BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN, UNIT-VIII, BHUBANESWAR-751012

CASE NO. 55/2015 FILING NO. 2

IN THE MATTER OF:

An application for approval of Aggregate Revenue Requirement and Transmission Tariff for the Financial Year 2016-17 under Section 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of OERC (Conduct of Business) Regulations, 2004, OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 and other tariff related matters.

AND

IN THE MATTER OF: Odisha Power Transmission Corporation Limited, Janpath,

Bhubaneswar

..... Applicant

AND

IN THE MATTER OF: Reply to the queries raised by the Hon'ble Commission vide

letter No. 1633 dated 22.12.2015.

The humble applicant above named

MOST RESPCTFULLY SHEWETH:

That in response to the queries raised by the Hon'ble Commission vide letter No. **1633** dated **22.12.2015** on OPTCL's Aggregate Revenue Requirement (ARR) & Transmission Tariff Application for FY 2016-17, OPTCL humbly submits the reply to the queries along with the supporting documents / additional information in the following paragraphs for kind information of the Hon'ble Commission.

TECHNICAL

Query No. 1: Annual audit of store materials

The Commission in past has directed OPTCL to conduct annual audit of the store materials and opined that there should be zero inventory except materials required to attend emergency break down. OPTCL should furnish a report on such audit to the Commission.

Reply of OPTCL:

As per the direction of Hon'ble Commission, OPTCL is in the process of conducting Annual Audit of Stores materials. OPTCL appointed 30 (Thirty) nos. of Chartered/Cost Accountant firms for the annual audit of materials during FY 2014-15. The stock audit of

30 nos. of Accounting Units related to inventory transactions such as material at site accounts and stores materials is completed. 27 Auditors have submitted their audit reports. The remaining 3 audit reports are yet to be received. During the course of Audit, emphasis is given to categorize the materials into A, B & C categories according to frequency of their usage. This will help maintaining fewer inventories in future.

Further, Stores Verification Party (SVP) of OPTCL carries out physical verification of site stores materials on regular basis.

However, the inventory stock maintained is within 5% of the population of materials / equipment installed which includes the emergency requirements as well as materials required for system up gradation.

Query No 2: Revenue from supervision charges / project management cost (ODSSP)

Detailed report on revenue receipt as regards to supervision charges and project management cost for implementation of Odisha Distribution System Strengthening Projects (ODSSP) and other works item wise may be furnished for FY 2014-15 & FY 2015-16 up to date.

Reply of OPTCL:

Govt. of Odisha has sanctioned Rs. 2600 Crore as Grant for construction of 500 nos. of 33/11kV sub-stations in the State of Odisha. OPTCL is the Nodal agency for construction of the above sub-stations.

As per the Notification No. 6366/ EN, Dated 07.08.2013 OPTCL is the Implementing/Nodal Agency. The responsibility of OPTCL is to coordinate with the agency involved viz, DoE, Finance Deptt, PMC, DISCOMs and Steering Committee of the projects. To manage the implementation of the project, OPTCL has to incur cost on setting of the project office, manpower, contingencies and project related administrative expenses as well as fees payable to Project Management Consultants (PMC). 6% (six) of projects cost will be made available to OPTCL towards project management cost as per the provision of the Notification.

OPTCL has engaged M/s MECON Ltd. & M/s WAPCOS Ltd. as PMC for construction of above 33/11kV sub-stations. Besides, M/s RITES Ltd. have been engaged as third party inspection agency. The total payment in this regard would be about 4 to 5 %. Besides, other expenses are also to be incurred against this Project.

Till date contract has been awarded for 312 sub-stations in two phases and contract for 161 sub-stations in 3rd phase is likely to be awarded by the end of the FY 2015-16. As per schedule, the 1st phase needs to be completed by the end of FY 2015-16.

OPTCL has received Rs. 619 Cr. (Rs. 329 Cr. in 2014-15 and Rs.290 Cr. in 2015-16) from the GoO in respect of ODSSP till date and already incurred expenditure of Rs.576.56 Cr. But OPTCL has not received any amount from the GoO towards project management cost for implementation of projects under ODSSP.

Query No 3: Disaster Resilience and Response system

OPTCL in its ARR has projected an amount of Rs.23.14 Cr. for procurement of T&P for Disaster Resilience and Response system and ERS towers for early restoration of EHT towers, which needs detail explanation. A note on the technology and practice being adopted/ followed in any transmission utility across the country may be furnished. Further, the reason of the above projection in the ARR for FY 2016-17, while the GoO has provided a special provision for Disaster Response Centre (DRC) and Disaster Resilient Power System (DRPS) under Odisha Power System Improvement Programme. The detail receipt by OPTCL from Govt. under these heads & expenditures made thereto should be furnished.

Reply of OPTCL:

Procurement action has been taken for spares of ERS Towers, New ERS Towers-12 nos., 82.5KVA DG Sets-50 nos., 160KVA DG Sets-25 nos., Diesel Dewatering Pump-20nos., Inflatable Light, Power Saw and advanced firefighting equipment which are essential for Disaster Response.

Action has been taken to keep 2 nos. transformers of 160 MVA capacity (one each at Chandaka, Lapanga / New Bolangir), 5 nos. transformers of 40 MVA capacity (one each at Khurda, Jajpur Road, Narendrapur, Sambalpur, New Bolangir), 2 nos. transformers of 20 MVA capacity (one each at Kendrapara, Jayanagar) in banking mode to meet any kind of exigencies.

In addition to the procurement action, regular awareness training and mock drills for erection of ERS structures are conducted at different geographical locations. During this exercise, ODRAF team's help will also be taken on various use of equipment used by them during natural disasters. Recently one such exercise has been conducted at Mancheswar and Bidanasi Grid sub-stations.

Govt. of India vide Ministry of Power DO letter No. 20/6/2014-OM Dt.05.12.2014 had stipulated that each Transmission Utility must have one set of ERS tower for their highest system voltage level for every 5000km line as a general practice. Accordingly, OPTCL has initiated procurement action for 3 sets (each set having 4 towers) for its line length of more than 12000 ckt km. But this general guideline may not be suitable for a coastal state like Odisha which is affected by cyclones/super cyclones almost in every year. So there is necessity for inclusion of more numbers of such towers to face the natural disasters effectively.

As per the special provision by GoO for Disaster Response Centre (DRC) and Disaster Resilient Power System (DRPS) under Odisha Power System Improvement Programme (OPSIP), OPTCL has received Rs. 5.0 Cr. under these heads. However, an amount of Rs. 8.92 Cr. have been spent towards procurement of spares for ERS towers during the FY 2015-16.

Query No 4: R & M expenditure

OPTCL may furnish detail list of expenditure incurred towards R&M work under different heads executed by OPTCL during 2015-16 upto date in line with Table – 7 of the ARR of ensuring year. OPTCL has projected an amount of Rs.15.00 Cr. towards sub-station automation system under R&M head. A detailed note on sub-station automation system and the basis of selection of s/s for the purpose should be furnished. The note should mention the specific areas which needs automation and the expected expenditure for the said work. The above works are capital in nature but included in the R & M works. OPTCL should also justify its inclusion in R & M.

Reply of OPTCL:

<u>List of up-to-date expenditure incurred towards R&M works in respect of TELECOM</u>

Wing during 2015-16

SI. No.	Description	Unit	Rate	Qty.	Cost (Rs. Lakh)
1.	AMC Charges of RTU	Quarterly	2.85	3	8.55
2.	AMC Charges of APS Package	Half yearly	6.00	1	6.00
3.	AMC Charges of wide band communication package	Half yearly	32.50	1	32.5
4.	Procurement of 132kV Line Trap	No.	-	22	59.73

5.	Procurement of 220kV Line Trap	No.		20	54.42
6	Procurement of VRLA Battery & Charger	No.	-	Charger-40 nos. Battery - 31sets	110.27
7.	Licence fee for walkie-talkie	No.	-	158	6.50
8.	R&M expenditure at divisions (Repair of defective PLCC modules, Imprests, petty purchases, Security Charges etc.)	LS	LS	LS	107.00
9.	Procurement of Multifunction Meter (MFM)	No.	0.09	50	4.50
	Total				Rs.389.47 lakh = Rs. 3.89 Cr.

<u>List of up-to-date expenditure incurred towards R&M works in respect of IT Wing during 2015-16</u>

SI. No.	Name of the Party	Nature of work	Amount as per invoice (Rs.)
1	Wipro	IT Work outsourcing	1,069,760
2	Wipro	Help Desk	119,347
3	BSNL	NoC+LLM	806,445
4	BSNL	FMS	281,619
5	HCL Comnet	AMC of OGS-WAN,	2,308,684
6	HCL Comnet	FMS, NOC-LLM	779,595
7	Cyberian Informatics	K7	484,735
8	BSNL	OGS WAN Diff of 2014-15	3,470,757
9	Oracle India Pvt. Ltd	Annual Technical Support	339559
		Total	Rs.9,660,501/-
			= Rs. 0.97 Cr.

<u>List of up-to-date expenditure incurred towards R & M works in respect of Civil</u> <u>Works during 2015-16</u>

Residential Building	Non-Residential Building	Control Room	Approach Road	Compound Wall
Bhoinagar, Mancheswar, Chandra Sekharpur, Berhampur, Rayagada, Burla, Rourkela, Bargarh, Brajarajnagar, Sambalpur, Puri, Joda	T.W. Building, MS Building, SLDC, Baripada, Chatrapur, Jharsuguda, Sambalpur, Meramundali, Puri, Chandaka, Kantaipalli, Narendrapur, Jayanagar	Mendhasal, Paradeep, Chainpal, Mendhsal, Jajpur Road, Joda, Therubali, Dhenkanal, Rengali, Banarpal, Narendrapur, Nayagarh, Kesura, Sunabeda, Balimela	AW Building, Paralakhemu bdi, Puri, Rayagada, Narendrapur	Puri, Mancheswar, Kesura, Chandaka, Tentulikhunti
256.19	160.54	151.75	17.84	41.49

Total Expenditure = Rs. 627.81 lakh

<u>List of up-to-date expenditure incurred towards R & M works in respect of O&M Wing during 2015-16</u>

SI. No.	Description	Unit	FY 2015-16		
			Rate	Qty	Cost
			(Rs.)		(Lakh)
1	Circuit Breaker	Nos.			
i	400kV		2,839,651	17	482.74
ii	220kV		1,348,503	54	728.19
iii	132kV		584,314	125	730.39
iv	33kV		198,422	269	533.76
2	C.T.	Nos.			
a)	220kV				
i	1200-600-300/1-1-1-1		335,903	31	104.13
b)	33kV				
i	1200-600-300/1-1-1		49,762	31	15.43
ii	800-400-200/1-1-1		43,252	138	59.69
iii	600-300-150/1-1-1		47,684	31	14.78
iv	400-200-100/1-1-1		43,738	320	139.96
3	P.T. / CVT	Nos.			
i	132kV PT		107072.9	123	131.70
ii	33kV PT/ IVT		27,129	69	18.72

4	Surge Arrester	Nos.			
i	400kV		120,330	22	26.47
ii	220kV		45,422	224	101.75
iii	132kV		30,530	506	154.48
iv	33kV		8,499	623	52.95
		_			
5	Isolator	Set			
i	220 KV Single Isolator with E/S		372,168	50	186.08
ii	220 KV Single Isolator W/O E/S		323,794	46	148.95
iii	132 KV Single Isolator W/O E/S		197,289	202	398.52
iv	33 KV Single Isolator W/O E/S		80,217	189	151.61
V	132 KV Double Isolator with E/S		374,410	70	262.09
vi	132 KV Double Isolator W/O E/S		348,076	47	163.60
vii	33 KV Double Isolator with E/S		171,916	181	311.17
viii	33 KV Double Isolator W/O E/S		151,218	81	122.49
ix	33kV SI W/O E/S		80,217	189	151.61
Х	33kV SI W/O E/S 2000A		88,645	28	24.82
xi	33kV DI W/O E/S 2000A		169,626	14	23.75
xii	33kV Isolator Spare			LS	4.06
xiii	132kV Isolator Spare			LS	7.04
xiv	220kV Isolator Spare			LS	2.98
6	Insulator	Nos.			
i	90 kN Disc		500	2788	13.95
ii	120 kN Disc		646	1930	12.46
iii	160 kN Disc		816	3529	28.79
iv	90 kN LR (132 KV)		6787	3502	237.68
V	120 kN LR (132 KV)		8021	2721	218.25
vi	90 kN LR (220 kV)				
	1 7		10647	2930	311.96
vii	120 kN LR (220 KV)		10647 12029	2930 251	311.96 30.19
vii viii	, ,				
	120 kN LR (220 KV)		12029	251	30.19
viii	120 kN LR (220 KV) 160 kN LR (220 KV)		12029 14290	251 1430	30.19 204.35
viii ix	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV)		12029 14290 2999	251 1430 655	30.19 204.35 19.64
viii ix	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV)	km	12029 14290 2999	251 1430 655	30.19 204.35 19.64
viii ix x	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV)	km	12029 14290 2999	251 1430 655	30.19 204.35 19.64
viii ix x	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV) Conductor	km	12029 14290 2999 2628	251 1430 655 322	30.19 204.35 19.64 8.46
viii ix x 7	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV) Conductor ACSR Panther	km	12029 14290 2999 2628 150,297	251 1430 655 322 966	30.19 204.35 19.64 8.46 1451.87
viii ix x 7 i	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV) Conductor ACSR Panther ACSR Zebra	km	12029 14290 2999 2628 150,297 275,525	251 1430 655 322 966 1241.156	30.19 204.35 19.64 8.46 1451.87 3419.70
viii ix x 7 i	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV) Conductor ACSR Panther ACSR Zebra	km Nos.	12029 14290 2999 2628 150,297 275,525	251 1430 655 322 966 1241.156	30.19 204.35 19.64 8.46 1451.87 3419.70
viii ix x 7 i ii iii	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV) Conductor ACSR Panther ACSR Zebra MOOSE		12029 14290 2999 2628 150,297 275,525	251 1430 655 322 966 1241.156	30.19 204.35 19.64 8.46 1451.87 3419.70
viii ix x 7 i ii iii	120 kN LR (220 KV) 160 kN LR (220 KV) 90 kN L/R silicon Rubber (132 kV) 120 kN L/R Silicon Rubber (132 kV) Conductor ACSR Panther ACSR Zebra MOOSE Single Suspension H/W Fitting		12029 14290 2999 2628 150,297 275,525 327,359	251 1430 655 322 966 1241.156 38.25	30.19 204.35 19.64 8.46 1451.87 3419.70 125.21

iv	For AAAC Panther		1,426	52	0.74
V	For AAAC Zebra		2,320	38	0.88
vi	For AAAC Moose		2,845	48	1.37
9	Double Suspension H/W Fitting	Nos.			
i	For ACSR Panther		2,224	351	7.81
ii	For ACSR Zebra		3,688	495	18.25
iii	For ACSR Moose		6,707	82	5.50
iv	For AAAC Panther		2,192	20	0.44
٧	For AAAC Zebra		3,688	19	0.70
vi	For AAAC Moose		6,707	9	0.60
		-			
10	Single Tension H/W Fitting	Nos.			
i	For ACSR Panther		1,466	1643	24.08
ii	For ACSR Zebra		1,961	1005	19.71
iii	For ACSR Moose		2,259	100	2.26
iv	For AAAC Panther		1,545	34	0.53
V	For AAAC Zebra		2,025	31	0.63
vi	For AAAC Moose		2,366	26	0.62
vii	For 7/3.15sq mm earth wire		404	25	0.10
11	Double Tension H/W Fitting	Nos.			
i	For ACSR Panther		3,086	262	8.08
ii	For ACSR Zebra		3,672	318	11.68
iii	For ACSR Moose		5,926	20	1.19
iv	For AAAC Panther		3,091	17	0.53
V	For AAAC Zebra		3,677	35	1.29
vi	For AAAC Moose		5,906	12	0.71
12	Repair Sleeve	Nos.			
i	For ACSR Panther		233	640	1.49
ii	For ACSR Zebra		252	898	2.26
iii	For ACSR Moose		362	205	0.74
iv	For AAAC Panther		161	131	0.21
V	For AAAC Zebra		274	152	0.42
vi	For AAAC Moose		362	106	0.38
13	Mid-span Joint	Nos.			
i	For ACSR Panther		419	1390	5.82
ii	For ACSR Zebra		696	845	5.88
iii	For ACSR Moose		895	256	2.29
iv	For AAAC Panther		394	131	0.52
V	For AAAC Zebra		657	78	0.51
vi	For AAAC Moose		895	55	0.49

14	Vibration Damper	Nos.			
i	ACSR Panther		368	9426	34.72
ii	ACSR Zebra		583	4455	25.98
iii	ACSR Moose		847	100	0.85
iv	AAAC Panther		368	30	0.11
V	AAAC Zebra		579	60	0.35
vi	AAAC Moose		841	150	1.26
vii	Others if any(E/W - 7/3.15)		348	30	0.10
15	Wave Trap	Nos.			
i	132 kV Wave Trap 1200/10mA		276,939	40	110.78
ii	220 kV Wave Trap 1200/10mA		282,791	2	5.66
16	GI Angle	MT			
i	45x45x5mm		65,227	130	84.80
ii	65x65x6mm		65,227	46	30.00
17	Battery & Charger				
i	Battery Set	Set	946,015	22	208.12
ii	Battery Charger	Nos.	17,654	17	3.00
18	Tower-Structure	Set			
i)	OA with Stubs		291,740	19	55.43
а	+3 extn. to OA		48,790	6	2.93
b	+6 extn. to OA		97,514	6	5.85
ii)	OB with Stubs				
а	+3 extn. to OB		87,160	4	3.49
iii)	OC with Stubs		638,951	5	31.95
а	+3 extn. to OC		95,721	2	1.91
b	+6 extn. to OC		47,860	4	1.91
iv)	PA with Stubs				
а	+6 extn. to PA		84,143	4	3.37
v)	PB with Stubs		322,841	7	22.60
а	+6 extn. to PB		131,693	4	5.27
vi)	PC with Stubs		211,057	14	29.55
vii)	DD Type for 220KV with Stubs		595065.9	2	11.90
а	+ 6 extn. to DD		194,800	0	0.00
vii)	UR Type for 220KV with Stubs		136598.4	5	6.83
а	+ 6 extn. to UR		271,397	5	13.57
19	Station Transformer	Nos.			
	250 kVA		417,857	42	175.50

20	Disaster Resilience & Response System				
	Spare for ERS Towers	Nos.	LS		892.00
					-
21	Miscellaneous	LS			
i	AMC of Energy Metering Systems			***	
ii	Engagement of Security personnel			***	
iii	Repair of Defective Power Transformers				
iv	Renovation Works of grid sub-stations including Repair / Replacement of Old & Defective Equipment, Bus Augmentation, Switchyard Remetalling & Illumination, Renovation of Earthing System, Painting of Equipment, Repair of Boundary Walls & Fencing, Repair of Approach Roads, Cable Trenches & Drainage System etc. including Miscellaneous Civil Works			***	400.00
V	Renovation of Ganjam Grid S/S				44.06
	TOTAL				Rs.13,778.31 lakhs= Rs. 137.78 Cr.

Note on sub-station Automation:

Presently, OPTCL has 102 nos. sub-stations of different capacities and 18 nos. of switching stations. 34 nos. sub-stations are in service more than 30 years and these need protection upgradation and replacement of control cable system. As requirement of control cable is reduced appreciably adopting control and monitoring through Fibre Optics (SAS-Sub-station Automation System), the control cable fault would be minimised.

Further, manning of switching stations puts a considerable strain on manpower resources. Integration of above switching stations to Network Control Center (NCC) will ease out pressure on manpower resource.

The following advantages can be achieved, if SAS system with Bay Kiosk/Merging unit is adopted instead of traditional control protection system for sub-station operation.

- 1. Reduction in operation and maintenance cost.
- 2. Small Control Room.
- 3. Less quantity of control cables.
- 4. Improvement in productivity and asset management.
- 5. Information Management.
- 6. Increase metering efficiency.

The remote control of sub-station can be managed with SAS and monitoring of sub-station with below screens.

- 1. SLD View.
- 2. Metering view per bay and whole sub-station.
- 3. Trend Analysis of MW, MVAR etc.
- 4. Fault event recording.
- 5. Disturbance recording etc.

Further, upper level communication will be possible through Gateway to NCC and LDC (Load Despatch Centre). Hence, by integrating the SAS system of all the sub-stations of OPTCL to NCC, monitoring and controlling of sub-stations centrally can be achieved through NCC.

The CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010 in PART A - SUBSTATIONS & SWITCHYARDS (66KV AND ABOVE) under Regulation 41 (5) (page 66) states as under:

"The location, layout, design and construction of the new installation shall provide for automation and computerised co-ordinated operation through supervision control and data acquisition system (SCADA) and Energy Management System and for future expansion".

It is proposed to convert existing sub-stations to SAS enabled sub-stations with Bay Kiosk or Merging unit (Digital) solution as per the site condition and setting of Network Control Center of OPTCL at Bhubaneswar in a phased manner and the expenditure will be met from R&M Head.

In first phase, it is proposed to convert 8 nos. sub-stations (Jajpur Road, Kendrapara, Rourkela, Aska, Brajarajnagar, Rayagada, Choudwar and Sambalpur) to SAS enabled with an estimated cost of Rs. 25 Cr. (tentative) with average cost per sub-station at Rs. 3.15 Cr. An expenditure of Rs. 15 Cr. has been proposed in the FY 2016-17.

Query No 5: Auxiliary energy consumption in the sub-station

OPTCL has claimed an amount of Rs.3.82 Cr. towards auxiliary energy consumption in sub-station. The entire power purchase cost of GRIDCO is recovered from DISCOMs through BSP & OPTCL is not paying any amount to GRIDCO for this consumption. In the above backdrop, OPTCL claim for such consumption on this head may be explained.

Reply of OPTCL:

It is submitted in page 17-18 of the ARR application under the head "A.1(d) Expenses related to auxiliary energy consumption in the sub-stations" as under:

"Up to FY 2015-16, OPTCL has not been allowed any amount towards auxiliary energy consumption in the sub-stations for the purpose of air-conditioning, lighting, technical consumption. The same is borne by GRIDCO as OPTCL has been billing to DISCOMs at grid sub-station ends (LT side of Power Transformers). As per Regulation 8.2 (d) of OERC Regulations, 2014, OPTCL is entitled to claim the expenses related to auxiliary energy consumption and reimburse the same to GRIDCO.

The auxiliary energy consumption in the sub-stations for the FY 2014-15, FY 2015-16 (up to Sept-15) are 10.75MU & 6.71MU respectively. It is estimated that the auxiliary energy consumption for the FY 2016-17 will be about 14 MU. Based on the approved average BSP rate for the FY 2015-16 i.e. Rs. 284.29, the amount under this head is worked out as Rs. 3.82 Cr.

OPTCL proposes **Rs. 3.82 Cr.** towards auxiliary energy consumption in the sub-stations. The amount may be approved by the Hon'ble Commission."

From the above, it is evident that GRIDCO's power purchase quantum does not include the auxiliary energy consumption in OPTCL sub-stations. Such unaccounted energy cost need to be recovered from consumers through OPTCL ARR for reimbursement to GRIDCO by OPTCL.

Query No 6: Basis of 150 MU energy handled in distribution network

In Table -27, OPTCL has deducted 150 MU towards energy handled in distribution network from the total energy transmitted in OPTCL network. OPTC has recovered its total ARR from the DISCOMs as per the meter reading taken at GRIDCO sub-station end. So reason of deducting 150 MU from total drawl of DISCOMs for calculating energy handled in OPTCL system may be explained. The basis and study undertaken by OPTCL to propose 150 MU loss in distribution system may be submitted.

Reply of OPTCL:

OPTCL anticipates approximately 150MU of energy flow to DISCOMs directly in their 11kV & 33kV distribution network without involvement of OPTCL EHT network during the year 2016-17. The details of such DISCOMs such network are outlined below:

- 1. Energy flow from Chipilima Power House to WESCO through TFR-I & II at 33kV voltage level.
- Energy flow from Burla Power House to WESCO through 11kV Island Feeder.
- 3. Direct injection by Solar / Thermal plants to DISCOMs network at 11kV/33kV voltage level without involvement of OPTCL EHT network.

As per Hon'ble OERC common order dated 26.09.2012 passed in Case No. 53/2008 (WESCO vs. OPTCL) and Case No. 53/2012 (NESCO vs. OPTCL), OPTCL is not entitled to transmission charges for the above transaction of energy.

The DISCOM wise energy flow for 2013-14, 2014-15 & 2015-16 (April'15 to November'15) in the above manner directly to DISCOMs is given hereunder.

(Figures in MU)

YEAR	CESU	NESCO	WESCO	SOUTHCO	TOTAL
FY 2013-14	6.309857	1.555798	128.686432	NIL	136.55
FY 2014-15	3.537739	0.948198	132.993800	NIL	137.48
FY 2015-16	0	0.814355	90.85512	NIL	91.67
	0	0.014333	90.00012	INIL	91.07
(04/15 to 11/15)					

Prorating for FY 2015-16, the expected energy flow will be to the tune of 137.51 MU (91.67/08x12) for which OPTCL will not get transmission charge. Considering the rising trend of power availability from Solar / Thermal plants, OPTCL has projected 150MU energy transaction to DISCOMs without involvement of OPTCL EHT network during FY 2016-17.

Query No 7: GCC Expenditure

OPTCL should furnish the detail expenditure incurred towards GCC and CSR for FY 2014-15 & 2015-16 up to date to justify their claim for 2016-17.

Reply of OPTCL:

Detailed Expenditure incurred towards GCC activities:

Expenditure of GCC in FY 2014-15

Sl. No.	Particulars	Amount (Rs.)
1	Salary of Executives	1418110
2	Salary of DEO	43200
3	Salary of Non-Executives	588000
4	Salary of Security - 2 nos.	62400
5	Expenditure for special GCC meeting	264627
6	Expenditure for GCC meeting (Zonal & SCADA)	500000
7	Hire charges of Vehicle	210000
8	TA & DA of Executives and Non-Executives	70000
9	Misc. expenditure (R&M, Entertaniment etc.)	72000
		Rs. 3228337/-=
	Total	Rs.0.32 Cr.

The Hon'ble Commission had approved an amount of Rs. 0.52 Cr. towards GCC Expenses for the year 2015-16 vide order dated 23.03.2015 (Case No. 67/2014). During the 1st six months (April to Sept'15), OPTCL has incurred an amount of Rs.0.087 Cr. towards GCC expenses. Projected expenditure for the balance six months (Oct. to Mar'16) is Rs.0.386 Cr. Hence, total amount of Rs.0.47 Cr. (0.087+0.386) is anticipated to be incurred by OPTCL towards GCC expenses for FY 2015-16.

Projected Expenditure of GCC in FY 2015-16

Α	Expenditure incurred during 1st six months (Apr-Sept'15)			
SI. No.	Particulars	Amount (Rs.)		
1	Salary of DGM	553812		
2	Salary of Stenographer gr. III	244608		
3	Salary of Security - 2 nos.	68400		
4	Expenditure for GCC meeting	0		
5	Misc. expenditure (Telephone Bill, Refreshment and R&M etc.)	400		
6	Medical Expenses	0		
	Total	867220		

В	Anticipated expenditure during next six months (Oct- Mar'16)						
Sl. No.	Particulars	Amount (Rs.)					
1	Salary of Executive(Sr.G.M.,)	800000					
2	Salary of Executive(D.G.M.,)	600000					
3	Salary of Executive(A.G.M.,)	580000					
4	Salary of Executive (Mgr., D.M)	960000					
5	Salary of Non-Executive(Steno,)	260000					
6	Salary of Security of 2 nos.	68400					
7	Expenditure for special GCC meeting	200000					
8	Expenditure for GCC meeting (Zonal & SCADA)						
		300000					
9	Hire charges of Vehicle	35000					
10	Technical importance of programme (TA & DA)	20000					
11	Misc expenditure (R&M, Entertainment etc.)	40000					
12	Medical expenses	0					
	Total 3863400						

Detailed Expenditure incurred towards CSR activities:

The CSR Policy of OPTCL was notified on 21.03.2015 pursuant to the provision under Section 135 of the Companies Act, 2013. Hence, during FY 2014-15, OPTCL was able to spend only Rs.4.00 lakhs against the required expenditure of Rs.50.00 lakhs. In the FY 2015-16, OPTCL has made budget provision of Rs.70.40 lakhs towards CSR activities. Further, as per the CSR policy, the unspent amount during a financial year will have to be spent within the next two financial years. Therefore, OPTCL will spend the unspent amount within the next two financial years for which the CSR Revenue Fund has been created in the accounts.

Query No 8: Transmission loss

OPTCL has proposed transmission loss in OPTCL system as 3.70% in the ARR of FY 2016-17 i.e. almost equal to the percentage of loss achieved for FY 2015-16 upto September, 2015. It is observed that there is minimal loss reduction after commissioning a number of new transmission projects and also adopting master maintenance plan. So OPTCL should submit the action plan to reduce the transmission loss in OPTCL system. Further, OPTCL may furnish the transmission loss level in other States of India.

Reply of OPTCL:

The transmission loss is purely a technical loss and a function of real time injection of power by a number of generators, system configuration and power flow requirements at different load centres. Thus, OPTCL has no control over the same at any point of time. The transmission system of OPTCL operates as an integral part of the Eastern Regional Grid to serve the internal demand of the State as well as to carry out import and export of power depending upon the system demand. In view of the increasing demand for power at an accelerated pace due to ongoing industrialization and implementation of central & state sponsored schemes like RGGVY, DDUGJY, BGJY, BSVY etc. in Odisha, there will be increased flow of power in the OPTCL transmission network contributing to increased transmission loss.

Over the years, OPTCL has been continuously undertaking construction of new lines and sub-stations for strengthening the transmission infrastructure to improve quality of power supply, meet the future load growth and to reduce transmission loss effectively. Further, OPTCL has taken various measures like addition of capacitor bank, load bifurcation, modification in system configuration, procurement of more efficient equipment, conductor augmentation and replacement etc. As a result, the transmission loss is gradually reducing year over year.

OPTCL would like to further submit that the transmission loss in OPTCL system is one of the lowest in the country compared to other transmission utilities. A table showing comparison of transmission losses of different leading STUs is shown below. The loss figures have been extracted from respective SERC/STU website.

Year	Year Name of the Transmission Utility							
		Karnataka Power	Gujarat Energy	Madhya Pradesh	Maharashtra State	Andhra Pradesh	Haryana Vidyut	Rajasthan Rajya
	OPTCL	Transmission Corporation	Transmission Corporation	Power Transmission	Electricity Transmission	Transmission Company Ltd.	Prasaran Nigam	Vidyut Prasaran
		Ltd. (KPTCL)	Ltd. (GETCO)	Corporation Ltd. (MPPTCL)	Company Ltd. (MSETCL)	(APTRANSCO)	Ltd. (HVPNL)	Nigam Ltd. (RVPN)
2009-10	4.11%	4.20%	4.30%	4.19%	4.61%	4.16% (A)	2.68%	4.37%
2010-11	3.93%	4.39%	3.85%	3.74%	4.31%	4.50%	2.63%	4.31%
2011-12	3.88%	3.90%	3.94%	3.51%	4.25%	4.22%	2.76%	4.33%
2012-13	3.84%	3.81%	3.89%	3.30%	4.12%	3.97%	2.49%	4.22%
2013-14	3.79%	3.88%	3.57%	3.00%	4.09%	3.59%	2.74%	4.21%(P)
2014-15	3.73%	NA	NA	2.82%	4.08%	3.37%	2.61%	4.20%(P)

A-Approved, P-Provisional, NA- Not Available

Query No. 9: Emergency power sale to CGPs

OPTCL should furnish the details of wheeling charge collected from CGPs (both quantum and revenue) for FY 2014-15 and 2015-16 up to date.

Reply of OPTCL:

The quantum of emergency power supplied to CGPs and revenue earned by OPTCL from transmission charge for FY 2014-15 and FY 2015-16 (April -Nov'15) are furnished in the table below.

Name of	2014	4-15	2015-16 (Apr- Nov'15)		
the CGP	Quantum	Revenue	Quantum	Revenue	
	(MU)	(Rs.)	(MU)	(Rs.)	
NALCO	0.012250	3063	0.018961	4740	
IMFA	2.188069	547017	4.025719	1006430	
Total	2.200319	550080	4.044680	1011170	

Query No 10: Details of quantum and revenue earned

OPTCL should furnish the details of quantum and revenue earned by OPTCL towards Interstate wheeling, STOA and STU charge received from energy exchange for FY 2014-15 and 2015-16 upto date. The details of STOA may be furnished in the table below:

Year	No. of application received by SLDC	No. of application allowed by SLDC	Total Power (MW) transmitted through Open Access	Total Energy (MU) transmitted through Open Access	Amount collected by OPTCL (Rs. in Lakhs)
2013-14					
2014-15					
2015-16					

Reply of OPTCL:

- (i) During FY 2014-15, OPTCL has made provision towards receivable of Rs. 10.68 Cr. from Inter-state power utilities towards wheeling of ER power to WR power based on the CERC orders for the period 2004-05 to 2013-14, which were pending since long. Against this, OPTCL has not received any amount. The tariff for the FY 2014-15 & 2015-16 will be determined by the CERC.
- (ii) OPTCL has claimed wheeling charges from Chhatishgarh State Power Distribution Company Limited. (CSPDCL) towards wheeling of 5MW (Chhatishgarh share) from Hirakud Power House. The wheeling charges have been raised based on the transmission charge approved by the Hon'ble OERC. During the FY 2014-15, OPTCL has claimed Rs.40.82 lakhs for wheeling 16.326816MU. Similarly, by the end of Dec-15, OPTCL has claimed Rs.30.81 lakhs for wheeling 12.325229MU.
- (iii) During the FY 2014-15, OPTCL claimed Rs. 1.76 Cr. for 70241.24 MWH towards MTOA charges from M/s JSL @ 25 p/u based on transmission charge approved for LTOA. Accordingly, JSL paid the billed amount. In the FY 2015-16, JSL has availed MTOA upto Oct-15 and the amount claimed by OPTCL is Rs. 7.46 Cr. for 208780.626 MWH @ 25 p/u. It is submitted that JSL has filed a petition before the Hon'ble OERC challenging the billed rate of @ 25 p/u in Case No.28/2015. The hearing of the case has been concluded and order is reserved.
- (iv) Amount received through STOA and STU charge received from Energy Exchange for FY 2014-15 and FY 2015-16 upto Dec-15 are as mentioned below:

(Rs. Cr.)

Particulars	FY 2014-15	FY2015-16 (upto Dec-15)
STOA	8.31	12.54
IEX	5.86	4.53
PXIL	0.11	0.03
Total	14.28	17.10

(v) The details of STOA applications received and allowed by SLDC is mentioned below:

Year	No. of application received by SLDC	No. of application allowed by SLDC
2013-14	761	683
2014-15	1297	1243
2015-16 (till Nov-15)	955	903

Query No 11: Details of completed projects

OPTCL should furnish the details of project completed during FY 2014-15 and FY 2015-16 up-to-date in the following format:-

Sl No.	Name of the Project	Schedule date of completion	Revised date of completion	Actual date of completion	Original estimated cost of the project	Revised cost	Actual expenditure

Reply of OPTCL:

The details of transmission projects completed by Construction wing during FY 2014-15 and FY 2015-16 (April-Dec'15) is furnished below.

SI. No.	Name of the Project	Schedule date of Completion	l date of	Actual Date of Completion	Estimated	Revised Cost (Rs. Cr.)	Actual Expenditure (Rs. Cr.)
	(A) Projects	completed	d during tl	ne Year 20	014-15		
	3x40MVA, 132/33kV S/S at Arugul with line	08/2013	1	06.05.2014	37.43	-	28.21
	2x20 MVA, 132/33kV S/S at Barbil with LILO	11/2011	,	02.08.2014	17.40	-	10.95
	2x20MVA, 132/33kV S/S at Kuchinda with LILO	06/2012	-	24.11.2014	20.60	-	21.31
	2x12.5MVA, 132/33kV S/S at Nuapada with line	06/2012	09/2014	27.12.2014	34.94	-	40.51
	2x12.5 MVA, 132/33kV S/S at Boudh with line	06/2012	•	30.01.2015	33.53	-	27.03

			T			1	
6	Conversion of 132/11kV S/S to 2X40MVA, 132/33kV S/S at Sarasmal (Jharsuguda)	03/2013	-	13.03.2015	13.41	15.38	7.54
	2X20 MVA,132/33kV S/S at Banki with line	08/2013	-	29.03.2015	21.16	-	22.31
	1X20 MVA + 1X40 MVA,132/33kV S/S at Shamuka Beach Resort, Puri with line	08/2013	-	30.03.2015	20.71	-	14.46
	Cabling system near Chandaka grid S/S for IDCO	-	-	March-2015	16.21		14.68
	(B) Projects comple	ted during	y Year 20	15-16 (up	to Dec-201	5)	
	2x12.5MVA, 132/33kV S/S at Dabugaon with line	06/2012	-	10.04.2015	6 projects executed by PGCIL in a package	-	24.85
	2X20 MVA,132/33kV S/S at Umerkote with line	11/2015	-	10.04.2015	41.16	-	31.67
	220kV LILO from Narandrapur- Mendhasal D/C line to Infocity-II S/S	05/2015	-	30.04.2015	1.77	-	-
4	2X20MVA,132/33kV S/S at Konark with line	07/2014	11/2015	29.06.2015	21.14	-	18.18
5	220kV Atri-Pandiabil D/C line	04/2015	-	30.06.2015	18.89	-	6.82
	2X160MVA+2x40MVA,220/132/33kV S/S at Puri with line	11/2015	-	09.07.2015	81.66	-	56.41
7	132kV system at 400/220kV S/S at Mendhasal	01/2015	-	17.07.2015	32.59	-	16.86
8	400/220kV Duburi New S/S	12/2008	-	ICT-I&II- 29.08.2015	42.07	-	-
9	400kV Meramundali- Duburi DC line	10/2008	-	Ckt.I- 11.09.2015 Ckt.II- 19.10.2015	131.48	-	173.17
10	2x40MVA,132/33kV Marshaghai (Tulasipur) S/S with line	11/2015	-	16.10.2015	20.57	-	17.45
11	2X20 MVA,132/33kV S/S at Kalunga with LILO	03/2013	12/2015	04.11.2015	14.56	-	15.41
12	2x160MVA, 220/132kV S/S & 2x20MVA, 132/33kV S/S at Lapanga with LILO	03/2013	03/2016	25.11.2015	64.83	-	52.51
	Conversion of 132kV switching station at Somanathpur (Balasore) to 2x20MVA, 132/33kV S/S	01/2014	03/2015	11.12.2015	11.22 (includes line conversion)	-	2.75
14	400kV Ib-Meramundali DC line (Restoration Work)	11/2012	-	30.12.2015	116.31	-	123.76

The details of projects completed by O&M wing regarding augmentation of sub-station capacity during FY 2014-15 and FY 2015-16 (April to Dec-15) is enclosed at **Annexure-1**.

FINANCE

Query No 12: Audited Accounts

The audited accounts along with statutory audit report for the FY 2014-15 may be submitted.

Reply of OPTCL:

Copy of the audited Annual Accounts of OPTCL for the FY 2014-15 along with statutory audit report has been submitted to the Hon'ble Commission on 30.12.2015 vide letter no. 459 dated 30.12.2015.

Query No 13:

In Form F-2, the column interest during construction remained blank. Classification may be given indicating the break-up of interest on loan capitalized and interest on loan charged to revenue account.

Reply of OPTCL:

Interest during construction (IDC) has been capitalized as per Accounting Standrad-16 issued by MCA. In F-2, the details of project wise capital expenditure have been indicated; whereas the projection on new loan is determined based on the overall fund requirement. Hence, the classification indicating the break-up of interest on loan capitalized and interest on loan charged to revenue account could not been ascertained. Accordingly, OPTCL has proposed the interest amount as revenue item. However, the actual interest capitalized may be considered during the true-up.

Query No 14:

It is found that every year actual addition to fixed asset is much less compared to the amount projected in the ARR of the previous years. A comparative statement of the actual addition of fixed asset vis-à-vis projection made in earlier years ARR filing is given below:-

Year	Addition to fixed asset (As per Audited account)	Addition to fixed asset (As per ARR)
2012-13	219.48	416.57
2013-14	196.47	256.72
2014-15	144.52	495.18
(Provisional)		

As seen from above, the estimates of OPTCL is much higher than the actual implementation. This results in escalation of capital cost due to time overrun and cost overrun. Clarification may be given.

Reply of OPTCL:

The reasons for low rate of capitalization are mentioned below:

- The ongoing and the newly awarded projects are executed with a particular schedule completion period varying from 24 to 36 months from the date of award of the contract.
- The schedule completion period in respect of a project is fixed based on the length of the associated line with the proposed sub-station.
- Delay in completion of the associated line work is attributed to delay in completion of the entire project awarded on turnkey basis.
- Delay in obtaining advance possession of sub-station land also is one of the primary causes for delay in the completion of project.

The main reasons of delay in completion of line work are furnished below.

- Acute RoW problem is encountered during construction of the line.
- Non-availability of clear corridor for construction of the line due to gap between survey and execution resulting change in route alignment during execution.
- Court cases filed by the land owners at different locations of the line during construction and status-quo maintained on the disputed land by the Hon'ble Court.
- Delay in getting statutory clearances such as forest clearance etc.

Due to the above reasons, although the sub-station work is complete in all respect within the schedule period, commissioning of the sub-station gets delayed due to delay in completion of the line work and ultimately it leads to the low rate of capitalization.

Further, projects are taken up as per the transmission plan and business plan of OPTCL approved by the Hon'ble Commission which create the gap between completion and work-in-progress, eventually leading to the low rate of capitalization.

Query No 15: Interest on loan

In Form F-4 it is found that the interest impact on loans borrowed before segregation of GRIDCO to OPTCL amounts to 26.26 crore and interest on loan after segregation of transmission business from GRIDCO amounts to Rs.98.29 crore. OPTCL may intimate the actual receipt of project

related loan upto 30.11.2015 and interest impact on such loans including interest during construction period. (year wise details)

Reply of OPTCL:

The loan availed as on 30.11.2015 and interest impact thereon for the FY 2016-17 are indicated in **F-13** (page 91-92 of the ARR application).

Query No 16: Month wise details of employees

Month-wise details of basic pay, grade pay, DA, HRA drawn from April, 2015 to November, 2015 may also be submitted. Further information on no. of employees may be submitted in the following format.

No. of	New	Retired/revi	No. of	Inductio	Retired/re	No. of
employees	employees	sed/expired	employees	n of new	signed/exp	employ
as on	induction	during	as on	employe	enditure	ees as
31.3.2014	during	2014-15.	31.3.2015	e during	during	on
	2014-15			2015-16	2015-16.	31.3.20
						16

Reply of OPTCL:

The month wise details of basic pay, grade pay, DA, HRA drawn from April-2015 to Nov-2015 for the FY 2015-16 are furnished in the Table below.

(Rs. Cr.)

				(1.101-011)
MONTHS	BASIC PAY	GRADE PAY	DEARNESS ALLOWANCE	HOUSE RENT ALLOWANCE
Apr-15	4.00	1.01	5.64	0.71
May-15	4.00	1.01	5.65	0.71
Jun-15	4.01	1.01	5.66	0.72
Jul-15	3.99	1.01	5.65	0.71
Aug-15	4.00	1.01	5.67	0.71
Sep-15	3.95	1.00	5.59	0.71
Oct-15	4.02	1.02	6.00	0.72
Nov-15	4.20	1.08	6.28	0.75

Information on number of employees has been furnished in the ARR application in page 5 under A.1(a) "Salaries, wages, pension contribution and other employee costs (F-10)". However, those information are again furnished in the sought format below:

No. of employees as on 31.3.2014	New employees induction during 2014-15	Retired/ resigned /expired during 2014-15	No. of employees as on 31.3.2015	Induction of new employee during 2015-16	Retired/ resigned /expired during 2015-16	No. of employees as on 31.3.2016
3067	199	143	3123	272	142	3253 (approx.)

Query No 17: Addition of Fixed Assets

In format F-17 (statement of fixed asset) the addition to fixed asset during 2015-16 is shown at Rs.963.63 crores. OPTCL may inform the actual addition of assets upto November, 2015 of the FY 2015-16.

Reply of OPTCL:

In the existing procedure the addition to fixed assets for any financial year can be ascertained only at the year-end based on the statement submitted by the respective field units. As reported, projects having estimated value of Rs. 506.79 Cr. have been completed by the end of Dec-15.

Query No 18: Infusion of equity

In Form F-9, OPTCL proposed equity infusion of Rs.56.93 crore during 2015-16. Details of such infusion of equity such as sanction order date etc., may be intimated if the equity is to be funded by Govt. of Odisha.

Reply of OPTCL:

OPTCL has received Rs.53.93 Cr. towards equity infusion from the GoO on 14.08.2015. Copy of the sanction letter is enclosed at **Annexure- 2.**

Query No 19: Sundry Debtors

In Form F-6, OPTCL has shown an amount of Rs.315.40 cr. towards Sundry Debtors as at the end of the year 2015-16. List of defaulters against whom the amount is due and action taken by OPTCL to recover the same may be given.

Reply of OPTCL:

List of major debtors including DISCOMs as on 01.04.2015 are as under:

Name of the Debtors	Amount (Rs. Cr.)
CESU	22.05
WESCO	13.96
NESCO	9.23
SOUTHCO	52.81
GRIDCO	48.88
NALCO	5.46
IMFA	13.96
Others	90.16
(including inter-state customers)	
TOTAL	256.50

Out of the above outstanding amount, transmission charges receivable for the month of March-15 is Rs. 51.57 Cr. The amount has been received in April-15. Outstanding with GRIDCO as shown above was transferred to OPTCL through notification which in true sense is not a debtor. Similarly, the others amounting to Rs.90.16 Cr. are old ones. During FY 2012-13, SOUTHCO and CESU had not paid Rs. 45.58 Cr. and Rs. 3.88 Cr. respectively. OPTCL is anticipating that the same amount will continue for FY 2015-16 and accordingly calculated the debtors of Rs. 315.40 Cr. at the end of the year 2015-16.

Query No 20: Monthly cash flow statement

Monthly cash flow statement considering the revenue items only for the FY 2014-15 and 2015-16 (actual upto November 2015) may be submitted.

Reply of OPTCL:

The month wise cash flow statements are enclosed at **Annexure- 3**.

Query No 21: Capital contribution from consumers (deposit work)

In Balance Sheet (F-19) the Capital contribution from consumers (deposit work) is shown at Nil where as in the cash flow statement an amount of Rs.176.95 crore is shown as receipt and further expects to receive an amount of Rs.290.44 crore during FY 2014-15 and 2015-16 respectively. Such inconsistency in figure may be clarified.

Reply of OPTCL:

These figures are shown under Current Liabilities. This row is a typographical error.

Query No 22: A&G Expenses

There appears to be a mismatch of figures on Administration and General Expenses during 2016-17 as shown in Format F-4 and F-12. Clarification may be given.

Reply of OPTCL:

In **F-12** (page 90 of the ARR application), OPTCL has made item wise projection under A&G with the anticipation of 10% increase over the FY 2015-16; whereas in **F-4** (page 80 of the ARR application), the A&G is claimed based on the Regulation 8.14 of OERC Transmission Tariff Regulations, 2014.

Query No 23: Procurement of materials and execution

OPTCL has claimed an amount of Rs.170.66 crore towards repair & maintenance during 2016-17. Information for the last four years (2012-13, 2013-14, 2014-15, 2015-16 upto November) showing the amount approved by the Commission and the actual as per audited accounts may be submitted. Further, OPTCL is required to submit actual status of procurement of materials (item wise) and its execution (actual from March 2015 to November, 2015).

Reply of OPTCL:

Information for the four years (2012-13, 2013-14, 2014-15, 2015-16 upto Nov-15) showing the amount approved by the Commission and the actual as per audited accounts are submitted in the Table below:

(Rs. Cr.)

Financial Year	Approved by OERC	Actual
2012-13	95.00	60.25
2013-14	60.00	70.20
2014-15	93.00	100.31
2015-16 (upto Nov-15)	108.00	96.78

The item wise procurement of materials and its actual execution during FY 2015-16 (April-Nov'15) in respect of **TELECOM wing** is submitted below in the prescribed format.

SI. No.	Name of the Item	Amount (Rs. Cr.)	Date of Delivery of materials	Present status and execution
1.	Procurement of 132kV Line Trap	0.59	Sept-2015	Materials received at sites for installation
2.	Procurement of 220kV Line Trap	0.54	Oct-2015	Materials received at sites for installation
2.	VRLA Battery & DCPS Charger	1.10	June-2015	Commissioning completed at respective sub-stations
3.	Multifunction Meter (MFM)	0.045	June-2015	Commissioned and working satisfactory.

The item wise procurement of materials and its actual execution during FY 2014-15 (April-Nov'15) in respect of **IT wing** is submitted below in the prescribed format.

SI. No.	Name of the Party	Nature of work	Amount as per invoice (Rs.)	Date of Delivery of Materials	Present Status & Execution
1	Wipro	IT Work outsourcing	1,069,760	Dec-14	completed
2	Wipro	Help Desk	119,347	Feb-15	completed
3	BSNL	NoC+LLM	806,445	Apr-15	completed
4	BSNL	FMS	281,619	Feb-15	completed
5	HCL Comnet	AMC of OGS- WAN,	2,308,684	May-15	completed
6	HCL Comnet	FMS, NOC-LLM	779,595	Aug 15	completed
7	Cyberian Informatics	K7	484,735	Sep-15	completed
8	BSNL	OGS WAN Diff of 2014-15	3,470,757	Oct-15	completed
9	Oracle India Pvt. Ltd	Annual Technical Support	339559	Aug-15	completed
		Total	Rs. 9,660,501/- =	Rs. 0.97 Cr.	

The item wise procurement of materials and its actual execution during FY 2014-15 (April-Nov'14) in respect of **O & M wing** is submitted below in the prescribed format.

SI.	Description	Unit	FY 2015-16		Date of	Present	
No.			Rate	Qty	Cost	Delivery	Status
			(Rs.)		(Lakh)	of Materials	& Execution
1	Circuit Breaker	Nos.					
i	400kV		2,839,651	17	482.74	15.07.2015	
ii	220kV		1,348,503	54	728.19	25.07.2015	
iii	132kV		584,314	125	730.39	15.09.2015 &15.07.2015	
iv	33kV		198,422	269	533.76	25.08.2015	
2	C.T.	Nos.					
a)	220kV						
i	1200-600-300/1-1-1- 1		335,903	31	104.13	18.12.2015	
b)	33kV						Installed at different S/S
i	1200-600-300/1-1-1		49,762	31	15.43		and some
ii	800-400-200/1-1-1		43,252	138	59.69	19.12.2015	are kept to meet
iii	600-300-150/1-1-1		47,684	31	14.78	19.12.2013	emergency
iv	400-200-100/1-1-1		43,738	320	139.96		requirement
3	P.T. / CVT	Nos.		·			
i	132kV PT		107072.9	123	131.70	25.12.2015	

lii	33kV PT/ IVT		27,129	69	18.72	18.12.2015	
"	JORV 1 17 1V 1		27,125	03	10.72		
4	Surge Arrester	Nos.					
i	400kV	1103.	120,330	22	26.47	07.07.2015	1
ii	220kV		45,422	224	101.75		1
iii	132kV		30,530	506	154.48	30.11.2015	
iv	33kV		8,499	623	52.95	1	
- IV	3387		0,400	023	32.33		
5	Isolator	Set					
	220 KV Single	OCI					1
i	Isolator with E/S		372,168	50	186.08		
ii	220 KV Single Isolator W/O E/S		323,794	46	148.95		
	132 KV Single		020,101			_	
iii	Isolator W/O E/S		197,289	202	398.52		
iv	33 KV Single Isolator W/O E/S		80,217	189	151.61		
	132 KV Double		55,211				
V	Isolator with E/S 132 KV Double		374,410	70	262.09		Installed at
vi	Isolator W/O E/S		348,076	47	163.60		different S/S and some
	33 KV Double						are kept to
vii	Isolator with E/S 33 KV Double		171,916	181	311.17	31.08.2015	meet emergency requirement
viii	Isolator W/O E/S		151,218	81	122.49	31.00.2015	
ix	33kV SI W/O E/S		80,217	189	151.61		
	33kV SI W/O E/S						
Х	2000A 33kV DI W/O E/S		88,645	28	24.82	_	
хi	2000A		169,626	14	23.75		
xii	33kV Isolator Spare			LS	4.06		
	132kV Isolator						
xiii	Spare 220kV Isolator			LS	7.04	_	
xiv	Spare			LS	2.98		
6	Insulator	Nos.					
i	90 kN Disc		500	2788	13.95		
ii	120 kN Disc		646	1930	12.46		
iii	160 kN Disc		816	3529	28.79		
iv	90 kN LR (132 KV)		6787	3502	237.68	00.00.0045	
V	120 kN LR (132 KV)		8021	2721	218.25	29.09.2015	
vi	90 kN LR (220 kV)		10647	2930	311.96		
vii	120 kN LR (220 KV)		12029	251	30.19		
viii	160 kN LR (220 KV)		14290	1430	204.35	1	
	90 kN L/R silicon					24.09.2015	1
ix	Rubber (132 kV) 120 kN L/R Silicon		2999	655	19.64	&	
х	Rubber (132 kV)		2628	322	8.46	30.09.2015]
]
7	Conductor	km]
i	ACSR Panther		150,297	966	1451.87	04.06.2015	

ii	ACSR Zebra		275,525	1241.156	3419.70	
iii	MOOSE		327,359	38.25	125.21	
8	Single Suspension H/W Fitting	Nos.				
i	For ACSR Panther		1,426	3547	50.58	_
ii	For ACSR Zebra		2,320	2051	47.58	<u> </u>
iii	For ACSR Moose		2,845	42	1.19	07.10.2015
iv	For AAAC Panther		1,426	52	0.74	07.10.2010
٧	For AAAC Zebra		2,320	38	0.88	1
vi	For AAAC Moose		2,845	48	1.37	
9	Double Suspension H/W Fitting	Nos.				
i	For ACSR Panther		2,224	351	7.81	
ii	For ACSR Zebra		3,688	495	18.25]
iii	For ACSR Moose		6,707	82	5.50	07.10.2015
iv	For AAAC Panther		2,192	20	0.44	07.10.2013
٧	For AAAC Zebra		3,688	19	0.70]
vi	For AAAC Moose		6,707	9	0.60	
10	Single Tension H/W Fitting	Nos.				
i	For ACSR Panther		1,466	1643	24.08	1
ii	For ACSR Zebra		1,961	1005	19.71	1
iii	For ACSR Moose		2,259	100	2.26	1
iv	For AAAC Panther		1,545	34	0.53	07.10.2015
٧	For AAAC Zebra		2,025	31	0.63	
vi	For AAAC Moose		2,366	26	0.62	
vii	For 7/3.15sq mm earth wire		404	25	0.10	
11	Double Tension H/W Fitting	Nos.				
i	For ACSR Panther		3,086	262	8.08	1
ii	For ACSR Zebra		3,672	318	11.68	1
iii	For ACSR Moose		5,926	20	1.19	07.10.2015
iv	For AAAC Panther		3,091	17	0.53	
V	For AAAC Zebra		3,677	35	1.29	<u> </u>
vi	For AAAC Moose		5,906	12	0.71	
12	Repair Sleeve	Nos.				
i	For ACSR Panther		233	640	1.49	<u> </u>
ii	For ACSR Zebra		252	898	2.26	07.10.2015
iii	For ACSR Moose		362	205	0.74	07.10.2010
iv	For AAAC Panther		161	131	0.21]

Work order placed on different Rate Contract Firms for replacement of conductors in Hot Line condition. Schedule completion: June 2016

v	For AAAC Zebra		274	152	0.42		
vi	For AAAC Moose		362	106	0.38	1	
13	Mid-span Joint	Nos.					
i	For ACSR Panther	11001	419	1390	5.82		
ii	For ACSR Zebra		696	845	5.88	1	
iii	For ACSR Moose		895	256	2.29		
iv	For AAAC Panther		394	131	0.52	07.10.2015	
V	For AAAC Zebra		657	78	0.51	1	
vi	For AAAC Moose	1	895	55	0.49	1	
V1	TOTAL CONTROL				0.10		
14	Vibration Damper	Nos.					
i	ACSR Panther	1	368	9426	34.72		
ii	ACSR Zebra	1	583	4455	25.98	1	
iii	ACSR Moose		847	100	0.85	1	
iv	AAAC Panther		368	30	0.11	07.10.2015	
V	AAAC Zebra		579	60	0.35	1	
vi	AAAC Moose		841	150	1.26	1	
	Others if any(E/W -	†				1	
vii	7/3.15)		348	30	0.10		
							Installed at
15	Wave Trap 132 kV Wave Trap	Nos.					different S/s
i	1200/10mA		276,939	40	110.78		and some
	220 kV Wave Trap					28.09.2015	are kept to meet
	1200/10mA		222 = 24				emergency
ii			282,791	2	5.66		requirement
40	OL Asserts	NAT.					Partly used
16	GI Angle	MT	25.225	400	0.1.00		in
i	45x45x5mm	1	65,227	130	84.80	-	replacement of theft
	65x65x6mm					03.09.2015	tower
ii			65,227	46	30.00		members
							7
17	Battery & Charger					04.00.0045	7 nos. Battery sets
i	Battery Set	Set	946,015	22	208.12	01.09.2015	and 5 nos.
						27.12.2015	chargers already
							installed.
	Battery Charger						Balance will be installed
							within March
ii		Nos.	17,654	17	3.00		2016
18	Tower-Structure	Set					Some towers have
i)	OA with Stubs		291,740	19	55.43	1	already
а	+3 extn. to OA		48,790	6	2.93	15.10.2015	been used
b	+6 extn. to OA		97,514	6	5.85		in different diversions
ii)	OB with Stubs						and some
							

a	+3 extn. to OB		87,160	4	3.49	1	are kept to
iii)	OC with Stubs		638,951	5	31.95	†	meet
a	+3 extn. to OC		95,721	2	1.91	†	emergency
b	+6 extn. to OC		47,860	4	1.91	†	
iv)	PA with Stubs		47,000		1.01		
a	+6 extn. to PA		84,143	4	3.37		
v)	PB with Stubs		322,841	7	22.60	1	
a	+6 extn. to PB		131,693	4	5.27	01.10.2015	
vi)	PC with Stubs		211,057	14	29.55	†	
	DD Type for 220KV						
vii)	with Stubs		595065.9	2	11.90	+	
a	+ 6 extn. to DD UR Type for 220KV		194,800	0	0.00	15.10.2015	
vii)	with Stubs		136598.4	5	6.83	1	
а	+ 6 extn. to UR		271,397	5	13.57		
19	Station Transformer	Nos.					15 nos. are already
13	Transformer	1400.				14.04.2015	installed.
						& 22.08.2015	Some are released to
						22.08.2015	220kV S/S
							to be
							erected as second
							station
							transformers and some
							are kept at
	05013/4		447.057	42	175.50		Stores for
	250 kVA		417,857	42	175.50		emergency
	Disaster Resilience						'
	& Response						
20	System Spare for ERS					07.10.2015	
	Towers	Nos.	LS		892.00	07110.2010	
21	Miscellaneous	LS					
i	AMC of Energy Metering Systems			***			
'	Engagement of						
ii	Security personnel			***			
iii	Repair of Defective Power Transformers						
	Renovation Works						
	of grid sub-stations including Repair /						
	Replacement of Old						
	& Defective						
	Equipment, Bus Augmentation,						
	Switchyard Re-						
	metalling & Illumination,						
	Renovation of						
	Earthing System,			***	400.00		
iv	Painting of			30	400.00	<u> </u>	<u> </u>

	Equipment, Repair of Boundary Walls & Fencing, Repair of Approach Roads, Cable Trenches & Drainage System etc. including Miscellaneous Civil Works			
V	Renovation of Ganjam Grid S/S		44.06	
	TOTAL		Rs.13,778.31 lakhs= Rs. 137.78 Cr.	

Query No 24: Income Tax

OPTCL claimed an amount of Rs.7.79 Cr. towards income tax for FY 2016-17 on the basis of actual amount paid for the FY 2014-15. Information may be given, how much of the allocated the core business of OPTCL.

Reply of OPTCL:

OPTCL has book profit Rs. 38.95 Cr. in FY 2014-15 on which Income Tax liability will arise u/s 115-JB of the Income Tax Act, 1961. The book profit is on account of its core business and as per the income considered in tariff. The tax liability on this book profit is Rs. 8.17 Cr. as detailed below.

(A) Tax @18.50 % on Rs.38.95 Crore : Rs. 7.21 Cr.
 (B) Surcharge @ 10% on (A) : Rs. 0.72 Cr.
 (C) Sub Total (A+B) : Rs. 7.93 Cr.
 (D) Educational Cess @ 3% on (C) : Rs. 0.24 Cr.
 (E) Total Tax Liabilities (C+D) : Rs. 8.17 Cr.

BY THE APPLICANT THROUGH

Bhubaneswar Dt.15bbbd.01.2016

CGM (RT&C)

BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN, UNIT-VIII, BHUBANESWAR-751012

CASE NO. 55/2015 FILING NO. 2

IN THE MATTER OF:

An application for approval of Aggregate Revenue Requirement and Transmission Tariff for the Financial Year 2016-17 under Section 62, 64 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of OERC (Conduct of Business) Regulations, 2004, OERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2014 and other tariff related matters.

AND

IN THE MATTER OF:

Odisha Power Transmission Corporation Limited, Janpath,

Bhubaneswar

..... Applicant

AND

IN THE MATTER OF:

Reply to the queries raised by the Hon'ble Commission vide letter No. 1633 dated 22.12.2015.

Affidavit verifying the submission

I, Bimal Prasad Mishra, son of Late Umesh Chandra Mishra, aged about 57 years, residing in OPTCL Colony, Bhubaneswar-751022, do solemnly affirm and say as follows:

- 1. That I am the Chief General Manager, Regulation, Tariff & Commercial wing, OPTCL, the Applicant and have been duly authorized by the said Applicant to make this affidavit on its behalf.
- 2. That the Statements made in paragraphs herein above are based on official information and I believe them to be true.

Bhubaneswar Dt.15.01.2016

DEPONENT

LIST OF ANNEXURES

- **Annexure-1** Projects completed by O&M wing during FY 2014-15 and FY 2015-16 (April to Dec-15) meeting to Query no.11 (page 33-35)
- Annexure-2 Sanction letter of Government of Odisha regarding equity infusion for construction of grid sub-stations in backward areas meeting to Query no.18 (Page 36-39)
- Annexure-3 Month wise cash flow statement for the FY 2014-15 and FY 2015-16 (April-Nov'15) meeting to Query no.20 (page 40-41)