

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

In re: Calculation of Gains and Appropriate )  
Regulatory Treatment for Non-Separated )  
Wholesale Energy Sales by Investor-owned )  
Electric Utilities )

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DOCKET NO. 010283-EI  
FILED: August 13, 2001

**REDACTED VERSION**

**TAMPA ELECTRIC COMPANY'S  
ANSWERS TO FIRST SET OF INTERROGATORIES (NOS. 1-4)  
OF  
THE OFFICE OF PUBLIC COUNSEL**

Tampa Electric files this its Answers to Interrogatories (Nos. 1 - 4) propounded and served on July 13, 2001, by the Office of Public Counsel.

DOCUMENT NUMBER-DATE

09869 AUG 13 2001

FPSC-COMMISSION CLERK

**TAMPA ELECTRIC COMPANY**

**DOCKET NO. 010283-EI**

**INDEX TO OPC'S 1ST SET OF INTERROGATORIES (NOS. 1-4)**

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1. Please give a clear definition of incremental fuel costs and detail how the utility determines incremental fuel cost. Provide a detailed example of such calculation. If there are numerous methodologies used by the utility, detail each methodology and explain the circumstance under which such methodology would be used.
- A. Incremental fuel costs are the costs of the last megawatt(s) of power from the system. These costs may be comprised of native generation and purchased power.

The incremental fuel costs for a given power sale are calculated by first dispatching the available generation and power purchases for all load of greater priority. Then the generation resources and power purchases are dispatched for the same load plus the power sale. The difference in fuel costs of the two cases is the incremental fuel costs.

**Detailed Example:**

Assumptions

Native Load = 2,000 MW

Power Sale = 100 MW

Native Generation\* = 2,050 MW

Incremental Cost of Last 50 MW of Native Generation = \$50/MWh

Hourly Purchases = 50 MW @ \$60/MWh

Calculation

Incremental Fuel Cost of 100 MW Sale =  $(50 \text{ MW} * \$50/\text{MWh}) + (50 \text{ MW} * \$60/\text{MWh}) = \$5,500$  per hour

\* Includes generation and firm, "must take" block purchases

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2. Please give a clear definition of incremental SO<sub>2</sub> and detail how the utility determines and calculates incremental SO<sub>2</sub>. Provide a detailed example of such calculation. If there are numerous methodologies used by the utility, detail each methodology and explain the circumstance under which such methodology would be used.
- A. Incremental SO<sub>2</sub> costs for non-separated wholesale sales are calculated when the company determines incremental fuel costs. The incremental amount of SO<sub>2</sub> emitted (tons) depends on the differences between the two dispatch cases described in the response to Interrogatory No. 1. The SO<sub>2</sub> emissions associated with a non-separated wholesale sale are priced at market price (\$/ton) for allowances each month.

**Detailed Example:**

Assumptions

Hourly SO<sub>2</sub> emissions associated with the sale described in the response to Interrogatory No. 1 total 100 tons for a given month.

The monthly market price of emission allowances is \$150/ton.

Calculation

Incremental SO<sub>2</sub> cost for the sale for that month is 100 tons \* \$150/ton = \$15,000.

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3. Please give a clear definition of incremental O&M costs and detail the type of expenses included in incremental O&M costs. Detail how the utility determines and calculates incremental O&M for each type of incremental O&M expense. Provide a detailed example of such calculation. If there are numerous methodologies used by the utility, detail each methodology and explain the circumstance under which such methodology would be used. Identify each type of incremental O&M expense that is included for recovery in the fuel clause.
- A. Incremental O&M costs are the change in O&M costs when the output of a generating unit is increased or decreased.

Incremental O&M expenses are calculated annually based upon the prior year's actual O&M expenses. Fixed and variable components of O&M expense are calculated using a procedure developed by the Electric Power Research Institute (EPRI). The procedure was published in their Technical Assessment Guide (TAG) Special Report, dated May 1982 (EPRI P-2410-SR). Incremental O&M costs equal variable O&M expenses since variable O&M is the portion of O&M costs that depends on generation output. The fixed component of O&M costs represents costs the utility will incur regardless of whether or not generation output varies.

The EPRI procedure sets fixed O&M costs equal to the capacity factor (%) times total annual O&M expenses. The capacity factor is based on total period hours less hours the units are off line due to economic dispatch during low load periods. The variable component is calculated by multiplying  $[1 - \text{the capacity factor (\%)}]$  by the total annual O&M cost.

No incremental O&M expense is included for recovery in the fuel clause. The O&M expense that is included is not related to Tampa Electric's generating assets. It is solely expense associated with purchased power contracts with cogenerators and Hardee Power Partners.

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Detailed Example:

2001 VARIABLE COAL O&M CALCULATION  
BASED UPON 2000 COAL O&M INFORMATION

	ADJUSTED MAX NET GWH	ACTUAL NET GEN. GWH
BIG BEND COAL GWH	15,148.0	10,713.1
GANNON COAL GWH	9,942.3	4,355.2
POLK COAL GWH	2,196.0	1,691.0
<b>TOTAL COAL GWH</b>	<b>27,286.3</b>	<b>16,759.3</b>

	<u>ANNUAL</u>
AVERAGE ADJUSTED COAL CAPACITY FACTOR	61.42%
BIG BEND O&M EXPENSE	\$48,552,341
GANNON O&M EXPENSE	\$39,494,449
POLK O&M EXPENSE	<u>\$22,631,219</u>
TOTAL O&M EXPENSE	\$110,678,009
VARIABLE COMPONENT * TOTAL O&M	\$42,699,344
<b>ESTIMATED COAL VARIABLE O&amp;M COSTS (\$/MWH)</b>	<b>\$2.55</b>

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4. For each non-separated wholesale sale during calendar year 2000 provide the following information detailed by transaction:

Date of sale

Identify whether it is a Broker sale or Non-Broker sale

Total KWH's sold

Price of non-separated sale in cents/KWH

Gain or (loss) on sale in cents/KWH

Incremental costs of sale in cents/KWH (identify type of costs included in calculating incremental costs)

Marginal generating cost in cents/KWH (identify type of costs included in calculating marginal generating costs)

Purchased power costs incurred during time of non-separated sale in cents/KWH

System average costs in cents/KWH

- A. Attached information is filed pursuant to Tampa Electric's separately filed request for protective order.

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
Seminole Electric Cooperative	01/01/2000 - 12/31/2000		Non-Broker	72,009,000					
Florida Municipal Power Agency	01/01/2000 - 12/31/2001		Non-Broker	1,091,250,000					
MA	01/04/00	10	Non-Broker	92,000					
MA	01/04/00	13	Non-Broker	192,000					
MA	01/04/00	14	Non-Broker	154,000					
MA	01/04/00	15	Non-Broker	18,000					
MA	01/04/00	15	Non-Broker	81,000					
MA	01/04/00	16	Non-Broker	20,000					
MA	01/04/00	16	Non-Broker	75,000					
MA	01/04/00	17	Non-Broker	20,000					
MA	01/04/00	17	Non-Broker	52,000					
MA	01/04/00	18	Non-Broker	2,000					
MA	01/04/00	18	Non-Broker	4,000					
MA	01/04/00	21	Non-Broker	64,000					
MA	01/04/00	22	Non-Broker	220,000					
MA	01/04/00	23	Non-Broker	42,000					
MA	01/04/00	11, 12	Non-Broker	200,000					
MA	01/05/00	8	Non-Broker	104,000					
MA	01/05/00	9	Non-Broker	21,000					
MA	01/05/00	9	Non-Broker	167,000					
MA	01/05/00	10	Non-Broker	283,000					
MA	01/05/00	11	Non-Broker	383,000					
MA	01/05/00	12	Non-Broker	400,000					
MA	01/05/00	13	Non-Broker	400,000					
MA	01/05/00	14	Non-Broker	212,000					
MA	01/05/00	15	Non-Broker	175,000					
MA	01/05/00	16	Non-Broker	198,000					
MA	01/05/00	17	Non-Broker	200,000					
MA	01/05/00	18	Non-Broker	283,000					
MA	01/05/00	19	Non-Broker	71,000					
MA	01/05/00	20	Non-Broker	4,000					
MA	01/05/00	21	Non-Broker	46,000					
MA	01/05/00	22	Non-Broker	4,000					
MA	01/06/00	7	Non-Broker	79,000					
MA	01/06/00	8	Non-Broker	115,000					
MA	01/06/00	9	Non-Broker	271,000					
MA	01/06/00	10	Non-Broker	108,000					
MA	01/06/00	11	Non-Broker	100,000					
MA	01/06/00	12	Non-Broker	246,000					
MA	01/06/00	13	Non-Broker	319,000					
MA	01/06/00	14	Non-Broker	325,000					
MA	01/06/00	15	Non-Broker	302,000					
MA	01/06/00	16	Non-Broker	300,000					
MA	01/06/00	17	Non-Broker	133,000					
MA	01/06/00	18	Non-Broker	100,000					
MA	01/06/00	19, 20	Non-Broker	117,000					
MA	01/06/00	8, 9	Non-Broker	166,000					
MA	01/07/00	12, 13, 14	Non-Broker	142,000					
MA	01/07/00	15, 16	Non-Broker	342,000					
MA	01/07/00	17, 18	Non-Broker	117,000					
MA	01/11/00	18, 19	Non-Broker	75,000					
MA	01/12/00	18	Non-Broker	69,000					
MA	01/12/00	19, 20, 21	Non-Broker	156,000					
MA	01/20/00	18, 19	Non-Broker	50,000					
MA	01/22/00	22	Non-Broker	92,000					
MA	01/22/00	23	Non-Broker	8,000					
MA	01/27/00	16	Non-Broker	92,000					
MA	01/27/00	17	Non-Broker	192,000					
MA	01/27/00	18	Non-Broker	17,000					
MA	01/27/00	10, 11	Non-Broker	100,000					
MA	01/29/00	11	Non-Broker	64,000					
MA	01/29/00	12	Non-Broker	143,000					
MA	01/29/00	13	Non-Broker	75,000					
MA	01/29/00	13	Non-Broker	112,000					
MA	01/29/00	14	Non-Broker	50,000					
MA	01/29/00	14	Non-Broker	275,000					
MA	01/29/00	15	Non-Broker	4,000					
MA	01/29/00	15	Non-Broker	300,000					
MA	01/29/00	16	Non-Broker	300,000					
MA	01/29/00	17	Non-Broker	300,000					
MA	01/29/00	18	Non-Broker	133,000					

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SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	01/29/00	19	Non-Broker	54,000					
MA	01/29/00	20	Non-Broker	142,000					
MA	01/29/00	21	Non-Broker	196,000					
MA	01/29/00	22, 23	Non-Broker	217,000					
MA	01/30/00	10	Non-Broker	92,000					
MA	01/30/00	11	Non-Broker	100,000					
MA	01/30/00	12	Non-Broker	192,000					
MA	01/30/00	13	Non-Broker	246,000					
MA	01/30/00	14	Non-Broker	250,000					
MA	01/30/00	15	Non-Broker	250,000					
MA	01/30/00	16	Non-Broker	250,000					
MA	01/30/00	17	Non-Broker	250,000					
MA	01/30/00	18	Non-Broker	250,000					
MA	01/30/00	19	Non-Broker	250,000					
MA	01/30/00	20	Non-Broker	108,000					
MA	01/30/00	21	Non-Broker	237,000					
MA	01/30/00	22, 23	Non-Broker	271,000					
MA	01/31/00	9	Non-Broker	31,000					
MA	01/31/00	9	Non-Broker	83,000					
MA	01/31/00	10	Non-Broker	75,000					
MA	01/31/00	10	Non-Broker	146,000					
MA	01/31/00	11	Non-Broker	121,000					
MA	01/31/00	12	Non-Broker	21,000					
MA	01/31/00	11, 12	Non-Broker	62,000					
MA	02/01/00	13	Non-Broker	92,000					
MA	02/01/00	14	Non-Broker	100,000					
MA	02/01/00	15	Non-Broker	192,000					
MA	02/01/00	16	Non-Broker	292,000					
MA	02/01/00	17	Non-Broker	300,000					
MA	02/01/00	18	Non-Broker	162,000					
MA	02/01/00	19	Non-Broker	12,000					
MA	02/02/00	10	Non-Broker	46,000					
MA	02/02/00	10	Non-Broker	92,000					
MA	02/02/00	11	Non-Broker	146,000					
MA	02/02/00	12	Non-Broker	81,000					
MA	02/02/00	12	Non-Broker	100,000					
MA	02/02/00	13	Non-Broker	190,000					
MA	02/02/00	14	Non-Broker	269,000					
MA	02/02/00	15	Non-Broker	435,000					
MA	02/02/00	16	Non-Broker	450,000					
MA	02/02/00	17	Non-Broker	422,000					
MA	02/02/00	22	Non-Broker	125,000					
MA	02/02/00	23	Non-Broker	25,000					
MA	02/02/00	24	Non-Broker	25,000					
MA	02/02/00	11, 12	Non-Broker	196,000					
MA	02/02/00	14, 15	Non-Broker	108,000					
MA	02/02/00	18, 19	Non-Broker	225,000					
MA	02/02/00	21, 22	Non-Broker	103,000					
MA	02/02/00	23, 24	Non-Broker	87,000					
MA	02/03/00	5	Non-Broker	26,000					
MA	02/03/00	6	Non-Broker	52,000					
MA	02/03/00	9	Non-Broker	50,000					
MA	02/03/00	10	Non-Broker	50,000					
MA	02/03/00	10	Non-Broker	200,000					
MA	02/03/00	11	Non-Broker	300,000					
MA	02/03/00	12	Non-Broker	125,000					
MA	02/03/00	12	Non-Broker	300,000					
MA	02/03/00	13	Non-Broker	108,000					
MA	02/03/00	13	Non-Broker	150,000					
MA	02/03/00	14	Non-Broker	267,000					
MA	02/03/00	15	Non-Broker	362,000					
MA	02/03/00	16	Non-Broker	375,000					
MA	02/03/00	17	Non-Broker	229,000					
MA	02/03/00	18	Non-Broker	342,000					
MA	02/03/00	19	Non-Broker	228,000					
MA	02/03/00	20	Non-Broker	60,000					
MA	02/03/00	20	Non-Broker	117,000					
MA	02/03/00	21	Non-Broker	83,000					
MA	02/03/00	22, 23	Non-Broker	204,000					
MA	02/04/00	12	Non-Broker	25,000					
MA	02/04/00	19	Non-Broker	92,000					
MA	02/04/00	13, 14	Non-Broker	100,000					
MA	02/04/00	20, 21, 22	Non-Broker	300,000					
MA	02/04/00	23, 24	Non-Broker	108,000					
MA	02/04/00	8 - 23	Non-Broker	1,600,000					
MA	02/05/00	13	Non-Broker	92,000					
MA	02/05/00	14	Non-Broker	192,000					
MA	02/05/00	15, 16	Non-Broker	279,000					
MA	02/06/00	12	Non-Broker	65,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	02/06/00	18	Non-Broker	92,000					
MA	02/06/00	19	Non-Broker	164,000					
MA	02/06/00	20	Non-Broker	170,000					
MA	02/06/00	13, 14	Non-Broker	75,000					
MA	02/06/00	21, 22, 23 24	Non-Broker	538,000					
MA	02/07/00	11	Non-Broker	115,000					
MA	02/07/00	12	Non-Broker	148,000					
MA	02/07/00	13	Non-Broker	104,000					
MA	02/07/00	14	Non-Broker	146,000					
MA	02/07/00	17	Non-Broker	219,000					
MA	02/07/00	18	Non-Broker	156,000					
MA	02/07/00	19	Non-Broker	219,000					
MA	02/07/00	20	Non-Broker	156,000					
MA	02/07/00	21	Non-Broker	104,000					
MA	02/07/00	22	Non-Broker	100,000					
MA	02/07/00	23	Non-Broker	8,000					
MA	02/07/00	15, 16	Non-Broker	300,000					
MA	02/08/00	11	Non-Broker	206,000					
MA	02/08/00	12	Non-Broker	275,000					
MA	02/08/00	13	Non-Broker	275,000					
MA	02/08/00	14	Non-Broker	206,000					
MA	02/08/00	15, 16, 17, 18, 19	Non-Broker	833,000					
MA	02/09/00	11	Non-Broker	167,000					
MA	02/09/00	12	Non-Broker	10,000					
MA	02/09/00	13	Non-Broker	5,000					
MA	02/09/00	18	Non-Broker	92,000					
MA	02/09/00	19	Non-Broker	8,000					
MA	02/09/00	12, 13	Non-Broker	233,000					
MA	02/10/00	10	Non-Broker	104,000					
MA	02/10/00	11	Non-Broker	217,000					
MA	02/10/00	12	Non-Broker	225,000					
MA	02/10/00	13	Non-Broker	225,000					
MA	02/10/00	14	Non-Broker	294,000					
MA	02/10/00	15	Non-Broker	162,000					
MA	02/10/00	16	Non-Broker	25,000					
MA	02/10/00	18	Non-Broker	92,000					
MA	02/10/00	19, 20	Non-Broker	108,000					
MA	02/11/00	20, 21	Non-Broker	75,000					
MA	02/12/00	13	Non-Broker	167,000					
MA	02/12/00	14	Non-Broker	223,000					
MA	02/12/00	15	Non-Broker	38,000					
MA	02/13/00	20, 21, 22	Non-Broker	200,000					
MA	02/14/00	11	Non-Broker	100,000					
MA	02/14/00	12	Non-Broker	200,000					
MA	02/14/00	13	Non-Broker	200,000					
MA	02/14/00	14	Non-Broker	200,000					
MA	02/14/00	17	Non-Broker	250,000					
MA	02/14/00	21	Non-Broker	100,000					
MA	02/14/00	22	Non-Broker	250,000					
MA	02/14/00	23	Non-Broker	150,000					
MA	02/14/00	15, 16	Non-Broker	400,000					
MA	02/15/00	11	Non-Broker	200,000					
MA	02/15/00	12	Non-Broker	300,000					
MA	02/15/00	13	Non-Broker	300,000					
MA	02/15/00	14	Non-Broker	300,000					
MA	02/15/00	15	Non-Broker	200,000					
MA	02/15/00	16	Non-Broker	200,000					
MA	02/15/00	17	Non-Broker	100,000					
MA	02/16/00	8	Non-Broker	50,000					
MA	02/16/00	12	Non-Broker	75,000					
MA	02/16/00	13	Non-Broker	225,000					
MA	02/16/00	14	Non-Broker	100,000					
MA	02/16/00	15	Non-Broker	5,000					
MA	02/16/00	17	Non-Broker	100,000					
MA	02/16/00	15, 16	Non-Broker	300,000					
MA	02/17/00	12	Non-Broker	100,000					
MA	02/17/00	15	Non-Broker	50,000					
MA	02/17/00	16	Non-Broker	100,000					
MA	02/17/00	17	Non-Broker	185,000					
MA	02/17/00	18	Non-Broker	140,000					
MA	02/17/00	19	Non-Broker	35,000					
MA	02/17/00	20	Non-Broker	50,000					
MA	02/17/00	21	Non-Broker	100,000					
MA	02/17/00	22	Non-Broker	200,000					
MA	02/17/00	23	Non-Broker	200,000					
MA	02/18/00	10	Non-Broker	150,000					
MA	02/18/00	11	Non-Broker	200,000					
MA	02/18/00	12	Non-Broker	150,000					
MA	02/18/00	13	Non-Broker	110,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	02/18/00	22	Non-Broker	100,000					
MA	02/23/00	10	Non-Broker	100,000					
MA	02/23/00	16	Non-Broker	150,000					
MA	02/23/00	17	Non-Broker	150,000					
MA	02/23/00	18	Non-Broker	125,000					
MA	02/23/00	11, 12	Non-Broker	200,000					
MA	02/23/00	13, 14, 15	Non-Broker	300,000					
MA	02/24/00	10	Non-Broker	100,000					
MA	02/25/00	10	Non-Broker	200,000					
MA	02/25/00	11	Non-Broker	250,000					
MA	02/25/00	12	Non-Broker	250,000					
MA	02/25/00	13	Non-Broker	25,000					
MA	02/25/00	13, 14, 15	Non-Broker	750,000					
MA	02/27/00	11	Non-Broker	100,000					
MA	02/27/00	12	Non-Broker	100,000					
MA	02/27/00	13	Non-Broker	100,000					
MA	02/27/00	14	Non-Broker	50,000					
MA	02/27/00	15	Non-Broker	50,000					
MA	02/27/00	18	Non-Broker	50,000					
MA	02/27/00	22	Non-Broker	100,000					
MA	02/28/00	8	Non-Broker	200,000					
MA	02/28/00	9	Non-Broker	150,000					
MA	02/28/00	10	Non-Broker	200,000					
MA	02/28/00	11	Non-Broker	225,000					
MA	02/28/00	12	Non-Broker	225,000					
MA	02/28/00	13	Non-Broker	225,000					
MA	02/28/00	14	Non-Broker	225,000					
MA	02/28/00	17	Non-Broker	12,000					
MA	02/28/00	15, 16	Non-Broker	140,000					
MA	02/29/00	8	Non-Broker	200,000					
MA	02/29/00	9	Non-Broker	270,000					
MA	02/29/00	10	Non-Broker	190,000					
MA	02/29/00	11	Non-Broker	300,000					
MA	02/29/00	12	Non-Broker	350,000					
MA	02/29/00	15	Non-Broker	200,000					
MA	02/29/00	16	Non-Broker	150,000					
MA	02/29/00	17	Non-Broker	50,000					
MA	02/29/00	18	Non-Broker	50,000					
MA	02/29/00	18	Non-Broker	125,000					
MA	02/29/00	19	Non-Broker	75,000					
MA	02/29/00	20	Non-Broker	75,000					
MA	02/29/00	21	Non-Broker	50,000					
MA	02/29/00	22	Non-Broker	100,000					
MA	02/29/00	13, 14	Non-Broker	400,000					
MA	03/01/00	7	Non-Broker	100,000					
MA	03/01/00	8	Non-Broker	200,000					
MA	03/01/00	9	Non-Broker	295,000					
MA	03/01/00	10	Non-Broker	335,000					
MA	03/01/00	11	Non-Broker	185,000					
MA	03/01/00	12	Non-Broker	135,000					
MA	03/01/00	13	Non-Broker	200,000					
MA	03/01/00	14	Non-Broker	300,000					
MA	03/01/00	15	Non-Broker	255,000					
MA	03/01/00	16	Non-Broker	200,000					
MA	03/01/00	21	Non-Broker	35,000					
MA	03/01/00	22	Non-Broker	100,000					
MA	03/01/00	23	Non-Broker	100,000					
MA	03/01/00	24	Non-Broker	200,000					
MA	03/02/00	1	Non-Broker	100,000					
MA	03/02/00	7	Non-Broker	40,000					
MA	03/02/00	10	Non-Broker	150,000					
MA	03/02/00	11	Non-Broker	110,000					
MA	03/02/00	14	Non-Broker	83,000					
MA	03/03/00	9	Non-Broker	150,000					
MA	03/03/00	10	Non-Broker	150,000					
MA	03/03/00	11	Non-Broker	100,000					
MA	03/03/00	14	Non-Broker	37,000					
MA	03/03/00	14	Non-Broker	50,000					
MA	03/03/00	17	Non-Broker	35,000					
MA	03/03/00	18	Non-Broker	30,000					
MA	03/03/00	19	Non-Broker	29,000					
MA	03/03/00	19	Non-Broker	85,000					
MA	03/03/00	20	Non-Broker	29,000					
MA	03/03/00	20	Non-Broker	85,000					
MA	03/03/00	21	Non-Broker	52,000					
MA	03/03/00	21	Non-Broker	77,000					
MA	03/03/00	23	Non-Broker	165,000					
MA	03/03/00	24	Non-Broker	200,000					
MA	03/03/00	12, 13	Non-Broker	100,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(2)</sup> cents/kWh
MA	03/04/00	2	Non-Broker	167,000					
MA	03/04/00	3	Non-Broker	200,000					
MA	03/04/00	8	Non-Broker	75,000					
MA	03/04/00	4, 5, 6, 7	Non-Broker	400,000					
MA	03/05/00	10	Non-Broker	200,000					
MA	03/05/00	11	Non-Broker	225,000					
MA	03/05/00	12	Non-Broker	225,000					
MA	03/05/00	13	Non-Broker	225,000					
MA	03/05/00	18	Non-Broker	225,000					
MA	03/05/00	19	Non-Broker	225,000					
MA	03/05/00	20	Non-Broker	300,000					
MA	03/05/00	21	Non-Broker	300,000					
MA	03/05/00	22	Non-Broker	300,000					
MA	03/05/00	23	Non-Broker	150,000					
MA	03/05/00	14, 15, 16, 17	Non-Broker	900,000					
MA	03/06/00	8	Non-Broker	50,000					
MA	03/06/00	8	Non-Broker	100,000					
MA	03/06/00	9	Non-Broker	50,000					
MA	03/06/00	11	Non-Broker	225,000					
MA	03/06/00	12	Non-Broker	50,000					
MA	03/06/00	12	Non-Broker	225,000					
MA	03/06/00	13	Non-Broker	50,000					
MA	03/06/00	13	Non-Broker	225,000					
MA	03/06/00	14	Non-Broker	350,000					
MA	03/06/00	15	Non-Broker	75,000					
MA	03/06/00	15	Non-Broker	400,000					
MA	03/06/00	16	Non-Broker	50,000					
MA	03/06/00	16	Non-Broker	350,000					
MA	03/06/00	17	Non-Broker	50,000					
MA	03/06/00	17	Non-Broker	350,000					
MA	03/06/00	18	Non-Broker	300,000					
MA	03/06/00	19	Non-Broker	275,000					
MA	03/06/00	23	Non-Broker	150,000					
MA	03/06/00	19, 20	Non-Broker	100,000					
MA	03/06/00	20, 21, 22	Non-Broker	825,000					
MA	03/06/00	9, 10	Non-Broker	450,000					
MA	03/07/00	8	Non-Broker	200,000					
MA	03/07/00	9	Non-Broker	300,000					
MA	03/07/00	10	Non-Broker	500,000					
MA	03/07/00	11	Non-Broker	500,000					
MA	03/07/00	12	Non-Broker	500,000					
MA	03/07/00	13	Non-Broker	400,000					
MA	03/07/00	14	Non-Broker	200,000					
MA	03/07/00	15	Non-Broker	175,000					
MA	03/07/00	16	Non-Broker	100,000					
MA	03/07/00	17	Non-Broker	100,000					
MA	03/07/00	20	Non-Broker	100,000					
MA	03/07/00	21	Non-Broker	160,000					
MA	03/07/00	22	Non-Broker	200,000					
MA	03/07/00	7 - 22	Non-Broker	1,600,000					
MA	03/07/00	23, 24	Non-Broker	400,000					
MA	03/08/00	8	Non-Broker	150,000					
MA	03/08/00	9	Non-Broker	200,000					
MA	03/08/00	10	Non-Broker	200,000					
MA	03/08/00	13	Non-Broker	150,000					
MA	03/08/00	14	Non-Broker	75,000					
MA	03/08/00	16	Non-Broker	125,000					
MA	03/08/00	17	Non-Broker	125,000					
MA	03/08/00	18	Non-Broker	125,000					
MA	03/08/00	21	Non-Broker	75,000					
MA	03/08/00	21	Non-Broker	75,000					
MA	03/08/00	22	Non-Broker	200,000					
MA	03/08/00	23	Non-Broker	400,000					
MA	03/08/00	24	Non-Broker	200,000					
MA	03/08/00	11, 12	Non-Broker	400,000					
MA	03/08/00	8 - 23	Non-Broker	1,600,000					
MA	03/09/00	7	Non-Broker	150,000					
MA	03/09/00	8	Non-Broker	150,000					
MA	03/09/00	9	Non-Broker	75,000					
MA	03/09/00	9	Non-Broker	200,000					
MA	03/09/00	11	Non-Broker	100,000					
MA	03/09/00	12	Non-Broker	150,000					
MA	03/09/00	12	Non-Broker	150,000					
MA	03/09/00	13	Non-Broker	300,000					
MA	03/09/00	14	Non-Broker	275,000					
MA	03/09/00	15	Non-Broker	75,000					
MA	03/09/00	15	Non-Broker	100,000					
MA	03/09/00	16	Non-Broker	10,000					
MA	03/09/00	16	Non-Broker	35,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	03/09/00	16	Non-Broker	95,000					
MA	03/09/00	17	Non-Broker	10,000					
MA	03/09/00	17	Non-Broker	100,000					
MA	03/09/00	18	Non-Broker	75,000					
MA	03/09/00	19	Non-Broker	25,000					
MA	03/09/00	20	Non-Broker	100,000					
MA	03/09/00	21	Non-Broker	58,000					
MA	03/09/00	23	Non-Broker	100,000					
MA	03/09/00	24	Non-Broker	300,000					
MA	03/09/00	10, 11	Non-Broker	400,000					
MA	03/10/00	7	Non-Broker	200,000					
MA	03/10/00	8	Non-Broker	200,000					
MA	03/10/00	9	Non-Broker	300,000					
MA	03/10/00	10	Non-Broker	300,000					
MA	03/10/00	11	Non-Broker	275,000					
MA	03/10/00	12	Non-Broker	225,000					
MA	03/10/00	13	Non-Broker	150,000					
MA	03/10/00	14	Non-Broker	125,000					
MA	03/10/00	15	Non-Broker	25,000					
MA	03/10/00	15	Non-Broker	50,000					
MA	03/10/00	16	Non-Broker	25,000					
MA	03/10/00	16	Non-Broker	40,000					
MA	03/10/00	20	Non-Broker	50,000					
MA	03/13/00	7	Non-Broker	30,000					
MA	03/13/00	10	Non-Broker	148,000					
MA	03/17/00	23	Non-Broker	100,000					
MA	03/19/00	8	Non-Broker	100,000					
MA	03/19/00	9	Non-Broker	200,000					
MA	03/19/00	19	Non-Broker	50,000					
MA	03/25/00	23	Non-Broker	100,000					
MA	03/25/00	10	Non-Broker	100,000					
MA	03/26/00	11	Non-Broker	100,000					
MA	03/26/00	12	Non-Broker	50,000					
MA	03/26/00	13	Non-Broker	100,000					
MA	03/26/00	14	Non-Broker	150,000					
MA	03/26/00	15	Non-Broker	250,000					
MA	03/26/00	16	Non-Broker	75,000					
MA	03/26/00	16	Non-Broker	150,000					
MA	03/26/00	17	Non-Broker	75,000					
MA	03/26/00	18	Non-Broker	75,000					
MA	03/26/00	19	Non-Broker	150,000					
MA	03/26/00	20	Non-Broker	75,000					
MA	03/26/00	21	Non-Broker	100,000					
MA	03/26/00	23	Non-Broker	100,000					
MA	03/27/00	8	Non-Broker	90,000					
MA	03/30/00	17	Non-Broker	75,000					
MA	03/31/00	16	Non-Broker	100,000					
MA	03/31/00	17	Non-Broker	34,000					
MA	03/31/00	17	Non-Broker	100,000					
MA	03/31/00	18	Non-Broker	30,000					
MA	03/31/00	18	Non-Broker	90,000					
MA	03/31/00	19	Non-Broker	100,000					
MA	03/31/00	19, 20, 21	Non-Broker	275,000					
MA	04/01/00	10	Non-Broker	200,000					
MA	04/01/00	11	Non-Broker	30,000					
MA	04/01/00	11	Non-Broker	75,000					
MA	04/01/00	12	Non-Broker	50,000					
MA	04/04/00	10	Non-Broker	150,000					
MA	04/04/00	12	Non-Broker	100,000					
MA	04/04/00	13	Non-Broker	50,000					
MA	04/04/00	13	Non-Broker	150,000					
MA	04/04/00	14	Non-Broker	175,000					
MA	04/04/00	15	Non-Broker	250,000					
MA	04/04/00	16	Non-Broker	300,000					
MA	04/04/00	17	Non-Broker	400,000					
MA	04/04/00	18	Non-Broker	300,000					
MA	04/04/00	19	Non-Broker	100,000					
MA	04/04/00	20	Non-Broker	100,000					
MA	04/04/00	21	Non-Broker	125,000					
MA	04/04/00	22	Non-Broker	150,000					
MA	04/04/00	9, 10, 11	Non-Broker	600,000					
MA	04/05/00	9	Non-Broker	150,000					
MA	04/05/00	10	Non-Broker	150,000					
MA	04/05/00	11	Non-Broker	50,000					
MA	04/05/00	11	Non-Broker	125,000					
MA	04/05/00	12	Non-Broker	73,000					
MA	04/05/00	12	Non-Broker	125,000					
MA	04/05/00	13	Non-Broker	43,000					
MA	04/05/00	13	Non-Broker	250,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	04/05/00	14	Non-Broker	28,000					
MA	04/05/00	14	Non-Broker	325,000					
MA	04/05/00	15	Non-Broker	17,000					
MA	04/05/00	15	Non-Broker	350,000					
MA	04/05/00	16	Non-Broker	19,000					
MA	04/05/00	16	Non-Broker	350,000					
MA	04/05/00	17	Non-Broker	250,000					
MA	04/05/00	18	Non-Broker	250,000					
MA	04/05/00	19	Non-Broker	225,000					
MA	04/05/00	20	Non-Broker	160,000					
MA	04/05/00	21	Non-Broker	260,000					
MA	04/05/00	22	Non-Broker	290,000					
MA	04/05/00	8, 9	Non-Broker	175,000					
MA	04/06/00	13	Non-Broker	100,000					
MA	04/06/00	14	Non-Broker	150,000					
MA	04/06/00	15	Non-Broker	100,000					
MA	04/06/00	16	Non-Broker	100,000					
MA	04/10/00	12	Non-Broker	100,000					
MA	04/10/00	13	Non-Broker	200,000					
MA	04/10/00	14	Non-Broker	200,000					
MA	04/10/00	15	Non-Broker	185,000					
MA	04/10/00	16	Non-Broker	165,000					
MA	04/10/00	17	Non-Broker	25,000					
MA	04/16/00	7	Non-Broker	5,000					
MA	04/16/00	8	Non-Broker	15,000					
MA	04/16/00	9	Non-Broker	5,000					
MA	04/16/00	10	Non-Broker	5,000					
MA	04/16/00	11	Non-Broker	10,000					
MA	04/16/00	12	Non-Broker	10,000					
MA	04/16/00	12	Non-Broker	125,000					
MA	04/16/00	13	Non-Broker	15,000					
MA	04/16/00	13	Non-Broker	50,000					
MA	04/17/00	9	Non-Broker	100,000					
MA	04/17/00	10	Non-Broker	100,000					
MA	04/22/00	10	Non-Broker	100,000					
MA	04/22/00	11	Non-Broker	100,000					
MA	04/23/00	9	Non-Broker	100,000					
MA	04/23/00	10	Non-Broker	100,000					
MA	04/23/00	11	Non-Broker	250,000					
MA	04/23/00	12	Non-Broker	250,000					
MA	04/23/00	13	Non-Broker	200,000					
MA	04/23/00	14	Non-Broker	250,000					
MA	04/26/00	9	Non-Broker	100,000					
MA	04/26/00	15	Non-Broker	50,000					
MA	04/26/00	16	Non-Broker	25,000					
MA	04/26/00	16	Non-Broker	50,000					
MA	05/01/00	14	Non-Broker	150,000					
MA	05/01/00	15	Non-Broker	125,000					
MA	05/02/00	11	Non-Broker	25,000					
MA	05/02/00	11	Non-Broker	100,000					
MA	05/02/00	12	Non-Broker	50,000					
MA	05/02/00	13	Non-Broker	50,000					
MA	05/02/00	14	Non-Broker	25,000					
MA	05/02/00	14	Non-Broker	100,000					
MA	05/02/00	15	Non-Broker	25,000					
MA	05/02/00	15	Non-Broker	50,000					
MA	05/02/00	20	Non-Broker	80,000					
MA	05/02/00	20	Non-Broker	100,000					
MA	05/02/00	21	Non-Broker	95,000					
MA	05/02/00	21	Non-Broker	170,000					
MA	05/02/00	22	Non-Broker	95,000					
MA	05/02/00	22	Non-Broker	185,000					
MA	05/02/00	23, 24	Non-Broker	500,000					
MA	05/03/00	1	Non-Broker	100,000					
MA	05/03/00	8	Non-Broker	100,000					
MA	05/03/00	9	Non-Broker	50,000					
MA	05/03/00	9	Non-Broker	200,000					
MA	05/03/00	10	Non-Broker	75,000					
MA	05/03/00	11	Non-Broker	100,000					
MA	05/03/00	13	Non-Broker	300,000					
MA	05/03/00	14	Non-Broker	200,000					
MA	05/03/00	15	Non-Broker	75,000					
MA	05/03/00	22	Non-Broker	25,000					
MA	05/03/00	22	Non-Broker	89,000					
MA	05/03/00	23	Non-Broker	98,000					
MA	05/03/00	23	Non-Broker	265,000					
MA	05/03/00	24	Non-Broker	450,000					
MA	05/03/00	10, 11, 12	Non-Broker	900,000					
MA	05/04/00	1	Non-Broker	325,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	05/04/00	2	Non-Broker	200,000					
MA	05/04/00	7	Non-Broker	85,000					
MA	05/04/00	11	Non-Broker	50,000					
MA	05/04/00	11	Non-Broker	250,000					
MA	05/04/00	12	Non-Broker	100,000					
MA	05/04/00	13	Non-Broker	40,000					
MA	05/04/00	14	Non-Broker	120,000					
MA	05/04/00	23	Non-Broker	95,000					
MA	05/04/00	24	Non-Broker	250,000					
MA	05/04/00	8, 9, 10	Non-Broker	750,000					
MA	05/04/00	9, 10	Non-Broker	100,000					
MA	05/05/00	1	Non-Broker	300,000					
MA	05/05/00	9	Non-Broker	100,000					
MA	05/05/00	10	Non-Broker	250,000					
MA	05/05/00	13	Non-Broker	125,000					
MA	05/05/00	21	Non-Broker	80,000					
MA	05/05/00	11, 12	Non-Broker	350,000					
MA	05/07/00	1	Non-Broker	100,000					
MA	05/07/00	11	Non-Broker	150,000					
MA	05/07/00	13	Non-Broker	50,000					
MA	05/08/00	9	Non-Broker	150,000					
MA	05/08/00	10	Non-Broker	250,000					
MA	05/08/00	11	Non-Broker	175,000					
MA	05/08/00	12	Non-Broker	125,000					
MA	05/08/00	13	Non-Broker	75,000					
MA	05/08/00	14	Non-Broker	80,000					
MA	05/08/00	15	Non-Broker	112,000					
MA	05/08/00	16	Non-Broker	109,000					
MA	05/08/00	17	Non-Broker	100,000					
MA	05/08/00	18	Non-Broker	50,000					
MA	05/08/00	19	Non-Broker	4,000					
MA	05/08/00	19	Non-Broker	55,000					
MA	05/08/00	20	Non-Broker	19,000					
MA	05/08/00	20	Non-Broker	90,000					
MA	05/08/00	21	Non-Broker	19,000					
MA	05/08/00	21	Non-Broker	90,000					
MA	05/08/00	22	Non-Broker	109,000					
MA	05/08/00	17, 18	Non-Broker	18,000					
MA	05/08/00	18, 19	Non-Broker	100,000					
MA	05/09/00	8	Non-Broker	84,000					
MA	05/09/00	9	Non-Broker	74,000					
MA	05/09/00	10	Non-Broker	100,000					
MA	05/09/00	11	Non-Broker	100,000					
MA	05/09/00	14	Non-Broker	29,000					
MA	05/09/00	14	Non-Broker	83,000					
MA	05/09/00	15	Non-Broker	35,000					
MA	05/09/00	15	Non-Broker	77,000					
MA	05/09/00	16	Non-Broker	77,000					
MA	05/09/00	18	Non-Broker	44,000					
MA	05/09/00	19	Non-Broker	20,000					
MA	05/09/00	21	Non-Broker	19,000					
MA	05/09/00	8 - 20	Non-Broker	455,000					
MA	05/09/00	9 - 13, 16 - 20	Non-Broker	979,000					
MA	05/10/00	9	Non-Broker	100,000					
MA	05/10/00	10	Non-Broker	40,000					
MA	05/12/00	8	Non-Broker	125,000					
MA	05/12/00	9	Non-Broker	50,000					
MA	05/16/00	9	Non-Broker	100,000					
MA	05/20/00	11	Non-Broker	100,000					
MA	05/21/00	10	Non-Broker	150,000					
MA	05/21/00	11	Non-Broker	75,000					
MA	05/23/00	8	Non-Broker	75,000					
MA	05/23/00	8	Non-Broker	200,000					
MA	05/23/00	9	Non-Broker	100,000					
MA	05/23/00	9	Non-Broker	150,000					
MA	05/24/00	8	Non-Broker	200,000					
MA	05/24/00	9	Non-Broker	200,000					
MA	05/25/00	1	Non-Broker	100,000					
MA	05/25/00	8	Non-Broker	150,000					
MA	05/26/00	1	Non-Broker	100,000					
MA	05/26/00	2	Non-Broker	100,000					
MA	05/26/00	3	Non-Broker	100,000					
MA	05/29/00	1	Non-Broker	100,000					
MA	05/30/00	9	Non-Broker	100,000					
MA	05/30/00	10	Non-Broker	100,000					
MA	05/31/00	8	Non-Broker	50,000					
MA	05/31/00	9	Non-Broker	150,000					
MA	05/31/00	10	Non-Broker	175,000					
MA	05/31/00	11	Non-Broker	75,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	05/31/00	12	Non-Broker	50,000					
MA	05/31/00	13	Non-Broker	100,000					
MA	06/01/00	8	Non-Broker	300,000					
MA	06/01/00	9	Non-Broker	300,000					
MA	06/01/00	10	Non-Broker	300,000					
MA	06/01/00	11	Non-Broker	50,000					
MA	06/02/00	1	Non-Broker	51,000					
MA	06/07/00	17	Non-Broker	46,000					
MA	06/08/00	8	Non-Broker	200,000					
MA	06/08/00	9	Non-Broker	100,000					
MA	06/08/00	9	Non-Broker	300,000					
MA	06/09/00	8	Non-Broker	100,000					
MA	06/09/00	9	Non-Broker	100,000					
MA	06/10/00	9	Non-Broker	100,000					
MA	06/10/00	10	Non-Broker	150,000					
MA	06/10/00	14	Non-Broker	100,000					
MA	06/10/00	14	Non-Broker	100,000					
MA	06/10/00	15	Non-Broker	60,000					
MA	06/10/00	15	Non-Broker	200,000					
MA	06/10/00	16	Non-Broker	60,000					
MA	06/10/00	16	Non-Broker	180,000					
MA	06/10/00	17	Non-Broker	60,000					
MA	06/10/00	24	Non-Broker	100,000					
MA	06/10/00	17, 18	Non-Broker	100,000					
MA	06/10/00	18, 19	Non-Broker	120,000					
MA	06/11/00	1	Non-Broker	100,000					
MA	06/11/00	10	Non-Broker	100,000					
MA	06/11/00	10	Non-Broker	100,000					
MA	06/11/00	11	Non-Broker	150,000					
MA	06/11/00	11	Non-Broker	200,000					
MA	06/11/00	12	Non-Broker	100,000					
MA	06/11/00	14	Non-Broker	50,000					
MA	06/11/00	14	Non-Broker	50,000					
MA	06/11/00	17	Non-Broker	100,000					
MA	06/11/00	19	Non-Broker	20,000					
MA	06/11/00	20	Non-Broker	20,000					
MA	06/11/00	21	Non-Broker	20,000					
MA	06/11/00	22	Non-Broker	60,000					
MA	06/11/00	23	Non-Broker	150,000					
MA	06/11/00	24	Non-Broker	150,000					
MA	06/11/00	17, 18	Non-Broker	100,000					
MA	06/12/00	7	Non-Broker	100,000					
MA	06/12/00	8	Non-Broker	200,000					
MA	06/12/00	9	Non-Broker	400,000					
MA	06/12/00	10	Non-Broker	300,000					
MA	06/12/00	11	Non-Broker	44,000					
MA	06/12/00	20	Non-Broker	100,000					
MA	06/12/00	21	Non-Broker	100,000					
MA	06/12/00	22	Non-Broker	120,000					
MA	06/13/00	8	Non-Broker	200,000					
MA	06/13/00	9	Non-Broker	400,000					
MA	06/13/00	10	Non-Broker	165,000					
MA	06/13/00	16	Non-Broker	90,000					
MA	06/13/00	17, 18	Non-Broker	140,000					
MA	06/13/00	17, 18	Non-Broker	310,000					
MA	06/14/00	2	Non-Broker	25,000					
MA	06/14/00	3	Non-Broker	21,000					
MA	06/14/00	9	Non-Broker	100,000					
MA	06/14/00	10	Non-Broker	100,000					
MA	06/14/00	10	Non-Broker	200,000					
MA	06/14/00	11	Non-Broker	150,000					
MA	06/14/00	12	Non-Broker	70,000					
MA	06/14/00	13	Non-Broker	90,000					
MA	06/14/00	13	Non-Broker	90,000					
MA	06/14/00	14	Non-Broker	40,000					
MA	06/14/00	14	Non-Broker	90,000					
MA	06/14/00	15	Non-Broker	55,000					
MA	06/15/00	8	Non-Broker	200,000					
MA	06/15/00	9	Non-Broker	200,000					
MA	06/16/00	7, 8	Non-Broker	300,000					
MA	06/17/00	7	Non-Broker	200,000					
MA	06/17/00	8	Non-Broker	100,000					
MA	06/18/00	9	Non-Broker	300,000					
MA	06/18/00	10	Non-Broker	100,000					
MA	06/18/00	2 - 8	Non-Broker	1,400,000					
MA	06/21/00	2	Non-Broker	100,000					
MA	06/21/00	7	Non-Broker	50,000					
MA	06/23/00	8	Non-Broker	75,000					
MA	06/23/00	9	Non-Broker	75,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	06/25/00	20	Non-Broker	52,000					
MA	06/25/00	20	Non-Broker	88,000					
MA	06/25/00	21	Non-Broker	52,000					
MA	06/25/00	21	Non-Broker	88,000					
MA	06/25/00	22	Non-Broker	180,000					
MA	06/25/00	24	Non-Broker	97,000					
MA	06/26/00	8	Non-Broker	40,000					
MA	06/26/00	14	Non-Broker	31,000					
MA	06/26/00	15	Non-Broker	75,000					
MA	06/26/00	15	Non-Broker	85,000					
MA	06/26/00	16	Non-Broker	100,000					
MA	06/26/00	17	Non-Broker	100,000					
MA	06/26/00	17	Non-Broker	200,000					
MA	06/26/00	18	Non-Broker	100,000					
MA	06/26/00	18	Non-Broker	200,000					
MA	06/26/00	19	Non-Broker	102,000					
MA	06/26/00	19	Non-Broker	200,000					
MA	06/26/00	20	Non-Broker	88,000					
MA	06/26/00	20	Non-Broker	195,000					
MA	06/26/00	21	Non-Broker	88,000					
MA	06/26/00	21	Non-Broker	185,000					
MA	06/26/00	22	Non-Broker	41,000					
MA	06/26/00	22	Non-Broker	151,000					
MA	06/26/00	23	Non-Broker	186,000					
MA	06/26/00	24	Non-Broker	200,000					
MA	06/27/00	1	Non-Broker	100,000					
MA	06/27/00	8	Non-Broker	65,000					
MA	06/27/00	9	Non-Broker	100,000					
MA	06/27/00	9	Non-Broker	200,000					
MA	06/27/00	10	Non-Broker	77,000					
MA	06/27/00	10	Non-Broker	160,000					
MA	06/27/00	12	Non-Broker	65,000					
MA	06/27/00	13	Non-Broker	30,000					
MA	06/27/00	13	Non-Broker	40,000					
MA	06/27/00	15	Non-Broker	75,000					
MA	06/27/00	15	Non-Broker	86,000					
MA	06/27/00	16	Non-Broker	75,000					
MA	06/27/00	16	Non-Broker	88,000					
MA	06/27/00	16	Non-Broker	180,000					
MA	06/27/00	17	Non-Broker	88,000					
MA	06/27/00	17	Non-Broker	180,000					
MA	06/27/00	18	Non-Broker	88,000					
MA	06/27/00	18	Non-Broker	180,000					
MA	06/27/00	19	Non-Broker	88,000					
MA	06/27/00	19	Non-Broker	120,000					
MA	06/27/00	19	Non-Broker	180,000					
MA	06/27/00	20	Non-Broker	88,000					
MA	06/27/00	20	Non-Broker	120,000					
MA	06/27/00	23	Non-Broker	102,000					
MA	06/27/00	17, 18	Non-Broker	220,000					
MA	06/27/00	20, 21, 22	Non-Broker	540,000					
MA	06/28/00	8	Non-Broker	100,000					
MA	06/28/00	8	Non-Broker	150,000					
MA	06/28/00	9	Non-Broker	100,000					
MA	06/28/00	9	Non-Broker	150,000					
MA	06/28/00	10	Non-Broker	225,000					
MA	06/28/00	14	Non-Broker	83,000					
MA	06/28/00	20	Non-Broker	85,000					
MA	06/29/00	1	Non-Broker	100,000					
MA	06/29/00	2	Non-Broker	100,000					
MA	06/29/00	7	Non-Broker	100,000					
MA	06/29/00	8	Non-Broker	175,000					
MA	06/29/00	9	Non-Broker	175,000					
MA	06/29/00	23	Non-Broker	100,000					
MA	06/30/00	15	Non-Broker	117,000					
MA	06/30/00	16	Non-Broker	115,000					
MA	06/30/00	17	Non-Broker	57,000					
MA	06/30/00	17	Non-Broker	167,000					
MA	06/30/00	18	Non-Broker	160,000					
MA	06/30/00	19	Non-Broker	210,000					
MA	06/30/00	20	Non-Broker	75,000					
MA	07/01/00	19	Non-Broker	60,000					
MA	07/02/00	10	Non-Broker	85,000					
MA	07/02/00	11	Non-Broker	125,000					
MA	07/03/00	8	Non-Broker	100,000					
MA	07/03/00	9, 10	Non-Broker	300,000					
MA	07/04/00	8	Non-Broker	50,000					
MA	07/04/00	9	Non-Broker	100,000					
MA	07/04/00	15	Non-Broker	50,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	07/04/00	15	Non-Broker	50,000					
MA	07/04/00	20	Non-Broker	30,000					
MA	07/04/00	21	Non-Broker	180,000					
MA	07/04/00	23	Non-Broker	140,000					
MA	07/04/00	24	Non-Broker	165,000					
MA	07/05/00	1	Non-Broker	300,000					
MA	07/05/00	7	Non-Broker	100,000					
MA	07/05/00	8	Non-Broker	200,000					
MA	07/05/00	9	Non-Broker	380,000					
MA	07/05/00	10	Non-Broker	475,000					
MA	07/05/00	11	Non-Broker	100,000					
MA	07/05/00	12	Non-Broker	40,000					
MA	07/05/00	15	Non-Broker	65,000					
MA	07/05/00	16	Non-Broker	22,000					
MA	07/05/00	16	Non-Broker	50,000					
MA	07/05/00	17	Non-Broker	10,000					
MA	07/05/00	17	Non-Broker	63,000					
MA	07/05/00	18	Non-Broker	16,000					
MA	07/05/00	18	Non-Broker	77,000					
MA	07/05/00	19	Non-Broker	9,000					
MA	07/05/00	19	Non-Broker	50,000					
MA	07/05/00	20	Non-Broker	50,000					
MA	07/05/00	16 - 21	Non-Broker	36,000					
MA	07/06/00	8	Non-Broker	100,000					
MA	07/06/00	9	Non-Broker	275,000					
MA	07/06/00	10	Non-Broker	175,000					
MA	07/06/00	16	Non-Broker	25,000					
MA	07/06/00	16	Non-Broker	38,000					
MA	07/06/00	17	Non-Broker	10,000					
MA	07/06/00	20	Non-Broker	16,000					
MA	07/06/00	20	Non-Broker	61,000					
MA	07/06/00	21	Non-Broker	81,000					
MA	07/06/00	21	Non-Broker	100,000					
MA	07/06/00	22	Non-Broker	21,000					
MA	07/06/00	22	Non-Broker	101,000					
MA	07/06/00	14 - 20	Non-Broker	56,000					
MA	07/07/00	7	Non-Broker	50,000					
MA	07/07/00	8	Non-Broker	50,000					
MA	07/07/00	9	Non-Broker	100,000					
MA	07/07/00	11	Non-Broker	75,000					
MA	07/08/00	17	Non-Broker	50,000					
MA	07/08/00	18	Non-Broker	75,000					
MA	07/08/00	19	Non-Broker	50,000					
MA	07/08/00	20	Non-Broker	65,000					
MA	07/08/00	21	Non-Broker	50,000					
MA	07/08/00	22	Non-Broker	100,000					
MA	07/09/00	1	Non-Broker	100,000					
MA	07/09/00	2	Non-Broker	150,000					
MA	07/09/00	3	Non-Broker	50,000					
MA	07/09/00	10	Non-Broker	100,000					
MA	07/10/00	8	Non-Broker	100,000					
MA	07/10/00	9	Non-Broker	250,000					
MA	07/10/00	10	Non-Broker	50,000					
MA	07/10/00	10	Non-Broker	265,000					
MA	07/10/00	11	Non-Broker	140,000					
MA	07/10/00	12	Non-Broker	61,000					
MA	07/10/00	16	Non-Broker	15,000					
MA	07/10/00	16	Non-Broker	65,000					
MA	07/10/00	17	Non-Broker	18,000					
MA	07/10/00	17	Non-Broker	83,000					
MA	07/10/00	18	Non-Broker	18,000					
MA	07/10/00	18	Non-Broker	83,000					
MA	07/10/00	19	Non-Broker	100,000					
MA	07/10/00	20	Non-Broker	95,000					
MA	07/10/00	21	Non-Broker	80,000					
MA	07/10/00	21	Non-Broker	100,000					
MA	07/10/00	22	Non-Broker	83,000					
MA	07/11/00	2	Non-Broker	150,000					
MA	07/11/00	3	Non-Broker	100,000					
MA	07/11/00	8	Non-Broker	200,000					
MA	07/11/00	9	Non-Broker	200,000					
MA	07/11/00	9	Non-Broker	200,000					
MA	07/11/00	10	Non-Broker	100,000					
MA	07/11/00	10	Non-Broker	100,000					
MA	07/13/00	15	Non-Broker	98,000					
MA	07/15/00	9	Non-Broker	60,000					
MA	07/15/00	13	Non-Broker	50,000					
MA	07/15/00	13	Non-Broker	166,000					
MA	07/15/00	14	Non-Broker	50,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	07/15/00	14	Non-Broker	88,000					
MA	07/15/00	14	Non-Broker	160,000					
MA	07/15/00	15	Non-Broker	88,000					
MA	07/15/00	15	Non-Broker	260,000					
MA	07/15/00	18	Non-Broker	360,000					
MA	07/15/00	19	Non-Broker	300,000					
MA	07/15/00	20	Non-Broker	300,000					
MA	07/15/00	21	Non-Broker	400,000					
MA	07/15/00	22	Non-Broker	400,000					
MA	07/15/00	23	Non-Broker	275,000					
MA	07/15/00	24	Non-Broker	375,000					
MA	07/15/00	16, 17	Non-Broker	176,000					
MA	07/15/00	16, 17	Non-Broker	720,000					
MA	07/16/00	1	Non-Broker	400,000					
MA	07/16/00	2	Non-Broker	400,000					
MA	07/16/00	3	Non-Broker	400,000					
MA	07/16/00	4	Non-Broker	100,000					
MA	07/16/00	5	Non-Broker	100,000					
MA	07/16/00	6	Non-Broker	100,000					
MA	07/16/00	9	Non-Broker	200,000					
MA	07/16/00	10	Non-Broker	300,000					
MA	07/16/00	11	Non-Broker	225,000					
MA	07/22/00	8	Non-Broker	200,000					
MA	07/22/00	9	Non-Broker	200,000					
MA	07/22/00	10	Non-Broker	125,000					
MA	07/22/00	16	Non-Broker	75,000					
MA	07/22/00	18	Non-Broker	25,000					
MA	07/23/00	9	Non-Broker	200,000					
MA	07/23/00	17	Non-Broker	100,000					
MA	07/23/00	18	Non-Broker	100,000					
MA	07/23/00	21	Non-Broker	50,000					
MA	07/23/00	22, 23, 24	Non-Broker	740,000					
MA	07/24/00	15	Non-Broker	100,000					
MA	07/24/00	16	Non-Broker	100,000					
MA	07/24/00	17	Non-Broker	100,000					
MA	07/24/00	18	Non-Broker	100,000					
MA	07/24/00	19	Non-Broker	100,000					
MA	07/24/00	20	Non-Broker	179,000					
MA	07/29/00	9	Non-Broker	100,000					
MA	07/31/00	8	Non-Broker	100,000					
MA	07/31/00	9	Non-Broker	100,000					
MA	07/31/00	20	Non-Broker	220,000					
MA	08/02/00	17	Non-Broker	100,000					
MA	08/02/00	18	Non-Broker	75,000					
MA	08/02/00	18	Non-Broker	95,000					
MA	08/02/00	19	Non-Broker	50,000					
MA	08/02/00	19	Non-Broker	195,000					
MA	08/02/00	20	Non-Broker	50,000					
MA	08/03/00	10	Non-Broker	95,000					
MA	08/03/00	10	Non-Broker	100,000					
MA	08/03/00	13	Non-Broker	85,000					
MA	08/03/00	20	Non-Broker	55,000					
MA	08/03/00	20	Non-Broker	75,000					
MA	08/04/00	8	Non-Broker	200,000					
MA	08/04/00	9	Non-Broker	150,000					
MA	08/09/00	19	Non-Broker	100,000					
MA	08/09/00	20	Non-Broker	100,000					
MA	08/14/00	16	Non-Broker	90,000					
MA	08/14/00	16	Non-Broker	125,000					
MA	08/18/00	8	Non-Broker	100,000					
MA	08/18/00	8	Non-Broker	100,000					
MA	08/18/00	9	Non-Broker	100,000					
MA	08/18/00	9	Non-Broker	100,000					
MA	08/18/00	10	Non-Broker	75,000					
MA	08/18/00	12	Non-Broker	95,000					
MA	08/18/00	13	Non-Broker	25,000					
MA	08/23/00	9	Non-Broker	50,000					
MA	08/23/00	9	Non-Broker	100,000					
MA	08/23/00	10	Non-Broker	100,000					
MA	08/29/00	15	Non-Broker	100,000					
MA	09/07/00	15	Non-Broker	50,000					
MA	09/10/00	9	Non-Broker	200,000					
MA	09/12/00	9	Non-Broker	100,000					
MA	09/13/00	8	Non-Broker	125,000					
MA	09/13/00	9	Non-Broker	100,000					
MA	09/14/00	9	Non-Broker	50,000					
MA	09/30/00	8, 9	Non-Broker	200,000					
MA	10/01/00	8	Non-Broker	150,000					
MA	10/01/00	9	Non-Broker	250,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	10/01/00	10	Non-Broker	100,000					
MA	10/01/00	11	Non-Broker	175,000					
MA	10/02/00	8	Non-Broker	200,000					
MA	10/02/00	9	Non-Broker	300,000					
MA	10/02/00	10	Non-Broker	150,000					
MA	10/02/00	11	Non-Broker	50,000					
MA	10/09/00	7	Non-Broker	50,000					
MA	10/09/00	8	Non-Broker	100,000					
MA	10/09/00	9	Non-Broker	100,000					
MA	10/09/00	10	Non-Broker	200,000					
MA	10/09/00	11	Non-Broker	125,000					
MA	10/09/00	12	Non-Broker	50,000					
MA	10/09/00	13	Non-Broker	50,000					
MA	10/09/00	14	Non-Broker	100,000					
MA	10/09/00	15	Non-Broker	100,000					
MA	10/09/00	16	Non-Broker	100,000					
MA	10/09/00	17	Non-Broker	100,000					
MA	10/09/00	18	Non-Broker	100,000					
MA	10/10/00	11	Non-Broker	75,000					
MA	10/10/00	12	Non-Broker	75,000					
MA	10/10/00	13	Non-Broker	125,000					
MA	10/10/00	14	Non-Broker	200,000					
MA	10/10/00	15	Non-Broker	100,000					
MA	10/10/00	16	Non-Broker	150,000					
MA	10/10/00	17	Non-Broker	150,000					
MA	10/10/00	20	Non-Broker	150,000					
MA	10/10/00	18, 19	Non-Broker	300,000					
MA	10/14/00	24	Non-Broker	350,000					
MA	10/15/00	1	Non-Broker	250,000					
MA	10/15/00	13	Non-Broker	90,000					
MA	10/19/00	12	Non-Broker	125,000					
MA	10/19/00	13	Non-Broker	50,000					
MA	10/19/00	13	Non-Broker	50,000					
MA	10/19/00	9, 10	Non-Broker	200,000					
MA	10/28/00	10	Non-Broker	100,000					
MA	10/28/00	11	Non-Broker	10,000					
MA	10/28/00	11	Non-Broker	125,000					
MA	10/28/00	12	Non-Broker	100,000					
MA	10/28/00	13	Non-Broker	50,000					
MA	11/11/00	10	Non-Broker	50,000					
MA	11/12/00	12	Non-Broker	51,000					
MA	11/13/00	11	Non-Broker	50,000					
MA	11/13/00	12	Non-Broker	60,000					
MA	11/13/00	13	Non-Broker	25,000					
MA	11/13/00	14	Non-Broker	25,000					
MA	11/13/00	15	Non-Broker	10,000					
MA	11/13/00	16	Non-Broker	10,000					
MA	11/14/00	16	Non-Broker	40,000					
MA	11/15/00	12	Non-Broker	75,000					
MA	11/15/00	13	Non-Broker	100,000					
MA	11/15/00	14	Non-Broker	100,000					
MA	11/15/00	16	Non-Broker	100,000					
MA	11/15/00	13, 14	Non-Broker	150,000					
MA	11/16/00	13	Non-Broker	50,000					
MA	11/26/00	4	Non-Broker	138,000					
MA	11/26/00	12	Non-Broker	100,000					
MA	11/26/00	13	Non-Broker	100,000					
MA	11/26/00	14	Non-Broker	150,000					
MA	11/26/00	15	Non-Broker	150,000					
MA	11/26/00	16	Non-Broker	150,000					
MA	11/26/00	17	Non-Broker	50,000					
MA	11/29/00	9	Non-Broker	50,000					
MA	11/30/00	12	Non-Broker	35,000					
MA	11/30/00	13	Non-Broker	65,000					
MA	11/30/00	14	Non-Broker	75,000					
MA	11/30/00	15	Non-Broker	125,000					
MA	11/30/00	16	Non-Broker	100,000					
MA	12/01/00	8	Non-Broker	25,000					
MA	12/01/00	8	Non-Broker	40,000					
MA	12/01/00	9	Non-Broker	48,000					
MA	12/01/00	9	Non-Broker	55,000					
MA	12/01/00	13	Non-Broker	103,000					
MA	12/01/00	14	Non-Broker	100,000					
MA	12/01/00	15	Non-Broker	100,000					
MA	12/01/00	16	Non-Broker	52,000					
MA	12/01/00	16	Non-Broker	100,000					
MA	12/01/00	17	Non-Broker	103,000					
MA	12/01/00	20	Non-Broker	25,000					
MA	12/01/00	24	Non-Broker	100,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	12/02/00	13	Non-Broker	25,000					
MA	12/02/00	13	Non-Broker	52,000					
MA	12/02/00	14	Non-Broker	25,000					
MA	12/02/00	14	Non-Broker	52,000					
MA	12/02/00	15	Non-Broker	50,000					
MA	12/02/00	15	Non-Broker	52,000					
MA	12/02/00	16	Non-Broker	50,000					
MA	12/02/00	16	Non-Broker	103,000					
MA	12/02/00	17	Non-Broker	100,000					
MA	12/02/00	18	Non-Broker	50,000					
MA	12/02/00	22	Non-Broker	100,000					
MA	12/03/00	10	Non-Broker	60,000					
MA	12/08/00	7	Non-Broker	60,000					
MA	12/18/00	18	Non-Broker	96,000					
MA	12/20/00	7	Non-Broker	100,000					
MA	12/20/00	8	Non-Broker	200,000					
MA	12/20/00	8	Non-Broker	200,000					
MA	12/20/00	9	Non-Broker	75,000					
MA	12/20/00	9	Non-Broker	325,000					
MA	12/20/00	10	Non-Broker	40,000					
MA	12/20/00	11	Non-Broker	204,000					
MA	12/20/00	12	Non-Broker	100,000					
MA	12/20/00	12	Non-Broker	150,000					
MA	12/20/00	14	Non-Broker	100,000					
MA	12/20/00	15	Non-Broker	200,000					
MA	12/20/00	16	Non-Broker	75,000					
MA	12/20/00	16	Non-Broker	100,000					
MA	12/20/00	17	Non-Broker	75,000					
MA	12/20/00	17	Non-Broker	115,000					
MA	12/20/00	18	Non-Broker	40,000					
MA	12/20/00	18	Non-Broker	51,000					
MA	12/20/00	18	Non-Broker	52,000					
MA	12/20/00	18	Non-Broker	102,000					
MA	12/20/00	19	Non-Broker	50,000					
MA	12/20/00	19	Non-Broker	125,000					
MA	12/20/00	19	Non-Broker	200,000					
MA	12/20/00	20	Non-Broker	285,000					
MA	12/20/00	21	Non-Broker	285,000					
MA	12/20/00	22	Non-Broker	100,000					
MA	12/20/00	23	Non-Broker	75,000					
MA	12/20/00	10, 11	Non-Broker	200,000					
MA	12/20/00	16, 17	Non-Broker	300,000					
MA	12/21/00	9	Non-Broker	100,000					
MA	12/21/00	10	Non-Broker	200,000					
MA	12/21/00	11	Non-Broker	100,000					
MA	12/21/00	13	Non-Broker	40,000					
MA	12/21/00	16	Non-Broker	200,000					
MA	12/21/00	17	Non-Broker	150,000					
MA	12/21/00	18	Non-Broker	75,000					
MA	12/21/00	22	Non-Broker	50,000					
MA	12/21/00	23	Non-Broker	10,000					
MA	12/22/00	4	Non-Broker	52,000					
MA	12/22/00	5	Non-Broker	82,000					
MA	12/22/00	6	Non-Broker	52,000					
MA	12/22/00	6	Non-Broker	100,000					
MA	12/22/00	11	Non-Broker	100,000					
MA	12/23/00	4	Non-Broker	100,000					
MA	12/23/00	5	Non-Broker	100,000					
MA	12/23/00	23	Non-Broker	100,000					
MA	12/24/00	6	Non-Broker	102,000					
MA	12/24/00	7	Non-Broker	100,000					
MA	12/24/00	8	Non-Broker	150,000					
MA	12/24/00	9	Non-Broker	200,000					
MA	12/24/00	10	Non-Broker	275,000					
MA	12/24/00	11	Non-Broker	150,000					
MA	12/24/00	12	Non-Broker	225,000					
MA	12/24/00	13	Non-Broker	125,000					
MA	12/24/00	20	Non-Broker	50,000					
MA	12/24/00	20	Non-Broker	75,000					
MA	12/24/00	20	Non-Broker	100,000					
MA	12/24/00	21	Non-Broker	25,000					
MA	12/24/00	21	Non-Broker	50,000					
MA	12/24/00	21	Non-Broker	150,000					
MA	12/24/00	22	Non-Broker	75,000					
MA	12/24/00	22	Non-Broker	100,000					
MA	12/24/00	22	Non-Broker	200,000					
MA	12/24/00	23	Non-Broker	100,000					
MA	12/24/00	23	Non-Broker	100,000					
MA	12/24/00	23	Non-Broker	200,000					

SALE	DATE OF SALE	TIME OF SALE (H.E.)	BROKER OR NON-BROKER	TOTAL kWh SOLD	PRICE cents/kWh (without capacity)	GAIN OR LOSS cents/kWh (without capacity)	INCREMENTAL COST <sup>(1)</sup> cents/kWh	MARGINAL GENERATING COST <sup>(2)</sup> cents/kWh	PURCHASED POWER COST AT TIME OF SALE <sup>(3)</sup> cents/kWh
MA	12/24/00	24	Non-Broker	100,000					
MA	12/24/00	24	Non-Broker	125,000					
MA	12/25/00	1	Non-Broker	150,000					
MA	12/25/00	7	Non-Broker	75,000					
MA	12/25/00	8	Non-Broker	150,000					
MA	12/25/00	8	Non-Broker	150,000					
MA	12/25/00	9	Non-Broker	150,000					
MA	12/25/00	9	Non-Broker	200,000					
MA	12/25/00	10	Non-Broker	75,000					
MA	12/25/00	10	Non-Broker	160,000					
MA	12/25/00	11	Non-Broker	110,000					
MA	12/25/00	11	Non-Broker	200,000					
MA	12/25/00	12	Non-Broker	100,000					
MA	12/25/00	12	Non-Broker	200,000					
MA	12/25/00	13	Non-Broker	75,000					
MA	12/25/00	13	Non-Broker	200,000					
MA	12/25/00	14	Non-Broker	25,000					
MA	12/25/00	14	Non-Broker	75,000					
MA	12/25/00	23	Non-Broker	75,000					
MA	12/25/00	24	Non-Broker	50,000					
MA	12/25/00	21, 22	Non-Broker	200,000					
MA	12/25/00	23, 24	Non-Broker	400,000					
MA	12/26/00	9	Non-Broker	50,000					
MA	12/26/00	9	Non-Broker	100,000					
MA	12/26/00	10	Non-Broker	50,000					
MA	12/26/00	10	Non-Broker	50,000					
MA	12/26/00	11	Non-Broker	20,000					
MA	12/26/00	11	Non-Broker	25,000					
MA	12/26/00	12	Non-Broker	25,000					
MA	12/26/00	12	Non-Broker	200,000					
MA	12/26/00	13	Non-Broker	175,000					
MA	12/26/00	17	Non-Broker	15,000					
MA	12/26/00	18	Non-Broker	25,000					
MA	12/26/00	18	Non-Broker	150,000					
MA	12/26/00	19	Non-Broker	25,000					
MA	12/26/00	19	Non-Broker	100,000					
MA	12/26/00	20	Non-Broker	36,000					
MA	12/26/00	20	Non-Broker	90,000					
MA	12/26/00	21	Non-Broker	25,000					
MA	12/26/00	21	Non-Broker	50,000					
MA	12/26/00	21	Non-Broker	185,000					
MA	12/26/00	22	Non-Broker	25,000					
MA	12/26/00	22	Non-Broker	60,000					
MA	12/26/00	22	Non-Broker	100,000					
MA	12/26/00	23	Non-Broker	100,000					
MA	12/27/00	8	Non-Broker	50,000					
MA	12/27/00	10	Non-Broker	70,000					
MA	12/27/00	11	Non-Broker	70,000					
MA	12/27/00	12	Non-Broker	100,000					
MA	12/27/00	13	Non-Broker	125,000					
MA	12/27/00	14	Non-Broker	150,000					
MA	12/27/00	15	Non-Broker	165,000					
MA	12/27/00	16	Non-Broker	165,000					
MA	12/27/00	17	Non-Broker	100,000					
MA	12/28/00	8	Non-Broker	150,000					
MA	12/28/00	9	Non-Broker	200,000					
MA	12/28/00	10	Non-Broker	245,000					
MA	12/29/00	8	Non-Broker	90,000					
MA	12/29/00	9	Non-Broker	100,000					

TAMPA ELECTRIC COMPANY  
DOCKET NO. 010283-EI  
OPC'S 1ST SET OF INTERROGATORIES  
INTERROGATORY NO. 4  
PAGE 17 OF 17  
FILED: AUGUST 13, 2001

Tampa Electric does not maintain system average cost on a transactional basis.  
Monthly system average cost is provided below.

Month	System Average Cost (cents/kWh)
Jan-00	2.496
Feb-00	2.295
Mar-00	2.332
Apr-00	2.492
May-00	2.462
Jun-00	2.669
Jul-00	2.961
Aug-00	3.274
Sep-00	3.326
Oct-00	3.013
Nov-00	2.952
Dec-00	2.988