

Proposed resolution to #482

Geoff Thompson

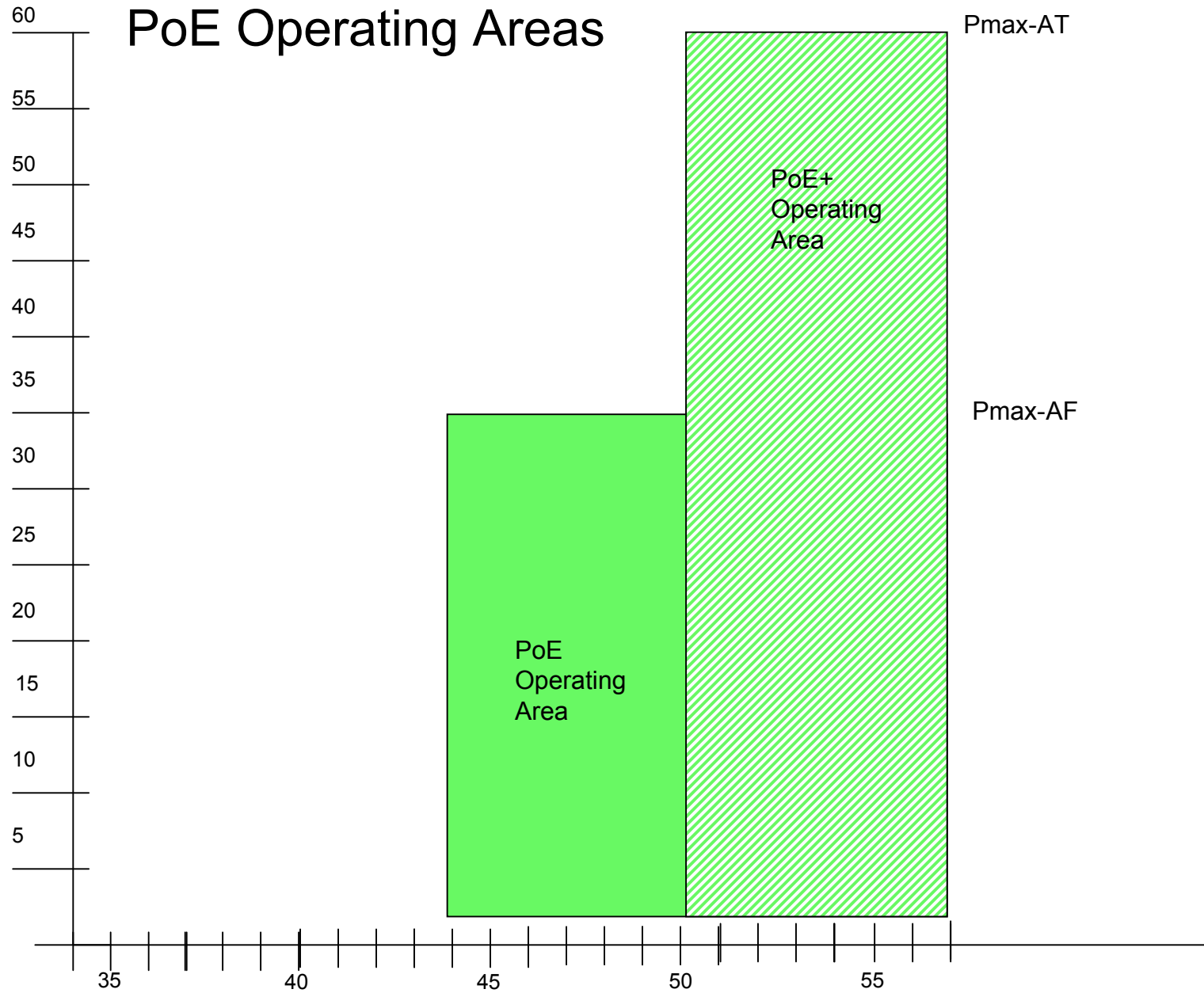
Nortel

Yair Darshan

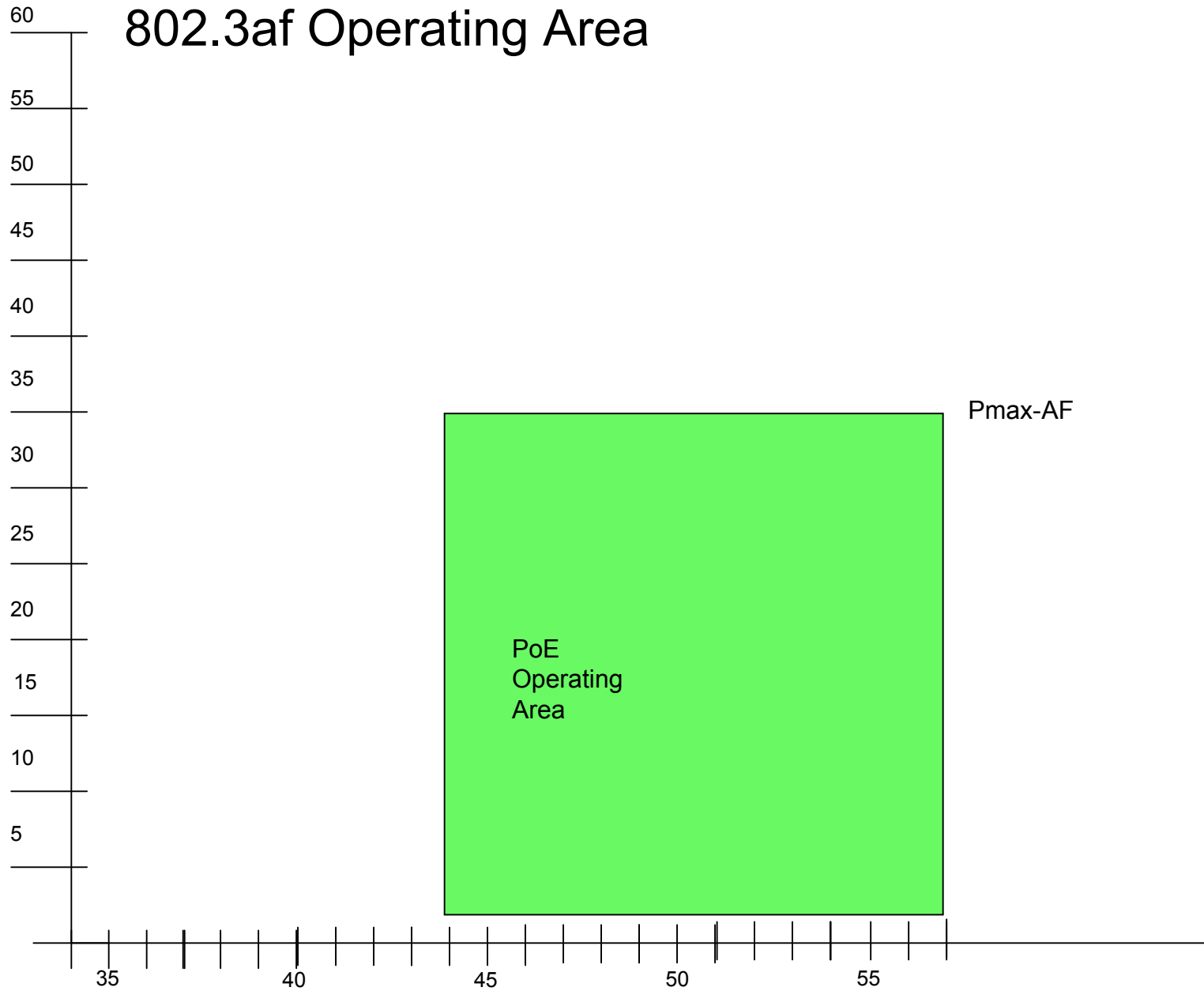
Micro Semi

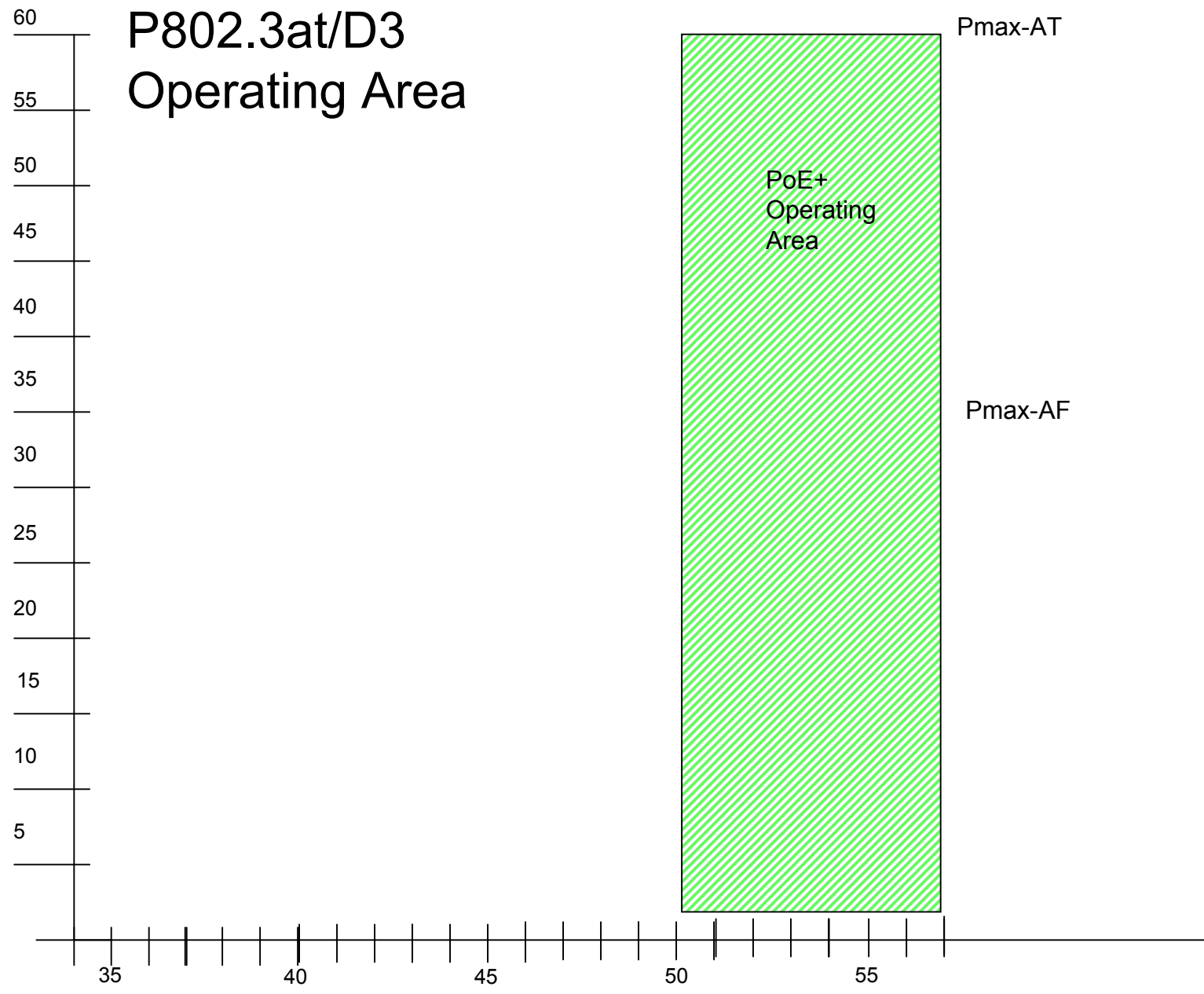
To P802.3at/Denver July 08

PoE Operating Areas



802.3af Operating Area





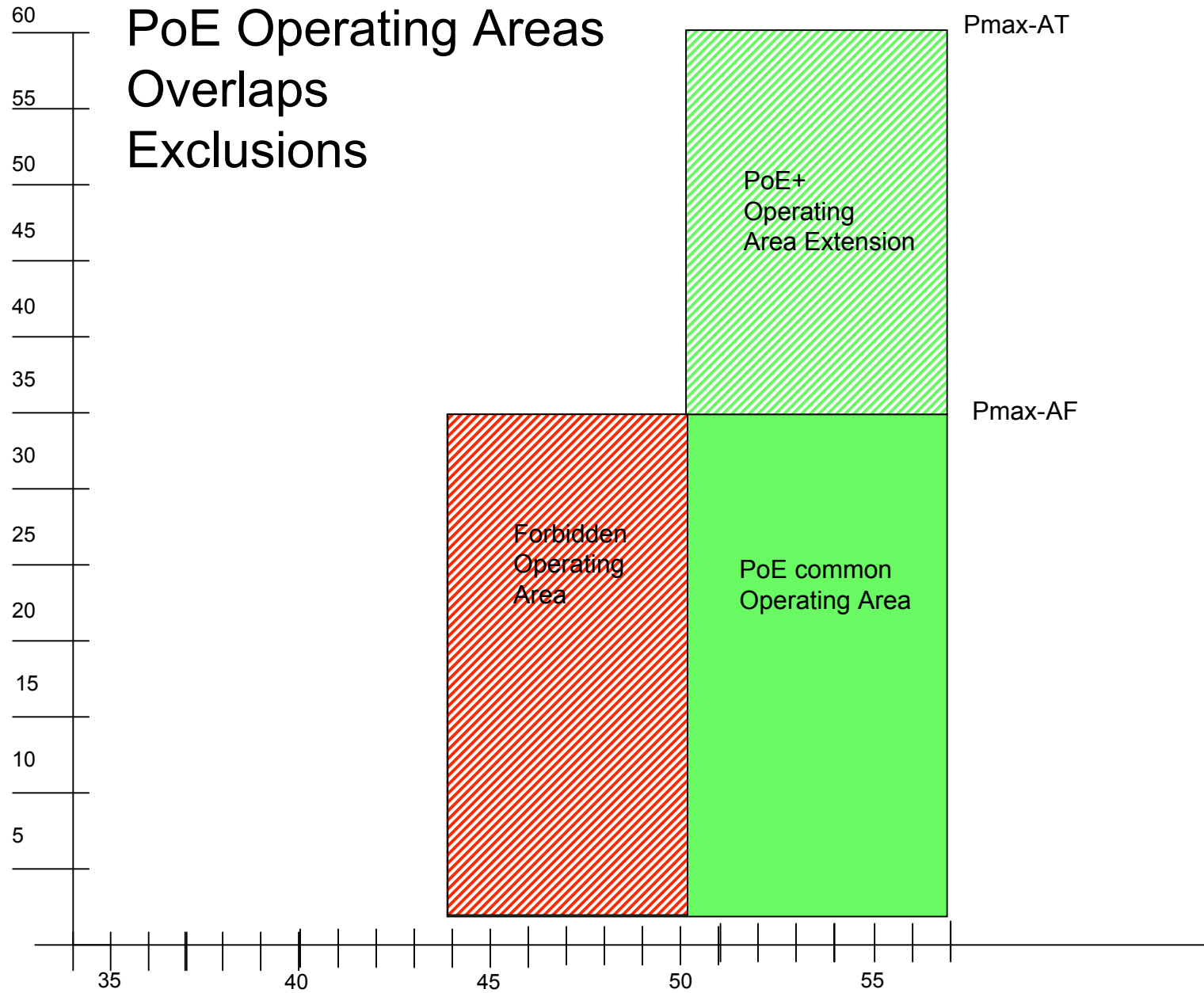
P802.3at/D3 Operating Area

PoE+
Operating
Area

Pmax-AT

Pmax-AF

PoE Operating Areas Overlaps Exclusions



Please
Make this legal



Proposed resolution to #482

- Proposed remedy:
 - Add text to “Additional Information” that says “PSE Type 1 Vport value allowed at less than full power output.”
- Text goes two places
 - Page 48, Line 16
 - Page 48, Line 19
- No other changes to draft needed to support this change.

Advantages

- Allows broader range of implementation
- Allows improved power retrofit to legacy systems
- Allows more power delivered and/or greater efficiency from 48VDC powered systems

How it using 44V for lower power affects other parts of the spec

- We have found that the parameter that may be affected is the requirement that PSE will not turn port OFF if voltage is dropped by 6% for $\leq 250\mu\text{s}$.
- The solution for it is in the PSE vendor arena. This is implementation issue. PSE can use large capacitance to address this issue. Any way PSE has to meet it. The rest is implementation
- There is PD specification covers 36V to 57V operating range.
If Type 2 PSE uses 44V it can deliver up to 20.72W. In this case PD minimum operating voltage is 37V and 36V in overload. So current PD specification cover this too

Motion

- Move to accept the recommended change as recorded on slide 7 of thompson_1_0708.pdf
- Moved by: Thompson/Darshan
- Yes ___ 3 ___
- No ___ 21 ___
- Abs ___ 8 ___
- Fail