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|                 8802-3/802.3 REVISION REQUEST 1274                |      2
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                                                                          4
DATE:                  9th Feb, 2015                                      5
NAME:                  George Zimmerman                                   6
COMPANY/AFFILIATION: CME Consulting/LTC                                   7
E-MAIL:                george@cmeconsulting.onmicrosoft.com               8
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REQUESTED REVISION:                                                      10
   STANDARD:          802.3-2012                                         11
   CLAUSE NUMBER:     33                                                 12
   CLAUSE TITLE:      Data Terminal Equipment (DTE) Power via Media      13
Dependent Interface (MDI)                                               14
                                                                         15
PROPOSED REVISION TEXT:                                                  16
Change: The PD shall withstand any voltage from 0 V to 57 V at the PI   17
indefinitely without permanent damage.                                  18
To:The PD shall withstand any common-mode voltage from 0 V to 57 V      19
applied to any two sets of two pins at the PI indefinitely without      20
permanent damage.  The two pins in each set shall correspond to the     21
balanced twisted wire pairs of the connected link segment              22
                                                                         23
RATIONALE FOR REVISION:                                                 24
Text in the existing standard is ambiguous and is inconsistent with     25
terminations and usage commonly found in Ethernet equipment. The intent 26
is to require PDs to be able to withstand application of common-mode PoE 27
voltage.  Application of 57V DC voltages in across the pins corresponding 28
to the two pairs twisted differentially to form a balanced pair of the  29
link segment would run a DC current across the transformer windings     30
commonly found in BASE-T Ethernet equipment and burn them out.          31
                                                                         32
IMPACT ON EXISTING NETWORKS:                                            33
None.                                                                   34
                                                                         35
+-------------------------------------------------------------------+     36
| Please attach supporting material, if any                         |     37
| Submit to:- David Law, Chair IEEE 802.3                           |     38
|  and copy:- Adam Healey, Vice-Chair IEEE 802.3                    |     39
|                                                                   |     40
| At:-        E-Mail: stds-802-3-maint-req@ieee.org                 |     41
|                                                                   |     42
|             +------- For official 802.3 use -----------+          |     43
|             | REV REQ NUMBER: 1274                      |          |     44
|             | DATE RECEIVED: 9th Feb, 2015              |          |     45
|             | EDITORIAL/TECHNICAL                       |          |     46
|             | ACCEPTED/DENIED                           |          |     47
|             | BALLOT REQ'D YES/NO                       |          |     48
|             | COMMENTS: XX-Xxx-XX Ver: D1.0 Status: R   |          |     49
+-------------+-------------------------------------------+----------+     50
| For information about this Revision Request see -                 |     51
|http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1274 |  52
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ISO/IEC 8802-3/IEEE Std.802.3 Revision Request. Subject to change.