Consolidated comment discussion March 17 - 20

- Peter Johnson's
  - **Comment** - 33.7.2.2 Requested PD Power Value (p.92, line 10) says the Request Power Value is the power at the output of the PSE PI. This can't be true - requested power in the TLV appears to always be PD interface.
    Resolution – This is not a critical item, we suggest the comment be made during ballot.

  - **Comment** - Table 33-9 points to 33.2.9.9 for the Max value of Tlim. The only mention of Tlim in 33.2.9.9 (p.52, line 49) points back to Table 33-9 for the Tlim range.
    Resolution – This is not a critical item, we suggest the comment be made during ballot.

  - **Comment** - Table 33-6 Association of Class 0 and Class 4 with Pclass (Minimum PSE Power) = Ptype per 33-9 seems to suggest Class 0 could be type 2 and Class 4 could be type 1 .. was this intended ?
    Resolution – We agree there may be confusion between the Types of Class 0 and 4, we do not understand the confusion in this context - we suggest the comment be made during ballot.

  - **Comment** - References in Table 33-9, Items 5 and 13 to 3.1.4.2 for Icable are off - Icable is defined in 3.1.4, 3.1.4.2 just specifies Type 2 system temperature derating of 15 deg.
    Resolution – This is not a critical item, if there are a small number of changes we may make this revision at the last minute, we suggest the comment be made during ballot if it is not done this time.

  - **Comment** - The branch whereby a PSE can remove power if out of spec on Vport (p. 49, line 47) is not included in Figure 33-9 (PSE State Diagram). So this only works if we assume this to be an Error Condition or if it is somehow related to a "power_not_available" condition.
    Resolution – Without a clear indication of what the vector should look like and where to install it in the state diagram, we are deferring to a similar comment by Yair Dashan.

- Yair Darshan
  - Yair agreed to review his comments and only put forward critical items, not all comments were addressed.
  - **Comment** - Draft 2.0: We had allowed the PSE to turn power off if Vport is out of operating range per 33.2.9.1. Therefore the state diagram in figures 33-9 should reflect it as well.
    The way to do it is to create new variable which will be optional. When the conditions of this variable are met, the PSE will remove power at any t<TLIM_MIN.

Resolution – There is a difference of opinion on whether to refine Error Condition or add the vector, we request the comment be submitted during ballot.

- **Comment** - Draft 2.0: According to the: Classification base line concept and Associated motions and Current text in 802.3 that define that the physical layer classification information is the maximum power that the PD will ever need. the text should explicitly note that a PD that asks more power than advertised in L1 hardware classification is specifically not compliant.

  The rational for this was to prevent interoperability issues such as when a PD that advertized through its Layer 1 classification that it needs e.g. 12.95W and through L2 requires more power then 12.95W. In this scenario when it is connected to PSE that equiped with L2 the PD will fully work and when connected to a PSE that doesnt equipped with L2 it may or will not work. As a result we mandate PD type 2 to support both L1 and L2 classification and specify that hardware classification results are max. Power values.
  Resolution – The group agreed to correct the issue during working group ballot

- **Comment** - Add editor comment that address the fact that this text may be subjected to changes due to the work of the 4P ad hoc Editor note "the text that address simultaneous operation of ALT A and ALT B may be changed as a result Task Force action". (reworded)
  Resolution – Failed to gain consensus to add text.

- **Comment** - Draft 2: Figur 33-11 specifying the behavior of startup mode in addition to overload, short and MPS. The behavior of short and startup are different in many aspects while it was similar in terms of ILIM and TLIM for type 1 legacy PSE. Now we have to separate the behavioral state diagram to reflect current changes in type 1 and type 2 PSE. We have to specify Tinrush, Iinrush for startup and ILIM/TLIM for short circuit. I believe that this differentiation will help to make clearer standards.
  Resolution – The task force agrees that the state machine needs to be split and would accept the change in principle, we request the same comment be submitted during working group.

- **Comment** - The PD state diagram is supplying a "Test Mode" like we did in the PSE state diagram. Test mode allows by passing all PD functions the prevent it from powering. In this way we can test PDs in the field if when connected to PSE something is not working and we want to isolate the problems. We can add a cautionary note as we did in 33.6.1.1.4 for the PD as well.
  Resolution – The task force agrees that the state “Test Mode” needs to be addressed, we request the same comment be submitted during working group ballot.

- **Comment** - Item 3, the 1000BT Midspan can be also divided to items 1 and 2.
  Resolution - The task force agrees to address 1000BT Midspan, we request the same comment be submitted during working group ballot.

- Anoop Vetteth:
  - **Comment** - Clause 33.8, Page 101, Line 12-14
    The PSE is presently mandated to remove the power if the PD does not send the first LLDP frame after power-on within 1.25 seconds.
    Proposal: Increase 1.25 seconds to 5 minutes. The PSE has three options
    - Do nothing and budget Max Power to PD
    - Revert to AF power level
    - Remove power

    None of these should be mandated.
    Reworded to "Change '1.25 seconds' to '5 minutes', change 'shall' to 'may'"
    Remedy – accept the reworded comment.

  - **Comment** - Clause 33.8, Page 101, Line 21
    The PSE shall remove power if loss of communication persists beyond 2xTTL.
    Proposal: Make the PSE behavior optional.
    Proposed Text: Change "PSE shall remove power" to "PSE may optionally remove power"

    Reword to Change "PSE shall remove power" to "PSE may remove power"
    Resolution – Accept reworded comment

  - **Comment** - 3) Figure 33-27, Page 97
    The only exit path from the state "LOSS OF COMMUNICATION" is to remove power.
    Proposal: PSE may optionally remove power or wait in that state until communication is re-established
    Resolution: Editor to make the state machine match the option power down of previous comment.

- Chad Jones:
  - **Resolution**: (following comment text)
    Page 49:
    Turn on ramp rate ->> 10V/us
    current unbalance for Type 2 ->> 3% Icable, remove 10.5, consolidate entries

  - Page 66:
    Inrush to operating delay mode MIN ->> 0ms
    Inrush to operating delay mode MAX ->> 50ms

- Page 81:
  Midspan signal path requirements (4 of them)
  Line 21 “Table TBD” ->>
  Line 22 “TBD mA.” ->> Iunb
  Line 23 “Table TBD” ->>
  Line 25 “TBD” ->>
  Midspan adhoc created a transfer function and reworded the paragraph.

- Page 95:
  pd_denial_timer ->> 1 sec
  pse_denial_timer ->> 1 sec , also change PD to PSE in text

- page 99:
  reassert request delay to persist ->> 1 sec

Comments captured and recorded by Michael McCormack