

Proposed Objectives– Continued

As modified in the SG meeting

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Objectives (Approved by 802.3 07/26)

- Define a method to detect a Fault Managed Power (FMP) receiver before applying operating voltage
- Specify FMP transmitter interface startup, operating, and shutdown behaviors and electrical characteristics
- Specify FMP receiver interface startup and operating behaviors and electrical characteristics
- Do not preclude operation with at least one IEEE 802.3 PHY
- Do not preclude Ethernet operation of the supported IEEE 802.3 PHYs in the presence of FMP
- Do not preclude FMP operation in the presence of Ethernet traffic between the supported IEEE 802.3 PHYs
- Define optional management parameters such as FMP detection, startup, operating state, allocated power, fault state, and fault reporting
- Do not preclude meeting the UL 1400-1 Fault-Managed Power Systems (Part 1: Safety Requirements) standard

For more information on FMP operation, see the CFI consensus meeting presentation:

https://www.ieee802.org/3/cfi/0326_2/Fault_Managed_Power_Ethernet_Powering_Techniques_Call_For_Interest-260310.pdf

Potential additions

- Define a standardized mechanism between sublayers that enables traffic to avoid and PHYs to mitigate known impending noise events
- Support the minimum and maximum frame size IEEE Std 802.3-2022
- Support the IEEE Std 802.3 Ethernet packet format at the MAC client service interface

Proposed Amendment

- Define a method to detect a Fault Managed Power (FMP) receiver before applying operating voltage
- Specify FMP transmitter interface startup, operating, and shutdown behaviors and electrical characteristics
- Specify FMP receiver interface startup and operating behaviors and electrical characteristics
- Do not preclude operation with at least one IEEE 802.3 PHY in the same cable
- Do not preclude Ethernet operation of the supported IEEE 802.3 PHYs in the presence of FMP
- Do not preclude FMP operation in the presence of Ethernet traffic between the supported IEEE 802.3 PHYs
- Define optional management parameters such as FMP detection, startup, operating state, allocated power, fault state, and fault reporting
- Do not preclude meeting the UL 1400-1 Fault-Managed Power Systems (Part 1: Safety Requirements) standard