

TABLE 1C

DIVISION	INPUT GPC-CPD	INPUT CPE	INPUT CPA-CPB	TRANSMISSION LOSS	TOTAL DIVISION INPUT	TOTAL DIVISION COST
E1P	34,391		1,002,784	128,656	1,165,831	\$7,445.67
E2P	2,078		60,562	7,641	70,281	477.15
E3P	510		14,831	1,786	17,127	110.46
E4P	2,716		79,294	10,123	92,133	589.01
E5P	3,157		91,918	11,822	106,897	681.53
E1S	54,958		1,602,597	206,358	1,863,913	11,869.93
E2S	225		6,885	1,158	8,268	51.19
E1T			208,950	26,106	235,056	1,347.16
E2T			62,874	7,997	70,871	406.39
E3T			4,807	508	5,315	32.00
E4T			8,959	1,081	10,040	57.60
E5T			365,790	45,263	411,053	2,358.30
E1V		21,426	159,851	22,478	203,755	1,212.31
E2V		147,297	1,098,224	154,775	1,400,296	8,335.34
E3V		2,566	19,266	2,973	24,805	143.70
E4V		2,080	15,754	2,246	20,080	120.07
E5V		486	3,777	463	4,726	29.73
E6V		215	1,785	364	2,364	14.63
E7V		20,356	151,849	20,920	193,125	1,148.87
TOTAL	98,035	194,426	4,960,757	652,718	5,905,936	\$36,431.04

TABLE 2

COST OF CURRENT FOR DIVISION EIP

FROM PLANTS	INPUT	PER CENT	COST
CP'C* & D*	34,391	35.08	\$975.55
CP A & B	1,002,784	20.22	6,470.12
Transmission Loss	128,656		
TOTALS	1,165,831		\$7,445.67

*Denotes standby plants.

TABLE 3

CLASS OF CUSTOMER	CLASS CONSUMPTION	PER CENT	PRODUCTION COST
E1PA	63,800	7.8	\$580.76
E1PB	1,078	.1	7.46
E1PC	337,685	41.4	3,082.51
E1PJ	4,391	.5	37.23
E1PK	9,860	1.2	89.35
E1PP	103,430	12.7	945.60
E1PR	287,240	35.2	2,620.87
E1PS	5,897	.7	52.11
E1PX	3,096	.4	29.78
TOTALS	816,477	100.00	\$7,445.67

illustrating the final allocation of generating costs, only those for the "EIP" division need to be considered because the method of distribution is the same for all divisions.

The total of the meter reading cards, as shown on Table 3 on this page, for each class of customers was used as the basis for allocating general costs to class of service. The difference between total consumption and the total input into the division represents the distribution loss and has no bearing on the final compilation as shown on Table 4A, page 97.

Transmission Expense

Again referring to the map, (see Figure 1, page 90), it will be noted that there are four incoming transmission lines connected with the substation serving district EIP.

CTA connecting power plant CPA
CTF connecting power plant CPB
CTE connecting power plant CPC
CTT connecting power plant CPD (Not shown on map)

There are many methods through which transmission line costs can be allocated, none of which can be considered infallible. A careful computation will prove that the minor discrepancies in all of the methods available are almost negligible, as far as the effect on the total cost of service is concerned.

If we assume that line losses should not be charged to districts because the outlying districts

TABLE 4

TOTAL TRANSMISSION COST FOR EIP	
CTA	\$258.56
CTF	19.25
CTT	169.12
CTE	167.00
TOTAL	\$613.93

TABLE 4A

DISTRIBUTION OF TRANSMISSION LINE CTA COSTS				
DIVISION	INPUT FROM LINE	MILES	KWH MILES	PER CENT DIVISION COST
EIP	1,037,175	30	31,115,250	34.84*
2P	62,640	30	1,879,200	2.10
3P	15,341	30	460,230	.52
4P	82,010	30	2,460,300	2.76
5P	95,075	30	2,852,250	3.19
1S	1,657,555	30	49,726,650	55.69
3S	7,110	30	213,300	.24
2T	62,874	8	502,992	.56
3T	4,807	9	43,263	.05
4T	8,959	5	44,795	.05
TOTALS	3,033,546		89,298,230	100.00

TABLE 4B

CLASS OF CUSTOMERS	PER CENT KWH USED	COST
E1PA	7.8	\$47.89
E1PB	.1	.60
E1PC	41.4	254.17
E1PJ	.5	3.07
E1PK	1.2	7.37
E1PP	12.7	77.97
E1PR	35.2	216.10
E1PS	.7	4.30
E1PX	.4	2.46
TOTAL	100.0	\$613.93

should not be held responsible for the location of the central generating stations, a combination formula of KWH-mile cost can be used with fairness to all communities to neutralize the extra cost incurred by the length of the transmission lines required to serve each district. By KWH-mile cost is meant the total KWH metered on the incoming meter of the substation chargeable to any given district, multiplied by the length of line from the generating plant serving the division to the substation of the district. The small extra cost chargeable to an outlying district is more than saved by the economies effected by the use of a few central stations instead of a smaller station in each district.

This method of distribution of transmission line costs is shown on Table 4A on this page. The table shows the distribution of the operating cost of transmission line CTA, which connects the generating plant CPA to the substation in EIP district. By this method of distribution of costs for the several transmission lines serving EIP the total transmission costs, as shown on Table 4 and Table 4B on this page, shows the transmission cost charged to district EIP, which charges are to be distributed to the classes of customers on the basis of consumption of each class.

Distribution Expense

Distribution costs include all expense incurred from the outgoing meter board at the substation to and including the customers' meters.

The expense of this department, with the exception of such items as supervision, is such that

TABLE 5
EIP—EXPENSE

DEPARTMENT	TOTAL COST	CLASS OF CUSTOMERS								
		A	B	C	J	K	P	R	S	W
CBM—General Office	\$4,326.61		4.33	683.60	34.61	103.84	3,461.29	4.33		
CBN—Planning										
CBP—Purchasing										
CPS—Stores										
CBT—Tool & Machine										
CBV—Conveyance										
CBX—Laboratory	140.52		.14	22.20	1.12	1.12	3.37	112.42	.14	
CC—Commercial	1,157.05		1.16	182.81	9.26	9.25	27.77	925.64	1.16	
CD—Distribution	1,349.34	62.06	1.35	203.75	9.45	9.45	31.03	1,030.90	1.35	
CN—New Business	1,243.26			297.14	19.89		28.59	897.64		
CP—Production	7,445.67	580.76	7.46	3,082.51	37.23	89.35	945.60	2,620.87	52.11	29.78
CT—Transmission	613.93	47.89	.60	254.17	3.07	7.37	77.97	216.10	4.30	2.46
CU—Utilization	1,432.34	567.84	4.08	155.89	2.10	17.84	119.04	563.43	2.12	
TOTALS	\$17,708.72	1,258.55	19.12	4,882.07	16.73	169.00	1,337.21	9,828.29	65.51	32.24