Cl **104** *SC* **104.6** *P* **39** *L* **36** # 2

Carlson, Steven HSD

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

IEEE 802.3 defines point to point links with a single station at each end of the link. This subclause indicates that a "multi-drop" mode is present for multiple PDs within a PI. This is not compatible with the IEEE 802.3 architecture.

As this is a Task Force review, this will be a general comment on 104.6 SCCP.
1. What is the rational for multi-drop mode?
2. Diagrams and explaination read like an IC data sheet, e.g. implied implementation, not an interoperability specification
3. Use of 64-bit addressing seems wildly unecessary and inefficient
4. Requirement for 64-bit address requires RAC action
5. PAR Section 6.1b should be a "Yes". It is currently a "No"
6. PD is burdened with a complex Layer 1 signature and classification mechanism
7. SCCP seems to be envisioned as a full communications scheme if the PSE is not powering the link. This is beyond the scope of the PAR.

SuggestedRemedy

Eliminate addressing scheme, which also eliminates the need for RAC action
Eliminate multi-drop mode
Redo figures and text to meet IEEE style
If SCCP is desired as a full communcations scheme when the PSE is not powering the link segment, change PAR to reflect this.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See gardner_3bu_x_1015.pdf.

Cl **104** *SC* **104.3.3.3** *P* **24** *L* **45** # 3

Chabot, Craig UNH-IOL

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

The text refers to section 104.3.6.4. This section does not appear to apply to any of the text describing the wakeup_detected variable.

SuggestedRemedy

Remove "See 104.3.6.4"
or
Reference appropriate section.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #115.

Cl **104** *SC* **104.3.3.3** *P* **24** *L* **43** # 4

Chabot, Craig UNH-IOL

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

"A Boolean variable indicating that the PD is requesting full power at the PI or an external wakeup request has been received by the PSE and that the PSE shall forward the request to the PD."
is confusing. The Shall only seems to apply to the external wakeup request, and this sentence makes it difficult to write the PICS item.

SuggestedRemedy

Change:
"A Boolean variable indicating that the PD is requesting full power at the PI or an external wakeup request has been received by the PSE and that the PSE shall forward the request to the PD."
To:
"A Boolean variable indicating that the PD is requesting full power at the PI or an external wakeup request has been received by the PSE. If an external wakeup request has been received by the PSE, it shall forward the request to the PD."

OR

Change:
"A Boolean variable indicating that the PD is requesting full power at the PI or an external wakeup request has been received by the PSE and that the PSE shall forward the request to the PD."
To:
""A Boolean variable indicating that the PD is requesting full power at the PI or an external wakeup request has been received by the PSE."
and move
"If an external wakeup request has been received by the PSE, it shall forward the request to the PD."
to the text for the external_wakeup variable.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #115.

Cl **104** *SC* **104.3.3.3** *P* **23** *L* **1** # 5

Chabot, Craig UNH-IOL

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

All variables should explicitly state the meaning of their possible values.
For example:
"option_detect_ted
This variable indicates if detection can be performed by the PSE during the ted_timer interval.
Values:FALSE:Do not perform detection during ted_timer interval.
TRUE:Perform detection during ted_timer interval."
-from page 631 of 802.3-2012 standard

SuggestedRemedy

Populate the meaning of values for variables in subclauses 104.3.3.3 and 104.4.3.3.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Need a complete remedy.

Cl **104** *SC* **104.7.4** *P* **51** *L* **12** # 8

Chabot, Craig UNH-IOL

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

The many changes from D1.2 to D1.3 have consequently necessitated changes to the PICS. I have drafted a new, corrected version of the PICS tables.

SuggestedRemedy

See chabot_3bu_1_1015

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Who will present for Craig in Catania?

Cl **104** *SC* **104.6** *P* **39** *L* **33** # 10

Law, David HP Ltd

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

The text seems to currently use PSE and master, and PD and slave, interchangeably. Suggest that the text be written in the terms of a PSE and a PD, and what their requirements are during the SCCP exchange.

See also comment that SCCP is being used of a point to point link.

SuggestedRemedy

[1] Suggest the first paragraph of subclause 104.6 be changed to read 'The PSE acts as a master during the SCCP exchange, controlling the PD that acts as the slave device.'.

[2] Suggest that the third sentence of the second paragraph of subclause 104.6 be changed to read 'The PD can derive power from the PSE's pull-up current during the SCCP exchange.'.

[3] Suggest that the title of subclause 104.6.1 'SCCP master' be changed to read 'PSE SCCP requirements'.

[4] Suggest that the text 'The master device shall source a pull-up current in ...' in subclause 104.6.1 be changed to read 'During the SCCP exchange the PSE shall source a pull-up current in ...'.

[5] Suggest that the sentence '104-7 illustrates the master device block diagram.' in subclause 104.6.1 be changed to read '104-7 illustrates the PSE SCCP block diagram.'.

[6] Suggest the title of Figure 104-7 'SCCP master block diagram' be changed to read 'PSE SCCP block diagram'.

[7] Suggest that the title of subclause 104.6.2 'SCCP slave' be changed to read 'PD SCCP requirements'.

[8] Suggest the text ' Slave devices that derive their power from the master's pull-up current should utilize a charge reservoir ...' in the first sentence of subclause 104.6.2 be changed to read 'PDs that derive their power from the PSE's pull-up current during the SCCP exchange should utilize a charge reservoir ...'.

[9] Suggest the title of Figure 104-8 'SCCP slave block diagram' be changed to read 'PD SCCP block diagram'.

[10] In subclause 104.6.3 'SCCP signaling' and 104.6.4 'Serial communication classification protocols' replace all instances of 'master' with 'PSE' and 'slave' with 'PD'.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Some of this may be OBE'd by gardner_3bu_x_1015.pdf.

Cl **104** *SC* **104.5** *P* **38** *L* **35** # 11

Law, David HP Ltd

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

Subclause 10.2.2 'Shall, should, may, and can' of the '2014 IEEE-SA Standards Style Manual' reads 'Note that the use of the word must is deprecated and shall not be used when stating mandatory requirements; must is used only to describe unavoidable situations.'. As the text is currently written it doesn't seem to describe an unavoidable situation, therefore suggest it be re-written to do so.

SuggestedRemedy

Suggest the text '... the MDI leads must provide isolation between all accessible external conductors, including frame ground (if any), and the non-MDI connector.' be changed to read '... the MDI leads must provide isolation between all accessible external conductors, including frame ground (if any), and the non-MDI connector, so as not to negate the DC isolation provided by the PD.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Is there a better word than 'negate'?

Cl **104** *SC* **104.5** *P* **38** *L* **35** # 12

Law, David HP Ltd

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

To ensure application of PoDL power is a broad set of applications suggest that isolation requirements be placed on both PSEs as well as PDs.

SuggestedRemedy

Change the text 'A PD shall ...' to read 'PDs and PSEs shall ...' and the text '... to a PD through ...' to read '... to a PD or PSE through ...'.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

See http://www.ieee802.org/3/bu/public/jan15/gardner_3bu_3_0115.pdf for discussion.

Cl **104** *SC* **104.6** *P* **39** *L* **33** # 13

Law, David HP Ltd

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

Since the SCCP is used on a point to point link, I don't see the need to support multiple salve devices and, as far as I can see, the PSE can only accept a single information byte with a PD class since it isn't capable of process multiple PD class responses from a PD.

Further, the inclusion an address in the SCCP message seems unnecessary on a point to point link, and would require a registration process to be defined to allocate these 48 bit addresses, assuming that each address is to be unique. I would note that at the moment the response to item 6.1.b. on the approved IEEE P802.3bu PAR, 'Is the Sponsor aware of possible registration activity related to this project?', is 'No'.

Finally, the exchange of this data to communicate a 8-bit information byte from the PD seems to take in the region of 7.5ms of the 25ms I understand that PoDL has been allocated from the overall maximum 100ms start up time.

SuggestedRemedy

Suggest that SCCP be changed to be based on a master (PSE) communicating with a single slave device (PD) which will remove the need for an address in the exchange and speed up the start up process.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #2.

Cl **104** *SC* **104.3.3.3** *P* **23** *L* **12** # 15

Law, David HP Ltd

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

The only fault defined for the variable 'fault_detected' is overload, and therefor the only condition that can result in the entry to the 'ERROR' state in the state diagram is an overload.

SuggestedRemedy

Suggest that either the variable 'fault_detected' be renamed 'overload' and the state 'ERROR' be renamed 'OVERLOAD' or addition conditions be added that result in 'fault_detected' being set 'true' such as a short circuit condition.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #91.

Cl **104** *SC* **104.1** *P* **19** *L* **6** # 23

Law, David HP Ltd

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

It doesn't seem correct that a 'Power Interface (PI)' is an 'optional entity' since it is an interface, not an entity, and it isn't an option on its own since a PSE or PI always has a PI, although in soem cases the PI may be not be physically instantiated.

SuggestedRemedy

Suggest that the first sentence of the first paragraph of subclause 104.1 Overview be changed to read 'This clause defines the functional and electrical characteristics of two optional power entities, a Powered Device (PD) and Power Sourcing Equipment (PSE), for use with supported Ethernet physical layers.'.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.3.1** *P* **22** *L* **18** # 39

Law, David HP Ltd

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

Subclause 104.3.1 ' types' states that '... there are two types of PSEs: a type A PSE ... a type B PSE ... A type A+B ...'. Similarly subclause 104.4.1 'PD types' states that 'There are two types of PDs: a type A ... a type B PD ... A type A+B ...'. in both cases there seem to be three, A, B and A+B.

SuggestedRemedy

Reword as three types, or clarify that a PD or PSE can be both a Type A and a Type B.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #84.

Cl **104** *SC* **104.3.3.5** *P* **25** *L* **28** # 40

Law, David HP Ltd

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

The 'PD_information_byte' function points states it is a variable that contains the '... type and class of the PD.' And provides a pointer to Table 104-8 '... for a description of the content' however Table 104-8 then states for the 'Power class' see Table 104-1.

SuggestedRemedy

Suggest a direct pointer to Table 104-1 for 'Power class'.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See gardner_3bu_x_1015.pdf

Cl **104** *SC* **104.3.1** *P* **27** *L* **18** # 42
Law, David HP Ltd

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

Wouldn't a type A PSE that is compatible with a 100BASE-T1 PHY not also be compatible with a 1000BASE-T1 PHY, while a type B PSE would only be compatible with 1000BASE-T1 PHYs?

SuggestedRemedy

See comment.

Proposed Response *Response Status* **W**

PROPOSED REJECT. No it is not.

Cl **104** *SC* **104.2** *P* **21** *L* **29** # 43
Law, David HP Ltd

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

It is not clear to me what the '(a)' and '(b)' in the third row of Table 104-1 is in reference to.

SuggestedRemedy

Please clarify.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #112.

Cl **104** *SC* **104.1.1** *P* **19** *L* **32** # 45
Dove, Daniel Dove Networking Solut

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

Should there be a reference/citation to SELV?

SuggestedRemedy

Reference IEC 62282-5-1, ed. 2.0 (2012-09)?

Proposed Response *Response Status* **W**

Need better remedy.

Cl **104** *SC* **104.1.1** *P* **19** *L* **38** # 46
Dove, Daniel Dove Networking Solut

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

The term "largely unaffected" may draw concerns in WG ballot.

SuggestedRemedy

Can we state "will continue to meet BER and other performance requirements"?

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Need more explicit remedy.

Cl **104** *SC* **104.1.4** *P* **21** *L* **4** # 48
Dove, Daniel Dove Networking Solut

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

Inconsistent capitalization;

SuggestedRemedy

Search and Replace "single-pair" with "Single-Pair", also S&R "Single-pair"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Repeat of comment 47.

Cl **104** *SC* **104.4.4** *P* **35** *L* **20** # 64
Gardner, Andrew Linear Technology Cor

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

Table 104-4 Isignature limit, should be 'Vconnector<Vsig_disable max'

SuggestedRemedy

See comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.4.6.2** *P* **37** *L* **31** # 65
Gardner, Andrew Linear Technology Cor

Comment Type **TR** *Comment Status* **D**
3.1V<VPI(PD)<3.5 should be in Table 104-6

SuggestedRemedy
See comment.

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.4.6.2** *P* **37** *L* **25** # 66
Gardner, Andrew Linear Technology Cor

Comment Type **TR** *Comment Status* **X**
Max PD input current during inrush should be specified here.

SuggestedRemedy
See gardner_3bu_x_1015 presentation.

Proposed Response *Response Status* **W**
See presentation.

Cl **104A** *SC* **104A.1** *P* **57** *L* **9** # 67
Gardner, Andrew Linear Technology Cor

Comment Type **TR** *Comment Status* **X**
The informative annex as written is not applicable to the PoDL phantom power architecture.

SuggestedRemedy
Either re-write or delete this annex.

Proposed Response *Response Status* **W**
Discuss in room.

Cl **104** *SC* **104.4.6.5** *P* **38** *L* **14** # 69
Gardner, Andrew Linear Technology Cor

Comment Type **ER** *Comment Status* **X**
See comment regarding relevence of 104A.1

SuggestedRemedy
See comment.

Proposed Response *Response Status* **W**
See comment #67.

Cl **104** *SC* **104.3.1** *P* **22** *L* **16** # 70
Gardner, Andrew Linear Technology Cor

Comment Type **T** *Comment Status* **D**
This subclause is redundant with 104.1.4

SuggestedRemedy
Delete 104.3.1

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.3.6.8** *P* **31** *L* **47** # 75
Gardner, Andrew Linear Technology Cor

Comment Type **ER** *Comment Status* **X**
See comment regarding relevence of 104A.1

SuggestedRemedy
If 104A.1 is removed, delete this subclause.

Proposed Response *Response Status* **W**
See comment #67.

Cl **104** *SC* **104.3.6.4** *P* **29** *L* **52** # 77
Gardner, Andrew Linear Technology Cor

Comment Type **TR** *Comment Status* **X**
Subclause 104.3.6.4 is referenced by Ilim in Table 104-3 but there is not baseline text regarding Ilim.

SuggestedRemedy
See gardner_3bu_x_1015 presentation.

Proposed Response *Response Status* **W**
See presentation.

Cl **104** *SC* **104.4.1** *P* **32** *L* **23** # 83
Gardner, Andrew Linear Technology Cor

Comment Type **E** *Comment Status* **D**
This subclause is redundant with 104.1.4

SuggestedRemedy
Delete 104.4.1

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE. See comment #67.

Cl **104** *SC* **104.4.3.3** *P* **33** *L* **6** # 85
Gardner, Andrew Linear Technology Cor

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

The variable 'disconnect' could be confused with the 'DISCONNECT' state

SuggestedRemedy

Rename the variable as disconnect_PD?

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.4.3** *P* **34** *L* **36** # 87
Gardner, Andrew Linear Technology Cor

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

The function 'do_sccp' is not defined.

SuggestedRemedy

Add defnition for 'do_sccp.'

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See presentation gardner_3bu_x_1015.pdf regarding SCCP.

Cl **104** *SC* **104.4.4** *P* **35** *L* **36** # 88
Gardner, Andrew Linear Technology Cor

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

Cbad in Table 104-5 is TBD.

SuggestedRemedy

Is Cbad required to fail detection. The tdet_timer should suffice. Consider removing Cbad.

Proposed Response *Response Status* **W**

Duplicate with #89.

Cl **104** *SC* **104.3.4.3** *P* **28** *L* **31** # 89
Gardner, Andrew Linear Technology Cor

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

Cbad in Table 104-5 is TBD.

SuggestedRemedy

Is Cbad required to fail detection. The tdet_timer should suffice. Consider removing Cbad.

Proposed Response *Response Status* **W**

Discuss in room.

Cl **104** *SC* **104.3.3** *P* **23** *L* **12** # 91
Gardner, Andrew Linear Technology Cor

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

fault_detected variable definition needs to be expanded to support faults during sleep.

SuggestedRemedy

Add '...or if the PSE is in a current limiting mode for at least TCUT.'

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See gardner_3bu_x_1015.pdf.

Cl **104** *SC* **104.3.3** *P* **26** *L* **10** # 92
Gardner, Andrew Linear Technology Cor

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

The potential exists for the PSE to source VSLEEP into a short indefinitely during the IDLE state.

SuggestedRemedy

Add fault_detected arc out of the PSE IDLE state.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Recommend giving editor license to correct.

Cl **104** *SC* **104.3.6.5** *P* **31** *L* **21** # 93
Gardner, Andrew Linear Technology Cor

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

The tinrush timer and tpon timer seem to be redundant.

SuggestedRemedy

See gardner_3bu_x_1015 presentation.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See presentation.

Cl **104** *SC* **104.5.1** *P* **38** *L* **35** # 94
Gardner, Andrew Linear Technology Cor

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

Need to resolve use of must in this subclause.

SuggestedRemedy

Define a level of DC isolation (Volts and ohms?) and use 'shall.'

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #11.

Cl **104** *SC* **104.5.3** *P* **38** *L* **38** # 95
Gardner, Andrew Linear Technology Cor

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

Need to add DC isolated PHY transmitter test fixtures to Clause 104.

SuggestedRemedy

See comment.

Proposed Response *Response Status* **W**

Discuss in room.

Need figures.

Cl **104** *SC* **104.6.3.4** *P* **43** *L* **1** # 98
Gardner, Andrew Linear Technology Cor

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

The timing parameters as defined for SCCP are not consistent with the detection current and PSE output and PD input capacitances.

SuggestedRemedy

re-work timing to be consistent with PoDL system paramters or remove SCCP from the standard.

Proposed Response *Response Status* **W**

See gardner_3bu_x_1015.pdf.

Cl **104** *SC* **104.6.4.4** *P* **47** *L* **13** # 99
Gardner, Andrew Linear Technology Cor

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

SCCP function commands are TBD.

SuggestedRemedy

Add a function commands that allow the PSE to readback PD status and perform mutual identification.

Proposed Response *Response Status* **W**

See comment #98.

Cl **104** *SC* **104.3.4.1** *P* **28** *L* **7** # 100
Gardner, Andrew Linear Technology Cor

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

The max value for Tdet is TBD.

SuggestedRemedy

See gardner_3bu_x_1015 presentation.

Proposed Response *Response Status* **W**

See presentation.

Cl **104** *SC* **104.4.6** *P* **36** *L* **50** # 101

Gardner, Andrew Linear Technology Cor

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

Cin,detect is TBD.

SuggestedRemedy

See gardner_3bu_x_1015 presentation.

Proposed Response *Response Status* **W**

See presentation.

Cl **104** *SC* **104.4.6** *P* **36** *L* **53** # 102

Gardner, Andrew Linear Technology Cor

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

tpwr_dly is TBD

SuggestedRemedy

See gardner_3bu_x_1015 presentation.

Proposed Response *Response Status* **W**

See presentation.

Cl **104.3** *SC* **table 104-3** *P* **23** *L* **16** # 103

Matola, Larry Delphi

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

clause may be wrong as I am commenting early (draft 1.2) due to vacation unable to wait for draft 1.3
sleep voltage left on from PSE to bias PD typically in Autoomotive applications hot plug is not doen with live voltage. Open circuit voltage can also lead to service accidents (stray screwdriver) and potential galvanic corrosion (unprotected open connector exposed to moisture)

SuggestedRemedy

suggest adding timer to turn off sleep bias if relativly low resistance is detected as falult mode (short circuit up to some small resistance TBD) to help prevent condition listed

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comments #15, #91, and #92.

Cl **104** *SC* **104.4.3.1** *P* **26** *L* **27** # 104

Matola, Larry Delphi

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

clause and page may be wrong due to comment against draft 1.2 will be out of office during 1.3 voting period
requirement for PoDL poer to be isolated from chassis (isolated to data lines) may be problematic if adding Ethernet to existing design. Typical Auto design standards allow DC groud to chassis (most times encourage local grounding for EMC reasons)

SuggestedRemedy

suggest putting DC isolation as prt of optional or reference design at PD or PSE (whichever is more cost effective) so potential circuitry does not have to be redesigned or revalidated. If isolation was added PSE or PD ethernet circuit existing module circuitry would not need to be revised.

Proposed Response *Response Status* **W**

See comment #11.

Cl **104** *SC* **104.2** *P* **21** *L* **29** # 112

Wienckowski, Natalie General Motors

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

Table 104-1: Do the "(a)" and "(b)" refer to the "A" and "B" system types defined in 104.1.4? If they do change "(a)" to "A" and "(b)" to "B" in the column headings. If they do not, change "(a)" to "(i)" and "(b)" to "(ii)" or some other designation that cannot be confused with the types.

SuggestedRemedy

See options in Comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #43.

Cl **104** *SC* **104.3.6.6** *P* **31** *L* **23** # 114
Gardner, Andrew Linear Technology

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

Tinrush and Tpon appear to be overlapping timers. In the PSE state machine, Tpon is used to limit the power-up timer, but subclause 104.3.6.6 refers to Tinrush instead.

SuggestedRemedy

Rename Tpon Tinrush in the state machine, and delete the Tpon timer definition.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

See gardner_3bu_x_1015.pdf.

Cl **104** *SC* **104.3.6** *P* **29** *L* **46** # 116
Gardner, Andrew Linear Technology

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

The range of Icut is too wide.

SuggestedRemedy

See gardner_3bu_x_1015.pdf

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.2** *P* **21** *L* **21** # 132
Dove, Daniel Dove Networking Solut

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

I have a concern about putting Link Segment first as it calls for the various system classes to define critical parameters, but you have not defined the system classes yet.

SuggestedRemedy

Move it behind the system class info.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.3** *P* **22** *L* **15** # 133
Dove, Daniel Dove Networking Solut

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

"no longer required" does not prevent application of power/voltage to the PD

SuggestedRemedy

replace "no longer required" with "not to be applied".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Cl **104** *SC* **104.3.3.3** *P* **23** *L* **24** # 135
Dove, Daniel Dove Networking Solut

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

This may be too general of a statement. There are other sources of fault that may not cause this specific signal, right?

SuggestedRemedy

I don't have a specific recommendation other than to ensure this text covers all cases, or is specificly accurate.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. See comments #15, #91, and #92.

Cl **104** *SC* **104.3.3.5** *P* **26** *L* **1** # 138
Dove, Daniel Dove Networking Solut

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

There is no subclause identified for the state diagram itself. It shows up in the functions subclause.

SuggestedRemedy

Add a sublcause for the state diagram

Proposed Response *Response Status* **W**

PROPOSED REJECT. See clause 104.3.3.

Cl **104** *SC* **104.3.3.5** *P* **26** *L* **1** # 139
Dove, Daniel Dove Networking Solut

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

Should Fault_Detected=FALSE be asserted here?

SuggestedRemedy

Add Fault_Detected=FALSE

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.3.6** *P* **28** *L* **13** # 140
Dove, Daniel Dove Networking Solut

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

TBD in table

SuggestedRemedy

All TBDs must be removed prior to D2.0. I don't have the replacement value, just wanted to identify this point. Search & Insert values for all TBDs.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See gardner_3bu_x_1015.pdf.

Cl **104** *SC* **104.3.6.1** *P* **30** *L* **52** # 141
Dove, Daniel Dove Networking Solut

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

It seems that a time value should be identified here. It does not constrain how fast or slow this value shall decay.

SuggestedRemedy

Insert a time value or reference the appropriate time value

Proposed Response *Response Status* **W**

PROPOSED REJECT. See 104.3.6.6.

Cl **104** *SC* **104.3.6.1** *P* **31** *L* **6** # 142
Dove, Daniel Dove Networking Solut

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

It seems that a time value should be identified here. It does not constrain how fast or slow this value shall decay.

SuggestedRemedy

Insert a time value or reference the appropriate time value

Proposed Response *Response Status* **W**

PROPOSED REJECT. See comment #141.

Cl **104** *SC* **104.3.6.1** *P* **31** *L* **25** # 143
Dove, Daniel Dove Networking Solut

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

"may remove" does not indicate any requirement. Is there a requirement? If so, a shall statement should apply.

SuggestedRemedy

If a "shall remove" requirement exists, please insert.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. This is actually in subclause 104.3.6.4.

Cl **104** *SC* **104.6.1** *P* **42** *L* **44** # 145
Dove, Daniel Dove Networking Solut

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

and ROM… is this essential? It could be PROM, RAM, etc. I think that all falls under the term LOGIC, so would delete this.

SuggestedRemedy

Delete words "and ROM"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **104** *SC* **104.6.1** *P* **42** *L* **44** # 146

Dove, Daniel Dove Networking Solut

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

and ROM… is this essential? It could be PROM, RAM, etc. I think that all falls under the term LOGIC, so would delete this.

SuggestedRemedy

Delete words "and ROM"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE. Duplicate comment with #145.