Consolidated list of Replies to Pre-bid Queries

S.No	Document Reference	Page No	Clause No	Description in RFP	Clarification Sought	Additional Remarks (if any)	NPCI Response
1	RFP for Flash Storage	32	2 / Requirement	Storage should be supplied @ two locations Chennai &Hyderabad. The proposed bidder should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites withRPO of lesser than 5 mins. The storage should have capability of 3way replication with zero data loss	We request NPCI to consider " Proposed bidder / OEM should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites withRPO of lesser than 5 mins."		Proposed bidder / OEM should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites withRPO of lesser than 5 mins.The storage should have capability of 3wayreplication with zero data loss if it is deployed with Near site arachitecture.
2	RFP for Flash Storage	32	3 / Architecture	Proposed storage must be a All Flash Array. Designed to take advantage of the Flash/SSD for high performance, reliability, energy efficiency and consistent performance. All the LUNs should have visibility through all controllers and data flow should be possible through them.	Based on earlier RFP response from NPCI, "Proposed bidder solution controller should support Active- Active, and both controllers should be able to serve the Data path for same LUN. All the LUNs should have visibility through all controllers and data flow should be possible through them." Request NPCI to clarify if the above is true for this RFP as well.		No change in RFP. (All the LUNs should have visibility through all controllers.)
3	RFP for Flash Storage	32	5 / Media	Offered storage shall support various SSD capacities drives	We understand from the earlier RFP response from NPCI that encryption should be hardware (SED /storage controller) based and not a software functionality. Request NPCI to clarify if SED based encryption is offered, will support be required for encrypted SSD drive capacities (960GB, 1.92TB, 3.84, 7.68 & 15TB).		The Maximum supported and available SSD disks can be supplied
4	RFP for Flash Storage	32	8/Encryption	The storage should have native encryption capabilities as per PCI DSS standards and encryption should not add any performance overheads	Request you to also clarify if the internal key management solution need to be offered along with storage offering.		Not required
5	RFP for Flash Storage	32	7 / RAID Support	Industry standard RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Enterprise All flash arrays do not support RAID0 as this does not offer any data protection. Hence request NPCI to remove the same in the clause.		Proposed bidder solution should support all the RAID Levels which offers data protection
6	RFP for Flash Storage	32	6 / Capacity	The proposed storage should provide 100 TB usable capacity post RAID 5/6 configuration and should be expandable up to 1 PB + and should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with Microsecond response time @ fully populated capacity.	All Flash arrays typically support multiple RAID group sizer, however, having larger RAID group sizes expose the data stored on it if there are drive failures. As per best practices, for better performance and lesser impact of drive failure during rebuild, and faster rebuild, it is recommended to use not more than 8 drives, i.e., R5(7+1) and R6(14+2).		Proposed bidder solution should provide performance and availability of Data without any impact during the rebuild process
7	RFP for Flash Storage	32	6 / Capacity	The proposed storage should provide 100 TB usable capacity post RAID 5/6 configuration and should be expandable up to 1 PB + and should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with Microsecond response time @ fully populated capacity.	Request NPCI to mention the IOPS requirement from Day 1 as storage should be able to deliver 1000000 IOPS when is it fully populated.		No change in RFP. The controllers should be able to deliver 1000000 IOPs is from day one
8	RFP for Flash Storage	32	10 / cache Mirroring	Fully populated cache not less than 4TB which should be mirrored between active-active controllers on a controller pair. The cache mirroring should happen over dedicated bus / path internal/external to array without using the host ports for the same.	Cache is used to provide faster response time & reduce latency while accessing data. To protect data written to cache, mirroring of the data is done across controllers (in same pair or across pair of controllers). Using low latency high bandwidth dedicated paths will be essential to ensure fast response time for the application/hosts. But incase cache mirroring is done at switch level the entire purpose is defeated as there will be high latency while accessing data. Hence request NPCI to mention cache mirroring to happen over dedicated bus/path internal to array without using the host ports. This will help NPCI to get maximum advantage from the available cache and avoid silos. please confirm whether 4TB cache should be available as a single unit and not as multiple islands of cache		Fully populated cache should not be less than 2TB on dual controllers from day one
9	RFP for Flash Storage	33	16 / Zero Data Loss	Even in case of natural calamities Data loss in storage should be zero	It is technically not feasible to achieve zero data loss by implementing async replication with RPO of 5 mins. We could offer a Zero Data loss solution by implementing a Sync replication to a near site and async replication to far DR and establishing a 3 DC replication with delta resync technology (cascaded and concurrent STAR). Request NPCI to confirm if such a functionality is being looked at.		The storage should be capable of zero RPO if it is deployed with Near site architecture
10	RFP for Flash Storage	33	24 / Availability	The storage should be able to provide availability parameter of 99.9999 % from the date of acceptance of the SAN to be calculated on an annual basis.	RFP page 23 point 8.1 mentions SLA downtime will be calculated beyond 5.26 minutes which works out to be 5 9's availability. 6 9's availability warrants anything beyond 31.5 seconds should be counted as SLA breach. Request NPCI to clarify if this is indeed 99.9999% (6 9's) availability and it will be <32seconds		Requirement is of 99.9999 availability (6 9's)
11		34	2 / Requirement	Storage should be supplied @ two locations Chennai &Hyderabad. Minimum two set of Nodes should be supplied ateach site. The proposed bidder should have implemented theproposed storage 2 No"s (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesserthan 5 mins. The storage should have capability of 3wayreplication with zero data loss.	We request NPCI to consider " Proposed bidder / OEM should have implemented theproposed storage 2 No"s (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesserthan 5 mins".		Proposed bidder / OEM should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites withRPO of lesser than 5 mins.The storage should have capability of 3wayreplication with zero data loss if it is deployed with Near site arachitecture.
12	RFP for Flash Storage	34	5/ Media	Offered storage shall support various SSD capacities drives	Request NPCI to clarify whether support is required for encrypted SSD drive capacity from 2TB to 15TB.		All supplied disks should follow PCIDSS latest standards
13	RFP for Flash Storage	34	9/Protocol Support	The storage solution should support various versions of FC , FCoE, iSCSI, NFS, and CIFS storage protocols and should be licensed for overall capacity from Day one	FCoE is no more an adopted technology. Dell EMC used to support FCoE in 2 generation older products, but with no acceptance and no requirement from customers, this interface is not offered anymore. Request NPCI to remove this from the clause.		Proposed 250 TB storage should support at least FC,iSCSI, NFS and CIFS.
14	RFP for Flash Storage	34	9/Protocol Support	The storage solution should support various versions of FC , FCoE, iSCSI, NFS, and CIFS storage protocols and should be licensed for overall capacity from Day one	Also please clarify if the NFS, CIFS would be implemented, as we do not see any mention of the 1/10Gbe ports for file serving in the RFP.		Proposed storage solution should have ample ports to supports all the necessary requested protocols with redundancy .
15	RFP for Flash Storage	34	10 /Cache	The storage should have minimum of 2 TB cache and should be upgradable	Considering exponential data growth up to 3PB, the system should provide sustained performance and controller cache is a vital component to complement the performance. We recommend cache must be upgradeable to minimum 4TB as a single unit as this would make the solution give consistent performance with all the data services on.		No change in RFP
16	RFP for Flash Storage	36	24/Availability	The storage should be able to provide availability parameter of 99.9999 % from the date of acceptance of the SAN to be calculated on an annual basis.	RFP page 23 point 8.1 mentions SLA downtime will be calculated beyond 5.26 minutes which works out to be 5 9's availability. 6 9's availability warrants anything beyond 31.5 seconds should be counted as SLA breach.		Requirement is of 99.9999 availability (6 9's)
17	RFP for Flash Storage	36	25/Hot Swappable	All the components in the storage should have the capability to be replaced without disruption of services and should be Hot swappable	If for this requirement 2 controllers (1 node) are offered, would NPCI accept 1 controller (50% of resources) to be taken offline for maintenance like software and hardware upgrades? If the backplane (active or passive) needs replacement, both controllers will be down and services will be disrupted. Request NPCI to clarify.		No change in RFP
18	RFP for Flash Storage	34	6 / Capacity	The proposed storage should provide 250 TB usable capacity post RAID 5/6 configuration and should be expandable up to 3 PB + and should be capable of delivering sustained 800000 IOPS (Read Write Ratio of 70:30) with sub Millisecond response time @ fully populated capacity.	Request NPCI to mention the IOPS requirement for Day 1 as storage should be able to deliver 800000 IOPS when is it fully populated.		No change in RFP. The controllers should be able to deliver 800000 IOPs is from day one
19	RFP for Flash Storage	34	25/Hot Swappable	All the components in the storage should have the capability to be replaced without disruption of services and should be Hot swappable	If for this requirement 2 controllers (1 node) are offered, would NPCI accept 1 controller (50% of resources) to be taken offline for maintenance like software and hardware upgrades? If the backplane (active or passive) needs replacement, both controllers will be down and services will be disrupted. Request NPCI to clarify.		No change in RFP
20	RFP for Flash Storage	35	16/Zero Data Loss	Even in case of natural calamities Data loss in storage should be zero	NPCI intends to have a zero data loss solution which essentially requires that there should not be any limitation around the no. of LUNS being replicated. While the storage array capacity configured in 100TB today and scalable to 1000TB, asuming a 100GB LUNS configured. we require atleast 10K LUN to be simultaneously replicated at the same time. Request NPCI to include teh clause that the storage array should be able to replicate atleast 10K LUNS simulaneously both Syncronously as well as asyncronously without any limitation		No change in RFP

#	Document	Page	Clause	Existing Clause	Query/Request		NPCI Response
21		50	Annexure k - Technical Point 1	The OEM should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully .	The proposing bidder should have implemented one such proposed model successfully in BFSI / Govt oraganization / Enterprise customer		No change in RFP
22		50	Annexure k - Technical Point 2	Storage should be supplied @ two locations Chennai & Hyderabad. The proposed bidder should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesser than 5 mins. The storage should have capability of 3way replication with zero data loss.	Request NPCI to consider " Storage should be supplied @ two locations Chennai & Hyderabad. The proposed bidder should have implemented the proposed or equivalent storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesser than 5 mins. The storage should have capability of 3way replication with zero data loss.		No change in RFP
23		50	Annexure k - Technical Point 3	Proposed storage must be a All Flash Array. Designed to take advantage of the Flash/SSD for high performance, reliability, energy efficiency and consistent performance. All the LUNs should have visibility through all controllers and data flow should be possible through them.	Proposed storage must be a All Flash Array or equivalent. Designed to take advantage of the Flash/SSD for high performance, reliability, energy efficiency and consistent performance. All the LUNs should have visibility through all controllers and data flow should be possible through them.		No change in RFP
24		52	Annexure k - Technical Table B Point 2	Storage should be supplied @ two locations Chennai & Hyderabad. Minimum two set of Nodes should be supplied at each site. The proposed bidder should have implemented the proposed storage 2 No"s (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesser than 5 mins. The storage should have capability of 3way replication with zero data loss.	Storage should be supplied @ two locations Chennai & Hyderabad. Minimum two set of Nodes should be supplied at each site. The proposed bidder should have implemented the proposed or equivalent storage 2 No"s (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesser than 5 mins. The storage should have capability of 3way replication with zero data loss.		No change in RFP
25		52	Annexure k - Technical Table B Point 1	The OEM should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully.	The proposing bidder should have implemented one such proposed model successfully in BFSI / Govt oraganization / Enterprise customer		No change in RFP
26	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	1	The OEM should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully.	Request to modify to "The OEM should **be present in Gartner's Leader's Quardant for All Flash Arrays 2017 and** have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully.		No change in RFP
27	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	5	Offered storage shall support various SSD capacities drives	Please confirm if support for high capacity 15TB SSD drive is required? Also please confirm what is the maximum size of SSD drive to be considered in the initial 100TB requirement		The Maximum supported and available SSD disks can be supplied
28	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	6	The proposed storage should provide 100 TB usable capacity post RAID 5/6 configuration and should be expandable up to 1 PB + and should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with Microsecond response time @ fully populated capacity.	Request to modify the same to "The proposed storage should provide 100 TB usable capacity **(without Dedupe and Compression)** post RAID 5/6 configuration and should be expandable up to 1 PB + **(without dedupe and compression)** and should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with **sub miliseconds** response time @ fully populated capacity.		No change in RFP
29	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	8	The storage should have native encryption capabilities as per PCI DSS standards and encryption should not add any performance overheads	Please modify the same to " The storage should have native encryption capabilities as per PCI DSS **3.2** standards and encryption should **be with Self Encrypting drives so as to** not add any performance overheads		All supplied disks should follow PCIDSS latest standards
30	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	9	The storage solution should support various versions of FC protocols.	Please confirm if support for alternate protocols, iSCSI, CIFS, NFS is required		For 100 TB storage FC is mandatory and other protocols are optional only
31	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	10	Fully populated cache not less than 4TB which should be mirrored between active-active controllers on a controller pair. The cache mirroring should happen over dedicated bus / path internal/external to array without using the host ports for the same.	Please confirm if 4TB cache is required on day one or supported scalability should be 4TB and above?		Fully populated cache should not be less than 2TB on dual controllers from day one
32	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	13	The Storage should support FC for Front-end host connectivity. Each SAN controller should have 8 FC ports supportive of 16/32 Gbps. 2 nos of 12 Gbps or better backend physical ports for disk connectivity.	Request to modify the point as "The Storage should support FC for Front-end host connectivity. Each SAN controller should have 8 FC ports supportive of 32 Gbps or **16 FC ports upportive of 16Gbps. 4 nos of** 12 Gbps or better backend physical ports for disk connectivity. "		SAN controller should have minimum 8 FC ports of 32 Gbps and it should also support connectivity to 16 Gbps SAN switch. At least 2 nos of 12 Gbps backend ports is required
33	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	32	14	The system should be scalable to minimum 1000 SSD drives / 1 PB +	Please modify the point as "The system should be scalable to minimum 1000 SSD drives **AND** 1 PB + **usable capacity without Dedupe and/or compression"**		The storage system should be able to scale at least 1 PB+ usable capacity
34	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	33	17	Proposed storage array should include storage based Synchronous and Asynchronous Replication, Snapshot, and Volume cloning features for the entire supported capacity of the storage array. Features like Thin Provisioning, compression, Deduplication are not to be considered	Please confirm if compression and deduplication should not to be considered for capacity sizing or not required as a feature at all?		Features like Thin Provisioning, compression, Deduplication are optional
35	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	33	19	The performance monitoring should be real-time and historical providing IOPS response time and utilization of individual components within the storage array.	Please confirm if historical monitoring upto 12 months would be required		Minimum 6 months of historical data is required
36	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	34	1	The OEM should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully.	Request to modify to "The OEM should **be present in Gartner's Leader's Quardant for All Flash Arrays 2017 and** have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully.		No change in RFP
37	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	34	3	Proposed storage must be true scale out Modular all flash array. Designed to take advantage of the Flash/SSD for high performance, reliability, energy efficiency and consistent performance. The architecture should be scalable at least minimum eight nodes. Each node should comprise of at least two controllers.	Request to modify the point as "Proposed storage must be true scale out Modular all flash array. Designed to take advantage of the Flash/SSD for high performance, reliability, energy efficiency and consistent performance. The architecture should be scalable at least minimum eight nodes/**Controllers.**"		The architecture should be scalable at least minimum eight nodes/Controllers.
38	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	34	5	Offered storage shall support various SSD capacities drives	Please confirm if support for high capacity 15TB SSD drive is required? Also please confirm what is the maximum size of SSD drive to be considered in the initial 250TB requirement		The Maximum supported and available SSD disks can be supplied
39	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	34	6	The proposed storage should provide 250 TB usable capacity post RAID 5/6 configuration and should be expandable up to 3 PB + and should be capable of delivering sustained 800000 IOPS (Read Write Ratio of 70:30) with sub Millisecond response time @ fully populated capacity.	Request to modify the same to "The proposed storage should provide 250 TB usable capacity **(without Dedupe and Compression)** post RAID 5/6 configuration and should be expandable up to 3 PB + **(without dedupe and compression)** and should be capable of delivering sustained 800000 IOPS (Read Write Ratio of 70:30) with sub miliseconds response time @ fully populated capacity.		The usable capacity mentioned is without Dedupe & compression
40	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	34	8	The storage should have native encryption capabilities as per PCI DSS standards and encryption should not add any performance overheads	Please modify the same to " The storage should have native encryption capabilities as per PCI DSS **3.2** standards and encryption should **be with Self Encrypting drives so as to** not add any performance overheads		All supplied disks should follow PCIDSS latest standards
41	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	34	10	The storage should have minimum of 2 TB cache and should be upgradable	Please modify the same to " The storage should have minimum of 2 TB cache and should be upgradable to 4TB"		No change in RFP
42	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	35	13	The Storage should support FC for Front-end host connectivity. Each SAN controller should be supportive of 16/32 Gbps. Dual redundant backend connectivity.	Request to modify the point as "The Storage should support FC for Front-end host connectivity. Each SAN controller should have 8 FC ports supportive of 32 Gbps or **16 FC ports upportive of 16Gbps. 4 nos of** 12 Gbps or better backend physical ports for disk connectivity. "		SAN controller should have minimum 8 FC ports of 32 Gbps and it should also support connectivity to 16 Gbps SAN switch. At least 2 nos of 12 Gbps backend ports is required
43	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	35	14	The system should be scalable to minimum 1000 SSD drives / 1 PB +	Please modify the point as "The system should be scalable to minimum 1000 SSD drives **AND** 3 PB + **usable capacity without Dedupe and/or compression"**		The storage system should be able to scale at least 1 PB+ usable capacity
44	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	35	19	The performance monitoring should be real-time and historical providing IOPS response time and utilization of individual components within the storage array.	Please confirm if historical monitoring upto 12 months would be required		Minimum 6 months of historical data is required

#	Section	Page	Clause	RFP Text	Query	Remarks	NPCI Response
45	RFP for Flash Storage 1.1 dated 24.11.2017.pdf	23	8.18	20% payment shall be released within 30 days after from the date of delivery of Hardware & software and 80% payment shall be released after successful installation of Hardware & software.	Plese modify 80% on delivery and 20% on instalaltion		No change in RFP
46	Capacity	32	6	The proposed storage should provide 100 TB usable capacity post RAID 5/6 configuration	Please clarify whether RAID 5 or RAID 6 is required?		Raid 6
47	Capacity	32	6	should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with Microsecond response time @ fully populated capacity.	Please clarify what is the maximum latency desired at peak performance.	should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with less than 300 microsecond response time @ fully populated capacity.	should be capable of delivering sustained 1000000 IOPS (Read Write Ratio of 60:40) with sub millisecond response time @ fully populated capacity.
48	Cache Mirroring	32	10	Fully populated cache not less than 4TB	When the desired performance is mentioned, storage should be populated with the right amount of cache to achieve the performance. Storage architectures are different for different OEMs and cache architectures are also different.	Request for a change to minimum of 1 TB which is sufficient to deliver the required performance.	Fully populated cache should not be less than 2TB on dual controllers from day one
49	Availability	33	24	The storage should be able to provide availability parameter of 99.9999 % from the date of acceptance of the SAN	This can only be achieved @ solution level.	Request it to change to 99.5% uptime for storage configuration calculated on annual basis	Requirement is of 99.9999 availability (6 9's).
50	Architecture	34	3	The Architecture should be scalable at least to a minimum of eight nodes. Each node should be comprised of atleast two controllers.		The architecture should be multi controller and should scale to a minimum of 8 nodes/controllers	The architecture should be scalable at least minimum eight nodes/Controllers.
51	Capacity	34	6	The proposed storage should provide 250 TB usable capacity post RAID 5/6 configuration	Please clarify whether effect of deduplication or compression can be considered while arriving at the capacity of 250TB. Is there an estimation for compression or deduplication that can be taken. Please also clarify whether RAID5 or RAID 6 is required.		The usable capacity mentioned is without Dedupe & compression , in Raid 6 for calculation
52	Cache	34	10	The storage should have minimum of 2 TB cache and should be upgradable.	When the desired performance is mentioned, storage should be populated with the right amount of cache to achieve the performance. Storage architectures are different for different OEMs and cache architectures are also different.	Request for a change to minimum of 1 TB which is sufficient to deliver the required performance.	Fully populated cache should not be less than 2TB on dual controllers from day one
53	Sec 9 Tech Specs	32	Table A Pt 2 Requirement	The proposed bidder should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesser than 5 mins.	Please remove this compliance requirement for the bidder. If at all required, please out the ownership compliance on the OEM.	It is difficult to have the same bidder and same brand combination repeatable for every opportunity in market. Moreover, such critical systems get implemented directly by OEMs.	No change in RFP
54	Sec 9 Tech Specs	32	Table A Pt 10 Cache Mirroring	Fully populated cache not less than 4TB which should be mirrored between active-active controllers on a controller pair. The cache mirroring should happen over dedicated bus / path internal/external to array without using the host ports for the same.	What is the starting cache required from day one - 128GB or 256GB or 512GB for the proposed active-active controller pair?	It is quite obvious that NPCI is not asking for 4TB cache for just 100TB usable capacity in this case.	Fully populated cache should not be less than 2TB on dual controllers from day one
55	Sec 9 Tech Specs	32	Table A Pt 10 Cache Mirroring	Fully populated cache not less than 4TB which should be mirrored between active-active controllers on a controller pair. The cache mirroring should happen over dedicated bus / path internal/external to array without using the host ports for the same.	Since NPCI has already specified the more important performance requirements of usable capacity, its full scalability and the response time and IOPS at full scalability, NPCI can remove the product level specs of cache from the RFP and leave it to the OEM to quote the appropriate model to comply with the performance requirements.	We wish to hope that NPCI does not want to focus on a particular storage brand and model and is open to healthy competition. As per our knowledge, currently, only EMC can commit and offer 4TB cache scalability on storage. So, NPCI will get only one Storage brand option to qualify. In case NPCI wants to focus on product spec and also be open to healthy competition from Hitachi, we request NPCI to optimize the requirement to either 512GB max or 2TB max to enable Hitachi to technically qualify on a product specification basis.	Fully populated cache should not be less than 2TB on dual controllers from day one
56	Sec 9 Tech Specs	32	Table A Pt 13 Host/Backend Interface	2 nos of 12 Gbps or better backend physical ports for disk connectivity.	Hitachi is the only storage brand to offer 32Gbps FC ports on Storage. Other brands do not offer 32Gbps FC ports as yet. The way NPCI has accomodated other brand's lower spec of 16Gb FC storage by writing 16 / 32 Gbps for FC ports, we request please change the backend SAS specification to 6 / 12 Gbps or please remove this specification completely. Since NPCI has already specified the more important performance requirements of usable capacity, its full scalability and the response time and IOPS at full scalability, NPCI can remove the product level specs of cache from the RFP and leave it to the OEM to quote the appropriate model to comply with the performance requirements.	In case NPCI wants to focus on product spec and also be open to healthy competition from Hitachi, we request NPCI to change the requirement to 6Gbps or higher SAS backend to enable Hitachi to technically qualify on a product specification basis. Hitachi storage comes with scalability to 512GB cache with 12Gbps SAS backend or 2TB cache with 6Gbps SAS backend.	SAN controller should have minimum 8 FC ports of 32 Gbps and it should also support connectivity to 16 Gbps SAN switch. At least 2 nos of 12 Gbps backend ports is required
57	Sec 9 Tech Specs	33	Table A Pt 16 Zero Data Loss	Even in case of natural calamities Data loss in storage should be zero	Need more clarity on this point.		The storage should be capable of zero RPO if it is deployed with Near site architecture
58	Sec 9 Tech Specs	33	Table A Pt 19 Software	The performance monitoring should be real-time and historical providing IOPS response time and utilization of individual components within the storage array.	Please confirm that historical monitoring report is required to be atleast 180 days or higher as per industry standard.		Minimum 6 months of historical data is required
59	Sec 9 Tech Specs	33	Table A Pt 22 Warranty & Support	5 Years	Annexure N - Commercial Bid (Indicative) on page 57 asks for 4th and 5th AMC. Please confirm whether the storage is required with 5 years warranty or 3 years warranty.		Kindly refer to Clause # 8.11 Warranties and 8.12 Support (AMC)
60	Sec 9 Tech Specs	34	Table B Pt 1 Brand	The proposing bidder should have implemented the proposed model successfully.	Please remove this compliance requirement for the bidder. If at all required, please out the ownership compliance on the OEM.	It is difficult to have the same bidder and same brand combination repeatable for every opportunity in market. Moreover, such critical systems get implemented directly by OEMs.	Proposed bidder / OEM should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites withRPO of lesser than 5 mins.The storage should have capability of 3wayreplication with zero data loss if it is deployed with Near site arachitecture.
61	Sec 9 Tech Specs	34	Table B Pt 2 Requirement	The proposed bidder should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites with RPO of lesser than 5 mins.	Please remove this compliance requirement for the bidder. If at all required, please out the ownership compliance on the OEM.	It is difficult to have the same bidder and same brand combination repeatable for every opportunity in market. Moreover, such critical systems get implemented directly by OEMs.	Proposed bidder / OEM should have implemented the proposed storage 2 Nos (1DC+1DR) Flash System successfully with replication capability between sites withRPO of lesser than 5 mins.The storage should have capability of 3wayreplication with zero data loss if it is deployed with Near site arachitecture.
62	Sec 9 Tech Specs	34	Table B Pt 3 Architecture	Proposed storage must be true scale out Modular all flash array. The architecture should be scalable at least minimum eight nodes. Each node should comprise of at least two controllers.	Since NPCI has already specified the more important performance requirements of usable capacity, its full scalability and the response time and IOPS at full scalability, NPCI can remove the product level specs of cache from the RFP and leave it to the OEM to quote the appropriate architecture model to comply with the performance requirements.	While some OEMs would necessarily require a sprawl of scale-out architecture of multiple nodes and controllers to meet NPCI's performance scalability, Hitachi can efficiently meet NPCI's performance scalability requirement with it's non-scale-out architecture having one pair of controllers.	The architecture should be scalable at least minimum eight nodes/Controllers.
63	Sec 9 Tech Specs	34	Table B Pt 9 Protocol Support	The storage solution should support various versions of FC , FCoE, iSCSI, NFS, and CIFS storage protocols and should be licensed for overall capacity from Day one.	Please remove the license requirement for protocols other then FC to make the specification look requirement specific.	This specifcation refers more to unified storage whereas NPCI is looking for a SAN Storage. As we understand that this storage is for Application workload which get connected to the Database through FC only, NPCI will not need any other protocol support than FC.	No change in RFP
64	Sec 9 Tech Specs	34	Table B Pt 10 Cache	The storage should have minimum of 2 TB cache and should be upgradable	What is the starting cache required from day one - 128GB or 256GB or 512GB for the proposed active-active controller pair?		No change in RFP
65	Sec 9 Tech Specs	34	Table B Pt 10 Cache	should be upgradable	Since NPCI has already specified the more important performance requirements of usable capacity, its full scalability and the response time and IOPS at full scalability, NPCI can remove the product level specs of cache from the RFP and leave it to the OEM to quote the appropriate model to comply with the performance requirements.		No change in RFP
66	Sec 9 Tech Specs	35	Table B Pt 16 Zero Data Loss	Even in case of natural calamities Data loss in storage should be zero	Need more clarity on this point.		The storage should be capable of zero RPO if it is deployed with Near site architecture

Internal - ITProcurement

#	Clause Title	Page	Clause	RFP Clause	Bidder's Remarks / Deviation		NPCI Response
67	Sec 9 Tech Specs	35	Table B Pt 19 Software	The performance monitoring should be real-time and historical providing IOPS response time and utilization of individual components within the storage array.	Please confirm that historical monitoring report is required to be atleast 180 days or higher as per industry standard.		Minimum 6 months of historical data is required
68	Sec 9 Tech Specs	36	Table B Pt 22 Warranty & Support	5 Years	Annexure N - Commercial Bid (Indicative) on page 57 asks for 4th and 5th AMC. Please confirm whether the storage is required with 5 years warranty or 3 years warranty.		Kindly refer to Clause # 8.11 Warranties and 8.12 Support (AMC)
69	Sec 4 Instruction to Bidders	11	Pt 6	An OEM may authorize only single bidder for the RFP.	We understand that an OEM can authorize atleast 2 to 3 bidders to ensure healthy participation for NPCI's consideration. Please confirm.		The RFP term is self-explanatory
70	Blacklisting declaration	11	4	The bidder should not be currently blacklisted by any bank / institution in India or abroad.	The bidder should not be currently blacklisted by any bank / institution in India or abroad.		No change in RFP
71	Eligibility Criteria	11	6	An OEM may authorize only single bidder for the RFP. In the event of OEM bidding directly, the OEM cannot be represented by any other bidder	Request you to please keep it open for both OEM & SI to choose multiple bidder		No change in RFP
72	Forfeiture of EMD	13	5.9	The EMD made by the bidder will be forfeited if: a) Bidder withdraws its bid before opening of the bids. b) Bidder withdraws its bid after opening of the bids but before Notification of Award. c) Selected Bidder withdraws its bid / Proposal before furnishing Performance Bank Guarantee. d) Bidder violates any of the provisions of the RFP up to submission of Performance Bank Guarantee. e) Selected Bidder fails to accept the order within five days from the date of receipt of the order. However, NPCI reserves its right to consider at its sole discretion the late acceptance of the order by selected Bidder. f) Bidder fails to submit the Performance Bank Guarantee within stipulated period from the date of acceptance of the Purchase Order. In such instance, NPCI at its discretion may cancel the order placed on the selected Bidder without giving any notice.	The EMD made by the bidder will be forfeited if: a) Bidder withdraws its bid before opening of the bids **due to reasons solely attributable to the bidder and despite adequate consideration of the bidder's deviations by NPCI.** b) Bidder withdraws its bid after opening of the bids but before Notification of Award **due to reasons solely attributable to the bidder and despite adequate consideration of the bidder's deviations by NPCI.** c) Selected Bidder withdraws its bid / Proposal before furnishing Performance Bank Guarantee **due to reasons solely attributable to the bidder and despite adequate consideration of the bidder's deviations by NPCI.** d) Bidder violates any of the provisions of the RFP up to submission of Performance Bank Guarantee **due to reasons solely attributable to the bidder and despite adequate consideration of the bidder's deviations by NPCI.** e) Selected Bidder fails to accept the order within five days from the date of receipt of the order **due to reasons solely attributable to the bidder and despite adequate consideration of the bidder's deviations by NPCI.** However, NPCI reserves its right to consider at its sole discretion the late acceptance of the order by selected Bidder. f) Bidder fails to submit the Performance Bank Guarantee within stipulated period from the date of acceptance of the Purchase Order**, due to reasons solely attributable to the bidder and despite adequate consideration of the bidder's deviations by NPCI**. In such instance, NPCI at its discretion may cancel the order placed on the selected Bidder without giving any notice.		No change in RFP terms
73	Period of Validity of Bids	13	5.10.	Bids shall remain valid for a period of 180 days after the date of bid opening as mentioned in Section 1 or as may be extended from time to time. NPCI reserves the right to reject a bid valid for a period shorter than 180 days as non-responsive, without any correspondence.	Bids shall remain valid for a period of ~~180 days~~ 30 days after the date of bid opening as mentioned in Section 1 or as may be extended from time to time. ~~NPCI reserves the right to reject a bid valid for a period shorter than 180 days as non-responsive, without any correspondence.~~		No change in RFP terms
74	Rejection of Bid	15	5.19	The bid is liable to be rejected if the bid document: a) Does not bear signature of authorized person. b) Is received through Fax / E-mail. c) Is received after expiry of the due date and time stipulated for Bid submission. d) Is incomplete / incorrect. e) Does not include requisite documents. f) Is Conditional. g) Does not conform to the terms and conditions stipulated in this Request for Proposal.	Request you consider the Deviations as we would like to discuss this during the contracting period, only if we are L1 bidder. Hence request you to consider Conditional bid.		No change in RFP terms
75	Taxes and Duties	20	8.5	AS PER RFP	Request to add the following, Any increase or decrease in the rates of the applicable taxes, duties or any new levy on account of changes in law shall be to the account of Customer.		No change in RFP terms
76	Incentivizing the Service Providers	21	8.9	Delivery of hardware / software / services – in case of delivery of the deliverables earlier than the stipulated delivery schedule as per the Purchase Order - 0.25% per week, for every week of early delivery, with a maximum of 2.5%, of the Order value of the respective component, i.e. hardware / software / services, as the case may be, provided the saving in delivery timeline / early delivery is not less than 20% of the prescribed delivery schedule, otherwise incentive will not be applicable. Vendors will not be eligible for any incentive if delivery happens as per the terms of the PO.	Delivery of hardware / software / services – in case of delivery of the deliverables earlier than the stipulated delivery schedule as per the Purchase Order - 0.25% per week, for every week of early delivery, with a maximum of 2.5%, of the Order value of the respective component, i.e. hardware / software / services, as the case may be, provided the saving in delivery timeline / early delivery is not less than 20% of the prescribed delivery schedule, otherwise incentive will not be applicable. Vendors will not be eligible for any incentive if delivery happens as per the terms of the PO.		No change in RFP
77	Penalty for default in delivery	21	8.1	If the Bidder does not deliver the Goods as per the above delivery period, or such authorized extension of delivery period as may be permitted in writing by NPCI, NPCI shall impose a penalty @ 0.5% of the total value of the Purchase Order for each week's delay subject to a maximum of 5% of the total undelivered value of the goods, without prejudice to any other right or remedy available under purchase order. In case of delay in compliance with the order beyond 10 days of the stipulated time period, NPCI will have the right to cancel the order.	If the Bidder does not deliver the Goods as per the above delivery period, or such authorized extension of delivery period as may be permitted in writing by NPCI, NPCI shall impose a penalty @ ~~0.5%~~ 0.25 % of the total value of the Purchase Order for each week's delay subject to a maximum of ~~5%~~ 3 % of the total undelivered value of the goods, without prejudice to any other right or remedy available under purchase order. In case of delay in compliance with the order beyond 10 days of the stipulated time period, NPCI will have the right to cancel the order **subject to a cure period of thirty (30) days. Either Party shall have the right to terminate this Agreement at any time in the event that the other party commits a material breach of the Agreement and fails to cure such default to the non-defaulting party's reasonable satisfaction within thirty (30) days. In the event of termination by NPCI, the Bidder shall be paid for the:** **1. goods delivered** **2. services rendered**		No change in RFP
78	Penalty on non-adherence to SLAs	23	8.14	For the purpose of such evaluation, annual cumulative downtime beyond 0.001% (i.e. downtime beyond 5.26 minutes) for storage would attract a penalty of 1% of the total cost of the Hardware, for each and every instance of downtime, subject to a maximum annual penalty of 5% of the total cost of the hardware.	For the purpose of such evaluation, annual cumulative downtime beyond 0.001% (i.e. downtime beyond 5.26 minutes) for storage would attract a penalty of ~~1%~~ 0.25 % of the total cost of the Hardware, for each and every instance of downtime, subject to a maximum annual penalty of ~~5%~~ 3 % of the total cost of the hardware.		No change in RFP
79	Repeat Order	23	8.16	NPCI reserves the right to place Purchase Orders with the selected bidder(s) for any or all of the goods and/or services at the agreed unit rate for individual categories of purchase order during the period of 6 months from the date of 1st Purchase Order.	NPCI reserves the right to place Purchase Orders with the selected bidder(s) for any or all of the goods and/or services at the agreed unit rate for individual categories of purchase order during the period of 6 months from the date of 1st Purchase Order .Further it is to be noted that:1.Change should be restricted to +/-10% maximum of the quantity quoted as per RFP. 2. Bidder agrees to provide the increased quantity at the same terms and conditions. However additional prices shall be charged for the goods supplied over the contracted quantity.		No change in RFP
80	Payment Terms	23	8.18	20% payment shall be released within 30 days after from the date of delivery of Hardware & software and 80% payment shall be released after successful installation of Hardware & software. The bidder needs to submit correct invoice and successful installation report duly signed by NPCI Officials.	~~20%~~ 90 % payment shall be released within 30 days after from the date of delivery of Hardware & software and ~~80%~~ 10 % payment shall be released after successful installation of Hardware & software. The bidder needs to submit correct invoice and successful installation report duly signed by NPCI Officials. Internal - ITProcurement		No change in RFP

#	Clause Name	Page	Clause	Original Text	Proposed/Modified Text	Comment	Resolution
81	AMC	23	8.18	AMC charges shall be paid quarterly in arrears after availing maintenance services. Payment will be released within 30 days of receipt of correct invoices along with necessary documents / certificates duly signed by authorized NPCI official The Recurring Service Charges will be paid quarterly in arrears after submission of necessary invoice and submission of quarterly reports including SLA and after deduction of penalties if any. b) For the purpose of payment, the end of the quarter will be June, Sept, Dec and March. c) The quarterly bills for the solution should be submitted to NPCI within 10 days of the last day of the relevant quarter. d) Invoice shall contain all details regarding PAN & registration number for service tax, VAT etc.	AMC charges shall be paid quarterly in ~~arrears~~ advance after availing maintenance services. Payment will be released within 30 days of receipt of correct invoices along with necessary documents / certificates duly signed by authorized NPCI official The ___) Recurring Service Charges will be paid quarterly in ~~arrears~~ advance after submission of necessary invoice and submission of quarterly reports including SLA and after deduction of penalties if any. b) For the purpose of payment, the end of the quarter will be June, Sept, Dec and March. c) The quarterly bills for the solution should be submitted to NPCI within 10 days of the last day of the relevant quarter. d) Invoice shall contain all details regarding PAN & registration number for service tax, VAT etc.		No change in RFP
82	Indemnity	24	8.21	The bidder shall indemnify, protect and save NPCI and hold NPCI harmless from and against all claims, losses, costs, damages, expenses, action suits and other proceedings, (including reasonable attorney fees), relating to or resulting from any act or omission or negligence or misconduct of the bidder and its employees and representatives, breach of the terms and conditions of the agreement or purchase order, false statement by the bidder, employment claims of employees of the bidder, third party claims arising due to infringement of intellectual property rights, death or personal injury attributable to acts or omission of bidder, violation of statutory and regulatory provisions including labour laws, laws related to information technology and intellectual property rights, breach of confidentiality obligations, breach of warranty, etc. Indemnity would be limited to court or arbitration awarded damages and shall exclude indirect, consequential and incidental damages and compensation. Bidder shall indemnify NPCI, provided NPCI promptly notifies the Bidder in writing of such claims and the Bidder shall have the right to undertake the sole defense and control of any such claim.	The bidder shall indemnify, protect and save NPCI and hold NPCI harmless from and against all claims, losses, costs, damages, expenses, action suits and other proceedings, (including reasonable attorney fees), relating to or resulting from any act or omission ~~or~~ arising out of the gross negligence or willful misconduct of the bidder and its employees and representatives, ~~breach of the terms and conditions of the agreement or purchase order,~~ fraudulent false statement by the bidder, employment claims of employees of the bidder, third party claims arising due to infringement of intellectual property rights, death or personal injury attributable to acts or omission of bidder, violation of statutory and regulatory provisions including labour laws, laws related to information technology and intellectual property rights, breach of confidentiality obligations, ~~breach of warranty, etc.~~ Indemnity would be limited to court or arbitration awarded damages and shall exclude indirect, consequential and incidental damages and compensation. Bidder shall indemnify NPCI, provided NPCI promptly notifies the Bidder in writing of such claims and the Bidder shall have the right to undertake the sole defense and control of any such claim.	Performance indemnficiation. Indemnification is excluded for indirect and consequential damages.	No change in RFP terms
83	Bidder's Liability	25	8.22	The selected Bidder will be liable for all the deliverables. The Bidder's aggregate liability in connection with obligations undertaken under the purchase order, regardless of the form or nature of the action giving rise to such liability (whether in contract, tort or otherwise), shall be at actual and limited to the value of the contract/purchase order. The Bidder's liability in case of claims against NPCI resulting from willful and gross misconduct, or gross negligence, fraud of the Bidder, its employees, contractors and subcontractors, from infringement of patents, trademarks, and copyrights or other Intellectual Property Rights or breach of confidentiality obligations shall be unlimited.	The selected Bidder will be liable for all the deliverables. Notwithstanding anything to the contrary contained herein or elsewhere, ~~T~~the Bidder's aggregate liability in connection with obligations undertaken under the purchase order, regardless of the form or nature of the action giving rise to such liability (whether in contract, tort or otherwise), shall be at actual and limited to 25% of the annual value of the ~~contract/~~purchase order. The Bidder's liability in case of claims against NPCI resulting from willful and gross misconduct, or gross negligence, fraud of the Bidder, its employees, contractors and subcontractors, from infringement of patents, trademarks, and copyrights or other Intellectual Property Rights ~~or breach of confidentiality obligations~~ shall be unlimited. Notwithstanding anything to the contrary elsewhere contained in this or any other contract between the parties, neither party shall, in any event, be liable for (1) any indirect, special, punitive, exemplary, speculative or consequential damages, including, but not limited to, any loss of use, loss of data, business interruption, and loss of income or profits, irrespective of whether it had an advance notice of the possibility of any such damages; or (2) damages relating to any claim that arose more than one year before institution of adversarial proceedings thereon.	No exclusions for indirect and consequential damages	No change in RFP terms
84	Exit Option and Contract negotiations	25	8.24	NPCI reserves its right to cancel the order in the event of happening of one or more of the situations as mentioned in the "Order Cancellation" clause 8.26 herein under	Subject to a cure period of thirty (30) days, NPCI reserves its right to cancel the order in the event of happening of one or more of the situations as mentioned in the "Order Cancellation" clause 8.26 herein under		No change in RFP terms
85	Extension of Contract	26	8.25	The bidder shall be required to consistently execute, in a successful and professional manner, the jobs assigned under this RFP or subsequent Purchase Order / Contract, as shall be entered by NPCI with the Bidder, to the satisfaction of and as decided by the NPCI up to a period of five (5) years (completion period) reckoned from the date of commencement of the services and may be extended for further period on satisfactory performance by bidder. However even in case, the bidder is not interested to extend the Contract for a further period, bidder shall be essentially required to execute the work at least for next 6 months period on the same rates and terms & conditions of the Contract. NPCI has right to alter (increase or decrease) the number of resources.	The bidder shall be required to consistently execute, in a successful and professional manner, the jobs assigned under this RFP or subsequent Purchase Order / Contract, as shall be entered by NPCI with the Bidder, to the satisfaction of and as decided by the NPCI up to a period of five (5) years (completion period) reckoned from the date of commencement of the services and may be extended for further period on satisfactory performance by bidder. However even in case, the bidder is not interested to extend the Contract for a further period, bidder shall be essentially required to execute the work at least for next 6 months period on the same rates and terms & conditions of the Contract. NPCI has right to alter (increase or decrease) the number of resources. Further it is to be noted that:1.Change should be restricted to +/-10% maximum of the quantity quoted as per RFP. 2. Bidder agrees to provide the increased quantity at the same terms and conditions. However additional prices shall be charged for the goods supplied over the contracted quantity.		No change in RFP terms
86	Order Cancellation	26	8.26	NPCI reserves its right to cancel the order in the event of one or more of the following situations, that are not occasioned due to reasons solely and directly attributable to NPCI alone; i. Delay in delivery is beyond the specified period as set out in the Purchase Order before acceptance of the product; or, ii. Serious discrepancy in the quality of service expected. iii. If a Bidder makes any statement or encloses any form which turns out to be false, incorrect and/or misleading or information submitted by the bidder turns out to be incorrect and/or bidder conceals or suppresses material information. In case of order cancellation, any payments made by NPCI to the Bidder for the particular service would necessarily have to be returned to NPCI with interest @ 15% per annum from the date of each such payment. Further the Bidder would also be required to compensate NPCI for any direct loss incurred by NPCI due to the cancellation of the Purchase Order and any additional expenditure to be incurred by NPCI to appoint any other Bidder. This is after repaying the original amount paid.	Subject to a cure period of thirty (30) days, NPCI reserves its right to cancel the order in the event of one or more of the following situations, that are not occasioned due to reasons solely and directly attributable to NPCI alone; i. Delay in delivery is beyond the specified period as set out in the Purchase Order before acceptance of the product; or, ii. Serious discrepancy in the quality of service expected. iii. If a Bidder makes any statement or encloses any form which turns out to be false, incorrect and/or misleading or information submitted by the bidder turns out to be incorrect and/or bidder conceals or suppresses material information. ~~In case of order cancellation, any payments made by NPCI to the Bidder for the particular service would necessarily have to be returned to NPCI with interest @ 15% per annum from the date of each such payment. Further the Bidder would also be required to compensate NPCI for any direct loss incurred by NPCI due to the cancellation of the Purchase Order and any additional expenditure to be incurred by NPCI to appoint any other Bidder. This is after repaying the original amount paid.~~ Either Party shall have the right to terminate this Agreement at any time in the event that the other party commits a material breach of the Agreement and fails to cure such default to the non-defaulting party's reasonable satisfaction within thirty (30) days. In the event of termination by customer, the Bidder shall be paid for the: 1. goods delivered 2. services rendered 3. work in progress 4. unpaid AMCs 5. third party orders in pipeline which cannot be cancelled despite Bidder's best efforts 5. unrecovered investments shall be paid by customer as per termination schedule till the date of termination Internal - IT Procurement		No change in RFP terms

#	Clause	Page	Section	RFP Clause	Bidder's Response / Deviation		Remarks
87	Termination of Purchase Order/Contract	27	8.27	For Convenience: NPCI, by written notice sent to Bidder, may terminate the Purchase Order/ contract in whole or in part at any time for its convenience giving three months prior notice. The notice of termination may specify that the termination is for convenience to the extent to which Bidder's performance under the contract is terminated and the date upon which such termination become effective. NPCI shall consider request of the bidder for pro-rata payment till the date of termination.	For Convenience: NPCI, by written notice sent to Bidder, may terminate the Purchase Order/ contract in whole or in part at any time for its convenience giving three months prior notice. The notice of termination may specify that the termination is for convenience to the extent to which Bidder's performance under the contract is terminated and the date upon which such termination become effective. NPCI shall consider request of the bidder for pro-rata payment till the date of termination.**In the event of termination by customer, the Bidder shall be paid for the: 1. goods delivered 2. services rendered 3. work in progress 4. unpaid AMCs 5. third party orders in pipeline which cannot be cancelled despite Bidder's best efforts 5. unrecovered investments shall be paid by customer as per termination schedule till the date of termination.**		No change in RFP terms
88	For Non-Performance	27	8.27	NPCI reserves its right to terminate the contract in the event of Bidder's repeated failures (say more than 3 occasions in a calendar year to maintain the service level prescribed by NPCI).	NPCI reserves its right to terminate the contract in the event of Bidder's repeated failures (say more than 3 occasions in a calendar year to maintain the service level prescribed by NPCI).**Either Party shall have the right to terminate this Agreement at any time in the event that the other party commits a material breach of the Agreement and fails to cure such default to the non-defaulting party's reasonable satisfaction within thirty (30) days. In the event of termination by customer, the Bidder shall be paid for the: 1. goods delivered 2. services rendered**		No change in RFP terms
89	Effect of termination	27	8.28	The Bidder agrees that after completion of the Term or upon earlier termination of the assignment the Bidder shall, if required by NPCI, continue to provide facility to NPCI at no less favorable terms than those contained in this RFP. In case NPCI wants to continue with the Bidder's facility after the completion of this contract then the Bidder shall offer the same terms to NPCI. ▫ NPCI shall make such prorated payment for services rendered by the Bidder and accepted by NPCI at the sole discretion of NPCI in the event of termination, provided that the Bidder is in compliance with its obligations till such date. However, no payment for "costs incurred, or irrevocably committed to, up to the effective date of such termination" will be admissible. There shall be no termination compensation payable to the Bidder. ▫ NPCI may make payments of undisputed amounts to the Bidder for services rendered till the effective date of termination. Termination shall be without prejudice to any other rights or remedies NPCI may be entitled to hereunder or at law and shall not affect any accrued rights or liabilities or either party nor the coming into force or continuation in force of any provision hereof which is expressly intended to come into force or continue in force on or after such termination. ▫ Upon cancellation of contract/completion of period of service, the Bidder should peacefully handover the legal possession of all the assets provided and obtains discharge from NPCI. NPCI also reserves the right to assign or allot or award the contract to any third party upon cancellation of the availed services.	The Bidder agrees that after completion of the Term or upon earlier termination of the assignment the Bidder shall, if required by NPCI, continue to provide facility to NPCI at no less favorable terms than those contained in this RFP. In case NPCI wants to continue with the Bidder's facility after the completion of this contract then the Bidder shall offer the same terms to NPCI. ▫ NPCI shall make such prorated payment for services rendered by the Bidder ~~and accepted by NPCI at the sole discretion of NPCI~~ in the event of termination, provided that the Bidder is in compliance with its obligations till such date. However, no payment for "costs incurred, or irrevocably committed to, up to the effective date of such termination" will be admissible. There shall be no termination compensation payable to the Bidder. ▫ NPCI may make payments of undisputed amounts to the Bidder for services rendered till the effective date of termination. Termination shall be without prejudice to any other rights or remedies NPCI may be entitled to hereunder or at law and shall not affect any accrued rights or liabilities or either party nor the coming into force or continuation in force of any provision hereof which is expressly intended to come into force or continue in force on or after such termination. ▫ Upon cancellation of contract/completion of period of service, the Bidder should peacefully handover the legal possession of all the assets provided and obtains discharge from NPCI. NPCI also reserves the right to assign or allot or award the contract to any third party upon cancellation of the availed services.		No change in RFP terms
90	Intellectual Property Rights	30	8.33	All rights, title and interest of NPCI in and to the trade names, trademark, service marks, logos, products, copy rights and other intellectual property rights shall remain the exclusive property of NPCI and Bidder shall not be entitled to use the same without the express prior written consent of NPCI. Nothing in this RFP including any discoveries, improvements or inventions made upon with/by the use of the Bidder or its respectively employed resources pursuant to contract shall either vest or shall be construed so that to vest any proprietary rights to the Bidder. Notwithstanding, anything contained in this RFP, this clause shall survive indefinitely, even after termination of this Purchase Order.	~~All rights, title and interest of NPCI in and to the trade names, trademark, service marks, logos, products, copy rights and other intellectual property rights shall remain the exclusive property of NPCI and Bidder shall not be entitled to use the same without the express prior written consent of NPCI. Nothing in this RFP including any discoveries, improvements or inventions made upon with/by the use of the Bidder or its respectively employed resources pursuant to contract shall either vest or shall be construed so that to vest any proprietary rights to the Bidder. Notwithstanding, anything contained in this RFP, this clause shall survive indefinitely, even after termination of this Purchase Order.~~ **No intellectual property rights of any nature shall be transferred from one party to the other in the course of performing any obligations or otherwise under this agreement. For the avoidance of doubt, Bidder may use certain tools, processes or methodologies of its own in performing the Services. Ownership of all intellectual property rights and any other rights in these shall vest with Bidder, and no rights shall be deemed to have accrued to the Customer.**		No change in RFP terms
91	Offer Letter	41		We undertake to comply with the terms and conditions of the bid document.	We undertake to comply with the terms and conditions of the bid document **read together with our deviations**.		No change in RFP terms
92	Declaration for Clean Track Record	43	Annexure D	I have carefully gone through the Terms & Conditions contained in the RFP document for selection of vendor for Request for Proposal for supply, installation & maintenance of Flash Storage - RFP No. NPCI/RFP/2017-18/IT/07 dated 24.11.2017. I hereby declare that my company has not been debarred/black listed by any Government / Semi Government / Private organizations in India / abroad. I further certify that I am competent officer and duly authorized by my company to make this declaration.	I have carefully gone through the Terms & Conditions contained in the RFP document for selection of vendor for Request for Proposal for supply, installation & maintenance of Flash Storage - RFP No. NPCI/RFP/2017-18/IT/07 dated 24.11.2017. I hereby declare that my company has ~~not been~~**is not currently** debarred/black listed by any Government / Semi Government ~~/ Private~~ organizations in India ~~/ abroad~~. I further certify that I am competent officer and duly authorized by my company to make this declaration.		No change in RFP terms
93		44	Annexure E	I have carefully gone through the Terms & Conditions contained in the RFP document for selection of vendor for Request for Proposal for supply, installation & maintenance of Flash Storage - RFP No. NPCI/RFP/2017-18/IT/07 dated 24.11.2017. I declare that all the provisions of this RFP/Tender Document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.	I have carefully gone through the Terms & Conditions contained in the RFP document for selection of vendor for Request for Proposal for supply, installation & maintenance of Flash Storage - RFP No. NPCI/RFP/2017-18/IT/07 dated 24.11.2017. I declare that all the provisions of this RFP/Tender Document**, read together with our deviations to the same,** are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.		No change in RFP terms
94		45	Annexure F	I have carefully gone through the Terms & Conditions contained in the RFP document for selection of vendor for Request for Proposal for supply, installation & maintenance of Flash Storage - RFP No. NPCI/RFP/2017-18/IT/07 dated 24.11.2017. I declare that all the provisions of this RFP/Tender Document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.	I have carefully gone through the Terms & Conditions contained in the RFP document for selection of vendor for Request for Proposal for supply, installation & maintenance of Flash Storage - RFP No. NPCI/RFP/2017-18/IT/07 dated 24.11.2017. I declare that all the provisions of this RFP/Tender Document**, read together with our deviations to the same,** are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.		No change in RFP terms
95	SNR			Clause not present in RFP	Customer hereby agrees to make the site ready as per the agreed specifications, within the agreed timelines. Customer agrees that Wipro shall not be in any manner be liable for any delay arising out of Customer's failure to make the site ready within the stipulated period, including but not limited to levy of liquidated damages for any delay in performance of Services under the terms of this Agreement. In case the SITE is not ready for a continuous period of 30 days, milestone payment related to installation will be released to vendor based on the SNR report, also if there is any additional warranty cost due to continuous site not readiness for 30 days, same will be borne by the customer		No change in RFP terms

#	Category	Col3	Col4	Clause/Description	Query/Request	Response
96	Risk and Title			Clause not present in RFP	Notwithstanding anything to the contrary contained elsewhere in the contract, The risk, title and ownership of the products shall be transferred to the customer upon delivery of such products to the customer	No change in RFP terms
97	Saving Clause			Clause not present in RFP	Wipro's failure to perform its contractual responsibilities, to perform the services, or to meet agreed service levels shall be excused if and to the extent Wipro performance is effected , delayed or causes non-performance due to Customer's omissions or actions whatsoever.	No change in RFP terms
98	Deemed Acceptance			Clause not present in RFP	Products/Services and/or deliverables shall be deemed to be fully and finally accepted by Customer in the event when Customer has not submitted its acceptance or rejection response in writing to Wipro within 15 days from the date of installation/commissioning or when Customer uses the Deliverable in its business, whichever occurs earlier. Parties agree that Wipro shall have 15 days time to correct in case of any rejection by Customer.	No change in RFP terms
99	Limitation of Liability			Clause not present in RFP	Notwithstanding anything to the contrary elsewhere contained in this or any other contract between the parties, neither party shall, in any event, be liable for (1) any indirect, special, punitive, exemplary, speculative or consequential damages, including, but not limited to, any loss of use, loss of data, business interruption, and loss of income or profits, irrespective of whether it had an advance notice of the possibility of any such damages; or (2) damages relating to any claim that arose more than one year before institution of adversarial proceedings thereon.

Subject to the above and notwithstanding anything to the contrary elsewhere contained herein, the maximum aggregate liability of Wipro for all claims under or in relation to this Agreement, shall be, regardless of the form of claim(s), shall be limited to 25% of the annual contract value. | No change in RFP terms |
100	Pass Through Warranty			Clause not present in RFP	Wipro shall "pass-through" any and all warranties and indemnities received from the manufacturer or licensor of the products and, to the extent, granted by such manufacturer or licensor, the Customer shall be the beneficiary of such manufacturer's or licensor's warranties and indemnities. Further, it is clarified that Wipro shall not provide any additional warranties and indemnities with respect such products.	No change in RFP terms
101	ERV			Clause not present in RFP	"It is agreed that the price quoted is arrived at based on the exchange rate of 1 USD = INR ___ ("Base Exchange Rate"). In the event the Base Exchange Rate either increases or decreases by percentage points greater than two per cent [2%], the prices shall be charged as per the then current exchange rate."	No change in RFP terms
102	Non Hire Clause			Clause not present in RFP	Customer acknowledges that personnel to be provided by Wipro represent a significant investment in recruitment and training, the loss of which would be detrimental to Wipro's business. In consideration of the foregoing, Customer agrees that for the term of this Agreement and for a period of one year thereafter, Customer will not directly or indirectly, recruit, hire, employ, engage, or discuss employment with any Wipro employee, or induce any such individual to leave the employ of Wipro. For purposes of this clause, a Wipro employee means any employee or person who has who has been involved in providing services under this Agreement.	No change in RFP terms
103	Change Order			Clause not present in RFP	Either party may request a change order ("Change Order") in the event of actual or anticipated change(s) to the agreed scope, Services, Deliverables, schedule, or any other aspect of the Statement of Work/Purchase Order. Wipro will prepare a Change Order reflecting the proposed changes, including the impact on the Deliverables, schedule, and fee. In the absence of a signed Change Order, Wipro shall not be bound to perform any additional services.	No change in RFP terms
104	Termination for default			Clause not present in RFP	Either Party shall have the right to terminate this Agreement at any time in the event that the other party commits a material breach of the Agreement and fails to cure such default to the non-defaulting party's reasonable satisfaction within thirty (30) days. In the event of termination Customer shall pay Wipro for goods delivered and services rendered till the date of termination.	No change in RFP terms
105	Additional Hardware			Clause not present in RFP	Notwithstanding anything to the contrary in the RFP, any requirement by Purchaser of any additional Hardware under the Agreement shall be provided by the Successful Bidder at an additional cost to Purchaser and the same shall be done through a Change Order.	No change in RFP terms
106	Upgrades/Enhancements			Clause not present in RFP	Notwithstanding anything to the contrary in the RFP, any requirement by Purchaser of any upgrade/enhancement shall be provided by the Successful Bidder at an additional cost to Purchaser and the same shall be done through a Change Order.	No change in RFP terms
107	Penalty Cap			Clause not present in RFP	Nothing withstanding anything contained here, including annexures etc, the maximum aggregate penalty against the bidder for all claims, by which ever name so called, shall be limited to 3% of the respective SOW/PO and shall be in lieu of all available remedies. Also, Wipro does not agree to any form of risk purchase.	No change in RFP terms
108	Arbitration				If the dispute cannot be settled by mutual discussions within the thirty (30) day period, either party may refer the matter to a panel of three arbitrators. Each party shall choose one arbitrator, both of whom shall elect the third arbitrator who shall be the presiding arbitrator. The arbitration proceedings shall be held under the provisions of the Arbitration and Conciliation Act, 1996 or any of its subsequent amendments. The arbitration proceedings shall be in English and the venue of arbitration shall be Bangalore, India.	No change in RFP terms
109	Force Majeure				Wipro is not responsible for delays caused by the reasons of strikes, changes in Government Regulations, labor disputes, wars, acts of God or any other such reason beyond its reasonable control.	No change in RFP terms
110	Scope of work	10		Integration with Switches	1. Can we get the details of existing SAN switches to check the compatibility matrix
2. Do we require to do any data migration from existing storage to new storage.
3. If data needs to be migrated from existing storage to new storage at primary site then what is the provisioning at DR site
4. Can we know the existing storage details as well to check the migration compatibility with new storage	1. Brocade 16/32 Gbps & Cisco MDS model Support
2. Not required to migrate data
3. No migration required
4. NA
111	Technical Specification			100 TB usable with 1,000,000 IOPS or 250TB usable with 800,000 IOPs	Given IOPS details for both the storages do you require in day one or both the storage should be sustainable after fully occupied disks in the storage.
Our understanding is mentioned IOPS require on day one, please clarify.	No change in RFP. The controllers should be able to deliver 1000000 IOPs & 800000 IOPs respectively from day one
112	Technical Specification			Micro second response time with 4K IOPS	Is it related to 4K Block size?
Can we consider the support of 8K Block size?	4k Blocks
113	Technical Specification			Brand -
The OEM should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The proposing bidder should have implemented the proposed model successfully.	As we request to keep it open for both i.e. OEM & Bidder.
The OEM/Bidder should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The OEM/Bidder should have implemented the proposed model successfully.	The OEM/Bidder should have deployed at least 2 High end storages in Indian Banking segments during the last one year. The OEM/Bidder should have implemented the proposed model successfully.
114	Technical Specification	32		Capacity	Is there any specific requirement of RAID Group configuration/consideration like RAID6 - not more than 6D+2P or RAID 5 - note more than 7D+1P etc for usable size consideration	Raid 6
115	Technical Specification	33		sparing	Any specific guidelines for count of the hot spare drives for sparing with respect to the number of RAID groups or SSDs	Minimum 3 Spare disks per disk type
116	Technical Specification	34		Protocol Support	You have asked iSCSI, NFS, and CIFS protocal support and license on day one. So do you require ethernet ports as well, if require then please provide number of ports, type of ports and speed	Proposed storage solution should have ample ports to supports all the necessary requested protocols with redundancy .
117	Eligibility Criteria	11	4.1.1.	The bidder should have minimum annual turnover of Rs.80 Crores during the three financial years i.e. 2014-15, 2015-16 and 2016-17 or calendar years 2014, 2015, 2016 or bidder"s financial years.	We request to kindly give some relaxation in this point. Request to please revise this point as "**The bidder should have minimum annual turnover of Rs.60 Crores during the three financial years i.e. 2014-15, 2015-16 and 2016-17 or calendar years 2014, 2015, 2016 or bidder's financial years.**" or "**The bidder should have minimum total turnover of Rs.240 Crores during the three financial years i.e. 2014-15, 2015-16 and 2016-17 or calendar years 2014, 2015, 2016 or bidder"s financial years.**"	No change in RFP
118	Turnover	11	4.1.2	The Bidder should have a minimum annual turnover of Rs 80 Crores during the three financial years 2014-2015, 2015-2016 and 2016-2017 or Calender year's 2014. 2015, & 2016 or bidders financial years	Please change the Turnover Criterion to Rs 50 Crores for the Financial years 2014-2015, 2015-2016 & 2016-2017	No change in RFP

119	EMD/Bid Security	8	14	Rs 5,00,000	We are registered as Udyog Aadhar (MSME), can we get an exemption on the EMD		No change in RFP. National Payments Corporation of India (NPCI) is neither a Government Company nor it is any Department of Government of India. As such the extant provisions would not apply to NPCI.
120	Support (AMC)	22	8.12	The successful bidder shall provide comprehensive On-site Maintainence (AMC) of Hardware/Software with Back to Back support with OEM for a period of 3 years, Cost of AMC should not be less than 8% of the Hardware cost	Please allow to quote for AMC amount below 8% for 4th & 5th Year		No change in RFP
121	Penalty on Non Adherance to SLA's	23	8.14	Annual Cumulative Downtime beyond 0.001% forStorage would attract a penalty of 1% of the total cost of Hardware for each and every instance of downtime	Please change the Penalty from 1% to 0.25% of the Total cost of Hardware		No change in RFP
122	Payment Terms	23	8.18	20% of the payment will be relesed within 30 days after from the date of delivery of Hardware & Software and 80% payment shall be relesed after successful installation of Hardware & Software	Please change the payment terms to 80% of the payment to be relesed within 30 days from the date of delivery of Hardware & Software and 20% to be relesed after successful installation of Hardware & Software		No change in RFP
123	Profit Making Company	11	4.1.3	The Bidder should be a profit making company in any of the 3 financial years 2014-2015, 2015-2016 & 2016-2017	Please change the Criterion to the company should be a profit making company in all of the financial years 2014-2015, 2015-2016 & 2016-2017		No change in RFP
124	Scope of Work	10	10	Integration with Switches	Please give us more details as to how NPCI would want to do it		1. Brocade 16/32 Gbps & Cisco MDS model Support
125	Product Training	10	19	Complete Product Training for 4 NPCI employees on Product Administration & trouble shooting	Will a 2 days training sufficient for the Staff?		No change in RFP
126	Technical Specifications	32	Table A, Point 6	The Proposed storage should provide 100TB usable stoarage capacity post RAID 5/6 configuration	Would NPCI want RAID 5 or RAID 6, please clarifiy		Raid 6
127	Technical Specifications	32	Table B, Point 6	The Proposed storage should provide 250TB usable stoarage capacity post RAID 5/6 configuration	Would NPCI want RAID 5 or RAID 6, please clarifiy		Raid 6