

NYPA Demand Class Rate Design

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Input Section 1, NYPA Conventional Demand Billed Classes

1. **Exam Cell/Excel/Spreads Budget Data** (Used to allocate the Distribution Revenue) **% Total**
(Total NYPA)

Minimum Grid	\$	5,125,014	3.0277%
Central East Minimum Grid (Exclude Bussing)	\$	13,051,861	7.7107%
Primary Distribution	\$	110,563,780	65.3184%
Secondary Distribution	\$	40,526,202	23.9432%
	\$	169,266,857	100.0000%

1b. **EDB Factor**
 Summer 1.011917
 Winter 1.013750
 Annual 1.013139

2. **NYPA Conv. Transmission Revenues at 6/1/00 Level Before EDB (Energy and Demand):**
 (On Separate Price-out Sheets)

		SUMMER	WINTER	ANNUAL
NYPA Conv (HT)	\$	4,135,688	7,943,039	12,078,727
NYPA Conv (LT)	\$	6,128,663	11,524,860	17,653,523
TOTAL	\$	10,264,351	19,467,899	29,732,260

2a. **EDB Factor:** 1.011917

2b. **NYPA Conv. Transmission Revenues at 6/1/00 Level After EDB (Demand):**
 (EDB applied only to Demand Rev)

		SUMMER	WINTER	ANNUAL
NYPA Conv Demand HT	\$	15,027,090	28,861,086	43,888,166
NYPA Conv Demand LT	\$	22,288,677	41,913,524	64,202,201
Total Distribution Rev for Conv	\$	37,315,767	70,774,620	108,090,387

3a. **EDB Factor** 1.013750

3b. **Distribution Revenues at 1/1/01 Level After EDB:** \$ 109,608,230

3c. **Allocation of Distribution Revenue at 1/1/01 Level (after EDB) based on Cost of Service Study %:**

Minimum Grid (Will be allocated to Secondary Dist. Charge)	3.02770%	\$ 3,315,661
Customer-Cost Escal Minimum Grid	7.71070%	\$ 8,443,851
		Allocation of \$109,608,230

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65.31640%	\$	71,529,024
23.94320%	\$	26,219,775
100.00000%	\$	109,508,231
		Allocation of \$11,039,024
33.01000%	\$	23,611,731
66.99000%	\$	47,917,293
	\$	71,529,024

Primary Distribution
Secondary Distribution

3d. Breakdown of Total Primary Distribution Costs Based on Data provided by ECOS Group:
% Subsidiary
% Primary

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4. NYPA Conv. ISD Revenues:			
Before EDB			ANNUAL
After EDB			
	\$	137,822,647	
	\$	139,630,494	
5. Standby Customer Costs:			
	\$	8,443,851	
Revenue Requirement for Total Standby Transmission Contract and As-Used Charges (After EDB):	\$	30,122,264	
Revenue Requirement for Total Standby Substation Contract and As-Used Charge (After EDB):	\$	23,614,731	
Revenue Requirement for Total Standby Primary Distribution Contract and As-Used Charge (After EDB):	\$	47,917,293	
Revenue Requirement for Total Standby Secondary Distribution Contract and As-Used Charge (After EDB):	\$	29,536,355	
	\$	131,186,644	
Total NYPA Standby Revenue Requirement:	\$	139,630,495	
6a. Revenue Requirement for Total Standby Secondary Distribution Contract and As-Used Charge (After EDB):	\$	29,536,355	
Minimum Grid (Will be allocated to Secondary Contract Distribution Charge)	\$	3,315,581	
Secondary Distribution Rev Req Excluding Minimum Grid:	\$	26,219,775	

6. Billing Determinants:				
				ANNUAL
Number of Bills				
NYPA Conv. DMD Classes		28,872	58,214	87,086
kWhrs				
NYPA Conv				
Billing kW (HT & LT)				
Billing kW (HT)		5,058,166	9,594,914	14,651,080
Billing kW (LT)		2,165,287	4,188,859	6,323,848
Billing kW (LT)		2,890,679	5,436,255	8,327,134
Ratio of Billing to Peak DMD (Data From Cost of Service Study)				
Transmission		0.977027	0.997122	
Distribution		0.997918	0.997122	

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NYPA Conventional Peak Demand

Transmission HT & LT
 Transmission HT
 Transmission LT

14,607,311
 6,262,235
 8,245,076

9,667,300
 4,146,691
 5,420,609

4,940,011
 2,115,644
 2,824,467

winter 8 A.M. - 10 P.M.

summer 8 A.M. - 4 P.M.

Distribution

Primary
 Primary HT
 Primary LT

14,612,959
 6,307,470
 8,305,489

9,667,300
 4,146,691
 5,420,609

6,045,839
 2,160,779
 2,884,860

winter 8 A.M. - 10 P.M.

summer 8 A.M. - 10 P.M.

Distribution

Secondary (All LT)

8,327,134
 8,305,489

5,436,255
 5,420,609

2,830,878
 2,884,880

LT kW that occurred on peak
 (Equals Primary LT)

6a. Relationship between the highest annual registered demand and annual billing demand.
 6b. NYPA Conv Billing Demand

HT+LT
 LT
 HT

143.90%

14,651,060
 8,327,134
 6,323,948

6c. Development of Contract Demand For HT<: Billing demand multiplied by the ratio in 6a.

Summer
 Winter

21,082,904
 7,027,635
 14,055,269

6d. Development of Contract Demand LT: Billing demand multiplied by the ratio in 6a.

Summer
 Winter

11,992,746
 3,984,249
 7,986,497

Development of Contract Demand HT: Billing demand multiplied by the ratio in 6a.

Summer
 Winter

8,100,158
 3,033,366
 8,046,772

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6a. Relationship between the highest registered demand recorded by season and the average daily demand by season by rating period:

	Summer	Winter
Transmission	118.64%	118.07%
Distribution	117.64%	116.07%

6b. Average Number of Days at which the On-Peak Transmission and Distribution Charges are applied in a summer month:
 Average Number of Days at which the On-Peak Transmission and Distribution Charges are applied in a winter month:

	22.00
	21.63

Based on 1993 Calendar

7. Current NYPA IOD Demand Transmission and Distribution Rates: \$/KW

	Summer	Winter	Seasonal Differential
Transmission	\$ 2.86	\$ 1.35	\$ 1.51
Rate Design Equation	X + 1.5100	X	
Primary Distribution	\$ 7.91	\$ 3.25	\$ 4.66
Rate Design Equation	Y + 4.66	Y	
Secondary Distribution	\$ 5.89	\$ 2.75	\$ 5.94
Rate Design Equation	Z + 5.94	Z	

6. Contract and As-Used Rev. allocation Information Provided by Electric Engineering:

	Secondary (LT)		Primary (HT)		33kV & Above Customer Contract
	Contract	As-Used	Contract	As-Used	
Secondary Primary	100%	0%	100%	0%	100%
Substation	50%	0%	50%	50%	100%
Transmission	0%	100%	0%	100%	50%
	100%	0%	100%	0%	80%

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**NYPA II Contract and As-Used Revenue allocation for HT and LT Customers
Based on Information Provided by Electric Engineering**

1. Information from Electric Engineering (Input Section,9):

	Secondary (LT)		Primary (HT)	
	Contract	As-Used	Contract	As-Used
Secondary	100%	0%		
Primary	50%	50%	100%	0%
Substation	0%	100%	50%	50%
Transmission	0%	100%	0%	100%

2. Total NYPA II Standby Revenue Requirement (Input Section,5):

SECONDARY DISTRIBUTION

Total Standby Secondary Distribution Contract and As-Used Revenue Requirement (After EDB):	\$	29,535,356
Minimum Grid (Will be allocated to Secondary Contract Distribution Charge)	\$	3,315,581
Total Secondary Distribution Rev Req Excluding Minimum Grid:	\$	26,219,775

Allocation of Total Secondary Distribution Rev. Req. Between Contract and As-Used Revenues:

Secondary	Secondary		Primary		138kV & Above Customer	
	Contract	As-Used	Contract	As-Used	Contract	As-Used
	100%					
\$ 26,219,775	\$ 26,219,775	\$ -				
	\$ 3,315,581					
Total	\$ 29,535,356					

minimum grid

PRIMARY DISTRIBUTION

Total Standby Primary Distribution Contract and As-Used Revenue Requirement (After EDB):	\$	47,917,293
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	Annual Contract kW	% Total kW
HT (Primary Customer)	9,100,158	43.16%
LT (Secondary Customer)	11,982,746	56.84%
Total kW	21,082,904	100.00%

Allocation of Total Primary Dist. Rev. Req. to High and Low Tension customers based on the percent above:

Type of Customer	% Total kW	Rev Req. Contributed by the customer
Primary	43.16%	\$ 20,681,104
Secondary	56.84%	\$ 27,236,189
	100.00%	\$ 47,917,293

Allocation of Revenue Requirement Between Contract and As-Used Revenues:

Primary	Secondary		Primary	
	Contract	As-Used	Contract	As-Used
	50%		100%	
Rev Req	\$ 27,236,189		20,681,104	0%
Total	\$ 13,618,095	\$ 13,618,095	\$ 20,681,104	\$ -

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SUBSTATION

Total Standby SUBSTATION Contract and As-Used Revenue Requirement (After EDB): \$ 23,611,731

	Annual Contract kW	% Total kW
HT (Primary Customer)	9,100,158	43.16%
LT (Secondary Customer)	11,982,746	56.84%
Total kW	21,082,904	100.00%

Allocation of Total Substation. Rev. Req. to High and Low Tension customers based on the percent above:

Type of Customer	% Total kW	Rev. Req. Contributed by the customer
Primary	43.16%	\$ 10,190,823
Secondary	56.84%	\$ 13,420,908
	100.00%	\$ 23,611,731

Allocation of Substation Rev. Req. Contributed by Various groups of customer Between Contract and As-Used Rev:

Substation	Secondary		Primary	
	Contract 0%	As-Used 100%	Contract 50%	As-Used 50%
Rev Req.	\$ 13,420,908		10,190,823	
Total	\$ -	\$ 13,420,908	\$ 5,095,412	\$ 5,095,412

TRANSMISSION

Total Standby TRANSMISSION Contract and As-Used Revenue Requirement (After EDB): \$ 30,122,264

	Annual Contract kW	% Total kW
HT (Primary Customer)	9,100,158	43.16%
HT (Secondary Customer)	11,982,746	56.84%
Total kW	21,082,904	100.00%

Allocation of Total TRANSMISSION. Rev. Req. to High and Low Tension customers based on the percent above:

Type of Customer	% Total kW	Rev. Req. Contributed by the customer
Primary	43.16%	\$ 13,000,769
Secondary	56.84%	\$ 17,121,495
	100.00%	\$ 30,122,264

Allocation of Transmission Rev. Req. Contributed by Various groups of customer Between Contract and As-Used Rev:

Transmission	Secondary		Primary	
	Contract 0%	As-Used 100%	Contract 0%	As-Used 100%
Rev Req.	\$ 17,121,495		13,000,769	
Total	\$ -	\$ 17,121,495	\$ -	\$ 13,000,769

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Summary Of Transmission And Distribution Contract and As-Used Revenue Requirements

	By HT & LT Customers							
	Secondary		Primary		Total		Grand Total	
	Contract	As-Used	Contract	As-Used	Contract	As-Used		
Secondary	\$ 29,535,356	\$ -			\$ 29,535,356	\$ -	\$ 29,535,356	
Primary	\$ 13,618,095	\$ 13,618,095	\$ 20,681,104	\$ -	\$ 34,299,199	\$ 13,618,095	\$ 47,917,294	
Substation	\$ -	\$ 13,420,908	\$ 5,095,412	\$ 5,095,412	\$ 5,095,412	\$ 18,516,320	\$ 23,611,732	
Transmission	\$ -	\$ 17,121,495	\$ -	\$ 13,000,769	\$ -	\$ 30,122,264	\$ 30,122,264	
Total	\$ 43,153,451	\$ 44,160,498	\$ 26,776,516	\$ 18,096,181	\$ 68,929,967	\$ 62,256,679	\$ 131,186,646	

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**NYPA Conventional Standby Rate Design
Applicable to NYPA Conventional Demand Billed (Rate I) Customers**

A. Development Of Standby Customer Charge:

	<u>Customer Charge Rev</u>	<u>Number of Bills</u>	<u>Customer Charge</u>
Including EDB:	8,443,851		
Annual EDB	1,013,139		
Excluding EDB:	\$ 8,334,346	87,086.0	\$ 95.70

B. Development of Contract Demand Charges, Per kW

	<u>Contract DMD Rev Incl. EDB</u> <u>NYPA Contract & Asused Rev</u> <u>Alloc. Share</u>	<u>Contract DMD Rev Excl. EDB</u> <u>EDB Factor 1.013139</u>	<u>Contract Demand (kW)</u> <u>Input Section 6 (c)</u>	<u>Contract Dmd Charge</u> <u>\$/kW Contract Demand</u>
Transmission				
Secondary (LT) \$	-	-	11,982,746 \$	-
Primary (HT) \$	-	-	9,100,158 \$	-
Substation				
Secondary (LT) \$	-	-	11,982,746 \$	-
Primary (HT) \$	5,095,412	5,029,332	9,100,158 \$	0.56
Primary Distribution				
Secondary (LT) \$	13,618,095	13,441,487	11,982,746 \$	1.12
Primary (HT) \$	20,581,104	20,412,899	9,100,158 \$	2.24
Secondary Distribution				
Secondary (LT) \$	29,535,356	29,152,324	11,982,746 \$	2.43

Increased by \$0.01 to meet revenue requirement.

C. Development of Daily As-Used On-Peak Transmission Demand Charge For HT and LT, \$/kW

As-Used Transmission Demand Revenue Requirement (Incl. EDB) for Secondary (LT) Customers:	\$ 17,121,495
As-Used Transmission Demand Revenue Requirement (Incl. EDB) for Primary (HT) Customers:	\$ 13,000,769
	<u>30,122,264</u>

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1. As-Used Transmission Demand Revenue Requirement (Incl. EDB) for Secondary (LT) Customers: \$ 17,121,495

<u>Calculation of Seasonal Differential in current transmission demand rates to be used in Rate Design Equations:</u>				<u>Percent As-Used</u>	<u>New Differential</u>
	<u>Summer</u>	<u>Winter</u>	<u>Seasonal Differential</u>	<u>(Share of the Differential)</u>	<u>Reflecting % As-Used</u>
NYP&A II Transmission Demand Rates	\$ 2.86	\$ 1.35	\$ 1.51	100%	\$ 1.51

Rate Design Equation

	<u>Summer</u>	<u>Winter</u>	
Daily Transmission As-Used Revenue=			
	2,824,487	5,420,609	* X + 1.51
			* X

Design of As-Used On Peak Transmission Charge, Per kW of Monthly Transmission Peak Demand for LT Customer:

\$	17,121,495 =	2,824,487 X+	4,264,945 +
		5,420,609 X	
\$	12,856,550 =	8,245,076 X	
	X =	\$ 1.5593 Per kW	Winter
	X + 1.5100 =	\$ 3.0693 Per kW	Summer

Daily As-Used On Peak Transmission Charge: If the Daily Transmission Peak Demand equals the Monthly Transmission Peak Demand:

X/21.63 =	\$ 0.0721 Per kW	Winter
(X+1.51)/22.00 =	\$ 0.1395 Per kW	Summer

Daily As-Used On Peak Transmission Charge: To be used to bill the LT customers:

To account for the fact that we will bill the customer on a daily transmission peak demand that does not equal to the average of the Monthly transmission Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality:

	<u>Seasonal Factor from ECOS</u>	<u>Daily Rates</u>
	<u>(Input Section I, 6d)</u>	<u>to be used</u>
Winter =	\$ 0.0721 116.07%	\$ 0.0837
Summer =	\$ 0.1395 118.64%	\$ 0.1655

SCB II Proposed Standby Daily As-Used Transmission Charge for Billing the LT customers:

<u>kW</u>	<u>Scale Back to Monthly Peak Rates</u>
Winter \$ 0.0837	\$ 1.56
Summer \$ 0.1655	\$ 3.07
	\$ 1.51

2. As-Used Transmission Demand Revenue Requirement (Incl. EDB) for Primary (HT) Customers: \$ 13,000,769

<u>Calculation of Seasonal Differential in current transmission demand rates to be used in Rate Design Equations:</u>				<u>Percent As-Used</u>	<u>New Differential</u>
	<u>Summer</u>	<u>Winter</u>	<u>Seasonal Differential</u>	<u>(Share of the Differential)</u>	<u>Reflecting % As-Used</u>
NYP&A II Transmission Demand Rates	\$ 2.86	\$ 1.35	\$ 1.51	100%	\$ 1.51

Rate Design Equation

	<u>Summer</u>	<u>Winter</u>	
Daily Transmission As-Used Revenue=			
	2,115,544	4,146,691	* X + 1.51
			* X

Design of As-Used On Peak Transmission Charge, Per kW of Monthly Transmission Peak Demand for HT Customer:

\$	13,000,769 =	2,115,544 X+	3,194,471 +
		4,146,691 X	
\$	9,806,298 =	6,262,235 X	
	X =	\$ 1.5659 Per kW	Winter
	X + 1.51 =	\$ 3.0769 Per kW	Summer

Daily As-Used On Peak Transmission Charge: If the Daily Transmission Peak Demand equals the Monthly Transmission Peak Demand:

X/21.63 =	\$ 0.0724 Per kW	Winter
(X+1.51)/22.00 =	\$ 0.1398 Per kW	Summer

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Daily As-Used On Peak Transmission Charge: To be used to bill the HT customers;

To account for the fact that we will bill the customer on a daily transmission peak demand that does not equal to the average of the Monthly transmission Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality:

		<u>Seasonal Factor from ECOS</u> (Input Section I, 6d)			<u>Daily Rates</u> <u>to be used</u>	
Winter =	\$	0.0724	116.07%	=	\$	0.0840
Summer =	\$	0.1396	118.64%	=	\$	0.1659

9C9 ii Proposed Standby Daily As-Used Transmission Charge for Billing the HT customers:

<u>kW</u>				<u>Scale Back to Monthly Peak Rates</u>	
Winter	\$	0.0840		\$	1.57
Summer	\$	0.1659		\$	3.08
				\$	1.51

<u>Daily On-Peak As-Used</u>		<u>Type of Customer</u>	
<u>Transmission Rate Summary</u>			
	<u>LT</u>		<u>HT</u>
Winter \$	0.0837	\$	0.0840
Summer \$	0.1655	\$	0.1658

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D. Development of Daily As-Used On-Peak Substation Demand Charge For HT & LT Customers, \$/kW

As-Used Substation Demand Revenue Requirement (Incl. EDB) for Secondary (LT) Customers:	\$	13,420,808
As-Used Substation Demand Revenue Requirement (Incl. EDB) for Primary (HT) Customers:	\$	5,095,412
		<u>18,516,320</u>

1. As-Used Substation Demand Revenue Requirement (Incl. EDB) for Secondary (LT) Customers: \$ 13,420,808

Calculation of Seasonal Differential in current Primary demand rates to be used in Rate Design Equations:			
	Summer	Winter	Seasonal Differential
Current SC9 Primary Demand Rates \$	7.91 \$	3.25 \$	4.66

% Substation	
Substation Share of Diff.	33%
As-Used Share of Diff.	1.54
New Differential Reflecting % As-Used	100% \$ 1.54

Rate Design Equation

	Summer	Winter	
Daily Substation As-Used Revenue*			
		Demand	
		LT kW (In Primary Period)	
		2,884,860	* Y+ 1.54
		5,420,609	- Y

Design of As-Used On Peak Substation Charge, Per kW of Monthly Substation Peak Demand for LT Customers:

\$	13,420,808 =		2,884,860 Y+	4,442,684 +
			5,420,609 Y+	
\$	8,978,224 =		8,305,469 Y	
	Y =	\$	1.0810 Per kW	Winter
	Y+ 1.54 =	\$	2.6210 Per kW	Summer

Daily As-Used On Peak Substation Charge: If the Daily Peak Demand equals the Monthly Peak Demand:

Y/21.63 =	\$	0.0500 Per kW	Winter
(Y+1.54) /22.00 =	\$	0.1191 Per kW	Summer

Daily As-Used On Peak Substation Charge: To be used to bill the LT customers:

To account for the fact that we will bill the customer on a daily peak demand that does not equal to the the Monthly Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality:

		Seasonal Factor from ECOS (Input Section I, 6d)		Daily Rates to be used
Winter =	\$	0.0500 116.07%	=	\$ 0.0580
Summer =	\$	0.1191 117.64%	=	\$ 0.1401

RCB II Proposed Standby Daily As-Used Substation Charge for Billing the LT customers:

			Scale Back to Monthly Peak Rates
Winter	\$	0.0580	\$ 1.08
Summer	\$	0.1401	\$ 2.52
			\$ 1.54

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2. As-Used Substation Demand Revenue Requirement (Incl. EDB) for HT Customers: \$ 5,095,412

				% Substation			
				33%			
				Substation Share of Diff.			
<u>Calculation of Seasonal Differential in current Primary demand rates to be used in Rate Design Equations:</u>				\$	1.54	New Differential	
	Summer	Winter	Seasonal Differential	As-Used Share of Diff.	50%	Reflecting % As-Used	
Current SC9 Primary Demand Rates	\$ 7.91	\$ 3.25	\$ 4.66			\$	0.77

Rate Design Equation

		Demand			
		HT KW (In Primary Period)			
Daily Substation As-Used Revenue*	Summer	2,160,779	Y+	* Y+ 0.77	
	Winter	4,146,691	Y	* Y	

Design of As-Used On Peak Substation Charge, Per KW of Monthly Peak Demand for HT Customer:

\$	5,095,412	=	2,160,779	Y+	1,663,800	+
			4,146,691	Y		
\$	3,431,612	=	6,307,470	Y		
	Y	=	\$ 0.5441	Per KW	Winter	
	Y+ 0.77	=	\$ 1.3141	Per KW	Summer	
<u>Daily As-Used On Peak Substation Charge: If the Daily on Peak Demand equals the Monthly Peak Demand:</u>						
	Y/21.63	=	\$ 0.0252	Per kW	Winter	
	(Y+0.77) /22.00	=	\$ 0.0597	Per kW	Summer	

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Daily As-Used On Peak Substation Charge: To be used to bill the HT customers:

To account for the fact that we will bill the customer on a daily transmission peak demand that does not equal to the average of the Monthly transmission Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality:

		<u>Seasonal Factor from ECOS</u> (Input Section I, 6d)			<u>Daily Rates</u> <u>(to be used)</u>	
Winter =	\$	0.0252	116.07%	=	\$	0.0292
Summer =	\$	0.0597	117.64%	=	\$	0.0702

SCS II Proposed Standby Daily As-Used Substation Charge for Billing the HT customers:

<u>KW</u>			<u>Scale Back to Monthly Peak Rate</u>
Winter	\$	0.0292	\$ 0.54
Summer	\$	0.0702	\$ 1.31
			\$ 0.77

<u>Daily On-Peak As-Used</u>	<u>Substation Rate Summary</u>	<u>LT (Sec.)</u>	<u>Type of Customer</u>	<u>HT (Primary)</u>
Winter	\$	0.0580	\$	0.0292
Summer	\$	0.1401	\$	0.0702

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**E. Development of Daily As-Used On-Peak Primary Demand Charge
For HT & LT customers, \$/kW**

As-Used Primary Demand Revenue Requirement (Incl. EDB) for Secondary (LT) Customers:	\$	13,618,095
As-Used Primary Demand Revenue Requirement (Incl. EDB) for Primary (HT) Customers:	\$	-
		<u>13,618,095</u>

1. As-Used Primary Demand Revenue Requirement (Incl. EDB) for Secondary (LT) Customers: \$ 13,618,095

<u>Calculation of Seasonal Differential in current Primary demand rates to be used in Rate Design Equations:</u>				<u>% Primary</u>	
	Summer	Winter	Seasonal Differential	67%	
Current SC9 Primary Demand Rates \$	7.91 \$	3.25 \$	4.66	Primary Share of Diff. \$ 3.12	New Differential Reflecting % As-Used \$ 1.56
				As-Used Share of Diff. 50%	

<u>Rate Design Equation</u>		<u>Demand</u>	
		LT kW (in Primary Period)	
Daily Substation As-Used Revenue-	Summer	2,884,860	* Y+ 1.56
	Winter	5,420,609	* Y

Design of As-Used On Peak Primary Charge, Per kW of Monthly Primary Peak Demand for LT Customer:

\$	13,618,095 =	2,884,860 Y+	4,500,382 +
		5,420,609 Y-	
\$	9,117,713 =	8,305,469 Y	
	Y =	\$ 1.0978 Per kW	Winter
	Y+ 1.56 =	\$ 2.6578 Per kW	Summer

Daily As-Used On Peak Primary Charge: If the Daily Peak Demand equals the Monthly Peak Demand:

Y/21.63 =	\$ 0.0508 Per kW	Winter
(Y+1.56)/22.00 =	\$ 0.1208 Per kW	Summer

Daily As-Used On Peak Primary Charge: To be used to bill the LT customers:
To account for the fact that we will bill the customer on a daily peak demand that does not equal to the Monthly Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality:

		<u>Seasonal Factor from ECOS</u> (Input Section I, 6d)		<u>Daily Rates to be used</u>
Winter =	\$	0.0508 116.07%	=	\$ 0.0590
Summer =	\$	0.1208 117.64%	=	\$ 0.1421

SC9 II Proposed Standby Daily As-Used Primary Charge for Billing the LT customers:

<u>kW</u>			<u>Scale Back to Monthly Peak Rates</u>
Winter	\$	0.0590	\$ 1.10
Summer	\$	0.1421	\$ 2.66
			\$ 1.58

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2. As-Used Primary Demand Revenue Requirement (Incl. EDB) for HT Customers:

\$ _____

<u>Calculation of Seasonal Differential in current Primary demand rates to be used in Rate Design Equations:</u>					<u>% Primary</u>	
					Primary Share of Diff.	New Differential
					As-Used Share of Diff.	Reflecting % As-Used
Current SCB Primary Demand Rates	Summer	7.91	Winter	3.25	Seasonal Differential	4.66
					Primary Share of Diff.	3.12
					As-Used Share of Diff.	0%
					New Differential	Reflecting % As-Used
						\$ -

Rate Design Equation

Daily Primary As-Used Revenue	Demand		HT KW (in Primary Period)	
	Summer	Winter		
			2,180,779	- Y+ 0.00
			4,146,691	+ Y

Design of As-Used On Peak Primary Charge, Per KW of Monthly Peak Demand for HT Customer:

\$	-	=	2,180,779	Y+	-	+
			4,146,691	Y		
\$	-	=	6,307,470	Y		
	Y =		\$	-	Per KW	Winter
	Y+ 0.00 =		\$	-	Per KW	Summer

Daily As-Used On Peak Primary Charge: if the Daily on Peak Demand equals the Monthly Peak Demand:

	Y/21.83 =		\$	-	Per KW	Winter
	(Y+0.00)/22.00 =		\$	-	Per KW	Summer

497

Daily As-Used On Peak Primary Charge: To be used to bill the HT customers;

To account for the fact that we will bill the customer on a daily transmission peak demand that does not equal to the average of the Monthly transmission Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality;

		Seasonal Factor from ECOS (Input Section I, 8d)		Daily Rates to be used
Winter =	\$	116.07%	=	\$
Summer =	\$	117.64%	=	\$

SCS II Proposed Standby Daily As-Used Primary Charge for Billing the HT customers;

KW			Scale Back to Monthly Peak Rates
Winter	\$	-	\$
Summer	\$	-	\$
			\$

Daily On-Peak As-Used	Primary Rate Summary	LT.(Sec.)	Type of Customer	HT (Primary)
Winter	\$	0.0590	\$	-
Summer	\$	0.1421	\$	-

498

**F. Development of Daily As-Used On-Peak Secondary Demand Charge
For LT (Secondary) Customers, \$/kW**

As Used Secondary Distribution Demand Revenue Requirement incl. EDB:

Calculation of Seasonal Differential in current primary demand rates to be used in Rate Design Equations:				Percent As-Used (Share of the Differential)	New Differential Reflecting % As-Used
	Summer	Winter	Seasonal Differential		
SC9 Secondary Distribution Demand Rates \$	8.69 \$	2.75 \$	5.94	0.00%	\$

Rate Design Equation

	Secondary kW billed on Peak	
Secondary Distribution As-Used Revenue*	Summer	2,884,860
	Winter	5,420,609
		Z + 0.00
		Z

Design of As-Used On Peak Secondary Distribution Charge, Per kW of Monthly Distribution Peak Demand:

Secondary Distribution Related As-Used Revenue Requirement (Before EDB):
(Input Section, (8))

\$	-	2,884,860	Z+	
\$	-	5,420,609	Z	
		8,305,469	Z	
	Z =	\$	-	Per kW
	Z + 0.00 =	\$	-	Per kW
				Winter
				Summer

Daily As-Used On Peak Secondary Distribution Charge: If the Daily Distribution Peak Demand equals monthly distribution peak demand:

	Z/21.63 =	\$	-	Per kW	Winter
	(Z+0.00) /22.00 =	\$	-	Per kW	Summer

Daily As-Used On Peak Secondary Distribution Charge: To be used to bill the LT customers Only:

To account for the fact that we will bill the customer on a daily distribution peak demand that does not equal to the Monthly Distribution Peak Demand, a seasonal factor from ECOS will be applied to the above daily rates to maintain revenue neutrality:

	Season Factor from ECOS (Input Section 1, 8d)	Daily Sec. DMD Rates to be used
Winter =	\$	\$
Summer =	\$	\$
	* 1.1607	
	* 1.1784	

SC9 II Proposed Standby Daily As-Used Secondary Distribution Charge for Billing the LT customers:

kW		Scale back to monthly peak rate:
Winter	\$	\$
Summer	\$	\$
		\$
		\$

499

G. NYPA II Standby Rate Priceout:

<u>Summer</u>	<u>Rate</u>	<u>Bills or Kilowatt</u>	<u>Revenue Before EDB</u>	<u>Summer EDB</u>	<u>Revenue After EDB</u>
<u>Customer Charge</u>	\$	95.70	26,872 \$	1.011917 \$	2,785,977
<u>Contract Demand Charge:</u>					
<u>Transmission</u>					
LT \$	-	-	3,994,249 \$	1.011917 \$	-
HT \$	-	-	3,033,386 \$	1.011917 \$	-
<u>Substation</u>					
LT \$	-	-	3,994,249 \$	1.011917 \$	-
HT \$	0.5800	-	3,033,386 \$	1.011917 \$	1,718,938
<u>Primary Distribution</u>					
LT \$	1.1200	-	3,994,249 \$	1.011917 \$	4,526,870
HT \$	2.2400	-	3,033,386 \$	1.011917 \$	6,875,768
<u>Secondary Distribution</u>					
\$	2.4300	-	3,994,249 \$	1.011917 \$	9,821,692
<u>Total Summer Contract Charge Rev</u>					\$ 22,943,259
<u>Daily As-Used On-Peak</u>	<u>Daily Rate</u>		<u>kW</u>	<u>Daily Rev</u>	<u>Rev incl. EDB</u>
<u>Transmission Demand Charge:</u>					
LT \$	0.1995	-	2,824,467 \$	394,013	* 22.00 = \$ 8,668,286
HT \$	0.1398	-	2,115,544 \$	295,753	* 22.00 = \$ 6,806,566
			\$	689,766	* 22.00 = \$ 15,174,852
<u>Daily As-Used On-Peak</u>					
<u>Substation Demand Charge:</u>					
LT \$	0.1191	-	2,884,860 \$	343,587	* 22.00 = \$ 7,558,914
HT \$	0.0597	-	2,160,779 \$	128,999	* 22.00 = \$ 2,837,978
			\$	472,586	\$ 10,396,892
<u>Daily As-Used On-Peak</u>					
<u>Primary Demand Charge:</u>					
LT \$	0.1208	-	2,884,860 \$	348,491	* 22.00 = \$ 7,666,802
HT \$	-	-	2,160,779 \$	-	* 22.00 = \$
					\$ 7,666,802
<u>Daily As-Used On-Peak</u>					
<u>Secondary Demand Charge:</u>					
LT \$	-	-	2,884,860 \$	-	* 22.00 = \$
<u>Total Summer Daily As-Used Charge</u>					\$ 33,238,546
<u>Summer Standby Revenue After EDB</u>					\$ 88,977,782

500

<u>Winter</u>	<u>Rate</u>	<u>Bills or Kilowatt</u>	<u>Revenue Before EDB</u>	<u>Winter</u>	<u>Revenue After EDB</u>
<u>Customer Charge</u>	\$	95.70	58,214 \$	5,571,080	1.01375 \$ 5,647,682
<u>Contract Demand Charge:</u>					
Transmission					
LT \$	-		7,988,497 \$	-	1.01375 \$ -
HT \$	-		6,066,772 \$	-	1.01375 \$ -
Substation					
LT \$	-		7,988,497 \$	-	1.01375 \$ -
HT \$	0.5500		6,066,772 \$	3,387,392	1.01375 \$ 3,444,106
Primary Distribution					
LT \$	1.1200		7,988,497 \$	8,947,117	1.01375 \$ 9,070,140
HT \$	2.2400		6,066,772 \$	13,589,569	1.01375 \$ 13,776,426
Secondary Distribution \$					
	2.4300		7,988,497 \$	19,412,048	1.01375 \$ 19,678,964
Total Winter Contract Charge Rev					\$ 45,989,636

<u>Daily As-Used On-Peak</u>	<u>Daily Rate</u>		<u>Daily Rev</u>		<u>Rev Incls. EDB</u>
<u>Transmission Demand Charge:</u>					
	<u>Before Adjusted by Factor</u>	<u>KW</u>			
LT \$	0.0721	5,420,809	\$ 390,826	* 21.63 =	\$ 8,453,586
HT \$	0.0724	4,146,691	\$ 300,220	* 21.63 =	\$ 6,483,759
<u>Daily As-Used On-Peak</u>					
<u>Substation Demand Charge:</u>					
LT \$	0.0500	5,420,809	\$ 271,030	* 21.63 =	\$ 5,862,379
HT \$	0.0252	4,146,691	\$ 104,497	* 21.63 =	\$ 2,260,270
<u>Daily As-Used On-Peak</u>					
<u>Primary Demand Charge:</u>					
LT \$	0.0608	5,420,809	\$ 275,367	* 21.63 =	\$ 5,956,188
HT \$	-	4,146,691	\$ -	* 21.63 =	\$ -
<u>Daily As-Used On-Peak</u>					
<u>Secondary Demand Charge:</u>					
LT \$	-	5,420,809	\$ -	* 21.63 =	\$ -
Total Winter Daily As-Used Charge					\$ 29,026,162

<u>Winter Standby Revenue After EDB</u>	\$	80,643,480
Total NYPA Conv. Standby Revenue After EDB	\$	139,621,262
<u>NYPA Revenue Requirement</u>	\$	139,630,495
Variance	\$	(9,233)
% Variance		-0.01%

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**NYPA SERVICE CLASSIFICATION == CONVENTIONAL
STANDBY RATE SUMMARY FOR VARIOUS TYPE OF CUSTOMERS
MAY - OCTOBER**

<u>Low Tension Customer:</u>	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02
<u>Customer Charge: (Per Bill)</u> \$	95.70 \$	95.70 \$	95.70 \$	95.70 \$	95.70 \$	95.70
<u>Transmission Contract Demand Charge:</u> Per kW of Contract Demand						
\$	- \$	- \$	- \$	- \$	- \$	-
<u>As Used Daily On-Peak Transmission Demand Charge, Per kW of Daily Transmission Peak Demand:</u>						
\$	0.0837 \$	0.1655 \$	0.1655 \$	0.1655 \$	0.1655 \$	0.0837
<u>Distribution Contract Demand Charge:</u> Per kW of Contract Demand						
\$	3.5500 \$	3.5500 \$	3.5500 \$	3.5500 \$	3.5500 \$	3.5500
<u>As Used Daily On-Peak Distribution Demand Charge, Per kW of Daily Distribution Peak Demand:</u>						
\$	0.1170 \$	0.2822 \$	0.2822 \$	0.2822 \$	0.2822 \$	0.1170

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**NYPA SERVICE CLASSIFICATION == CONVENTIONAL
STANDBY RATE SUMMARY FOR VARIOUS TYPE OF CUSTOMERS
MAY - OCTOBER**

<u>High Tension Customer:</u>	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02
<u>Customer Charge: (Per Bill)</u> \$	95.70 \$	95.70 \$	95.70 \$	95.70 \$	95.70 \$	95.70
<u>Transmission Contract Demand Charge: Per KW of Contract Demand</u>	\$ -	\$ -	\$ -	\$ -	\$ -	-
<u>As Used Daily On-Peak Transmission Demand Charge, Per KW of Daily Transmission Peak Demand:</u>	\$ 0.0840	\$ 0.1659	\$ 0.1659	\$ 0.1659	\$ 0.1659	0.0840
<u>Distribution Contract Demand Charge: Per KW of Contract Demand</u>	\$ 2.8000	\$ 2.8000	\$ 2.8000	\$ 2.8000	\$ 2.8000	2.8000
<u>As Used Daily On-Peak Distribution Demand Charge, Per KW of Daily Distribution Peak Demand:</u>	\$ 0.0292	\$ 0.0702	\$ 0.0702	\$ 0.0702	\$ 0.0702	0.0292