* **7** # 4

Wienckowski, Natalie General Motors

Comment Type **E** *Comment Status* **D** *Clean-up*

Row 6a is changed but it isn't included in the Editor's note.

SuggestedRemedy

Add "6a" to the list in the Editor's note before "6b".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
TFTD
Add 6a to the list in the Editor's note if note is note deleted by comment 9

Cl **104** *SC* **104.7.1.3** *P* **21** *L* **7** # 26

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx. Additionally P802.3/D2.1 has "SCCP electrical requirements" numbered Table 104-12.

SuggestedRemedy

Change Table 104-12 as follows, editing rows 6b, 7, 8, 9, 11, 15, 16, and 18, and removing rows 20 and 21, unchanged rows not shown:. Also change table number to 104.12 at line 11 and page 22, line 1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.1.3** *P* **21** *L* **17** # 5

Wienckowski, Natalie General Motors

Comment Type **E** *Comment Status* **D** *EZ*

The elipses on the merged row indicating skipped rows should be left justified, not centered.

SuggestedRemedy

Left justify the elipses (…).
Do the same on P21L40, P21L46, P22L21, and P22L26.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.2** *P* **22** *L* **43** # 64

Dawe, Piers Nvidia

Comment Type **T** *Comment Status* **D** *SCCP*

This says "The PD shall return all 1s in the data and CRC8 fields for any unsupported command". Is all ones the correct CRC8 for a payload of all 1s? If not, the usefulness of the CRC8 is weakened.

SuggestedRemedy

Should the CRC8 be whatever is the normal CRC for a payload of all 1s?

Proposed Response *Response Status* **W**

PROPOSED REJECT.
The CRG disagrees with the commenter. The purpose of the text is to clarify what happens when one of the optional commands introduced in IEEE Std 802.3cg are used with a legacy device. It deliberately returns a bad CRC, does it in a way where devices that do not support the optional capability do not need additional functionality (by making it a straight pull-up).

Cl **104** *SC* **104.7.2** *P* **22** *L* **43** # 63

Dawe, Piers Nvidia

Comment Type **E** *Comment Status* **D** *SCCP*

In "The PD shall return all 1s in the data and CRC8 fields for any unsupported command", is there a "data field" and is it what is called in e.g. 104.7.2.4, "a 16-bit ... read payload"?

SuggestedRemedy

For consistency, change "data" to "payload"?

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "data" to "payload" on page 22, line 43.

Cl **104** *SC* **104.7.2.6** *P* **22** *L* **51** # 27

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx. Additionally P802.3/D2.1 has "SCVOLT_INFO register table" numbered Table 104-14.

SuggestedRemedy

Change Table 104-14, Description for b[7:0] as shown:. Also change table number to 104.14 page 23, line 1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
(fixed typo in remedy)
Change Table 104-14, Description for b[7:0] as shown:. Also change table number to 104-14 page 23, line 1.

Cl **104** *SC* **104.7.2.6** *P* **23** *L* **1** # 59

Marris, Arthur Cadence Design Systems

Comment Type **E** *Comment Status* **D** *EZ*

Table number seems wrong

SuggestedRemedy

Change to Table 104–14

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.7.2.6** *P* **23** *L* **8** # 60

Marris, Arthur Cadence Design Systems

Comment Type **T** *Comment Status* **D** *SCCP*

Having a tolerance of "0 + 20mV" seems weird

SuggestedRemedy

Consider adding extra text to explain why a negative tolerance is not allowed

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Delete (strikeout) "+/- 20 mV tolerance, " from Description,
Insert new final sentence in first paragraph of 104.7.2.6 as follows:
"The voltage measurement returned by the Read_VOLT_INFO command is an 8-bit unsigned value with each least-significant bit equals 10 mV, and is up to 20 mV greater than the actual voltage at the PD PI."

Cl **104** *SC* **104.9.1** *P* **24** *L* **4** # 45

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

No apparent changes in 104.9.1 or 104.9.2. The project name 802.3dd appears in 104.9.2.2 (apparently changing the existing text) but this will disappear when integrated into the standard.

SuggestedRemedy

Remove these subclauses and their hierarchy from the amendment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.9.4.1** *P* **25** *L* **4** # 28

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has "Powered Device (PD)" numbered 104.9.4.3.

SuggestedRemedy

Update subclause number.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.9.4.1** *P* **25** *L* **6** # 29

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

Editing instruction should be updated for being an amendment to 802.3-20xx.

SuggestedRemedy

PD 11 and PD 17.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.9.4.1** *P* **25** *L* **10** # 30

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1, where "PD Discharge" is numbered PD11, Subclause is 104.5.7.

SuggestedRemedy

Update base text to that of P802.3/D2.1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.9.4.1** *P* **25** *L* **20** # 31

Grow, Robert RMG Consulting

Comment Type **E** *Comment Status* **D** *EZ*

P802.3/D2.1 has this PICS numbered PD17

SuggestedRemedy

Update base text to that of P802.3/D2.1.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.9.4.4** *P* **25** *L* **25** # 32

Grow, Robert RMG Consulting

Comment Type **TR** *Comment Status* **D** *alignment with revision*

This PICS item already exists in P802.3/D2.1. This version includes differences from COMEL2 in the revision draft

SuggestedRemedy

Either delete subclause and its contents; or turn into a Change edit to the next revision.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change edit on COMEL2 (<SO> = strikeout start/end, <UL> = underline start/end) to:
Feature: "Type E <SO>PSE and<SO> PD fault tolerance"
Value/Comment: "The PI shall meet the fault tolerance requirements as specified in <UL>146.8.5 and <UL>146.8.6"
Strikeout PSETE:M in Status

Cl **104** *SC* **104.9.4.4** *P* **25** *L* **31** # 46

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *alignment with revision*

The new item COMEL2 coincides with a similar item recently added in 802.3dc D2.1 (see comment #12 in https://www.ieee802.org/3/dc/comments/P8023_D2p0_comments_final_by_id.pdf).

SuggestedRemedy

Align the text with 802.3dc D2.1, or add an editor's note to explain any difference that may need to be resolved in the future.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment 32.
Response to comment 32 is:
ACCEPT IN PRINCIPLE.
Change edit on COMEL2 (<SO> = strikeout start/end, <UL> = underline start/end) to:
Feature: "Type E <SO>PSE and<SO> PD fault tolerance"
Value/Comment: "The PI shall meet the fault tolerance requirements as specified in <UL>146.8.5 and <UL>146.8.6"
Strikeout PSETE:M in Status

Cl **146** *SC* **146.5.4.2** *P* **26** *L* **19** # 47

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

The added text creates two separate cases that the first sentence refers to; these cases should be written as a bulleted list after the first sentence (as presented in stewart_3dd_02_09072021).

Also, preferably, the part common to both cases should not be repeated, but instead be part of the first sentence.

SuggestedRemedy

Preferably, insert "The magnitude of the positive and negative droop is defined with respect to an initial value at 133.3 ns after the zero crossing and a final value at 800 ns after the zero crossing" before the first sentence of this subclause.

Rewrite the requirements as two bullets (for PI that is / is not encompassed within the MDI) either using the definition above or based on the current text.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
The text is consistent with the style of similar text in IEEE Std 802.3 (e.g., see Clause 96) which does not use a bulleted list

Cl **146** *SC* **146.5.4.2** *P* **26** *L* **25** # 48

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *Editorial*

The sentence "For applications such as those shown in Annex 146A, implementers should consider transmitter amplitude limitations" is unclear for a reader unfamiliar with Annex 146A. That annex does not decribe the applications, it only lists guidelines for these applications.

Also, it is unclear which transmitter amplitude limitations should be considered and whether this applies only to a PI encompassed within the MDI as currently written.

SuggestedRemedy

Change "For applications such as those shown in Annex 146A" to "For intrinsically-safe applications addressed by Annex 146A"

Clarify if it's only for PI encompassed within the MDI.

Clarify what amplitude limitations should be considered.

Consider making this sentence an informative NOTE.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change "For applications such as those shown in Annex 146A, implementers should consider transmitter amplitude limitations."
to
"Implementers should consider transmitter amplitude limitations when appropriate to the application, such as those addressed by Annex 146A."

Cl **146** *SC* **146.8.3** *P* **26** *L* **43** # 49

Ran, Adee Cisco

Comment Type **T** *Comment Status* **D** *Editorial*

It would benefit the readers if graphical representations of the return loss limits were provided, especially to show the difference between the two specifications.

The following Matlab/Octave code can be used to illustrate equation 146-17 (top subplot) and 146-17a (bottom subplot):

figure; subplot(2,1,1); f=linspace(0.1, 0.2, 100); plot(f, 20-18*log10(0.2./f), 'k'); hold on; f=linspace(0.2, 1, 100); plot(f, 20*ones(size(f)), 'k'); f=linspace(1, 10, 100); plot(f, 20-16.7*log10(f), 'k'); f=linspace(10, 20, 100); plot(f, 3.3-7.6*log10(f/10), 'k'); ylim([0 22]); axis ij; grid on; xlabel('Frequency (MHz)'); ylabel('Return loss (dB)'); text(3, 15, sprintf('Meets equation
constraints')); subplot(2,1,2); f=linspace(0.1, 0.5, 100); plot(f, 20-18*log10(0.5./f), 'k'); hold on; f=linspace(0.5, 1, 100); plot(f, 20*ones(size(f)), 'k'); f=linspace(1, 10, 100); plot(f, 20-16.7*log10(f), 'k'); f=linspace(10, 20, 100); plot(f, 3.3-7.6*log10(f/10), 'k'); ylim([0 22]); axis ij; grid on; xlabel('Frequency (MHz)'); ylabel('Return loss (dB)'); text(3, 15, sprintf('Meets equation
constraints'));

(displayed in linear frequency scale as is common for return loss specifications, but can be changed to log-f if desired)

SVG file can be provided if needed.

SuggestedRemedy

Add a figure illustrating equations 146-17 and 146-17a and refer to it in the text, with editorial license.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
The text is clear and correct. Many equations are provided in IEEE Std 802.3 without the need to show plots.

Cl **146** *SC* **146.8.5** *P* **27** *L* **23** # 50

Ran, Adee Cisco

Comment Type **E** *Comment Status* **D** *alignment with revision*

The editorial instruction says "Change the first paragraph of 146.8.5, inserted by IEEE Std 802.3cg-2019". But 802.3cg added the entire clause 146, not this specific paragraph.

If desired, the fact that clause 146 was added by 802.3cg can be stated in a single note at the beginning of this clause, but not in the specific editorial instruction.

Similarly for the two editorial instructions in 146.8.6.

SuggestedRemedy

Delete the three instances of ", inserted by IEEE Std 802.3cg-2019"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Accomodated by comment 8 which removes all such instances in aligment with the revision.
Response to comment 8 is
ACCEPT.
Remove references to IEEE Std 802.3cg-2019, including: "(as modified by IEEE Std 802.3cg-2019)" *with and without parens* and ", inserted by IEEE Std 802.3cg-2019," from all editing instructions.

Cl **146** *SC* **146.11.4.5** *P* **30** *L* **27** # 54

Anslow, Pete Independent

Comment Type **ER** *Comment Status* **D** *EZ*

The status entry for Item MDI2 does not conform to the syntax set out in 21.6.
:M should appear at the end of the entry and "+" is not defined as OR

SuggestedRemedy

Change the entry to !PPSE*!PPD:M

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **146** *SC* **146.11.4.5** *P* **30** *L* **31** # 55

Anslow, Pete Independent

Comment Type **ER** *Comment Status* **D** *EZ*

The status entry for Item MDI2a does not conform to the syntax set out in 21.6.
:M should appear at the end of the entry

SuggestedRemedy

Change the entry to (PPSE or PPD):M

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **146** *SC* **146.11.4.5** *P* **30** *L* **33** # 56

Anslow, Pete Independent

Comment Type **ER** *Comment Status* **D** *EZ*

The status entry for Item MDI4 does not conform to the syntax set out in 21.6.
:M should appear at the end of the entry and also N/A [ ] is missing from the support column

SuggestedRemedy

Change the status entry to !PPSE:M
Add N/A [ ] to the support entry.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **146** *SC* **146.11.4.5** *P* **30** *L* **35** # 57

Anslow, Pete Independent

Comment Type **ER** *Comment Status* **D** *EZ*

The status entry for Item MDI5 does not conform to the syntax set out in 21.6.
:M should appear at the end of the entry and also N/A [ ] is missing from the support column

SuggestedRemedy

Change the status entry to !PPSE:M
Add N/A [ ] to the support entry.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.