Working Output from PDCC 5/22/2024 on Tutorial

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# Request and announcement of a tutorial / Consensus Building Meeting

Call for Interest: Single-Pair Ethernet Powering Cabling Restrictions

This is a call for interest to initiate a Study Group to develop a PAR and CSD to provide clarification on using single-pair Ethernet powering when the current carrying capacity of the cabling is restricted to be below the maximum current source capability of the PSE. The IEEE 802.3WG’s Power Delivery Coordinating Committee (PDCC) has been working with other SDOs to avoid potential issues. Some international cabling SDOs have proposed an approach of labeling and administration to separate cabling at different current carrying capacities. It may be necessary to have additional information in IEEE Std 802.3 to assure support of all powering applications.

# Potential Outline of the Tutorial Presentation

What is in Clause 104

* Different classes
* Progression of increased power in PoE over time

What is the current status of ISO 11801 on this issue

* Progression from:
  + Support for 2A, to
  + Keyed connectors, to
  + Labels…

What is the fundamental issue/potential problem

* Misuse of labels
* Hidden cable segments
* Overheating, premature aging of cabling
* Installer, user, and regulator confusion

What might 802.3 include

* Warning text
* Explanatory text to notify people of the problems and how to avoid them

Why a study group

* Open process
* Wide notification