Distributions

Load	History		Simulation	
MW Bins	Distribution	Count	Distribution	Count
18000	0.000	0	0.000	0
19000	0.000	0	0.000	0
20000	0.000	0	0.000	6
21000	0.001	1	0.001	17
22000	0.003	6	0.005	152
23000	0.016	32	0.015	491
24000	0.036	72	0.036	1138
25000	0.068	135	0.063	2009
26000	0.076	150	0.087	2783
27000	0.089	177	0.106	3394
28000	0.128	253	0.122	3889
29000	0.138	273	0.132	4208
30000	0.121	240	0.124	3966
31000	0.112	223	0.101	3247
32000	0.080	158	0.079	2541
33000	0.052	104	0.058	1842
34000	0.050	100	0.038	1200
35000	0.017	34	0.019	612
36000	0.010	20	0.010	328
37000	0.003	6	0.004	136
38000	0.000	0	0.001	33
39000	0.000	0	0.000	8
40000	0.000	0	0.000	0
41000	0.000	0	0.000	0
42000	0.000	0	0.000	0
43000	0.000	0	0.000	0
44000	0.000	0	0.000	0
45000	0.000	0	0.000	0
		1984		32000

Price	History		Simulation	
Price Bins	Distribution	Count	Distribution	Count
$0	0.000	0	0.000	0
$5	0.000	0	0.000	0
$10	0.001	2	0.000	1
$15	0.003	5	0.006	203
$20	0.013	25	0.049	1560
$25	0.041	82	0.116	3697
$30	0.261	518	0.165	5276
$35	0.266	528	0.160	5117
$40	0.116	231	0.118	3761
$45	0.061	121	0.085	2708
$50	0.050	99	0.065	2082
$60	0.042	83	0.078	2483
$70	0.029	57	0.049	1569
$80	0.022	44	0.032	1029
$90	0.021	41	0.021	674
$100	0.013	25	0.014	434
$120	0.015	30	0.018	590
$140	0.010	20	0.011	342
$160	0.025	49	0.006	197
$180	0.006	12	0.003	94
$200	0.004	8	0.002	64
$250	0.002	4	0.002	69
$300	0.000	0	0.001	29
$350	0.000	0	0.000	7
$400	0.000	0	0.000	7
$450	0.000	0	0.000	4
$500	0.000	0	0.000	0
$550	0.000	0	0.000	3
$600	0.000	0	0.000	0
		1984		32000

10-Percentile Price Slices

History

Hour	7	8	9	10	11
Percentile					
0-10	$22.40	$24.54	$26.01	$26.72	$27.44
10-20	$21.82	$25.02	$26.97	$27.75	$28.64
20-30	$21.26	$25.18	$26.72	$28.62	$30.12
30-40	$23.34	$26.86	$27.83	$29.14	$30.68
40-50	$25.60	$28.78	$30.13	$31.31	$32.42
50-60	$23.67	$27.28	$29.22	$30.48	$32.04
60-70	$24.00	$28.72	$29.83	$32.49	$35.20
70-80	$25.44	$29.33	$30.70	$33.82	$37.87
80-90	$27.59	$29.76	$31.33	$33.32	$39.35
90-100	$29.64	$32.01	$35.78	$43.90	$72.85

Simulation

Hour	7	8	9	10	11
Percentile					
0-10	$18.62	$19.88	$21.14	$22.40	$23.56
10-20	$20.81	$22.70	$24.58	$26.47	$28.36
20-30	$21.70	$23.91	$26.11	$28.32	$30.76
30-40	$22.37	$24.68	$26.98	$29.29	$32.19
40-50	$22.99	$25.45	$27.91	$30.37	$33.62
50-60	$22.91	$25.40	$27.89	$30.38	$34.29
60-70	$24.05	$26.50	$28.94	$31.38	$35.78
70-80	$23.67	$26.33	$29.00	$31.66	$37.19
80-90	$23.43	$25.98	$28.53	$31.08	$38.10
90-100	$22.37	$25.07	$27.77	$30.47	$42.48

Price-Duration Curves

0%	1%	2%	3%	4%	5%
$10.00	$18.16	$20.77	$22.89	$24.05	$24.89
$9.64	$15.74	$17.19	$18.16	$18.99	$19.70

Summer Cal PX Si

Description of Workbook

The attached plots (Charts 1-5) show the results of a simu
unconstrained market clearing prices (UMCP's
1998 and 1999. Due to notably low volumes
the first 4 days of July, 1998 were omitted fro
5X16 periods, exclusive of NERC holidays, fo

Probabilistic models generated simulated loads and, from
that intra-day relationships as well as overall
prices of the 4 super peak hours, hours 15-18
(chart not included). The simulation has two
the distribution and hourly serial correlations
for genereating prices probabilistically from loa
from the base case loads, from scenarios dev

Simulated data reported are from a 2000 day by 16 hour
adequate for discussion purposes. A larger s
The 2,000 day run takes less than 30 second
15 minutes. The calculations were accomplis
create files too large for e-mailing, but are ava

[Person_1]

Chart 1: a comparison of the historic and simulated hour
Chart 2: a similar comparison of hourly prices (please no
Charts 3 and 4: the 16-hour daily price data sets were so
across 10 ten-percentile slices. This allows co
Recall that each slice in the history chart cont
slices average across 200 days for each hour
Chart 5: Price-duration curve comparison for historic and