Confidential Release

Case Number:
91-698-EL-FOR

Date of Confidential Document:

April 15, 1991

Today's Date:

July 29, 2009

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PUBLIC UTILITIES COMMISSION
FORECASTING & SITING

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the 1991 Long-Term Forecast Report of Ohio Edison Company	)))	Case No. 91-698-EL-FOR 0001

OHIO EDISON SYSTEM
Long Term Forecast Report
To The
Public Utilities Commission of Ohio
1991-Electric

CONFIDENTIAL MATERIAL
SUBMITTED UNDER SEAL

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Filed April 15, 1991

OHIO EDISON SYSTEM
1991 INTEGRATED RESOURCE PLANS
RATE AND REVENUE ANALYSIS SUMMARY
CONSTANT DOLLARS

	ALTERNATE PLANS								PREFERRED PLAN	
	BASE CASE (SUPPLY ONLY) RETAIL REVENUE RQMTS		DEMAND SIDE PLAN 1 RETAIL REVENUE RQMTS		DEMAND SIDE PLAN 2 RETAIL REVENUE RQMTS		DEMAND SIDE PLAN 3 RETAIL REVENUE RQMTS		DEMAND SIDE PLAN 4 RETAIL REVENUE RQMTS	
YEAR	$ MILLIONS	¢/KWH	$ MILLIONS	¢/KWH	$ MILLIONS	¢/KWH	$ MILLIONS	¢/KWH	$ MILLIONS	¢/KWH
1991	$2,137.1	8.75	$2,140.7	8.76	$2,142.5	8.80	$2,138.5	8.74	$2,138.6	8.74
1992	2,128.1	8.62	2,132.5	8.63	2,135.6	8.72	2,129.5	8.59	2,130.0	8.60
1993	2,127.1	8.45	2,124.9	8.44	2,129.6	8.56	2,120.8	8.38	2,121.2	8.39
1994	2,150.3	8.40	2,145.7	8.40	2,152.2	8.55	2,140.0	8.31	2,143.5	8.37
1995	2,170.8	8.33	2,162.0	8.32	2,163.9	8.49	2,162.4	8.23	2,159.7	8.32
1996	2,237.4	8.41	2,207.9	8.34	2,205.4	8.49	2,206.2	8.23	2,207.5	8.36
1997	2,261.5	8.35	2,251.9	8.37	2,240.3	8.48	2,245.7	8.23	2,240.4	8.37
1998	2,305.7	8.35	2,288.6	8.34	2,301.3	8.54	2,296.0	8.25	2,297.4	8.46
1999	2,370.1	8.41	2,346.5	8.38	2,337.7	8.50	2,357.2	8.30	2,335.3	8.44
2000	2,397.1	8.33	2,402.9	8.41	2,388.6	8.51	2,387.7	8.24	2,377.6	8.43
2001	2,501.6	8.54	2,454.1	8.43	2,440.5	8.53	2,459.3	8.34	2,445.5	8.51
2002	2,533.6	8.50	2,542.7	8.58	2,492.4	8.55	2,518.7	8.39	2,533.6	8.66
2003	2,637.1	8.70	2,589.4	8.59	2,595.9	8.75	2,573.1	8.43	2,580.2	8.67
2004	2,664.5	8.64	2,625.1	8.56	2,624.4	8.70	2,664.2	8.58	2,616.8	8.64
2005	2,694.8	8.59	2,672.8	8.57	2,655.6	8.65	2,696.7	8.54	2,665.7	8.65
2006	2,724.7	8.54	2,702.5	8.51	2,695.8	8.63	2,715.8	8.45	2,692.2	8.59
2007	2,754.9	8.49	2,737.6	8.48	2,729.5	8.59	2,754.5	8.43	2,727.1	8.55
2008	2,788.3	8.45	2,774.7	8.45	2,765.5	8.55	2,791.6	8.40	2,763.9	8.52
2009	2,821.6	8.41	2,810.4	8.42	2,799.2	8.51	2,827.9	8.37	2,804.5	8.50
2010	2,873.0	8.41	2,880.0	8.48	2,885.2	8.62	2,900.7	8.44	2,871.3	8.55
PRESENT VAL $	$27,266.3		$27,124.7		$27,079.6		$27,146.4		$27,055.6	
DIFF. FROM BASE CASE	---		($141.6)		($186.7)		($119.9)		($210.7)	
LEVELIZED ¢/KWH		8.49		8.48		8.59		8.40		8.50
DIFF. FROM BASE CASE		---		(0.01)		0.10		(0.09)		0.02

NOTE: COLUMN TOTALS AND DIFFERENCES REFLECT ROUNDING.

Reference Page 9-8

Short Term Implementation Plan
Benefit and Cost Summary

Program: Hot Water Conservation Program

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	($0)	$0*	NE	NE
1992	($144)	$226	-7430	-0.8
1993	($298)	$235	-14852	-1.6
1994	($476)	$149	-18566	-2.0

* Pilot program costs to be borne by subsidiary

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

NE = Not Estimated

Reference Page 9-10

Short Term Implementation Plan
Benefit and Cost Summary

Program: Controlled Air Conditioning

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	NE	$50	0	NE
1992	($7)	$200	0	-4.3
1993	($10)	$384	0	-8.7
1994	($572)	$550	0	-11.9

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

NE = Not Estimated

Reference Page 9-12

Short Term Implementation Plan
Benefit and Cost Summary

Program: High Efficiency Appliance Program

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	($3)	$44	-184	0
1992	($7)	$46	-374	-0.1
1993	($12)	$48	-562	-0.2
1994	($31)	$50	-766	-0.3

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-14

Short Term Implementation Plan
Benefit and Cost Summary

Program: Weatherization

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	($1)	$14	-58	-0.004
1992	($3)	$19	-184	-0.013
1993	($6)	$20	-304	-0.022
1994	($8)	$13	-364	-0.026

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-17

Short Term Implementation Plan
Benefit and Cost Summary

Program: Thermal Energy Storage - Cooling

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	($3)	$45	102	-0.5
1992	($11)	$44	198	-1.0
1993	($13)	$44	296	-1.4
1994	($21)	$45	400	-1.9

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-20

Short Term Implementation Plan
Benefit and Cost Summary

Program: C/I Efficient Lighting

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	NE	$30	NE	NE
1992	NE	$40	NE	NE
1993	($214)	$242	-10032	-2.2
1994	($642)	$243	-20066	-4.3

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

NE = Not Estimated

Reference Page 9-22

Short Term Implementation Plan
Benefit and Cost Summary

Program: Steel Plus

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	0	0	0	0
1992	($300)	$800	-6000	-2.0
1993	($807)	$1,600	-38000	-5.0
1994	($2017)	$2,400	-78000	-10.0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-23

Short Term Implementation Plan
Benefit and Cost Summary

Program: Interruptible Load Contracts

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	($667)	$14,202	0	-225
1992	($706)	$14,202	0	-225
1993	($746)	$14,202	0	-225
1994	($11248)	$14,202	0	-225

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-25

Short Term Implementation Plan
Benefit and Cost Summary

Program: Total Electric Heat Pump

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$108	$511	6674	0
1992	$293	$683	16012	0
1993	$540	$857	28024	0
1994	$797	$934	40708	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-27

Short Term Implementation Plan
Benefit and Cost Summary

Program: Add-On Heat Pump

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$45	$391	2784	0
1992	$121	$504	6678	0
1993	$225	$620	11692	0
1994	$330	$684	16980	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-29

Short Term Implementation Plan
Benefit and Cost Summary

Program: Geothermal Program

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$14	$316	856	-0.1
1992	$40	$378	2204	-0.2
1993	$93	$499	4900	-0.3
1994	$167	$714	10298	-0.7

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-31

Short Term Implementation Plan
Benefit and Cost Summary

Program: Electric Resistance Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$167	$606	10896	0
1992	$384	$672	22462	0
1993	$618	$719	34044	0
1994	$848	$790	46300	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-33

Short Term Implementation Plan
Benefit and Cost Summary

Program: Electric Water Heater Conversion

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$69	$280	4109	0
1992	$166	$340	8675	0
1993	$269	$389	13470	0
1994	$376	$429	18264	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-35

Short Term Implementation Plan
Benefit and Cost Summary

Program: Dual Fuel Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$82	$178	5448	0
1992	$181	$194	10892	0
1993	$291	$211	16340	0
1994	$391	$227	21788	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-36

Short Term Implementation Plan
Benefit and Cost Summary

Program: Thermal Energy Storage - Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$8	$68	546	0
1992	$21	$77	1272	0
1993	$37	$88	2180	0
1994	$61	$98	3276	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-38

Short Term Implementation Plan
Benefit and Cost Summary

Program: Residential Safety/Security Lighting

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$3	$19	176	0
1992	$7	$23	408	0
1993	$11	$27	702	0
1994	$18	$31	1056	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-41

Short Term Implementation Plan
Benefit and Cost Summary

Program: C/I Space Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$316	$300	20968	0
1992	$701	$415	41930	0
1993	$1,123	$416	62900	0
1994	$1,513	$416	83870	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-44

Short Term Implementation Plan
Benefit and Cost Summary

Program: Commercial Water Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$186	$80	10622	1.6
1992	$431	$243	21236	3.2
1993	$670	$243	31860	4.9
1994	$1,218	$243	42486	6.5

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-47

Short Term Implementation Plan
Benefit and Cost Summary

Program: Food Service

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$116	$100	7162	0
1992	$263	$113	14326	0
1993	$412	$113	21492	0
1994	$562	$113	28654	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

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Reference Page 9-50

Short Term Implementation Plan
Benefit and Cost Summary

Program: Electric Thermal Storage - Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	NE	$10	NE	NE
1992	NE	$30	NE	NE
1993	$144	$373	9,508	0
1994	$312	$409	19,014	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

NE = Not Estimated

Reference Page 9-53

Short Term Implementation Plan
Benefit and Cost Summary

Program: Process Heating

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$512	$40	26532	7.5
1992	$1,231	$52	53054	14.9
1993	$1,881	$55	79586	22.4
1994	$3,976	$57	106114	29.9

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

Reference Page 9-55

Short Term Implementation Plan
Benefit and Cost Summary

Program: C/I Security Lighting

	Supply Costs ($000)	Program Costs ($000)	Energy Impact (MWH)	Peak Impact (MW)
1991	$32	$61	2246	0
1992	$71	$111	4486	0
1993	$112	$160	6734	0
1994	$153	$210	8976	0

Supply Costs = Production Costs + Capacity Cost + Transmission Cost + Environmental Control Cost

Program Cost = A&G + Capital Investment + Rebates or Bill Credits

OHIO EDISON
The Energy Makers

76 S. Main Street
Akron, Ohio 44308-1890

Docketing Division

RECEIVED
APR 15 1991
PUBLIC UTILITIES COMMISSION
FORECASTING & SITING

OHIO EDISON SYSTEM
1991 Long Term Forecast Report

CONFIDENTIAL MATERIAL
SUBMITTED UNDER SEAL

Case No. 91-698-EL-FOR

ELECTRIC UTILITY MARGINAL COST COMPUTATION

(PUCO SPREADSHEET VERSION 1.2, MARCH 1993) PREPARED BY: POE

OHIO EDISON COMPANY IRP SUPPLY SIDE PLANNING DATE: 11-Sep-93

				TRANSMISSION FACILITY COST DATA			GENERATING FACILITY COST DATA PEAKING PLANTS			INTERMEDIATE PLANTS			BASELOAD PLANTS			
EAR	SUPPLY PLAN	PLANT TYPE	PLANT CODE	CAPITAL ($/kW)	FIXED O&M ($/kW/yr)	TOTAL ($/kW/yr)	CAPITAL ($/kW)	FIXED O&M ($/kW/yr)	TOTAL ($/kW/yr)	CAPITAL ($/kW)	FIXED O&M ($/kW/yr)	TOTAL ($/kW/yr)	CAPITAL ($/kW)	FIXED O&M ($/kW/yr)	TOTAL ($/kW/yr)	YEAR
993	**************	0	0	83.00	0.00	14.09	183.00	4.30	38.72	496.00	4.30	96.98	0.00	0.00	0.00	1993
994	**************	0	0	86.07	0.00	14.61	189.22	4.48	40.08	512.86	4.48	100.31	0.00	0.00	0.00	1994
995	**************	0	0	89.26	0.00	15.15	195.66	4.67	41.48	530.30	4.67	103.75	0.00	0.00	0.00	1995
996	**************	0	0	92.56	0.00	15.71	202.31	4.86	42.93	548.33	4.86	107.33	0.00	0.00	0.00	1996
997	WL	11	1	95.98	0.00	16.29	209.19	5.07	44.43	566.97	5.07	111.02	0.00	0.00	0.00	1997
998	2-ct's	12	1	99.53	0.00	16.89	408.96	0.86	77.05	586.25	5.28	114.84	0.00	0.00	0.00	1998
999	WL,1-ct	21	2	103.22	0.00	17.52	422.86	0.90	79.36	606.18	5.50	118.79	0.00	0.00	0.00	1999
000	1-ct,3-CC's	22	2	107.04	0.00	18.17	437.24	0.93	82.39	644.49	5.20	125.59	0.00	0.00	0.00	2000
001	1-ct	12	1	111.00	0.00	18.84	452.11	0.97	85.20	665.40	5.42	129.91	0.00	0.00	0.00	2001
002	**************	0	0	115.10	0.00	19.53	467.48	1.01	88.11	689.06	5.65	134.37	0.00	0.00	0.00	2002
003	1-CC	22	2	119.36	0.00	20.26	483.37	1.06	91.11	712.48	5.88	138.99	0.00	0.00	0.00	2003
004	**************	0	0	123.76	0.00	21.01	499.81	1.10	94.22	736.71	6.13	143.77	0.00	0.00	0.00	2004
005	**************	0	0	128.36	0.00	21.78	516.80	1.15	97.43	761.76	6.39	148.71	0.00	0.00	0.00	2005
006	**************	0	0	133.11	0.00	22.59	534.37	1.20	100.76	787.66	6.66	153.82	0.00	0.00	0.00	2006
007	**************	0	0	138.03	0.00	23.43	552.54	1.25	104.19	814.44	6.94	159.11	0.00	0.00	0.00	2007
008	1-ct	12	1	143.14	0.00	24.29	571.33	1.30	107.74	842.13	7.23	164.58	0.00	0.00	0.00	2008
009	2-ct	12	1	148.44	0.00	25.19	590.76	1.36	111.42	870.76	7.53	170.24	0.00	0.00	0.00	2009
010	1-ct	12	1	153.93	0.00	26.12	610.84	1.41	115.22	900.37	7.85	176.09	0.00	0.00	0.00	2010
011	1-CC	22	2	159.62	0.00	27.09	631.61	1.47	119.15	930.98	8.18	182.15	0.00	0.00	0.00	2011
012	3-ct,1-CC	22	2	165.53	0.00	28.09	653.08	1.53	123.21	962.63	8.52	188.41	0.00	0.00	0.00	2012
013	3-ct	12	1	171.65	0.00	29.13	675.28	1.59	127.42	995.36	8.88	194.89	0.00	0.00	0.00	2013
014	**************	0	0	178.00	0.00	30.21	698.24	1.66	131.76	1029.20	9.25	201.59	0.00	0.00	0.00	2014
015	**************	0	0	184.59	0.00	31.33	721.98	1.73	136.26	1064.20	9.64	208.53	0.00	0.00	0.00	2015
016	**************	0	0	191.42	0.00	32.49	746.53	1.80	140.90	1100.38	10.05	215.70	0.00	0.00	0.00	2016
017	**************	0	0	198.50	0.00	33.69	771.91	1.88	145.71	1137.79	10.47	223.12	0.00	0.00	0.00	2017
018	**************	0	0	205.85	0.00	34.94	798.16	1.96	150.68	1176.48	10.91	230.80	0.00	0.00	0.00	2018
019	**************	0	0	213.46	0.00	36.23	825.90	2.04	155.82	1216.48	11.37	238.74	0.00	0.00	0.00	2019
020	**************	0	0	221.36	0.00	37.57	853.36	2.13	161.14	1257.84	11.84	246.96	0.00	0.00	0.00	2020
021	**************	0	0	229.55	0.00	38.96	882.37	2.22	166.63	1300.60	12.34	255.45	0.00	0.00	0.00	2021
022	**************	0	0	238.05	0.00	40.40	912.37	2.31	172.32	1344.83	12.86	264.25	0.00	0.00	0.00	2022
023	**************	0	0	246.85	0.00	41.89	943.39	2.41	178.20	1390.55	13.40	273.34	0.00	0.00	0.00	2023

EXHIBIT ___ TFP-2

ELECTRIC UTILITY MARGINAL COST COMPUTATION

***** OHIO EDISON COMPANY IRP SUPPLY SIDE PLANNING ***** PREPARED BY: POE DATE: 22-Jan-93

PLANT CODE	FACILITY LEVELIZED COST DATA: TRANS ($/kW/yr)	PEAKING PLANTS ($/kW/yr)	INTERMED PLANTS ($/kW/yr)	BASELOAD PLANTS ($/kW/yr)	FACILITY CAPACITY COSTS: TOTAL ($/kW/yr)	DEMAND RELATED ($/kW/yr)	ENERGY RELATED ($/kW/yr)	DEMAND RELATED CAPACITY COST ALLOCATIONS: SUMMER ($/kW/yr)	WINTER ($/kW/yr)	ENERGY RELATED CAPACITY COST ALLOCATIONS — INTERMEDIATE PLANTS: ANNUAL ($/kW/yr)	SUMMER ($/kWh)	WINTER ($/kWh)	BASELOAD PLANTS: ANNUAL ($/kW/yr)	SUMMER ($/kWh)	WINTER ($/kWh)	YEAR
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000000	0.000000	0.00	0.000000	0.000000	1993
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000000	0.000000	0.00	0.000000	0.000000	1994
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000000	0.000000	0.00	0.000000	0.000000	1995
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000000	0.000000	0.00	0.000000	0.000000	1996
1	16.29	44.43	0.00	0.00	60.72	60.72	0.00	60.72	0.00	0.00	0.000000	0.000000	0.00	0.000000	0.000000	1997
1	16.89	77.05	0.00	0.00	93.94	93.94	0.00	93.94	0.00	0.00	0.000000	0.000000	0.00	0.000000	0.000000	1998
2	17.62	79.68	118.79	0.00	136.31	97.19	39.12	97.19	0.00	39.12	0.011529	0.011529	0.00	0.000000	0.000000	1999
2	18.17	82.39	125.59	0.00	143.76	100.56	43.20	100.56	0.00	43.20	0.012732	0.012732	0.00	0.000000	0.000000	2000
1	18.84	85.20	125.83	0.00	144.67	104.04	40.63	104.04	0.00	40.63	0.011974	0.011974	0.00	0.000000	0.000000	2001
0	18.84	85.25	126.08	0.00	144.92	104.08	40.83	104.08	0.00	40.83	0.012034	0.012034	0.00	0.000000	0.000000	2002
2	20.26	91.11	138.99	0.00	159.25	111.37	47.88	111.37	0.00	47.88	0.014111	0.014111	0.00	0.000000	0.000000	2003
0	20.26	91.16	139.26	0.00	159.52	111.42	48.10	111.42	0.00	48.10	0.014176	0.014176	0.00	0.000000	0.000000	2004
0	20.26	91.21	139.54	0.00	159.80	111.47	48.33	111.47	0.00	48.33	0.014243	0.014243	0.00	0.000000	0.000000	2005
0	20.26	91.26	139.83	0.00	160.09	111.52	48.57	111.52	0.00	48.57	0.014314	0.014314	0.00	0.000000	0.000000	2006
0	20.26	91.32	140.13	0.00	160.39	111.57	48.82	111.57	0.00	48.82	0.014387	0.014387	0.00	0.000000	0.000000	2007
1	24.29	107.74	140.45	0.00	164.74	132.04	32.70	132.04	0.00	32.70	0.009639	0.009639	0.00	0.000000	0.000000	2008
1	25.19	111.42	140.78	0.00	165.97	136.61	29.36	136.61	0.00	29.36	0.008653	0.008653	0.00	0.000000	0.000000	2009
1	26.12	115.22	141.12	0.00	167.24	141.34	25.90	141.34	0.00	25.90	0.007634	0.007634	0.00	0.000000	0.000000	2010
2	27.09	119.15	182.15	0.00	209.24	146.24	63.00	146.24	0.00	63.00	0.018567	0.018567	0.00	0.000000	0.000000	2011
2	28.09	123.21	188.41	0.00	216.50	151.31	65.20	151.31	0.00	65.20	0.019215	0.019215	0.00	0.000000	0.000000	2012
1	29.13	127.42	188.80	0.00	217.93	156.55	61.38	156.55	0.00	61.38	0.018091	0.018091	0.00	0.000000	0.000000	2013
0	29.13	127.49	189.20	0.00	218.33	156.62	61.71	156.62	0.00	61.71	0.018189	0.018189	0.00	0.000000	0.000000	2014
0	29.13	127.56	189.62	0.00	218.76	156.70	62.06	156.70	0.00	62.06	0.018291	0.018291	0.00	0.000000	0.000000	2015
0	29.13	127.64	190.06	0.00	219.19	156.77	62.42	156.77	0.00	62.42	0.018397	0.018397	0.00	0.000000	0.000000	2016
0	29.13	127.72	190.52	0.00	219.65	156.86	62.80	156.86	0.00	62.80	0.018507	0.018507	0.00	0.000000	0.000000	2017
0	29.13	127.81	191.00	0.00	220.13	156.94	63.19	156.94	0.00	63.19	0.018623	0.018623	0.00	0.000000	0.000000	2018
0	29.13	127.90	191.49	0.00	220.63	157.03	63.59	157.03	0.00	63.59	0.018743	0.018743	0.00	0.000000	0.000000	2019
0	29.13	127.99	192.01	0.00	221.14	157.12	64.02	157.12	0.00	64.02	0.018868	0.018868	0.00	0.000000	0.000000	2020
0	29.13	128.09	192.55	0.00	221.68	157.22	64.46	157.22	0.00	64.46	0.018998	0.018998	0.00	0.000000	0.000000	2021
0	29.13	128.19	193.11	0.00	222.24	157.32	64.92	157.32	0.00	64.92	0.019134	0.019134	0.00	0.000000	0.000000	2022
0	29.13	128.29	193.70	0.00	222.83	157.43	65.40	157.43	0.00	65.40	0.019276	0.019276	0.00	0.000000	0.000000	2023

ELECTRIC UTILITY MARGINAL COST COMPUTATION

PREPARED BY: POE

OHIO EDISON COMPANY IRP SUPPLY SIDE PLANNING DATE: 11-Sep-93

R	PLANT CODE	VARIABLE ENERGY COST ($/kWh) SUMMER ON-PEAK	SUMMER MID-PEAK	SUMMER OFF-PEAK	WINTER ON-PEAK	WINTER MID-PEAK	WINTER OFF-PEAK	TOTAL MARGINAL ENERGY COST ($/kWh) SUMMER ON-PEAK	SUMMER MID-PEAK	SUMMER OFF-PEAK	WINTER ON-PEAK	WINTER MID-PEAK	WINTER OFF-PEAK	YEAR
3	0	0.016050	0.014410	0.012740	0.014810	0.014280	0.013100	0.016050	0.014410	0.012740	0.014810	0.014280	0.013100	1993
4	0	0.021560	0.016400	0.013130	0.021160	0.017560	0.013840	0.021560	0.016400	0.013130	0.021160	0.017560	0.013840	1994
5	0	0.025860	0.020980	0.015350	0.022250	0.021050	0.016370	0.025860	0.020980	0.015350	0.022250	0.021050	0.016370	1995
6	0	0.027960	0.022830	0.015620	0.024960	0.023670	0.017610	0.027960	0.022830	0.015620	0.024960	0.023670	0.017610	1996
7	1	0.030870	0.025390	0.016980	0.026500	0.025180	0.018920	0.030870	0.025390	0.016980	0.026500	0.025180	0.018920	1997
8	1	0.036380	0.029480	0.018260	0.030330	0.028950	0.020650	0.036380	0.029480	0.018260	0.030330	0.028950	0.020650	1998
9	2	0.042360	0.034550	0.020300	0.035460	0.033940	0.022750	0.053889	0.046079	0.020300	0.046989	0.045469	0.022750	1999
0	2	0.037080	0.032290	0.020910	0.032260	0.031110	0.022180	0.049812	0.045022	0.020910	0.044992	0.043842	0.022180	2000
1	1	0.040840	0.034880	0.022270	0.035020	0.033960	0.024070	0.052814	0.046854	0.022270	0.046994	0.045934	0.024070	2001
2	0	0.042810	0.037430	0.023800	0.037010	0.036380	0.025990	0.054844	0.049464	0.023800	0.049044	0.048414	0.025990	2002
3	2	0.041190	0.037520	0.025080	0.037340	0.036840	0.027440	0.055301	0.051631	0.025080	0.051451	0.050951	0.027440	2003
4	0	0.045170	0.040660	0.026610	0.039490	0.038830	0.028640	0.059346	0.054836	0.026610	0.053666	0.053006	0.028640	2004
5	0	0.051390	0.044690	0.029030	0.042360	0.041060	0.030640	0.065633	0.058933	0.029030	0.056603	0.055303	0.030640	2005
6	0	0.042780	0.039220	0.027330	0.039820	0.038930	0.029200	0.057094	0.053534	0.027330	0.054134	0.053244	0.029200	2006
7	0	0.047040	0.042500	0.028820	0.042180	0.041610	0.030920	0.061427	0.056887	0.028820	0.056567	0.055997	0.030920	2007
8	1	0.051340	0.046560	0.031220	0.046140	0.044200	0.033730	0.060979	0.056199	0.031220	0.054779	0.053839	0.033730	2008
9	1	0.056120	0.049710	0.031940	0.047890	0.047280	0.035110	0.064773	0.058363	0.031940	0.056543	0.055933	0.035110	2009
0	1	0.059740	0.052860	0.034090	0.051320	0.050590	0.037220	0.067374	0.060494	0.034090	0.058954	0.058224	0.037220	2010
1	2	0.065930	0.058000	0.037320	0.055150	0.053190	0.039130	0.084497	0.076567	0.037320	0.073717	0.071757	0.039130	2011
2	2	0.069170	0.061950	0.038900	0.059510	0.057840	0.042080	0.088385	0.081165	0.038900	0.078725	0.077055	0.042080	2012
3	1	0.075710	0.066210	0.040680	0.064980	0.062590	0.044800	0.093801	0.084301	0.040680	0.083071	0.080681	0.044800	2013
4	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018189	0.018189	0.000000	0.018189	0.018189	0.000000	2014
5	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018291	0.018291	0.000000	0.018291	0.018291	0.000000	2015
6	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018397	0.018397	0.000000	0.018397	0.018397	0.000000	2016
7	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018507	0.018507	0.000000	0.018507	0.018507	0.000000	2017
8	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018623	0.018623	0.000000	0.018623	0.018623	0.000000	2018
9	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018743	0.018743	0.000000	0.018743	0.018743	0.000000	2019
0	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018868	0.018868	0.000000	0.018868	0.018868	0.000000	2020
1	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.018998	0.018998	0.000000	0.018998	0.018998	0.000000	2021
2	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.019134	0.019134	0.000000	0.019134	0.019134	0.000000	2022
3	0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.019276	0.019276	0.000000	0.019276	0.019276	0.000000	2023