*Cl* **FM**      *SC* **FM**                *P* **1**          *L* **29**         # R1-6

Wienckowski, Natalie                    General Motors Company

*Comment Type*   **E**      *Comment Status*  **X**

    IEEE Std 802.3cm was approved by the IEEE-SA Standards Board on 30 JAN 2020.

*SuggestedRemedy*

    Change 802.3cm-20xx to 802.3cm-2020.  Also make this change on P13 L13.

*Proposed Response*       *Response Status*  **O**

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*Cl* **FM**      *SC* **FM**                *P* **1**          *L* **29**         # R1-5

Wienckowski, Natalie                    General Motors Company

*Comment Type*   **E**      *Comment Status*  **X**

    IEEE Std 802.3cq was approved by the IEEE-SA Standards Board on 30 JAN 2020.

*SuggestedRemedy*

    Change 802.3cq-20xx to 802.3cq-2020.  Also make this change on P13 L8.

*Proposed Response*       *Response Status*  **O**

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*Cl* **0**       *SC* **0**                 *P*             *L*              # R1-7

Berger, Catherine                       Editorial Coordination

*Comment Type*   **G**      *Comment Status*  **X**

    This draft meets all editorial requirements.

*SuggestedRemedy*


*Proposed Response*       *Response Status*  **O**

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*Cl* **45**      *SC* **45.2.1.194.5**      *P* **41**         *L* **27**         # R1-3

Wienckowski, Natalie                    General Motors Company

*Comment Type*   **T**      *Comment Status*  **X**

    Correct the implementation of comment i-56 to add text to 45.2.1.195.1.

*SuggestedRemedy*

    Remove the text accidentally added to 45.2.1.194.5.  Add a new paragraph to 45.2.1.195.1 stating, "The values of L = 2 and L = 4 are not defined for 2.5GBASE-T1 PHYs, and the value of L = 4 is not defined for 5GBASE-T1 PHYs. Bits 1.2312.12:11 will indicate whatever value is received from the link partner, but if the undefined  values are received, the requested interleaver depth is out of scope of this standard and may not be supported by the local PHY."

*Proposed Response*       *Response Status*  **O**

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*Cl* **45**      *SC* **45.2.1.195**        *P* **42**         *L* **8**          # R1-4

Wienckowski, Natalie                    General Motors Company

*Comment Type*   **T**      *Comment Status*  **X**

    Comment i-56 metioned that "Reserved" should be changed to "undefined" in Table 45-155d but the "Proposed Change" neglected to include this.

*SuggestedRemedy*

    Change "Reserved" to "undefined" for the values 01 and 10 in the description of bits 1.2312.12:11 in Table 45-155d.

*Proposed Response*       *Response Status*  **O**

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general           *Cl* **45**                    Page 1 of 2
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn     *SC* **45.2.1.195**           2/16/2020  11:59:15 AM
SORT ORDER: Clause, Subclause, page, line

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*Cl* **149**     *SC* **149.3.7.2.2**          *P* **119**     *L* **54**          # R1-8

Zimmerman, George                    ADI, APL Group, Aquantia, BMW, Cisco, CommScop

*Comment Type* **T**      *Comment Status* **X**

(I realize that this comment may be out of scope)
There seems to be a problem in the EEE transmit state diagram with regards to the transition from SEND_SLEEP to SEND_ALERT. tx_lpi_req is generated by the PCS 64B/65B Transmit state machine at any symbol boundary when it receives the LPI request. In Figure 149-20, tx_lpi_req is further qualified with rs_fec_frame_done in the EEE transmit state machine so that transition from TX_NORMAL to SEND_SLEEP occurs on any RS-FEC frame boundary. During the 8 RS-FEC frames that the EEE transmit state machine stays in the SEND_SLEEP state, tx_lpi_req could go false, While this tx_lpi_req transition is aligned to tx_alert_start_next, the EEE transmit state machine may have only completed four RS-FEC frames of SEND_SLEEP, so the transition to SEND_ALERT will be delayed for an additional four RS-FEC frames. This delay would cause SEND_ALERT to transmit ALERT outside of the specified ALERT window.
149.3.2.2.22 that states "PMA transmits the sleep signals starting at the beginning of the next superframe", but this doesn't address the problem as the size of the superframe changes based on the interleave, and as shown in the example above even though the SEND_SLEEP did start on a 4 RS-FEC superframe boundary, ALERT was still transmitted incorrectly.

To prevent this potential misalignment, the transition to SEND_SLEEP needs to be aligned to the start of ALERT, which according to 149.3.6.1 "shall start at the beginning of any eight PHY frame boundary starting at the beginning of the frame following a refresh PHY frame". Aligning the transition to SEND_SLEEP would ensures that the lpi_sleep_timer completes and the EEE state machine transitions to SEND_ALERT that the ALERT transmission is properly aligned.

*SuggestedRemedy*

Add the following variable to 149.3.7.2.2, in alphanumeric order: (page 119 line 54)

tx_sleep_start_next
A Boolean value. This variable is set TRUE during the seventh RS-FEC frame in every group of eight RS-FEC frames, where the group of eight RS-FEC frames start with the RS-FEC frame after refresh.

In Figure 149-20 (page 129 line 9)
Change the transition from TX_NORMAL to SEND_SLEEP to the following:
tx_lpi_req *
rs_fec_frame_done *
tx_sleep_start_next

*Proposed Response*          *Response Status* **O**

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*Cl* **149**     *SC* **149.9.1**          *P* **179**     *L* **8**          # R1-1

Wienckowski, Natalie                    General Motors Company

*Comment Type* **E**      *Comment Status* **X**

The editor's note regarding the maintenance task force is no longer needed.  P802.3cr has started WG ballot and the text currently in this section does not need any additional changes.

*SuggestedRemedy*

Delete Editor's Note:  The equivalent text in other clauses of IEEE Std 802.3 is under consideration for revision by the maintenance task force. This clause should be revised to align with the output of that effort.

*Proposed Response*          *Response Status* **O**

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*Cl* **149B**     *SC* **149B.3.2**          *P* **205**     *L* **10**          # R1-2

Wienckowski, Natalie                    General Motors Company

*Comment Type* **E**      *Comment Status* **X**

Remove the word "ensure" added by comment i-76.  The reason for the recommendation is not required.

*SuggestedRemedy*

Change:  It is recommended that this status is set for a minimum of 100 milliseconds to ensure reception by the link partner management entity.   To:  It is recommended that this status is set for a minimum of 100 milliseconds.  This same change should also be made on P205 L20 (149B.3.3), P205 L29 (149B.3.4), and P205 L40 (149B.3.5).

*Proposed Response*          *Response Status* **O**

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

*Cl* **149B**
*SC* **149B.3.2**

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