

ORDER OF THE WEST BENGAL ELECTRICITY REGULATORY COMMISSION FOR THE YEAR 2021 – 2022

IN

CASE NO. APR - 105 /21-22

IN REGARD TO THE APPLICATION OF WEST BENGAL STATE ELECTRICITY TRANSMISSION COMPANY LIMITED FOR ANNUAL PERFORMANCE REVIEW (APR) FOR THE YEAR 2021-22 UNDER REGULATION 2.6 OF THE WBERC (TERMS AND CONDITIONS OF TARIFF) REGULATIONS, 2011 AS AMENDED.

PRESENT:

DR. MALLELA VENKATESWARA RAO, CHAIRPERSON SRI PULAK KUMAR TEWARI, MEMBER

DATE: 03.01.2024





Chapter 1 : Preamble

- 1.1 In terms of the provisions contained in regulation 2.6 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time (hereinafter referred to as the 'Tariff Regulations'), the generating companies or the licensees, as the case may be, are subject to an Annual Performance Review (in short 'APR'). West Bengal State Electricity Transmission Company Limited (hereinafter referred to as 'WBSETCL') submitted their application for Annual Performance Review for 2021-22 on 29.09.2022 in terms of the provision contained in Tariff Regulations. This application was admitted by the Commission on 03.11.2022 and was numbered as APR-105/22-23.
- 1.2 The West Bengal Electricity Regulatory Commission (hereinafter referred to as the 'Commission') introduced Multi Year Tariff procedure and as such, APR aims at carrying out adjustments arising out of difference between the actual performance and projected performance under different factors/ heads of accounts.
- 1.3 WBSETCL is one of the successor entities of erstwhile West Bengal State Electricity Board (in short 'WBSEB') and came into being with effect from 01.04.2007. It is engaged in the business of transmission of electricity and management of the State Load Despatch Centre (in short 'SLDC') in terms of West Bengal Power Sector Reform Transfer Scheme, 2007, notified by the Department of Power and Non-conventional Energy Sources, Government of West Bengal vide Notification No. 12-PO/O/III/3R-29/2006 dated 25.01.2007 followed by subsequent modifications made through Notification No. 313-PO/O/III/3R-29/2006 dated 19.09.2008. The instant application of WBSETCL for APR of 2021-22 is its second application of the 7th control period consisting of three years, based on the Audited Annual Report and Accounts for 2021-22. The adjustments as may arise out of the review of the Commission's MYT order dated 25.06.2021 in Case No. TP-90/20-21 with reference to the aforesaid Audited Annual Report and Accounts for 2021-22 and will be considered for giving effect to while determining the amount of revenue adjustable through tariff order of the ensuing year or through separate order as specified in regulation 2.6.6 of the Tariff Regulations.
- 1.4 The APR is to cover the annual fixed charges allowed to the applicant, incentives and the effect of gain sharing as per Schedule-9B and Schedule-10 of the Tariff Regulations. Element of the performance incentive or gain sharing on account of achieving better operational norms, however, was not considered for WBSETCL while determining its Aggregate Revenue Requirement (in short 'ARR') for 2021-22 in terms of the





referred schedules to the Tariff Regulations. The APR for 2021-22 is, therefore, the review of the different elements of fixed charges, categorized as controllable and uncontrollable, allowed to WBSETCL through its ARR for the year 2021-22 vis-à-vis the actuals as per the Audited Annual Report and Accounts.

- 1.5 WBSETCL submitted the required data / information in the formats specified by the Commission and also a copy of its Audited Annual Report and Accounts for 2021-22. The detailed review of its performances is being taken up in the subsequent parts of the order. The review involves examination of the expenditures incurred under different heads of fixed charges for ascertaining the admissibility of such expenditures in terms of the Tariff Regulations.
- In terms of regulation 2.6.12 of the Tariff Regulations, WBSETCL was directed to publish the approved gist of the APR application for 2021-22, as submitted by WBSETCL, on 29.09.2022 in the newspapers and also in the website of WBSETCL. The gist was then published by WBSETCL on 22.11.2022 in Áajkaal', 'Bartaman', 'The Telegraph' and 'The Times of India'. The publication invited the attention of all interested parties, stakeholders and the members of the public to the applications for APR for 2021-22 of WBSETCL and requested for submission of suggestions, objections, comments etc., if any, on the applications to the Commission within 21 days from date of publications. The approved gist along with the APR petition for 2021-22 was also published in the website of WBSETCL. Opportunities were also afforded to all to inspect the applications and download copies from the website of WBSETCL thereof.
- 1.7 No comment, suggestion, objection on the APR application for 2021-22 of WBSETCL has been received during the stipulated time.





Chapter 2 : Determination of Fixed Cost

- 2.1 The Tariff Regulations specify the classification of different fixed charge elements under controllable and uncontrollable head and also the treatment of variation between projected expenditure and actual expenditure of such fixed charge elements during truing up of ARR in APR. The uncontrollable elements of fixed charges are those elements where variations of actual expenditure with the expenditure allowed by the Commission in the ARR for the concerned year are occurred due to the factors beyond the control of the generating company or the licensee. The amount of actual expenses/ charges under such different heads of accounts are, therefore, to be considered on prudent check for carrying out positive or negative adjustments, as the case may be.
- 2.2 A summarized position of the amount claimed and allowed in the tariff order is provided as in the following table:

Table: 2A (Summary)

SI. No.	Item head	Amount Admitted in Tariff Order 2021-22 (Rs. In Lakh)	Amount Claimed in APR 2021-22 (Rs. In Lakh)
1	WBSETCL	152941.48	164874.14
2	SLDC *	1917.72	2571.60
3	Overall	154859.20	167445.74

*WBSETCL has submitted auditor's certificate specifying the head-wise details of SLDC expenses in Volume-II of its APR petition.

The permitted expenses/charges under different heads of accounts are being determined after prudence check for carrying out positive or negative adjustments under Annual Performance Review in the following paragraphs. Some mismatches are also noted in the claim vis-à-vis Form E(T) submitted by WBSETCL, which are also dealt with suitably in the subsequent paragraphs.

2.3 Employee Cost:

2.3.1 In the tariff order for 2021-22 an amount of Rs.25626.32 Lakh was admitted towards employee cost having elements like salaries and wages including allowances, bonus; contribution to PF and other funds, including terminal benefits, etc. as well as employee welfare expenses. As per Note: 20 of the Audited Annual Accounts for 2021-22, the amount of employee cost is Rs.37814.12 Lakh, after netting off the expenses of





Rs.5155.07 Lakh regarding capitalization. This includes contribution to provident and other funds of Rs.13288.02 Lakh and staff welfare expenses of Rs.125.31 Lakh. As per submission in the APR petition (Auditors' certificate in Volume-II) after adjustment of other comprehensive income of Rs.11122.68 Lakh, admissible amount of contribution to terminal benefit funds amounts to Rs.2165.34 Lakh (Rs.13288.02 Lakh – Rs.11122.68 Lakh). Further from the auditor's certificate submitted in Volume-II of the petition, it is observed that Directors' Fees & Expenses amounting to Rs.4.07 Lakh has been accounted under the head of "Other Expenses", which shall be part of Employee Cost in terms of regulation 5.9.1 of the Tariff Regulations. It is observed that, WBSETCL in its Form E(T) has claimed Rs.26691.44 Lakh (Rs.37814.12 Lakh – Rs.11122.68 Lakh) without considering the Directors' fees, but with the other comprehensive income in terms of IND-AS. Thus, the total admissible amount under employee cost as per audited annual account comes to Rs.26695.51 Lakh (Rs.26691.44 Lakh + Rs.4.07 Lakh).

- 2.3.2 In the year 2021-22, the average number of employees in WBSETCL was 2402 against the average total transmission line of 15669.505 CKM. Thus, the employee per CKM is 0.153. This is well within the recommended norms of 0.35 under Schedule 9A of the Tariff Regulations. As the man /CKM ratio is being satisfied thus the Commission admits the uncontrollable item of Employee cost of Rs.26695.51 Lakh.
- 2.3.3 Within the above total admitted amount of Rs. 26695.51 Lakh, the allocation for SLDC is Rs.540.88 Lakh on the head of employee cost of SLDC as per Auditor's Certificate on SLDC Expenses in Volume-II of APR Petition. Thus, the allocated amount to WBSETCL for its transmission business stands to Rs.26154.63 Lakh (Rs.26695.51 Lakh- Rs. 540.88 Lakh). The break-up of the employee cost admitted for the year 2021-22 is given in the Table 2B below:

Table: 2B (Employees Cost)

Particulars	As per Claim	As per Claim Admitted in APR (Rs. I		
		WBSETCL	SLDC	Total
Employee Cost	26691.44	26154.63	540.88	26695.51

2.4 Operation and Maintenance (O&M) Expenses:

2.4.1 O&M expenses primarily consists of 'Repair & Maintenance Expenses', 'Administrative & General Expenses' and 'Other Operational Expenses' including outsourcing, etc. In Tariff Regulations O&M expenses are basically considered as controllable expenses, except manpower related costs. As per regulation 2.6.10 of the Tariff Regulations any additional expense to any controllable item may be allowed if inflation is found more





than 15% with respect to the price considered in tariff order or the business volume parameter (Average Transmission Line Length in CKM) increases by more than 5% to the values considered in the tariff order or if specifically mentioned in the Tariff Order.

2.4.2 In the tariff order of seventh control period pertaining from FY 2020-21 to FY 2022-23 the expenditures for different heads which are sensitive to business volume parameters had been projected by the Commission on the basis of trend of inflation as well as the business volume growth of the previous years vis-à-vis the expenditure projected by WBSETCL. For this purpose, a hybrid index (HI) consisting of 60% and 40% weightage on WPI (Wholesale Price Index) and CPI (Consumer Price Index) respectively has been used by the Commission. From the analysis of business volume parameters and inflation indexes in table below, it is found that the variations due to inflation are well within the limits and the variations of business volume parameters are reduced beyond the limits as specified in regulation 2.6.10 of the Tariff Regulations:

Table: 2C (Inflation and Business Volume Parameters)

Particulars	Tariff Order 2021-22	Actual Value of 2021-22	Variation in %
Business Volume parameter Average Transmission Line Length (CKM)	16728.12	15669.51	-6.33%
WPI in %	1.67%	12.97%	
CPI in %	7.54%	5.10%	
Inflation in hybrid index [WPI: CPI (60:40)] in %	4.02%	9.82%	

Actual figures of WPI, CPI from Office of Economic Advisor, GOI and CPI numbers for Industrial Workers, Labour Bureau, GOI respectively

- 2.4.3 In the Tarif order of 2021-22 under paragraph 4.9.1 it has been specified that, in case while finalizing the APRs the actual value of Transmission Line Length (TLL) is found to be higher/ lower than the admitted value in the Tariff Order, then impact of such amount will be adjusted. And, thus the impact due to regulation: 2.6.10 of Tariff Regulations will naturally get adjusted.
- 2.4.4 In view of the above, the admissible amounts under the controllable heads are as below:





Table: 2D (Adjustments as in Regulation 2.6.10 of Tariff Regulations and Paragraph 4.9.1 of Tariff Order)

Sr No	Particulars	Claimed in Tariff Petition	Tariff Order for 2021-22	Impact of Para 4.9.1 of Tariff Order & Reg 2.6.10 of Tariff Regulations	Admissible Amount
			(Rs. In Lakh)		
		(1)	(2)	(3)	(4) = 2+3
Α	Repair & Maintenance	7960.31	7626.35	-108.65	7517.70
1	Rent	125.99	130.41	43.65	174.06
	Legal Charges	59.80	36.80	-2.63	34.17
В	Auditor's Fees	82.88	80.29	-5.69	74.60
	Others (+ Consultancy)	2123.39	2117.78	-133.92	1983.86
	Total A&G	2392.06	2365.28	-98.59	2266.69
С	Overall	10352.37	9991.63	-207.25	9784.38

Element wise analysis of actual expenditure vis-à-vis the permissible amount for the controllable items during 2021-22 are dealt with in the following paragraphs:

2.4.5 Repair and Maintenance (R&M) Expenses:

2.4.5.1 In APR application the actual expenditure under Repair & Maintenance head has been claimed as Rs.9046.13 Lakh against the admissible amount of Rs.7517.70 Lakh as per Table: 2D above. Since, R&M expense is a controllable element, the Commission decides to restrict the admissible amount to Rs.7517.70 Lakh.

2.4.5.2 From the auditor's certificate submitted at page 62 of Volume-II, it is observed that, as on 31.03.2022 out of 15750.020 CKM total transmission line length maintained by WBSETCL, 637 CKM of line pertains to assets not owned but maintained by WBSETCL.

2.4.5.3 Further it is observed that, in the claim of total Repair & Maintenance expenses, Rs.35.68 Lakh is pertaining to SLDC operation as per Auditor's Certificate on SLDC Expenses in Volume-II of APR Petition (P-49). The Commission admits the said amount of Rs.35.68 Lakh as SLDC repair & maintenance expense and Rs.7482.02 Lakh (Rs.7517.70 Lakh - Rs.35.68 Lakh) as repair maintenance expenses related to transmission





business of WBSETCL. The break-up of the repair & maintenance expenses admitted for the year 2021-22 is given in the Table: 2E below:

Table: 2E (Break-up of Repair & Maintenance Expenses)

Particulars	Admitted in	APR 2019-20 (Rs. li	n Lakh)	
	WBSETCL	SLDC	Total	
Repairs & Maintenance	7482.02	35.68	7517.70	

2.4.6 Administrative & General (A&G) Expenses:

2.4.6.1 A&G expenses has four major elements such as Rent, Legal Charges, Audit fees & expenses and Other Administrative & General Expenses. As per regulation the other administrative & General expenses together with rent, legal charges, audit fees & expenses are part of the A&G expenses and the variation of actual expenses corresponding to the admitted amount in tariff order is permissible in terms of regulation 2.5.5(iv).

2.4.6.2 It is seen from the form E(t) in Volume -II of the petition that the claim under the head other A&G expenses along with the consultancy charges for the year 2021-22 is Rs.1397.64 Lakh (Rs.1349.27 Lakh + Rs.48.37 Lakh) which includes Directors' fees & expenses amounting to Rs.4.07 Lakh and netting off the expenses capitalized. However, the expenses towards Directors' fees & expenses has already been admitted under the head employee cost. The admissible amount under the head of other A&G expenses is Rs.1983.86 Lakh as shown in Table: 2D above. On detailed scrutiny of audited annual accounts vis-à-vis the claim in APR petition, it is observed that, the claim of other A&G expenses also excluded Rs.1217.30 Lakh pertaining to Corporate Social Responsibility (CSR). It is also seen from the 'Auditors' Certificate' for 'Other Expenses' that Rs.273.72 Lakh towards 'Provision for Stalled Projects' has been included in other A&G expenses which is not admissible. Such provision comes into play after prudence check whenever cash flow be made.

2.4.6.3 So, the audited amount regarding other A&G expenses incurred in 2021-22 comes to Rs.1119.85 Lakh (Rs.1397.64 Lakh - Rs.4.07 Lakh - Rs.273.72 Lakh) which is less than the admissible amount Rs.1983.86 Lakh. It is further noted that, WBSETCL has adjusted the amount of Rs.293.10 Lakh pertaining to capitalization of A&G expenses as mentioned under Note: 23 of the Audited Annual Accounts.

2.4.6.4 So, the Commission admits Rs.1119.85 Lakh in the head of other A&G expenses, being minimum between the admissible amount and the audited amount in this regard.





Table: 2F (Administrative & General Expenses)

Particulars	Admissible amount as per Table 2D	As per APR Petition	Admitted in APR
		(Rs. In Lakh)	
Rent	174.06	148.68	148.68
Legal Charges	34.17	65.47	34.17
Auditor's Fees	74.60	86.09	74.60
Other A&G Expenses (Excluding CSR, Directors' Fees, Provision for Stalled Projects and Expenses Capitalised)	1983.86	1393.57	1119.85
Adjustment under regulation 2.5.5 (iv)	III-II-II		42.79
Total	2266.69	1693.81	1420.09

2.4.6.5 In its claim of total Administrative & General expenses, Rs.48.33 Lakh is pertaining to SLDC operation. The Commission admits an amount of Rs.48.33 Lakh as SLDC A&G expense including bank charge of Rs.0.35 Lakh for the year 2021-22. The break-up of the Administrative & General expenses admitted for the year 2021-22is given in the Table 2H below:

Table: 2G (Break-up of Administrative & General Expenses)

Particulars	Admitted in APR (Rs. In Lakh)		
	WBSETCL	SLDC	Total
Administrative & General Expenses	1371.76	48.33	1420.09

2.4.7 Other Operational Expenses:

- 2.4.7.1 In respect of allowance of expenses such as, Rates & Taxes, license fee and filing fees and Cost of outsourcing the principle adopted in the Tariff Order has been followed and the admitted expenses are discussed in the following paragraphs based on submitted forms and Auditors' Certificate.
- 2.4.7.2 WBSETCL has claimed an amount of Rs.130.70 Lakh in Form: 1.17 on account of Rates and Taxes related to municipal taxes paid for different establishment for 2021-22 against total approved amount of Rs.91.46 Lakh in tariff order. Additionally, WBSETCL has claimed Rs.38.37 Lakh in Form: 1.13 in the head of Service Tax & Entry Tax. But, as per Note: 23 of the Audited Annual Accounts, it is found as Rs.130.70 Lakh





only. All the mentioned taxes being statutory in nature, the amount Rs.130.70 Lakh is admitted as per the Audited Annual Accounts.

2.4.7.3 WBSETCL has claimed Rs.286.55 Lakh for the year 2021-22 towards license fee and filing fees. From note 23 of the Audited account it is observed that WBSETCL has booked Rs.213.68 Lakh as license fees and Rs.72.87 Lakh as fees for filing petitions. This being statutory and uncontrollable expenses, the Commission decides to admit the full amount of Rs.286.55 Lakh (Rs.213.68 Lakh + Rs.72.87 Lakh) under license fee and filing fees.

2.4.7.4 WBSETCL has claimed an amount of Rs.2547.55 Lakh on account of cost of outsourcing for security and Rs.1438.63 Lakh for outsourcing of vehicle for the year 2021-22 against the admitted amount of Rs.2486.35 Lakh and Rs.1112.57 Lakh respectively in the tariff order. The Commission had earlier admitted Rs.2374.59 Lakh for outsourcing of security and Rs.1119.59 Lakh for outsourcing of vehicle for the year 2020-21. WBSETCL submitted that, the expenditure on the security of their assets, has been increased to minimize loss or theft at site. It has also been claimed that, the vehicle expense has been increased little due to exorbitant price hike of fuel. The Commission observes that, outsourcing being on manpower and vehicle related expenses, which are uncontrollable as per the Tariff Regulations, the actual amount is admitted. Item wise expenses on the head of other operational expenses is being provided in Table below:

Table: 2H (Other Operational Expenses)

Particulars	Allowed in Tariff Order	2021-22 (APR Petition)	2021-22 (Admitted)
		(Rs. In Lakh)	
Rates & Taxes (+ Service & Entry Tax)	91.46	169.07	130.70
License and Filing Fees	277.27	286.55	286.55
Outsourcing – Security Expense	2486.35	2547.55	
Outsourcing – Vehicle Charges	1112.57	1438.63	2547.55
Total	3967.65		1438.63
	3907.03	4441.80	4403.43

2.5 Return on Equity:

2.5.1 On scrutiny of annual accounts and different forms in Volume II of the APR petition for 2021-22 of WBSETCL, the following facts are observed:







- The closing balance of general reserves as on 31.03.2021 is Rs.411633.92 Lakh as per Reserve & Surplus Schedule of the Audited Annual Accounts;
- ii) The actual addition to the equity base in 2021-22 is Rs.74051.16 Lakh (Rs.57359.46 Lakh + Rs.16691.70 Lakh) as per Reserve & Surplus Schedule of the Audited Annual Accounts, as Rs.16691.10 Lakh transferred to Reserve & Surplus on redemption of Debentures.
- iii) It is observed that WBSETCL in Note: 17 has shown cumulative consumers' contribution to fixed assets as Rs.46265.30 Lakh during 2021-22, whereas in 2020-21 the cumulative balance was shown as Rs. 44939.64 Lakh. It is noted that Rs.5645.38 Lakh is received and Rs.4319.72 Lakh is transferred on completion of asset including supervision charges in 2021-22 as per Note: 17.3, while Rs.3756.28 Lakh (Rs.23553.88 Lakh Rs.19797.60 Lakh) is received as deferred revenue owing to consumers' contribution as per Note: 13. The Commission decides to arrive at the figures from Note: 13, ie. Rs.3756.28 Lakh of the audited annual account as the assets from 'Consumers Contribution' transferred on completion. Similarly, the government grant during 2021-22 as Rs.178.31 Lakh (Rs.20486.33 Lakh Rs.20308.02 Lakh) is considered by the Commission.
- iv) The admissible equity base at the beginning of 2021-22 is considered as Rs.315543.59 Lakh as per closing balance computed in APR order of 2020-21 and then, the same is calculated as Rs.335672.56 Lakh at the end of 2021-22.
- v) From note 1 (Fixed Assets) of the notes to accounts of audited annual accounts, it is observed that during 2021-22, the addition to tangible fixed assets was Rs.71031.16 Lakh. There was no intangible fixed assets addition. After excluding the consumer contribution and grant funded assets as considered in para (iii) above, net asset addition during 2021-22 comes to Rs.67096.57 Lakh (Rs.71031.16 Lakh Rs.3756.28 Lakh Rs.178.31 Lakh) to be considered as addition to fixed assets for the purpose of computation of return on equity. The computations of the Equity Base for allowing returns following the amount of returns are shown hereunder:

Table: 2I (Computation of Return on Equity)

SI.	(Parada i Articial i Oli E	
No.	Particulars	Admitted Amount in
	Actual Equity base at the beginning of the year	(Rs. In Lakh)
1	Share Capital	
	Free Reserve	110552.00
	Total	411633.92
1-1		522185.92





SI.	Particulars	Admitted Amount in
No.		(Rs. In Lakh)
2	Admissible equity base at the beginning of the year	315543.59
3	Addition to Equity base during the year	74051.16
4	Actual Equity base at the end of the year	596237.08
5	Net Addition to the original cost of Fixed Assets during the year	67096.57
6	Normative addition to Equity [30% of sl. No. (5) above]	20128.97
7	Amount to be considered as addition during the year being lower of (3) & (6)	20128.97
8	Admissible Equity Base at the end of year [(8)= (2)+(7)]	335672.56
9	Average admissible Equity Base [((2)+(8))/2]	325608.08
10	Allowable return @ 15.5% on sl. No. (9) above	50469.25

2.6 **Borrowing Cost**:

- 2.6.1 WBSETCL has claimed Rs.36009.32 Lakh of total borrowing cost for the year 2021-22 as detailed below:
- (i) Rs.25778.79 Lakh as interest on capital borrowings,
- (ii) Rs.9492.19 Lakh as interest on normative loan,
- (iii) Rs.699.97 Lakh for interest on working capital and
- (iv) Rs.38.37 Lakh for other finance charges.
- 2.6.2 In the note-21 of the audited annual account the total financing cost after interest capitalized is reflected as Rs.26504.77 Lakh. The reconciliation based on actual borrowing cost (excluding normative interest) claimed in Form-C and Form 1.17(c) vis-à-vis note-21 of audited accounts is as below:

Table: 2J (Detail of Borrowing Costs)

Particulars	Note-20 of Audited Account	As Claimed in Form: C and Form: 1.17 (c)
	(Rs. In Lakh)	
Interest on Loan Capital	04700 04	31019.06
Interest on Working Capital	31700.01	699.97
Other Finance Charges	38.37	38.37
Less: Interest Capitalized	5233.61	5233.61
Total	26504.77	26523.79



2.6.3 <u>Interest on Loan Capital:</u> WBSETCL vide submission made in Form: E(T) of volume -II of the petition has claimed interest on capital loans amounting to Rs.25778.79 Lakh as due on opening outstanding debt and fresh borrowing made during the year 2021-22. The Commission computes normative equity and normative debt considering asset addition during the year as follows:

Table: 2K (Break-up of Debt & Equity to Service)

SI No	Particulars	Amount (Rs. In Lakh)
1	Asset Addition as per Books of Accounts in 2021-22	71031.16
2	Less	
i	Assets on Consumer Contribution in 2021-22	3756.28
ii	Assets on Government Grant in 2021-22	178.31
3	Net Asset Added in 2021-22 (1 – i - ii)	67096.57
4	Serviceable through Equity	20128.97
5	Serviceable through Debt	46967.60

2.6.3.1 The Commission now admits 'Interest on Loan Capital' as following ie. Rs.25785.45 Lakh considering the actual drawal of loan capital for 2021-22 ie. Rs.34262.00 Lakh being less than the normative debt ie. Rs.46967.60 Lakh.

Table: 2L (Detail of Loan Capital)

SI No	Particulars	Original Loan	Opening Balance	Repayment Due	Fresh Drawal	Interest Paid	Closing Balance
		(Rs. In Lakh)					
1	Secured Bonds (9.75%)	0.00	0.00	0.00	0.00	0.00	0.00
2	Secured Bonds (10.29%)	25000.00	25000.00	25000.00	0.00	817.56	0.00
3	PFC Limited	10680.50	8010.38	1068.05	0.00	720.10	6942.33
4	REC Limited	187361.08	165018.12	17814.61	0.00	15425.68	147203.51
5	LIC	14663.42	4924.89	1231.23	0.00	405.60	3693.66
6	NABARD	83315.81	44316.58	3545.00	25433.00	4633.93	66204.58
7	HUDCO	8923.00	4142.82	1274.72	0.00	337.82	2868.10
8	State Bank of India	53537.29	49591.16	4.14	3829.00	4014.74	53416.02
9	PNB	5000.00	0.00	0.01	5000.00	6.66	4999.99
10	State Government Loan	117284.62	55061.48	4850.50	0.00	4656.97	50210.98
11	Toal Loan Capital	505765.72	356065.43	54788.26	34262.00	31019.06	335539.17
12	ess: Interest Capitalised					-5233.61	000000.17





SI No	Particulars	Original Loan	Opening Balance	Repayment Due	Fresh Drawal	Interest Paid	Closing Balance
				(Rs. In L	akh)		
13	Net Interest Admitted					25785.45	

2.6.4 <u>Interest on Normative Debt:</u>

2.6.4.1 WBSETCL has claimed a sum of Rs.9492.19 Lakh towards interest on normative loan in its submission under Form -C. The Commission proceeds to determine the admissible amount of interest on normative debt following the principle adopted by the Commission in previous APR order by considering the cumulative asset addition vis-à-vis actual addition to debt since 2007-08 as below:

Table: 2M (Cumulative Debt and Fixed Assets)

Year	Addition to Debt as Admitted	Addition to Fixed Assets as Admitted
	(Rs. In Lakh)	(Rs. In Lakh)
2007 – 2008	29249.00	0.00
2008 – 2009	23427.00	32637.10
2009 – 2010	54041.00	70342.68
2010 – 2011	11443.00	24742.55
2011 – 2012	38652.00	23698.70
2012 – 2013	6309.37	45400.13
2013 – 2014	18113.73	42158.59
2014 – 2015	38655.02	49709.04
2015 – 2016	45822.66	61061.05
2016 – 2017	45547.45	59332.71
2017 – 2018	45101.66	
2018 – 2019	22457.80	91873.82
2019 – 2020	30707.49	103014.62
2020 – 2021		72145.61
	47048.52	67212.17
2021 - 2022	34262.00	67096.57
Total	490837.70	810425.34





2.6.4.2 As the cumulative actual addition to debt Rs.490837.70 Lakh during the above period is lower than 70% of the cumulative addition to the fixed assets (ie. Rs.810425.34 Lakh) during this period, the asset created by deploying equity beyond the normative admissible equity during the year is required to be serviced as normative debt in terms of the Tariff Regulations. The admissible interest on such normative debt comes to Rs.2323.90 Lakh as detailed below:

Table: 2N (Interest on Normative Debt)

SI No	Particulars	Derivation	Amount (Rs. In Lakh)
1	Opening Balance of Normative Debt before Adjustment	A1	24028.0
2	Less: Cumulative Repayment of Normative Debt upto Previous Year	A2	3444.7
3	Opening Balance of Net Normative Debt	A=A1-A2	20583.30
4	Actual Addition to Debt for Current Year	В	34262.00
5	Addition to Fixed Asset for Current Year	С	67096.57
6	Normative Addition to Debt @70% of "C"	D=CX0.7	46967.60
7	Normative Addition to Debt for Current Year as Considered to APR	E=Higher of B & D	46967.60
8	Addition to Gross Normative Debt for Current Year	F1=E-B	12750.60
9	Repayment of Normative Debt for Current Year	F2=A/10	2058.33
10	Net Additional Gross Normative Debt for Current Year	G=F1-F2	10647.27
11	Closing Balance of Net Normative Debt	H=A+G	31230.57
12	Average Balance of Normative Debt	I=(A+H)/2	25906.94
13	Weighted Average Rate of Interest Paid on Loan Capital for Current Year	J	8.9702%
14	Interest on Normative Debt Admitted	K=J*I	2323.90
15	Closing Gross Normative Debt	B1=A1+F1	36733.69
16	Cumulative Repayment of Normative Debt upto Current Year	B2=A2+F2	5503.12





2.6.5 Interest on Working Capital:

2.6.5.1 In the APR for 2021-22, WBSETCL has claimed an amount of Rs.699.97 Lakh as 'Interest on Working Capital' and in Form C of Volume II of the APR petition, it is submitted that, WBSETCL has obtained short-term loan from Canara Bank and UBI to meet up its working capital and has paid an interest amounting same to Rs.699.97 Lakh.

2.6.5.2 As per Note: 21 of the audited annual account the total financing cost including other finance charges of Rs.38.37 Lakh and netting off interest capitalized is reflected as Rs.26504.77 Lakh out of which Rs.25785.45 Lakh is already admitted as interests on long term capital loans in Table: 2L, so the balance Rs.642.58 Lakh (Rs.26504.77 Lakh – Rs.25785.45 Lakh – Rs.38.37 Lakh) stands as interest on working capital.

2.6.5.3 In terms of regulations 5.6.5.1 of the Tariff Regulations, working capital requirement on normative basis is @ 18% on the base amount derived by summation of annual fixed charges and fuel and power purchase cost reduced by the elements of the ARR determined, viz., depreciation etc. The Commission vide Paragraph 7 of its order dated April 6, 2022 in Case No SM-30/21-22 has ordered that "The interest on working capital which has already been determined for the period effective on and from 01.04.2016 in the tariff orders issued by the Commission considering the SBI PLR/MCLR without any float will be trued up based on actual working capital interest paid, subject to the ceiling of the interest on working capital assessed on normative basis at the rate of one-year MCLR of SBI, as on 1st April of the concerned year, plus 350 basis points."

2.6.5.4 The one-year Marginal Cost of Lending Rates (MCLR) of the State Bank of India as on 1st April, 2021 was **6.5%**. The Commission thus has considered normative Interest on working capital at the rate of 10% (6.5% + 3.5%) for interest calculation as per regulation 5.6.5.2 of Tariff Regulations. The following table shows the calculation in this regard.

Table: 20 (Interest on Working Capital)

SI. No.	Particulars	Amount (Rs. In Lakh)
1	Annual Fixed Charges for 2021-22	132286.63
2	Less: Depreciation	
3		30713.10
J	Less: Advance Against Depreciation	0.00





SI. No.	Particulars	Amount
4	Less: Poturo on Fauit.	(Rs. In Lakh)
	Less: Return on Equity	50469.25
5	Less: Reserve for Unforeseen Exigencies	0.00
6	Less: Deferred Revenue Expenses	
7	Total Deductions: Sum of (2) to (6)	0.00
8	<u></u>	81182.35
	Allowable Fixed Charge for Computation of Working Capital (1)-(7)	51104.27
9	Allowable Working Capital @18% on 8	9198.77
10	Interest at State Bank MCLR (6.5%) + 3.5%	
11	Interest on Working Capital [9 x 10]	10%
12		919.88
	Actual Interest for Working Capital Paid	642.58
13	Interest on Working Capital Admitted [Min (11,12)]	642.58

- 2.6.5.5 As the actual interest claimed by WBSETCL being less than the normative interest on working capital, the Commission admits the actual interest of Rs.642.58 Lakh for the year 2021-22 as per the provisions of the Tariff Regulations as explained in Paragraph: 2.6.5.2.
- 2.6.6 Other Finance Charges: WBSETCL has claimed Rs.38.37 Lakh as other financial charges in its APR petition for the year 2021-22. Rs.38.37 Lakh booked under note 21 of the audited account is admitted under the head 'other finance charges' for the year 2021-22 in terms of regulation 5.6.4.2 of the Tariff Regulations.
- 2.6.7 In view of above analysis, the total admissible borrowing cost comes as below:

Table: 2P (Admissible Borrowing Cost)

As Claimed (Rs. In Lakh)	Admitted (Rs. In Lakh)	
	ramitted (13. III Lakii)	
35270.98	25785.45	
	2323.90	
699.97	642.58	
38.37	38.37	
36009.32	28790.30	
	38.37	





2.7 Depreciation:

- 2.7.1 In the tariff order for the year 2021-22 Rs.33628.16 Lakh was allowed under the head of Depreciation. In audited accounts of WBSETCL for 2021-22 under note-22, depreciation has been shown as Rs.31804.41 Lakh. Depreciation as reported in Accounts includes amortization of Rs.1091.31 Lakh following IND AS accounting procedure.
- 2.7.2 Depreciation is an uncontrollable head of expenditure in ARR for any base year of the control period and the related ensuing years. Accordingly, the Commission admits Rs.30713.10 Lakh as depreciation for the year 2021-22 after due adjustment on amortization amount of Rs.1091.31 Lakh (Rs.589.45 Lakh + Rs.501.86 Lakh). As per the auditor's certificate submitted in volume-II of APR petition depreciation of SLDC assets is Rs.4.54 Lakh during 2021-22. Thus, the break-up of depreciation admitted in 2021-22 is as below:

Table: 2Q (Break-up of Depreciation)

Particulars	Admi	nitted in APR (Rs. In Lakh)		
	WBSETCL	SLDC	Total	
Depreciation	30708.56	4.54	30713.10	

2.8 Advance Against Depreciation / Interest Credit:

- 2.8.1 In terms of the Tariff Regulations, depreciation is primarily used for repayment of capital loan. Where, the amount of depreciation falls short of amount of loan repayment such shortfall is allowed under Advance Against Depreciation (AAD) limited to 1/10 of original amount of allowable loan. Similarly, when amount of loan repayment in a year is less than allowed depreciation, an interest credit at the rate of weighted average cost of debt for the corresponding year needs to be adjusted on such excess depreciation charged. Further in terms of the Tariff Regulations, it is required to be ensured that the depreciation allowed should not go beyond 90% of the original cost of assets and after repayment of entire loan the resulting depreciable amount shall be spread over the balance useful life of the fixed asset. The Commission has computed the cumulative amount of 'excess of depreciation over repayment' as Rs.29206.79 Lakh as on 31.03.2021 in the APR order for 2020-21.
- 2.8.2 Based on the admitted depreciation and repayment of capital loan, calculation of 'Interest Credit' is shown in the following table.





Table: 2R (Advance Against Depreciation / Interest Credit)

SI No	Particulars	Derivation	Amount (Rs. In Lakh)
1	Repayment of Admissible Loan	Α	54788.26
2	1/10th of Original Amount of Loan	В	50576.57
3	Maximum Repayment Admissible	C=MIN (A, B)	50576.57
4	Depreciation Admitted	D	30713.10
5	Excess of Depreciation & AAD over Repayment upto Last Year	E	29206.79
6	Excess of Depreciation & AAD over Repayment upto Current Year	F = (D+E) - C	9343.32
7	Weighted Average Rate of Interest Paid on Loan Capital for Current Year	G	8.9702%
8	Interest Credit for Current Year	Н	838.11

- 2.9 <u>ULDC Charges:</u> WBSETCL has claimed expenditure towards payment of ULDC charges to Power Grid Corporation of India Limited as Rs.119.68 Lakh, which is evident from note-23 of the audited account. The entire amount has been claimed under SLDC expenses as per the auditor's certificate submitted as Annexure-III. Accordingly, the Commission decides to admit the amount under SLDC expenses.
- 2.10 <u>ERPC Charges:</u> As per note 23 to the annual accounts of 2021-22, an amount of Rs.16.00 Lakh was paid to ERPC (Eastern Regional Power Committee) and entire amount is claimed under transmission business of WBSETCL. The same is admitted by the Commission.

2.11 WBPDCL Charges (Bakreswar and Santaldih Transmission Systems):

- 2.11.1 WBSETCL is operating the transmission system constructed by the West Bengal Power Development Corporation Limited (in short 'WBPDCL') associated with the Bakreswar and Santaldih Power Stations. WBPDCL is to recover, the expenditure incurred by them relating to these transmission systems, from WBSETCL in instalments.
- 2.11.2 As per note 23 to the audited accounts of 2021-22, an amount of Rs.1539.93 Lakh was paid by WBSETCL towards transmission charges to WBPDCL during the year. The Commission now admits the







amount of Rs.1539.93 Lakh on account of charges payable to WBPDCL for Bakreswar and Santaldih transmission systems in the APR for 2021-22.

- 2.11.3 The Commission shall, however, determine the admissible fixed charge of 'Bakreswar Transmission System' and 'Santaldih Transmission System' for the year 2021-22 in the APR order of WBPDCL for the year 2021-22. Adjustment, if any, on the payable amount of WBSETCL to WBPDCL for the Bakreswar and Santaldih Transmission systems due to such APR order of WBPDCL, shall be dealt with in the tariff order in respect of WBPDCL for the subsequent period.
- 2.12 Income Tax: In the APR application of 2021-22, WBSETCL has claimed an amount of Rs.16075.17 Lakh for income tax. The Commission observes from the cash flow statement of the audited annual accounts of WBSETCL that, Rs.16075.17 Lakh has been paid as Income Tax during 2020-21. Accordingly, the Commission decides to admit the amount of Rs.16075.17 Lakh under the head Income tax for the year 2021-22.
- Reserve for Unforeseen Exigencies: No amount has been claimed by WBSETCL under this head. However, in terms of regulation 5.11 of the Tariff Regulations, WBSETCL was allowed Rs.3834.2 Lakh in the tariff under head Reserve for Unforeseen Exigencies from 2006-07 to 2010-11. WBERC vide order dated 10.6.2014 while disposing Review of APR order for 2011-12 directed WBSETCL to maintain investment under the fund as on 31.3.2013 i.e. Rs.4804.69 Lakh and thus, WBSETCL to continue with investment of such amount with accrued interest. The Commission does not consider to allow any amount under this head in APR for 2021-22. WBSETCL shall continue with the investment of such fund in terms of regulations 5.11.1 and 5.24 of the Tariff Regulations failing which an amount as per provision of regulation 5.11.2 will be withheld in the ARR of future year.

Table: 2S (Reserve for Unforeseen Exigency Fund)

SI. No.	Particulars	As per Annual Accounts for 2021-22 (Rs. In Lakh)
1	Opening Balance of Reserve for Unforeseen Exigency Fund	
2	Addition during the Year	9282.21
3	Reserve for Unforeseen Exigency Fund as on 31.03.2022	589.26
lote: A	us per Auditor's Certificate vide Dir(Op)/WBSETCL/RAC/1(xi)/419 d	9871.47 ated 07 02 2023, submitted by





SI. No.	Particulars	As per Annual Accounts for 2021-22	
		(Rs. In Lakh)	
wbsetcl on 08.0 as on 31.12.2022 i	02.2023, actual investment against reserve for is Rs 10521.51 lakh	or unforeseen exigencies with accrued interes	

- 2.14 <u>Special Allocations:</u> WBSETCL has claimed Rs.3345.25 Lakh under the head 'Special Allocation' for recovery of APR claims in 2020-21. It may be noted that Rs.3345.25 Lakh as revenue recoverable for 2020-21 which includes adjustments of APR for 2013-14 & 2014-15 and the adjustments of APR for 2013-14 & 2014-15 have already been adjusted in the Tariff Order for 2022-23. So, the Commission accordingly does not consider any recovery claims.
- Income from Non-tariff Sources: The incomes from other non-tariff sources during the year 2021-22 has been claimed as Rs.3230.96 Lakh excluding income related to SLDC. WBSETCL has submitted that the claimed amount of Rs 3230.96 lakhs excludes the interest earned on Exigencies Reserve Fund investment since the same is required to be invested in the reserve fund and interest earned on investment pertaining to SLDC which are also future investment requirement of SLDC. As per note 19 to the annual accounts of WBSETCL total other income is Rs.4353.05 Lakh. In Para: 2.13 above, Rs.493.86 Lakh is hereby recorded as interest on Reserve for Unforeseen Exigencies Fund. It is also seen from the Auditor's certificate submitted by WBSETCL SLDC related other income is Rs 1102.75 Lakh. Accordingly, the Commission admits Rs. 2756.44 Lakh (Rs.4353.05 Lakh Rs.493.86 Lakh Rs.1102.75 Lakh) as income from non-tariff sources in 2021-22 for the purpose of APR determination on transmission business of WBSETCL.
- 2.16 <u>SLDC Expenses:</u> WBSETCL has submitted the details of SLDC expenses through auditor's certificate as Annexure-III in Volume-II of their APR petition specifying capital expenditure of Rs.19.49 Lakh and revenue expenditure of Rs.749.11 Lakh. SLDC expenses on different revenue heads such as employee cost, repair & maintenance cost, administrative & general expense, rates & taxes, depreciation, etc. are already discussed in above paragraphs as described in table below:

Table: 2T (SLDC Expenses)

SI. No.	Particulars	As Claimed	Admitted in APR
		(Rs. In Lakh)	(Rs. In Lakh)
1 UID	ULDC Charges		
	orbo onarges	119.68	119.68





SI. No.	Particulars	As Claimed	Admitted in APR	
		(Rs. In Lakh)	(Rs. In Lakh)	
2	Employee Cost	540.88	540.88	
3	Repair & Maintenance Expenses	35.68	35.68	
4	Administrative & General Charges	48.33	48.33	
5	Depreciation	4.54	46.54	
	Total Expenses	749.11	749.11	

- 2.16.1 The Commission in the tariff order of 2021-22 has allowed SLDC to continue to levy SLDC charges at the rate of 0.5 paise /kWh every month from the licensees. The amount is to be deposited in WBSLDC Fund as per West Bengal Electricity Regulatory Commission (Miscellaneous Provisions) Regulations, 2013 and all expenditure for operation of SLDC shall be incurred from WBSLDC Fund exclusively. From note-18 of the audited accounts of WBSETCL, the amount earned during 2021-22 is Rs.2571.60 Lakh.
- 2.17 Income from Short-term Open Access: As per note -18 to the audited accounts of WBSETCL, an amount of Rs.31129.87 Lakh has been earned by WBSETCL under the head "Short Term Open Access Charges" during the year 2021-22. Thus, the total income of Rs.31129.87 Lakh from short-term open access is being considered by the Commission an income during the year 2021-22 and adjusted from the Gross ARR.
- 2.18 <u>Incentive for Transmission Licensee:</u> WBSETCL in their APR application has claimed Rs.280.99 Lakh as incentive on the basis of their annual availability of 99.92% during the year 2021-22 against the target availability for incentive of 99.75%. In view of admitted ARR, the admissible incentive in terms of paragraph 8 of schedule 10 of the Tariff Regulations, comes to Rs.232.72 Lakh as detailed below:

Table: 2U (Computation of Incentive)

SI. No	Item	Amount (Rs. In Lakh)
1	Net Revenue Requirement of WBSETCL excluding Incentive	132286.63
2	Annual Availability	
3	Target Availability	99.92%
4	Incentive [(1) x ((2) – (3)) / (3)]	99.75%
	mocritive [(1) x ((2) - (3)) / (3)]	225.45

2.19 <u>Fixed Charges as Admitted:</u> Based on the foregoing analyses, the total amount of fixed charges allowable to WBSETCL for transmission utility function has been shown in Annexure: 1. As may be seen there-





from, the total allowable fixed charges for WBSETCL comes to Rs.132512.08 Lakh is related to transmission business.

Annexure: 1 (Aggregate Revenue Requirement)

No	lland fr: tak	Claimed in APR	Admitted in APR	SLDC	Transmissior Business
1	Employee Cost	(Rs. In Lakh)			
2		26691.44	26695.51	540.88	26154.63
3	The area wanterlance (Naw)	9046.13	7517.70	35.68	7482.02
4	Administrative and General Charge	1697.87	1420.09	48.33	1371.76
5	Licensing & Filling Fee	286.55	286.55		286.55
6	Outsourcing Cost	3986.18	3986.18	-	3986.18
	Rates & Taxes (Except Income & Profit)	169.07	130.70	-	130.70
7	Interest on Loan Capital	25778.79	25785.45	1984 III	25785.45
8	Interest on Normative Debt	9492.19	2323.90	-	2323.90
9	Other Finance Charge	38.37	38.37		38.37
10	Depreciation	31804.41	30713.10	4.54	30708.56
11	Advance Against Depreciation	18772.17			30700.56
12	Income Tax	16075.17	16075.17	_	10075 47
13	Reserve for Unforeseen Exigencies	0.00	0.00		16075.17
14	Returns on Equity	51966.41	50469.25		0.00
15	WBPDCL Charges (Bakreswar & Santaldih Transmission Systems)	1539.93	1539.93	-	50469.25 1539.93
16	ULDC Charge	119.68	119.68	110.00	
17	ERPC Charge	16.00		119.68	
18	Interest on Working Capital	699.97	16.00		16.00
19	Gross Revenue Requirement	198180.33	642.58		642.58
20	Less: Non-tariff Income		167760.16	749.11	167011.05
	Less: Interest Credit	3230.96	2756.44	-	2756.44
	Less: SLDC Charges	0.00	838.11	-	838.11
	Less: STOA Charge	2571.60			
21	Net Revenue Requirement	31129.87	31129.87	-	31129.87
22	Add: Incentive	161247.90	133035.74	749.11	132286.63
23	Add: Special Allocation	280.99	225.45		225.45
24	Aggregate Revenue Requirement (ARR)	3345.25	-	- E-1	
	33 34.0 (Coronae Requirement (ARR)	164874.14	133261.19	749.11	132512.08





Chapter 3: Amount Adjustable on APR

- 3.1 As shown at the Paragraph: 2.19 of the previous chapter, the re-determined amount of fixed charges of WBSETCL for the year 2021-22 comes to Rs 133261.19 Lakh out of which Rs.132512.08 Lakh is related to transmission business.
- 3.2 The revenue from operation had been earned by WBSETCL by way of transmission charges and Short-Term Open Access (STOA) charges with reference to its audited accounts are as follows:
 - (i) As per Note: 18.1 to the Audited Annual Accounts, the net transmission charge for 2021-22 will be Rs.134112.19 Lakh.
 - (ii) WBSETCL has also earned Rs.31129.87 Lakh on account of STOA charges for 2021-22, which has already been considered for arriving at admissible net ARR as mentioned in Paragraph: 2.17.
 - (iii) Income booked in the Audited Annual Accounts from amortization of government grant of Rs.501.86 Lakh and amortization of consumer contribution of Rs.589.45 Lakh towards assets have already been adjusted in Paragraph: 2.7 in Chapter-2. Revenue realized from scheduling and SLDC charges is not adjusted with income of transmission business of WBSETCL as already narrated in Paragraph: 2.16.
 - (iv)Thus, the total revenue income of WBSETCL comes as Rs.134112.19 Lakh.
- 3.3 As it comes out from the findings in paragraph 3.1 and 3.2 above, WBSETCL has a over recovery of Rs.1600.11 Lakh as given below:

SI. No.	Particulars	Amount (Rs. In Lakh)	
1	Approved Realizable Revenue Admitted in APR for 2021-22	132512.08	
2	Revenue Realized from Operation for 2021-22	134112.19	
3	Adjustable Net Revenue for 2021-22	-1600.11	

3.4 In terms of regulation 2.6.6 of the Tariff Regulations, the over recovery of Rs.1600.11 Lakh or a part thereof may be adjusted with the amount of Aggregate Revenue Requirement for the subsequent period or that for any other ensuing year or through a separate order, as may be decided by the Commission. The





decision of the Commission in this regard will be given in the subsequent tariff order of WBSETCL or in a separate order.

- 3.5 WBSETCL is directed to comply with the directions as following.
- The Commission in the APR order for 2018-19 had directed WBSETCL to enter into a service agreement with the owner of 637 CKM Transmission Line which is maintained by WBSETCL. WBSETCL shall comply with the direction.
- ii) WBSETCL is directed to submit the actual amount of assets created out of government grant and /or consumers' contribution during the year vis -a-vis the cumulative position along with their subsequent APR petitions.
- iii) WBSETCL shall submit an audited report along with its subsequent APR petitions specifying the original cost of assets, loan repayments, depreciation and advance against depreciation availed, etc. in terms of second proviso of regulation 5.5.2 of the Tariff Regulations as directed in the APR order 2018-19 and 2019-20.
- 3.6 WBSETCL is to take a note of this order.
- 3.7 A copy of the order may be served upon WBSETCL.

Sd/-(PULAK KUMAR TEWARI) MEMBER Sd/-(MALLELA VENKATESWARA RAO) CHAIRPERSON

Date: 03.01.2024

Sd/-DY. DIR. (ENGINEERING)