

**CENTRAL MAINE POWER COMPANY
RESPONSE TO ORAL DATA REQUEST NO. 3
DOCKET No. 2008-255**

December 2, 2008

ODR-03-37

Q. Please provide the source of the “ratio of firm summer cap to installed cap” figures for each area listed in the Attachment 1 to the response EX-07-07.

A. Attachment 1 contains the work papers that are the source of those figures.

Response Prepared and Submitted By:

Richard S. Hahn
Principal Consultant
La Capra Associates, Inc.

Attachment(s):

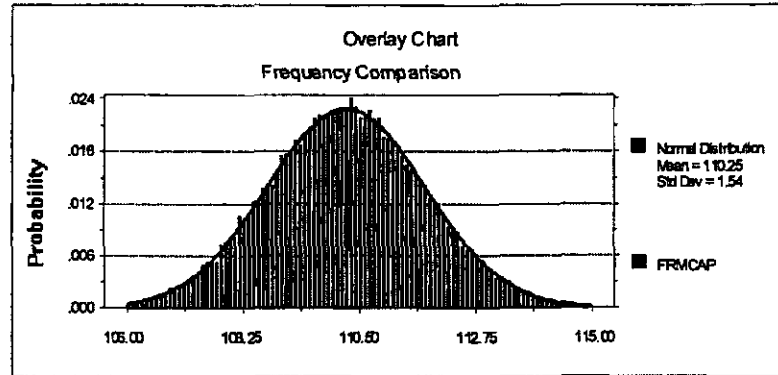
1. Firm Capacity

RESULTS

ALL EXISTING UNITS PLUS FOUR 25 MW GTs

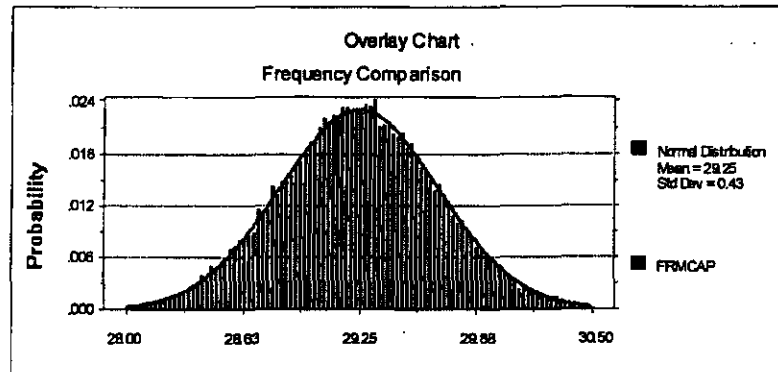
SIMULATION RESULTS			
mean=	110.25	criteria	99.97%
stdev=	1.54	WIN CAP	131
		SUM CAP	121 0.924
		UCAP	110 0.843
		FIRM CAP	105 0.803

77
0.771809



ALL EXISTING UNITS

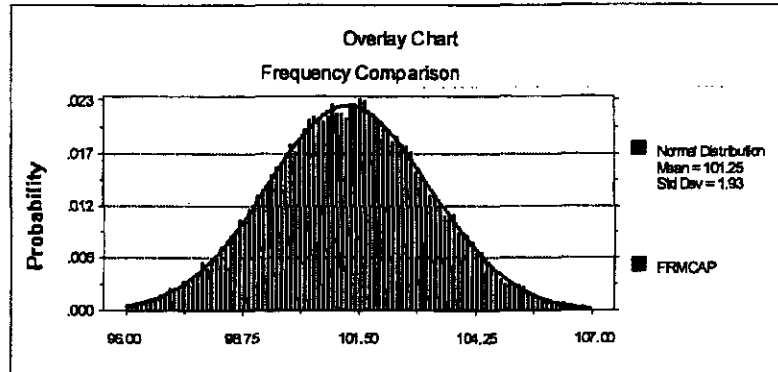
SIMULATION RESULTS			
mean=	29.25	criteria	99.97%
stdev=	0.43	WIN CAP	31
		SUM CAP	31 1.000
		UCAP	29 0.952
		FIRM CAP	28 0.904



ALL EXISTING UNITS PLUS TEN 10 MW GTs

SIMULATION RESULTS			
mean=	101.25	criteria	99.97%
stdev=	1.83	WIN CAP	131
		SUM CAP	121 0.924
		UCAP	101 0.774
		FIRM CAP	95 0.724

67
0.668526

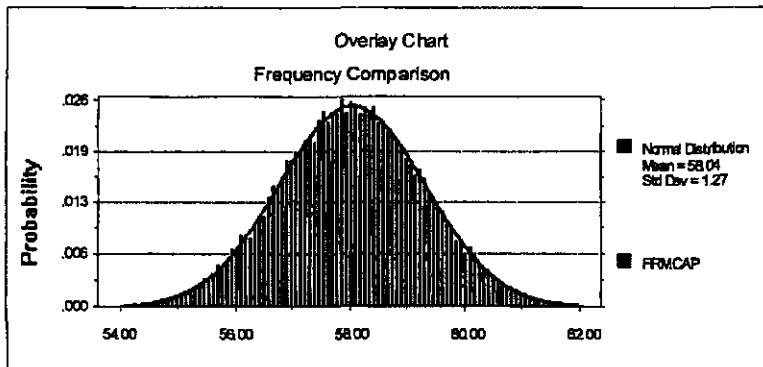


RESULTS

ALL EXISTING UNITS PLUS FOUR 10 MW GTs

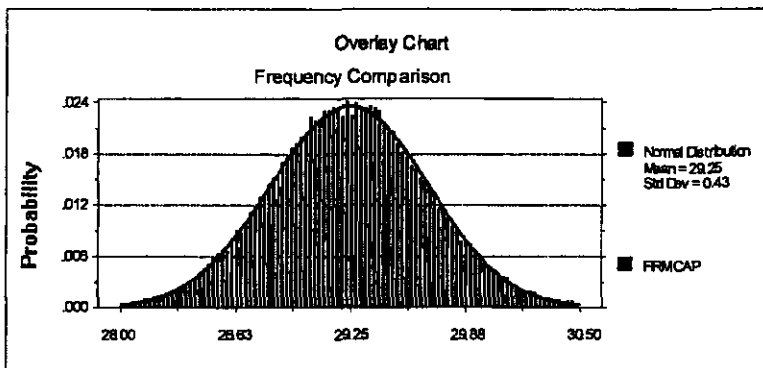
SIMULATION RESULTS			
mean=	58.04	criteria	99.97%
stdev=	1.27	WIN CAP	71
		SUM CAP	67 0.943
		UCAP	58 0.821
		FIRM CAP	54 0.759

28
0.647886



ALL EXISTING UNITS

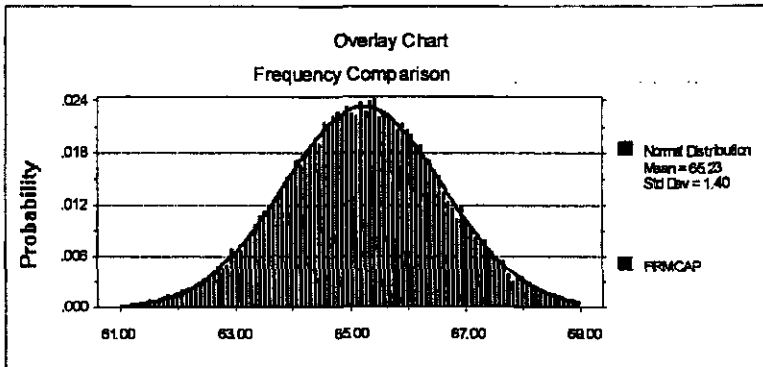
SIMULATION RESULTS			
mean=	29.25	criteria	99.97%
stdev=	0.43	WIN CAP	31
		SUM CAP	31 1.000
		UCAP	29 0.952
		FIRM CAP	28 0.904



ALL EXISTING UNITS PLUS FIVE 10 MW GTs

SIMULATION RESULTS			
mean=	65.23	criteria	99.97%
stdev=	1.40	WIN CAP	81
		SUM CAP	76 0.938
		UCAP	65 0.908
		FIRM CAP	60 0.748

33
0.653027



ABRBY ID	STATION NAME	UNIT TYPE	NET CAPABILITY (MW)		FORMA	PERIOD	START	END	FIRM CAP	WIND	HYDRO	SOLAR	OTHER	LOSS
			SUMMER	WINTER										
483	AEI LIVERMORE	ST	34.70	34.43	26	7.01			0.00	0	0	1	0	
2278	BARKER LOWER HYDRO	HDR	0.30	0.30	36	4.62			0.00	0	0	1	0	
2279	BARKER UPPER HYDRO	HDR	0.22	0.25	36	4.62			0.00	0	0	1	0	
326	GULF ISLAND COMPOSITE	HW	32.97	32.87	37	3.13			0.00	0	0	1	0	
1263	LEWISTON US	HDR	0.64	0.64	36	4.62			0.00	0	0	1	0	
487	MILLER HYDRO	HDR	9.14	14.44	36	4.62			0.00	0	0	1	0	
1109	MMWAC	ST	2.73	2.73	26	7.01			2.54	0	0	1	1	
358	BRUNSWICK	HDR	11.82	17.04	36	4.62			0.00	0	0	0	0	
1083	ANDROSCOGGIN ENERGY CENTER	GT	127.39	190.85	32	11.19			0.00	0	0	1	0	
590	BORALEX STRATTON ENERGY	ST	45.02	44.38	28	7.01			0.00	0	0	1	0	
2283	EUSTIS HYDRO	HDR	0.14	0.28	36	4.62			0.00	0	0	0	0	
2280	BENTON FALLS HYDRO	HDR	3.78	4.38	36	4.62			0.00	1	0	0	0	
12106	FIEC DIESEL	IC	2.00	2.00	38	10.30			0.00	0	1	0	0	
2284	GARDNER HYDRO	HDR	0.75	0.88	36	4.62			0.00	0	0	0	0	
480	LOCKWOOD	HDR	6.85	7.00	36	4.62			0.00	1	0	0	0	
736	MESSALONSKEE COMPOSITE	HDR	4.40	4.40	36	4.62			0.00	1	0	0	0	
1107	SOMERSET	ST	5.00	5.00	28	7.01			0.00	1	0	0	0	
2428	UNITED AMERICAN HYDRO-NEW	HDR	14.14	17.15	36	4.62			0.00	1	0	1	0	
756	FT HALFAX	HDR	1.80	1.80	36	4.62			0.00	1	0	0	0	
11424	RUMFORD FALLS	HW	41.27	40.86	37	3.13			0.00	0	0	1	0	
1295	RUMFORD POWER	CC	244.94	289.75	34	8.33			0.00	0	0	1	0	
684	SWANB FALLS	HDR	0.41	0.41	36	4.62			0.00	0	0	0	0	
1271	SYBKO WIGHT BROOK	HDR	0.03	0.03	36	4.62			0.00	0	0	1	0	
331	AZISCOHOS HYDRO	HDR	6.81	6.81	36	4.62			0.00	0	0	0	0	
1258	SHE SMALL HYDRO COMPOSITE	HDR	1.72	1.89	36	4.62			0.00	0	0	0	0	
2281	BROWNS MILL HYDRO	HDR	0.65	0.45	36	4.62			0.00	0	0	0	0	
429	GREENVILLE	ST	15.81	15.70	26	7.01			0.00	0	0	0	0	
2285	GREENVILLE HYDRO	HDR	0.04	0.10	36	4.62			0.00	0	0	0	0	
532	PELEPSCOT	HDR	8.80	13.55	36	4.62			0.00	0	0	0	0	
1113	BRASSIA HYDRO	HDR	4.20	4.20	36	4.62			0.00	0	0	0	0	
432	HARRIS 1	HW	16.78	16.78	36	4.62			0.00	0	0	0	0	
433	HARRIS 2	HW	34.85	34.50	37	3.13			0.00	0	0	0	0	
434	HARRIS 3	HW	34.21	33.91	37	3.13			0.00	0	0	0	0	
757	HARRIS 4	HW	1.44	1.28	36	4.62			0.00	0	0	0	0	
1273	KENNEBEC WATER US	HDR	0.38	0.32	36	4.62			0.00	1	0	0	0	
1114	MADISON COMPOSITE	HDR	16.45	20.31	36	4.62			0.00	0	0	0	0	
495	MONTY	HCP	28.00	28.00	36	4.62			28.71	0	0	1	1	
2290	PITTSFIELD HYDRO	HDR	0.88	0.73	36	4.62			0.00	0	0	0	0	
2289	POINER DAM HYDRO	HDR	0.20	0.20	36	4.62			0.00	0	0	0	0	
781	SHAWMUT	HDR	8.50	8.50	36	4.62			0.00	1	0	0	0	
2291	WAYERLY AVENUE HYDRO	HDR	0.30	0.24	36	4.62			0.00	0	0	0	0	
817	WESTON	HDR	13.20	13.20	36	4.62			0.00	1	0	0	0	
821	WILLIAMS	HCP	14.80	14.90	36	4.62			0.00	0	0	0	0	
836	WYMAN HYDRO 1	HW	27.38	27.38	36	4.62			0.00	0	0	0	0	
837	WYMAN HYDRO 2	HW	28.87	28.87	36	4.62			0.00	0	0	0	0	
838	WYMAN HYDRO 3	HW	25.73	25.73	36	4.62			0.00	0	0	0	0	
	NEW GT-10		9.00	10.00	40	20.00			7.20				1	
	NEW GT-10		9.00	10.00	40	20.00			7.20				1	
	NEW GT-10		9.00	10.00	40	20.00			7.20				1	
	NEW GT-10		9.00	10.00	40	20.00			7.20				1	
	NEW GT-10		9.00	10.00	40	20.00			7.20				1	
	NEW GT-10		9.00	10.00	40	20.00			0.00				0	
	NEW GT-10		9.00	10.00	40	20.00			0.00				0	
	NEW GT-10		9.00	10.00	40	20.00			0.00				0	
	NEW GT-10		9.00	10.00	40	20.00			0.00				0	
	NEW GT-10		9.00	10.00	40	20.00			0.00				0	
	NEW GT-10		9.00	10.00	40	20.00			0.00				0	

note: all prob dist are normal with STDEV of 33% of mean

CALCULATION RESULTS			
mean:	05.23	crit:0.8	89.97%
stddev:	1.40	WIN CAP	81
		SUM CAP	78 0.938
		LCAP	66 0.804
		FIRM CAP	80 0.743

PROB	DIST
11	16.19
12	18.29
16	8.84
26	7.01
31	25.76
32	11.16
33	6.90
34	6.33
36	4.62
37	3.13
38	10.30
39	10.00
40	20.00
44	
45	

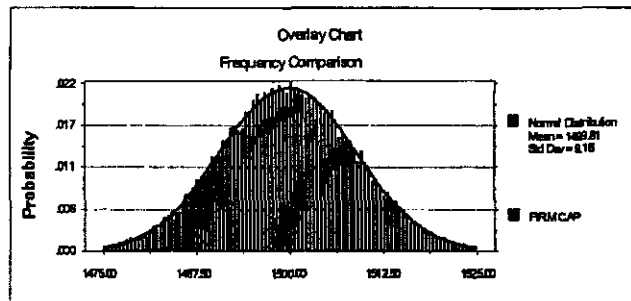
75.73 80.73

RESULTS

ALL EXISTING UNITS PLUS EIGHT 100 MW GTs

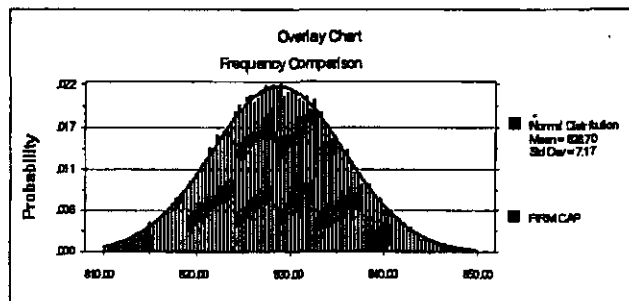
SIMULATION RESULTS			
mean=	1498.81	criteria	99.97%
stdev=	9.18	WIN CAP	1,782
		SUM CAP	1,802 0.910
		UCAP	1,500 0.851
		FIRM CAP	1,468 0.833

664
0.830351



ALL EXISTING UNITS

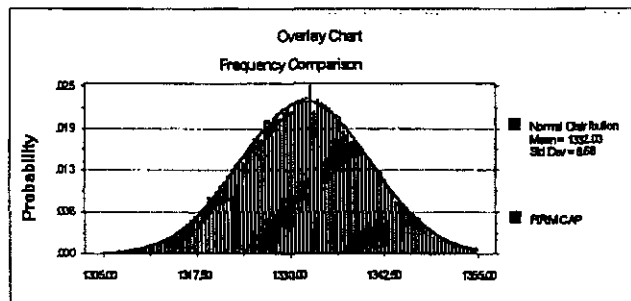
SIMULATION RESULTS			
mean=	828.70	criteria	99.97%
stdev=	7.17	WIN CAP	962
		SUM CAP	882 0.917
		UCAP	829 0.862
		FIRM CAP	804 0.836



ALL EXISTING UNITS PLUS SIX 100 MW GTs

SIMULATION RESULTS			
mean=	1332.03	criteria	99.97%
stdev=	8.68	WIN CAP	1,562
		SUM CAP	1,422 0.911
		UCAP	1,332 0.853
		FIRM CAP	1,302 0.834

498
0.830247

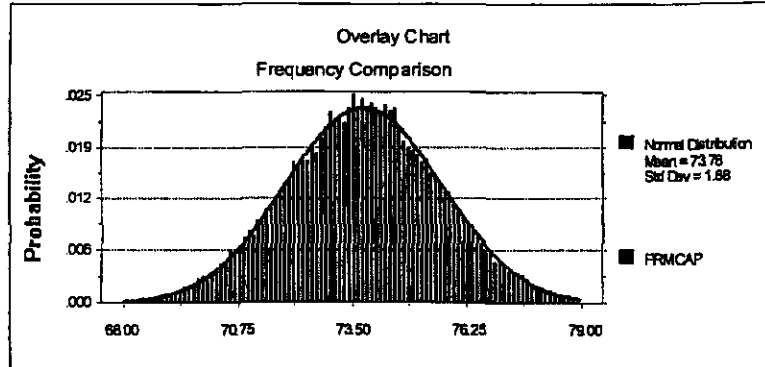


RESULTS

TEN 10 MW GTs

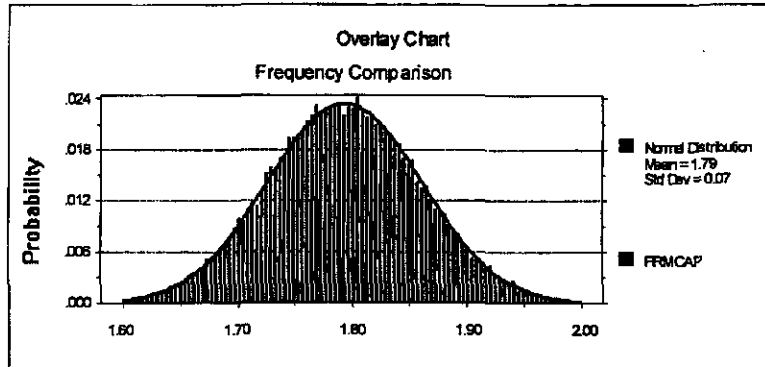
SIMULATION RESULTS			
mean=	73.76	criteria	99.97%
stdev=	1.80	WIN CAP	102
		SUM CAP	92 0.902
		UCAP	74 0.723
		FIRM CAP	66 0.663

66
0.660533



ALL EXISTING UNITS

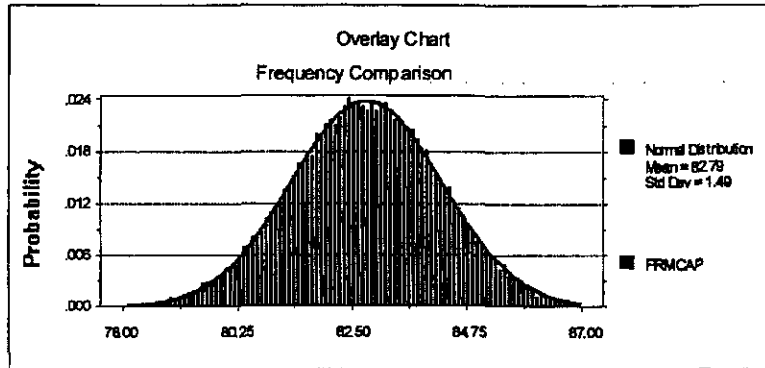
SIMULATION RESULTS			
mean=	1.79	criteria	99.97%
stdev=	0.07	WIN CAP	2
		SUM CAP	2 1.000
		UCAP	2 0.897
		FIRM CAP	2 0.775



four 25 MW GTs

SIMULATION RESULTS			
mean=	82.76	criteria	99.97%
stdev=	1.49	WIN CAP	102
		SUM CAP	92 0.902
		UCAP	83 0.812
		FIRM CAP	78 0.782

76
0.761271

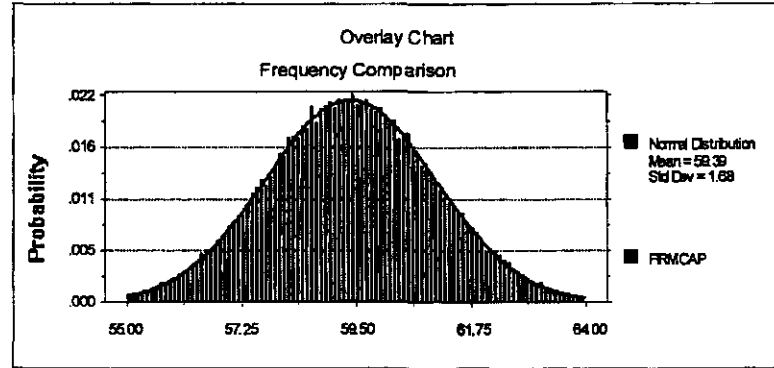


RESULTS

EIGHT 10 MW GTs

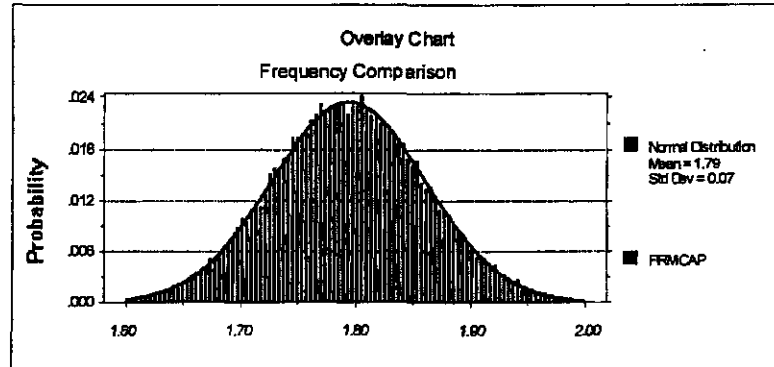
SIMULATION RESULTS			
mean=	59.39	criteria	99.97%
stdev=	1.68	WIN CAP	82
		SUM CAP	74 0.902
		UCAP	69 0.724
		FIRM CAP	54 0.654

52
0.850939



ALL EXISTING UNITS

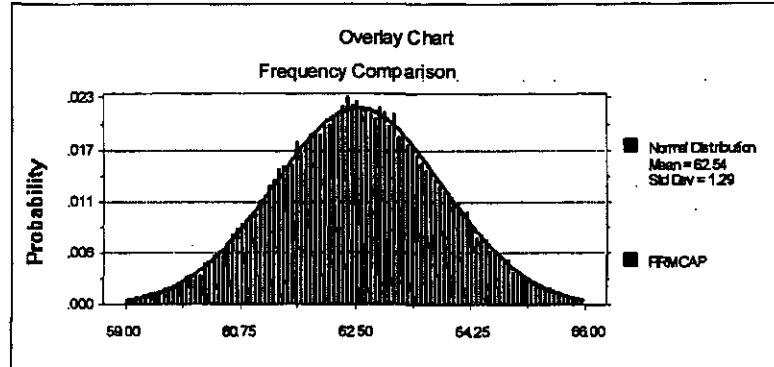
SIMULATION RESULTS			
mean=	1.79	criteria	99.97%
stdev=	0.07	WIN CAP	2
		SUM CAP	2 1.000
		UCAP	2 0.897
		FIRM CAP	2 0.775



THREE 25 MW GTs

SIMULATION RESULTS			
mean=	62.54	criteria	99.97%
stdev=	1.29	WIN CAP	77
		SUM CAP	70 0.903
		UCAP	63 0.812
		FIRM CAP	58 0.755

57
0.754179



ARRIVAL DATE	STATION NAME	UNIT TYPE	NET CAPACITY - MW	PERM. No.	PERIOD	START	STOP	START	STOP	START	STOP	START	STOP	START	STOP
483	AEI LIVERMORE	ST	34.70	34.43	28	7.01	1.00								
2278	BARKER LOWER HYDRO	HDR	0.36	0.90	36	4.82	1.00			0.00	0	0	1	0	
2278	BARKER UPPER HYDRO	HDR	0.22	0.55	36	4.82	1.00			0.00	0	0	1	0	
328	GULF ISLAND COMPOSITE	HW	32.97	32.97	37	3.13	1.00			0.00	0	0	1	0	
1283	LEWISTON US	HDR	0.84	0.84	36	4.82	1.00			0.00	0	0	1	0	
487	MILLER HYDRO	HDR	9.14	14.44	36	4.82	1.00			0.00	0	0	1	0	
1109	MAWAC	ST	2.73	2.73	28	7.01	1.00			0.00	0	0	1	1	
368	BRUNSWICK	HDR	11.82	17.04	36	4.82	1.00			0.00	0	0	0	0	
1083	ANDROSCOGGIN ENERGY CENTER	GT	127.39	190.85	32	11.16	1.00			0.00	0	0	1	0	
690	BORALEX STRATTON ENERGY	ST	45.02	44.36	28	7.01	1.00			0.00	0	0	1	0	
2283	EUSTIS HYDRO	HDR	0.14	0.25	36	4.82	1.00			0.00	0	0	0	0	
2280	BENTON FALLS HYDRO	HDR	3.78	4.38	36	4.82	1.00			0.00	1	0	0	0	
12108	FIEC DIESEL	IC	2.00	2.00	38	18.30			1	1.78	0	1	0	0	
2284	GARDNER HYDRO	HDR	0.75	0.99	36	4.82	1.00			0.00	0	0	0	0	
490	LOCKWOOD	HDR	8.95	7.00	36	4.82	1.00			0.00	1	0	0	0	
789	MEBBALONSKEE COMPOSITE	HDR	4.40	4.40	36	4.82	1.00			0.00	1	0	0	0	
1107	SOMERSET	ST	5.00	5.00	28	7.01	1.00			0.00	1	0	0	0	
2428	UNITED AMERICAN HYDRO-NEW	HDR	14.14	17.15	36	4.82	1.00			0.00	1	0	1	0	
758	FT HALIFAX	HDR	1.80	1.80	36	4.82	1.00			0.00	1	0	0	0	
11424	RUMFORD FALLS	HW	41.27	40.95	37	3.13	1.00			0.00	0	0	1	0	
1256	RUMFORD POWER	CC	244.84	288.75	34	8.33	1.00			0.00	0	0	1	0	
884	SWANS FALLS	HDR	0.41	0.41	36	4.82	1.00			0.00	0	0	0	0	
1271	SYSD WRIGHT BROOK	HDR	0.03	0.03	36	4.82	1.00			0.00	0	0	1	0	
331	AZIBOGOS HYDRO	HDR	6.81	6.81	36	4.82	1.00			0.00	0	0	0	0	
1258	BHE SMALL HYDRO COMPOSITE	HDR	1.72	1.88	36	4.82	1.00			0.00	0	0	0	0	
2281	BROWNS MILL HYDRO	HDR	0.85	0.48	36	4.82	1.00			0.00	0	0	0	0	
428	GREENVILLE	ST	19.81	18.10	28	7.01	1.00			0.00	0	0	0	0	
2285	GREENVILLE HYDRO	HDR	0.04	0.10	36	4.82	1.00			0.00	0	0	0	0	
532	PEJEPSCOT	HDR	8.80	13.55	36	4.82	1.00			0.00	0	0	0	0	
1113	BRASSIA HYDRO	HDR	4.20	4.20	36	4.82	1.00			0.00	0	0	0	0	
432	HARRIS 1	HW	16.78	16.78	36	4.82	1.00			0.00	0	0	0	0	
433	HARRIS 2	HW	34.95	34.60	37	3.13	1.00			0.00	0	0	0	0	
434	HARRIS 3	HW	34.21	33.81	37	3.13	1.00			0.00	0	0	0	0	
757	HARRIS 4	HW	1.44	1.25	36	4.82	1.00			0.00	0	0	0	0	
1273	KENNEBEC WATER US	HDR	0.38	0.32	36	4.82	1.00			0.00	1	0	0	0	
1114	MADISON COMPOSITE	HDR	18.45	20.31	36	4.82	1.00			0.00	0	0	0	0	
495	MONTY	HDP	28.00	28.00	36	4.82	1.00			0.00	0	0	1	1	
2290	PITTSFIELD HYDRO	HDR	0.88	0.73	36	4.82	1.00			0.00	0	0	0	0	
2289	POINER DAM HYDRO	HDR	0.20	0.20	36	4.82	1.00			0.00	0	0	0	0	
781	SHAWMUT	HDR	8.50	9.50	36	4.82	1.00			0.00	1	0	0	0	
2291	WAVERLY AVENUE HYDRO	HDR	0.30	0.24	36	4.82	1.00			0.00	0	0	0	0	
817	WESTON	HDR	13.20	13.20	36	4.82	1.00			0.00	1	0	0	0	
821	WILLIAMS	HDP	14.80	14.80	36	4.82	1.00			0.00	0	0	0	0	
636	WYMAN HYDRO 1	HW	27.36	27.36	36	4.82	1.00			0.00	0	0	0	0	
637	WYMAN HYDRO 2	HW	28.87	28.87	36	4.82	1.00			0.00	0	0	0	0	
638	WYMAN HYDRO 3	HW	25.73	25.73	36	4.82	1.00			0.00	0	0	0	0	
	NEW GT-25		22.50	25.00	39	10.00			1	20.28		1			
	NEW GT-25		22.50	25.00	39	10.00			1	20.28		1			
	NEW GT-25		22.50	25.00	39	10.00			1	20.25		1			
	NEW GT-10		9.00	10.00	40	20.00				0.00					
	NEW GT-10		9.00	10.00	40	20.00				0.00					
	NEW GT-10		9.00	10.00	40	20.00				0.00					
	NEW GT-10		9.00	10.00	40	20.00				0.00					
	NEW GT-10		9.00	10.00	40	20.00				0.00					
	NEW GT-10		9.00	10.00	40	20.00				0.00					
	NEW GT-10		9.00	10.00	40	20.00				0.00					

86.50 77.00

note: all prob dist are normal with STDEV at 33% of mean

SIMULATION RESULTS			
mean =	82.84	errors	88.87%
stdev =	1.28	WIN CAP	77
		SUM CAP	70 0.903
		UCAP	63 0.812
		FRM CAP	68 0.755

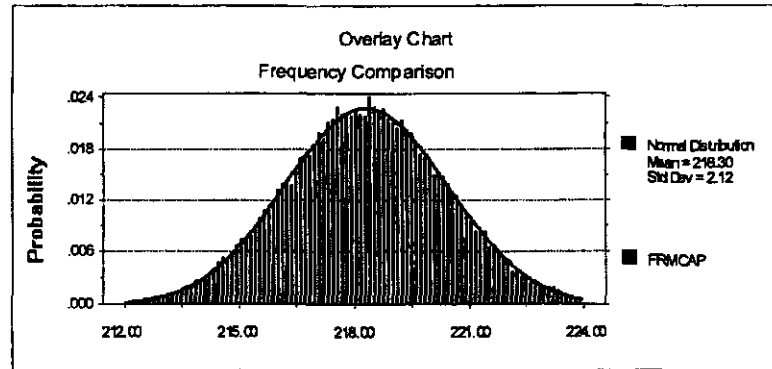
PROB DIST	#	STDEV
11	18.18	
12	18.29	
16	8.84	
20	7.01	
31	25.79	
32	15.16	
33	6.80	
34	6.33	
36	4.82	
37	3.13	
38	10.30	
39	10.00	
40	20.00	
44		
45		

RESULTS

ALL EXISTING UNITS PLUS EIGHT 25 MW GTs

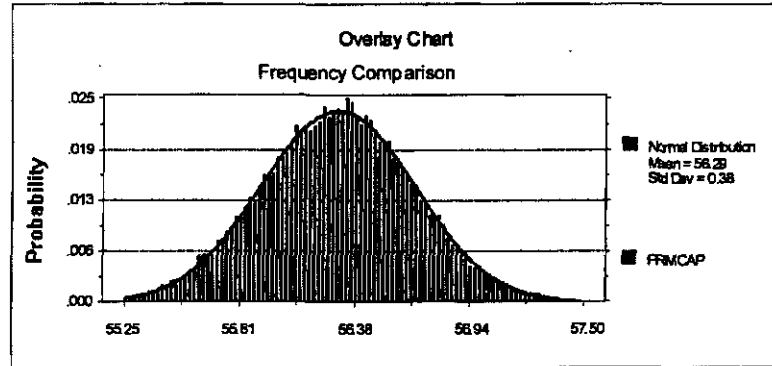
SIMULATION RESULTS			
mean=	218.30	criteria	99.97%
stdev=	2.12	WIN CAP	263
		SUM CAP	239 0.910
		UCAP	216 0.831
		FIRM CAP	211 0.803

156
0.780195



ALL EXISTING UNITS

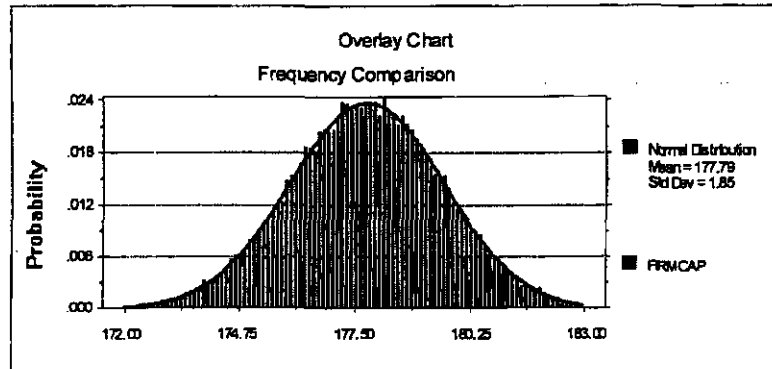
SIMULATION RESULTS			
mean=	56.29	criteria	99.97%
stdev=	0.38	WIN CAP	63
		SUM CAP	59 0.943
		UCAP	56 0.898
		FIRM CAP	55 0.877



ALL EXISTING UNITS PLUS SIX 25 MW GTs

SIMULATION RESULTS			
mean=	177.79	criteria	99.97%
stdev=	1.85	WIN CAP	213
		SUM CAP	194 0.913
		UCAP	178 0.836
		FIRM CAP	171 0.806

116
0.77637

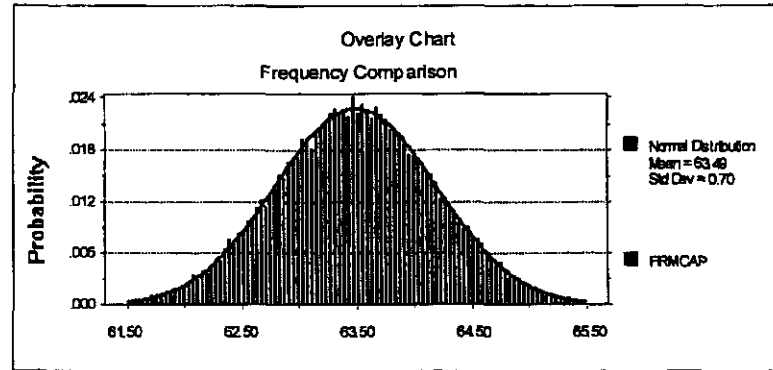


RESULTS

ALL EXISTING UNITS PLUS ONE 10 MW GTs

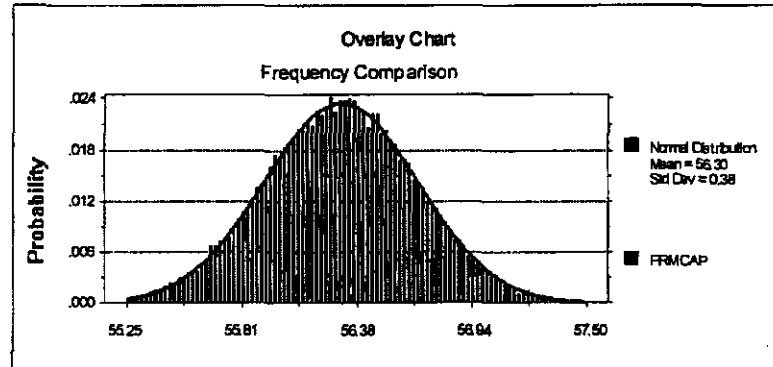
SIMULATION RESULTS			
mean=	63.49	criteria	99.97%
stdev=	0.70	WIN CAP	73
		SUM CAP	68 0.937
		UCAP	63 0.873
		FIRM CAP	61 0.840

6.09
0.609188



ALL EXISTING UNITS

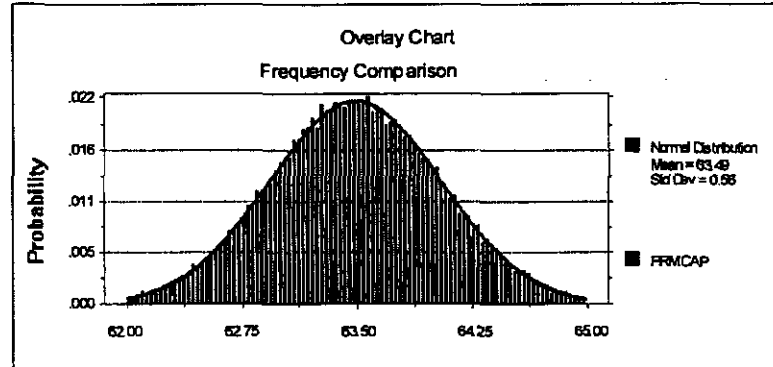
SIMULATION RESULTS			
mean=	56.30	criteria	99.97%
stdev=	0.38	WIN CAP	63
		SUM CAP	59 0.943
		UCAP	58 0.896
		FIRM CAP	55 0.877



ALL EXISTING UNITS PLUS TWO 5 MW GTs

SIMULATION RESULTS			
mean=	63.49	criteria	99.97%
stdev=	0.58	WIN CAP	73
		SUM CAP	68 0.937
		UCAP	63 0.873
		FIRM CAP	62 0.847

6.57
0.657231

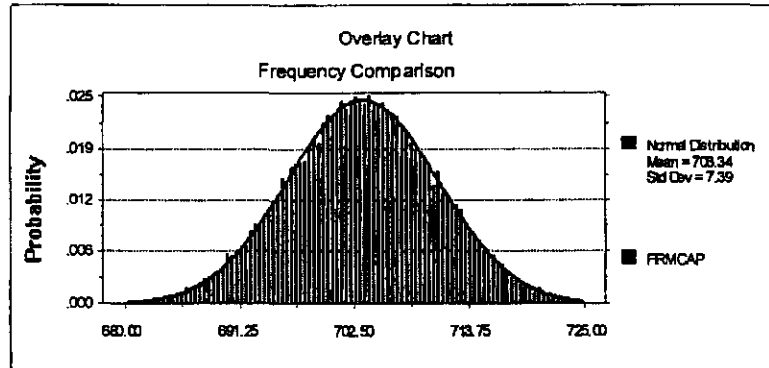


RESULTS

ALL EXISTING UNITS PLUS EIGHT 25 MW GTs

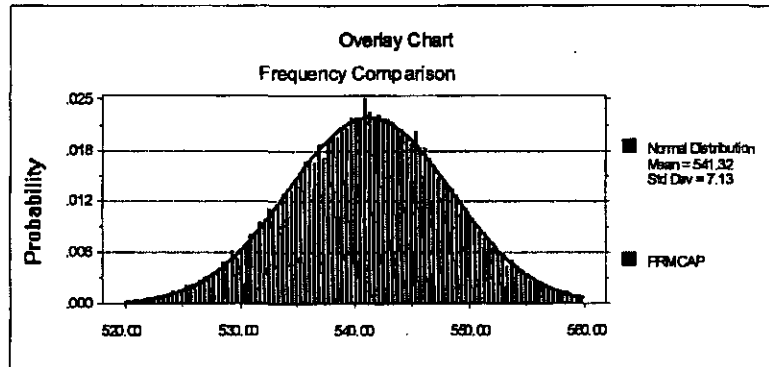
SIMULATION RESULTS			
mean=	703.34	criteria	99.97%
stdev=	7.39	WIN CAP	848
		SUM CAP	762 0.898
		UCAP	703 0.830
		FIRM CAP	678 0.800

161
0.805839



ALL EXISTING UNITS

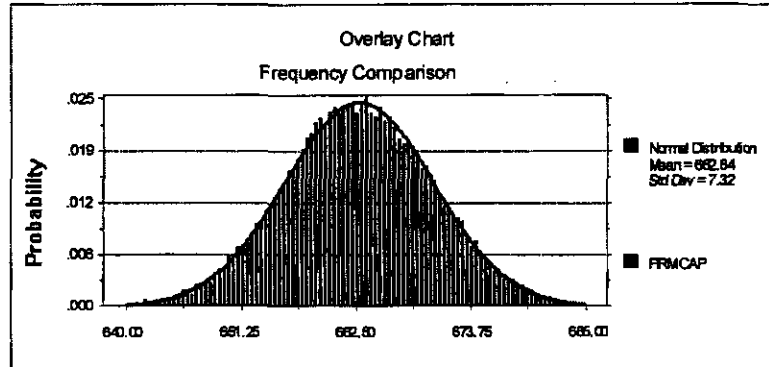
SIMULATION RESULTS			
mean=	541.32	criteria	99.97%
stdev=	7.13	WIN CAP	848
		SUM CAP	582 0.898
		UCAP	541 0.836
		FIRM CAP	517 0.798



ALL EXISTING UNITS PLUS SIX 25 MW GTs

SIMULATION RESULTS			
mean=	662.84	criteria	99.97%
stdev=	7.32	WIN CAP	798
		SUM CAP	717 0.898
		UCAP	683 0.831
		FIRM CAP	638 0.798

121
0.805787



ASSET ID	STATION NAME	UNIT TYPE	NET CAPABILITY - MW	PERFORM. ANS	PERFORM. \$/ANS	STABILITY (Years)	PROB. OF FAILURE	REPAIR COST	REPAIR TIME	REPAIR PROB.	REPAIR TIME	REPAIR PROB.	REPAIR TIME	REPAIR PROB.	REPAIR TIME	REPAIR PROB.
483	NEI LIVERMORE	ST	34.70	34.43	28	7.01										
2278	BARKER LOWER HYDRO	HDR	0.39	0.90	36	4.62										
2279	BARKER UPPER HYDRO	HDR	0.22	0.55	36	4.62										
228	GULF ISLAND COMPOSITE	HW	32.87	32.87	37	3.13										
1283	LEWISTON US	HDR	0.84	0.84	36	4.62										
487	MILLER HYDRO	HDR	0.14	14.44	36	4.62										
1108	MMWAC	ST	2.73	2.73	26	7.01										
358	BRUNSWICK	HDR	11.62	17.04	36	4.62										
1083	ANDROSCOGGIN ENERGY CENTER	GT	127.39	160.85	32	11.16										
590	BORALEX STRATTON ENERGY	ST	45.02	44.36	26	7.01										
2263	EUBT18 HYDRO	HDR	0.14	0.25	36	4.62										
2280	BENTON FALLS HYDRO	HDR	3.78	4.36	36	4.62										
12108	FIEC DIESEL	IC	2.00	2.00	36	10.30										
2284	GARDNER HYDRO	HDR	0.75	0.98	36	4.62										
460	LOCKWOOD	HDR	6.95	7.00	36	4.62										
790	NEBBALONSKEE COMPOSITE	HDR	4.40	4.40	36	4.62										
1107	SOMERSET	ST	5.00	5.00	26	7.01										
2428	UNITED AMERICAN HYDRO-NEW	HDR	14.14	17.15	36	4.62										
788	FT HALIFAX	HDR	1.80	1.80	36	4.62										
11424	RUMFORD FALLS	HW	41.27	40.95	37	3.13										
1255	RUMFORD POWER	CC	244.94	288.75	34	8.33										
884	SWANS FALLS	HDR	0.41	0.41	36	4.62										
1271	WYBKO WIGHT BROOK	HDR	0.03	0.03	36	4.62										
331	AZISCOHOS HYDRO	HDR	6.61	6.61	36	4.62										
1258	BHE SMALL HYDRO COMPOSITE	HDR	1.72	1.89	36	4.62										
2281	BROWNS MILL HYDRO	HDR	0.65	0.48	36	4.62										
428	GREENVILLE	ST	15.61	15.10	26	7.01										
2285	GREENVILLE HYDRO	HDR	0.04	0.10	36	4.62										
532	PEJEPSCOT	HDR	6.90	13.56	36	4.62										
1113	BRASLIA HYDRO	HDR	4.20	4.20	36	4.62										
432	HARRIS 1	HW	18.70	18.78	36	4.62										
433	HARRIS 2	HW	34.85	34.50	37	3.13										
434	HARRIS 3	HW	34.21	33.91	37	3.13										
757	HARRIS 4	HW	1.44	1.25	36	4.62										
1273	KENNEBEC WATER US	HDR	0.39	0.32	36	4.62										
1114	MADISON COMPOSITE	HDR	16.45	20.31	36	4.62										
485	MONTY	HDP	28.00	28.00	36	4.62										
2280	PITTSFIELD HYDRO	HDR	0.88	0.73	36	4.62										
2289	POINEER DAM HYDRO	HDR	0.20	0.20	36	4.62										
791	SHAWMUT	HDR	9.50	9.50	36	4.62										
2291	WAVERLY AVENUE HYDRO	HDR	0.30	0.24	36	4.62										
617	WESTON	HDR	13.20	13.20	36	4.62										
821	WILLIAMS	HDP	14.90	14.90	36	4.62										
836	WYMAN HYDRO 1	HW	27.36	27.36	36	4.62										
837	WYMAN HYDRO 2	HW	29.87	28.87	36	4.62										
838	WYMAN HYDRO 3	HW	25.73	25.73	36	4.62										
	NEW GT-26		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-26		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										
	NEW GT-25		22.50	25.00	36	10.00										

11	18.19
12	18.29
16	8.84
26	7.01
31	25.78
32	11.16
33	6.80
34	8.33
36	4.62
37	3.13
38	10.30
39	10.00
40	20.00
44	
45	

note: all prob dist are normal with STDEV at 35% of mean

REGULATION RESULTS			
mean=	541.32	ortho=	98.87%
std=	7.13	WIN CAP	648
		SUM CAP	862 0.698
		UCAP	541 0.636
		FIRM CAP	517 0.798

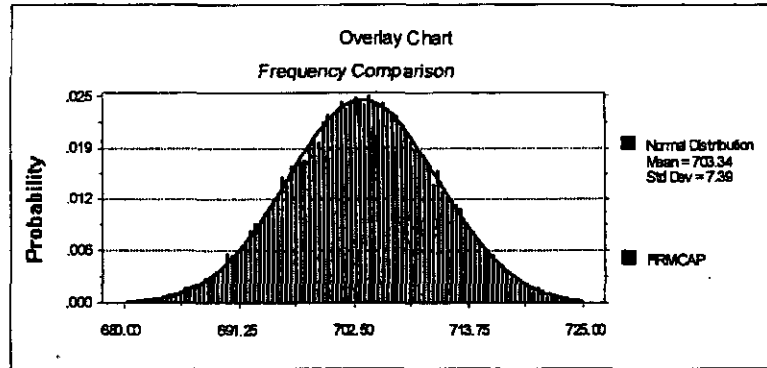
561.57 647.75

RESULTS

ALL EXISTING UNITS PLUS EIGHT 25 MW GTs

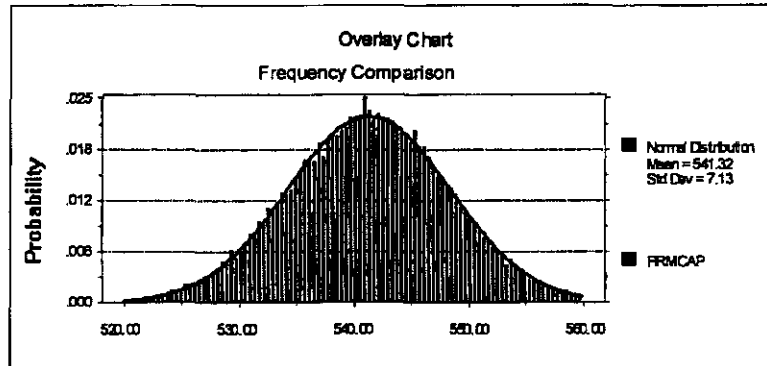
SIMULATION RESULTS			
mean=	703.34	criteria	99.97%
stdev=	7.39	WIN CAP	848
		SUM CAP	762 0.898
		UCAP	703 0.830
		FIRM CAP	878 0.800

161
0.805639



ALL EXISTING UNITS

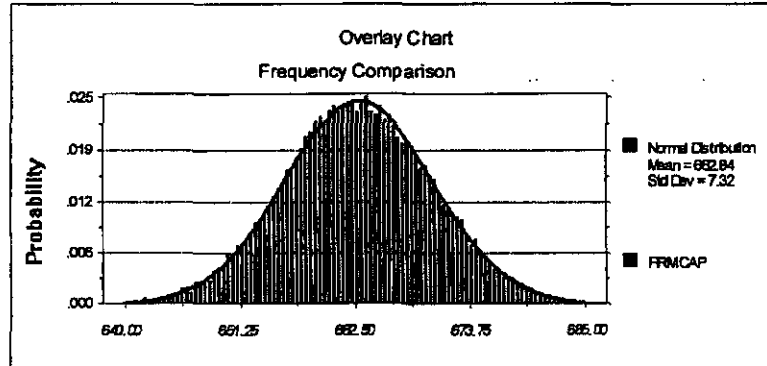
SIMULATION RESULTS			
mean=	541.32	criteria	99.97%
stdev=	7.13	WIN CAP	648
		SUM CAP	582 0.898
		UCAP	541 0.836
		FIRM CAP	517 0.798



ALL EXISTING UNITS PLUS SIX 25 MW GTs

SIMULATION RESULTS			
mean=	662.84	criteria	99.97%
stdev=	7.32	WIN CAP	798
		SUM CAP	717 0.898
		UCAP	663 0.831
		FIRM CAP	636 0.799

121
0.805787

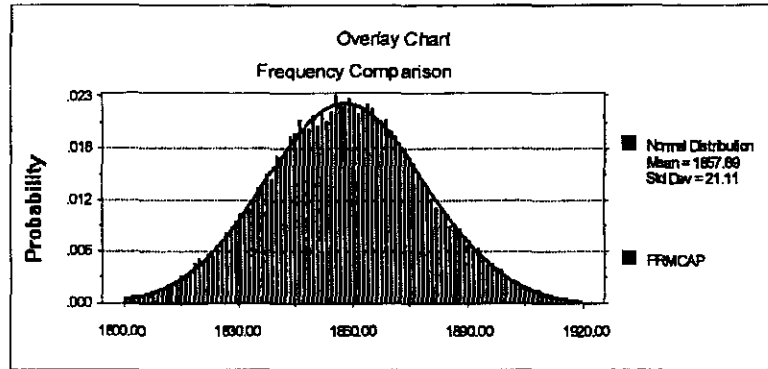


RESULTS

ALL EXISTING UNITS PLUS SIX 100 MW Gts

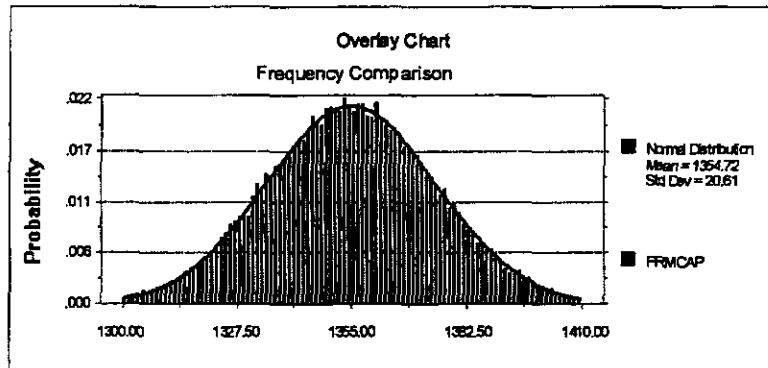
SIMULATION RESULTS			
mean=	1857.89	criteria	99.97%
stdev=	21.11	WIN CAP	2,169
		SUM CAP	2,032 0.937
		UCAP	1,858 0.857
		FIRM CAP	1,785 0.823

501
0.835757



ALL EXISTING UNITS ONLY

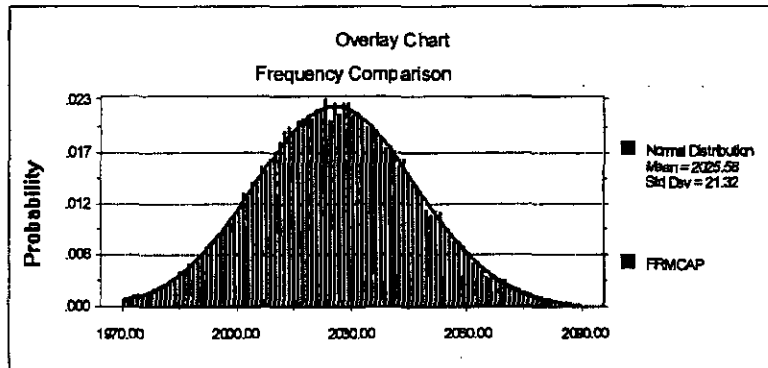
SIMULATION RESULTS			
mean=	1354.72	criteria	99.97%
stdev=	20.61	WIN CAP	1,569
		SUM CAP	1,492 0.951
		UCAP	1,355 0.863
		FIRM CAP	1,284 0.818



ALL EXISTING UNITS PLUS EIGHT 100 MW Gts

SIMULATION RESULTS			
mean=	2025.58	criteria	99.97%
stdev=	21.32	WIN CAP	2,399
		SUM CAP	2,212 0.934
		UCAP	2,026 0.855
		FIRM CAP	1,952 0.824

668
0.835529

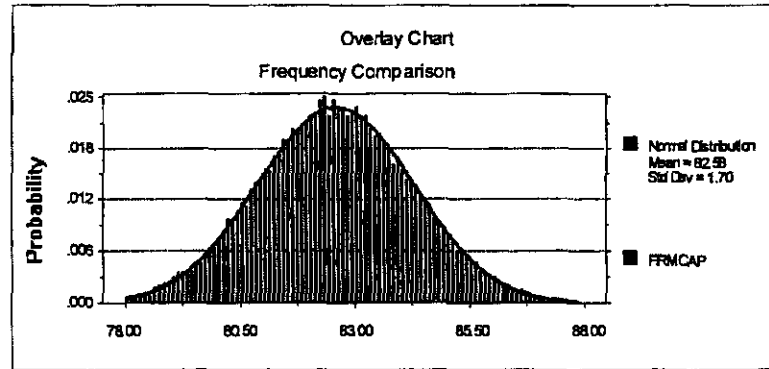


RESULTS

ALL EXISTING UNITS PLUS SIX 10 MW Gts

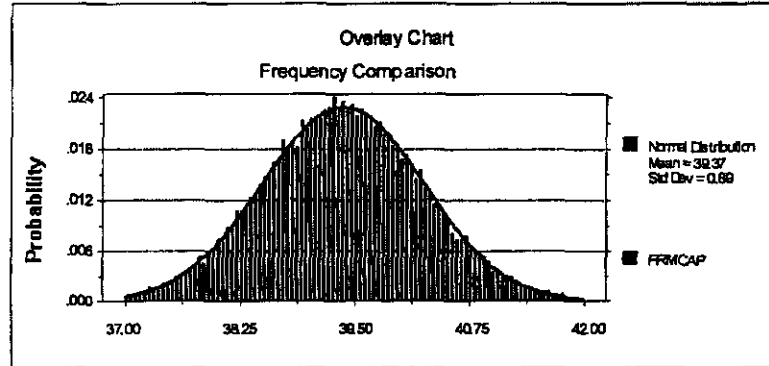
SIMULATION RESULTS			
mean=	82.58	criteria	99.97%
stdev=	1.70	WIN CAP	115
		SUM CAP	98 0.851
		UCAP	83 0.719
		FIRM CAP	77 0.668

40
0.67384



ALL EXISTING UNITS ONLY

SIMULATION RESULTS			
mean=	39.37	criteria	99.97%
stdev=	0.89	WIN CAP	55
		SUM CAP	44 0.798
		UCAP	39 0.717
		FIRM CAP	36 0.662



ALL EXISTING UNITS PLUS FOUR 10 MW Gts

SIMULATION RESULTS			
mean=	68.17	criteria	99.97%
stdev=	1.48	WIN CAP	85
		SUM CAP	80 0.841
		UCAP	68 0.718
		FIRM CAP	83 0.665

27
0.669384

