TP3 IPR Stressors

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Initial IPR Screening

- Fully support the ‘Ewen’ method
- Narrow the candidates – eliminate:
  - < 4 dB (insufficient stress)
  - > 5 dB (overly stressful)
  - D2.0 stressors (out-of-date)
- 30 remain
  - 8 for pre-cursor
  - 10 for symmetric
  - 12 for post-cursor

Further Considerations

- Initial impressions are critical to the standard's success
  - Cannot sacrifice expectations at this critical and competitive juncture
  - LRM must compare favorably to reverse LX-4 traction
  - Results on lab fibers such as TIA 12/96 and simulation results on Gen67YY show that 4.5dB PIE-D gives the minimum level of performance that 802.3 is used to
  - Concerned about perception with high use of offset patch-cords if margins are low
- Must protect against uncertainties
  - Don't want guard-banding in standard, but we cannot assume that numerous uncertainties around center launch, real transmitters, lack of OM2 models, measurement methods, etc. will work in our favor
  - Must consider duplex link requirements
- >4.5 dB exists today to meet demands of low power, high yield, low cost
  - EDC module demonstrated D2.0 stressors to 5.1 dB (bhoja_1_0305); 4.5 dB is achievable now
  - Industry experience shows that solutions improve dramatically and rapidly
  - Should not base long-term decisions on 1st silicon or technologies that have not had a chance to mature
- Conclusion: 4.5 dB is necessary and is feasible

Conclusions

- Same PIE-D target is appropriate for pre-cursor, post-cursor & symmetric
  - All equally likely
- Propose all stressors be set at 4.5 dB PIE-D min
  - Pre-cursor row 23
  - Symmetrical row 22
  - Post-cursor row 20