Cl **24** *SC* **1.1** *P* **37** *L* **8** # 73
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**
clause is mispelled "clasue"

SuggestedRemedy
replace with clause

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **24** *SC* **1.1** *P* **8** *L* **9** # 74
Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**
what is "the proper detection of low link utilization"? This sentence confuses me.

SuggestedRemedy
Replace with

When this capability is implemented and enabled, the PHY will enter the low power idle mode during periods of low link utilization. Energy is conserved by deactivating some or all functional blocks.

Proposed Response *Response Status* **O**

Cl **24** *SC* **1.4.2** *P* **38** *L* **14** # 75
Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**
receiving and processing should be receive and process

SuggestedRemedy
replace receiving and processing with receive and process

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **24** *SC* **2.2** *P* **38** *L* **52** # 76
Bennett, Michael LBNL

Comment Type **TR** *Comment Status* **D**
Transmit process needs to periodically be activated to ...

if this is required then use shall

SuggestedRemedy
replace
the Transmit process needs to periodically be activated

with
the Transmit process shall be activated periodically

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **24** *SC* **2.2** *P* **38** *L* **54** # 77
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**
sites is not the right word

SuggestedRemedy
replace between two sites of the link segment with

between link partners

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **24** *SC* **2.2.1.6** *P* **41** *L* **53** # 78
Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**
Authenticate is not the right word and implies more than that accomplished by the SLEEP code-group.

SuggestedRemedy
replace authenicate with verify

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **24** *SC* **2.2.5** *P* **42** *L* **46** # 79

Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**

transmission is mispelled: trasnmission

SuggestedRemedy

replace trasnmission with transmission

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **24** *SC* **2.2.5** *P* **42** *L* **47** # 80

Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**

The following sentence confuses me: The REFRESH signal is used to maintain some internal parameters of the receiver and is sharing the same SLEEP code-groups which will not make PCS exit the Low Power Receive state.

SuggestedRemedy

replace with

The REFRESH signal is used to maintain some internal parameters of the receiver, such as those necessary for timing recovery. It shares the SLEEP code-groups and will not cause the PCS to exit the Low Power Receive state.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **24** *SC* **2.3.4** *P* **44** *L* **14** # 81

Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**

In the following sentence, "of" should be "or" and "receive" should be "receiver"

If the PHY fails to receive a valid Refresh signal of Wake
signal when this timer is expired, the receive will assume a link failure.

Also, shouldn't the signal be received before the timer expires?

SuggestedRemedy

replace of with or and receive with receiver

If the answer to my question is yes, then replace sentence with

If the PHY fails to receive a valid Refresh signal or Wake
signal before this timer expires, the receiver shall assume a link failure when the timer has expired.

Proposed Response *Response Status* **O**

Cl **24** *SC* **3.1.9.3** *P* **47** *L* **50** # 82

Bennett, Michael LBNL

Comment Type **TR** *Comment Status* **D**

If the generation of Far-End fault during low power idle is an undesireable condition then we should speficy that

SuggestedRemedy

Replace

Care must be taken not to generate Far-
End fault during the Low Power Idle mode when signal_status can be OFF during the QUIET state

with
Far-End fault shall not be generated during the Low Power Idle mode

Proposed Response *Response Status* **O**

Cl **24** *SC* **4.1** *P* **50** *L* **49** # 83
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**

Something is missing in the following statement:

100BASE-X does not include a Station Management (SMT) function; therefore the PMD-to-SMT interface defined in ISO/IEC 9314-3:1990 and ANSI X3.263-1995.

SuggestedRemedy

Not sure what the author intended so I can't be specific but it needs to be fixed

Proposed Response *Response Status* **O**

Cl **25** *SC* **3** *P* **55** *L* **13** # 86
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**

I am not sure what this means:

Two new service primitives PMD_RXQUIET.request (rx_quiet) (subclause 24.4.14) and PMD_TXQUIET.request (tx_quiet) (subclause 24.4.1.5) are used to communicate the operation result of such capability from PCS.

SuggestedRemedy

I don't know enough about what the author intended to say to offer a solution, but it needs to be clarified and perhaps reworded

Proposed Response *Response Status* **O**

Cl **25** *SC* **4** *P* **56** *L* **26** # 84
Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**

editing instructions use the term "adopt" the optional capabilities ... The option should be included.

SuggestedRemedy

replace adopt with include

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **25** *SC* **4** *P* **56** *L* **26** # 85
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**

editor's instruction uses "adopt" the optional capability ... It should be include, not adopt

SuggestedRemedy

replace adopt with include

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **25** *SC* **4.11** *P* **56** *L* **38** # 87
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**

missing the word "an"

SuggestedRemedy

insert the word an as shown: TP-PMD does not have an option to support

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **25** *SC* **4.11.3** *P* **60** *L* **14** # 88
Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**

adopted is the wrong word

SuggestedRemedy

replace adopted with used

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **25** *SC* **4.11.3** *P* **60** *L* **23** # 89
Bennett, Michael LBNL

Comment Type **ER** *Comment Status* **D**

adopted is the wrong word

SuggestedRemedy

replace adopted with used

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **40** *SC* **40.3.1.3.4** *P* **80** *L* **24** # 68

CHOU, JOSEPH REALTEK SEMICON

Comment Type **TR** *Comment Status* **D** *sdn[3]*

The Sdn[3] encodes the loc_lpi_reg=TRUE information during non-data transmission. If the transmitted symbol is ZERO (SEND_Z), the output is supposed to be ZERO. However, the condition loc_lpi_reg=TRUE will invert the output and give a non-zero output.

SuggestedRemedy

Modiy the equation by excluding the condition (tx_mode /= SEND_Z) as follows:

Sdn[3]
= Scn[3]^TXD[3], if (tx_enable=1)
= Scn[3]^1, else if (loc_lpi_req=TRUE * tx_mode != SEND_Z)
= Scn[3], else

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Refer to #50.

Cl **40** *SC* **40.3.1.3.4** *P* **80** *L* **8** # 69

CHOU, JOSEPH REALTEK SEMICON

Comment Type **TR** *Comment Status* **D**

tx_error is encoded in the channel B output Sdn[1].
The GMII opcode used for Carrier_extention (0x0F) is already excluded from the encoding
By the same token, the opcode used for the LPI mode (0x01, TX_LP_IDLE) needs to be excluded from the encoding of Sdn(1) to avoid the non-zero output during SEND_Z.

SuggestedRemedy

Modiy the equation to exlude TXD[7:0]=0x01 condition in cext_err as follows:

Sdn[1]
= Scn[1]^TXD[1], if (tx_enable=1)
= Scn[1]^cext_err, else

cext_err
= tx_error if (tx_enable=0 * TXDn[7:0]!=0x0F * TXDn[7:0]!=0x01)
= 0 else

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **40** *SC* **40.3.1.3.4** *P* **84** *L* **23** # 50

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D** *sdn[3]*

Refine definition of sdn[3] to ensure desired behavior when tx_mode = SEND_Z.

SuggestedRemedy

sdn[3] = scn[3]^1 else if (loc_lpi_req = TRUE * tx_mode != SEND_Z)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **40** *SC* **40.3.1.3.4** *P* **84** *L* **23** # 36

Michael, Grimwood Broadcom Corporation

Comment Type **TR** *Comment Status* **D** *sdn[3]*

The specification would be cleaner and less confusing if it does not encode loc_lpi_req while in tx_mode=SEND_Z.

SuggestedRemedy

Change:

Sdn[3] = Scn[3]^1 else if (loc_lpi_req = TRUE)

To:

Sdn[3] = Scn[3]^1 if ((loc_lpi_req = TRUE)*((tx_mode = SEND_N) + (tx_mode = SEND_I)))

{In words, if tx_mode=SEND_Z, sdn[3] is always equal to 0}

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Refer to #50.

Cl **40** *SC* **40.4.2.4** *P* **88** *L* **12** # 35

Michael, Grimwood Broadcom Corporation

Comment Type **TR** *Comment Status* **D**

If the receiver is allowed to be deactivated during WAIT_QUIET and therefore not able to decode rem_lpi_req, then there may exist a condition in which the only way to wake from WAIT_QUIET would be to retrain following the expiration of timer lpi_wait_timer_done. This would lead to an unacceptably long delay and would not meet the EEE task force objectives. This comment proposes a clarification intended to ensure proper operation.

SuggestedRemedy

After this sentence:

"During the WAIT_QUIET and QUIET states, the PHY may deactivate transmit and receive functions in order to conserve energy."

Add the following sentence:

"However, in the WAIT_QUIET state, the PHY shall be capable of correctly decoding rem_lpi_req."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **40** *SC* **40.4.2.4** *P* **88** *L* **18** # 33

Michael, Grimwood Broadcom Corporation

Comment Type **E** *Comment Status* **D**

Typo

SuggestedRemedy

Change: "...sufficient quality and during..."

To: "...sufficient quality and duration..."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **40** *SC* **40.4.5.1** *P* **85** *L* **12** # 70

CHOU, JOSEPH REALTEK SEMICON

Comment Type **TR** *Comment Status* **D**

Need to define the timing constraint to be referred by various LPI timers

SuggestedRemedy

Propose a maximum value of 1 us or smaller if feasible

Proposed Response *Response Status* **W**

PROPOSED REJECT.
Per chou_01_0908 slide 4, the editor assumes that this comment refers to assertion of signal_detect.

The editor agrees that the signal_detect function requires further definition but humbly submits that it is a more complex issue than the definition of a timing constraint.

The suggestion is to resubmit this comment in the next round of review supported by a comprehensive description of signal_detect behavior.

Cl **40** *SC* **40.4.5.2** *P* **85** *L* **40** # 71

CHOU, JOSEPH REALTEK SEMICON

Comment Type **TR** *Comment Status* **D** *Figure 40-15b*

Some intermediate LPI states need minimum time to transit and maximum time to break out.
It is better to have separate timer for each state.

SuggestedRemedy

change lpi_wait_timer to lpi_waitqt_timer for WAIT_QUIET state and lpi_waittr_timer for WAIT_TRAINING state.
Suggested value of lpi_waitqt_timer is 10us to 12us
Suggested value of lpi_waittr_timer is 1.8us to 2us

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Refer to #34.

Cl **40** *SC* **40.4.5.2** *P* **89** *L* **40** # 34

Michael, Grimwood Broadcom Corporation

Comment Type **TR** *Comment Status* **D** *Figure 40-15b*

lpi_wait_timer is used as both a maximum time to dwell in the WAIT_QUIET state and the minimum time to dwell in the low-power state. These objectives are somewhat conflicting. For example, an increase in the timer value would reduce the chances of a retrain out of the WAIT_QUIET state, but would have a negative impact on the overall wake time. With two separate timers, these two conflicting objectives can be individually optimized.

SuggestedRemedy

Separate these timer functions, creating individual timers for each the WAIT_QUIET and WAKE_TRAINING states.

1. Change lpi_wait_timer to lpi_waketr_timer. Change description to "the minimum time the PHY must remain in the wake training state." Keep the remaining text the same.

2. Make new timer lpi_waitq_timer. Describe it as, "The maximum time that the PHY can remain in the WAIT_QUIET state." Add the following, "Values: The condition lpi_waitq_timer_done becomes true upon timer expiration. Duration: This timer shall have a period between 4.5 µs and 5.0 µs."

Change the state diagram in Figure 40-15b on page 92 as follows:

In WAIT_QUIET state, change lpi_wait_timer to lpi_waitq_timer.
In WAIT_QUIET state transition to B, change lpi_wait_timer_done to lpi_waitq_timer_done.

In WAKE_TRAINING state, add "start lpi_waketr_timer".
In WAKE_TRAINING state, transition to UPDATE, change lpi_wait_timer_done to lpi_waketr_timer_done.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Implement changes per healey_02_0908.pdf.

Cl **40** *SC* **40.4.5.2** *P* **90** *L* **1** # 51

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

lpi_waketx_timer and lpi_wakemz_timer periods are TBD.

SuggestedRemedy

Define compliant ranges for these parameters.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
Suggest that this comment be submitted during the next round of review supported by a proposal for specific timer values.

Cl **40** *SC* **40.4.6.1** *P* **88** *L* **1** # 72

CHOU, JOSEPH REALTEK SEMICON

Comment Type **TR** *Comment Status* **D** *Figure 40-15b*

Please refer to Figure 40-15b.
The spirit of EEE GPHY state transitions is to mimic the cold start of GPHY link so that the local and remote sites, either Master or Slave, can keep synchronization of training states to set up the appropriate CDR loop.
However, either party of an EEE link segment can exit any intermediate state and accelerate the transition of rest of states resulting in a temporary out of sync of state coherency between two sides due to the round trip delay of signal exchanged.
During the acceleration of state transition, the unwanted SEND_Z (WAIT_QUIET, QUIET, WAKE_SILENT) output may cause the timing loop failure and mess up the descrambler and decoder.
The state machine Figure 40-15b needs to be modified.

SuggestedRemedy

1. Encode lpi_mode signal in channel B output as follows
cext_errn
= tx_errorn if(tx_enablen=0
*TXDn[7:0])/=0x0F
*TXDn[7:0])/=0x01)
=1 , if(loc_lpi_mode=TRUE
*tx_mode/=SEND_Z)
=0, else

2. Force state SLEEP to exit to ACTIVE state if the remote party is deactivating LPI request (rem_lpi_reg = FALSE) in ACTIVE state.
3. Add a new state WAIT_ACTIVE between UPDATE and ACTIVE to avoid unwanted SEND_Z output by improved handshaking protocol .
4. Add a new watchdog timer lpi_waitact_timer (10us to 12us)
5. Add a new timer lpi_quietmin_timer (signal_detect time=1us) to guarantee a minimum SEND_Z time during acceleration of state transition due to loc_lpi_reg=FALSE
6. Forbid exiting from intermediate state WAIT_QUIET when local LPI request is de-asserted.
The ambiguity and proposed solutions will be presented in the Sep 2008 Interim meeting. (chou_01_0908.pdf)

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Referring to chou_01_0908.pdf...
1. "Comment #5, case 1" does not reflect the operation Figure 40-15b. It presumes a state machine clock qualifies transitions between states but this is not the intended operation. The state machine is asynchronous and may instantaneously "fall through" states as the transition conditions dictate. Therefore, the intermediate states "WQ, Q, W, and Z" are occupied for zero time and zero is not sent by LP1.
2. "Comment #5, case 2" is addressed by the change suggested by comment #52
3. "Comment #5, case 3" illustrates a case of undesirable fall-through. In this case LP2 arrives at the WAKE_TRAINING state before it realizes LP1 was transitioning to QUIET.

While the suggested remedy may address the issue, the editor suggests a corrective action that does not include the exchange of additional state information between the local device and link partner.

Recommended changes are described in healey_02_0908.pdf.

Cl **40** *SC* **40.4.6.1** *P* **92** *L* **1** # 52

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D** *Figure 40-15b*

It has been pointed out (by Joseph Chou) that, per the current PHY Control state diagram, part b (Figure 40-15b), there is a possibility that the local device could receive zero during SEND_IDLE_OR_DATA when the local device deasserts loc_lpi_req during UPDATE but the link partner transitions to WAIT_QUIET prior to receiving the notification. Under certain timing conditions, the duration of zero could be on the order of the round-trip delay, leading to a loss of timing and a link restart.

Also, per previous discussions, it has been pointed out that the roles of the SLEEP and UPDATE states are similar, and measures were taken at the July 2008 plenary to match the timers corresponding to these states. This step has made the two states redundant and one should be removed.

To address these issues, remove the SLEEP state and move the transition from SEND_IDLE_OR_DATA to UPDATE. The transition back to SEND_IDLE_OR_DATA should originate from the WAKE_TRAINING state. Several refinements to the transition conditions are required and will be shown in a separate presentation.

SuggestedRemedy

Proposed changes to the state diagram will be submitted as a presentation for the September 2008 interim (to be named, assume healey_01_0908.pdf).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Implement changes described in healey_02_0908.pdf.

Cl **45** *SC* **Table 45-145** *P* **100** *L* **5** # 1

Tidstrom, Rick Broadcom

Comment Type **TR** *Comment Status* **D**

The EEE advertisement register (Register 7.60) is shown as next page format. 10G-BASE-T auto-negotiation needs to exchange extended next pages.

SuggestedRemedy

Remove Next Page bit from EEE advertisement register, and define bits [15:7] as Reserved.

The EEE advertisment register (Register 7.60) and the EEE mode control register (Register 7.62) should be mapped into an formatted extended next page format as shown in subclause 55.6.1.2 of the IEEE Draft P802.3/D1.2 dated August 22, 2007.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The advertisement must use unformatted next pages for 10/100/1000 PHYs and backplane PHYs, but it would also be useful to allow the use of unformatted extended next pages for 10GBASE-T PHYs.

Direct the editor to make the changes to support both next pages and extended next pages. Including the following:

Edit Annex 28C to define message code 11 as follows:

"EEE Technology Message Code (alternate format).
EEE capability to follow using extended next page"

Add
28C-11 Message code 11 - EEE Technology Message Code (alternate format)

PHYs that negotiate extended next page support (reference) use next page message code 11 to indicate that EEE technology messages will follow the transmission of this page [the initial, Message (formatted) next page] with at least two extended next pages that contain information defined in 45.2.7.13a.

Edit 45.2.7.13a to show mapping of register bits in 7.60 & 7.62 to extended next pages.

Cl **45** *SC* **Table 45-146** *P* **101** *L* **16** # 2

Tidstrom, Rick Broadcom

Comment Type **TR** *Comment Status* **D**

The EEE mode control register (Register 7.62) is shown as next page format. 10G-BASE-T auto-negotiation needs to exchange extended next pages.

SuggestedRemedy

Remove Next Page bit from EEE advertisement register, and define bits [15:7] as Reserved.

The EEE advertisment register (Register 7.60) and the EEE mode control register (Register 7.62) should be mapped into an formatted extended next page format as shown in subclause 55.6.1.2 of the IEEE Draft P802.3/D1.2 dated August 22, 2007.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See response to previous comment.

Cl **55** *SC* **55.1.3.3** *P* **121** *L* **25** # 3

Tidstrom, Rick Broadcom

Comment Type **TR** *Comment Status* **D**

The subclause states "Quiet, refresh, and awake time periods are vendor specific, and are advertised during auto-negotiation."

The above statememt contradicts Clause 45, Table-146, page 101, line 15, which only lists auto-negotiation choices of reduced energy or normal energy.

SuggestedRemedy

The auto-negotiation definitions for EEE sleep, quiet, refresh, alert and awake need to be decided between discrete values for each signal type, or a reduced/normal energy methodology.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The definitions are outstanding TBDs. There are several presentations addressing these at this meeting. Values will be put in for the TBDs after reviewing presentations on the topics and discussion of these at the Task Force meeting.

We will also maintain consistency on these between Clause 55 and Clause 45.

Cl **55** *SC* **55.3.2.2** *P* **125** *L* **50** # 6

Tidstrom, Rick Broadcom

Comment Type **TR** *Comment Status* **D**

The subclause states "The SLEEP signal is signaled using repeated N_IDLE XGMII codewords encoded using the 65B-LDPC coding technique".

This statement is incorrect. The SLEEP signal is signaled using repeated LP_IDLE XGMII codewords.

SuggestedRemedy

Change N_IDLE to LP_IDLE.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **55** *SC* **55.3.2.3** *P* **129** *L* **11** # 4

Tidstrom, Rick Broadcom

Comment Type **TR** *Comment Status* **D**

The subclause states "The time spent in each of the sleep, quiet, refresh, alert and awake states is determined by vendor specific values, which are advertised during auto-negotiation."

The above statememt contradicts Clause 45, Table-146, page 101, line 15, which only lists auto-negotiation choices of reduced energy or normal energy.

SuggestedRemedy

The auto-negotiation definitions for EEE sleep, quiet, refresh, alert and awake need to be decided between discrete values for each signal type, or a reduced/normal energy methodology.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The definitions are outstanding TBDs. There are several presentations addressing these at this meeting. Values will be put in for the TBDs after reviewing presentations on the topics and discussion of these at the Task Force meeting.

We will also maintain consistency on these between Clause 55 and Clause 45.

Cl **55** *SC* **55.6.1** *P* **142** *L* **8** # 5

Tidstrom, Rick Broadcom

Comment Type **TR** *Comment Status* **D**

The subclause states "If EEE mode is supported, then Auto-Negotiation signaling is also used to determine the values of Ts, Tq, Tr, Ta, and Tw supported by the local PHY".

The above statememt contradicts Clause 45, Table-146, page 101, line 15, which only lists auto-negotiation choices of reduced energy or normal energy.

SuggestedRemedy

The auto-negotiation definitions for EEE sleep, quiet, refresh, alert and awake need to be decided between discrete values for each signal type, or a reduced/normal energy methodology.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The definitions are outstanding TBDs. There are several presentations addressing these at this meeting. Values will be put in for the TBDs after reviewing presentations on the topics and discussion of these at the Task Force meeting.

We will also maintain consistency on these between Clause 55 and Clause 45.

Cl **69** *SC* **69.1.1** *P* **136** *L* **20** # 7

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

The terms Low-Power Idle, Energy Efficient Ethernet, Low Power Mode Operational Mode, energy efficient mode, etc. appear to be used interchangeably. Occurs in multiple places throughout the draft.

SuggestedRemedy

Create a defined use and eliminate unnecessary terms that are similar to prevent confusion.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
I agree in principle. Those terms appear thoughout most of the other clauses as well. I'll accept whatever terms the group agrees to use and replace them. I suggest that we define them as:
Energy Efficient Ethernet = a capability of the PHY
Low-Power Idle = the signaling mechanism
Low-Power mode = period between end of sleep and beginning of wake.

Cl **69** *SC* **69.1.1** *P* **136** *L* **21** # 8

Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Use of "will".

SuggestedRemedy

Search for all cases of "will" in the document. If it requires compliance, change to shall; otherwise, eliminate the use of "will".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
The sub-editor shall search the document for "will" and reword the sentences it not a testable requirement.

Cl **69** *SC* **69.2.3** *P* **137** *L* **11** # 9

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Table borders are messed up.

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Done

Cl **69** *SC* **69.2.6** *P* **138** *L* **1** # 10

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Blank page. There are other occurences throughout the draft.

SuggestedRemedy

Remove.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Many attempts were made to delete those blank pages. Author will seek FrameMaker expertise and delete those blank pages in next draft.

Cl **70** *SC* **70.1** *P* **140** *L* **18** # 15
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Ethernet misspelled. Efficient misspelled. Multiple instances throughout the draft.

SuggestedRemedy

Run spell checker on the draft.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Ran spell checker and corrected mis-spelled words.

Cl **70** *SC* **70.1** *P* **140** *L* **28** # 11
Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Description of LPI is symmetric.

Also applies to 71.1 and 72.1.

SuggestedRemedy

Change to be asymmetric.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Symmetric references will be removed from those sections.

Cl **70** *SC* **70.3a** *P* **140** *L* **45** # 12
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Use of invalid subheader format. Multiple instances throughout the draft.

SuggestedRemedy

Change to correct subheader or add additional layer of subheading.

Proposed Response *Response Status* **W**

PROPOSED REJECT.
Subheader format consistent with standard editing practice for insertion of new section between other of same level. Section will be re-numbered when inserted in later drafts.

Cl **70** *SC* **70.3a** *P* **140** *L* **50** # 13
Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Use of the word "must". Multiple instances.

SuggestedRemedy

Replace "must" with "shall" throughout the draft.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Removed "must" from 70.3a and 70.3b

Cl **70** *SC* **70.6.10.1** *P* **143** *L* **9** # 16
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Auto-negotiation misspelled. Multiple instances throughout the draft.

SuggestedRemedy

Correct spelling.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Corrected misspellings.

Cl **70** *SC* **70.6.4** *P* **142** *L* **25** # 14
Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Required has limited meaning. Multiple instances throughout the draft.

SuggestedRemedy

Replace "required" with "mandatory".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change 'required' to 'mandatory' in section 70.5. There is no section 70.6 in these changes.

Cl **71** *SC* **71.3a** *P* **153** *L* **15** # 17

Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Hexadecimal must be proceeded with 0x. Multiple instances throughout the draft.

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Put 0x prefix on hex value in Clause 71.

Cl **71** *SC* **71.5.6** *P* **154** *L* **51** # 18

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Hanging sentence "For normal operation."

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Added "its definition is beyond the scope of this specification."

Cl **72** *SC* **72.3a** *P* **171** *L* **12** # 19

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

"XGMII interface" is an incorrect term.

SuggestedRemedy

Change to be "XGMII" as the last I is for interface.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Fixed

Cl **72** *SC* **72.3a** *P* **176** *L* **52** # 53

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

10GBASE-KR should not be using the low-power idle encoding for 10GBASE-X (e.g. 8B10B). It should define a 64B/66B block encoding of low-power idle

SuggestedRemedy

The correct reference appears to be 49.2.4.7.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Will reference 49.2.4.7 instead.

Cl **72** *SC* **72.6.11.1** *P* **181** *L* **37** # 54

Healey, Adam LSI Corporation

Comment Type **E** *Comment Status* **D**

Editor's note implies something is to be deleted, but what?

SuggestedRemedy

Remove note or clarify what is to be deleted prior to publication.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Deleted.

Cl **72** *SC* **72.6.11.2** *P* **181** *L* **40** # 55

Healey, Adam LSI Corporation

Comment Type **E** *Comment Status* **D**

What does "TBS" represent? "To Be Specified?"

SuggestedRemedy

Explain with an editor's note or add missing text (note there are multiple instances throughout the clause).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Deleted.

Cl **72** *SC* **72.6.11.2** *P* **182** *L* **4** # 42

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

Not clear that the timing parameters in this table (table caption missing) or that table under 72.6.11.3 (page 182, line 28) are practical to implement or enforce as specifications.

1. There are multiple circular definitions of timers. These definitions force the local device to know the timing parameters of its link partner in order to establish upper and lower bounds on its own timers. Since these parameters are not advertised, this is not practical. Parameters should be defined as absolute values or as functions of parameters well known to the device under test. This applies to T_SL, T_OL, T_SR, and T_OR.

2. What is the value of a "typical" column in these tables? This isn't a data sheet. The document only needs to define the compliant range of the parameters.

3. Are these parameters normative or informative? How are they to be measured and verified against the specification? For example, T_DL is defined to be the "Time from XGMII receiving /LPI/ to entering the TX_SLEEP state." Entry into the TX_SLEEP state is not observable, but may be inferred by the presence of 64B/66B encoding of low-power idle observed at the MDI. Parameters, especially normative parameters, must be defined as a function of some observable input and some observable output.

4. Do T_DL and T_DR consider propagation delay through the FEC sublayer, when enabled? It doesn't appear likely that it does with 100 ns allocation, so where is this latency budgeted?

5. Assuming that frame lock process follows the procedure defined in IEEE 802.3 ap 72.6.1.4.1, there could be an issue with refresh and wake. A minimum of 2 frame markers are required to declare frame lock, e.g. the first identifies the frame boundary and second is a consistency check. If one assumes the first few training frames are consumed via signal detect latency, circuit re-activation latency, and timing recovery latency, the minimum value (4) of T_TRAIN looks tight. However, in the worst-case, the framing algorithm could need to test each and every candidate frame marker position before identifying the frame boundary (4,384 possibilities) and number of frames required to complete this search would be an order of magnitude larger than the minimum value of T_TRAIN. While faster frame locking is possible, it may require modifications to the current frame lock state diagram or perhaps an alternative fast-lock diagram for EEE purposes.

If one assumes that the framing algorithm must examine all possible candidate frame marker positions before finding the first match (worst-case),

SuggestedRemedy

1. Eliminate circular definition timers and establish easily comprehended ranges.
2. Remove "typical" column.
3. Boil down the table to set of essential parameters with measurable reference points.
4. Resolve refresh and wake time allocations against the worst case time to lock to training frame via the currently specified or some new algorithm.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
These should have been submitted as multiple comments so that the editor and group could evaluate them individually.
1.) PROPOSED REJECT.
There were discussions earlier to exchange link partners timing information during autonegotiation. No presentation or decision was made either to used fixed value or exchange these values. If the group agrees to use fixed values, the editor will put in fixed ranges and remove reference to negotated parameters.
2.) PROPOSED ACCEPT.
Typical column will be removed.
3.) PROPOSED ACCEPT.
Will specify only observable, measurable reference points in table.
4.) PROPOSED REJECT.
Realistic min/max values need to be proposed and voted on by the group. New algorithm needs to be proposed, voted on and then will be entered into the draft document.

Cl **72** *SC* **72.6.11.4.1** *P* **183** *L* **12** # 43

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

Variable definition issues...

1. frame_lock is already defined in IEEE 802.3ap-2007. Eliminate this redundant definition or, if a new variable is needed, give it a new name.

2. sending_data is essentially !training. Is a another variable really required?

3. xxx_timer_done are typically not defined as variables, and are inferred fromm the timer definitions.

4. tx_coded, pcs_rxcd, pcs_encode, and pcs_decode are not defined in Clause 72. Furthermore, nature of these variables consitutes a layer violation. Low-power idle encoding should originate in the PCS and pass through the PMA and PMD. Low-power idle encoded signals should pass through the PMD and PMA to the PCS where they should be decoded. A service interface primitive may be defined which can carry a status flag to/from the PCS to acheive some desired behavior.

SuggestedRemedy

Update variable definitions per comment. Examine layering model and service interfaces to ensure layering is preserved and proper communication paths are present between the sublayers.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
These should have been submitted as multiple comments so that the editor and group could evaluate them individually.
1.) PROPOSED ACCEPT.
Same definition, so duplicate will be deleted.
2.) PROPOSED REJECT.
The !training could also be QUIET state. Keeping sending_data.
3.) PROPOSED ACCEPT.
Xxx_timer_done definition will be deleted.
4.) PROPOSED ACCEPT IN PRINCIPLE. There needs to be some signaling between the layers. We could decide to make it manditory for EEE implementation of BP PHY to be only with integrated PCS, PMA, and PMD. I would prefer not defining new Service Interfaces signals for 36, 48, or 49 as they have no use for optical PMDs.

Cl **72** *SC* **72.6.11.4.4** *P* **185** *L* **38** # 44

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

TRANSMIT() function is already defined in Clause 72. This definition is inconsistent with the original function.

SuggestedRemedy

Rename the function.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.
Renamed to XMIT()

Cl **93** *SC* **92.2.3** *P* **198** *L* **29** # 41

Michael, Grimwood Broadcom Corporation

Comment Type **ER** *Comment Status* **D**

Add timing parameter for alert.

SuggestedRemedy

Add:

"Ta: Duration PHY transmits alert signal in 10GBASE-Te"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

"Ta: Duration PHY transmits alert signal in 10GBASE-T mode "

Cl **93** *SC* **93** *P* **1** *L* **54** # 20

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Page numbering is wrong.

SuggestedRemedy

Fix page numbering.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93** *SC* **93.1.** *P* *L* # 60
Taich, Dimitry Teranetics

Comment Type **E** *Comment Status* **D**

Synchroneouse Low power mode is not described.

SuggestedRemedy

Add synchronous Low Power Mode description

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editor to provide symmetrical LP_IDLE mode description

Cl **93** *SC* **93.1.1** *P* **1** *L* **14** # 21
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Should reference to 100BASE-T actually be 100BASE-TX?

SuggestedRemedy

If so, fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change line 14 to read:

For 100 Mb/s operation, 100BASE-TX Physical layer device is included.

Cl **93** *SC* **93.1.1** *P* **1** *L* **14** # 22
Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Sentence about 1000 Mb/s has errors.

SuggestedRemedy

1000BASE-T shouldn't have a space. 1000BASE-KX is missing.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Replace
"For 1000 Mb/s, 1000 BASE-T
Physical Layer device is included. For 10 Gb/s, three Physical Layer signaling systems are supported."

with following

"For 1000 Mb/s, two Physical Layer signaling schemes are supported. For operation over twisted pair cabling media 1000BASE-T protocol is included. For serial communication over electrical backplane 1000BASE-KX protocol is supported."

Cl **93** *SC* **93.1.1** *P* **1** *L* **17** # 23
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Last sentence is confusing.

SuggestedRemedy

Change to read "For serial operation on electrical backplane, the 10GBASE-KR..."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93** *SC* **93.1.2** *P* **1** *L* **28** # 24

Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Objectives for which project?

SuggestedRemedy

Change to read Energy Efficient Ethernet.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Replace line 28 with following:

"The following are the objectives of Energy Efficient Ethernet:"

Cl **93** *SC* **93.1.2** *P* **1** *L* **37** # 25

Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**

Should's and shall's need to be removed from the objectives list.

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editor to modify clause 93.1.2 so it does not include shall's and should's

Cl **93** *SC* **93.1.3** *P* **196** *L* **18** # 56

Taich, Dimitry Teranetics

Comment Type **E** *Comment Status* **D**

Font on Fig 93-1 is broken in two places

SuggestedRemedy

Fix the font

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93** *SC* **93.1.3** *P* **196** *L* **39** # 37

Michael, Grimwood Broadcom Corporation

Comment Type **ER** *Comment Status* **D**

The statement, "After the LP_SLEEP signal transmission the transmit function of the local PHY enters a quiet mode.", is not necessarily true for 1000GBASE-T EEE since it is symmetric and does not enter quiet mode until both sides have transmitted sleep.

SuggestedRemedy

Change "After the LP_SLEEP signal transmission the transmit function of the local PHY enters a quiet mode." to be correct for 1000BASE-T also. Something like the following:

In 100BASE-TX and 10GBASE-T EEE modes, after the LP_SLEEP signal transmission, the transmit function of the local PHY enters a quiet mode. In 1000BASE-T EEE, after the local PHY transmits LP_SLEEP and receives LP_SLEEP from the remote PHY, then the transmit function of the local PHY enters a quiet mode.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Exact text to be finalized after discussion at Task force meeting

Cl **93** *SC* **93.1.3** *P* **196** *L* **45** # 57

Taich, Dimitry Teranetics

Comment Type **E** *Comment Status* **D**

"PY" abbreviation should be "PHY"

SuggestedRemedy

fix the typo

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93** *SC* **93.1.3** *P* **196** *L* **48** # 58

Taich, Dimitry Teranetics

Comment Type **ER** *Comment Status* **D**

newly defined nomenclature misuse

SuggestedRemedy

Replace
"In the receive direction Low Power operation is triggered by the reception of LP_IDLE codewords from the PHY link partner. This signals that the link partner is about to enter Low Power mode. Following sending LP_IDLE codeword the link partner ceases transmission and enters LP_Quiet_st state"

by the following:

"In the receive direction Low Power operation is triggered by the reception of LP_Sleep signal from the PHY link partner. This signals that the link partner is about to enter Low Power mode. Following sending LP_Sleep signal the link partner ceases transmission and enters LP_Quiet_st state"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93** *SC* **93.1.3** *P* **197** *L* **1** # 59

Taich, Dimitry Teranetics

Comment Type **E** *Comment Status* **D**

text is not clear

SuggestedRemedy

add word "period" after words "full 10G data-rate"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **93** *SC* **93.1.3** *P* **197** *L* **10** # 38

Michael, Grimwood Broadcom Corporation

Comment Type **ER** *Comment Status* **D**

Figure 93-2 does not reflect the proposed 10GBASE-T alert/awake signaling and although it generalizes the concept of LPI, it might generate confusion with the specifics of the 10GBASE-T.

SuggestedRemedy

Either modify the figure showing the different possible signaling types or have a separate figure for the different 10GBASE-T scheme.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Replace text in lane 4 by following:

"Figure 93-2 illustrates general principles of the EEE-compliant transmitter operation."

Cl **93** *SC* **93.1.3** *P* **197** *L* **22** # 39

Michael, Grimwood Broadcom Corporation

Comment Type **ER** *Comment Status* **D**

According to terminology used in the respective LPI proposals, the use of synchronous/asynchronous should instead be symmetric/asymmetric.

SuggestedRemedy

Change "synchronous" to "symmetric".

Change "asynchronous" to "asymmetric".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Following changes to be made throughout whole clause 93:

Change term "synchronous" to "symmetric" (when describing both link partners entering LP_IDLE state at the same time)

Change term "synchronous" to "symmetric" (when describing both link partners entering LP_IDLE state independently)

Cl **93** *SC* **93.1.3** *P* **2** *L* **4** # 26
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Font sizes and shading make diagram hard to read. Also applies to Figure 93-2.

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change font size and picture attributes according to IEEE style guidelines

Cl **93** *SC* **93.1.3** *P* **3** *L* **22** # 27
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Synchronous or symmetric? Did the terminology change?

SuggestedRemedy

Select one and define.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See response to comment #39

Cl **93** *SC* **93.1.4** *P* **3** *L* **35** # 28
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Table border is wrong.

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Formatting will be changed according to IEEE style guidelines

Cl **93** *SC* **93.2.1** *P* **198** *L* **27** # 61
Taich, Dimitry Teranetics

Comment Type **T** *Comment Status* **D**

Tw parameter definition is not consistent through draft but also clause 93 itself: defined as duration of the T_wake transmission, used several time as latency between LPI_IDLE codeword and PHY readiness for full data-rate state

SuggestedRemedy

Discuss among all editors and fix Tw definition

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Exact text to be proposed after discussion at Task Force meeting

Cl **93** *SC* **93.2.1** *P* **3** *L* **52** # 30
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**

Formatting makes list hard to read. Also applies to 93.2.2.

SuggestedRemedy

Fix.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Commenter please provide suggestion of the acceptable and easy to read format.

Cl **93** *SC* **93.2.2** *P* **198** *L* **21** # 40
Michael, Grimwood Broadcom Corporation

Comment Type **ER** *Comment Status* **D**

Add "LP_Alert" signal for 10GBASE-T EEE mode.

SuggestedRemedy

Proposed Response *Response Status* **W**

PROPOSED REJECT.

Subclause 93.2.2 lists signals and parameters mentioned in Clause 93. "LP_Alert" is not used anywhere in Clause 93

Cl **93** *SC* **93.3** *P* **198** *L* **31** # 45

Healey, Adam LSI Corporation

Comment Type **ER** *Comment Status* **D**

This introductory paragraph only describes Auto-Negotiation as it pertains to twisted pair PHYs.

This project also addresses Backplane Ethernet PHYs hence auto-negotiation is also defined in Clause 73 and is also performed using differential Manchester encoding.

SuggestedRemedy

Rewrite to broaden the scope of the introduction by describing the features of both Clause 28 and Clause 37 Auto-Negotiation.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editor will provide new AN description that includes both Clause 28 and Clause 73

Cl **93** *SC* **93.3** *P* **198** *L* **51** # 46

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

Per grimwood_01_0708.pdf, page 4, 1000BASE-T intends to only support one (Tq, Tr) pair and proposeds that Tw_PHY be a "negotiated" parameter.

SuggestedRemedy

1. Distinguish between Tw_PHY and Tw_SYS in the text. Tw_PHY is a parameter that is resolved by Auto-Negotiation and sets the minimum bound for Tw_SYS. Tw_SYS may be changed during link operation using LLDP per 93.4.
2. Define an unformatted page for the negotiation of Tw_PHY. Suggest an n-bit (n >= 5) unsigned integer representing the minimum Tw_PHY that the PHY supports in units of microseconds.
3. Define the resolution of Tw_PHY to be the larger of the locally advertised value and value received by the link partner.
4. In Table 93-4, remove the 1000BASE-T PHY energy bit. There is no mapping of this bit to functionality described in Clause 40. Note that it is possible that other PHYs listed in this table only support a single (Tq, Tr) as well.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editor to modify clause 93 according to the proposed remedy

Cl **93** *SC* **93.3** *P* **199** *L* **1** # 47

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

1. "Message Count" should be "Message code #"
2. The definition of "11" should be broadened to include "11...2047" since all of the message codes greater than 11 are reserved.
3. This table appears in Clause 93, Annex 28A, and Annex 73A with slightly different formats. Which is the normative reference? This redundancy is also risks inconsistency. It is suggested that the redundancy is removed and information related to next page format be collected in the corresponding Annexes.

SuggestedRemedy

Per comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

1. Fix line 1 on page 199 to read "Message code #"

2. Modify table 93-2 to include M11-2047 messages and define them as reserved

3. See response to comment #31

Cl **93** *SC* **93.3** *P* **199** *L* **32** # 49

Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**

It is never stated how the bits in Table 93-3 are to be used. The suggested rule is that if X is the HCD technology and both the local device and link partner advertise EEE support for X then the device shall enable X in EEE mode.

Also, perhaps a better name would be "EEE mode request" since "support" implies a capability but not necessarily a desire to enter the mode.

SuggestedRemedy

Per comment.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Editor will provide text on Table's 93-3 bits usage as per commenter's suggestion.

Cl **93** *SC* **93.3** *P* **199** *L* **32** # 48
Healey, Adam LSI Corporation

Comment Type **T** *Comment Status* **D**
1000BASE-KX is missing from the table.

SuggestedRemedy
Add a bit for 1000BASE-KX.

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.

Cl **93** *SC* **93.3** *P* **199** *L* **46** # 62
Taich, Dimitry Teranetics

Comment Type **T** *Comment Status* **D**
Table 93-3, bit U2: "10GBASE-Te EEE support (0 = no, 1 = yes)"

SuggestedRemedy
is it 10GBASE-T? - then remove "e" suffix at the end
is it 10BASE-Te? - then add bit for 10GBASE-T support

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.

Change to be determined after discussion at Task Force meeting

Cl **93** *SC* **93.3** *P* **4** *L* **31** # 29
Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**
Clause 73 should also be listed.

SuggestedRemedy
Add Clause 73.

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.

See response to comment #45

Cl **93** *SC* **93.3** *P* **5** *L* **1** # 31
Booth, Brad AMCC

Comment Type **T** *Comment Status* **D**
Table 93-2, 93-3 and 93-4 should be defined in 28A and 73A.

SuggestedRemedy
Move tables to 28A and 73A and remove from Clause 93.

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.

Editor will follow suggested remedy

Cl **93** *SC* **93.4.1** *P* **7** *L* **11** # 32
Booth, Brad AMCC

Comment Type **E** *Comment Status* **D**
Overuse of the TM symbol.

SuggestedRemedy
Use only once and remove all other instances.

Proposed Response *Response Status* **W**
PROPOSED ACCEPT IN PRINCIPLE.

Is this nessesary? Should be discussed with Hugh

Cl **99** *SC* *P* **3** *L* **2** # 90
Bennett, Michael LBNL

Comment Type **E** *Comment Status* **D**
Ethernet should be capitalized

SuggestedRemedy
capitalize it

Proposed Response *Response Status* **W**
PROPOSED ACCEPT.