Analysis of TP3 Candidate Stressor Sets

(drawing upon on John Ewen's stressors and comments on Draft 2.0)

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TP3 Candidate Stressor Set Performance on Gen67yy Monte Carlo set with connectors

				From Ewen Spreadsheet			GaTech	
Category	**Index**	**1-way %tile**	**Duplex %tile**	**PIE-D**	**PIE(8,3)**	**PIE(12,5)**	**PIE(12,0)**	**PIE(6,2)**
Stressor Set 1								
PreCursor	10	92.5%	85.6%	3.82	4.44	4.12	5.59	4.62
PostCursor	15	95.0%	90.3%	4.20	4.42	4.34	6.38	4.77
Split-Sym	5	90.0%	81.0%	3.83	4.31	4.20	6.16	4.44
Stressor Set 2								
PreCursor	23	99.0%	98.0%	4.57	5.85	5.38	7.70	6.43
PostCursor	20	97.5%	95.1%	4.56	4.77	4.72	7.07	5.31
Split-Sym	22	98.5%	97.0%	4.57	5.40	5.20	7.72	5.73
Stressors at 99%tile								
PreCursor	24	99.5%	99.0%	4.74	6.23	5.81	8.43	6.82
PostCursor	24	99.5%	99.0%	5.18	5.47	5.40	8.95	5.99
Split-Sym	24	99.5%	99.0%	4.99	5.92	5.70	8.69	6.34

- The duplex, two-fiber link is most relevant to coverage estimation
- Stressor Set 1 tests between the 80 & 90%tiles
- Stressor Set 2 does not test “at worst case,” but rather between 95 & 98%tiles
- Stressor Set 1 would properly reject a linear equalizer
- Stressor set 2 is required to reject an inadequately short DFE architecture

(grey shading indicates values failing a 6.0dB power budget for real, finite length DFE)