P802.17 D0.3 PHY Issues List
Clause 7, and Annexes B, C, and D

1/ Conformance test point specifications.
Compliance test interface is currently limited to the electrical interface(s) specified for each RS. There is currently no way for an implementor to provide a MAC/PHY chip, for example, and claim conformance to the standard unless the internal interface can be exposed.

2/ MAC datapath requirements for the [optional] LENGTH parameter.
The MAC physical layer interface PHY_DATA.request and PHY_DATA.indicate primitives include an optional LENGTH parameter.
–Does Clause 6 clearly indicate what to do with this parameter? It needs to be conveyed from the receiving PHY to the transmitting PHY, or to/from the MAC client.
–Does the MAC ever generate LENGTH, or is it always generated by the MAC client?

3/ RS can only transfer "frames" via the PHY_DATA.indicate primitive.
The currently defined RS can only transfer "frames" as a parameter of the PHY_DATA.indicate primitive. What happens if the RS receives something that is not a well-formed RPR frame? For example, if an EOP is missing, should the RS transfer the corrupted frame, and what are the rules to determine when to terminate the frame? How does the requirement to transfer "frames" affect cut-through operation?

4/ C2 (signal label) value(s) for RPR
Comment #434 requested a C2 (signal label) value for SONET/SDH PHYs transporting RPR payloads using GFP or HDLC-like framing. Editors determined that:

–The C2 label 0x1B denotes a GFP delineated payload (not specifically RPR).
–There are two C2 labels for PoS; 0x16 for HDLC-like framing and ox18 for HDLC/LAPS.
–Also, T1.X1 has provisionally reserved 0x09 as the user payload identifier (UPI) for an RPR payload.

Comment resolution group requests that our Chair work with our liasons to ITU and T1.X1 to advise whether we can get specific values for RPR (GFP and HDLC), or whether we should use the already assigned values 0x1B and 0x16.

5/ Annex B (clock synchronization) text is vague and incomplete.
Description of Annex B is currently incomplete, but a proposal from the July 2002 meeting is expected to result in draft text for Sept 2002 to resolve this issue.

6/ CRC calculation in the MAC depends on the PHY layer.
A single description of CRC calculation is currently defined for the MAC, but should depend on whether an Ethernet or SONET/SDH physical layer is used. Transmitted bit order is different for the PHYs.

7/ Comment #643 notes that there are no delay constraints for the RPR MAC or sublayers. Do we need to add delay constraints to ensure stable operation or meet Topology and Protection requirements?

8/ There are currently no PICS sections in Clause 7 or Annexes B, C, or D and must be added.

9/ Annex D has many open areas such as undefined mappings from SPI-3 and 4 signals to MAC physical layer primitives.