Comparing TCP Reno and TCP Cubic

QUEUE	200	400	800	1600
DELAY=200	Rnd= 0.7322	0.3812	0.4298	0.7185
	Avg= 0.667686304	0.35844	0.41964	0.72404
	Std= 0.151813675	0.026851488	0.044570062	0.010083769
QUEUE	200	400	800	1600
DELAY=400	Rnd= 0.2315	0.5223	0.3562	0.6921
	Avg= 0.18048	0.44526	0.35512	0.66024
	Std= 0.061734153	0.041756657	0.011516493	0.043033643

Conclusion:

From the data collected Reno performs better with larger queues, because the bandwidth ratios for larger queue values are more as compared to small queue values. The data also clearly shows that at large delays the tcp reno performance decreases as compared to small delays.

Bottleneck Link Utilization:

Delay=200

QUEUE	Random Trial	Time Finished	Total Packets transferred	Bottleneck-link utilization	Percentage link utilization
200	0.7322	45.9772	173220000	3.767519553	75.35%
400	0.3812	31.8177	138120000	4.340980021	86.82%
800	0.4298	32.9875	142980000	4.334369079	86.69%
1600	0.7185	39.026	171850000	4.403474607	88.07%

Delay=400

QUEUE	Random Trial	Time Finished	Total Packets transferred	Bottleneck-link utilization	Percentage link utilization
200	0.2315	47.5808	123150000	2.588228865	51.76%
400	0.5223	60.5908	152230000	2.512427629	50.25%
800	0.3562	35.3353	135620000	3.838088257	76.76%
1600	0.6921	41.4002	169210000	4.087178323	81.74%