

Update on Submitted ENERGY STAR Data

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Data Center Storage
Stakeholder Meeting

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SNIA Emerald™

Data

Review

- Block Data set
 - ◆ Transactional Data set
 - ◆ Sequential Data set
- File Data set

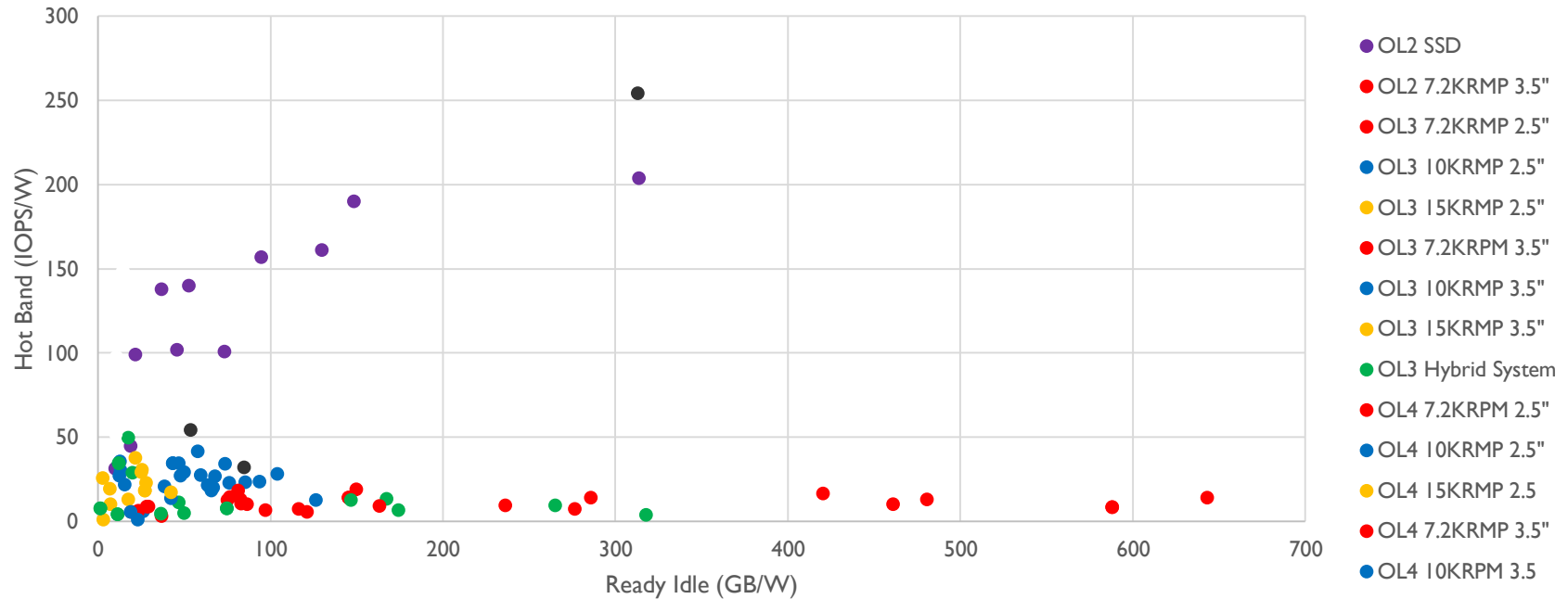
➤ Data set pulled from ENERGY STAR August 2019

- ◆ OEM configurations removed from the dataset
- ◆ Hybrid (HDD/SSD) removed

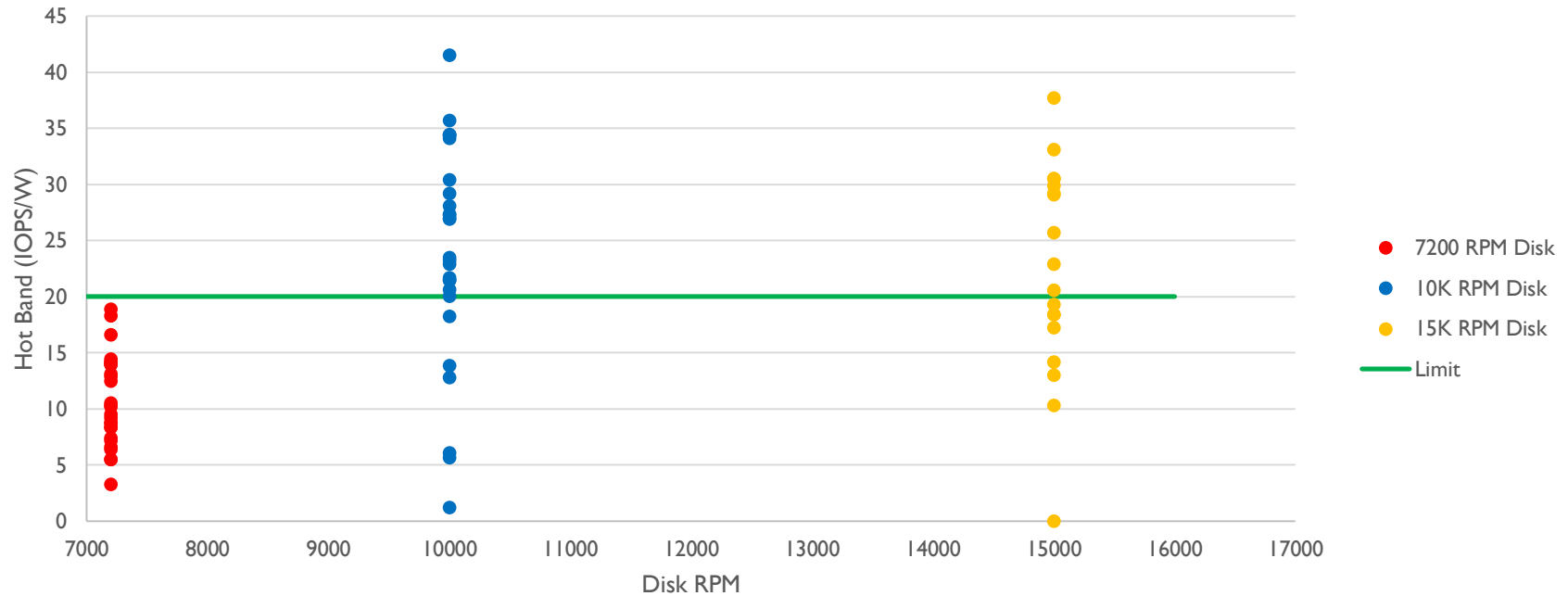
System	# of Systems	# 7.2K RPM	# 10K RPM	# 15K RPM	# SSD
Online 2 Transactional	12	1			11
Online 3 Transactional	29	4	18	7	
Online 4 Transactional	27	4	8	6	9
Online 2 Sequential	15	6	9		
Online 3 Sequential	22	7	14	1	
Online 4 Sequential	28	4	12	12	



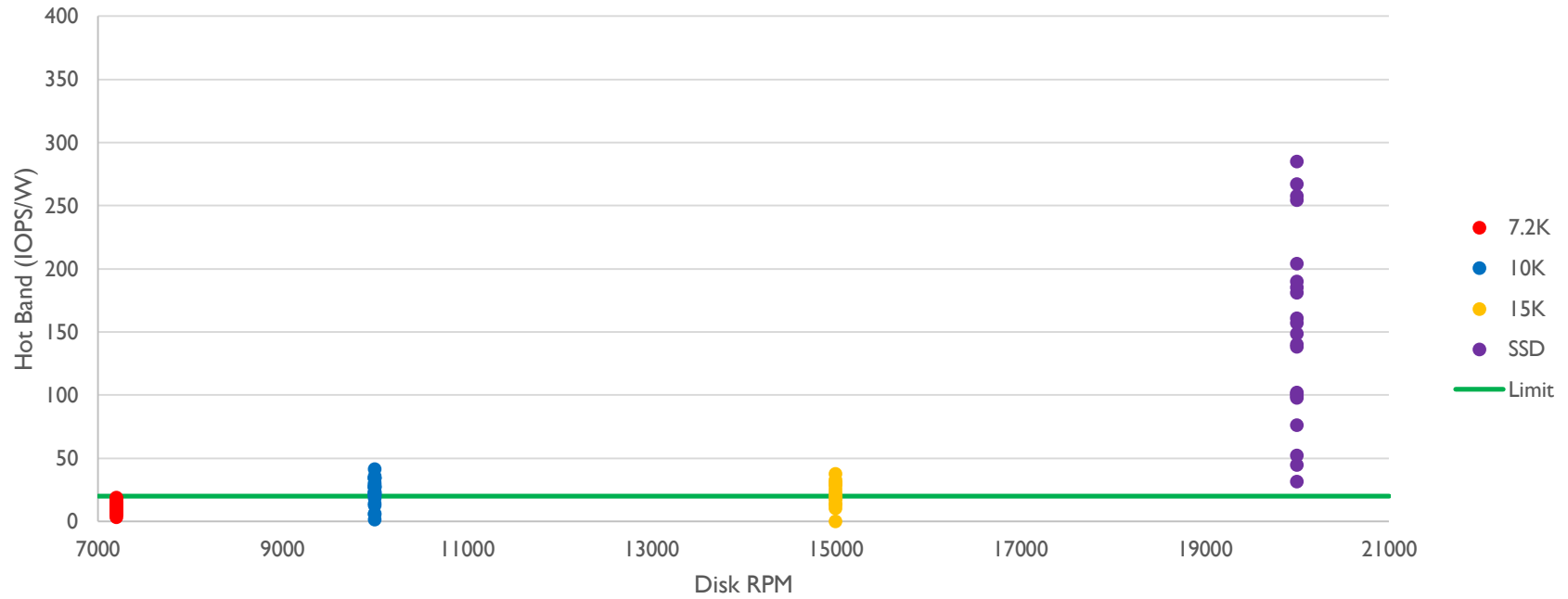
Transactional Hot Band vs. Idle



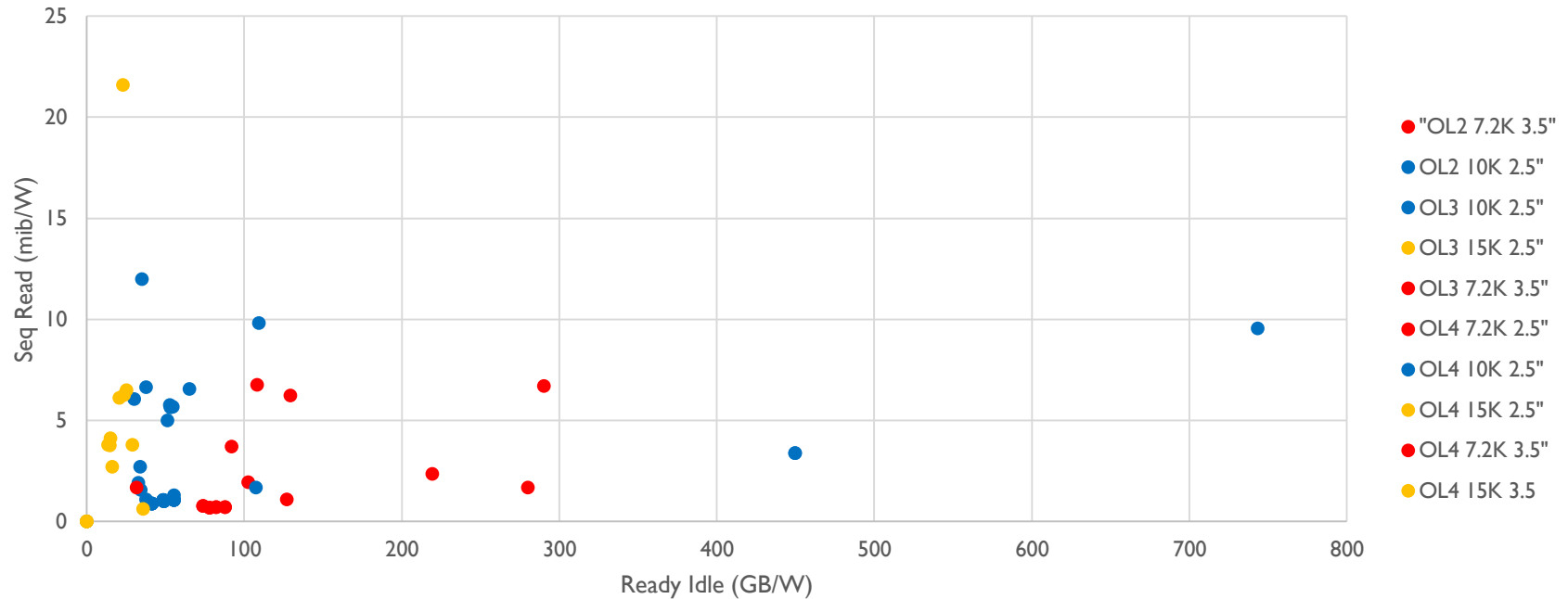
Transactional Hot Band by Disk Speed



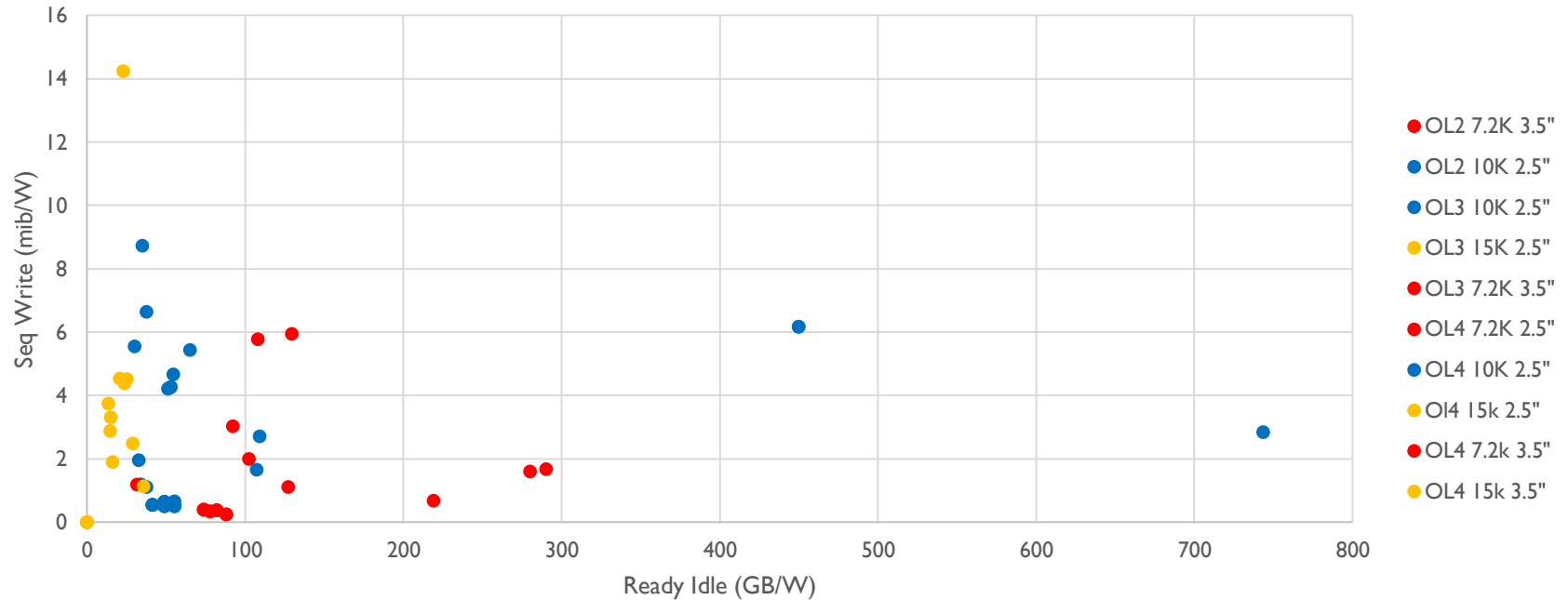
Transactional HDD vs SSD



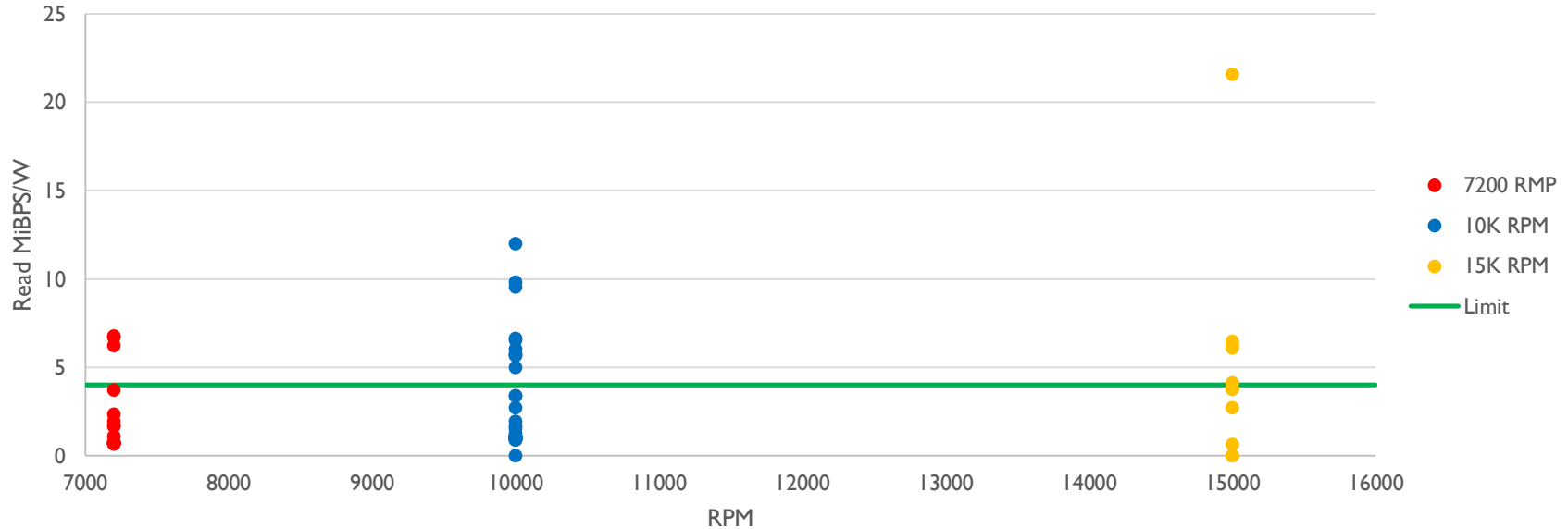
Sequential Read vs. Ready Idle



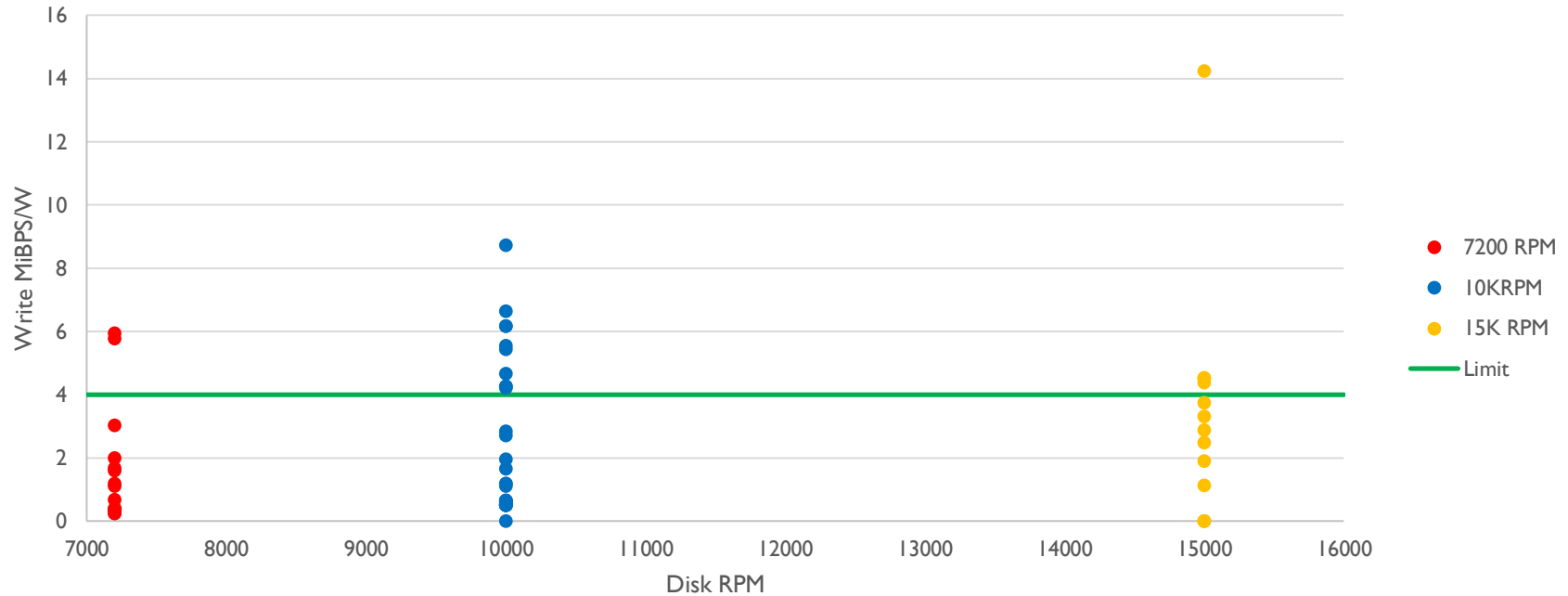
Sequential Write vs. Ready Idle



Sequential Read vs. Proposed Limit



Sequential Write vs. Proposed Limit

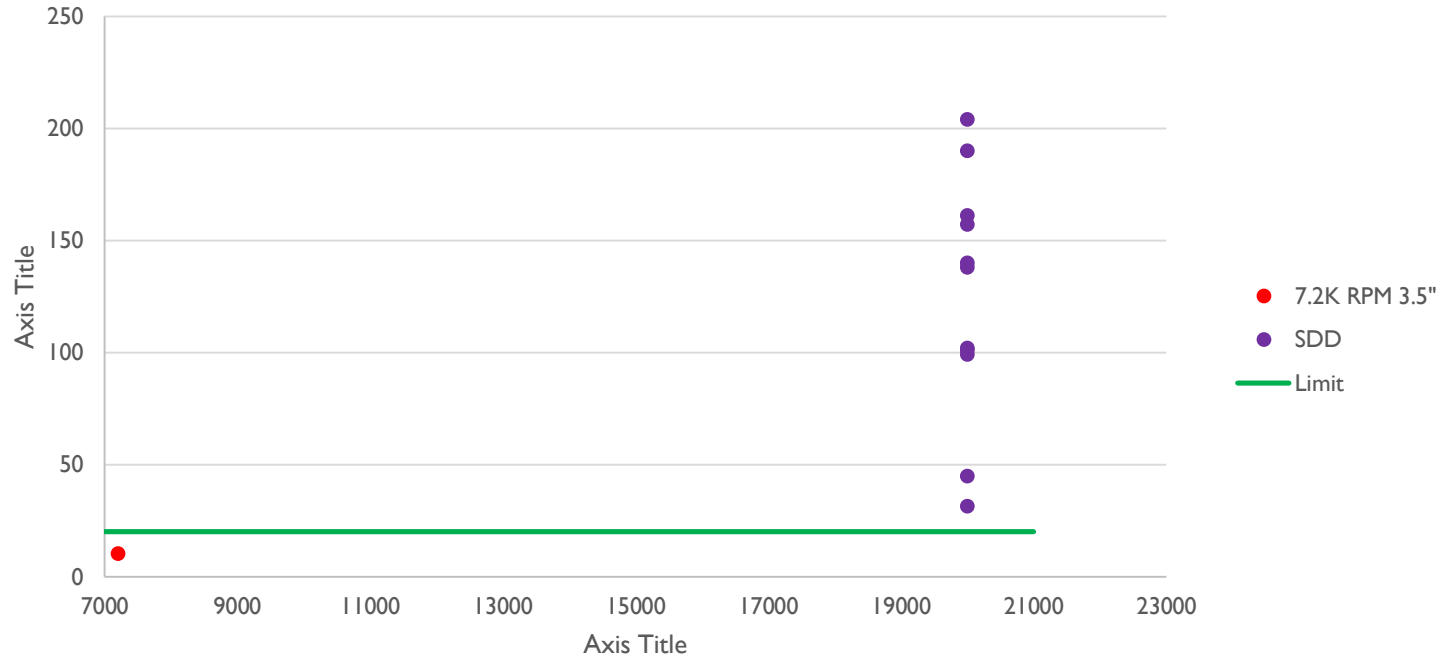


- Have 10 submission to EPA
 - ◆ From a Single Vendor
 - ◆ Six Online 4 Systems
 - ◆ Four Online 2 Systems (Missing workload data)

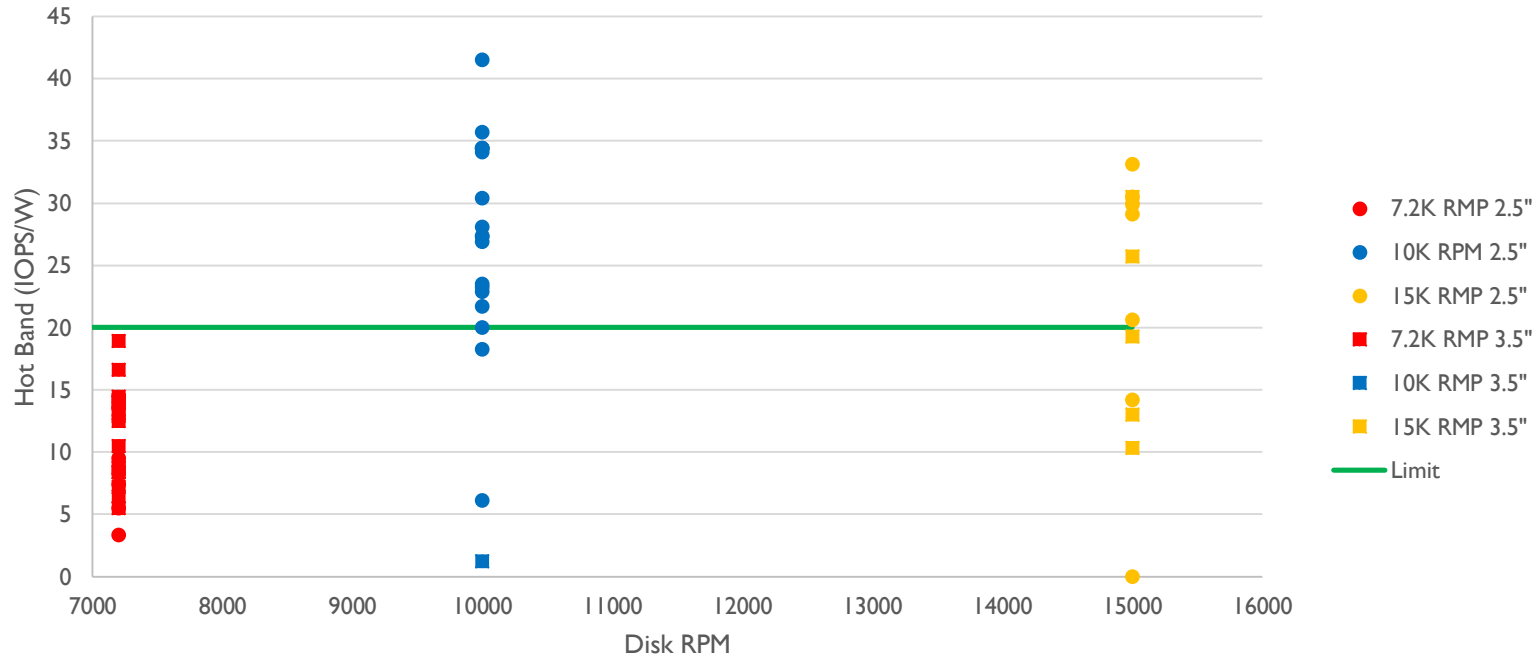
Back up slides

- Trans Online 2
- Trans Online 3
- Trans Online 4

Online 2 Hot Band by Disk Speed



Online 3 Hot Band by Disk Speed



Online 4 HDD Hot Band by Disk Speed

