

68	1,000	8,649	8,649	1.000000	1.000000
0	2,000	0	8,649	0.000000	1.000000
0	3,000	0	8,649	0.000000	1.000000
0	4,000	0	8,649	0.000000	1.000000
0	5,000	0	8,649	0.000000	1.000000
0	10,000	0	8,649	0.000000	1.000000
0	15,000	0	8,649	0.000000	1.000000
0	20,000	0	8,649	0.000000	1.000000
0	25,000	0	8,649	0.000000	1.000000
0	30,000	0	8,649	0.000000	1.000000
0	35,000	0	8,649	0.000000	1.000000
0	40,000	0	8,649	0.000000	1.000000
0	45,000	0	8,649	0.000000	1.000000
0	50,000	0	8,649	0.000000	1.000000
0	90,000	0	8,649	0.000000	1.000000
0	100,000	0	8,649	0.000000	1.000000
0	135,000	0	8,649	0.000000	1.000000
0	150,000	0	8,649	0.000000	1.000000
0	200,000	0	8,649	0.000000	1.000000
0	250,000	0	8,649	0.000000	1.000000
0	300,000	0	8,649	0.000000	1.000000
0	600,000	0	8,649	0.000000	1.000000
0	999,999	0	8,649	0.000000	1.000000

TN 07/2001 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	15,971	1,000	1,496,808	1,496,808	0.733982	0.733982
	525	2,000	306,950	1,803,758	0.150517	0.884500
	159	3,000	106,979	1,910,737	0.052458	0.936959
	77	4,000	58,601	1,969,338	0.028735	0.965695
	46	5,000	33,342	2,002,680	0.016349	0.982044
	21	10,000	35,284	2,037,964	0.017302	0.999346
	1	15,000	1,332	2,039,296	0.000653	1.000000
	0	20,000	0	2,039,296	0.000000	1.000000
	0	25,000	0	2,039,296	0.000000	1.000000
	0	30,000	0	2,039,296	0.000000	1.000000
	0	35,000	0	2,039,296	0.000000	1.000000
	0	40,000	0	2,039,296	0.000000	1.000000
	0	45,000	0	2,039,296	0.000000	1.000000
	0	50,000	0	2,039,296	0.000000	1.000000
	0	90,000	0	2,039,296	0.000000	1.000000
	0	100,000	0	2,039,296	0.000000	1.000000
	0	135,000	0	2,039,296	0.000000	1.000000
	0	150,000	0	2,039,296	0.000000	1.000000
	0	200,000	0	2,039,296	0.000000	1.000000
	0	250,000	0	2,039,296	0.000000	1.000000
	0	300,000	0	2,039,296	0.000000	1.000000
	0	600,000	0	2,039,296	0.000000	1.000000
	0	999,999	0	2,039,296	0.000000	1.000000

TN 07/2001 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	90	1,000	54,470	54,470	0.160494	0.160494

44	2,000	39,458	93,928	0.116261	0.276756
34	3,000	31,790	125,718	0.093668	0.370424
30	4,000	28,391	154,109	0.083653	0.454077
28	5,000	25,189	179,298	0.074218	0.528296
24	10,000	90,310	269,608	0.266095	0.794392
14	15,000	48,535	318,143	0.143007	0.937399
3	20,000	13,005	331,148	0.038318	0.975718
2	25,000	5,660	336,808	0.016677	0.992395
1	30,000	2,581	339,389	0.007604	1.000000
0	35,000	0	339,389	0.000000	1.000000
0	40,000	0	339,389	0.000000	1.000000
0	45,000	0	339,389	0.000000	1.000000
0	50,000	0	339,389	0.000000	1.000000
0	90,000	0	339,389	0.000000	1.000000
0	100,000	0	339,389	0.000000	1.000000
0	135,000	0	339,389	0.000000	1.000000
0	150,000	0	339,389	0.000000	1.000000
0	200,000	0	339,389	0.000000	1.000000
0	250,000	0	339,389	0.000000	1.000000
0	300,000	0	339,389	0.000000	1.000000
0	600,000	0	339,389	0.000000	1.000000
0	999,999	0	339,389	0.000000	1.000000

TN 07/2001 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	3,000	3,000	0.030449	0.030449
	3	2,000	3,000	6,000	0.030449	0.060898
	3	3,000	3,000	9,000	0.030449	0.091347
	3	4,000	3,000	12,000	0.030449	0.121796
	3	5,000	3,000	15,000	0.030449	0.152245
	3	10,000	15,000	30,000	0.152245	0.304491
	3	15,000	15,000	45,000	0.152245	0.456736
	3	20,000	13,881	58,881	0.140888	0.597625
	2	25,000	5,391	64,272	0.054717	0.652342
	1	30,000	5,000	69,272	0.050748	0.703090
	1	35,000	5,000	74,272	0.050748	0.753839
	1	40,000	5,000	79,272	0.050748	0.804587
	1	45,000	5,000	84,272	0.050748	0.855336
	1	50,000	5,000	89,272	0.050748	0.906084
	1	90,000	9,253	98,525	0.093915	1.000000
	0	100,000	0	98,525	0.000000	1.000000
	0	135,000	0	98,525	0.000000	1.000000
	0	150,000	0	98,525	0.000000	1.000000
	0	200,000	0	98,525	0.000000	1.000000
	0	250,000	0	98,525	0.000000	1.000000
	0	300,000	0	98,525	0.000000	1.000000
	0	600,000	0	98,525	0.000000	1.000000
	0	999,999	0	98,525	0.000000	1.000000

TN 07/2001 362	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	544	544	1.000000	1.000000
	0	2,000	0	544	0.000000	1.000000

0	3,000	0	544	0.000000	1.000000
0	4,000	0	544	0.000000	1.000000
0	5,000	0	544	0.000000	1.000000
0	10,000	0	544	0.000000	1.000000
0	15,000	0	544	0.000000	1.000000
0	20,000	0	544	0.000000	1.000000
0	25,000	0	544	0.000000	1.000000
0	30,000	0	544	0.000000	1.000000
0	35,000	0	544	0.000000	1.000000
0	40,000	0	544	0.000000	1.000000
0	45,000	0	544	0.000000	1.000000
0	50,000	0	544	0.000000	1.000000
0	90,000	0	544	0.000000	1.000000
0	100,000	0	544	0.000000	1.000000
0	135,000	0	544	0.000000	1.000000
0	150,000	0	544	0.000000	1.000000
0	200,000	0	544	0.000000	1.000000
0	250,000	0	544	0.000000	1.000000
0	300,000	0	544	0.000000	1.000000
0	600,000	0	544	0.000000	1.000000
0	999,999	0	544	0.000000	1.000000

TN 07/2001 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	7	1,000	1,701	1,701	(0.015203)	(0.015203)
	3	2,000	1,000	2,701	(0.008937)	(0.024141)
	3	3,000	1,000	3,701	(0.008937)	(0.033078)
	3	4,000	1,000	4,701	(0.008937)	(0.042016)
	3	5,000	1,000	5,701	(0.008937)	(0.050954)
	3	10,000	5,000	10,701	(0.044689)	(0.095643)
	3	15,000	294	10,995	(0.002627)	(0.098271)
	2	20,000	0	10,995	0.000000	(0.098271)
	2	25,000	0	10,995	0.000000	(0.098271)
	2	30,000	0	10,995	0.000000	(0.098271)
	2	35,000	0	10,995	0.000000	(0.098271)
	2	40,000	0	10,995	0.000000	(0.098271)
	2	45,000	0	10,995	0.000000	(0.098271)
	2	50,000	(1,550)	9,445	0.013853	(0.084417)
	1	90,000	(40,000)	(30,555)	0.357513	0.273095
	1	100,000	(10,000)	(40,555)	0.089378	0.362473
	1	135,000	(35,000)	(75,555)	0.312824	0.675297
	1	150,000	(15,000)	(90,555)	0.134067	0.809365
	1	200,000	(21,329)	(111,884)	0.190634	1.000000
	0	250,000	0	(111,884)	0.000000	1.000000
	0	300,000	0	(111,884)	0.000000	1.000000
	0	600,000	0	(111,884)	0.000000	1.000000
	0	999,999	0	(111,884)	0.000000	1.000000

TN 07/2001 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	102	1,000	74,203	74,203	0.084946	0.084946
	63	2,000	61,403	135,606	0.070293	0.155239
	60	3,000	57,074	192,680	0.065337	0.220577

55	4,000	53,984	246,664	0.061800	0.282377
53	5,000	52,318	298,982	0.059892	0.342269
52	10,000	209,973	508,955	0.240373	0.582643
33	15,000	118,567	627,522	0.135733	0.718377
16	20,000	68,962	696,484	0.078946	0.797324
12	25,000	45,678	742,162	0.052291	0.849615
8	30,000	30,967	773,129	0.035450	0.885065
5	35,000	18,116	791,245	0.020738	0.905804
3	40,000	13,179	804,424	0.015087	0.920892
2	45,000	10,000	814,424	0.011447	0.932339
2	50,000	10,000	824,424	0.011447	0.943787
2	90,000	45,420	869,844	0.051996	0.995783
1	100,000	3,683	873,527	0.004216	1.000000
0	135,000	0	873,527	0.000000	1.000000
0	150,000	0	873,527	0.000000	1.000000
0	200,000	0	873,527	0.000000	1.000000
0	250,000	0	873,527	0.000000	1.000000
0	300,000	0	873,527	0.000000	1.000000
0	600,000	0	873,527	0.000000	1.000000
0	999,999	0	873,527	0.000000	1.000000

TN 07/2001 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	49,083	49,083	0.010853	0.010853
	49	2,000	48,060	97,143	0.010627	0.021481
	47	3,000	47,000	144,143	0.010393	0.031874
	47	4,000	47,000	191,143	0.010393	0.042267
	47	5,000	47,000	238,143	0.010393	0.052660
	47	10,000	230,907	469,050	0.051060	0.103720
	43	15,000	208,531	677,581	0.046112	0.149832
	40	20,000	193,862	871,443	0.042868	0.192700
	38	25,000	164,391	1,035,834	0.036351	0.229052
	31	30,000	142,060	1,177,894	0.031413	0.260466
	27	35,000	131,470	1,309,364	0.029071	0.289537
	24	40,000	119,130	1,428,494	0.026343	0.315880
	23	45,000	105,014	1,533,508	0.023221	0.339102
	20	50,000	95,387	1,628,895	0.021092	0.360195
	18	90,000	535,956	2,164,851	0.118515	0.478710
	11	100,000	104,520	2,269,371	0.023112	0.501822
	10	135,000	283,194	2,552,565	0.062622	0.564445
	7	150,000	88,816	2,641,381	0.019639	0.584084
	5	200,000	206,541	2,847,922	0.045672	0.629756
	4	250,000	181,134	3,029,056	0.040053	0.669810
	3	300,000	150,000	3,179,056	0.033169	0.702980
	3	600,000	724,798	3,903,854	0.160273	0.863253
	1	999,999	618,402	4,522,256	0.136746	1.000000

TN 07/2001 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001100	0.001100
	3	2,000	3,000	6,000	0.001100	0.002200
	3	3,000	3,000	9,000	0.001100	0.003301
	3	4,000	3,000	12,000	0.001100	0.004401

3	5,000	3,000	15,000	0.001100	0.005501
3	10,000	15,000	30,000	0.005501	0.011003
3	15,000	15,000	45,000	0.005501	0.016505
3	20,000	15,000	60,000	0.005501	0.022007
3	25,000	15,000	75,000	0.005501	0.027509
3	30,000	15,000	90,000	0.005501	0.033011
3	35,000	15,000	105,000	0.005501	0.038513
3	40,000	15,000	120,000	0.005501	0.044015
3	45,000	15,000	135,000	0.005501	0.049516
3	50,000	15,000	150,000	0.005501	0.055018
3	90,000	120,000	270,000	0.044015	0.099033
3	100,000	30,000	300,000	0.011003	0.110037
3	135,000	83,351	383,351	0.030572	0.140609
2	150,000	30,000	413,351	0.011003	0.151613
2	200,000	100,000	513,351	0.036679	0.188292
2	250,000	100,000	613,351	0.036679	0.224971
2	300,000	100,000	713,351	0.036679	0.261651
2	600,000	483,403	1,196,754	0.177308	0.438959
1	999,999	1,529,591	2,726,345	0.561040	1.000000

TN 07/2001 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.218794	0.218794
	2	2,000	2,000	4,000	0.218794	0.437588
	2	3,000	1,668	5,668	0.182474	0.620063
	1	4,000	1,000	6,668	0.109397	0.729460
	1	5,000	1,000	7,668	0.109397	0.838857
	1	10,000	1,473	9,141	0.161142	1.000000
	0	15,000	0	9,141	0.000000	1.000000
	0	20,000	0	9,141	0.000000	1.000000
	0	25,000	0	9,141	0.000000	1.000000
	0	30,000	0	9,141	0.000000	1.000000
	0	35,000	0	9,141	0.000000	1.000000
	0	40,000	0	9,141	0.000000	1.000000
	0	45,000	0	9,141	0.000000	1.000000
	0	50,000	0	9,141	0.000000	1.000000
	0	90,000	0	9,141	0.000000	1.000000
	0	100,000	0	9,141	0.000000	1.000000
	0	135,000	0	9,141	0.000000	1.000000
	0	150,000	0	9,141	0.000000	1.000000
	0	200,000	0	9,141	0.000000	1.000000
	0	250,000	0	9,141	0.000000	1.000000
	0	300,000	0	9,141	0.000000	1.000000
	0	600,000	0	9,141	0.000000	1.000000
	0	999,999	0	9,141	0.000000	1.000000

TN 08/2001 101	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	0	0	0.000000	0.000000
	0	2,000	0	0	0.000000	0.000000
	0	3,000	0	0	0.000000	0.000000
	0	4,000	0	0	0.000000	0.000000
	0	5,000	0	0	0.000000	0.000000
	0	10,000	0	0	0.000000	0.000000
	0	15,000	0	0	0.000000	0.000000
	0	20,000	0	0	0.000000	0.000000
	0	25,000	0	0	0.000000	0.000000
	0	30,000	0	0	0.000000	0.000000
	0	35,000	0	0	0.000000	0.000000
	0	40,000	0	0	0.000000	0.000000
	0	45,000	0	0	0.000000	0.000000
	0	50,000	0	0	0.000000	0.000000
	0	90,000	0	0	0.000000	0.000000
	0	100,000	0	0	0.000000	0.000000
	0	135,000	0	0	0.000000	0.000000
	0	150,000	0	0	0.000000	0.000000
	0	200,000	0	0	0.000000	0.000000
	0	250,000	0	0	0.000000	0.000000
	0	300,000	0	0	0.000000	0.000000
	0	600,000	0	0	0.000000	0.000000
	0	999,999	0	0	0.000000	0.000000

TN 08/2001 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	124,674	1,000	1,554,314	1,554,314	1.004078	1.004078
	7	2,000	(2,999)	1,551,315	(0.001937)	1.002140
	3	3,000	(2,558)	1,548,757	(0.001652)	1.000488
	1	4,000	(756)	1,548,001	(0.000488)	1.000000
	0	5,000	0	1,548,001	0.000000	1.000000
	0	10,000	0	1,548,001	0.000000	1.000000
	0	15,000	0	1,548,001	0.000000	1.000000
	0	20,000	0	1,548,001	0.000000	1.000000
	0	25,000	0	1,548,001	0.000000	1.000000
	0	30,000	0	1,548,001	0.000000	1.000000
	0	35,000	0	1,548,001	0.000000	1.000000
	0	40,000	0	1,548,001	0.000000	1.000000
	0	45,000	0	1,548,001	0.000000	1.000000
	0	50,000	0	1,548,001	0.000000	1.000000
	0	90,000	0	1,548,001	0.000000	1.000000
	0	100,000	0	1,548,001	0.000000	1.000000
	0	135,000	0	1,548,001	0.000000	1.000000
	0	150,000	0	1,548,001	0.000000	1.000000
	0	200,000	0	1,548,001	0.000000	1.000000
	0	250,000	0	1,548,001	0.000000	1.000000
	0	300,000	0	1,548,001	0.000000	1.000000
	0	600,000	0	1,548,001	0.000000	1.000000
	0	999,999	0	1,548,001	0.000000	1.000000

TN 08/2001 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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67	1,000	8,883	8,883	1.000000	1.000000
0	2,000	0	8,883	0.000000	1.000000
0	3,000	0	8,883	0.000000	1.000000
0	4,000	0	8,883	0.000000	1.000000
0	5,000	0	8,883	0.000000	1.000000
0	10,000	0	8,883	0.000000	1.000000
0	15,000	0	8,883	0.000000	1.000000
0	20,000	0	8,883	0.000000	1.000000
0	25,000	0	8,883	0.000000	1.000000
0	30,000	0	8,883	0.000000	1.000000
0	35,000	0	8,883	0.000000	1.000000
0	40,000	0	8,883	0.000000	1.000000
0	45,000	0	8,883	0.000000	1.000000
0	50,000	0	8,883	0.000000	1.000000
0	90,000	0	8,883	0.000000	1.000000
0	100,000	0	8,883	0.000000	1.000000
0	135,000	0	8,883	0.000000	1.000000
0	150,000	0	8,883	0.000000	1.000000
0	200,000	0	8,883	0.000000	1.000000
0	250,000	0	8,883	0.000000	1.000000
0	300,000	0	8,883	0.000000	1.000000
0	600,000	0	8,883	0.000000	1.000000
0	999,999	0	8,883	0.000000	1.000000

TN 08/2001 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	15,879	1,000	1,434,588	1,434,588	0.734614	0.734614
	480	2,000	285,081	1,719,669	0.145982	0.880596
	145	3,000	99,570	1,819,239	0.050987	0.931583
	74	4,000	52,981	1,872,220	0.027130	0.958713
	42	5,000	30,919	1,903,139	0.015832	0.974546
	24	10,000	40,879	1,944,018	0.020933	0.995479
	2	15,000	8,828	1,952,846	0.004520	1.000000
	0	20,000	0	1,952,846	0.000000	1.000000
	0	25,000	0	1,952,846	0.000000	1.000000
	0	30,000	0	1,952,846	0.000000	1.000000
	0	35,000	0	1,952,846	0.000000	1.000000
	0	40,000	0	1,952,846	0.000000	1.000000
	0	45,000	0	1,952,846	0.000000	1.000000
	0	50,000	0	1,952,846	0.000000	1.000000
	0	90,000	0	1,952,846	0.000000	1.000000
	0	100,000	0	1,952,846	0.000000	1.000000
	0	135,000	0	1,952,846	0.000000	1.000000
	0	150,000	0	1,952,846	0.000000	1.000000
	0	200,000	0	1,952,846	0.000000	1.000000
	0	250,000	0	1,952,846	0.000000	1.000000
	0	300,000	0	1,952,846	0.000000	1.000000
	0	600,000	0	1,952,846	0.000000	1.000000
	0	999,999	0	1,952,846	0.000000	1.000000

TN 08/2001 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
2 of 6	90	1,000	55,088	55,088	0.148753	0.148753

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45	2,000	40,664	95,752	0.109804	0.258557
37	3,000	32,942	128,694	0.088952	0.347510
30	4,000	27,967	156,661	0.075518	0.423029
27	5,000	25,743	182,404	0.069513	0.492543
25	10,000	91,454	273,858	0.246952	0.739495
15	15,000	56,832	330,690	0.153462	0.892957
8	20,000	29,650	360,340	0.080063	0.973021
3	25,000	9,913	370,253	0.026767	0.999789
1	30,000	78	370,331	0.000210	1.000000
0	35,000	0	370,331	0.000000	1.000000
0	40,000	0	370,331	0.000000	1.000000
0	45,000	0	370,331	0.000000	1.000000
0	50,000	0	370,331	0.000000	1.000000
0	90,000	0	370,331	0.000000	1.000000
0	100,000	0	370,331	0.000000	1.000000
0	135,000	0	370,331	0.000000	1.000000
0	150,000	0	370,331	0.000000	1.000000
0	200,000	0	370,331	0.000000	1.000000
0	250,000	0	370,331	0.000000	1.000000
0	300,000	0	370,331	0.000000	1.000000
0	600,000	0	370,331	0.000000	1.000000
0	999,999	0	370,331	0.000000	1.000000

TN 08/2001 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	3,000	3,000	0.035102	0.035102
	3	2,000	3,000	6,000	0.035102	0.070205
	3	3,000	3,000	9,000	0.035102	0.105307
	3	4,000	3,000	12,000	0.035102	0.140410
	3	5,000	3,000	15,000	0.035102	0.175512
	3	10,000	12,135	27,135	0.141989	0.317502
	2	15,000	10,000	37,135	0.117008	0.434510
	2	20,000	10,000	47,135	0.117008	0.551518
	2	25,000	6,507	53,642	0.076137	0.627656
	1	30,000	5,000	58,642	0.058504	0.686160
	1	35,000	5,000	63,642	0.058504	0.744664
	1	40,000	5,000	68,642	0.058504	0.803168
	1	45,000	5,000	73,642	0.058504	0.861672
	1	50,000	5,000	78,642	0.058504	0.920176
	1	90,000	6,822	85,464	0.079823	1.000000
	0	100,000	0	85,464	0.000000	1.000000
	0	135,000	0	85,464	0.000000	1.000000
	0	150,000	0	85,464	0.000000	1.000000
	0	200,000	0	85,464	0.000000	1.000000
	0	250,000	0	85,464	0.000000	1.000000
	0	300,000	0	85,464	0.000000	1.000000
	0	600,000	0	85,464	0.000000	1.000000
	0	999,999	0	85,464	0.000000	1.000000

TN 08/2001 362	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	709	709	1.000000	1.000000
	0	2,000	0	709	0.000000	1.000000

0	3,000	0	709	0.000000	1.000000
0	4,000	0	709	0.000000	1.000000
0	5,000	0	709	0.000000	1.000000
0	10,000	0	709	0.000000	1.000000
0	15,000	0	709	0.000000	1.000000
0	20,000	0	709	0.000000	1.000000
0	25,000	0	709	0.000000	1.000000
0	30,000	0	709	0.000000	1.000000
0	35,000	0	709	0.000000	1.000000
0	40,000	0	709	0.000000	1.000000
0	45,000	0	709	0.000000	1.000000
0	50,000	0	709	0.000000	1.000000
0	90,000	0	709	0.000000	1.000000
0	100,000	0	709	0.000000	1.000000
0	135,000	0	709	0.000000	1.000000
0	150,000	0	709	0.000000	1.000000
0	200,000	0	709	0.000000	1.000000
0	250,000	0	709	0.000000	1.000000
0	300,000	0	709	0.000000	1.000000
0	600,000	0	709	0.000000	1.000000
0	999,999	0	709	0.000000	1.000000

TN 08/2001 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	7	1,000	4,000	4,000	0.110011	0.110011
	4	2,000	3,043	7,043	0.083690	0.193701
	3	3,000	3,000	10,043	0.082508	0.276210
	3	4,000	2,910	12,953	0.080033	0.356243
	2	5,000	2,000	14,953	0.055005	0.411248
	2	10,000	10,000	24,953	0.275027	0.686276
	2	15,000	10,000	34,953	0.275027	0.961303
	2	20,000	1,407	36,360	0.038696	1.000000
	0	25,000	0	36,360	0.000000	1.000000
	0	30,000	0	36,360	0.000000	1.000000
	0	35,000	0	36,360	0.000000	1.000000
	0	40,000	0	36,360	0.000000	1.000000
	0	45,000	0	36,360	0.000000	1.000000
	0	50,000	0	36,360	0.000000	1.000000
	0	90,000	0	36,360	0.000000	1.000000
	0	100,000	0	36,360	0.000000	1.000000
	0	135,000	0	36,360	0.000000	1.000000
	0	150,000	0	36,360	0.000000	1.000000
	0	200,000	0	36,360	0.000000	1.000000
	0	250,000	0	36,360	0.000000	1.000000
	0	300,000	0	36,360	0.000000	1.000000
	0	600,000	0	36,360	0.000000	1.000000
	0	999,999	0	36,360	0.000000	1.000000

TN 08/2001 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	102	1,000	73,579	73,579	0.078595	0.078595
	61	2,000	59,772	133,351	0.063847	0.142443
	57	3,000	54,918	188,269	0.058662	0.201105

53	4,000	52,509	240,778	0.056089	0.257194
52	5,000	52,000	292,778	0.055545	0.312740
52	10,000	218,296	511,074	0.233179	0.545920
36	15,000	141,890	652,964	0.151564	0.697484
20	20,000	86,379	739,343	0.092268	0.789752
14	25,000	54,042	793,385	0.057726	0.847479
9	30,000	33,092	826,477	0.035348	0.882827
6	35,000	27,967	854,444	0.029873	0.912701
4	40,000	14,201	868,645	0.015169	0.927871
2	45,000	10,000	878,645	0.010681	0.938552
2	50,000	10,000	888,645	0.010681	0.949234
2	90,000	47,525	936,170	0.050765	1.000000
0	100,000	0	936,170	0.000000	1.000000
0	135,000	0	936,170	0.000000	1.000000
0	150,000	0	936,170	0.000000	1.000000
0	200,000	0	936,170	0.000000	1.000000
0	250,000	0	936,170	0.000000	1.000000
0	300,000	0	936,170	0.000000	1.000000
0	600,000	0	936,170	0.000000	1.000000
0	999,999	0	936,170	0.000000	1.000000

TN 08/2001 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	49,352	49,352	0.010512	0.010512
	49	2,000	48,567	97,919	0.010345	0.020858
	48	3,000	48,000	145,919	0.010224	0.031082
	48	4,000	48,000	193,919	0.010224	0.041307
	48	5,000	48,000	241,919	0.010224	0.051531
	48	10,000	236,862	478,781	0.050454	0.101986
	44	15,000	220,000	698,781	0.046862	0.148849
	44	20,000	199,835	898,616	0.042567	0.191416
	38	25,000	172,839	1,071,455	0.036816	0.228233
	32	30,000	154,221	1,225,676	0.032851	0.261084
	30	35,000	140,315	1,365,991	0.029888	0.290973
	27	40,000	130,651	1,496,642	0.027830	0.318804
	25	45,000	121,580	1,618,222	0.025898	0.344702
	22	50,000	97,545	1,715,767	0.020778	0.365480
	19	90,000	575,403	2,291,170	0.122568	0.488048
	11	100,000	110,000	2,401,170	0.023431	0.511480
	11	135,000	299,356	2,700,526	0.063766	0.575246
	6	150,000	77,256	2,777,782	0.016456	0.591703
	5	200,000	202,323	2,980,105	0.043097	0.634800
	4	250,000	174,491	3,154,596	0.037168	0.671969
	3	300,000	150,000	3,304,596	0.031951	0.703921
	3	600,000	763,702	4,068,298	0.162678	0.866599
	1	999,999	626,254	4,694,552	0.133400	1.000000

TN 08/2001 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.000994	0.000994
	3	2,000	3,000	6,000	0.000994	0.001988
	3	3,000	3,000	9,000	0.000994	0.002982
	3	4,000	3,000	12,000	0.000994	0.003976

3	5,000	3,000	15,000	0.000994	0.004970
3	10,000	15,000	30,000	0.004970	0.009940
3	15,000	15,000	45,000	0.004970	0.014910
3	20,000	15,000	60,000	0.004970	0.019880
3	25,000	15,000	75,000	0.004970	0.024850
3	30,000	15,000	90,000	0.004970	0.029820
3	35,000	15,000	105,000	0.004970	0.034790
3	40,000	15,000	120,000	0.004970	0.039760
3	45,000	15,000	135,000	0.004970	0.044730
3	50,000	15,000	150,000	0.004970	0.049700
3	90,000	120,000	270,000	0.039760	0.089460
3	100,000	30,000	300,000	0.009940	0.099400
3	135,000	105,000	405,000	0.034790	0.134191
3	150,000	45,000	450,000	0.014910	0.149101
3	200,000	124,006	574,006	0.041087	0.190188
2	250,000	100,000	674,006	0.033133	0.223322
2	300,000	100,000	774,006	0.033133	0.256456
2	600,000	600,000	1,374,006	0.198801	0.455257
2	999,999	1,644,078	3,018,084	0.544742	1.000000

TN 08/2001 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.226449	0.226449
	2	2,000	2,000	4,000	0.226449	0.452898
	2	3,000	1,392	5,392	0.157608	0.610507
	1	4,000	1,000	6,392	0.113224	0.723731
	1	5,000	1,000	7,392	0.113224	0.836956
	1	10,000	1,440	8,832	0.163043	1.000000
	0	15,000	0	8,832	0.000000	1.000000
	0	20,000	0	8,832	0.000000	1.000000
	0	25,000	0	8,832	0.000000	1.000000
	0	30,000	0	8,832	0.000000	1.000000
	0	35,000	0	8,832	0.000000	1.000000
	0	40,000	0	8,832	0.000000	1.000000
	0	45,000	0	8,832	0.000000	1.000000
	0	50,000	0	8,832	0.000000	1.000000
	0	90,000	0	8,832	0.000000	1.000000
	0	100,000	0	8,832	0.000000	1.000000
	0	135,000	0	8,832	0.000000	1.000000
	0	150,000	0	8,832	0.000000	1.000000
	0	200,000	0	8,832	0.000000	1.000000
	0	250,000	0	8,832	0.000000	1.000000
	0	300,000	0	8,832	0.000000	1.000000
	0	600,000	0	8,832	0.000000	1.000000
	0	999,999	0	8,832	0.000000	1.000000

TN 09/2001 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	124,443	1,000	1,687,221	1,687,221	0.997248	0.997248
	5	2,000	1,567	1,688,788	0.000926	0.998174
	1	3,000	1,000	1,689,788	0.000591	0.998765
	1	4,000	1,000	1,690,788	0.000591	0.999356
	1	5,000	1,000	1,691,788	0.000591	0.999947
	1	10,000	89	1,691,877	0.000052	1.000000
	0	15,000	0	1,691,877	0.000000	1.000000
	0	20,000	0	1,691,877	0.000000	1.000000
	0	25,000	0	1,691,877	0.000000	1.000000
	0	30,000	0	1,691,877	0.000000	1.000000
	0	35,000	0	1,691,877	0.000000	1.000000
	0	40,000	0	1,691,877	0.000000	1.000000
	0	45,000	0	1,691,877	0.000000	1.000000
	0	50,000	0	1,691,877	0.000000	1.000000
	0	90,000	0	1,691,877	0.000000	1.000000
	0	100,000	0	1,691,877	0.000000	1.000000
	0	135,000	0	1,691,877	0.000000	1.000000
	0	150,000	0	1,691,877	0.000000	1.000000
	0	200,000	0	1,691,877	0.000000	1.000000
	0	250,000	0	1,691,877	0.000000	1.000000
	0	300,000	0	1,691,877	0.000000	1.000000
	0	600,000	0	1,691,877	0.000000	1.000000
	0	999,999	0	1,691,877	0.000000	1.000000

TN 09/2001 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	66	1,000	8,029	8,029	1.000000	1.000000
	0	2,000	0	8,029	0.000000	1.000000
	0	3,000	0	8,029	0.000000	1.000000
	0	4,000	0	8,029	0.000000	1.000000
	0	5,000	0	8,029	0.000000	1.000000
	0	10,000	0	8,029	0.000000	1.000000
	0	15,000	0	8,029	0.000000	1.000000
	0	20,000	0	8,029	0.000000	1.000000
	0	25,000	0	8,029	0.000000	1.000000
	0	30,000	0	8,029	0.000000	1.000000
	0	35,000	0	8,029	0.000000	1.000000
	0	40,000	0	8,029	0.000000	1.000000
	0	45,000	0	8,029	0.000000	1.000000
	0	50,000	0	8,029	0.000000	1.000000
	0	90,000	0	8,029	0.000000	1.000000
	0	100,000	0	8,029	0.000000	1.000000
	0	135,000	0	8,029	0.000000	1.000000
	0	150,000	0	8,029	0.000000	1.000000
	0	200,000	0	8,029	0.000000	1.000000
	0	250,000	0	8,029	0.000000	1.000000
	0	300,000	0	8,029	0.000000	1.000000
	0	600,000	0	8,029	0.000000	1.000000
	0	999,999	0	8,029	0.000000	1.000000

TN 09/2001 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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15,784	1,000	1,532,681	1,532,681	0.724690	0.724690
535	2,000	312,248	1,844,929	0.147638	0.872328
160	3,000	112,723	1,957,652	0.053298	0.925627
81	4,000	63,334	2,020,986	0.029945	0.955572
50	5,000	35,522	2,056,508	0.016795	0.972368
28	10,000	52,984	2,109,492	0.025052	0.997420
3	15,000	5,455	2,114,947	0.002579	1.000000
0	20,000	0	2,114,947	0.000000	1.000000
0	25,000	0	2,114,947	0.000000	1.000000
0	30,000	0	2,114,947	0.000000	1.000000
0	35,000	0	2,114,947	0.000000	1.000000
0	40,000	0	2,114,947	0.000000	1.000000
0	45,000	0	2,114,947	0.000000	1.000000
0	50,000	0	2,114,947	0.000000	1.000000
0	90,000	0	2,114,947	0.000000	1.000000
0	100,000	0	2,114,947	0.000000	1.000000
0	135,000	0	2,114,947	0.000000	1.000000
0	150,000	0	2,114,947	0.000000	1.000000
0	200,000	0	2,114,947	0.000000	1.000000
0	250,000	0	2,114,947	0.000000	1.000000
0	300,000	0	2,114,947	0.000000	1.000000
0	600,000	0	2,114,947	0.000000	1.000000
0	999,999	0	2,114,947	0.000000	1.000000

TN 09/2001 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	90	1,000	66,237	66,237	0.160778	0.160778
	57	2,000	47,986	114,223	0.116477	0.277256
	42	3,000	37,917	152,140	0.092036	0.369293
	35	4,000	32,032	184,172	0.077752	0.447045
	30	5,000	26,791	210,963	0.065030	0.512075
	24	10,000	93,809	304,772	0.227705	0.739781
	16	15,000	60,175	364,947	0.146064	0.885845
	10	20,000	32,828	397,775	0.079684	0.965529
	3	25,000	8,633	406,408	0.020955	0.986484
	1	30,000	5,000	411,408	0.012136	0.998621
	1	35,000	568	411,976	0.001378	1.000000
	0	40,000	0	411,976	0.000000	1.000000
	0	45,000	0	411,976	0.000000	1.000000
	0	50,000	0	411,976	0.000000	1.000000
	0	90,000	0	411,976	0.000000	1.000000
	0	100,000	0	411,976	0.000000	1.000000
	0	135,000	0	411,976	0.000000	1.000000
	0	150,000	0	411,976	0.000000	1.000000
	0	200,000	0	411,976	0.000000	1.000000
	0	250,000	0	411,976	0.000000	1.000000
	0	300,000	0	411,976	0.000000	1.000000
	0	600,000	0	411,976	0.000000	1.000000
	0	999,999	0	411,976	0.000000	1.000000

TN 09/2001 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	3,000	3,000	0.024965	0.024965

3	2,000	3,000	6,000	0.024965	0.049931
3	3,000	3,000	9,000	0.024965	0.074897
3	4,000	3,000	12,000	0.024965	0.099863
3	5,000	3,000	15,000	0.024965	0.124829
3	10,000	15,000	30,000	0.124829	0.249658
3	15,000	15,000	45,000	0.124829	0.374488
3	20,000	15,000	60,000	0.124829	0.499317
3	25,000	12,910	72,910	0.107436	0.606754
2	30,000	10,000	82,910	0.083219	0.689973
2	35,000	10,000	92,910	0.083219	0.773193
2	40,000	10,000	102,910	0.083219	0.856412
2	45,000	9,560	112,470	0.079557	0.935970
1	50,000	5,000	117,470	0.041609	0.977580
1	90,000	2,694	120,164	0.022419	1.000000
0	100,000	0	120,164	0.000000	1.000000
0	135,000	0	120,164	0.000000	1.000000
0	150,000	0	120,164	0.000000	1.000000
0	200,000	0	120,164	0.000000	1.000000
0	250,000	0	120,164	0.000000	1.000000
0	300,000	0	120,164	0.000000	1.000000
0	600,000	0	120,164	0.000000	1.000000
0	999,999	0	120,164	0.000000	1.000000

TN 09/2001 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.003268	0.003268
	1	2,000	1,000	2,000	0.003268	0.006537
	1	3,000	1,000	3,000	0.003268	0.009806
	1	4,000	1,000	4,000	0.003268	0.013075
	1	5,000	1,000	5,000	0.003268	0.016344
	1	10,000	5,000	10,000	0.016344	0.032689
	1	15,000	5,000	15,000	0.016344	0.049034
	1	20,000	5,000	20,000	0.016344	0.065378
	1	25,000	5,000	25,000	0.016344	0.081723
	1	30,000	5,000	30,000	0.016344	0.098068
	1	35,000	5,000	35,000	0.016344	0.114412
	1	40,000	5,000	40,000	0.016344	0.130757
	1	45,000	5,000	45,000	0.016344	0.147102
	1	50,000	5,000	50,000	0.016344	0.163446
	1	90,000	40,000	90,000	0.130757	0.294204
	1	100,000	10,000	100,000	0.032689	0.326893
	1	135,000	35,000	135,000	0.114412	0.441306
	1	150,000	15,000	150,000	0.049034	0.490340
	1	200,000	50,000	200,000	0.163446	0.653787
	1	250,000	50,000	250,000	0.163446	0.817233
	1	300,000	50,000	300,000	0.163446	0.980680
	1	600,000	5,910	305,910	0.019319	1.000000
	0	999,999	0	305,910	0.000000	1.000000

TN 09/2001 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	7	1,000	4,000	4,000	0.023187	0.023187
	4	2,000	3,812	7,812	0.022097	0.045285

3	3,000	2,597	10,409	0.015054	0.060339
2	4,000	2,000	12,409	0.011593	0.071933
2	5,000	2,000	14,409	0.011593	0.083527
2	10,000	10,000	24,409	0.057968	0.141495
2	15,000	10,000	34,409	0.057968	0.199464
2	20,000	10,000	44,409	0.057968	0.257433
2	25,000	10,000	54,409	0.057968	0.315401
2	30,000	10,000	64,409	0.057968	0.373370
2	35,000	10,000	74,409	0.057968	0.431339
2	40,000	10,000	84,409	0.057968	0.489307
2	45,000	10,000	94,409	0.057968	0.547276
2	50,000	10,000	104,409	0.057968	0.605245
2	90,000	61,400	165,809	0.355927	0.961172
1	100,000	6,698	172,507	0.038827	1.000000
0	135,000	0	172,507	0.000000	1.000000
0	150,000	0	172,507	0.000000	1.000000
0	200,000	0	172,507	0.000000	1.000000
0	250,000	0	172,507	0.000000	1.000000
0	300,000	0	172,507	0.000000	1.000000
0	600,000	0	172,507	0.000000	1.000000
0	999,999	0	172,507	0.000000	1.000000

TN 09/2001 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	82,270	82,270	0.086490	0.086490
	71	2,000	64,645	146,915	0.067961	0.154451
	60	3,000	58,570	205,485	0.061574	0.216025
	56	4,000	53,701	259,186	0.056455	0.272481
	52	5,000	52,000	311,186	0.054667	0.327148
	52	10,000	221,549	532,735	0.232913	0.560062
	36	15,000	138,605	671,340	0.145714	0.705777
	21	20,000	79,696	751,036	0.083784	0.789561
	13	25,000	56,915	807,951	0.059834	0.849395
	10	30,000	38,031	845,982	0.039981	0.889377
	4	35,000	19,964	865,946	0.020988	0.910365
	3	40,000	12,111	878,057	0.012732	0.923097
	2	45,000	10,000	888,057	0.010513	0.933610
	2	50,000	10,000	898,057	0.010513	0.944123
	2	90,000	52,365	950,422	0.055051	0.999174
	1	100,000	785	951,207	0.000825	1.000000
	0	135,000	0	951,207	0.000000	1.000000
	0	150,000	0	951,207	0.000000	1.000000
	0	200,000	0	951,207	0.000000	1.000000
	0	250,000	0	951,207	0.000000	1.000000
	0	300,000	0	951,207	0.000000	1.000000
	0	600,000	0	951,207	0.000000	1.000000
	0	999,999	0	951,207	0.000000	1.000000

TN 09/2001 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	51,165	51,165	0.010201	0.010201
	51	2,000	51,000	102,165	0.010168	0.020369
	51	3,000	50,068	152,233	0.009982	0.030352

50	4,000	50,000	202,233	0.009969	0.040321
50	5,000	50,000	252,233	0.009969	0.050290
50	10,000	246,601	498,834	0.049167	0.099457
48	15,000	229,251	728,085	0.045708	0.145166
42	20,000	201,890	929,975	0.040252	0.185418
38	25,000	174,562	1,104,537	0.034804	0.220223
34	30,000	156,648	1,261,185	0.031232	0.251455
27	35,000	129,871	1,391,056	0.025893	0.277349
25	40,000	121,724	1,512,780	0.024269	0.301618
23	45,000	111,481	1,624,261	0.022227	0.323846
21	50,000	103,659	1,727,920	0.020667	0.344513
19	90,000	632,530	2,360,450	0.126114	0.470627
13	100,000	127,834	2,488,284	0.025487	0.496115
11	135,000	276,768	2,765,052	0.055182	0.551297
7	150,000	97,333	2,862,385	0.019406	0.570703
6	200,000	245,596	3,107,981	0.048967	0.619670
4	250,000	163,603	3,271,584	0.032619	0.652290
3	300,000	150,000	3,421,584	0.029907	0.682197
3	600,000	727,253	4,148,837	0.145000	0.827197
1	999,999	866,698	5,015,535	0.172802	1.000000

TN 09/2001 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001173	0.001173
	3	2,000	3,000	6,000	0.001173	0.002346
	3	3,000	3,000	9,000	0.001173	0.003519
	3	4,000	3,000	12,000	0.001173	0.004692
	3	5,000	3,000	15,000	0.001173	0.005866
	3	10,000	15,000	30,000	0.005866	0.011732
	3	15,000	15,000	45,000	0.005866	0.017598
	3	20,000	15,000	60,000	0.005866	0.023464
	3	25,000	15,000	75,000	0.005866	0.029330
	3	30,000	15,000	90,000	0.005866	0.035197
	3	35,000	15,000	105,000	0.005866	0.041063
	3	40,000	15,000	120,000	0.005866	0.046929
	3	45,000	15,000	135,000	0.005866	0.052795
	3	50,000	15,000	150,000	0.005866	0.058661
	3	90,000	120,000	270,000	0.046929	0.105591
	3	100,000	30,000	300,000	0.011732	0.117323
	3	135,000	105,000	405,000	0.041063	0.158386
	3	150,000	45,000	450,000	0.017598	0.175985
	3	200,000	131,291	581,291	0.051345	0.227330
	2	250,000	100,000	681,291	0.039107	0.266438
	2	300,000	100,000	781,291	0.039107	0.305545
	2	600,000	600,000	1,381,291	0.234646	0.540192
	2	999,999	1,175,743	2,557,034	0.459807	1.000000

TN 09/2001 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.189304	0.189304
	2	2,000	2,000	4,000	0.189304	0.378608
	2	3,000	1,619	5,619	0.153241	0.531850
	1	4,000	1,000	6,619	0.094652	0.626502

1	5,000	1,000	7,619	0.094652	0.721154
1	10,000	2,946	10,565	0.278845	1.000000
0	15,000	0	10,565	0.000000	1.000000
0	20,000	0	10,565	0.000000	1.000000
0	25,000	0	10,565	0.000000	1.000000
0	30,000	0	10,565	0.000000	1.000000
0	35,000	0	10,565	0.000000	1.000000
0	40,000	0	10,565	0.000000	1.000000
0	45,000	0	10,565	0.000000	1.000000
0	50,000	0	10,565	0.000000	1.000000
0	90,000	0	10,565	0.000000	1.000000
0	100,000	0	10,565	0.000000	1.000000
0	135,000	0	10,565	0.000000	1.000000
0	150,000	0	10,565	0.000000	1.000000
0	200,000	0	10,565	0.000000	1.000000
0	250,000	0	10,565	0.000000	1.000000
0	300,000	0	10,565	0.000000	1.000000
0	600,000	0	10,565	0.000000	1.000000
0	999,999	0	10,565	0.000000	1.000000

TN 10/2001 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	125,702	1,000	2,787,026	2,787,026	1.000801	1.000801
	11	2,000	825	2,787,851	0.000296	1.001097
	1	3,000	(1,000)	2,786,851	(0.000359)	1.000738
	1	4,000	(1,000)	2,785,851	(0.000359)	1.000379
	1	5,000	(1,000)	2,784,851	(0.000359)	1.000020
	1	10,000	(57)	2,784,794	(0.000020)	1.000000
	0	15,000	0	2,784,794	0.000000	1.000000
	0	20,000	0	2,784,794	0.000000	1.000000
	0	25,000	0	2,784,794	0.000000	1.000000
	0	30,000	0	2,784,794	0.000000	1.000000
	0	35,000	0	2,784,794	0.000000	1.000000
	0	40,000	0	2,784,794	0.000000	1.000000
	0	45,000	0	2,784,794	0.000000	1.000000
	0	50,000	0	2,784,794	0.000000	1.000000
	0	90,000	0	2,784,794	0.000000	1.000000
	0	100,000	0	2,784,794	0.000000	1.000000
	0	135,000	0	2,784,794	0.000000	1.000000
	0	150,000	0	2,784,794	0.000000	1.000000
	0	200,000	0	2,784,794	0.000000	1.000000
	0	250,000	0	2,784,794	0.000000	1.000000
	0	300,000	0	2,784,794	0.000000	1.000000
	0	600,000	0	2,784,794	0.000000	1.000000
	0	999,999	0	2,784,794	0.000000	1.000000

TN 10/2001 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	67	1,000	4,328	4,328	1.000000	1.000000
	0	2,000	0	4,328	0.000000	1.000000
	0	3,000	0	4,328	0.000000	1.000000
	0	4,000	0	4,328	0.000000	1.000000
	0	5,000	0	4,328	0.000000	1.000000
	0	10,000	0	4,328	0.000000	1.000000
	0	15,000	0	4,328	0.000000	1.000000
	0	20,000	0	4,328	0.000000	1.000000
	0	25,000	0	4,328	0.000000	1.000000
	0	30,000	0	4,328	0.000000	1.000000
	0	35,000	0	4,328	0.000000	1.000000
	0	40,000	0	4,328	0.000000	1.000000
	0	45,000	0	4,328	0.000000	1.000000
	0	50,000	0	4,328	0.000000	1.000000
	0	90,000	0	4,328	0.000000	1.000000
	0	100,000	0	4,328	0.000000	1.000000
	0	135,000	0	4,328	0.000000	1.000000
	0	150,000	0	4,328	0.000000	1.000000
	0	200,000	0	4,328	0.000000	1.000000
	0	250,000	0	4,328	0.000000	1.000000
	0	300,000	0	4,328	0.000000	1.000000
	0	600,000	0	4,328	0.000000	1.000000
	0	999,999	0	4,328	0.000000	1.000000

15,893	1,000	1,938,216	1,938,216	0.712921	0.712921
687	2,000	416,703	2,354,919	0.153273	0.866194
239	3,000	154,152	2,509,071	0.056700	0.922895
111	4,000	77,965	2,587,036	0.028677	0.951572
57	5,000	42,116	2,629,152	0.015491	0.967064
34	10,000	72,276	2,701,428	0.026584	0.993648
6	15,000	15,198	2,716,626	0.005590	0.999239
1	20,000	2,069	2,718,695	0.000761	1.000000
0	25,000	0	2,718,695	0.000000	1.000000
0	30,000	0	2,718,695	0.000000	1.000000
0	35,000	0	2,718,695	0.000000	1.000000
0	40,000	0	2,718,695	0.000000	1.000000
0	45,000	0	2,718,695	0.000000	1.000000
0	50,000	0	2,718,695	0.000000	1.000000
0	90,000	0	2,718,695	0.000000	1.000000
0	100,000	0	2,718,695	0.000000	1.000000
0	135,000	0	2,718,695	0.000000	1.000000
0	150,000	0	2,718,695	0.000000	1.000000
0	200,000	0	2,718,695	0.000000	1.000000
0	250,000	0	2,718,695	0.000000	1.000000
0	300,000	0	2,718,695	0.000000	1.000000
0	600,000	0	2,718,695	0.000000	1.000000
0	999,999	0	2,718,695	0.000000	1.000000

TN 10/2001 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	91	1,000	84,896	84,896	0.130890	0.130890
	82	2,000	77,148	162,044	0.118944	0.249834
	72	3,000	65,159	227,203	0.100460	0.350294
	57	4,000	51,660	278,863	0.079647	0.429942
	48	5,000	44,556	323,419	0.068695	0.498637
	42	10,000	150,950	474,369	0.232730	0.731368
	21	15,000	84,627	558,996	0.130475	0.861843
	15	20,000	58,940	617,936	0.090871	0.952715
	9	25,000	24,235	642,171	0.037364	0.990080
	2	30,000	6,434	648,605	0.009919	1.000000
	0	35,000	0	648,605	0.000000	1.000000
	0	40,000	0	648,605	0.000000	1.000000
	0	45,000	0	648,605	0.000000	1.000000
	0	50,000	0	648,605	0.000000	1.000000
	0	90,000	0	648,605	0.000000	1.000000
	0	100,000	0	648,605	0.000000	1.000000
	0	135,000	0	648,605	0.000000	1.000000
	0	150,000	0	648,605	0.000000	1.000000
	0	200,000	0	648,605	0.000000	1.000000
	0	250,000	0	648,605	0.000000	1.000000
	0	300,000	0	648,605	0.000000	1.000000
	0	600,000	0	648,605	0.000000	1.000000
	0	999,999	0	648,605	0.000000	1.000000

TN 10/2001 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	3,000	3,000	0.021089	0.021089

3	2,000	3,000	6,000	0.021089	0.042179
3	3,000	3,000	9,000	0.021089	0.063268
3	4,000	3,000	12,000	0.021089	0.084358
3	5,000	3,000	15,000	0.021089	0.105448
3	10,000	15,000	30,000	0.105448	0.210896
3	15,000	15,000	45,000	0.105448	0.316344
3	20,000	15,000	60,000	0.105448	0.421792
3	25,000	15,000	75,000	0.105448	0.527240
3	30,000	10,548	85,548	0.074151	0.601391
2	35,000	10,000	95,548	0.070298	0.671690
2	40,000	10,000	105,548	0.070298	0.741989
2	45,000	10,000	115,548	0.070298	0.812288
2	50,000	10,000	125,548	0.070298	0.882587
2	90,000	16,702	142,250	0.117413	1.000000
0	100,000	0	142,250	0.000000	1.000000
0	135,000	0	142,250	0.000000	1.000000
0	150,000	0	142,250	0.000000	1.000000
0	200,000	0	142,250	0.000000	1.000000
0	250,000	0	142,250	0.000000	1.000000
0	300,000	0	142,250	0.000000	1.000000
0	600,000	0	142,250	0.000000	1.000000
0	999,999	0	142,250	0.000000	1.000000

TN 10/2001 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.001961	0.001961
	1	2,000	1,000	2,000	0.001961	0.003922
	1	3,000	1,000	3,000	0.001961	0.005884
	1	4,000	1,000	4,000	0.001961	0.007845
	1	5,000	1,000	5,000	0.001961	0.009806
	1	10,000	5,000	10,000	0.009806	0.019613
	1	15,000	5,000	15,000	0.009806	0.029420
	1	20,000	5,000	20,000	0.009806	0.039227
	1	25,000	5,000	25,000	0.009806	0.049034
	1	30,000	5,000	30,000	0.009806	0.058840
	1	35,000	5,000	35,000	0.009806	0.068647
	1	40,000	5,000	40,000	0.009806	0.078454
	1	45,000	5,000	45,000	0.009806	0.088261
	1	50,000	5,000	50,000	0.009806	0.098068
	1	90,000	40,000	90,000	0.078454	0.176522
	1	100,000	10,000	100,000	0.019613	0.196136
	1	135,000	35,000	135,000	0.068647	0.264783
	1	150,000	15,000	150,000	0.029420	0.294204
	1	200,000	50,000	200,000	0.098068	0.392272
	1	250,000	50,000	250,000	0.098068	0.490340
	1	300,000	50,000	300,000	0.098068	0.588408
	1	600,000	209,850	509,850	0.411591	1.000000
	0	999,999	0	509,850	0.000000	1.000000

TN 10/2001 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	4,000	4,000	0.024257	0.024257
	4	2,000	4,000	8,000	0.024257	0.048515

4	3,000	4,000	12,000	0.024257	0.072773
4	4,000	4,000	16,000	0.024257	0.097031
4	5,000	4,000	20,000	0.024257	0.121289
4	10,000	19,682	39,682	0.119360	0.240650
3	15,000	11,064	50,746	0.067097	0.307747
2	20,000	10,000	60,746	0.060644	0.368392
2	25,000	10,000	70,746	0.060644	0.429036
2	30,000	10,000	80,746	0.060644	0.489681
2	35,000	10,000	90,746	0.060644	0.550326
2	40,000	10,000	100,746	0.060644	0.610970
2	45,000	10,000	110,746	0.060644	0.671615
2	50,000	8,709	119,455	0.052815	0.724430
1	90,000	40,000	159,455	0.242578	0.967009
1	100,000	5,440	164,895	0.032990	1.000000
0	135,000	0	164,895	0.000000	1.000000
0	150,000	0	164,895	0.000000	1.000000
0	200,000	0	164,895	0.000000	1.000000
0	250,000	0	164,895	0.000000	1.000000
0	300,000	0	164,895	0.000000	1.000000
0	600,000	0	164,895	0.000000	1.000000
0	999,999	0	164,895	0.000000	1.000000

TN 10/2001 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	100	1,000	94,528	94,528	0.068867	0.068867
	92	2,000	87,348	181,876	0.063636	0.132503
	83	3,000	79,844	261,720	0.058169	0.190672
	77	4,000	75,986	337,706	0.055358	0.246031
	73	5,000	70,545	408,251	0.051394	0.297425
	68	10,000	294,916	703,167	0.214857	0.512282
	52	15,000	218,882	922,049	0.159463	0.671746
	35	20,000	147,570	1,069,619	0.107510	0.779256
	22	25,000	86,615	1,156,234	0.063102	0.842358
	12	30,000	54,362	1,210,596	0.039604	0.881963
	8	35,000	30,749	1,241,345	0.022401	0.904365
	5	40,000	24,385	1,265,730	0.017765	0.922130
	4	45,000	18,533	1,284,263	0.013502	0.935632
	3	50,000	15,000	1,299,263	0.010928	0.946560
	3	90,000	67,532	1,366,795	0.049199	0.995759
	1	100,000	5,820	1,372,615	0.004240	1.000000
	0	135,000	0	1,372,615	0.000000	1.000000
	0	150,000	0	1,372,615	0.000000	1.000000
	0	200,000	0	1,372,615	0.000000	1.000000
	0	250,000	0	1,372,615	0.000000	1.000000
	0	300,000	0	1,372,615	0.000000	1.000000
	0	600,000	0	1,372,615	0.000000	1.000000
	0	999,999	0	1,372,615	0.000000	1.000000

TN 10/2001 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	52,000	52,000	0.008599	0.008599
	52	2,000	52,000	104,000	0.008599	0.017198
	52	3,000	51,567	155,567	0.008527	0.025725

51	4,000	51,000	206,567	0.008433	0.034159
51	5,000	51,000	257,567	0.008433	0.042593
51	10,000	253,723	511,290	0.041957	0.084550
50	15,000	247,372	758,662	0.040907	0.125457
48	20,000	223,994	982,656	0.037041	0.162499
41	25,000	202,013	1,184,669	0.033406	0.195905
39	30,000	180,988	1,365,657	0.029929	0.225834
35	35,000	164,292	1,529,949	0.027168	0.253003
31	40,000	148,940	1,678,889	0.024629	0.277633
28	45,000	137,231	1,816,120	0.022693	0.300326
26	50,000	125,812	1,941,932	0.020805	0.321131
25	90,000	796,283	2,738,215	0.131679	0.452811
15	100,000	148,871	2,887,086	0.024618	0.477429
14	135,000	341,402	3,228,488	0.056456	0.533886
8	150,000	117,298	3,345,786	0.019397	0.553283
7	200,000	280,590	3,626,376	0.046400	0.599683
5	250,000	227,754	3,854,130	0.037663	0.637346
4	300,000	177,431	4,031,561	0.029341	0.666688
3	600,000	743,791	4,775,352	0.122998	0.789686
1	999,999	1,271,795	6,047,147	0.210313	1.000000

TN 10/2001 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001284	0.001284
	3	2,000	3,000	6,000	0.001284	0.002568
	3	3,000	3,000	9,000	0.001284	0.003852
	3	4,000	3,000	12,000	0.001284	0.005137
	3	5,000	3,000	15,000	0.001284	0.006421
	3	10,000	15,000	30,000	0.006421	0.012842
	3	15,000	15,000	45,000	0.006421	0.019264
	3	20,000	15,000	60,000	0.006421	0.025685
	3	25,000	15,000	75,000	0.006421	0.032107
	3	30,000	15,000	90,000	0.006421	0.038528
	3	35,000	15,000	105,000	0.006421	0.044950
	3	40,000	15,000	120,000	0.006421	0.051371
	3	45,000	15,000	135,000	0.006421	0.057792
	3	50,000	15,000	150,000	0.006421	0.064214
	3	90,000	120,000	270,000	0.051371	0.115585
	3	100,000	30,000	300,000	0.012842	0.128428
	3	135,000	105,000	405,000	0.044950	0.173378
	3	150,000	45,000	450,000	0.019264	0.192642
	3	200,000	150,000	600,000	0.064214	0.256856
	3	250,000	150,000	750,000	0.064214	0.321071
	3	300,000	130,279	880,279	0.055771	0.376842
	2	600,000	600,000	1,480,279	0.256856	0.633699
	2	999,999	855,652	2,335,931	0.366300	1.000000

TN 10/2001 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.101605	0.101605
	2	2,000	2,000	4,000	0.101605	0.203210
	2	3,000	2,000	6,000	0.101605	0.304816
	2	4,000	1,854	7,854	0.094188	0.399004

1	5,000	1,000	8,854	0.050802	0.449806
1	10,000	5,000	13,854	0.254013	0.703820
1	15,000	5,000	18,854	0.254013	0.957833
1	20,000	830	19,684	0.042166	1.000000
0	25,000	0	19,684	0.000000	1.000000
0	30,000	0	19,684	0.000000	1.000000
0	35,000	0	19,684	0.000000	1.000000
0	40,000	0	19,684	0.000000	1.000000
0	45,000	0	19,684	0.000000	1.000000
0	50,000	0	19,684	0.000000	1.000000
0	90,000	0	19,684	0.000000	1.000000
0	100,000	0	19,684	0.000000	1.000000
0	135,000	0	19,684	0.000000	1.000000
0	150,000	0	19,684	0.000000	1.000000
0	200,000	0	19,684	0.000000	1.000000
0	250,000	0	19,684	0.000000	1.000000
0	300,000	0	19,684	0.000000	1.000000
0	600,000	0	19,684	0.000000	1.000000
0	999,999	0	19,684	0.000000	1.000000

TN 11/2001 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	127,755	1,000	6,642,677	6,642,677	0.999175	0.999175
	18	2,000	5,397	6,648,074	0.000811	0.999987
	1	3,000	82	6,648,156	0.000012	1.000000
	0	4,000	0	6,648,156	0.000000	1.000000
	0	5,000	0	6,648,156	0.000000	1.000000
	0	10,000	0	6,648,156	0.000000	1.000000
	0	15,000	0	6,648,156	0.000000	1.000000
	0	20,000	0	6,648,156	0.000000	1.000000
	0	25,000	0	6,648,156	0.000000	1.000000
	0	30,000	0	6,648,156	0.000000	1.000000
	0	35,000	0	6,648,156	0.000000	1.000000
	0	40,000	0	6,648,156	0.000000	1.000000
	0	45,000	0	6,648,156	0.000000	1.000000
	0	50,000	0	6,648,156	0.000000	1.000000
	0	90,000	0	6,648,156	0.000000	1.000000
	0	100,000	0	6,648,156	0.000000	1.000000
	0	135,000	0	6,648,156	0.000000	1.000000
	0	150,000	0	6,648,156	0.000000	1.000000
	0	200,000	0	6,648,156	0.000000	1.000000
	0	250,000	0	6,648,156	0.000000	1.000000
	0	300,000	0	6,648,156	0.000000	1.000000
	0	600,000	0	6,648,156	0.000000	1.000000
	0	999,999	0	6,648,156	0.000000	1.000000

TN 11/2001 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	66	1,000	6,997	6,997	1.000000	1.000000
	0	2,000	0	6,997	0.000000	1.000000
	0	3,000	0	6,997	0.000000	1.000000
	0	4,000	0	6,997	0.000000	1.000000
	0	5,000	0	6,997	0.000000	1.000000
	0	10,000	0	6,997	0.000000	1.000000
	0	15,000	0	6,997	0.000000	1.000000
	0	20,000	0	6,997	0.000000	1.000000
	0	25,000	0	6,997	0.000000	1.000000
	0	30,000	0	6,997	0.000000	1.000000
	0	35,000	0	6,997	0.000000	1.000000
	0	40,000	0	6,997	0.000000	1.000000
	0	45,000	0	6,997	0.000000	1.000000
	0	50,000	0	6,997	0.000000	1.000000
	0	90,000	0	6,997	0.000000	1.000000
	0	100,000	0	6,997	0.000000	1.000000
	0	135,000	0	6,997	0.000000	1.000000
	0	150,000	0	6,997	0.000000	1.000000
	0	200,000	0	6,997	0.000000	1.000000
	0	250,000	0	6,997	0.000000	1.000000
	0	300,000	0	6,997	0.000000	1.000000
	0	600,000	0	6,997	0.000000	1.000000
	0	999,999	0	6,997	0.000000	1.000000

TN 11/2001 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,134	1,000	2,958,251	2,958,251	0.668021	0.668021
1,131	2,000	736,887	3,695,138	0.166401	0.834422
471	3,000	321,501	4,016,639	0.072600	0.907022
222	4,000	159,578	4,176,217	0.036035	0.943058
122	5,000	91,366	4,267,583	0.020631	0.963690
71	10,000	139,552	4,407,135	0.031513	0.995203
7	15,000	16,283	4,423,418	0.003677	0.998880
2	20,000	4,959	4,428,377	0.001119	1.000000
0	25,000	0	4,428,377	0.000000	1.000000
0	30,000	0	4,428,377	0.000000	1.000000
0	35,000	0	4,428,377	0.000000	1.000000
0	40,000	0	4,428,377	0.000000	1.000000
0	45,000	0	4,428,377	0.000000	1.000000
0	50,000	0	4,428,377	0.000000	1.000000
0	90,000	0	4,428,377	0.000000	1.000000
0	100,000	0	4,428,377	0.000000	1.000000
0	135,000	0	4,428,377	0.000000	1.000000
0	150,000	0	4,428,377	0.000000	1.000000
0	200,000	0	4,428,377	0.000000	1.000000
0	250,000	0	4,428,377	0.000000	1.000000
0	300,000	0	4,428,377	0.000000	1.000000
0	600,000	0	4,428,377	0.000000	1.000000
0	999,999	0	4,428,377	0.000000	1.000000

TN 11/2001 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	91	1,000	88,790	88,790	0.110916	0.110916
	85	2,000	83,372	172,162	0.104148	0.215064
	81	3,000	79,112	251,274	0.098826	0.313891
	77	4,000	70,546	321,820	0.088126	0.402017
	64	5,000	60,328	382,148	0.075361	0.477378
	57	10,000	200,960	583,108	0.251039	0.728417
	27	15,000	106,868	689,976	0.133499	0.861917
	17	20,000	69,002	758,978	0.086197	0.948114
	10	25,000	34,625	793,603	0.043253	0.991368
	3	30,000	6,910	800,513	0.008632	1.000000
	0	35,000	0	800,513	0.000000	1.000000
	0	40,000	0	800,513	0.000000	1.000000
	0	45,000	0	800,513	0.000000	1.000000
	0	50,000	0	800,513	0.000000	1.000000
	0	90,000	0	800,513	0.000000	1.000000
	0	100,000	0	800,513	0.000000	1.000000
	0	135,000	0	800,513	0.000000	1.000000
	0	150,000	0	800,513	0.000000	1.000000
	0	200,000	0	800,513	0.000000	1.000000
	0	250,000	0	800,513	0.000000	1.000000
	0	300,000	0	800,513	0.000000	1.000000
	0	600,000	0	800,513	0.000000	1.000000
	0	999,999	0	800,513	0.000000	1.000000

TN 11/2001 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.029598	0.029598

4	2,000	3,131	7,131	0.023168	0.052766
3	3,000	3,000	10,131	0.022198	0.074965
3	4,000	3,000	13,131	0.022198	0.097163
3	5,000	3,000	16,131	0.022198	0.119362
3	10,000	15,000	31,131	0.110993	0.230356
3	15,000	15,000	46,131	0.110993	0.341349
3	20,000	15,000	61,131	0.110993	0.452343
3	25,000	15,000	76,131	0.110993	0.563336
3	30,000	11,324	87,455	0.083792	0.647129
2	35,000	10,000	97,455	0.073995	0.721125
2	40,000	6,641	104,096	0.049140	0.770265
1	45,000	5,000	109,096	0.036997	0.807263
1	50,000	5,000	114,096	0.036997	0.844261
1	90,000	21,047	135,143	0.155738	1.000000
0	100,000	0	135,143	0.000000	1.000000
0	135,000	0	135,143	0.000000	1.000000
0	150,000	0	135,143	0.000000	1.000000
0	200,000	0	135,143	0.000000	1.000000
0	250,000	0	135,143	0.000000	1.000000
0	300,000	0	135,143	0.000000	1.000000
0	600,000	0	135,143	0.000000	1.000000
0	999,999	0	135,143	0.000000	1.000000

TN 11/2001 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	2,000	2,000	0.005310	0.005310
	2	2,000	2,000	4,000	0.005310	0.010621
	2	3,000	2,000	6,000	0.005310	0.015932
	2	4,000	2,000	8,000	0.005310	0.021243
	2	5,000	2,000	10,000	0.005310	0.026554
	2	10,000	10,000	20,000	0.026554	0.053108
	2	15,000	10,000	30,000	0.026554	0.079663
	2	20,000	10,000	40,000	0.026554	0.106217
	2	25,000	10,000	50,000	0.026554	0.132772
	2	30,000	10,000	60,000	0.026554	0.159326
	2	35,000	10,000	70,000	0.026554	0.185881
	2	40,000	10,000	80,000	0.026554	0.212435
	2	45,000	10,000	90,000	0.026554	0.238989
	2	50,000	7,554	97,554	0.020059	0.259049
	1	90,000	40,000	137,554	0.106217	0.365266
	1	100,000	10,000	147,554	0.026554	0.391821
	1	135,000	35,000	182,554	0.092940	0.484761
	1	150,000	15,000	197,554	0.039831	0.524593
	1	200,000	50,000	247,554	0.132772	0.657365
	1	250,000	50,000	297,554	0.132772	0.790137
	1	300,000	50,000	347,554	0.132772	0.922909
	1	600,000	29,031	376,585	0.077090	1.000000
	0	999,999	0	376,585	0.000000	1.000000

TN 11/2001 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	100	1,000	96,494	96,494	0.063869	0.063869
	94	2,000	93,012	189,506	0.061564	0.125433

92	3,000	91,454	280,960	0.060533	0.185966
90	4,000	86,939	367,899	0.057544	0.243511
85	5,000	84,973	452,872	0.056243	0.299754
84	10,000	336,584	789,456	0.222784	0.522538
54	15,000	228,650	1,018,106	0.151342	0.673881
38	20,000	160,373	1,178,479	0.106150	0.780031
26	25,000	106,357	1,284,836	0.070397	0.850429
17	30,000	66,128	1,350,964	0.043769	0.894199
10	35,000	35,909	1,386,873	0.023768	0.917967
6	40,000	24,507	1,411,380	0.016221	0.934188
4	45,000	20,000	1,431,380	0.013237	0.947426
4	50,000	15,278	1,446,658	0.010112	0.957538
3	90,000	64,151	1,510,809	0.042461	1.000000
0	100,000	0	1,510,809	0.000000	1.000000
0	135,000	0	1,510,809	0.000000	1.000000
0	150,000	0	1,510,809	0.000000	1.000000
0	200,000	0	1,510,809	0.000000	1.000000
0	250,000	0	1,510,809	0.000000	1.000000
0	300,000	0	1,510,809	0.000000	1.000000
0	600,000	0	1,510,809	0.000000	1.000000
0	999,999	0	1,510,809	0.000000	1.000000

TN 11/2001 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	56	1,000	54,000	54,000	0.007310	0.007310
	54	2,000	54,000	108,000	0.007310	0.014620
	54	3,000	53,261	161,261	0.007210	0.021830
	53	4,000	52,799	214,060	0.007147	0.028978
	52	5,000	51,162	265,222	0.006926	0.035904
	51	10,000	255,000	520,222	0.034520	0.070425
	51	15,000	249,995	770,217	0.033843	0.104268
	48	20,000	224,085	994,302	0.030335	0.134603
	43	25,000	207,970	1,202,272	0.028154	0.162757
	40	30,000	187,255	1,389,527	0.025349	0.188107
	36	35,000	172,044	1,561,571	0.023290	0.211397
	33	40,000	161,039	1,722,610	0.021800	0.233198
	31	45,000	146,011	1,868,621	0.019766	0.252964
	27	50,000	129,333	1,997,954	0.017508	0.270473
	24	90,000	787,990	2,785,944	0.106674	0.377147
	15	100,000	143,053	2,928,997	0.019365	0.396513
	14	135,000	358,952	3,287,949	0.048593	0.445106
	8	150,000	120,000	3,407,949	0.016245	0.461351
	8	200,000	298,240	3,706,189	0.040374	0.501725
	5	250,000	222,558	3,928,747	0.030128	0.531854
	4	300,000	171,136	4,099,883	0.023167	0.555022
	2	600,000	565,378	4,665,261	0.076538	0.631560
	1	999,999	2,721,621	7,386,882	0.368439	1.000000

TN 11/2001 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001221	0.001221
	3	2,000	3,000	6,000	0.001221	0.002442
	3	3,000	3,000	9,000	0.001221	0.003663

3	4,000	3,000	12,000	0.001221	0.004884
3	5,000	3,000	15,000	0.001221	0.006105
3	10,000	15,000	30,000	0.006105	0.012211
3	15,000	15,000	45,000	0.006105	0.018317
3	20,000	15,000	60,000	0.006105	0.024423
3	25,000	15,000	75,000	0.006105	0.030529
3	30,000	15,000	90,000	0.006105	0.036635
3	35,000	15,000	105,000	0.006105	0.042741
3	40,000	15,000	120,000	0.006105	0.048846
3	45,000	15,000	135,000	0.006105	0.054952
3	50,000	15,000	150,000	0.006105	0.061058
3	90,000	120,000	270,000	0.048846	0.109905
3	100,000	30,000	300,000	0.012211	0.122117
3	135,000	105,000	405,000	0.042741	0.164858
3	150,000	45,000	450,000	0.018317	0.183175
3	200,000	150,000	600,000	0.061058	0.244234
3	250,000	150,000	750,000	0.061058	0.305292
3	300,000	142,334	892,334	0.057938	0.363231
2	600,000	600,000	1,492,334	0.244234	0.607465
2	999,999	964,323	2,456,657	0.392534	1.000000

TN 11/2001 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.074049	0.074049
	2	2,000	2,000	4,000	0.074049	0.148098
	2	3,000	2,000	6,000	0.074049	0.222148
	2	4,000	2,000	8,000	0.074049	0.296197
	2	5,000	2,000	10,000	0.074049	0.370247
	2	10,000	5,003	15,003	0.185234	0.555481
	1	15,000	5,000	20,003	0.185123	0.740605
	1	20,000	5,000	25,003	0.185123	0.925728
	1	25,000	2,006	27,009	0.074271	1.000000
	0	30,000	0	27,009	0.000000	1.000000
	0	35,000	0	27,009	0.000000	1.000000
	0	40,000	0	27,009	0.000000	1.000000
	0	45,000	0	27,009	0.000000	1.000000
	0	50,000	0	27,009	0.000000	1.000000
	0	90,000	0	27,009	0.000000	1.000000
	0	100,000	0	27,009	0.000000	1.000000
	0	135,000	0	27,009	0.000000	1.000000
	0	150,000	0	27,009	0.000000	1.000000
	0	200,000	0	27,009	0.000000	1.000000
	0	250,000	0	27,009	0.000000	1.000000
	0	300,000	0	27,009	0.000000	1.000000
	0	600,000	0	27,009	0.000000	1.000000
	0	999,999	0	27,009	0.000000	1.000000

TN 12/2001 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	128,796	1,000	9,276,039	9,276,039	0.998327	0.998327
	20	2,000	8,362	9,284,401	0.000900	0.999227
	2	3,000	1,750	9,286,151	0.000188	0.999415
	1	4,000	1,000	9,287,151	0.000107	0.999523
	1	5,000	1,000	9,288,151	0.000107	0.999630
	1	10,000	3,431	9,291,582	0.000369	1.000000
	0	15,000	0	9,291,582	0.000000	1.000000
	0	20,000	0	9,291,582	0.000000	1.000000
	0	25,000	0	9,291,582	0.000000	1.000000
	0	30,000	0	9,291,582	0.000000	1.000000
	0	35,000	0	9,291,582	0.000000	1.000000
	0	40,000	0	9,291,582	0.000000	1.000000
	0	45,000	0	9,291,582	0.000000	1.000000
	0	50,000	0	9,291,582	0.000000	1.000000
	0	90,000	0	9,291,582	0.000000	1.000000
	0	100,000	0	9,291,582	0.000000	1.000000
	0	135,000	0	9,291,582	0.000000	1.000000
	0	150,000	0	9,291,582	0.000000	1.000000
	0	200,000	0	9,291,582	0.000000	1.000000
	0	250,000	0	9,291,582	0.000000	1.000000
	0	300,000	0	9,291,582	0.000000	1.000000
	0	600,000	0	9,291,582	0.000000	1.000000
	0	999,999	0	9,291,582	0.000000	1.000000

TN 12/2001 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	66	1,000	8,891	8,891	1.000000	1.000000
	0	2,000	0	8,891	0.000000	1.000000
	0	3,000	0	8,891	0.000000	1.000000
	0	4,000	0	8,891	0.000000	1.000000
	0	5,000	0	8,891	0.000000	1.000000
	0	10,000	0	8,891	0.000000	1.000000
	0	15,000	0	8,891	0.000000	1.000000
	0	20,000	0	8,891	0.000000	1.000000
	0	25,000	0	8,891	0.000000	1.000000
	0	30,000	0	8,891	0.000000	1.000000
	0	35,000	0	8,891	0.000000	1.000000
	0	40,000	0	8,891	0.000000	1.000000
	0	45,000	0	8,891	0.000000	1.000000
	0	50,000	0	8,891	0.000000	1.000000
	0	90,000	0	8,891	0.000000	1.000000
	0	100,000	0	8,891	0.000000	1.000000
	0	135,000	0	8,891	0.000000	1.000000
	0	150,000	0	8,891	0.000000	1.000000
	0	200,000	0	8,891	0.000000	1.000000
	0	250,000	0	8,891	0.000000	1.000000
	0	300,000	0	8,891	0.000000	1.000000
	0	600,000	0	8,891	0.000000	1.000000
	0	999,999	0	8,891	0.000000	1.000000

TN 12/2001 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,314	1,000	3,851,095	3,851,095	0.645764	0.645764
1,502	2,000	1,002,730	4,853,825	0.168141	0.813905
664	3,000	476,999	5,330,824	0.079984	0.893890
332	4,000	246,806	5,577,630	0.041385	0.935275
182	5,000	132,778	5,710,408	0.022264	0.957540
96	10,000	190,277	5,900,685	0.031906	0.989446
10	15,000	35,451	5,936,136	0.005944	0.995390
5	20,000	13,141	5,949,277	0.002203	0.997594
1	25,000	5,000	5,954,277	0.000838	0.998432
1	30,000	5,000	5,959,277	0.000838	0.999271
1	35,000	4,346	5,963,623	0.000728	1.000000
0	40,000	0	5,963,623	0.000000	1.000000
0	45,000	0	5,963,623	0.000000	1.000000
0	50,000	0	5,963,623	0.000000	1.000000
0	90,000	0	5,963,623	0.000000	1.000000
0	100,000	0	5,963,623	0.000000	1.000000
0	135,000	0	5,963,623	0.000000	1.000000
0	150,000	0	5,963,623	0.000000	1.000000
0	200,000	0	5,963,623	0.000000	1.000000
0	250,000	0	5,963,623	0.000000	1.000000
0	300,000	0	5,963,623	0.000000	1.000000
0	600,000	0	5,963,623	0.000000	1.000000
0	999,999	0	5,963,623	0.000000	1.000000

TN 12/2001 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	91	1,000	90,342	90,342	0.072628	0.072628
	89	2,000	89,000	179,342	0.071549	0.144177
	89	3,000	89,000	268,342	0.071549	0.215726
	89	4,000	87,852	356,194	0.070626	0.286353
	86	5,000	85,908	442,102	0.069063	0.355416
	85	10,000	366,157	808,259	0.294362	0.649779
	53	15,000	194,687	1,002,946	0.156513	0.806293
	29	20,000	112,376	1,115,322	0.090341	0.896635
	17	25,000	63,986	1,179,308	0.051440	0.948075
	9	30,000	41,492	1,220,800	0.033356	0.981431
	7	35,000	20,073	1,240,873	0.016137	0.997568
	2	40,000	3,024	1,243,897	0.002431	1.000000
	0	45,000	0	1,243,897	0.000000	1.000000
	0	50,000	0	1,243,897	0.000000	1.000000
	0	90,000	0	1,243,897	0.000000	1.000000
	0	100,000	0	1,243,897	0.000000	1.000000
	0	135,000	0	1,243,897	0.000000	1.000000
	0	150,000	0	1,243,897	0.000000	1.000000
	0	200,000	0	1,243,897	0.000000	1.000000
	0	250,000	0	1,243,897	0.000000	1.000000
	0	300,000	0	1,243,897	0.000000	1.000000
	0	600,000	0	1,243,897	0.000000	1.000000
	0	999,999	0	1,243,897	0.000000	1.000000

TN 12/2001 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.022318	0.022318

4	2,000	4,000	8,000	0.022318	0.044637
4	3,000	4,000	12,000	0.022318	0.066956
4	4,000	4,000	16,000	0.022318	0.089275
4	5,000	3,520	19,520	0.019640	0.108915
3	10,000	15,000	34,520	0.083695	0.192611
3	15,000	15,000	49,520	0.083695	0.276306
3	20,000	15,000	64,520	0.083695	0.360002
3	25,000	15,000	79,520	0.083695	0.443698
3	30,000	14,895	94,415	0.083109	0.526807
2	35,000	10,000	104,415	0.055797	0.582604
2	40,000	10,000	114,415	0.055797	0.638401
2	45,000	10,000	124,415	0.055797	0.694198
2	50,000	10,000	134,415	0.055797	0.749995
2	90,000	40,596	175,011	0.226513	0.976509
1	100,000	4,210	179,221	0.023490	1.000000
0	135,000	0	179,221	0.000000	1.000000
0	150,000	0	179,221	0.000000	1.000000
0	200,000	0	179,221	0.000000	1.000000
0	250,000	0	179,221	0.000000	1.000000
0	300,000	0	179,221	0.000000	1.000000
0	600,000	0	179,221	0.000000	1.000000
0	999,999	0	179,221	0.000000	1.000000

TN 12/2001 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.000068	0.000068
	1	2,000	1,000	2,000	0.000068	0.000137
	1	3,000	1,000	3,000	0.000068	0.000206
	1	4,000	1,000	4,000	0.000068	0.000275
	1	5,000	1,000	5,000	0.000068	0.000343
	1	10,000	5,000	10,000	0.000343	0.000687
	1	15,000	5,000	15,000	0.000343	0.001031
	1	20,000	5,000	20,000	0.000343	0.001375
	1	25,000	5,000	25,000	0.000343	0.001719
	1	30,000	5,000	30,000	0.000343	0.002063
	1	35,000	5,000	35,000	0.000343	0.002406
	1	40,000	5,000	40,000	0.000343	0.002750
	1	45,000	5,000	45,000	0.000343	0.003094
	1	50,000	5,000	50,000	0.000343	0.003438
	1	90,000	40,000	90,000	0.002750	0.006189
	1	100,000	10,000	100,000	0.000687	0.006876
	1	135,000	35,000	135,000	0.002406	0.009283
	1	150,000	15,000	150,000	0.001031	0.010315
	1	200,000	50,000	200,000	0.003438	0.013753
	1	250,000	50,000	250,000	0.003438	0.017191
	1	300,000	50,000	300,000	0.003438	0.020630
	1	600,000	300,000	600,000	0.020630	0.041260
	1	999,999	13,941,770	14,541,770	0.958739	1.000000

TN 12/2001 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.008585	0.008585
	4	2,000	4,000	8,000	0.008585	0.017171

4	3,000	4,000	12,000	0.008585	0.025757
4	4,000	4,000	16,000	0.008585	0.034342
4	5,000	4,000	20,000	0.008585	0.042928
4	10,000	20,000	40,000	0.042928	0.085857
4	15,000	20,000	60,000	0.042928	0.128785
4	20,000	20,000	80,000	0.042928	0.171714
4	25,000	20,000	100,000	0.042928	0.214642
4	30,000	20,000	120,000	0.042928	0.257571
4	35,000	20,000	140,000	0.042928	0.300499
4	40,000	20,000	160,000	0.042928	0.343428
4	45,000	20,000	180,000	0.042928	0.386356
4	50,000	20,000	200,000	0.042928	0.429285
4	90,000	109,369	309,369	0.234752	0.664037
2	100,000	13,377	322,746	0.028712	0.692750
1	135,000	35,000	357,746	0.075124	0.767874
1	150,000	15,000	372,746	0.032196	0.800071
1	200,000	50,000	422,746	0.107321	0.907392
1	250,000	43,145	465,891	0.092607	1.000000
0	300,000	0	465,891	0.000000	1.000000
0	600,000	0	465,891	0.000000	1.000000
0	999,999	0	465,891	0.000000	1.000000

TN 12/2001 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	99,000	99,000	0.047610	0.047610
	99	2,000	98,402	197,402	0.047322	0.094932
	98	3,000	98,000	295,402	0.047129	0.142061
	98	4,000	98,000	393,402	0.047129	0.189190
	98	5,000	97,169	490,571	0.046729	0.235920
	97	10,000	439,177	929,748	0.211204	0.447124
	76	15,000	317,721	1,247,469	0.152795	0.599920
	53	20,000	216,331	1,463,800	0.104035	0.703955
	38	25,000	155,214	1,619,014	0.074643	0.778599
	28	30,000	119,331	1,738,345	0.057387	0.835987
	20	35,000	84,583	1,822,928	0.040676	0.876663
	14	40,000	59,159	1,882,087	0.028450	0.905114
	10	45,000	35,760	1,917,847	0.017197	0.922311
	6	50,000	29,894	1,947,741	0.014376	0.936687
	5	90,000	116,782	2,064,523	0.056161	0.992849
	2	100,000	12,722	2,077,245	0.006118	0.998967
	1	135,000	2,147	2,079,392	0.001032	1.000000
	0	150,000	0	2,079,392	0.000000	1.000000
	0	200,000	0	2,079,392	0.000000	1.000000
	0	250,000	0	2,079,392	0.000000	1.000000
	0	300,000	0	2,079,392	0.000000	1.000000
	0	600,000	0	2,079,392	0.000000	1.000000
	0	999,999	0	2,079,392	0.000000	1.000000

TN 12/2001 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	56	1,000	54,000	54,000	0.007455	0.007455
	54	2,000	54,000	108,000	0.007455	0.014910
	54	3,000	54,000	162,000	0.007455	0.022365

54	4,000	54,000	216,000	0.007455	0.029820
54	5,000	54,000	270,000	0.007455	0.037275
54	10,000	265,825	535,825	0.036699	0.073975
52	15,000	252,126	787,951	0.034808	0.108783
50	20,000	234,072	1,022,023	0.032315	0.141099
45	25,000	218,197	1,240,220	0.030124	0.171223
42	30,000	192,297	1,432,517	0.026548	0.197771
36	35,000	171,139	1,603,656	0.023627	0.221398
33	40,000	161,961	1,765,617	0.022360	0.243758
32	45,000	156,459	1,922,076	0.021600	0.265359
30	50,000	143,441	2,065,517	0.019803	0.285162
28	90,000	795,497	2,861,014	0.109825	0.394987
16	100,000	151,848	3,012,862	0.020963	0.415951
15	135,000	405,288	3,418,150	0.055953	0.471904
8	150,000	120,000	3,538,150	0.016567	0.488471
8	200,000	315,101	3,853,251	0.043502	0.531974
5	250,000	215,191	4,068,442	0.029709	0.561683
3	300,000	150,000	4,218,442	0.020708	0.582392
3	600,000	722,198	4,940,640	0.099705	0.682097
2	999,999	2,302,664	7,243,304	0.317902	1.000000

TN 12/2001 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001169	0.001169
	3	2,000	3,000	6,000	0.001169	0.002338
	3	3,000	3,000	9,000	0.001169	0.003508
	3	4,000	3,000	12,000	0.001169	0.004677
	3	5,000	3,000	15,000	0.001169	0.005847
	3	10,000	15,000	30,000	0.005847	0.011694
	3	15,000	15,000	45,000	0.005847	0.017542
	3	20,000	15,000	60,000	0.005847	0.023389
	3	25,000	15,000	75,000	0.005847	0.029236
	3	30,000	15,000	90,000	0.005847	0.035084
	3	35,000	15,000	105,000	0.005847	0.040931
	3	40,000	15,000	120,000	0.005847	0.046778
	3	45,000	15,000	135,000	0.005847	0.052626
	3	50,000	15,000	150,000	0.005847	0.058473
	3	90,000	120,000	270,000	0.046778	0.105252
	3	100,000	30,000	300,000	0.011694	0.116947
	3	135,000	105,000	405,000	0.040931	0.157878
	3	150,000	45,000	450,000	0.017542	0.175420
	3	200,000	150,000	600,000	0.058473	0.233894
	3	250,000	150,000	750,000	0.058473	0.292368
	3	300,000	128,714	878,714	0.050175	0.342544
	2	600,000	600,000	1,478,714	0.233894	0.576438
	2	999,999	1,086,545	2,565,259	0.423561	1.000000

TN 12/2001 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.036116	0.036116
	2	2,000	2,000	4,000	0.036116	0.072233
	2	3,000	2,000	6,000	0.036116	0.108350
	2	4,000	2,000	8,000	0.036116	0.144466

2	5,000	2,000	10,000	0.036116	0.180583
2	10,000	10,000	20,000	0.180583	0.361167
2	15,000	6,836	26,836	0.123447	0.484614
1	20,000	5,000	31,836	0.090291	0.574906
1	25,000	5,000	36,836	0.090291	0.665197
1	30,000	5,000	41,836	0.090291	0.755489
1	35,000	5,000	46,836	0.090291	0.845781
1	40,000	5,000	51,836	0.090291	0.936073
1	45,000	3,540	55,376	0.063926	1.000000
0	50,000	0	55,376	0.000000	1.000000
0	90,000	0	55,376	0.000000	1.000000
0	100,000	0	55,376	0.000000	1.000000
0	135,000	0	55,376	0.000000	1.000000
0	150,000	0	55,376	0.000000	1.000000
0	200,000	0	55,376	0.000000	1.000000
0	250,000	0	55,376	0.000000	1.000000
0	300,000	0	55,376	0.000000	1.000000
0	600,000	0	55,376	0.000000	1.000000
0	999,999	0	55,376	0.000000	1.000000

TN 01/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	130,081	1,000	21,754,813	21,754,813	0.998401	0.998401
	97	2,000	35,065	21,789,878	0.001609	1.000010
	10	3,000	4,361	21,794,239	0.000200	1.000210
	2	4,000	(606)	21,793,633	(0.000027)	1.000182
	1	5,000	(1,000)	21,792,633	(0.000045)	1.000137
	1	10,000	(2,985)	21,789,648	(0.000137)	1.000000
	0	15,000	0	21,789,648	0.000000	1.000000
	0	20,000	0	21,789,648	0.000000	1.000000
	0	25,000	0	21,789,648	0.000000	1.000000
	0	30,000	0	21,789,648	0.000000	1.000000
	0	35,000	0	21,789,648	0.000000	1.000000
	0	40,000	0	21,789,648	0.000000	1.000000
	0	45,000	0	21,789,648	0.000000	1.000000
	0	50,000	0	21,789,648	0.000000	1.000000
	0	90,000	0	21,789,648	0.000000	1.000000
	0	100,000	0	21,789,648	0.000000	1.000000
	0	135,000	0	21,789,648	0.000000	1.000000
	0	150,000	0	21,789,648	0.000000	1.000000
	0	200,000	0	21,789,648	0.000000	1.000000
	0	250,000	0	21,789,648	0.000000	1.000000
	0	300,000	0	21,789,648	0.000000	1.000000
	0	600,000	0	21,789,648	0.000000	1.000000
	0	999,999	0	21,789,648	0.000000	1.000000

TN 01/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	66	1,000	20,977	20,977	0.983174	0.983174
	3	2,000	359	21,336	0.016826	1.000000
	0	3,000	0	21,336	0.000000	1.000000
	0	4,000	0	21,336	0.000000	1.000000
	0	5,000	0	21,336	0.000000	1.000000
	0	10,000	0	21,336	0.000000	1.000000
	0	15,000	0	21,336	0.000000	1.000000
	0	20,000	0	21,336	0.000000	1.000000
	0	25,000	0	21,336	0.000000	1.000000
	0	30,000	0	21,336	0.000000	1.000000
	0	35,000	0	21,336	0.000000	1.000000
	0	40,000	0	21,336	0.000000	1.000000
	0	45,000	0	21,336	0.000000	1.000000
	0	50,000	0	21,336	0.000000	1.000000
	0	90,000	0	21,336	0.000000	1.000000
	0	100,000	0	21,336	0.000000	1.000000
	0	135,000	0	21,336	0.000000	1.000000
	0	150,000	0	21,336	0.000000	1.000000
	0	200,000	0	21,336	0.000000	1.000000
	0	250,000	0	21,336	0.000000	1.000000
	0	300,000	0	21,336	0.000000	1.000000
	0	600,000	0	21,336	0.000000	1.000000
	0	999,999	0	21,336	0.000000	1.000000

TN 01/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,585	1,000	6,954,014	6,954,014	0.553235	0.553235
3,199	2,000	2,192,532	9,146,546	0.174429	0.727665
1,528	3,000	1,203,597	10,350,143	0.095753	0.823418
939	4,000	744,264	11,094,407	0.059210	0.882629
586	5,000	477,347	11,571,754	0.037975	0.920605
382	10,000	850,186	12,421,940	0.067637	0.988243
56	15,000	117,489	12,539,429	0.009347	0.997590
12	20,000	20,688	12,560,117	0.001645	0.999235
3	25,000	6,406	12,566,523	0.000509	0.999745
2	30,000	3,198	12,569,721	0.000254	1.000000
0	35,000	0	12,569,721	0.000000	1.000000
0	40,000	0	12,569,721	0.000000	1.000000
0	45,000	0	12,569,721	0.000000	1.000000
0	50,000	0	12,569,721	0.000000	1.000000
0	90,000	0	12,569,721	0.000000	1.000000
0	100,000	0	12,569,721	0.000000	1.000000
0	135,000	0	12,569,721	0.000000	1.000000
0	150,000	0	12,569,721	0.000000	1.000000
0	200,000	0	12,569,721	0.000000	1.000000
0	250,000	0	12,569,721	0.000000	1.000000
0	300,000	0	12,569,721	0.000000	1.000000
0	600,000	0	12,569,721	0.000000	1.000000
0	999,999	0	12,569,721	0.000000	1.000000

TN 01/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	90	1,000	90,000	90,000	0.060702	0.060702
	90	2,000	89,012	179,012	0.060035	0.120737
	89	3,000	89,000	268,012	0.060027	0.180765
	89	4,000	89,000	357,012	0.060027	0.240793
	89	5,000	89,000	446,012	0.060027	0.300821
	89	10,000	416,214	862,226	0.280723	0.581544
	73	15,000	270,049	1,132,275	0.182139	0.763683
	38	20,000	152,143	1,284,418	0.102615	0.866299
	22	25,000	84,934	1,369,352	0.057285	0.923584
	12	30,000	50,155	1,419,507	0.033828	0.957412
	9	35,000	38,035	1,457,542	0.025653	0.983066
	6	40,000	22,217	1,479,759	0.014984	0.998050
	1	45,000	2,890	1,482,649	0.001949	1.000000
	0	50,000	0	1,482,649	0.000000	1.000000
	0	90,000	0	1,482,649	0.000000	1.000000
	0	100,000	0	1,482,649	0.000000	1.000000
	0	135,000	0	1,482,649	0.000000	1.000000
	0	150,000	0	1,482,649	0.000000	1.000000
	0	200,000	0	1,482,649	0.000000	1.000000
	0	250,000	0	1,482,649	0.000000	1.000000
	0	300,000	0	1,482,649	0.000000	1.000000
	0	600,000	0	1,482,649	0.000000	1.000000
	0	999,999	0	1,482,649	0.000000	1.000000

TN 01/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.021037	0.021037

4	2,000	4,000	8,000	0.021037	0.042074
4	3,000	4,000	12,000	0.021037	0.063111
4	4,000	4,000	16,000	0.021037	0.084148
4	5,000	4,000	20,000	0.021037	0.105185
4	10,000	20,000	40,000	0.105185	0.210371
4	15,000	20,000	60,000	0.105185	0.315557
4	20,000	16,459	76,459	0.086562	0.402119
3	25,000	15,000	91,459	0.078889	0.481008
3	30,000	15,000	106,459	0.078889	0.559898
3	35,000	10,941	117,400	0.057541	0.617439
2	40,000	10,000	127,400	0.052592	0.670032
2	45,000	9,993	137,393	0.052556	0.722588
1	50,000	5,000	142,393	0.026296	0.748885
1	90,000	40,000	182,393	0.210371	0.959256
1	100,000	7,747	190,140	0.040743	1.000000
0	135,000	0	190,140	0.000000	1.000000
0	150,000	0	190,140	0.000000	1.000000
0	200,000	0	190,140	0.000000	1.000000
0	250,000	0	190,140	0.000000	1.000000
0	300,000	0	190,140	0.000000	1.000000
0	600,000	0	190,140	0.000000	1.000000
0	999,999	0	190,140	0.000000	1.000000

TN 01/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	0	0	0.000000	0.000000
	0	2,000	0	0	0.000000	0.000000
	0	3,000	0	0	0.000000	0.000000
	0	4,000	0	0	0.000000	0.000000
	0	5,000	0	0	0.000000	0.000000
	0	10,000	0	0	0.000000	0.000000
	0	15,000	0	0	0.000000	0.000000
	0	20,000	0	0	0.000000	0.000000
	0	25,000	0	0	0.000000	0.000000
	0	30,000	0	0	0.000000	0.000000
	0	35,000	0	0	0.000000	0.000000
	0	40,000	0	0	0.000000	0.000000
	0	45,000	0	0	0.000000	0.000000
	0	50,000	0	0	0.000000	0.000000
	0	90,000	0	0	0.000000	0.000000
	0	100,000	0	0	0.000000	0.000000
	0	135,000	0	0	0.000000	0.000000
	0	150,000	0	0	0.000000	0.000000
	0	200,000	0	0	0.000000	0.000000
	0	250,000	0	0	0.000000	0.000000
	0	300,000	0	0	0.000000	0.000000
	0	600,000	0	0	0.000000	0.000000
	0	999,999	0	0	0.000000	0.000000

TN 01/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	99,000	99,000	0.040351	0.040351
	99	2,000	99,000	198,000	0.040351	0.080702

99	3,000	98,449	296,449	0.040126	0.120828
98	4,000	98,000	394,449	0.039943	0.160772
98	5,000	98,000	492,449	0.039943	0.200715
98	10,000	478,269	970,718	0.194936	0.395651
91	15,000	383,881	1,354,599	0.156464	0.552116
61	20,000	268,856	1,623,455	0.109582	0.661698
44	25,000	184,067	1,807,522	0.075023	0.736722
33	30,000	143,013	1,950,535	0.058290	0.795012
25	35,000	121,558	2,072,093	0.049545	0.844557
23	40,000	96,833	2,168,926	0.039467	0.884025
14	45,000	61,131	2,230,057	0.024916	0.908941
11	50,000	42,002	2,272,059	0.017119	0.926061
6	90,000	141,062	2,413,121	0.057495	0.983556
2	100,000	20,000	2,433,121	0.008151	0.991708
2	135,000	20,344	2,453,465	0.008291	1.000000
0	150,000	0	2,453,465	0.000000	1.000000
0	200,000	0	2,453,465	0.000000	1.000000
0	250,000	0	2,453,465	0.000000	1.000000
0	300,000	0	2,453,465	0.000000	1.000000
0	600,000	0	2,453,465	0.000000	1.000000
0	999,999	0	2,453,465	0.000000	1.000000

TN 01/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	56	1,000	51,330	51,330	0.007367	0.007367
	51	2,000	51,000	102,330	0.007320	0.014687
	51	3,000	50,946	153,276	0.007312	0.022000
	50	4,000	49,626	202,902	0.007123	0.029123
	49	5,000	49,000	251,902	0.007033	0.036156
	49	10,000	242,107	494,009	0.034750	0.070907
	48	15,000	235,532	729,541	0.033806	0.104714
	46	20,000	217,750	947,291	0.031254	0.135968
	41	25,000	199,114	1,146,405	0.028579	0.164548
	38	30,000	187,115	1,333,520	0.026857	0.191405
	37	35,000	175,563	1,509,083	0.025199	0.216605
	33	40,000	160,288	1,669,371	0.023006	0.239611
	32	45,000	147,715	1,817,086	0.021202	0.260813
	27	50,000	130,615	1,947,701	0.018747	0.279561
	25	90,000	844,704	2,792,405	0.121243	0.400805
	19	100,000	173,085	2,965,490	0.024843	0.425649
	16	135,000	476,880	3,442,370	0.068448	0.494097
	11	150,000	144,800	3,587,170	0.020783	0.514881
	9	200,000	390,678	3,977,848	0.056075	0.570957
	6	250,000	238,471	4,216,319	0.034228	0.605185
	4	300,000	198,844	4,415,163	0.028540	0.633726
	3	600,000	823,858	5,239,021	0.118251	0.751978
	2	999,999	1,727,961	6,966,982	0.248021	1.000000

TN 01/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.000993	0.000993
	3	2,000	3,000	6,000	0.000993	0.001986
	3	3,000	3,000	9,000	0.000993	0.002979

3	4,000	3,000	12,000	0.000993	0.003972
3	5,000	3,000	15,000	0.000993	0.004965
3	10,000	15,000	30,000	0.004965	0.009930
3	15,000	15,000	45,000	0.004965	0.014895
3	20,000	15,000	60,000	0.004965	0.019860
3	25,000	15,000	75,000	0.004965	0.024826
3	30,000	15,000	90,000	0.004965	0.029791
3	35,000	15,000	105,000	0.004965	0.034756
3	40,000	15,000	120,000	0.004965	0.039721
3	45,000	15,000	135,000	0.004965	0.044686
3	50,000	15,000	150,000	0.004965	0.049652
3	90,000	120,000	270,000	0.039721	0.089373
3	100,000	30,000	300,000	0.009930	0.099304
3	135,000	105,000	405,000	0.034756	0.134060
3	150,000	45,000	450,000	0.014895	0.148956
3	200,000	150,000	600,000	0.049652	0.198608
3	250,000	150,000	750,000	0.049652	0.248260
3	300,000	150,000	900,000	0.049652	0.297912
3	600,000	660,974	1,560,974	0.218791	0.516704
2	999,999	1,460,047	3,021,021	0.483295	1.000000

TN 01/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.024797	0.024797
	2	2,000	2,000	4,000	0.024797	0.049593
	2	3,000	2,000	6,000	0.024797	0.074390
	2	4,000	2,000	8,000	0.024797	0.099187
	2	5,000	2,000	10,000	0.024797	0.123984
	2	10,000	10,000	20,000	0.123984	0.247969
	2	15,000	10,000	30,000	0.123984	0.371954
	2	20,000	10,000	40,000	0.123984	0.495939
	2	25,000	10,000	50,000	0.123984	0.619924
	2	30,000	6,971	56,971	0.086429	0.706354
	1	35,000	5,000	61,971	0.061992	0.768346
	1	40,000	5,000	66,971	0.061992	0.830339
	1	45,000	5,000	71,971	0.061992	0.892331
	1	50,000	5,000	76,971	0.061992	0.954324
	1	90,000	3,684	80,655	0.045676	1.000000
	0	100,000	0	80,655	0.000000	1.000000
	0	135,000	0	80,655	0.000000	1.000000
	0	150,000	0	80,655	0.000000	1.000000
	0	200,000	0	80,655	0.000000	1.000000
	0	250,000	0	80,655	0.000000	1.000000
	0	300,000	0	80,655	0.000000	1.000000
	0	600,000	0	80,655	0.000000	1.000000
	0	999,999	0	80,655	0.000000	1.000000

TN 02/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	130,628	1,000	17,196,148	17,196,148	0.998331	0.998331
	82	2,000	27,151	17,223,299	0.001576	0.999908
	5	3,000	1,583	17,224,882	0.000091	1.000000
	0	4,000	0	17,224,882	0.000000	1.000000
	0	5,000	0	17,224,882	0.000000	1.000000
	0	10,000	0	17,224,882	0.000000	1.000000
	0	15,000	0	17,224,882	0.000000	1.000000
	0	20,000	0	17,224,882	0.000000	1.000000
	0	25,000	0	17,224,882	0.000000	1.000000
	0	30,000	0	17,224,882	0.000000	1.000000
	0	35,000	0	17,224,882	0.000000	1.000000
	0	40,000	0	17,224,882	0.000000	1.000000
	0	45,000	0	17,224,882	0.000000	1.000000
	0	50,000	0	17,224,882	0.000000	1.000000
	0	90,000	0	17,224,882	0.000000	1.000000
	0	100,000	0	17,224,882	0.000000	1.000000
	0	135,000	0	17,224,882	0.000000	1.000000
	0	150,000	0	17,224,882	0.000000	1.000000
	0	200,000	0	17,224,882	0.000000	1.000000
	0	250,000	0	17,224,882	0.000000	1.000000
	0	300,000	0	17,224,882	0.000000	1.000000
	0	600,000	0	17,224,882	0.000000	1.000000
	0	999,999	0	17,224,882	0.000000	1.000000

TN 02/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	66	1,000	16,040	16,040	0.993989	0.993989
	1	2,000	97	16,137	0.006011	1.000000
	0	3,000	0	16,137	0.000000	1.000000
	0	4,000	0	16,137	0.000000	1.000000
	0	5,000	0	16,137	0.000000	1.000000
	0	10,000	0	16,137	0.000000	1.000000
	0	15,000	0	16,137	0.000000	1.000000
	0	20,000	0	16,137	0.000000	1.000000
	0	25,000	0	16,137	0.000000	1.000000
	0	30,000	0	16,137	0.000000	1.000000
	0	35,000	0	16,137	0.000000	1.000000
	0	40,000	0	16,137	0.000000	1.000000
	0	45,000	0	16,137	0.000000	1.000000
	0	50,000	0	16,137	0.000000	1.000000
	0	90,000	0	16,137	0.000000	1.000000
	0	100,000	0	16,137	0.000000	1.000000
	0	135,000	0	16,137	0.000000	1.000000
	0	150,000	0	16,137	0.000000	1.000000
	0	200,000	0	16,137	0.000000	1.000000
	0	250,000	0	16,137	0.000000	1.000000
	0	300,000	0	16,137	0.000000	1.000000
	0	600,000	0	16,137	0.000000	1.000000
	0	999,999	0	16,137	0.000000	1.000000

16,667	1,000	6,018,850	6,018,850	0.607483	0.607483
2,537	2,000	1,704,960	7,723,810	0.172081	0.779564
1,183	3,000	878,216	8,602,026	0.088638	0.868203
657	4,000	496,595	9,098,621	0.050121	0.918324
374	5,000	297,152	9,395,773	0.029991	0.948316
231	10,000	451,364	9,847,137	0.045556	0.993872
24	15,000	46,032	9,893,169	0.004646	0.998518
3	20,000	12,142	9,905,311	0.001225	0.999744
1	25,000	2,536	9,907,847	0.000256	1.000000
0	30,000	0	9,907,847	0.000000	1.000000
0	35,000	0	9,907,847	0.000000	1.000000
0	40,000	0	9,907,847	0.000000	1.000000
0	45,000	0	9,907,847	0.000000	1.000000
0	50,000	0	9,907,847	0.000000	1.000000
0	90,000	0	9,907,847	0.000000	1.000000
0	100,000	0	9,907,847	0.000000	1.000000
0	135,000	0	9,907,847	0.000000	1.000000
0	150,000	0	9,907,847	0.000000	1.000000
0	200,000	0	9,907,847	0.000000	1.000000
0	250,000	0	9,907,847	0.000000	1.000000
0	300,000	0	9,907,847	0.000000	1.000000
0	600,000	0	9,907,847	0.000000	1.000000
0	999,999	0	9,907,847	0.000000	1.000000

TN 02/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	90	1,000	90,000	90,000	0.064389	0.064389
	90	2,000	89,196	179,196	0.063813	0.128202
	89	3,000	89,000	268,196	0.063673	0.191876
	89	4,000	89,000	357,196	0.063673	0.255549
	89	5,000	87,425	444,621	0.062546	0.318096
	87	10,000	400,894	845,515	0.286812	0.604909
	70	15,000	246,740	1,092,255	0.176525	0.781435
	35	20,000	139,724	1,231,979	0.099963	0.881398
	19	25,000	68,768	1,300,747	0.049198	0.930597
	10	30,000	44,858	1,345,605	0.032092	0.962690
	8	35,000	28,318	1,373,923	0.020259	0.982949
	4	40,000	13,954	1,387,877	0.009983	0.992933
	2	45,000	5,850	1,393,727	0.004185	0.997118
	1	50,000	4,028	1,397,755	0.002881	1.000000
	0	90,000	0	1,397,755	0.000000	1.000000
	0	100,000	0	1,397,755	0.000000	1.000000
	0	135,000	0	1,397,755	0.000000	1.000000
	0	150,000	0	1,397,755	0.000000	1.000000
	0	200,000	0	1,397,755	0.000000	1.000000
	0	250,000	0	1,397,755	0.000000	1.000000
	0	300,000	0	1,397,755	0.000000	1.000000
	0	600,000	0	1,397,755	0.000000	1.000000
	0	999,999	0	1,397,755	0.000000	1.000000

TN 02/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.024560	0.024560

4	2,000	4,000	8,000	0.024560	0.049121
4	3,000	4,000	12,000	0.024560	0.073681
4	4,000	4,000	16,000	0.024560	0.098242
4	5,000	4,000	20,000	0.024560	0.122802
4	10,000	20,000	40,000	0.122802	0.245605
4	15,000	19,914	59,914	0.122274	0.367879
3	20,000	15,000	74,914	0.092102	0.459981
3	25,000	10,023	84,937	0.061542	0.521524
2	30,000	9,767	94,704	0.059970	0.581494
1	35,000	5,000	99,704	0.030700	0.612195
1	40,000	5,000	104,704	0.030700	0.642896
1	45,000	5,000	109,704	0.030700	0.673596
1	50,000	5,000	114,704	0.030700	0.704297
1	90,000	40,000	154,704	0.245605	0.949902
1	100,000	8,159	162,863	0.050097	1.000000
0	135,000	0	162,863	0.000000	1.000000
0	150,000	0	162,863	0.000000	1.000000
0	200,000	0	162,863	0.000000	1.000000
0	250,000	0	162,863	0.000000	1.000000
0	300,000	0	162,863	0.000000	1.000000
0	600,000	0	162,863	0.000000	1.000000
0	999,999	0	162,863	0.000000	1.000000

TN 02/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.000094	0.000094
	1	2,000	1,000	2,000	0.000094	0.000188
	1	3,000	1,000	3,000	0.000094	0.000282
	1	4,000	1,000	4,000	0.000094	0.000376
	1	5,000	1,000	5,000	0.000094	0.000470
	1	10,000	5,000	10,000	0.000470	0.000941
	1	15,000	5,000	15,000	0.000470	0.001411
	1	20,000	5,000	20,000	0.000470	0.001882
	1	25,000	5,000	25,000	0.000470	0.002352
	1	30,000	5,000	30,000	0.000470	0.002823
	1	35,000	5,000	35,000	0.000470	0.003293
	1	40,000	5,000	40,000	0.000470	0.003764
	1	45,000	5,000	45,000	0.000470	0.004234
	1	50,000	5,000	50,000	0.000470	0.004705
	1	90,000	40,000	90,000	0.003764	0.008469
	1	100,000	10,000	100,000	0.000941	0.009410
	1	135,000	35,000	135,000	0.003293	0.012704
	1	150,000	15,000	150,000	0.001411	0.014115
	1	200,000	50,000	200,000	0.004705	0.018820
	1	250,000	50,000	250,000	0.004705	0.023526
	1	300,000	50,000	300,000	0.004705	0.028231
	1	600,000	300,000	600,000	0.028231	0.056462
	1	999,999	10,026,460	10,626,460	0.943537	1.000000

TN 02/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,056	2,056	0.042317	0.042317
	2	2,000	2,000	4,056	0.041165	0.083482

2	3,000	2,000	6,056	0.041165	0.124647
2	4,000	2,000	8,056	0.041165	0.165812
2	5,000	2,000	10,056	0.041165	0.206977
2	10,000	10,000	20,056	0.205824	0.412802
2	15,000	10,000	30,056	0.205824	0.618627
2	20,000	10,000	40,056	0.205824	0.824452
2	25,000	8,529	48,585	0.175548	1.000000
0	30,000	0	48,585	0.000000	1.000000
0	35,000	0	48,585	0.000000	1.000000
0	40,000	0	48,585	0.000000	1.000000
0	45,000	0	48,585	0.000000	1.000000
0	50,000	0	48,585	0.000000	1.000000
0	90,000	0	48,585	0.000000	1.000000
0	100,000	0	48,585	0.000000	1.000000
0	135,000	0	48,585	0.000000	1.000000
0	150,000	0	48,585	0.000000	1.000000
0	200,000	0	48,585	0.000000	1.000000
0	250,000	0	48,585	0.000000	1.000000
0	300,000	0	48,585	0.000000	1.000000
0	600,000	0	48,585	0.000000	1.000000
0	999,999	0	48,585	0.000000	1.000000

TN 02/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	99,000	99,000	0.042296	0.042296
	99	2,000	98,526	197,526	0.042093	0.084389
	98	3,000	98,000	295,526	0.041868	0.126258
	98	4,000	98,000	393,526	0.041868	0.168127
	98	5,000	98,000	491,526	0.041868	0.209996
	98	10,000	468,667	960,193	0.200230	0.410227
	85	15,000	356,908	1,317,101	0.152483	0.562710
	62	20,000	252,781	1,569,882	0.107996	0.670706
	39	25,000	181,867	1,751,749	0.077699	0.748406
	33	30,000	144,685	1,896,434	0.061814	0.810221
	25	35,000	113,915	2,010,349	0.048668	0.858889
	20	40,000	79,374	2,089,723	0.033911	0.892800
	13	45,000	51,140	2,140,863	0.021848	0.914649
	9	50,000	32,094	2,172,957	0.013711	0.928361
	6	90,000	129,506	2,302,463	0.055329	0.983690
	2	100,000	20,000	2,322,463	0.008544	0.992235
	2	135,000	18,175	2,340,638	0.007765	1.000000
	0	150,000	0	2,340,638	0.000000	1.000000
	0	200,000	0	2,340,638	0.000000	1.000000
	0	250,000	0	2,340,638	0.000000	1.000000
	0	300,000	0	2,340,638	0.000000	1.000000
	0	600,000	0	2,340,638	0.000000	1.000000
	0	999,999	0	2,340,638	0.000000	1.000000

TN 02/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	50,084	50,084	0.008683	0.008683
	50	2,000	50,000	100,084	0.008668	0.017351
	50	3,000	50,000	150,084	0.008668	0.026020

50	4,000	50,000	200,084	0.008668	0.034688
50	5,000	50,000	250,084	0.008668	0.043357
50	10,000	250,000	500,084	0.043342	0.086700
50	15,000	250,000	750,084	0.043342	0.130043
50	20,000	230,574	980,658	0.039975	0.170018
42	25,000	202,951	1,183,609	0.035185	0.205204
40	30,000	194,769	1,378,378	0.033767	0.238971
37	35,000	177,891	1,556,269	0.030841	0.269812
33	40,000	157,827	1,714,096	0.027362	0.297175
29	45,000	133,538	1,847,634	0.023151	0.320327
26	50,000	129,481	1,977,115	0.022448	0.342775
25	90,000	831,903	2,809,018	0.144228	0.487004
18	100,000	162,261	2,971,279	0.028131	0.515135
15	135,000	462,282	3,433,561	0.080146	0.595282
11	150,000	143,327	3,576,888	0.024848	0.620130
9	200,000	365,454	3,942,342	0.063359	0.683490
6	250,000	232,693	4,175,035	0.040342	0.723832
4	300,000	172,002	4,347,037	0.029820	0.753652
3	600,000	784,975	5,132,012	0.136092	0.889745
2	999,999	635,945	5,767,957	0.110254	1.000000

TN 02/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001082	0.001082
	3	2,000	3,000	6,000	0.001082	0.002164
	3	3,000	3,000	9,000	0.001082	0.003246
	3	4,000	3,000	12,000	0.001082	0.004328
	3	5,000	3,000	15,000	0.001082	0.005411
	3	10,000	15,000	30,000	0.005411	0.010822
	3	15,000	15,000	45,000	0.005411	0.016233
	3	20,000	15,000	60,000	0.005411	0.021644
	3	25,000	15,000	75,000	0.005411	0.027055
	3	30,000	15,000	90,000	0.005411	0.032466
	3	35,000	15,000	105,000	0.005411	0.037877
	3	40,000	15,000	120,000	0.005411	0.043288
	3	45,000	15,000	135,000	0.005411	0.048699
	3	50,000	15,000	150,000	0.005411	0.054110
	3	90,000	120,000	270,000	0.043288	0.097398
	3	100,000	30,000	300,000	0.010822	0.108220
	3	135,000	105,000	405,000	0.037877	0.146098
	3	150,000	45,000	450,000	0.016233	0.162331
	3	200,000	150,000	600,000	0.054110	0.216441
	3	250,000	150,000	750,000	0.054110	0.270551
	3	300,000	150,000	900,000	0.054110	0.324662
	3	600,000	640,374	1,540,374	0.231005	0.555668
	2	999,999	1,231,738	2,772,112	0.444332	1.000000

TN 02/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.025283	0.025283
	2	2,000	2,000	4,000	0.025283	0.050566
	2	3,000	2,000	6,000	0.025283	0.075849
	2	4,000	2,000	8,000	0.025283	0.101132

2	5,000	2,000	10,000	0.025283	0.126415
2	10,000	10,000	20,000	0.126415	0.252831
2	15,000	10,000	30,000	0.126415	0.379247
2	20,000	10,000	40,000	0.126415	0.505663
2	25,000	9,905	49,905	0.125214	0.630878
1	30,000	5,000	54,905	0.063207	0.694086
1	35,000	5,000	59,905	0.063207	0.757294
1	40,000	5,000	64,905	0.063207	0.820502
1	45,000	5,000	69,905	0.063207	0.883710
1	50,000	5,000	74,905	0.063207	0.946918
1	90,000	4,199	79,104	0.053082	1.000000
0	100,000	0	79,104	0.000000	1.000000
0	135,000	0	79,104	0.000000	1.000000
0	150,000	0	79,104	0.000000	1.000000
0	200,000	0	79,104	0.000000	1.000000
0	250,000	0	79,104	0.000000	1.000000
0	300,000	0	79,104	0.000000	1.000000
0	600,000	0	79,104	0.000000	1.000000
0	999,999	0	79,104	0.000000	1.000000

TN 03/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	130,785	1,000	15,865,211	15,865,211	0.999381	0.999381
	39	2,000	9,526	15,874,737	0.000600	0.999981
	1	3,000	295	15,875,032	0.000018	1.000000
	0	4,000	0	15,875,032	0.000000	1.000000
	0	5,000	0	15,875,032	0.000000	1.000000
	0	10,000	0	15,875,032	0.000000	1.000000
	0	15,000	0	15,875,032	0.000000	1.000000
	0	20,000	0	15,875,032	0.000000	1.000000
	0	25,000	0	15,875,032	0.000000	1.000000
	0	30,000	0	15,875,032	0.000000	1.000000
	0	35,000	0	15,875,032	0.000000	1.000000
	0	40,000	0	15,875,032	0.000000	1.000000
	0	45,000	0	15,875,032	0.000000	1.000000
	0	50,000	0	15,875,032	0.000000	1.000000
	0	90,000	0	15,875,032	0.000000	1.000000
	0	100,000	0	15,875,032	0.000000	1.000000
	0	135,000	0	15,875,032	0.000000	1.000000
	0	150,000	0	15,875,032	0.000000	1.000000
	0	200,000	0	15,875,032	0.000000	1.000000
	0	250,000	0	15,875,032	0.000000	1.000000
	0	300,000	0	15,875,032	0.000000	1.000000
	0	600,000	0	15,875,032	0.000000	1.000000
	0	999,999	0	15,875,032	0.000000	1.000000

TN 03/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	66	1,000	14,605	14,605	1.000000	1.000000
	0	2,000	0	14,605	0.000000	1.000000
	0	3,000	0	14,605	0.000000	1.000000
	0	4,000	0	14,605	0.000000	1.000000
	0	5,000	0	14,605	0.000000	1.000000
	0	10,000	0	14,605	0.000000	1.000000
	0	15,000	0	14,605	0.000000	1.000000
	0	20,000	0	14,605	0.000000	1.000000
	0	25,000	0	14,605	0.000000	1.000000
	0	30,000	0	14,605	0.000000	1.000000
	0	35,000	0	14,605	0.000000	1.000000
	0	40,000	0	14,605	0.000000	1.000000
	0	45,000	0	14,605	0.000000	1.000000
	0	50,000	0	14,605	0.000000	1.000000
	0	90,000	0	14,605	0.000000	1.000000
	0	100,000	0	14,605	0.000000	1.000000
	0	135,000	0	14,605	0.000000	1.000000
	0	150,000	0	14,605	0.000000	1.000000
	0	200,000	0	14,605	0.000000	1.000000
	0	250,000	0	14,605	0.000000	1.000000
	0	300,000	0	14,605	0.000000	1.000000
	0	600,000	0	14,605	0.000000	1.000000
	0	999,999	0	14,605	0.000000	1.000000

TN 03/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,664	1,000	5,684,223	5,684,223	0.630882	0.630882
2,327	2,000	1,561,928	7,246,151	0.173355	0.804238
1,031	3,000	758,928	8,005,079	0.084232	0.888470
551	4,000	406,941	8,412,020	0.045165	0.933636
302	5,000	230,671	8,642,691	0.025601	0.959238
176	10,000	333,156	8,975,847	0.036976	0.996214
17	15,000	29,378	9,005,225	0.003260	0.999475
2	20,000	4,726	9,009,951	0.000524	1.000000
0	25,000	0	9,009,951	0.000000	1.000000
0	30,000	0	9,009,951	0.000000	1.000000
0	35,000	0	9,009,951	0.000000	1.000000
0	40,000	0	9,009,951	0.000000	1.000000
0	45,000	0	9,009,951	0.000000	1.000000
0	50,000	0	9,009,951	0.000000	1.000000
0	90,000	0	9,009,951	0.000000	1.000000
0	100,000	0	9,009,951	0.000000	1.000000
0	135,000	0	9,009,951	0.000000	1.000000
0	150,000	0	9,009,951	0.000000	1.000000
0	200,000	0	9,009,951	0.000000	1.000000
0	250,000	0	9,009,951	0.000000	1.000000
0	300,000	0	9,009,951	0.000000	1.000000
0	600,000	0	9,009,951	0.000000	1.000000
0	999,999	0	9,009,951	0.000000	1.000000

TN 03/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	90	1,000	89,909	89,909	0.085572	0.085572
	89	2,000	88,258	178,167	0.084001	0.169573
	88	3,000	87,925	266,092	0.083684	0.253257
	87	4,000	85,365	351,457	0.081247	0.334505
	85	5,000	81,228	432,685	0.077310	0.411815
	76	10,000	295,380	728,065	0.281133	0.692948
	37	15,000	129,878	857,943	0.123613	0.816562
	20	20,000	82,991	940,934	0.078988	0.895550
	12	25,000	57,178	998,112	0.054420	0.949970
	9	30,000	26,547	1,024,659	0.025266	0.975236
	4	35,000	9,774	1,034,433	0.009302	0.984539
	1	40,000	5,000	1,039,433	0.004758	0.989298
	1	45,000	5,000	1,044,433	0.004758	0.994057
	1	50,000	5,000	1,049,433	0.004758	0.998816
	1	90,000	1,244	1,050,677	0.001184	1.000000
	0	100,000	0	1,050,677	0.000000	1.000000
	0	135,000	0	1,050,677	0.000000	1.000000
	0	150,000	0	1,050,677	0.000000	1.000000
	0	200,000	0	1,050,677	0.000000	1.000000
	0	250,000	0	1,050,677	0.000000	1.000000
	0	300,000	0	1,050,677	0.000000	1.000000
	0	600,000	0	1,050,677	0.000000	1.000000
	0	999,999	0	1,050,677	0.000000	1.000000

TN 03/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.027452	0.027452

4	2,000	4,000	8,000	0.027452	0.054904
4	3,000	3,578	11,578	0.024556	0.079460
3	4,000	3,000	14,578	0.020589	0.100050
3	5,000	3,000	17,578	0.020589	0.120639
3	10,000	15,000	32,578	0.102946	0.223585
3	15,000	15,000	47,578	0.102946	0.326532
3	20,000	11,727	59,305	0.080483	0.407015
2	25,000	10,000	69,305	0.068630	0.475646
2	30,000	10,000	79,305	0.068630	0.544277
2	35,000	6,364	85,669	0.043676	0.587953
1	40,000	5,000	90,669	0.034315	0.622269
1	45,000	5,000	95,669	0.034315	0.656584
1	50,000	5,000	100,669	0.034315	0.690900
1	90,000	40,000	140,669	0.274523	0.965423
1	100,000	5,038	145,707	0.034576	1.000000
0	135,000	0	145,707	0.000000	1.000000
0	150,000	0	145,707	0.000000	1.000000
0	200,000	0	145,707	0.000000	1.000000
0	250,000	0	145,707	0.000000	1.000000
0	300,000	0	145,707	0.000000	1.000000
0	600,000	0	145,707	0.000000	1.000000
0	999,999	0	145,707	0.000000	1.000000

TN 03/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.003866	0.003866
	1	2,000	1,000	2,000	0.003866	0.007733
	1	3,000	1,000	3,000	0.003866	0.011599
	1	4,000	1,000	4,000	0.003866	0.015466
	1	5,000	1,000	5,000	0.003866	0.019332
	1	10,000	5,000	10,000	0.019332	0.038665
	1	15,000	5,000	15,000	0.019332	0.057997
	1	20,000	5,000	20,000	0.019332	0.077330
	1	25,000	5,000	25,000	0.019332	0.096663
	1	30,000	5,000	30,000	0.019332	0.115995
	1	35,000	5,000	35,000	0.019332	0.135328
	1	40,000	5,000	40,000	0.019332	0.154661
	1	45,000	5,000	45,000	0.019332	0.173993
	1	50,000	5,000	50,000	0.019332	0.193326
	1	90,000	40,000	90,000	0.154661	0.347987
	1	100,000	10,000	100,000	0.038665	0.386652
	1	135,000	35,000	135,000	0.135328	0.521981
	1	150,000	15,000	150,000	0.057997	0.579979
	1	200,000	50,000	200,000	0.193326	0.773305
	1	250,000	50,000	250,000	0.193326	0.966631
	1	300,000	8,630	258,630	0.033368	1.000000
	0	600,000	0	258,630	0.000000	1.000000
	0	999,999	0	258,630	0.000000	1.000000

TN 03/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,000	2,000	0.128791	0.128791
	2	2,000	2,000	4,000	0.128791	0.257582

2	3,000	2,000	6,000	0.128791	0.386373
2	4,000	2,000	8,000	0.128791	0.515165
2	5,000	1,264	9,264	0.081396	0.596561
1	10,000	5,000	14,264	0.321978	0.918539
1	15,000	1,265	15,529	0.081460	1.000000
0	20,000	0	15,529	0.000000	1.000000
0	25,000	0	15,529	0.000000	1.000000
0	30,000	0	15,529	0.000000	1.000000
0	35,000	0	15,529	0.000000	1.000000
0	40,000	0	15,529	0.000000	1.000000
0	45,000	0	15,529	0.000000	1.000000
0	50,000	0	15,529	0.000000	1.000000
0	90,000	0	15,529	0.000000	1.000000
0	100,000	0	15,529	0.000000	1.000000
0	135,000	0	15,529	0.000000	1.000000
0	150,000	0	15,529	0.000000	1.000000
0	200,000	0	15,529	0.000000	1.000000
0	250,000	0	15,529	0.000000	1.000000
0	300,000	0	15,529	0.000000	1.000000
0	600,000	0	15,529	0.000000	1.000000
0	999,999	0	15,529	0.000000	1.000000

TN 03/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	98,644	98,644	0.047334	0.047334
	98	2,000	98,000	196,644	0.047025	0.094360
	98	3,000	98,000	294,644	0.047025	0.141386
	98	4,000	97,935	392,579	0.046994	0.188380
	97	5,000	94,243	486,822	0.045222	0.233603
	92	10,000	402,699	889,521	0.193236	0.426840
	69	15,000	293,035	1,182,556	0.140614	0.567454
	49	20,000	207,065	1,389,621	0.099361	0.666815
	33	25,000	155,980	1,545,601	0.074847	0.741663
	30	30,000	140,440	1,686,041	0.067390	0.809054
	24	35,000	100,319	1,786,360	0.048138	0.857192
	16	40,000	65,813	1,852,173	0.031580	0.888773
	11	45,000	42,715	1,894,888	0.020497	0.909270
	6	50,000	26,747	1,921,635	0.012834	0.922104
	4	90,000	97,655	2,019,290	0.046860	0.968964
	2	100,000	20,000	2,039,290	0.009597	0.978562
	2	135,000	44,676	2,083,966	0.021438	1.000000
	0	150,000	0	2,083,966	0.000000	1.000000
	0	200,000	0	2,083,966	0.000000	1.000000
	0	250,000	0	2,083,966	0.000000	1.000000
	0	300,000	0	2,083,966	0.000000	1.000000
	0	600,000	0	2,083,966	0.000000	1.000000
	0	999,999	0	2,083,966	0.000000	1.000000

TN 03/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	53,000	53,000	0.008121	0.008121
	53	2,000	52,809	105,809	0.008092	0.016214
	52	3,000	52,000	157,809	0.007968	0.024183

52	4,000	52,000	209,809	0.007968	0.032151
52	5,000	52,000	261,809	0.007968	0.040120
52	10,000	258,479	520,288	0.039610	0.079730
51	15,000	251,569	771,857	0.038551	0.118281
49	20,000	232,071	1,003,928	0.035563	0.153844
43	25,000	205,280	1,209,208	0.031457	0.185302
40	30,000	190,797	1,400,005	0.029238	0.214540
36	35,000	166,802	1,566,807	0.025561	0.240101
32	40,000	158,732	1,725,539	0.024324	0.264426
31	45,000	145,939	1,871,478	0.022364	0.286790
27	50,000	135,000	2,006,478	0.020687	0.307478
27	90,000	819,033	2,825,511	0.125510	0.432989
18	100,000	175,335	3,000,846	0.026868	0.459857
16	135,000	528,866	3,529,712	0.081044	0.540902
13	150,000	170,535	3,700,247	0.026133	0.567036
11	200,000	450,379	4,150,626	0.069017	0.636053
7	250,000	288,765	4,439,391	0.044251	0.680304
5	300,000	250,000	4,689,391	0.038310	0.718615
5	600,000	838,814	5,528,205	0.128542	0.847157
1	999,999	997,389	6,525,594	0.152842	1.000000

TN 03/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001102	0.001102
	3	2,000	3,000	6,000	0.001102	0.002205
	3	3,000	3,000	9,000	0.001102	0.003308
	3	4,000	3,000	12,000	0.001102	0.004411
	3	5,000	3,000	15,000	0.001102	0.005513
	3	10,000	15,000	30,000	0.005513	0.011027
	3	15,000	15,000	45,000	0.005513	0.016541
	3	20,000	15,000	60,000	0.005513	0.022055
	3	25,000	15,000	75,000	0.005513	0.027569
	3	30,000	15,000	90,000	0.005513	0.033083
	3	35,000	15,000	105,000	0.005513	0.038597
	3	40,000	15,000	120,000	0.005513	0.044111
	3	45,000	15,000	135,000	0.005513	0.049625
	3	50,000	15,000	150,000	0.005513	0.055139
	3	90,000	120,000	270,000	0.044111	0.099250
	3	100,000	30,000	300,000	0.011027	0.110278
	3	135,000	105,000	405,000	0.038597	0.148875
	3	150,000	45,000	450,000	0.016541	0.165417
	3	200,000	150,000	600,000	0.055139	0.220556
	3	250,000	150,000	750,000	0.055139	0.275696
	3	300,000	123,097	873,097	0.045249	0.320945
	2	600,000	600,000	1,473,097	0.220556	0.541502
	2	999,999	1,247,291	2,720,388	0.458497	1.000000

TN 03/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.037843	0.037843
	2	2,000	2,000	4,000	0.037843	0.075685
	2	3,000	2,000	6,000	0.037843	0.113528
	2	4,000	2,000	8,000	0.037843	0.151371

2	5,000	2,000	10,000	0.037843	0.189214
2	10,000	10,000	20,000	0.189214	0.378429
2	15,000	8,789	28,789	0.166300	0.544730
1	20,000	5,000	33,789	0.094607	0.639337
1	25,000	5,000	38,789	0.094607	0.733945
1	30,000	5,000	43,789	0.094607	0.828552
1	35,000	5,000	48,789	0.094607	0.923159
1	40,000	4,061	52,850	0.076840	1.000000
0	45,000	0	52,850	0.000000	1.000000
0	50,000	0	52,850	0.000000	1.000000
0	90,000	0	52,850	0.000000	1.000000
0	100,000	0	52,850	0.000000	1.000000
0	135,000	0	52,850	0.000000	1.000000
0	150,000	0	52,850	0.000000	1.000000
0	200,000	0	52,850	0.000000	1.000000
0	250,000	0	52,850	0.000000	1.000000
0	300,000	0	52,850	0.000000	1.000000
0	600,000	0	52,850	0.000000	1.000000
0	999,999	0	52,850	0.000000	1.000000

TN 04/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	130,703	1,000	9,387,425	9,387,425	0.998396	0.998396
	25	2,000	8,138	9,395,563	0.000865	0.999262
	4	3,000	2,317	9,397,880	0.000246	0.999508
	1	4,000	1,000	9,398,880	0.000106	0.999615
	1	5,000	1,000	9,399,880	0.000106	0.999721
	1	10,000	2,618	9,402,498	0.000278	1.000000
	0	15,000	0	9,402,498	0.000000	1.000000
	0	20,000	0	9,402,498	0.000000	1.000000
	0	25,000	0	9,402,498	0.000000	1.000000
	0	30,000	0	9,402,498	0.000000	1.000000
	0	35,000	0	9,402,498	0.000000	1.000000
	0	40,000	0	9,402,498	0.000000	1.000000
	0	45,000	0	9,402,498	0.000000	1.000000
	0	50,000	0	9,402,498	0.000000	1.000000
	0	90,000	0	9,402,498	0.000000	1.000000
	0	100,000	0	9,402,498	0.000000	1.000000
	0	135,000	0	9,402,498	0.000000	1.000000
	0	150,000	0	9,402,498	0.000000	1.000000
	0	200,000	0	9,402,498	0.000000	1.000000
	0	250,000	0	9,402,498	0.000000	1.000000
	0	300,000	0	9,402,498	0.000000	1.000000
	0	600,000	0	9,402,498	0.000000	1.000000
	0	999,999	0	9,402,498	0.000000	1.000000

TN 04/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	67	1,000	8,892	8,892	1.000000	1.000000
	0	2,000	0	8,892	0.000000	1.000000
	0	3,000	0	8,892	0.000000	1.000000
	0	4,000	0	8,892	0.000000	1.000000
	0	5,000	0	8,892	0.000000	1.000000
	0	10,000	0	8,892	0.000000	1.000000
	0	15,000	0	8,892	0.000000	1.000000
	0	20,000	0	8,892	0.000000	1.000000
	0	25,000	0	8,892	0.000000	1.000000
	0	30,000	0	8,892	0.000000	1.000000
	0	35,000	0	8,892	0.000000	1.000000
	0	40,000	0	8,892	0.000000	1.000000
	0	45,000	0	8,892	0.000000	1.000000
	0	50,000	0	8,892	0.000000	1.000000
	0	90,000	0	8,892	0.000000	1.000000
	0	100,000	0	8,892	0.000000	1.000000
	0	135,000	0	8,892	0.000000	1.000000
	0	150,000	0	8,892	0.000000	1.000000
	0	200,000	0	8,892	0.000000	1.000000
	0	250,000	0	8,892	0.000000	1.000000
	0	300,000	0	8,892	0.000000	1.000000
	0	600,000	0	8,892	0.000000	1.000000
	0	999,999	0	8,892	0.000000	1.000000

TN 04/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,524	1,000	3,855,578	3,855,578	0.701569	0.701569
1,433	2,000	888,682	4,744,260	0.161706	0.863275
547	3,000	361,757	5,106,017	0.065826	0.929101
239	4,000	164,671	5,270,688	0.029963	0.959065
107	5,000	82,997	5,353,685	0.015102	0.974167
66	10,000	122,082	5,475,767	0.022214	0.996382
8	15,000	17,834	5,493,601	0.003245	0.999627
2	20,000	2,049	5,495,650	0.000372	1.000000
0	25,000	0	5,495,650	0.000000	1.000000
0	30,000	0	5,495,650	0.000000	1.000000
0	35,000	0	5,495,650	0.000000	1.000000
0	40,000	0	5,495,650	0.000000	1.000000
0	45,000	0	5,495,650	0.000000	1.000000
0	50,000	0	5,495,650	0.000000	1.000000
0	90,000	0	5,495,650	0.000000	1.000000
0	100,000	0	5,495,650	0.000000	1.000000
0	135,000	0	5,495,650	0.000000	1.000000
0	150,000	0	5,495,650	0.000000	1.000000
0	200,000	0	5,495,650	0.000000	1.000000
0	250,000	0	5,495,650	0.000000	1.000000
0	300,000	0	5,495,650	0.000000	1.000000
0	600,000	0	5,495,650	0.000000	1.000000
0	999,999	0	5,495,650	0.000000	1.000000

TN 04/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	90	1,000	82,553	82,553	0.140366	0.140366
	79	2,000	73,652	156,205	0.125232	0.265598
	66	3,000	59,161	215,366	0.100592	0.366191
	54	4,000	49,007	264,373	0.083327	0.449519
	45	5,000	40,030	304,403	0.068063	0.517583
	37	10,000	132,848	437,251	0.225884	0.743467
	16	15,000	74,363	511,614	0.126441	0.869908
	12	20,000	39,347	550,961	0.066902	0.936810
	6	25,000	20,162	571,123	0.034281	0.971092
	2	30,000	10,000	581,123	0.017003	0.988096
	2	35,000	5,317	586,440	0.009040	0.997136
	1	40,000	1,684	588,124	0.002863	1.000000
	0	45,000	0	588,124	0.000000	1.000000
	0	50,000	0	588,124	0.000000	1.000000
	0	90,000	0	588,124	0.000000	1.000000
	0	100,000	0	588,124	0.000000	1.000000
	0	135,000	0	588,124	0.000000	1.000000
	0	150,000	0	588,124	0.000000	1.000000
	0	200,000	0	588,124	0.000000	1.000000
	0	250,000	0	588,124	0.000000	1.000000
	0	300,000	0	588,124	0.000000	1.000000
	0	600,000	0	588,124	0.000000	1.000000
	0	999,999	0	588,124	0.000000	1.000000

TN 04/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	3,000	3,000	0.026020	0.026020

3	2,000	3,000	6,000	0.026020	0.052041
3	3,000	3,000	9,000	0.026020	0.078062
3	4,000	3,000	12,000	0.026020	0.104082
3	5,000	3,000	15,000	0.026020	0.130103
3	10,000	15,000	30,000	0.130103	0.260206
3	15,000	11,934	41,934	0.103510	0.363716
2	20,000	10,000	51,934	0.086735	0.450452
2	25,000	10,000	61,934	0.086735	0.537187
2	30,000	7,493	69,427	0.064990	0.602178
1	35,000	5,000	74,427	0.043367	0.645546
1	40,000	5,000	79,427	0.043367	0.688914
1	45,000	5,000	84,427	0.043367	0.732282
1	50,000	5,000	89,427	0.043367	0.775649
1	90,000	25,866	115,293	0.224350	1.000000
0	100,000	0	115,293	0.000000	1.000000
0	135,000	0	115,293	0.000000	1.000000
0	150,000	0	115,293	0.000000	1.000000
0	200,000	0	115,293	0.000000	1.000000
0	250,000	0	115,293	0.000000	1.000000
0	300,000	0	115,293	0.000000	1.000000
0	600,000	0	115,293	0.000000	1.000000
0	999,999	0	115,293	0.000000	1.000000

TN 04/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.000891	0.000891
	1	2,000	1,000	2,000	0.000891	0.001783
	1	3,000	1,000	3,000	0.000891	0.002674
	1	4,000	1,000	4,000	0.000891	0.003566
	1	5,000	1,000	5,000	0.000891	0.004457
	1	10,000	5,000	10,000	0.004457	0.008915
	1	15,000	5,000	15,000	0.004457	0.013373
	1	20,000	5,000	20,000	0.004457	0.017831
	1	25,000	5,000	25,000	0.004457	0.022289
	1	30,000	5,000	30,000	0.004457	0.026747
	1	35,000	5,000	35,000	0.004457	0.031205
	1	40,000	5,000	40,000	0.004457	0.035663
	1	45,000	5,000	45,000	0.004457	0.040121
	1	50,000	5,000	50,000	0.004457	0.044579
	1	90,000	40,000	90,000	0.035663	0.080242
	1	100,000	10,000	100,000	0.008915	0.089158
	1	135,000	35,000	135,000	0.031205	0.120363
	1	150,000	15,000	150,000	0.013373	0.133737
	1	200,000	50,000	200,000	0.044579	0.178316
	1	250,000	50,000	250,000	0.044579	0.222895
	1	300,000	50,000	300,000	0.044579	0.267475
	1	600,000	300,000	600,000	0.267475	0.534950
	1	999,999	521,600	1,121,600	0.465049	1.000000

TN 04/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,000	2,000	0.044896	0.044896
	2	2,000	2,000	4,000	0.044896	0.089792

2	3,000	2,000	6,000	0.044896	0.134689
2	4,000	2,000	8,000	0.044896	0.179585
2	5,000	1,754	9,754	0.039374	0.218959
1	10,000	5,000	14,754	0.112241	0.331200
1	15,000	5,000	19,754	0.112241	0.443441
1	20,000	5,000	24,754	0.112241	0.555682
1	25,000	5,000	29,754	0.112241	0.667923
1	30,000	5,000	34,754	0.112241	0.780164
1	35,000	5,000	39,754	0.112241	0.892405
1	40,000	4,793	44,547	0.107594	1.000000
0	45,000	0	44,547	0.000000	1.000000
0	50,000	0	44,547	0.000000	1.000000
0	90,000	0	44,547	0.000000	1.000000
0	100,000	0	44,547	0.000000	1.000000
0	135,000	0	44,547	0.000000	1.000000
0	150,000	0	44,547	0.000000	1.000000
0	200,000	0	44,547	0.000000	1.000000
0	250,000	0	44,547	0.000000	1.000000
0	300,000	0	44,547	0.000000	1.000000
0	600,000	0	44,547	0.000000	1.000000
0	999,999	0	44,547	0.000000	1.000000

TN 04/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	96,751	96,751	0.065331	0.065331
	94	2,000	89,243	185,994	0.060261	0.125592
	84	3,000	80,088	266,082	0.054079	0.179672
	78	4,000	74,795	340,877	0.050505	0.230177
	71	5,000	68,763	409,640	0.046432	0.276610
	65	10,000	298,985	708,625	0.201890	0.478500
	53	15,000	211,516	920,141	0.142826	0.621326
	34	20,000	131,470	1,051,611	0.088775	0.710101
	21	25,000	98,976	1,150,587	0.066833	0.776935
	17	30,000	71,241	1,221,828	0.048105	0.825041
	13	35,000	54,423	1,276,251	0.036749	0.861790
	9	40,000	40,587	1,316,838	0.027406	0.889196
	7	45,000	21,354	1,338,192	0.014419	0.903616
	3	50,000	13,666	1,351,858	0.009228	0.912844
	2	90,000	80,000	1,431,858	0.054020	0.966864
	2	100,000	20,000	1,451,858	0.013505	0.980369
	2	135,000	29,072	1,480,930	0.019630	1.000000
	0	150,000	0	1,480,930	0.000000	1.000000
	0	200,000	0	1,480,930	0.000000	1.000000
	0	250,000	0	1,480,930	0.000000	1.000000
	0	300,000	0	1,480,930	0.000000	1.000000
	0	600,000	0	1,480,930	0.000000	1.000000
	0	999,999	0	1,480,930	0.000000	1.000000

TN 04/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	53,063	53,063	0.009754	0.009754
	53	2,000	52,645	105,708	0.009677	0.019431
	52	3,000	52,000	157,708	0.009558	0.028989

52	4,000	52,000	209,708	0.009558	0.038548
52	5,000	52,000	261,708	0.009558	0.048107
52	10,000	256,065	517,773	0.047069	0.095176
51	15,000	243,743	761,516	0.044804	0.139981
45	20,000	217,479	978,995	0.039976	0.179958
42	25,000	201,998	1,180,993	0.037131	0.217089
38	30,000	183,917	1,364,910	0.033807	0.250897
36	35,000	169,217	1,534,127	0.031105	0.282002
32	40,000	148,933	1,683,060	0.027376	0.309379
29	45,000	142,723	1,825,783	0.026235	0.335615
28	50,000	130,119	1,955,902	0.023918	0.359533
24	90,000	784,688	2,740,590	0.144241	0.503774
15	100,000	150,000	2,890,590	0.027573	0.531347
15	135,000	473,022	3,363,612	0.086950	0.618298
12	150,000	163,545	3,527,157	0.030062	0.648361
10	200,000	336,953	3,864,110	0.061938	0.710300
5	250,000	189,049	4,053,159	0.034751	0.745050
3	300,000	112,039	4,165,198	0.020595	0.765645
2	600,000	440,675	4,605,873	0.081004	0.846650
1	999,999	834,237	5,440,110	0.153349	1.000000

TN 04/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001340	0.001340
	3	2,000	3,000	6,000	0.001340	0.002680
	3	3,000	3,000	9,000	0.001340	0.004020
	3	4,000	3,000	12,000	0.001340	0.005360
	3	5,000	3,000	15,000	0.001340	0.006700
	3	10,000	15,000	30,000	0.006700	0.013401
	3	15,000	15,000	45,000	0.006700	0.020102
	3	20,000	15,000	60,000	0.006700	0.026803
	3	25,000	15,000	75,000	0.006700	0.033503
	3	30,000	15,000	90,000	0.006700	0.040204
	3	35,000	15,000	105,000	0.006700	0.046905
	3	40,000	15,000	120,000	0.006700	0.053606
	3	45,000	15,000	135,000	0.006700	0.060306
	3	50,000	15,000	150,000	0.006700	0.067007
	3	90,000	120,000	270,000	0.053606	0.120613
	3	100,000	30,000	300,000	0.013401	0.134015
	3	135,000	105,000	405,000	0.046905	0.180920
	3	150,000	45,000	450,000	0.020102	0.201022
	3	200,000	150,000	600,000	0.067007	0.268030
	3	250,000	127,183	727,183	0.056814	0.324845
	2	300,000	100,000	827,183	0.044671	0.369517
	2	600,000	600,000	1,427,183	0.268030	0.637547
	2	999,999	811,369	2,238,552	0.362452	1.000000

TN 04/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.094813	0.094813
	2	2,000	2,000	4,000	0.094813	0.189627
	2	3,000	2,000	6,000	0.094813	0.284441
	2	4,000	2,000	8,000	0.094813	0.379254

2	5,000	2,000	10,000	0.094813	0.474068
2	10,000	5,607	15,607	0.265810	0.739878
1	15,000	5,000	20,607	0.237034	0.976912
1	20,000	487	21,094	0.023087	1.000000
0	25,000	0	21,094	0.000000	1.000000
0	30,000	0	21,094	0.000000	1.000000
0	35,000	0	21,094	0.000000	1.000000
0	40,000	0	21,094	0.000000	1.000000
0	45,000	0	21,094	0.000000	1.000000
0	50,000	0	21,094	0.000000	1.000000
0	90,000	0	21,094	0.000000	1.000000
0	100,000	0	21,094	0.000000	1.000000
0	135,000	0	21,094	0.000000	1.000000
0	150,000	0	21,094	0.000000	1.000000
0	200,000	0	21,094	0.000000	1.000000
0	250,000	0	21,094	0.000000	1.000000
0	300,000	0	21,094	0.000000	1.000000
0	600,000	0	21,094	0.000000	1.000000
0	999,999	0	21,094	0.000000	1.000000

TN 05/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	129,933	1,000	3,494,633	3,494,633	0.996875	0.996875
	22	2,000	5,103	3,499,736	0.001455	0.998330
	1	3,000	1,000	3,500,736	0.000285	0.998615
	1	4,000	1,000	3,501,736	0.000285	0.998901
	1	5,000	1,000	3,502,736	0.000285	0.999186
	1	10,000	2,852	3,505,588	0.000813	1.000000
	0	15,000	0	3,505,588	0.000000	1.000000
	0	20,000	0	3,505,588	0.000000	1.000000
	0	25,000	0	3,505,588	0.000000	1.000000
	0	30,000	0	3,505,588	0.000000	1.000000
	0	35,000	0	3,505,588	0.000000	1.000000
	0	40,000	0	3,505,588	0.000000	1.000000
	0	45,000	0	3,505,588	0.000000	1.000000
	0	50,000	0	3,505,588	0.000000	1.000000
	0	90,000	0	3,505,588	0.000000	1.000000
	0	100,000	0	3,505,588	0.000000	1.000000
	0	135,000	0	3,505,588	0.000000	1.000000
	0	150,000	0	3,505,588	0.000000	1.000000
	0	200,000	0	3,505,588	0.000000	1.000000
	0	250,000	0	3,505,588	0.000000	1.000000
	0	300,000	0	3,505,588	0.000000	1.000000
	0	600,000	0	3,505,588	0.000000	1.000000
	0	999,999	0	3,505,588	0.000000	1.000000

TN 05/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	67	1,000	4,685	4,685	1.000000	1.000000
	0	2,000	0	4,685	0.000000	1.000000
	0	3,000	0	4,685	0.000000	1.000000
	0	4,000	0	4,685	0.000000	1.000000
	0	5,000	0	4,685	0.000000	1.000000
	0	10,000	0	4,685	0.000000	1.000000
	0	15,000	0	4,685	0.000000	1.000000
	0	20,000	0	4,685	0.000000	1.000000
	0	25,000	0	4,685	0.000000	1.000000
	0	30,000	0	4,685	0.000000	1.000000
	0	35,000	0	4,685	0.000000	1.000000
	0	40,000	0	4,685	0.000000	1.000000
	0	45,000	0	4,685	0.000000	1.000000
	0	50,000	0	4,685	0.000000	1.000000
	0	90,000	0	4,685	0.000000	1.000000
	0	100,000	0	4,685	0.000000	1.000000
	0	135,000	0	4,685	0.000000	1.000000
	0	150,000	0	4,685	0.000000	1.000000
	0	200,000	0	4,685	0.000000	1.000000
	0	250,000	0	4,685	0.000000	1.000000
	0	300,000	0	4,685	0.000000	1.000000
	0	600,000	0	4,685	0.000000	1.000000
	0	999,999	0	4,685	0.000000	1.000000

TN 05/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,330	1,000	2,097,770	2,097,770	0.724173	0.724173
740	2,000	443,512	2,541,282	0.153105	0.877278
266	3,000	165,410	2,706,692	0.057101	0.934379
102	4,000	74,169	2,780,861	0.025604	0.959983
55	5,000	42,502	2,823,363	0.014672	0.974656
35	10,000	65,116	2,888,479	0.022478	0.997134
2	15,000	5,094	2,893,573	0.001758	0.998893
1	20,000	3,206	2,896,779	0.001106	1.000000
0	25,000	0	2,896,779	0.000000	1.000000
0	30,000	0	2,896,779	0.000000	1.000000
0	35,000	0	2,896,779	0.000000	1.000000
0	40,000	0	2,896,779	0.000000	1.000000
0	45,000	0	2,896,779	0.000000	1.000000
0	50,000	0	2,896,779	0.000000	1.000000
0	90,000	0	2,896,779	0.000000	1.000000
0	100,000	0	2,896,779	0.000000	1.000000
0	135,000	0	2,896,779	0.000000	1.000000
0	150,000	0	2,896,779	0.000000	1.000000
0	200,000	0	2,896,779	0.000000	1.000000
0	250,000	0	2,896,779	0.000000	1.000000
0	300,000	0	2,896,779	0.000000	1.000000
0	600,000	0	2,896,779	0.000000	1.000000
0	999,999	0	2,896,779	0.000000	1.000000

TN 05/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	89	1,000	71,536	71,536	0.151702	0.151702
	64	2,000	55,784	127,320	0.118297	0.269999
	46	3,000	40,477	167,797	0.085837	0.355836
	35	4,000	34,083	201,880	0.072277	0.428114
	33	5,000	32,430	234,310	0.068772	0.496886
	32	10,000	106,672	340,982	0.226212	0.723099
	15	15,000	61,728	402,710	0.130902	0.854002
	8	20,000	34,296	437,006	0.072729	0.926731
	6	25,000	14,061	451,067	0.029818	0.956550
	2	30,000	10,000	461,067	0.021206	0.977756
	2	35,000	9,333	470,400	0.019791	0.997548
	1	40,000	1,156	471,556	0.002451	1.000000
	0	45,000	0	471,556	0.000000	1.000000
	0	50,000	0	471,556	0.000000	1.000000
	0	90,000	0	471,556	0.000000	1.000000
	0	100,000	0	471,556	0.000000	1.000000
	0	135,000	0	471,556	0.000000	1.000000
	0	150,000	0	471,556	0.000000	1.000000
	0	200,000	0	471,556	0.000000	1.000000
	0	250,000	0	471,556	0.000000	1.000000
	0	300,000	0	471,556	0.000000	1.000000
	0	600,000	0	471,556	0.000000	1.000000
	0	999,999	0	471,556	0.000000	1.000000

TN 05/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,373	2,373	0.023076	0.023076

2	2,000	2,000	4,373	0.019448	0.042524
2	3,000	2,000	6,373	0.019448	0.061973
2	4,000	2,000	8,373	0.019448	0.081422
2	5,000	2,000	10,373	0.019448	0.100871
2	10,000	10,000	20,373	0.097244	0.198115
2	15,000	10,000	30,373	0.097244	0.295359
2	20,000	10,000	40,373	0.097244	0.392603
2	25,000	10,000	50,373	0.097244	0.489847
2	30,000	7,247	57,620	0.070472	0.560320
1	35,000	5,000	62,620	0.048622	0.608942
1	40,000	5,000	67,620	0.048622	0.657564
1	45,000	5,000	72,620	0.048622	0.706186
1	50,000	5,000	77,620	0.048622	0.754808
1	90,000	25,214	102,834	0.245191	1.000000
0	100,000	0	102,834	0.000000	1.000000
0	135,000	0	102,834	0.000000	1.000000
0	150,000	0	102,834	0.000000	1.000000
0	200,000	0	102,834	0.000000	1.000000
0	250,000	0	102,834	0.000000	1.000000
0	300,000	0	102,834	0.000000	1.000000
0	600,000	0	102,834	0.000000	1.000000
0	999,999	0	102,834	0.000000	1.000000

TN 05/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	0	0	0.000000	0.000000
	0	2,000	0	0	0.000000	0.000000
	0	3,000	0	0	0.000000	0.000000
	0	4,000	0	0	0.000000	0.000000
	0	5,000	0	0	0.000000	0.000000
	0	10,000	0	0	0.000000	0.000000
	0	15,000	0	0	0.000000	0.000000
	0	20,000	0	0	0.000000	0.000000
	0	25,000	0	0	0.000000	0.000000
	0	30,000	0	0	0.000000	0.000000
	0	35,000	0	0	0.000000	0.000000
	0	40,000	0	0	0.000000	0.000000
	0	45,000	0	0	0.000000	0.000000
	0	50,000	0	0	0.000000	0.000000
	0	90,000	0	0	0.000000	0.000000
	0	100,000	0	0	0.000000	0.000000
	0	135,000	0	0	0.000000	0.000000
	0	150,000	0	0	0.000000	0.000000
	0	200,000	0	0	0.000000	0.000000
	0	250,000	0	0	0.000000	0.000000
	0	300,000	0	0	0.000000	0.000000
	0	600,000	0	0	0.000000	0.000000
	0	999,999	0	0	0.000000	0.000000

TN 05/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	1,000	1,000	0.624219	0.624219
	1	2,000	602	1,602	0.375780	1.000000

0	3,000	0	1,602	0.000000	1.000000
0	4,000	0	1,602	0.000000	1.000000
0	5,000	0	1,602	0.000000	1.000000
0	10,000	0	1,602	0.000000	1.000000
0	15,000	0	1,602	0.000000	1.000000
0	20,000	0	1,602	0.000000	1.000000
0	25,000	0	1,602	0.000000	1.000000
0	30,000	0	1,602	0.000000	1.000000
0	35,000	0	1,602	0.000000	1.000000
0	40,000	0	1,602	0.000000	1.000000
0	45,000	0	1,602	0.000000	1.000000
0	50,000	0	1,602	0.000000	1.000000
0	90,000	0	1,602	0.000000	1.000000
0	100,000	0	1,602	0.000000	1.000000
0	135,000	0	1,602	0.000000	1.000000
0	150,000	0	1,602	0.000000	1.000000
0	200,000	0	1,602	0.000000	1.000000
0	250,000	0	1,602	0.000000	1.000000
0	300,000	0	1,602	0.000000	1.000000
0	600,000	0	1,602	0.000000	1.000000
0	999,999	0	1,602	0.000000	1.000000

TN 05/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	101	1,000	83,047	83,047	0.062799	0.062799
	75	2,000	71,467	154,514	0.054042	0.116841
	70	3,000	67,318	221,832	0.050905	0.167746
	66	4,000	65,169	287,001	0.049279	0.217026
	64	5,000	62,666	349,667	0.047387	0.264413
	61	10,000	270,487	620,154	0.204538	0.468952
	44	15,000	180,571	800,725	0.136545	0.605497
	29	20,000	113,647	914,372	0.085938	0.691435
	19	25,000	86,541	1,000,913	0.065441	0.756876
	15	30,000	62,414	1,063,327	0.047196	0.804073
	10	35,000	50,000	1,113,327	0.037809	0.841882
	10	40,000	37,028	1,150,355	0.028000	0.869883
	5	45,000	25,000	1,175,355	0.018904	0.888787
	5	50,000	17,679	1,193,034	0.013368	0.902156
	2	90,000	80,000	1,273,034	0.060494	0.962651
	2	100,000	20,000	1,293,034	0.015123	0.977774
	2	135,000	29,391	1,322,425	0.022225	1.000000
	0	150,000	0	1,322,425	0.000000	1.000000
	0	200,000	0	1,322,425	0.000000	1.000000
	0	250,000	0	1,322,425	0.000000	1.000000
	0	300,000	0	1,322,425	0.000000	1.000000
	0	600,000	0	1,322,425	0.000000	1.000000
	0	999,999	0	1,322,425	0.000000	1.000000

TN 05/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	55	1,000	51,103	51,103	0.009874	0.009874
	51	2,000	51,000	102,103	0.009854	0.019729
	51	3,000	51,000	153,103	0.009854	0.029584

51	4,000	51,000	204,103	0.009854	0.039439
51	5,000	50,658	254,761	0.009788	0.049228
50	10,000	239,609	494,370	0.046300	0.095528
47	15,000	225,350	719,720	0.043545	0.139073
43	20,000	210,760	930,480	0.040725	0.179799
40	25,000	189,904	1,120,384	0.036695	0.216494
36	30,000	171,917	1,292,301	0.033220	0.249714
33	35,000	152,244	1,444,545	0.029418	0.279133
27	40,000	132,931	1,577,476	0.025686	0.304819
25	45,000	122,542	1,700,018	0.023679	0.328499
23	50,000	107,840	1,807,858	0.020838	0.349337
19	90,000	634,005	2,441,863	0.122510	0.471847
13	100,000	130,000	2,571,863	0.025120	0.496968
13	135,000	396,045	2,967,908	0.076528	0.573496
10	150,000	141,957	3,109,865	0.027430	0.600927
8	200,000	291,726	3,401,591	0.056371	0.657298
4	250,000	200,000	3,601,591	0.038646	0.695945
4	300,000	185,335	3,786,926	0.035812	0.731757
3	600,000	664,276	4,451,202	0.128359	0.860117
1	999,999	723,906	5,175,108	0.139882	1.000000

TN 05/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001409	0.001409
	3	2,000	3,000	6,000	0.001409	0.002819
	3	3,000	3,000	9,000	0.001409	0.004228
	3	4,000	3,000	12,000	0.001409	0.005638
	3	5,000	3,000	15,000	0.001409	0.007047
	3	10,000	15,000	30,000	0.007047	0.014095
	3	15,000	15,000	45,000	0.007047	0.021143
	3	20,000	15,000	60,000	0.007047	0.028190
	3	25,000	15,000	75,000	0.007047	0.035238
	3	30,000	15,000	90,000	0.007047	0.042285
	3	35,000	15,000	105,000	0.007047	0.049333
	3	40,000	15,000	120,000	0.007047	0.056381
	3	45,000	15,000	135,000	0.007047	0.063428
	3	50,000	15,000	150,000	0.007047	0.070476
	3	90,000	120,000	270,000	0.056381	0.126857
	3	100,000	30,000	300,000	0.014095	0.140953
	3	135,000	105,000	405,000	0.049333	0.190286
	3	150,000	45,000	450,000	0.021143	0.211429
	3	200,000	146,001	596,001	0.068597	0.280027
	2	250,000	100,000	696,001	0.046984	0.327011
	2	300,000	100,000	796,001	0.046984	0.373995
	2	600,000	600,000	1,396,001	0.281906	0.655901
	2	999,999	732,368	2,128,369	0.344098	1.000000

TN 05/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.124571	0.124571
	2	2,000	2,000	4,000	0.124571	0.249143
	2	3,000	2,000	6,000	0.124571	0.373715
	2	4,000	1,685	7,685	0.104951	0.478667

1	5,000	1,000	8,685	0.062285	0.540953
1	10,000	5,000	13,685	0.311429	0.852382
1	15,000	2,370	16,055	0.147617	1.000000
0	20,000	0	16,055	0.000000	1.000000
0	25,000	0	16,055	0.000000	1.000000
0	30,000	0	16,055	0.000000	1.000000
0	35,000	0	16,055	0.000000	1.000000
0	40,000	0	16,055	0.000000	1.000000
0	45,000	0	16,055	0.000000	1.000000
0	50,000	0	16,055	0.000000	1.000000
0	90,000	0	16,055	0.000000	1.000000
0	100,000	0	16,055	0.000000	1.000000
0	135,000	0	16,055	0.000000	1.000000
0	150,000	0	16,055	0.000000	1.000000
0	200,000	0	16,055	0.000000	1.000000
0	250,000	0	16,055	0.000000	1.000000
0	300,000	0	16,055	0.000000	1.000000
0	600,000	0	16,055	0.000000	1.000000
0	999,999	0	16,055	0.000000	1.000000

TN 06/2002 101	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	0	0	0.000000	0.000000
	0	2,000	0	0	0.000000	0.000000
	0	3,000	0	0	0.000000	0.000000
	0	4,000	0	0	0.000000	0.000000
	0	5,000	0	0	0.000000	0.000000
	0	10,000	0	0	0.000000	0.000000
	0	15,000	0	0	0.000000	0.000000
	0	20,000	0	0	0.000000	0.000000
	0	25,000	0	0	0.000000	0.000000
	0	30,000	0	0	0.000000	0.000000
	0	35,000	0	0	0.000000	0.000000
	0	40,000	0	0	0.000000	0.000000
	0	45,000	0	0	0.000000	0.000000
	0	50,000	0	0	0.000000	0.000000
	0	90,000	0	0	0.000000	0.000000
	0	100,000	0	0	0.000000	0.000000
	0	135,000	0	0	0.000000	0.000000
	0	150,000	0	0	0.000000	0.000000
	0	200,000	0	0	0.000000	0.000000
	0	250,000	0	0	0.000000	0.000000
	0	300,000	0	0	0.000000	0.000000
	0	600,000	0	0	0.000000	0.000000
	0	999,999	0	0	0.000000	0.000000

TN 06/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	128,833	1,000	2,774,093	2,774,093	1.001848	1.001848
	17	2,000	730	2,774,823	0.000263	1.002112
	1	3,000	(1,000)	2,773,823	(0.000361)	1.001750
	1	4,000	(1,000)	2,772,823	(0.000361)	1.001389
	1	5,000	(1,000)	2,771,823	(0.000361)	1.001028
	1	10,000	(2,848)	2,768,975	(0.001028)	1.000000
	0	15,000	0	2,768,975	0.000000	1.000000
	0	20,000	0	2,768,975	0.000000	1.000000
	0	25,000	0	2,768,975	0.000000	1.000000
	0	30,000	0	2,768,975	0.000000	1.000000
	0	35,000	0	2,768,975	0.000000	1.000000
	0	40,000	0	2,768,975	0.000000	1.000000
	0	45,000	0	2,768,975	0.000000	1.000000
	0	50,000	0	2,768,975	0.000000	1.000000
	0	90,000	0	2,768,975	0.000000	1.000000
	0	100,000	0	2,768,975	0.000000	1.000000
	0	135,000	0	2,768,975	0.000000	1.000000
	0	150,000	0	2,768,975	0.000000	1.000000
	0	200,000	0	2,768,975	0.000000	1.000000
	0	250,000	0	2,768,975	0.000000	1.000000
	0	300,000	0	2,768,975	0.000000	1.000000
	0	600,000	0	2,768,975	0.000000	1.000000
	0	999,999	0	2,768,975	0.000000	1.000000

TN 06/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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67	1,000	6,108	6,108	1.000000	1.000000
0	2,000	0	6,108	0.000000	1.000000
0	3,000	0	6,108	0.000000	1.000000
0	4,000	0	6,108	0.000000	1.000000
0	5,000	0	6,108	0.000000	1.000000
0	10,000	0	6,108	0.000000	1.000000
0	15,000	0	6,108	0.000000	1.000000
0	20,000	0	6,108	0.000000	1.000000
0	25,000	0	6,108	0.000000	1.000000
0	30,000	0	6,108	0.000000	1.000000
0	35,000	0	6,108	0.000000	1.000000
0	40,000	0	6,108	0.000000	1.000000
0	45,000	0	6,108	0.000000	1.000000
0	50,000	0	6,108	0.000000	1.000000
0	90,000	0	6,108	0.000000	1.000000
0	100,000	0	6,108	0.000000	1.000000
0	135,000	0	6,108	0.000000	1.000000
0	150,000	0	6,108	0.000000	1.000000
0	200,000	0	6,108	0.000000	1.000000
0	250,000	0	6,108	0.000000	1.000000
0	300,000	0	6,108	0.000000	1.000000
0	600,000	0	6,108	0.000000	1.000000
0	999,999	0	6,108	0.000000	1.000000

TN 06/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	16,205	1,000	1,799,627	1,799,627	0.711905	0.711905
	671	2,000	396,246	2,195,873	0.156748	0.868654
	222	3,000	151,124	2,346,997	0.059782	0.928436
	98	4,000	76,573	2,423,570	0.030291	0.958727
	62	5,000	45,847	2,469,417	0.018136	0.976863
	34	10,000	56,325	2,525,742	0.022281	0.999145
	2	15,000	2,161	2,527,903	0.000854	1.000000
	0	20,000	0	2,527,903	0.000000	1.000000
	0	25,000	0	2,527,903	0.000000	1.000000
	0	30,000	0	2,527,903	0.000000	1.000000
	0	35,000	0	2,527,903	0.000000	1.000000
	0	40,000	0	2,527,903	0.000000	1.000000
	0	45,000	0	2,527,903	0.000000	1.000000
	0	50,000	0	2,527,903	0.000000	1.000000
	0	90,000	0	2,527,903	0.000000	1.000000
	0	100,000	0	2,527,903	0.000000	1.000000
	0	135,000	0	2,527,903	0.000000	1.000000
	0	150,000	0	2,527,903	0.000000	1.000000
	0	200,000	0	2,527,903	0.000000	1.000000
	0	250,000	0	2,527,903	0.000000	1.000000
	0	300,000	0	2,527,903	0.000000	1.000000
	0	600,000	0	2,527,903	0.000000	1.000000
	0	999,999	0	2,527,903	0.000000	1.000000

TN 06/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	35	1,000	22,325	22,325	0.157485	0.157485

17	2,000	16,165	38,490	0.114031	0.271517
14	3,000	13,613	52,103	0.096029	0.367546
13	4,000	12,138	64,241	0.085624	0.453170
12	5,000	10,403	74,644	0.073385	0.526555
10	10,000	37,256	111,900	0.262812	0.789367
7	15,000	24,277	136,177	0.171255	0.960623
3	20,000	5,582	141,759	0.039376	1.000000
0	25,000	0	141,759	0.000000	1.000000
0	30,000	0	141,759	0.000000	1.000000
0	35,000	0	141,759	0.000000	1.000000
0	40,000	0	141,759	0.000000	1.000000
0	45,000	0	141,759	0.000000	1.000000
0	50,000	0	141,759	0.000000	1.000000
0	90,000	0	141,759	0.000000	1.000000
0	100,000	0	141,759	0.000000	1.000000
0	135,000	0	141,759	0.000000	1.000000
0	150,000	0	141,759	0.000000	1.000000
0	200,000	0	141,759	0.000000	1.000000
0	250,000	0	141,759	0.000000	1.000000
0	300,000	0	141,759	0.000000	1.000000
0	600,000	0	141,759	0.000000	1.000000
0	999,999	0	141,759	0.000000	1.000000

TN 06/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	7	1,000	5,000	5,000	0.029020	0.029020
	5	2,000	5,000	10,000	0.029020	0.058040
	5	3,000	5,000	15,000	0.029020	0.087061
	5	4,000	5,000	20,000	0.029020	0.116081
	5	5,000	5,000	25,000	0.029020	0.145101
	5	10,000	20,268	45,268	0.117636	0.262738
	4	15,000	20,000	65,268	0.116081	0.378819
	4	20,000	20,000	85,268	0.116081	0.494901
	4	25,000	17,150	102,418	0.099539	0.594440
	3	30,000	15,000	117,418	0.087061	0.681501
	3	35,000	13,214	130,632	0.076694	0.758196
	2	40,000	10,000	140,632	0.058040	0.816237
	2	45,000	10,000	150,632	0.058040	0.874278
	2	50,000	6,351	156,983	0.036861	0.911139
	1	90,000	15,310	172,293	0.088860	1.000000
	0	100,000	0	172,293	0.000000	1.000000
	0	135,000	0	172,293	0.000000	1.000000
	0	150,000	0	172,293	0.000000	1.000000
	0	200,000	0	172,293	0.000000	1.000000
	0	250,000	0	172,293	0.000000	1.000000
	0	300,000	0	172,293	0.000000	1.000000
	0	600,000	0	172,293	0.000000	1.000000
	0	999,999	0	172,293	0.000000	1.000000

TN 06/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.002451	0.002451
	1	2,000	1,000	2,000	0.002451	0.004903

1	3,000	1,000	3,000	0.002451	0.007355
1	4,000	1,000	4,000	0.002451	0.009807
1	5,000	1,000	5,000	0.002451	0.012259
1	10,000	5,000	10,000	0.012259	0.024518
1	15,000	5,000	15,000	0.012259	0.036777
1	20,000	5,000	20,000	0.012259	0.049036
1	25,000	5,000	25,000	0.012259	0.061295
1	30,000	5,000	30,000	0.012259	0.073554
1	35,000	5,000	35,000	0.012259	0.085813
1	40,000	5,000	40,000	0.012259	0.098072
1	45,000	5,000	45,000	0.012259	0.110332
1	50,000	5,000	50,000	0.012259	0.122591
1	90,000	40,000	90,000	0.098072	0.220664
1	100,000	10,000	100,000	0.024518	0.245182
1	135,000	35,000	135,000	0.085813	0.330995
1	150,000	15,000	150,000	0.036777	0.367773
1	200,000	50,000	200,000	0.122591	0.490364
1	250,000	50,000	250,000	0.122591	0.612955
1	300,000	50,000	300,000	0.122591	0.735546
1	600,000	107,860	407,860	0.264453	1.000000
0	999,999	0	407,860	0.000000	1.000000

TN 06/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	3,486	3,486	0.047779	0.047779
	3	2,000	3,000	6,486	0.041118	0.088898
	3	3,000	3,000	9,486	0.041118	0.130016
	3	4,000	3,000	12,486	0.041118	0.171134
	3	5,000	3,000	15,486	0.041118	0.212253
	3	10,000	10,503	25,989	0.143955	0.356208
	2	15,000	8,509	34,498	0.116625	0.472834
	1	20,000	5,000	39,498	0.068530	0.541365
	1	25,000	5,000	44,498	0.068530	0.609895
	1	30,000	5,000	49,498	0.068530	0.678426
	1	35,000	5,000	54,498	0.068530	0.746957
	1	40,000	5,000	59,498	0.068530	0.815487
	1	45,000	5,000	64,498	0.068530	0.884018
	1	50,000	5,000	69,498	0.068530	0.952549
	1	90,000	3,462	72,960	0.047450	1.000000
	0	100,000	0	72,960	0.000000	1.000000
	0	135,000	0	72,960	0.000000	1.000000
	0	150,000	0	72,960	0.000000	1.000000
	0	200,000	0	72,960	0.000000	1.000000
	0	250,000	0	72,960	0.000000	1.000000
	0	300,000	0	72,960	0.000000	1.000000
	0	600,000	0	72,960	0.000000	1.000000
	0	999,999	0	72,960	0.000000	1.000000

TN 06/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	89	1,000	72,768	72,768	0.062925	0.062925
	69	2,000	65,544	138,312	0.056678	0.119604
	64	3,000	62,061	200,373	0.053666	0.173271

61	4,000	60,737	261,110	0.052521	0.225793
60	5,000	58,303	319,413	0.050417	0.276210
57	10,000	256,004	575,417	0.221377	0.497588
45	15,000	180,627	756,044	0.156196	0.653784
28	20,000	110,209	866,253	0.095302	0.749086
18	25,000	72,845	939,098	0.062992	0.812079
10	30,000	39,135	978,233	0.033841	0.845920
6	35,000	24,190	1,002,423	0.020918	0.866839
4	40,000	20,000	1,022,423	0.017294	0.884133
4	45,000	16,273	1,038,696	0.014072	0.898205
3	50,000	15,000	1,053,696	0.012971	0.911177
3	90,000	82,836	1,136,532	0.071631	0.982808
1	100,000	10,000	1,146,532	0.008647	0.991456
1	135,000	9,880	1,156,412	0.008543	1.000000
0	150,000	0	1,156,412	0.000000	1.000000
0	200,000	0	1,156,412	0.000000	1.000000
0	250,000	0	1,156,412	0.000000	1.000000
0	300,000	0	1,156,412	0.000000	1.000000
0	600,000	0	1,156,412	0.000000	1.000000
0	999,999	0	1,156,412	0.000000	1.000000

TN 06/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	52	1,000	46,187	46,187	0.008015	0.008015
	46	2,000	45,870	92,057	0.007960	0.015975
	45	3,000	45,000	137,057	0.007809	0.023784
	45	4,000	45,000	182,057	0.007809	0.031593
	45	5,000	45,000	227,057	0.007809	0.039402
	45	10,000	221,411	448,468	0.038422	0.077824
	42	15,000	202,258	650,726	0.035098	0.112923
	38	20,000	184,505	835,231	0.032017	0.144941
	35	25,000	159,680	994,911	0.027709	0.172651
	28	30,000	129,596	1,124,507	0.022489	0.195140
	25	35,000	125,000	1,249,507	0.021691	0.216832
	25	40,000	115,166	1,364,673	0.019985	0.236817
	21	45,000	100,567	1,465,240	0.017451	0.254269
	20	50,000	100,000	1,565,240	0.017353	0.271622
	20	90,000	644,164	2,209,404	0.111784	0.383406
	15	100,000	122,733	2,332,137	0.021298	0.404705
	10	135,000	266,661	2,598,798	0.046274	0.450980
	6	150,000	85,486	2,684,284	0.014834	0.465814
	5	200,000	244,904	2,929,188	0.042499	0.508313
	4	250,000	200,000	3,129,188	0.034706	0.543020
	4	300,000	200,000	3,329,188	0.034706	0.577727
	4	600,000	842,438	4,171,626	0.146191	0.723919
	2	999,999	1,590,931	5,762,557	0.276080	1.000000

TN 06/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001541	0.001541
	3	2,000	3,000	6,000	0.001541	0.003083
	3	3,000	3,000	9,000	0.001541	0.004624
	3	4,000	3,000	12,000	0.001541	0.006166

3	5,000	3,000	15,000	0.001541	0.007708
3	10,000	15,000	30,000	0.007708	0.015416
3	15,000	15,000	45,000	0.007708	0.023124
3	20,000	15,000	60,000	0.007708	0.030832
3	25,000	15,000	75,000	0.007708	0.038541
3	30,000	15,000	90,000	0.007708	0.046249
3	35,000	15,000	105,000	0.007708	0.053957
3	40,000	15,000	120,000	0.007708	0.061665
3	45,000	15,000	135,000	0.007708	0.069374
3	50,000	15,000	150,000	0.007708	0.077082
3	90,000	120,000	270,000	0.061665	0.138748
3	100,000	30,000	300,000	0.015416	0.154164
3	135,000	105,000	405,000	0.053957	0.208122
3	150,000	31,428	436,428	0.016150	0.224272
2	200,000	100,000	536,428	0.051388	0.275660
2	250,000	100,000	636,428	0.051388	0.327048
2	300,000	100,000	736,428	0.051388	0.378436
2	600,000	600,000	1,336,428	0.308329	0.686766
2	999,999	609,545	1,945,973	0.313234	1.000000

TN 06/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,021	2,021	0.164322	0.164322
	2	2,000	2,000	4,021	0.162614	0.326937
	2	3,000	2,000	6,021	0.162614	0.489552
	2	4,000	1,007	7,028	0.081876	0.571428
	1	5,000	1,000	8,028	0.081307	0.652736
	1	10,000	4,271	12,299	0.347264	1.000000
	0	15,000	0	12,299	0.000000	1.000000
	0	20,000	0	12,299	0.000000	1.000000
	0	25,000	0	12,299	0.000000	1.000000
	0	30,000	0	12,299	0.000000	1.000000
	0	35,000	0	12,299	0.000000	1.000000
	0	40,000	0	12,299	0.000000	1.000000
	0	45,000	0	12,299	0.000000	1.000000
	0	50,000	0	12,299	0.000000	1.000000
	0	90,000	0	12,299	0.000000	1.000000
	0	100,000	0	12,299	0.000000	1.000000
	0	135,000	0	12,299	0.000000	1.000000
	0	150,000	0	12,299	0.000000	1.000000
	0	200,000	0	12,299	0.000000	1.000000
	0	250,000	0	12,299	0.000000	1.000000
	0	300,000	0	12,299	0.000000	1.000000
	0	600,000	0	12,299	0.000000	1.000000
	0	999,999	0	12,299	0.000000	1.000000

TN 07/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	128,531	1,000	1,693,986	1,693,986	0.992704	0.992704
	7	2,000	2,306	1,696,292	0.001351	0.994055
	2	3,000	2,000	1,698,292	0.001172	0.995227
	2	4,000	2,000	1,700,292	0.001172	0.996399
	2	5,000	2,000	1,702,292	0.001172	0.997571
	2	10,000	4,144	1,706,436	0.002428	1.000000
	0	15,000	0	1,706,436	0.000000	1.000000
	0	20,000	0	1,706,436	0.000000	1.000000
	0	25,000	0	1,706,436	0.000000	1.000000
	0	30,000	0	1,706,436	0.000000	1.000000
	0	35,000	0	1,706,436	0.000000	1.000000
	0	40,000	0	1,706,436	0.000000	1.000000
	0	45,000	0	1,706,436	0.000000	1.000000
	0	50,000	0	1,706,436	0.000000	1.000000
	0	90,000	0	1,706,436	0.000000	1.000000
	0	100,000	0	1,706,436	0.000000	1.000000
	0	135,000	0	1,706,436	0.000000	1.000000
	0	150,000	0	1,706,436	0.000000	1.000000
	0	200,000	0	1,706,436	0.000000	1.000000
	0	250,000	0	1,706,436	0.000000	1.000000
	0	300,000	0	1,706,436	0.000000	1.000000
	0	600,000	0	1,706,436	0.000000	1.000000
	0	999,999	0	1,706,436	0.000000	1.000000

TN 07/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	67	1,000	8,037	8,037	1.000000	1.000000
	0	2,000	0	8,037	0.000000	1.000000
	0	3,000	0	8,037	0.000000	1.000000
	0	4,000	0	8,037	0.000000	1.000000
	0	5,000	0	8,037	0.000000	1.000000
	0	10,000	0	8,037	0.000000	1.000000
	0	15,000	0	8,037	0.000000	1.000000
	0	20,000	0	8,037	0.000000	1.000000
	0	25,000	0	8,037	0.000000	1.000000
	0	30,000	0	8,037	0.000000	1.000000
	0	35,000	0	8,037	0.000000	1.000000
	0	40,000	0	8,037	0.000000	1.000000
	0	45,000	0	8,037	0.000000	1.000000
	0	50,000	0	8,037	0.000000	1.000000
	0	90,000	0	8,037	0.000000	1.000000
	0	100,000	0	8,037	0.000000	1.000000
	0	135,000	0	8,037	0.000000	1.000000
	0	150,000	0	8,037	0.000000	1.000000
	0	200,000	0	8,037	0.000000	1.000000
	0	250,000	0	8,037	0.000000	1.000000
	0	300,000	0	8,037	0.000000	1.000000
	0	600,000	0	8,037	0.000000	1.000000
	0	999,999	0	8,037	0.000000	1.000000

TN 07/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,131	1,000	1,502,674	1,502,674	0.725105	0.725105
500	2,000	298,620	1,801,294	0.144097	0.869203
156	3,000	110,500	1,911,794	0.053321	0.922524
77	4,000	60,565	1,972,359	0.029225	0.951749
48	5,000	38,034	2,010,393	0.018353	0.970102
28	10,000	54,376	2,064,769	0.026238	0.996341
4	15,000	6,143	2,070,912	0.002964	0.999305
1	20,000	1,439	2,072,351	0.000694	1.000000
0	25,000	0	2,072,351	0.000000	1.000000
0	30,000	0	2,072,351	0.000000	1.000000
0	35,000	0	2,072,351	0.000000	1.000000
0	40,000	0	2,072,351	0.000000	1.000000
0	45,000	0	2,072,351	0.000000	1.000000
0	50,000	0	2,072,351	0.000000	1.000000
0	90,000	0	2,072,351	0.000000	1.000000
0	100,000	0	2,072,351	0.000000	1.000000
0	135,000	0	2,072,351	0.000000	1.000000
0	150,000	0	2,072,351	0.000000	1.000000
0	200,000	0	2,072,351	0.000000	1.000000
0	250,000	0	2,072,351	0.000000	1.000000
0	300,000	0	2,072,351	0.000000	1.000000
0	600,000	0	2,072,351	0.000000	1.000000
0	999,999	0	2,072,351	0.000000	1.000000

TN 07/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	35	1,000	20,266	20,266	0.163906	0.163906
	15	2,000	13,908	34,174	0.112484	0.276390
	13	3,000	11,328	45,502	0.091617	0.368008
	11	4,000	11,000	56,502	0.088965	0.456973
	11	5,000	9,642	66,144	0.077981	0.534955
	8	10,000	37,427	103,571	0.302699	0.837654
	6	15,000	19,149	122,720	0.154872	0.992526
	1	20,000	924	123,644	0.007473	1.000000
	0	25,000	0	123,644	0.000000	1.000000
	0	30,000	0	123,644	0.000000	1.000000
	0	35,000	0	123,644	0.000000	1.000000
	0	40,000	0	123,644	0.000000	1.000000
	0	45,000	0	123,644	0.000000	1.000000
	0	50,000	0	123,644	0.000000	1.000000
	0	90,000	0	123,644	0.000000	1.000000
	0	100,000	0	123,644	0.000000	1.000000
	0	135,000	0	123,644	0.000000	1.000000
	0	150,000	0	123,644	0.000000	1.000000
	0	200,000	0	123,644	0.000000	1.000000
	0	250,000	0	123,644	0.000000	1.000000
	0	300,000	0	123,644	0.000000	1.000000
	0	600,000	0	123,644	0.000000	1.000000
	0	999,999	0	123,644	0.000000	1.000000

TN 07/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	7	1,000	5,000	5,000	0.039249	0.039249

5	2,000	5,000	10,000	0.039249	0.078499
5	3,000	5,000	15,000	0.039249	0.117748
5	4,000	5,000	20,000	0.039249	0.156998
5	5,000	5,000	25,000	0.039249	0.196247
5	10,000	17,319	42,319	0.135952	0.332200
3	15,000	15,000	57,319	0.117748	0.449949
3	20,000	15,000	72,319	0.117748	0.567697
3	25,000	10,538	82,857	0.082722	0.650420
2	30,000	10,000	92,857	0.078499	0.728919
2	35,000	5,117	97,974	0.040168	0.769087
1	40,000	5,000	102,974	0.039249	0.808336
1	45,000	5,000	107,974	0.039249	0.847586
1	50,000	5,000	112,974	0.039249	0.886835
1	90,000	14,416	127,390	0.113164	1.000000
0	100,000	0	127,390	0.000000	1.000000
0	135,000	0	127,390	0.000000	1.000000
0	150,000	0	127,390	0.000000	1.000000
0	200,000	0	127,390	0.000000	1.000000
0	250,000	0	127,390	0.000000	1.000000
0	300,000	0	127,390	0.000000	1.000000
0	600,000	0	127,390	0.000000	1.000000
0	999,999	0	127,390	0.000000	1.000000

TN 07/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,000	2,000	0.060375	0.060375
	2	2,000	2,000	4,000	0.060375	0.120751
	2	3,000	2,000	6,000	0.060375	0.181126
	2	4,000	2,000	8,000	0.060375	0.241502
	2	5,000	2,000	10,000	0.060375	0.301877
	2	10,000	10,000	20,000	0.301877	0.603755
	2	15,000	8,513	28,513	0.256988	0.860743
	1	20,000	4,613	33,126	0.139256	1.000000
	0	25,000	0	33,126	0.000000	1.000000
	0	30,000	0	33,126	0.000000	1.000000
	0	35,000	0	33,126	0.000000	1.000000
	0	40,000	0	33,126	0.000000	1.000000
	0	45,000	0	33,126	0.000000	1.000000
	0	50,000	0	33,126	0.000000	1.000000
	0	90,000	0	33,126	0.000000	1.000000
	0	100,000	0	33,126	0.000000	1.000000
	0	135,000	0	33,126	0.000000	1.000000
	0	150,000	0	33,126	0.000000	1.000000
	0	200,000	0	33,126	0.000000	1.000000
	0	250,000	0	33,126	0.000000	1.000000
	0	300,000	0	33,126	0.000000	1.000000
	0	600,000	0	33,126	0.000000	1.000000
	0	999,999	0	33,126	0.000000	1.000000

TN 07/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	89	1,000	70,430	70,430	0.064227	0.064227
	64	2,000	62,189	132,619	0.056712	0.120939

61	3,000	59,857	192,476	0.054585	0.175524
59	4,000	58,333	250,809	0.053195	0.228720
57	5,000	55,826	306,635	0.050909	0.279630
55	10,000	236,818	543,453	0.215961	0.495591
41	15,000	164,835	708,288	0.150318	0.645909
25	20,000	90,618	798,906	0.082637	0.728547
15	25,000	68,549	867,455	0.062512	0.791059
11	30,000	37,539	904,994	0.034233	0.825292
5	35,000	20,849	925,843	0.019012	0.844305
4	40,000	16,132	941,975	0.014711	0.859016
3	45,000	15,000	956,975	0.013679	0.872695
3	50,000	15,000	971,975	0.013679	0.886374
3	90,000	99,340	1,071,315	0.090591	0.976965
2	100,000	14,956	1,086,271	0.013638	0.990604
1	135,000	10,303	1,096,574	0.009395	1.000000
0	150,000	0	1,096,574	0.000000	1.000000
0	200,000	0	1,096,574	0.000000	1.000000
0	250,000	0	1,096,574	0.000000	1.000000
0	300,000	0	1,096,574	0.000000	1.000000
0	600,000	0	1,096,574	0.000000	1.000000
0	999,999	0	1,096,574	0.000000	1.000000

TN 07/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	53	1,000	47,021	47,021	0.007818	0.007818
	47	2,000	46,176	93,197	0.007678	0.015496
	46	3,000	46,000	139,197	0.007648	0.023145
	46	4,000	46,000	185,197	0.007648	0.030794
	46	5,000	46,000	231,197	0.007648	0.038443
	46	10,000	228,755	459,952	0.038037	0.076481
	45	15,000	210,245	670,197	0.034959	0.111441
	39	20,000	185,195	855,392	0.030794	0.142235
	35	25,000	159,467	1,014,859	0.026516	0.168751
	29	30,000	137,070	1,151,929	0.022792	0.191544
	26	35,000	130,000	1,281,929	0.021616	0.213160
	26	40,000	125,499	1,407,428	0.020868	0.234028
	24	45,000	113,440	1,520,868	0.018862	0.252891
	21	50,000	102,050	1,622,918	0.016969	0.269860
	20	90,000	614,692	2,237,610	0.102211	0.372072
	13	100,000	103,683	2,341,293	0.017240	0.389312
	9	135,000	252,883	2,594,176	0.042049	0.431362
	5	150,000	75,000	2,669,176	0.012471	0.443833
	5	200,000	250,000	2,919,176	0.041570	0.485403
	5	250,000	208,843	3,128,019	0.034726	0.520130
	4	300,000	200,000	3,328,019	0.033256	0.553386
	4	600,000	709,114	4,037,133	0.117912	0.671299
	2	999,999	1,976,778	6,013,911	0.328700	1.000000

TN 07/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001698	0.001698
	3	2,000	3,000	6,000	0.001698	0.003397
	3	3,000	3,000	9,000	0.001698	0.005095

3	4,000	3,000	12,000	0.001698	0.006794
3	5,000	3,000	15,000	0.001698	0.008493
3	10,000	15,000	30,000	0.008493	0.016986
3	15,000	15,000	45,000	0.008493	0.025479
3	20,000	15,000	60,000	0.008493	0.033972
3	25,000	15,000	75,000	0.008493	0.042465
3	30,000	15,000	90,000	0.008493	0.050958
3	35,000	15,000	105,000	0.008493	0.059450
3	40,000	15,000	120,000	0.008493	0.067943
3	45,000	15,000	135,000	0.008493	0.076436
3	50,000	15,000	150,000	0.008493	0.084929
3	90,000	120,000	270,000	0.067943	0.152873
3	100,000	30,000	300,000	0.016986	0.169859
3	135,000	105,000	405,000	0.059450	0.229310
3	150,000	30,816	435,816	0.017448	0.246758
2	200,000	100,000	535,816	0.056619	0.303378
2	250,000	100,000	635,816	0.056619	0.359998
2	300,000	100,000	735,816	0.056619	0.416618
2	600,000	552,842	1,288,658	0.313018	0.729637
1	999,999	477,504	1,766,162	0.270362	1.000000

TN 07/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.168265	0.168265
	2	2,000	2,000	4,000	0.168265	0.336530
	2	3,000	1,719	5,719	0.144623	0.481154
	1	4,000	1,000	6,719	0.084132	0.565286
	1	5,000	1,000	7,719	0.084132	0.649419
	1	10,000	4,167	11,886	0.350580	1.000000
	0	15,000	0	11,886	0.000000	1.000000
	0	20,000	0	11,886	0.000000	1.000000
	0	25,000	0	11,886	0.000000	1.000000
	0	30,000	0	11,886	0.000000	1.000000
	0	35,000	0	11,886	0.000000	1.000000
	0	40,000	0	11,886	0.000000	1.000000
	0	45,000	0	11,886	0.000000	1.000000
	0	50,000	0	11,886	0.000000	1.000000
	0	90,000	0	11,886	0.000000	1.000000
	0	100,000	0	11,886	0.000000	1.000000
	0	135,000	0	11,886	0.000000	1.000000
	0	150,000	0	11,886	0.000000	1.000000
	0	200,000	0	11,886	0.000000	1.000000
	0	250,000	0	11,886	0.000000	1.000000
	0	300,000	0	11,886	0.000000	1.000000
	0	600,000	0	11,886	0.000000	1.000000
	0	999,999	0	11,886	0.000000	1.000000

TN 08/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	128,575	1,000	1,512,010	1,512,010	1.007902	1.007902
	6	2,000	(1,798)	1,510,212	(0.001198)	1.006704
	2	3,000	(2,000)	1,508,212	(0.001333)	1.005370
	2	4,000	(2,000)	1,506,212	(0.001333)	1.004037
	2	5,000	(2,000)	1,504,212	(0.001333)	1.002704
	2	10,000	(4,057)	1,500,155	(0.002704)	1.000000
	0	15,000	0	1,500,155	0.000000	1.000000
	0	20,000	0	1,500,155	0.000000	1.000000
	0	25,000	0	1,500,155	0.000000	1.000000
	0	30,000	0	1,500,155	0.000000	1.000000
	0	35,000	0	1,500,155	0.000000	1.000000
	0	40,000	0	1,500,155	0.000000	1.000000
	0	45,000	0	1,500,155	0.000000	1.000000
	0	50,000	0	1,500,155	0.000000	1.000000
	0	90,000	0	1,500,155	0.000000	1.000000
	0	100,000	0	1,500,155	0.000000	1.000000
	0	135,000	0	1,500,155	0.000000	1.000000
	0	150,000	0	1,500,155	0.000000	1.000000
	0	200,000	0	1,500,155	0.000000	1.000000
	0	250,000	0	1,500,155	0.000000	1.000000
	0	300,000	0	1,500,155	0.000000	1.000000
	0	600,000	0	1,500,155	0.000000	1.000000
	0	999,999	0	1,500,155	0.000000	1.000000

TN 08/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	65	1,000	8,285	8,285	0.975739	0.975739
	1	2,000	206	8,491	0.024261	1.000000
	0	3,000	0	8,491	0.000000	1.000000
	0	4,000	0	8,491	0.000000	1.000000
	0	5,000	0	8,491	0.000000	1.000000
	0	10,000	0	8,491	0.000000	1.000000
	0	15,000	0	8,491	0.000000	1.000000
	0	20,000	0	8,491	0.000000	1.000000
	0	25,000	0	8,491	0.000000	1.000000
	0	30,000	0	8,491	0.000000	1.000000
	0	35,000	0	8,491	0.000000	1.000000
	0	40,000	0	8,491	0.000000	1.000000
	0	45,000	0	8,491	0.000000	1.000000
	0	50,000	0	8,491	0.000000	1.000000
	0	90,000	0	8,491	0.000000	1.000000
	0	100,000	0	8,491	0.000000	1.000000
	0	135,000	0	8,491	0.000000	1.000000
	0	150,000	0	8,491	0.000000	1.000000
	0	200,000	0	8,491	0.000000	1.000000
	0	250,000	0	8,491	0.000000	1.000000
	0	300,000	0	8,491	0.000000	1.000000
	0	600,000	0	8,491	0.000000	1.000000
	0	999,999	0	8,491	0.000000	1.000000

TN 08/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,015	1,000	1,438,084	1,438,084	0.731068	0.731068
479	2,000	271,282	1,709,366	0.137909	0.868978
155	3,000	103,467	1,812,833	0.052598	0.921577
79	4,000	60,434	1,873,267	0.030722	0.952299
47	5,000	34,346	1,907,613	0.017460	0.969760
29	10,000	55,207	1,962,820	0.028065	0.997825
3	15,000	4,278	1,967,098	0.002174	1.000000
0	20,000	0	1,967,098	0.000000	1.000000
0	25,000	0	1,967,098	0.000000	1.000000
0	30,000	0	1,967,098	0.000000	1.000000
0	35,000	0	1,967,098	0.000000	1.000000
0	40,000	0	1,967,098	0.000000	1.000000
0	45,000	0	1,967,098	0.000000	1.000000
0	50,000	0	1,967,098	0.000000	1.000000
0	90,000	0	1,967,098	0.000000	1.000000
0	100,000	0	1,967,098	0.000000	1.000000
0	135,000	0	1,967,098	0.000000	1.000000
0	150,000	0	1,967,098	0.000000	1.000000
0	200,000	0	1,967,098	0.000000	1.000000
0	250,000	0	1,967,098	0.000000	1.000000
0	300,000	0	1,967,098	0.000000	1.000000
0	600,000	0	1,967,098	0.000000	1.000000
0	999,999	0	1,967,098	0.000000	1.000000

TN 08/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	36	1,000	21,354	21,354	0.150881	0.150881
	17	2,000	15,437	36,791	0.109073	0.259955
	15	3,000	12,685	49,476	0.089628	0.349584
	12	4,000	11,880	61,356	0.083941	0.433525
	11	5,000	10,304	71,660	0.072805	0.506330
	9	10,000	41,489	113,149	0.293150	0.799481
	6	15,000	24,612	137,761	0.173902	0.973383
	2	20,000	3,767	141,528	0.026616	1.000000
	0	25,000	0	141,528	0.000000	1.000000
	0	30,000	0	141,528	0.000000	1.000000
	0	35,000	0	141,528	0.000000	1.000000
	0	40,000	0	141,528	0.000000	1.000000
	0	45,000	0	141,528	0.000000	1.000000
	0	50,000	0	141,528	0.000000	1.000000
	0	90,000	0	141,528	0.000000	1.000000
	0	100,000	0	141,528	0.000000	1.000000
	0	135,000	0	141,528	0.000000	1.000000
	0	150,000	0	141,528	0.000000	1.000000
	0	200,000	0	141,528	0.000000	1.000000
	0	250,000	0	141,528	0.000000	1.000000
	0	300,000	0	141,528	0.000000	1.000000
	0	600,000	0	141,528	0.000000	1.000000
	0	999,999	0	141,528	0.000000	1.000000

TN 08/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	4,021	4,021	0.030752	0.030752

4	2,000	4,000	8,021	0.030591	0.061343
4	3,000	4,000	12,021	0.030591	0.091935
4	4,000	4,000	16,021	0.030591	0.122526
4	5,000	4,000	20,021	0.030591	0.153118
4	10,000	16,213	36,234	0.123995	0.277113
3	15,000	15,000	51,234	0.114718	0.391832
3	20,000	15,000	66,234	0.114718	0.506550
3	25,000	10,970	77,204	0.083897	0.590447
2	30,000	10,000	87,204	0.076478	0.666926
2	35,000	10,000	97,204	0.076478	0.743405
2	40,000	10,000	107,204	0.076478	0.819884
2	45,000	5,537	112,741	0.042346	0.862230
1	50,000	5,000	117,741	0.038239	0.900470
1	90,000	13,014	130,755	0.099529	1.000000
0	100,000	0	130,755	0.000000	1.000000
0	135,000	0	130,755	0.000000	1.000000
0	150,000	0	130,755	0.000000	1.000000
0	200,000	0	130,755	0.000000	1.000000
0	250,000	0	130,755	0.000000	1.000000
0	300,000	0	130,755	0.000000	1.000000
0	600,000	0	130,755	0.000000	1.000000
0	999,999	0	130,755	0.000000	1.000000

TN 08/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,000	2,000	0.164609	0.164609
	2	2,000	2,000	4,000	0.164609	0.329218
	2	3,000	2,000	6,000	0.164609	0.493827
	2	4,000	2,000	8,000	0.164609	0.658436
	2	5,000	1,629	9,629	0.134074	0.792510
	1	10,000	2,521	12,150	0.207489	1.000000
	0	15,000	0	12,150	0.000000	1.000000
	0	20,000	0	12,150	0.000000	1.000000
	0	25,000	0	12,150	0.000000	1.000000
	0	30,000	0	12,150	0.000000	1.000000
	0	35,000	0	12,150	0.000000	1.000000
	0	40,000	0	12,150	0.000000	1.000000
	0	45,000	0	12,150	0.000000	1.000000
	0	50,000	0	12,150	0.000000	1.000000
	0	90,000	0	12,150	0.000000	1.000000
	0	100,000	0	12,150	0.000000	1.000000
	0	135,000	0	12,150	0.000000	1.000000
	0	150,000	0	12,150	0.000000	1.000000
	0	200,000	0	12,150	0.000000	1.000000
	0	250,000	0	12,150	0.000000	1.000000
	0	300,000	0	12,150	0.000000	1.000000
	0	600,000	0	12,150	0.000000	1.000000
	0	999,999	0	12,150	0.000000	1.000000

TN 08/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	89	1,000	70,339	70,339	0.063372	0.063372
	66	2,000	61,164	131,503	0.055106	0.118479

63	3,000	57,772	189,275	0.052050	0.170530
58	4,000	55,212	244,487	0.049744	0.220274
55	5,000	53,000	297,487	0.047751	0.268025
55	10,000	228,566	526,053	0.205929	0.473954
41	15,000	166,385	692,438	0.149906	0.623861
24	20,000	94,343	786,781	0.084999	0.708861
15	25,000	71,110	857,891	0.064067	0.772929
13	30,000	39,614	897,505	0.035690	0.808619
5	35,000	20,794	918,299	0.018734	0.827354
4	40,000	20,000	938,299	0.018019	0.845373
4	45,000	16,259	954,558	0.014648	0.860022
3	50,000	15,000	969,558	0.013514	0.873537
3	90,000	111,074	1,080,632	0.100073	0.973610
2	100,000	15,171	1,095,803	0.013668	0.987279
1	135,000	14,119	1,109,922	0.012720	1.000000
0	150,000	0	1,109,922	0.000000	1.000000
0	200,000	0	1,109,922	0.000000	1.000000
0	250,000	0	1,109,922	0.000000	1.000000
0	300,000	0	1,109,922	0.000000	1.000000
0	600,000	0	1,109,922	0.000000	1.000000
0	999,999	0	1,109,922	0.000000	1.000000

TN 08/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	52	1,000	47,021	47,021	0.007340	0.007340
	47	2,000	46,981	94,002	0.007334	0.014675
	46	3,000	46,000	140,002	0.007181	0.021856
	46	4,000	46,000	186,002	0.007181	0.029038
	46	5,000	45,830	231,832	0.007154	0.036193
	45	10,000	223,597	455,429	0.034907	0.071100
	43	15,000	207,528	662,957	0.032398	0.103499
	39	20,000	190,212	853,169	0.029695	0.133194
	37	25,000	182,199	1,035,368	0.028444	0.161639
	34	30,000	149,063	1,184,431	0.023271	0.184910
	27	35,000	127,575	1,312,006	0.019916	0.204827
	24	40,000	117,111	1,429,117	0.018283	0.223110
	23	45,000	108,200	1,537,317	0.016891	0.240002
	21	50,000	102,973	1,640,290	0.016075	0.256078
	19	90,000	627,134	2,267,424	0.097906	0.353984
	13	100,000	109,085	2,376,509	0.017030	0.371015
	9	135,000	299,615	2,676,124	0.046775	0.417790
	7	150,000	96,312	2,772,436	0.015036	0.432826
	6	200,000	288,939	3,061,375	0.045108	0.477934
	5	250,000	202,840	3,264,215	0.031666	0.509601
	4	300,000	200,000	3,464,215	0.031223	0.540825
	4	600,000	1,105,706	4,569,921	0.172620	0.713445
	2	999,999	1,835,505	6,405,426	0.286554	1.000000

TN 08/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001482	0.001482
	3	2,000	3,000	6,000	0.001482	0.002964
	3	3,000	3,000	9,000	0.001482	0.004447

3	4,000	3,000	12,000	0.001482	0.005929
3	5,000	3,000	15,000	0.001482	0.007411
3	10,000	15,000	30,000	0.007411	0.014823
3	15,000	15,000	45,000	0.007411	0.022235
3	20,000	15,000	60,000	0.007411	0.029646
3	25,000	15,000	75,000	0.007411	0.037058
3	30,000	15,000	90,000	0.007411	0.044470
3	35,000	15,000	105,000	0.007411	0.051882
3	40,000	15,000	120,000	0.007411	0.059293
3	45,000	15,000	135,000	0.007411	0.066705
3	50,000	15,000	150,000	0.007411	0.074117
3	90,000	120,000	270,000	0.059293	0.133410
3	100,000	30,000	300,000	0.014823	0.148234
3	135,000	105,000	405,000	0.051882	0.200116
3	150,000	45,000	450,000	0.022235	0.222351
3	200,000	137,339	587,339	0.067861	0.290212
2	250,000	100,000	687,339	0.049411	0.339623
2	300,000	100,000	787,339	0.049411	0.389035
2	600,000	600,000	1,387,339	0.296468	0.685503
2	999,999	636,486	2,023,825	0.314496	1.000000

TN 08/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.159223	0.159223
	2	2,000	2,000	4,000	0.159223	0.318446
	2	3,000	1,541	5,541	0.122681	0.441127
	1	4,000	1,000	6,541	0.079611	0.520738
	1	5,000	1,000	7,541	0.079611	0.600350
	1	10,000	5,000	12,541	0.398057	0.998407
	1	15,000	20	12,561	0.001592	1.000000
	0	20,000	0	12,561	0.000000	1.000000
	0	25,000	0	12,561	0.000000	1.000000
	0	30,000	0	12,561	0.000000	1.000000
	0	35,000	0	12,561	0.000000	1.000000
	0	40,000	0	12,561	0.000000	1.000000
	0	45,000	0	12,561	0.000000	1.000000
	0	50,000	0	12,561	0.000000	1.000000
	0	90,000	0	12,561	0.000000	1.000000
	0	100,000	0	12,561	0.000000	1.000000
	0	135,000	0	12,561	0.000000	1.000000
	0	150,000	0	12,561	0.000000	1.000000
	0	200,000	0	12,561	0.000000	1.000000
	0	250,000	0	12,561	0.000000	1.000000
	0	300,000	0	12,561	0.000000	1.000000
	0	600,000	0	12,561	0.000000	1.000000
	0	999,999	0	12,561	0.000000	1.000000

TN 09/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	128,437	1,000	1,618,140	1,618,140	0.996659	0.996659
	5	2,000	1,270	1,619,410	0.000782	0.997441
	1	3,000	1,000	1,620,410	0.000615	0.998057
	1	4,000	1,000	1,621,410	0.000615	0.998673
	1	5,000	1,000	1,622,410	0.000615	0.999289
	1	10,000	1,154	1,623,564	0.000710	1.000000
	0	15,000	0	1,623,564	0.000000	1.000000
	0	20,000	0	1,623,564	0.000000	1.000000
	0	25,000	0	1,623,564	0.000000	1.000000
	0	30,000	0	1,623,564	0.000000	1.000000
	0	35,000	0	1,623,564	0.000000	1.000000
	0	40,000	0	1,623,564	0.000000	1.000000
	0	45,000	0	1,623,564	0.000000	1.000000
	0	50,000	0	1,623,564	0.000000	1.000000
	0	90,000	0	1,623,564	0.000000	1.000000
	0	100,000	0	1,623,564	0.000000	1.000000
	0	135,000	0	1,623,564	0.000000	1.000000
	0	150,000	0	1,623,564	0.000000	1.000000
	0	200,000	0	1,623,564	0.000000	1.000000
	0	250,000	0	1,623,564	0.000000	1.000000
	0	300,000	0	1,623,564	0.000000	1.000000
	0	600,000	0	1,623,564	0.000000	1.000000
	0	999,999	0	1,623,564	0.000000	1.000000

TN 09/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	64	1,000	8,197	8,197	1.000000	1.000000
	0	2,000	0	8,197	0.000000	1.000000
	0	3,000	0	8,197	0.000000	1.000000
	0	4,000	0	8,197	0.000000	1.000000
	0	5,000	0	8,197	0.000000	1.000000
	0	10,000	0	8,197	0.000000	1.000000
	0	15,000	0	8,197	0.000000	1.000000
	0	20,000	0	8,197	0.000000	1.000000
	0	25,000	0	8,197	0.000000	1.000000
	0	30,000	0	8,197	0.000000	1.000000
	0	35,000	0	8,197	0.000000	1.000000
	0	40,000	0	8,197	0.000000	1.000000
	0	45,000	0	8,197	0.000000	1.000000
	0	50,000	0	8,197	0.000000	1.000000
	0	90,000	0	8,197	0.000000	1.000000
	0	100,000	0	8,197	0.000000	1.000000
	0	135,000	0	8,197	0.000000	1.000000
	0	150,000	0	8,197	0.000000	1.000000
	0	200,000	0	8,197	0.000000	1.000000
	0	250,000	0	8,197	0.000000	1.000000
	0	300,000	0	8,197	0.000000	1.000000
	0	600,000	0	8,197	0.000000	1.000000
	0	999,999	0	8,197	0.000000	1.000000

TN 09/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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15,959	1,000	1,510,563	1,510,563	0.727209	0.727209
507	2,000	294,809	1,805,372	0.141925	0.869135
166	3,000	110,424	1,915,796	0.053159	0.922295
84	4,000	61,856	1,977,652	0.029778	0.952073
55	5,000	33,917	2,011,569	0.016328	0.968401
27	10,000	55,507	2,067,076	0.026722	0.995123
4	15,000	8,489	2,075,565	0.004086	0.999210
1	20,000	1,640	2,077,205	0.000789	1.000000
0	25,000	0	2,077,205	0.000000	1.000000
0	30,000	0	2,077,205	0.000000	1.000000
0	35,000	0	2,077,205	0.000000	1.000000
0	40,000	0	2,077,205	0.000000	1.000000
0	45,000	0	2,077,205	0.000000	1.000000
0	50,000	0	2,077,205	0.000000	1.000000
0	90,000	0	2,077,205	0.000000	1.000000
0	100,000	0	2,077,205	0.000000	1.000000
0	135,000	0	2,077,205	0.000000	1.000000
0	150,000	0	2,077,205	0.000000	1.000000
0	200,000	0	2,077,205	0.000000	1.000000
0	250,000	0	2,077,205	0.000000	1.000000
0	300,000	0	2,077,205	0.000000	1.000000
0	600,000	0	2,077,205	0.000000	1.000000
0	999,999	0	2,077,205	0.000000	1.000000

TN 09/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	36	1,000	21,960	21,960	0.148458	0.148458
	17	2,000	14,984	36,944	0.101298	0.249756
	13	3,000	13,000	49,944	0.087885	0.337642
	13	4,000	12,379	62,323	0.083687	0.421329
	11	5,000	11,000	73,323	0.074364	0.495693
	11	10,000	41,812	115,135	0.282666	0.778359
	7	15,000	26,558	141,693	0.179543	0.957902
	4	20,000	6,227	147,920	0.042097	1.000000
	0	25,000	0	147,920	0.000000	1.000000
	0	30,000	0	147,920	0.000000	1.000000
	0	35,000	0	147,920	0.000000	1.000000
	0	40,000	0	147,920	0.000000	1.000000
	0	45,000	0	147,920	0.000000	1.000000
	0	50,000	0	147,920	0.000000	1.000000
	0	90,000	0	147,920	0.000000	1.000000
	0	100,000	0	147,920	0.000000	1.000000
	0	135,000	0	147,920	0.000000	1.000000
	0	150,000	0	147,920	0.000000	1.000000
	0	200,000	0	147,920	0.000000	1.000000
	0	250,000	0	147,920	0.000000	1.000000
	0	300,000	0	147,920	0.000000	1.000000
	0	600,000	0	147,920	0.000000	1.000000
	0	999,999	0	147,920	0.000000	1.000000

TN 09/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	5,000	5,000	0.038780	0.038780

5	2,000	5,000	10,000	0.038780	0.077561
5	3,000	5,000	15,000	0.038780	0.116342
5	4,000	5,000	20,000	0.038780	0.155122
5	5,000	5,000	25,000	0.038780	0.193903
5	10,000	24,255	49,255	0.188125	0.382029
4	15,000	20,000	69,255	0.155122	0.537151
4	20,000	17,841	87,096	0.138377	0.675529
2	25,000	7,271	94,367	0.056394	0.731924
1	30,000	5,000	99,367	0.038780	0.770705
1	35,000	5,000	104,367	0.038780	0.809485
1	40,000	5,000	109,367	0.038780	0.848266
1	45,000	5,000	114,367	0.038780	0.887047
1	50,000	5,000	119,367	0.038780	0.925828
1	90,000	9,563	128,930	0.074172	1.000000
0	100,000	0	128,930	0.000000	1.000000
0	135,000	0	128,930	0.000000	1.000000
0	150,000	0	128,930	0.000000	1.000000
0	200,000	0	128,930	0.000000	1.000000
0	250,000	0	128,930	0.000000	1.000000
0	300,000	0	128,930	0.000000	1.000000
0	600,000	0	128,930	0.000000	1.000000
0	999,999	0	128,930	0.000000	1.000000

TN 09/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.000934	0.000934
	1	2,000	1,000	2,000	0.000934	0.001868
	1	3,000	1,000	3,000	0.000934	0.002802
	1	4,000	1,000	4,000	0.000934	0.003736
	1	5,000	1,000	5,000	0.000934	0.004670
	1	10,000	5,000	10,000	0.004670	0.009340
	1	15,000	5,000	15,000	0.004670	0.014011
	1	20,000	5,000	20,000	0.004670	0.018681
	1	25,000	5,000	25,000	0.004670	0.023351
	1	30,000	5,000	30,000	0.004670	0.028022
	1	35,000	5,000	35,000	0.004670	0.032692
	1	40,000	5,000	40,000	0.004670	0.037362
	1	45,000	5,000	45,000	0.004670	0.042033
	1	50,000	5,000	50,000	0.004670	0.046703
	1	90,000	40,000	90,000	0.037362	0.084066
	1	100,000	10,000	100,000	0.009340	0.093407
	1	135,000	35,000	135,000	0.032692	0.126099
	1	150,000	15,000	150,000	0.014011	0.140111
	1	200,000	50,000	200,000	0.046703	0.186814
	1	250,000	50,000	250,000	0.046703	0.233518
	1	300,000	50,000	300,000	0.046703	0.280221
	1	600,000	300,000	600,000	0.280221	0.560443
	1	999,999	470,580	1,070,580	0.439556	1.000000

TN 09/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	4,000	4,000	0.009002	0.009002
	4	2,000	4,000	8,000	0.009002	0.018004

4	3,000	4,000	12,000	0.009002	0.027006
4	4,000	4,000	16,000	0.009002	0.036009
4	5,000	4,000	20,000	0.009002	0.045011
4	10,000	15,460	35,460	0.034793	0.079805
3	15,000	15,000	50,460	0.033758	0.113564
3	20,000	15,000	65,460	0.033758	0.147322
3	25,000	15,000	80,460	0.033758	0.181081
3	30,000	11,943	92,403	0.026878	0.207959
2	35,000	10,000	102,403	0.022505	0.230465
2	40,000	10,000	112,403	0.022505	0.252971
2	45,000	10,000	122,403	0.022505	0.275477
2	50,000	10,000	132,403	0.022505	0.297982
2	90,000	80,000	212,403	0.180046	0.478028
2	100,000	20,000	232,403	0.045011	0.523040
2	135,000	70,000	302,403	0.157540	0.680580
2	150,000	30,000	332,403	0.067517	0.748097
2	200,000	94,179	426,582	0.211956	0.960054
1	250,000	17,749	444,331	0.039945	1.000000
0	300,000	0	444,331	0.000000	1.000000
0	600,000	0	444,331	0.000000	1.000000
0	999,999	0	444,331	0.000000	1.000000

TN 09/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	87	1,000	73,784	73,784	0.064373	0.064373
	69	2,000	64,515	138,299	0.056286	0.120659
	62	3,000	60,807	199,106	0.053051	0.173710
	58	4,000	57,781	256,887	0.050411	0.224121
	57	5,000	55,375	312,262	0.048312	0.272433
	55	10,000	239,914	552,176	0.209313	0.481747
	42	15,000	166,947	719,123	0.145653	0.627400
	26	20,000	96,390	815,513	0.084095	0.711495
	16	25,000	74,271	889,784	0.064797	0.776293
	12	30,000	44,735	934,519	0.039029	0.815322
	7	35,000	25,791	960,310	0.022501	0.837824
	4	40,000	15,762	976,072	0.013751	0.851575
	3	45,000	15,000	991,072	0.013086	0.864662
	3	50,000	15,000	1,006,072	0.013086	0.877749
	3	90,000	107,434	1,113,506	0.093731	0.971480
	2	100,000	20,000	1,133,506	0.017449	0.988929
	2	135,000	12,689	1,146,195	0.011070	1.000000
	0	150,000	0	1,146,195	0.000000	1.000000
	0	200,000	0	1,146,195	0.000000	1.000000
	0	250,000	0	1,146,195	0.000000	1.000000
	0	300,000	0	1,146,195	0.000000	1.000000
	0	600,000	0	1,146,195	0.000000	1.000000
	0	999,999	0	1,146,195	0.000000	1.000000

TN 09/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	52	1,000	48,062	48,062	0.007944	0.007944
	48	2,000	48,000	96,062	0.007934	0.015879
	48	3,000	48,000	144,062	0.007934	0.023813

48	4,000	47,554	191,616	0.007860	0.031674
47	5,000	47,000	238,616	0.007769	0.039443
47	10,000	225,583	464,199	0.037289	0.076732
44	15,000	206,828	671,027	0.034188	0.110921
39	20,000	188,138	859,165	0.031099	0.142020
36	25,000	171,195	1,030,360	0.028298	0.170319
33	30,000	149,417	1,179,777	0.024698	0.195017
26	35,000	127,091	1,306,868	0.021008	0.216026
24	40,000	119,461	1,426,329	0.019747	0.235773
23	45,000	108,963	1,535,292	0.018011	0.253784
21	50,000	100,659	1,635,951	0.016639	0.270423
20	90,000	596,751	2,232,702	0.098643	0.369067
10	100,000	100,000	2,332,702	0.016530	0.385597
10	135,000	314,532	2,647,234	0.051992	0.437589
8	150,000	102,536	2,749,770	0.016949	0.454538
6	200,000	275,424	3,025,194	0.045527	0.500066
5	250,000	211,569	3,236,763	0.034972	0.535038
4	300,000	200,000	3,436,763	0.033060	0.568099
4	600,000	938,552	4,375,315	0.155143	0.723242
2	999,999	1,674,269	6,049,584	0.276757	1.000000

TN 09/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001483	0.001483
	3	2,000	3,000	6,000	0.001483	0.002966
	3	3,000	3,000	9,000	0.001483	0.004449
	3	4,000	3,000	12,000	0.001483	0.005932
	3	5,000	3,000	15,000	0.001483	0.007415
	3	10,000	15,000	30,000	0.007415	0.014830
	3	15,000	15,000	45,000	0.007415	0.022245
	3	20,000	15,000	60,000	0.007415	0.029660
	3	25,000	15,000	75,000	0.007415	0.037075
	3	30,000	15,000	90,000	0.007415	0.044490
	3	35,000	15,000	105,000	0.007415	0.051905
	3	40,000	15,000	120,000	0.007415	0.059321
	3	45,000	15,000	135,000	0.007415	0.066736
	3	50,000	15,000	150,000	0.007415	0.074151
	3	90,000	120,000	270,000	0.059321	0.133472
	3	100,000	30,000	300,000	0.014830	0.148302
	3	135,000	105,000	405,000	0.051905	0.200208
	3	150,000	45,000	450,000	0.022245	0.222453
	3	200,000	150,000	600,000	0.074151	0.296604
	3	250,000	106,290	706,290	0.052543	0.349148
	2	300,000	100,000	806,290	0.049434	0.398582
	2	600,000	600,000	1,406,290	0.296604	0.695187
	2	999,999	616,603	2,022,893	0.304812	1.000000

TN 09/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.139577	0.139577
	2	2,000	2,000	4,000	0.139577	0.279154
	2	3,000	1,624	5,624	0.113336	0.392490
	1	4,000	1,000	6,624	0.069788	0.462279

1	5,000	1,000	7,624	0.069788	0.532067
1	10,000	5,000	12,624	0.348942	0.881010
1	15,000	1,705	14,329	0.118989	1.000000
0	20,000	0	14,329	0.000000	1.000000
0	25,000	0	14,329	0.000000	1.000000
0	30,000	0	14,329	0.000000	1.000000
0	35,000	0	14,329	0.000000	1.000000
0	40,000	0	14,329	0.000000	1.000000
0	45,000	0	14,329	0.000000	1.000000
0	50,000	0	14,329	0.000000	1.000000
0	90,000	0	14,329	0.000000	1.000000
0	100,000	0	14,329	0.000000	1.000000
0	135,000	0	14,329	0.000000	1.000000
0	150,000	0	14,329	0.000000	1.000000
0	200,000	0	14,329	0.000000	1.000000
0	250,000	0	14,329	0.000000	1.000000
0	300,000	0	14,329	0.000000	1.000000
0	600,000	0	14,329	0.000000	1.000000
0	999,999	0	14,329	0.000000	1.000000

TN 10/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	128,929	1,000	2,149,547	2,149,547	1.002079	1.002079
	7	2,000	(308)	2,149,239	(0.000143)	1.001935
	1	3,000	(1,000)	2,148,239	(0.000466)	1.001469
	1	4,000	(1,000)	2,147,239	(0.000466)	1.001003
	1	5,000	(1,000)	2,146,239	(0.000466)	1.000537
	1	10,000	(1,152)	2,145,087	(0.000537)	1.000000
	0	15,000	0	2,145,087	0.000000	1.000000
	0	20,000	0	2,145,087	0.000000	1.000000
	0	25,000	0	2,145,087	0.000000	1.000000
	0	30,000	0	2,145,087	0.000000	1.000000
	0	35,000	0	2,145,087	0.000000	1.000000
	0	40,000	0	2,145,087	0.000000	1.000000
	0	45,000	0	2,145,087	0.000000	1.000000
	0	50,000	0	2,145,087	0.000000	1.000000
	0	90,000	0	2,145,087	0.000000	1.000000
	0	100,000	0	2,145,087	0.000000	1.000000
	0	135,000	0	2,145,087	0.000000	1.000000
	0	150,000	0	2,145,087	0.000000	1.000000
	0	200,000	0	2,145,087	0.000000	1.000000
	0	250,000	0	2,145,087	0.000000	1.000000
	0	300,000	0	2,145,087	0.000000	1.000000
	0	600,000	0	2,145,087	0.000000	1.000000
	0	999,999	0	2,145,087	0.000000	1.000000

TN 10/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	64	1,000	4,439	4,439	1.000000	1.000000
	0	2,000	0	4,439	0.000000	1.000000
	0	3,000	0	4,439	0.000000	1.000000
	0	4,000	0	4,439	0.000000	1.000000
	0	5,000	0	4,439	0.000000	1.000000
	0	10,000	0	4,439	0.000000	1.000000
	0	15,000	0	4,439	0.000000	1.000000
	0	20,000	0	4,439	0.000000	1.000000
	0	25,000	0	4,439	0.000000	1.000000
	0	30,000	0	4,439	0.000000	1.000000
	0	35,000	0	4,439	0.000000	1.000000
	0	40,000	0	4,439	0.000000	1.000000
	0	45,000	0	4,439	0.000000	1.000000
	0	50,000	0	4,439	0.000000	1.000000
	0	90,000	0	4,439	0.000000	1.000000
	0	100,000	0	4,439	0.000000	1.000000
	0	135,000	0	4,439	0.000000	1.000000
	0	150,000	0	4,439	0.000000	1.000000
	0	200,000	0	4,439	0.000000	1.000000
	0	250,000	0	4,439	0.000000	1.000000
	0	300,000	0	4,439	0.000000	1.000000
	0	600,000	0	4,439	0.000000	1.000000
	0	999,999	0	4,439	0.000000	1.000000

TN 10/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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15,955	1,000	1,791,403	1,791,403	0.692635	0.692635
634	2,000	401,336	2,192,739	0.155174	0.847809
235	3,000	162,837	2,355,576	0.062960	0.910769
115	4,000	86,763	2,442,339	0.033546	0.944315
71	5,000	55,520	2,497,859	0.021466	0.965782
44	10,000	84,251	2,582,110	0.032575	0.998357
3	15,000	4,248	2,586,358	0.001642	1.000000
0	20,000	0	2,586,358	0.000000	1.000000
0	25,000	0	2,586,358	0.000000	1.000000
0	30,000	0	2,586,358	0.000000	1.000000
0	35,000	0	2,586,358	0.000000	1.000000
0	40,000	0	2,586,358	0.000000	1.000000
0	45,000	0	2,586,358	0.000000	1.000000
0	50,000	0	2,586,358	0.000000	1.000000
0	90,000	0	2,586,358	0.000000	1.000000
0	100,000	0	2,586,358	0.000000	1.000000
0	135,000	0	2,586,358	0.000000	1.000000
0	150,000	0	2,586,358	0.000000	1.000000
0	200,000	0	2,586,358	0.000000	1.000000
0	250,000	0	2,586,358	0.000000	1.000000
0	300,000	0	2,586,358	0.000000	1.000000
0	600,000	0	2,586,358	0.000000	1.000000
0	999,999	0	2,586,358	0.000000	1.000000

TN 10/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	36	1,000	34,000	34,000	0.136221	0.136221
	34	2,000	31,591	65,591	0.126569	0.262790
	28	3,000	22,802	88,393	0.091356	0.354147
	20	4,000	18,386	106,779	0.073663	0.427810
	17	5,000	17,000	123,779	0.068110	0.495921
	17	10,000	64,060	187,839	0.256656	0.752578
	8	15,000	37,527	225,366	0.150352	0.902930
	7	20,000	19,897	245,263	0.079717	0.982647
	1	25,000	4,331	249,594	0.017352	1.000000
	0	30,000	0	249,594	0.000000	1.000000
	0	35,000	0	249,594	0.000000	1.000000
	0	40,000	0	249,594	0.000000	1.000000
	0	45,000	0	249,594	0.000000	1.000000
	0	50,000	0	249,594	0.000000	1.000000
	0	90,000	0	249,594	0.000000	1.000000
	0	100,000	0	249,594	0.000000	1.000000
	0	135,000	0	249,594	0.000000	1.000000
	0	150,000	0	249,594	0.000000	1.000000
	0	200,000	0	249,594	0.000000	1.000000
	0	250,000	0	249,594	0.000000	1.000000
	0	300,000	0	249,594	0.000000	1.000000
	0	600,000	0	249,594	0.000000	1.000000
	0	999,999	0	249,594	0.000000	1.000000

TN 10/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	5,000	5,000	0.033805	0.033805

5	2,000	5,000	10,000	0.033805	0.067611
5	3,000	5,000	15,000	0.033805	0.101417
5	4,000	5,000	20,000	0.033805	0.135223
5	5,000	5,000	25,000	0.033805	0.169029
5	10,000	24,416	49,416	0.165081	0.334110
4	15,000	18,574	67,990	0.125582	0.459693
3	20,000	15,000	82,990	0.101417	0.561111
3	25,000	13,230	96,220	0.089450	0.650561
2	30,000	5,618	101,838	0.037984	0.688545
1	35,000	5,000	106,838	0.033805	0.722351
1	40,000	5,000	111,838	0.033805	0.756157
1	45,000	5,000	116,838	0.033805	0.789963
1	50,000	5,000	121,838	0.033805	0.823769
1	90,000	26,065	147,903	0.176230	1.000000
0	100,000	0	147,903	0.000000	1.000000
0	135,000	0	147,903	0.000000	1.000000
0	150,000	0	147,903	0.000000	1.000000
0	200,000	0	147,903	0.000000	1.000000
0	250,000	0	147,903	0.000000	1.000000
0	300,000	0	147,903	0.000000	1.000000
0	600,000	0	147,903	0.000000	1.000000
0	999,999	0	147,903	0.000000	1.000000

TN 10/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.000387	0.000387
	1	2,000	1,000	2,000	0.000387	0.000774
	1	3,000	1,000	3,000	0.000387	0.001161
	1	4,000	1,000	4,000	0.000387	0.001548
	1	5,000	1,000	5,000	0.000387	0.001935
	1	10,000	5,000	10,000	0.001935	0.003870
	1	15,000	5,000	15,000	0.001935	0.005805
	1	20,000	5,000	20,000	0.001935	0.007740
	1	25,000	5,000	25,000	0.001935	0.009675
	1	30,000	5,000	30,000	0.001935	0.011611
	1	35,000	5,000	35,000	0.001935	0.013546
	1	40,000	5,000	40,000	0.001935	0.015481
	1	45,000	5,000	45,000	0.001935	0.017416
	1	50,000	5,000	50,000	0.001935	0.019351
	1	90,000	40,000	90,000	0.015481	0.034833
	1	100,000	10,000	100,000	0.003870	0.038703
	1	135,000	35,000	135,000	0.013546	0.052249
	1	150,000	15,000	150,000	0.005805	0.058054
	1	200,000	50,000	200,000	0.019351	0.077406
	1	250,000	50,000	250,000	0.019351	0.096758
	1	300,000	50,000	300,000	0.019351	0.116109
	1	600,000	300,000	600,000	0.116109	0.232219
	1	999,999	1,983,760	2,583,760	0.767780	1.000000

TN 10/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,000	2,000	0.013057	0.013057
	2	2,000	2,000	4,000	0.013057	0.026115

2	3,000	2,000	6,000	0.013057	0.039173
2	4,000	2,000	8,000	0.013057	0.052230
2	5,000	2,000	10,000	0.013057	0.065288
2	10,000	10,000	20,000	0.065288	0.130577
2	15,000	10,000	30,000	0.065288	0.195865
2	20,000	10,000	40,000	0.065288	0.261154
2	25,000	10,000	50,000	0.065288	0.326443
2	30,000	10,000	60,000	0.065288	0.391731
2	35,000	10,000	70,000	0.065288	0.457020
2	40,000	10,000	80,000	0.065288	0.522309
2	45,000	10,000	90,000	0.065288	0.587597
2	50,000	8,185	98,185	0.053438	0.641036
1	90,000	40,000	138,185	0.261154	0.902191
1	100,000	10,000	148,185	0.065288	0.967479
1	135,000	4,981	153,166	0.032520	1.000000
0	150,000	0	153,166	0.000000	1.000000
0	200,000	0	153,166	0.000000	1.000000
0	250,000	0	153,166	0.000000	1.000000
0	300,000	0	153,166	0.000000	1.000000
0	600,000	0	153,166	0.000000	1.000000
0	999,999	0	153,166	0.000000	1.000000

TN 10/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	87	1,000	82,247	82,247	0.053255	0.053255
	81	2,000	77,964	160,211	0.050482	0.103738
	76	3,000	74,753	234,964	0.048403	0.152141
	73	4,000	71,912	306,876	0.046563	0.198705
	70	5,000	70,000	376,876	0.045325	0.244031
	70	10,000	310,586	687,462	0.201107	0.445139
	55	15,000	243,060	930,522	0.157384	0.602523
	40	20,000	155,170	1,085,692	0.100474	0.702997
	23	25,000	92,913	1,178,605	0.060162	0.763159
	16	30,000	64,799	1,243,404	0.041958	0.805117
	10	35,000	47,313	1,290,717	0.030635	0.835753
	9	40,000	40,264	1,330,981	0.026071	0.861825
	8	45,000	28,543	1,359,524	0.018481	0.880306
	4	50,000	16,893	1,376,417	0.010938	0.891245
	3	90,000	118,604	1,495,021	0.076797	0.968042
	2	100,000	20,000	1,515,021	0.012950	0.980993
	2	135,000	29,354	1,544,375	0.019007	1.000000
	0	150,000	0	1,544,375	0.000000	1.000000
	0	200,000	0	1,544,375	0.000000	1.000000
	0	250,000	0	1,544,375	0.000000	1.000000
	0	300,000	0	1,544,375	0.000000	1.000000
	0	600,000	0	1,544,375	0.000000	1.000000
	0	999,999	0	1,544,375	0.000000	1.000000

TN 10/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	52	1,000	49,314	49,314	0.007756	0.007756
	49	2,000	49,000	98,314	0.007706	0.015462
	49	3,000	49,000	147,314	0.007706	0.023169

49	4,000	49,000	196,314	0.007706	0.030876
49	5,000	49,000	245,314	0.007706	0.038583
49	10,000	243,072	488,386	0.038230	0.076813
47	15,000	233,662	722,048	0.036750	0.113564
45	20,000	210,181	932,229	0.033057	0.146621
40	25,000	189,543	1,121,772	0.029811	0.176433
36	30,000	167,967	1,289,739	0.026418	0.202851
31	35,000	148,821	1,438,560	0.023406	0.226257
29	40,000	135,948	1,574,508	0.021382	0.247639
26	45,000	129,822	1,704,330	0.020418	0.268058
25	50,000	120,250	1,824,580	0.018913	0.286971
24	90,000	708,850	2,533,430	0.111488	0.398459
15	100,000	144,199	2,677,629	0.022679	0.421139
13	135,000	351,044	3,028,673	0.055212	0.476351
9	150,000	135,000	3,163,673	0.021232	0.497584
9	200,000	344,629	3,508,302	0.054203	0.551788
5	250,000	209,915	3,718,217	0.033015	0.584803
4	300,000	200,000	3,918,217	0.031456	0.616259
4	600,000	1,042,365	4,960,582	0.163943	0.780203
2	999,999	1,397,478	6,358,060	0.219796	1.000000

TN 10/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001285	0.001285
	3	2,000	3,000	6,000	0.001285	0.002570
	3	3,000	3,000	9,000	0.001285	0.003855
	3	4,000	3,000	12,000	0.001285	0.005140
	3	5,000	3,000	15,000	0.001285	0.006425
	3	10,000	15,000	30,000	0.006425	0.012851
	3	15,000	15,000	45,000	0.006425	0.019277
	3	20,000	15,000	60,000	0.006425	0.025703
	3	25,000	15,000	75,000	0.006425	0.032129
	3	30,000	15,000	90,000	0.006425	0.038554
	3	35,000	15,000	105,000	0.006425	0.044980
	3	40,000	15,000	120,000	0.006425	0.051406
	3	45,000	15,000	135,000	0.006425	0.057832
	3	50,000	15,000	150,000	0.006425	0.064258
	3	90,000	120,000	270,000	0.051406	0.115664
	3	100,000	30,000	300,000	0.012851	0.128516
	3	135,000	105,000	405,000	0.044980	0.173497
	3	150,000	45,000	450,000	0.019277	0.192774
	3	200,000	150,000	600,000	0.064258	0.257032
	3	250,000	150,000	750,000	0.064258	0.321290
	3	300,000	125,122	875,122	0.053600	0.374891
	2	600,000	600,000	1,475,122	0.257032	0.631924
	2	999,999	859,212	2,334,334	0.368075	1.000000

TN 10/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.084505	0.084505
	2	2,000	2,000	4,000	0.084505	0.169011
	2	3,000	2,000	6,000	0.084505	0.253517
	2	4,000	1,360	7,360	0.057464	0.310981

1	5,000	1,000	8,360	0.042252	0.353234
1	10,000	5,000	13,360	0.211264	0.564499
1	15,000	5,000	18,360	0.211264	0.775763
1	20,000	5,000	23,360	0.211264	0.987028
1	25,000	307	23,667	0.012971	1.000000
0	30,000	0	23,667	0.000000	1.000000
0	35,000	0	23,667	0.000000	1.000000
0	40,000	0	23,667	0.000000	1.000000
0	45,000	0	23,667	0.000000	1.000000
0	50,000	0	23,667	0.000000	1.000000
0	90,000	0	23,667	0.000000	1.000000
0	100,000	0	23,667	0.000000	1.000000
0	135,000	0	23,667	0.000000	1.000000
0	150,000	0	23,667	0.000000	1.000000
0	200,000	0	23,667	0.000000	1.000000
0	250,000	0	23,667	0.000000	1.000000
0	300,000	0	23,667	0.000000	1.000000
0	600,000	0	23,667	0.000000	1.000000
0	999,999	0	23,667	0.000000	1.000000

TN 11/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	130,979	1,000	7,255,879	7,255,879	0.994670	0.994670
	34	2,000	15,412	7,271,291	0.002112	0.996783
	9	3,000	6,545	7,277,836	0.000897	0.997680
	6	4,000	5,005	7,282,841	0.000686	0.998366
	5	5,000	4,421	7,287,262	0.000606	0.998972
	4	10,000	7,493	7,294,755	0.001027	1.000000
	0	15,000	0	7,294,755	0.000000	1.000000
	0	20,000	0	7,294,755	0.000000	1.000000
	0	25,000	0	7,294,755	0.000000	1.000000
	0	30,000	0	7,294,755	0.000000	1.000000
	0	35,000	0	7,294,755	0.000000	1.000000
	0	40,000	0	7,294,755	0.000000	1.000000
	0	45,000	0	7,294,755	0.000000	1.000000
	0	50,000	0	7,294,755	0.000000	1.000000
	0	90,000	0	7,294,755	0.000000	1.000000
	0	100,000	0	7,294,755	0.000000	1.000000
	0	135,000	0	7,294,755	0.000000	1.000000
	0	150,000	0	7,294,755	0.000000	1.000000
	0	200,000	0	7,294,755	0.000000	1.000000
	0	250,000	0	7,294,755	0.000000	1.000000
	0	300,000	0	7,294,755	0.000000	1.000000
	0	600,000	0	7,294,755	0.000000	1.000000
	0	999,999	0	7,294,755	0.000000	1.000000

TN 11/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	62	1,000	6,860	6,860	1.000000	1.000000
	0	2,000	0	6,860	0.000000	1.000000
	0	3,000	0	6,860	0.000000	1.000000
	0	4,000	0	6,860	0.000000	1.000000
	0	5,000	0	6,860	0.000000	1.000000
	0	10,000	0	6,860	0.000000	1.000000
	0	15,000	0	6,860	0.000000	1.000000
	0	20,000	0	6,860	0.000000	1.000000
	0	25,000	0	6,860	0.000000	1.000000
	0	30,000	0	6,860	0.000000	1.000000
	0	35,000	0	6,860	0.000000	1.000000
	0	40,000	0	6,860	0.000000	1.000000
	0	45,000	0	6,860	0.000000	1.000000
	0	50,000	0	6,860	0.000000	1.000000
	0	90,000	0	6,860	0.000000	1.000000
	0	100,000	0	6,860	0.000000	1.000000
	0	135,000	0	6,860	0.000000	1.000000
	0	150,000	0	6,860	0.000000	1.000000
	0	200,000	0	6,860	0.000000	1.000000
	0	250,000	0	6,860	0.000000	1.000000
	0	300,000	0	6,860	0.000000	1.000000
	0	600,000	0	6,860	0.000000	1.000000
	0	999,999	0	6,860	0.000000	1.000000

TN 11/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,245	1,000	3,266,595	3,266,595	0.624200	0.624200
1,269	2,000	847,416	4,114,011	0.161929	0.786129
580	3,000	412,922	4,526,933	0.078903	0.865032
301	4,000	237,015	4,763,948	0.045290	0.910323
185	5,000	156,708	4,920,656	0.029944	0.940267
131	10,000	287,203	5,207,859	0.054880	0.995148
17	15,000	25,391	5,233,250	0.004851	1.000000
0	20,000	0	5,233,250	0.000000	1.000000
0	25,000	0	5,233,250	0.000000	1.000000
0	30,000	0	5,233,250	0.000000	1.000000
0	35,000	0	5,233,250	0.000000	1.000000
0	40,000	0	5,233,250	0.000000	1.000000
0	45,000	0	5,233,250	0.000000	1.000000
0	50,000	0	5,233,250	0.000000	1.000000
0	90,000	0	5,233,250	0.000000	1.000000
0	100,000	0	5,233,250	0.000000	1.000000
0	135,000	0	5,233,250	0.000000	1.000000
0	150,000	0	5,233,250	0.000000	1.000000
0	200,000	0	5,233,250	0.000000	1.000000
0	250,000	0	5,233,250	0.000000	1.000000
0	300,000	0	5,233,250	0.000000	1.000000
0	600,000	0	5,233,250	0.000000	1.000000
0	999,999	0	5,233,250	0.000000	1.000000

TN 11/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	37	1,000	35,000	35,000	0.063367	0.063367
	35	2,000	35,000	70,000	0.063367	0.126734
	35	3,000	35,000	105,000	0.063367	0.190102
	35	4,000	35,000	140,000	0.063367	0.253469
	35	5,000	34,644	174,644	0.062722	0.316192
	34	10,000	161,030	335,674	0.291544	0.607737
	26	15,000	105,403	441,077	0.190832	0.798569
	17	20,000	61,865	502,942	0.112006	0.910575
	9	25,000	32,338	535,280	0.058547	0.969123
	3	30,000	13,524	548,804	0.024485	0.993608
	2	35,000	3,530	552,334	0.006391	1.000000
	0	40,000	0	552,334	0.000000	1.000000
	0	45,000	0	552,334	0.000000	1.000000
	0	50,000	0	552,334	0.000000	1.000000
	0	90,000	0	552,334	0.000000	1.000000
	0	100,000	0	552,334	0.000000	1.000000
	0	135,000	0	552,334	0.000000	1.000000
	0	150,000	0	552,334	0.000000	1.000000
	0	200,000	0	552,334	0.000000	1.000000
	0	250,000	0	552,334	0.000000	1.000000
	0	300,000	0	552,334	0.000000	1.000000
	0	600,000	0	552,334	0.000000	1.000000
	0	999,999	0	552,334	0.000000	1.000000

TN 11/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	5,000	5,000	0.030546	0.030546

5	2,000	4,504	9,504	0.027516	0.058063
4	3,000	4,000	13,504	0.024437	0.082500
4	4,000	4,000	17,504	0.024437	0.106938
4	5,000	4,000	21,504	0.024437	0.131375
4	10,000	20,000	41,504	0.122187	0.253563
4	15,000	20,000	61,504	0.122187	0.375750
4	20,000	16,182	77,686	0.098861	0.474612
3	25,000	15,000	92,686	0.091640	0.566253
3	30,000	11,646	104,332	0.071149	0.637402
2	35,000	7,333	111,665	0.044800	0.682202
1	40,000	5,000	116,665	0.030546	0.712749
1	45,000	5,000	121,665	0.030546	0.743296
1	50,000	5,000	126,665	0.030546	0.773843
1	90,000	37,018	163,683	0.226156	1.000000
0	100,000	0	163,683	0.000000	1.000000
0	135,000	0	163,683	0.000000	1.000000
0	150,000	0	163,683	0.000000	1.000000
0	200,000	0	163,683	0.000000	1.000000
0	250,000	0	163,683	0.000000	1.000000
0	300,000	0	163,683	0.000000	1.000000
0	600,000	0	163,683	0.000000	1.000000
0	999,999	0	163,683	0.000000	1.000000

TN 11/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	1	1,000	1,000	1,000	0.008288	0.008288
	1	2,000	1,000	2,000	0.008288	0.016576
	1	3,000	1,000	3,000	0.008288	0.024865
	1	4,000	1,000	4,000	0.008288	0.033153
	1	5,000	1,000	5,000	0.008288	0.041442
	1	10,000	5,000	10,000	0.041442	0.082884
	1	15,000	5,000	15,000	0.041442	0.124326
	1	20,000	5,000	20,000	0.041442	0.165768
	1	25,000	5,000	25,000	0.041442	0.207210
	1	30,000	5,000	30,000	0.041442	0.248653
	1	35,000	5,000	35,000	0.041442	0.290095
	1	40,000	5,000	40,000	0.041442	0.331537
	1	45,000	5,000	45,000	0.041442	0.372979
	1	50,000	5,000	50,000	0.041442	0.414421
	1	90,000	40,000	90,000	0.331537	0.745959
	1	100,000	10,000	100,000	0.082884	0.828843
	1	135,000	20,650	120,650	0.171156	1.000000
	0	150,000	0	120,650	0.000000	1.000000
	0	200,000	0	120,650	0.000000	1.000000
	0	250,000	0	120,650	0.000000	1.000000
	0	300,000	0	120,650	0.000000	1.000000
	0	600,000	0	120,650	0.000000	1.000000
	0	999,999	0	120,650	0.000000	1.000000

TN 11/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	3,000	3,000	0.006967	0.006967
	3	2,000	2,833	5,833	0.006579	0.013546

2	3,000	2,000	7,833	0.004644	0.018190
2	4,000	2,000	9,833	0.004644	0.022835
2	5,000	2,000	11,833	0.004644	0.027480
2	10,000	10,000	21,833	0.023223	0.050703
2	15,000	10,000	31,833	0.023223	0.073927
2	20,000	10,000	41,833	0.023223	0.097150
2	25,000	10,000	51,833	0.023223	0.120373
2	30,000	10,000	61,833	0.023223	0.143597
2	35,000	10,000	71,833	0.023223	0.166820
2	40,000	10,000	81,833	0.023223	0.190044
2	45,000	10,000	91,833	0.023223	0.213267
2	50,000	10,000	101,833	0.023223	0.236490
2	90,000	78,839	180,672	0.183091	0.419582
1	100,000	10,000	190,672	0.023223	0.442805
1	135,000	35,000	225,672	0.081281	0.524087
1	150,000	15,000	240,672	0.034835	0.558922
1	200,000	50,000	290,672	0.116117	0.675039
1	250,000	50,000	340,672	0.116117	0.791156
1	300,000	50,000	390,672	0.116117	0.907273
1	600,000	39,928	430,600	0.092726	1.000000
0	999,999	0	430,600	0.000000	1.000000

TN 11/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	87	1,000	84,989	84,989	0.039235	0.039235
	84	2,000	84,000	168,989	0.038778	0.078013
	84	3,000	84,000	252,989	0.038778	0.116791
	84	4,000	84,000	336,989	0.038778	0.155570
	84	5,000	84,000	420,989	0.038778	0.194348
	84	10,000	410,748	831,737	0.189621	0.383969
	80	15,000	335,079	1,166,816	0.154688	0.538658
	58	20,000	251,220	1,418,036	0.115975	0.654633
	40	25,000	173,429	1,591,465	0.080063	0.734696
	30	30,000	125,791	1,717,256	0.058071	0.792768
	22	35,000	83,506	1,800,762	0.038550	0.831318
	13	40,000	54,701	1,855,463	0.025252	0.856571
	10	45,000	50,000	1,905,463	0.023082	0.879653
	10	50,000	46,049	1,951,512	0.021258	0.900911
	7	90,000	142,563	2,094,075	0.065813	0.966725
	3	100,000	21,600	2,115,675	0.009971	0.976697
	2	135,000	43,412	2,159,087	0.020041	0.996738
	1	150,000	7,065	2,166,152	0.003261	1.000000
	0	200,000	0	2,166,152	0.000000	1.000000
	0	250,000	0	2,166,152	0.000000	1.000000
	0	300,000	0	2,166,152	0.000000	1.000000
	0	600,000	0	2,166,152	0.000000	1.000000
	0	999,999	0	2,166,152	0.000000	1.000000

TN 11/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	52	1,000	50,000	50,000	0.006955	0.006955
	50	2,000	50,000	100,000	0.006955	0.013910
	50	3,000	50,000	150,000	0.006955	0.020866

50	4,000	50,000	200,000	0.006955	0.027821
50	5,000	49,136	249,136	0.006835	0.034656
49	10,000	245,000	494,136	0.034081	0.068738
49	15,000	240,795	734,931	0.033496	0.102234
48	20,000	230,872	965,803	0.032116	0.134350
44	25,000	198,716	1,164,519	0.027643	0.161993
39	30,000	183,780	1,348,299	0.025565	0.187559
35	35,000	167,307	1,515,606	0.023273	0.210833
32	40,000	158,700	1,674,306	0.022076	0.232909
30	45,000	141,446	1,815,752	0.019676	0.252585
28	50,000	135,893	1,951,645	0.018903	0.271489
26	90,000	858,065	2,809,710	0.119363	0.390853
18	100,000	159,156	2,968,866	0.022139	0.412993
15	135,000	444,102	3,412,968	0.061778	0.474771
10	150,000	150,000	3,562,968	0.020866	0.495637
10	200,000	445,432	4,008,400	0.061963	0.557600
7	250,000	290,179	4,298,579	0.040366	0.597966
5	300,000	250,000	4,548,579	0.034777	0.632743
5	600,000	1,211,582	5,760,161	0.168540	0.801284
4	999,999	1,428,497	7,188,658	0.198715	1.000000

TN 11/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001074	0.001074
	3	2,000	3,000	6,000	0.001074	0.002148
	3	3,000	3,000	9,000	0.001074	0.003222
	3	4,000	3,000	12,000	0.001074	0.004296
	3	5,000	3,000	15,000	0.001074	0.005370
	3	10,000	15,000	30,000	0.005370	0.010740
	3	15,000	15,000	45,000	0.005370	0.016110
	3	20,000	15,000	60,000	0.005370	0.021481
	3	25,000	15,000	75,000	0.005370	0.026851
	3	30,000	15,000	90,000	0.005370	0.032221
	3	35,000	15,000	105,000	0.005370	0.037591
	3	40,000	15,000	120,000	0.005370	0.042962
	3	45,000	15,000	135,000	0.005370	0.048332
	3	50,000	15,000	150,000	0.005370	0.053702
	3	90,000	120,000	270,000	0.042962	0.096664
	3	100,000	30,000	300,000	0.010740	0.107405
	3	135,000	105,000	405,000	0.037591	0.144997
	3	150,000	45,000	450,000	0.016110	0.161107
	3	200,000	150,000	600,000	0.053702	0.214810
	3	250,000	150,000	750,000	0.053702	0.268513
	3	300,000	150,000	900,000	0.053702	0.322215
	3	600,000	623,130	1,523,130	0.223091	0.545307
	2	999,999	1,270,030	2,793,160	0.454692	1.000000

TN 11/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.029678	0.029678
	2	2,000	2,000	4,000	0.029678	0.059356
	2	3,000	2,000	6,000	0.029678	0.089035
	2	4,000	2,000	8,000	0.029678	0.118713

2	5,000	2,000	10,000	0.029678	0.148392
2	10,000	9,556	19,556	0.141803	0.290195
1	15,000	5,000	24,556	0.074196	0.364391
1	20,000	5,000	29,556	0.074196	0.438587
1	25,000	5,000	34,556	0.074196	0.512784
1	30,000	5,000	39,556	0.074196	0.586980
1	35,000	5,000	44,556	0.074196	0.661176
1	40,000	5,000	49,556	0.074196	0.735372
1	45,000	5,000	54,556	0.074196	0.809568
1	50,000	5,000	59,556	0.074196	0.883764
1	90,000	7,833	67,389	0.116235	1.000000
0	100,000	0	67,389	0.000000	1.000000
0	135,000	0	67,389	0.000000	1.000000
0	150,000	0	67,389	0.000000	1.000000
0	200,000	0	67,389	0.000000	1.000000
0	250,000	0	67,389	0.000000	1.000000
0	300,000	0	67,389	0.000000	1.000000
0	600,000	0	67,389	0.000000	1.000000
0	999,999	0	67,389	0.000000	1.000000

TN 12/2002 311	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	132,979	1,000	18,677,071	18,677,071	1.000237	1.000237
	71	2,000	14,677	18,691,748	0.000786	1.001023
	11	3,000	(3,266)	18,688,482	(0.000174)	1.000848
	6	4,000	(4,313)	18,684,169	(0.000231)	1.000617
	5	5,000	(4,421)	18,679,748	(0.000236)	1.000380
	4	10,000	(7,102)	18,672,646	(0.000380)	1.000000
	0	15,000	0	18,672,646	0.000000	1.000000
	0	20,000	0	18,672,646	0.000000	1.000000
	0	25,000	0	18,672,646	0.000000	1.000000
	0	30,000	0	18,672,646	0.000000	1.000000
	0	35,000	0	18,672,646	0.000000	1.000000
	0	40,000	0	18,672,646	0.000000	1.000000
	0	45,000	0	18,672,646	0.000000	1.000000
	0	50,000	0	18,672,646	0.000000	1.000000
	0	90,000	0	18,672,646	0.000000	1.000000
	0	100,000	0	18,672,646	0.000000	1.000000
	0	135,000	0	18,672,646	0.000000	1.000000
	0	150,000	0	18,672,646	0.000000	1.000000
	0	200,000	0	18,672,646	0.000000	1.000000
	0	250,000	0	18,672,646	0.000000	1.000000
	0	300,000	0	18,672,646	0.000000	1.000000
	0	600,000	0	18,672,646	0.000000	1.000000
	0	999,999	0	18,672,646	0.000000	1.000000

TN 12/2002 312	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	63	1,000	16,124	16,124	1.000000	1.000000
	0	2,000	0	16,124	0.000000	1.000000
	0	3,000	0	16,124	0.000000	1.000000
	0	4,000	0	16,124	0.000000	1.000000
	0	5,000	0	16,124	0.000000	1.000000
	0	10,000	0	16,124	0.000000	1.000000
	0	15,000	0	16,124	0.000000	1.000000
	0	20,000	0	16,124	0.000000	1.000000
	0	25,000	0	16,124	0.000000	1.000000
	0	30,000	0	16,124	0.000000	1.000000
	0	35,000	0	16,124	0.000000	1.000000
	0	40,000	0	16,124	0.000000	1.000000
	0	45,000	0	16,124	0.000000	1.000000
	0	50,000	0	16,124	0.000000	1.000000
	0	90,000	0	16,124	0.000000	1.000000
	0	100,000	0	16,124	0.000000	1.000000
	0	135,000	0	16,124	0.000000	1.000000
	0	150,000	0	16,124	0.000000	1.000000
	0	200,000	0	16,124	0.000000	1.000000
	0	250,000	0	16,124	0.000000	1.000000
	0	300,000	0	16,124	0.000000	1.000000
	0	600,000	0	16,124	0.000000	1.000000
	0	999,999	0	16,124	0.000000	1.000000

TN 12/2002 321	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
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16,603	1,000	6,156,439	6,156,439	0.539251	0.539251
2,713	2,000	1,896,930	8,053,369	0.166154	0.705405
1,344	3,000	1,069,426	9,122,795	0.093672	0.799078
831	4,000	670,272	9,793,067	0.058710	0.857788
534	5,000	454,091	10,247,158	0.039774	0.897562
376	10,000	962,322	11,209,480	0.084291	0.981853
78	15,000	184,242	11,393,722	0.016138	0.997991
7	20,000	20,386	11,414,108	0.001785	0.999777
1	25,000	2,540	11,416,648	0.000222	1.000000
0	30,000	0	11,416,648	0.000000	1.000000
0	35,000	0	11,416,648	0.000000	1.000000
0	40,000	0	11,416,648	0.000000	1.000000
0	45,000	0	11,416,648	0.000000	1.000000
0	50,000	0	11,416,648	0.000000	1.000000
0	90,000	0	11,416,648	0.000000	1.000000
0	100,000	0	11,416,648	0.000000	1.000000
0	135,000	0	11,416,648	0.000000	1.000000
0	150,000	0	11,416,648	0.000000	1.000000
0	200,000	0	11,416,648	0.000000	1.000000
0	250,000	0	11,416,648	0.000000	1.000000
0	300,000	0	11,416,648	0.000000	1.000000
0	600,000	0	11,416,648	0.000000	1.000000
0	999,999	0	11,416,648	0.000000	1.000000

TN 12/2002 331	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	37	1,000	36,000	36,000	0.048310	0.048310
	36	2,000	36,000	72,000	0.048310	0.096620
	36	3,000	36,000	108,000	0.048310	0.144930
	36	4,000	36,000	144,000	0.048310	0.193240
	36	5,000	36,000	180,000	0.048310	0.241550
	36	10,000	175,347	355,347	0.235306	0.476856
	33	15,000	147,075	502,422	0.197366	0.674223
	25	20,000	100,605	603,027	0.135006	0.809230
	15	25,000	66,136	669,163	0.088751	0.897981
	11	30,000	42,170	711,333	0.056589	0.954571
	6	35,000	24,182	735,515	0.032451	0.987022
	3	40,000	9,671	745,186	0.012978	1.000000
	0	45,000	0	745,186	0.000000	1.000000
	0	50,000	0	745,186	0.000000	1.000000
	0	90,000	0	745,186	0.000000	1.000000
	0	100,000	0	745,186	0.000000	1.000000
	0	135,000	0	745,186	0.000000	1.000000
	0	150,000	0	745,186	0.000000	1.000000
	0	200,000	0	745,186	0.000000	1.000000
	0	250,000	0	745,186	0.000000	1.000000
	0	300,000	0	745,186	0.000000	1.000000
	0	600,000	0	745,186	0.000000	1.000000
	0	999,999	0	745,186	0.000000	1.000000

TN 12/2002 341	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	6	1,000	5,000	5,000	0.021944	0.021944

5	2,000	5,000	10,000	0.021944	0.043889
5	3,000	5,000	15,000	0.021944	0.065834
5	4,000	5,000	20,000	0.021944	0.087779
5	5,000	5,000	25,000	0.021944	0.109724
5	10,000	21,301	46,301	0.093489	0.203214
4	15,000	16,900	63,201	0.074173	0.277388
3	20,000	15,000	78,201	0.065834	0.343223
3	25,000	15,000	93,201	0.065834	0.409058
3	30,000	15,000	108,201	0.065834	0.474892
3	35,000	13,315	121,516	0.058439	0.533332
2	40,000	10,000	131,516	0.043889	0.577222
2	45,000	10,000	141,516	0.043889	0.621111
2	50,000	10,000	151,516	0.043889	0.665001
2	90,000	63,899	215,415	0.280451	0.945453
1	100,000	10,000	225,415	0.043889	0.989343
1	135,000	2,428	227,843	0.010656	1.000000
0	150,000	0	227,843	0.000000	1.000000
0	200,000	0	227,843	0.000000	1.000000
0	250,000	0	227,843	0.000000	1.000000
0	300,000	0	227,843	0.000000	1.000000
0	600,000	0	227,843	0.000000	1.000000
0	999,999	0	227,843	0.000000	1.000000

TN 12/2002 360	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	9	1,000	9,000	9,000	0.002375	0.002375
	9	2,000	9,000	18,000	0.002375	0.004750
	9	3,000	9,000	27,000	0.002375	0.007125
	9	4,000	9,000	36,000	0.002375	0.009500
	9	5,000	9,000	45,000	0.002375	0.011875
	9	10,000	45,000	90,000	0.011875	0.023751
	9	15,000	45,000	135,000	0.011875	0.035626
	9	20,000	45,000	180,000	0.011875	0.047501
	9	25,000	45,000	225,000	0.011875	0.059377
	8	30,000	40,000	265,000	0.010556	0.069933
	8	35,000	40,000	305,000	0.010556	0.080489
	8	40,000	40,000	345,000	0.010556	0.091045
	8	45,000	40,000	385,000	0.010556	0.101601
	8	50,000	40,000	425,000	0.010556	0.112157
	8	90,000	320,000	745,000	0.084447	0.196605
	8	100,000	80,000	825,000	0.021112	0.217717
	8	135,000	280,000	1,105,000	0.073891	0.291609
	8	150,000	120,000	1,225,000	0.031668	0.323277
	7	200,000	350,000	1,575,000	0.092364	0.415641
	7	250,000	350,000	1,925,000	0.092364	0.508006
	7	300,000	350,000	2,275,000	0.092364	0.600371
	7	600,000	1,256,790	3,531,790	0.331666	0.932037
	2	999,999	257,530	3,789,320	0.067962	1.000000

TN 12/2002 365	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	5	1,000	2,000	2,000	0.030565	0.030565
	2	2,000	2,000	4,000	0.030565	0.061130

2	3,000	2,000	6,000	0.030565	0.091695
2	4,000	2,000	8,000	0.030565	0.122260
2	5,000	2,000	10,000	0.030565	0.152825
2	10,000	10,000	20,000	0.152825	0.305651
2	15,000	10,000	30,000	0.152825	0.458477
2	20,000	10,000	40,000	0.152825	0.611303
2	25,000	8,794	48,794	0.134395	0.745698
1	30,000	5,000	53,794	0.076412	0.822110
1	35,000	5,000	58,794	0.076412	0.898523
1	40,000	5,000	63,794	0.076412	0.974936
1	45,000	1,640	65,434	0.025063	1.000000
0	50,000	0	65,434	0.000000	1.000000
0	90,000	0	65,434	0.000000	1.000000
0	100,000	0	65,434	0.000000	1.000000
0	135,000	0	65,434	0.000000	1.000000
0	150,000	0	65,434	0.000000	1.000000
0	200,000	0	65,434	0.000000	1.000000
0	250,000	0	65,434	0.000000	1.000000
0	300,000	0	65,434	0.000000	1.000000
0	600,000	0	65,434	0.000000	1.000000
0	999,999	0	65,434	0.000000	1.000000

TN 12/2002 371	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	87	1,000	85,000	85,000	0.034359	0.034359
	85	2,000	84,551	169,551	0.034178	0.068537
	84	3,000	84,000	253,551	0.033955	0.102492
	84	4,000	84,000	337,551	0.033955	0.136447
	84	5,000	84,000	421,551	0.033955	0.170403
	84	10,000	419,037	840,588	0.169386	0.339790
	83	15,000	382,723	1,223,311	0.154707	0.494497
	69	20,000	304,315	1,527,626	0.123013	0.617510
	50	25,000	208,240	1,735,866	0.084176	0.701687
	35	30,000	154,677	1,890,543	0.062524	0.764212
	28	35,000	119,906	2,010,449	0.048469	0.812681
	21	40,000	88,307	2,098,756	0.035696	0.848378
	16	45,000	72,058	2,170,814	0.029127	0.877506
	13	50,000	56,989	2,227,803	0.023036	0.900542
	10	90,000	186,815	2,414,618	0.075516	0.976058
	1	100,000	10,000	2,424,618	0.004042	0.980101
	1	135,000	35,000	2,459,618	0.014148	0.994249
	1	150,000	14,227	2,473,845	0.005751	1.000000
	0	200,000	0	2,473,845	0.000000	1.000000
	0	250,000	0	2,473,845	0.000000	1.000000
	0	300,000	0	2,473,845	0.000000	1.000000
	0	600,000	0	2,473,845	0.000000	1.000000
	0	999,999	0	2,473,845	0.000000	1.000000

TN 12/2002 372	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	52	1,000	50,000	50,000	0.006566	0.006566
	50	2,000	50,000	100,000	0.006566	0.013132
	50	3,000	50,000	150,000	0.006566	0.019698

50	4,000	50,000	200,000	0.006566	0.026265
50	5,000	50,000	250,000	0.006566	0.032831
50	10,000	249,161	499,161	0.032721	0.065552
49	15,000	235,435	734,596	0.030918	0.096471
46	20,000	222,045	956,641	0.029160	0.125631
42	25,000	204,257	1,160,898	0.026824	0.152456
39	30,000	183,349	1,344,247	0.024078	0.176534
34	35,000	160,717	1,504,964	0.021106	0.197640
32	40,000	150,849	1,655,813	0.019810	0.217451
29	45,000	142,839	1,798,652	0.018758	0.236209
28	50,000	134,114	1,932,766	0.017612	0.253822
26	90,000	832,450	2,765,216	0.109322	0.363144
18	100,000	180,000	2,945,216	0.023638	0.386783
18	135,000	495,605	3,440,821	0.065085	0.451868
11	150,000	162,459	3,603,280	0.021335	0.473204
10	200,000	451,646	4,054,926	0.059312	0.532516
9	250,000	351,679	4,406,605	0.046184	0.578701
5	300,000	250,000	4,656,605	0.032831	0.611532
5	600,000	1,101,298	5,757,903	0.144629	0.756161
3	999,999	1,856,741	7,614,644	0.243838	1.000000

TN 12/2002 373	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	3,000	3,000	0.001086	0.001086
	3	2,000	3,000	6,000	0.001086	0.002173
	3	3,000	3,000	9,000	0.001086	0.003260
	3	4,000	3,000	12,000	0.001086	0.004347
	3	5,000	3,000	15,000	0.001086	0.005434
	3	10,000	15,000	30,000	0.005434	0.010868
	3	15,000	15,000	45,000	0.005434	0.016303
	3	20,000	15,000	60,000	0.005434	0.021737
	3	25,000	15,000	75,000	0.005434	0.027172
	3	30,000	15,000	90,000	0.005434	0.032606
	3	35,000	15,000	105,000	0.005434	0.038041
	3	40,000	15,000	120,000	0.005434	0.043475
	3	45,000	15,000	135,000	0.005434	0.048909
	3	50,000	15,000	150,000	0.005434	0.054344
	3	90,000	120,000	270,000	0.043475	0.097819
	3	100,000	30,000	300,000	0.010868	0.108688
	3	135,000	105,000	405,000	0.038041	0.146729
	3	150,000	45,000	450,000	0.016303	0.163032
	3	200,000	150,000	600,000	0.054344	0.217377
	3	250,000	150,000	750,000	0.054344	0.271721
	3	300,000	150,000	900,000	0.054344	0.326065
	3	600,000	621,367	1,521,367	0.225118	0.551183
	2	999,999	1,238,814	2,760,181	0.448816	1.000000

TN 12/2002 381	BILLS	BLOCK	THERMS	CUM. THERMS	% THERMS	CUM. %
	3	1,000	2,000	2,000	0.019716	0.019716
	2	2,000	2,000	4,000	0.019716	0.039433
	2	3,000	2,000	6,000	0.019716	0.059150
	2	4,000	2,000	8,000	0.019716	0.078867

2	5,000	2,000	10,000	0.019716	0.098584
2	10,000	10,000	20,000	0.098584	0.197168
2	15,000	10,000	30,000	0.098584	0.295753
2	20,000	5,986	35,986	0.059012	0.354765
1	25,000	5,000	40,986	0.049292	0.404057
1	30,000	5,000	45,986	0.049292	0.453349
1	35,000	5,000	50,986	0.049292	0.502642
1	40,000	5,000	55,986	0.049292	0.551934
1	45,000	5,000	60,986	0.049292	0.601226
1	50,000	5,000	65,986	0.049292	0.650518
1	90,000	35,450	101,436	0.349481	1.000000
0	100,000	0	101,436	0.000000	1.000000
0	135,000	0	101,436	0.000000	1.000000
0	150,000	0	101,436	0.000000	1.000000
0	200,000	0	101,436	0.000000	1.000000
0	250,000	0	101,436	0.000000	1.000000
0	300,000	0	101,436	0.000000	1.000000
0	600,000	0	101,436	0.000000	1.000000
0	999,999	0	101,436	0.000000	1.000000

NO. 126: Provide the following reports from March 2002 through April 2003:

- a. Tennessee O&M Payroll Report
- b. Tennessee Allocated Income Statement showing all O&M expenses by account number.
- c. Corporate Office 3-State Income Statement showing all O&M expenses by account number.
- d. Tennessee Direct Income Statement

RESPONSE:

CDs provided to staff and schedules attached

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR MAR/2002 - MAR/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
84000	8,524.63		0.00		0.00		8,524.63
84100	28,307.17		0.00		0.00		28,307.17
84400	14,996.05		0.00		0.00		14,996.05
84810	14,921.20		0.00		0.00		14,921.20
87000	93,387.28		86.97		0.00		93,474.25
87100	3,695.55		40.29		0.00		3,735.84
87400	2,095.63		0.00		0.00		2,095.63
87500	39,567.66		220.61		309.81		40,098.09
87810	480.44		6.71		0.00		487.15
87815	5,008.93		0.00		50.70		5,059.63
87825	12,093.03		0.00		0.00		12,093.03
87827	35,297.68		0.00		0.00		35,297.68
87828	29,086.06		35.81		15.15		29,137.02
87830	319.36		0.00		0.00		319.36
87910	0.00		6.71		0.00		6.71
87920	39.92		0.00		0.00		39.92
87930	40,516.72		1,356.29		0.00		41,873.01
87940	18,474.10		0.00		0.00		18,474.10
87960	117.87		0.00		0.00		117.87
87970	141,224.56		156.99		395.58		141,777.12
88030	36,434.68		0.00		0.00		36,434.68
88600	3,750.13		0.00		0.00		3,750.13
88700	88,848.83		830.98		1,097.75		90,777.55
88701	2,794.65		0.00		456.48		3,251.13
88710	3,257.48		53.71		0.00		3,311.19
88720	0.00		26.86		0.00		26.86
88730	3,210.11		26.86		384.46		3,621.43
88900	5,867.85		0.00		0.00		5,867.85
89200	73,650.33		490.25		125.83		74,266.42
89201	2,273.23		0.00		31.03		2,304.26
89210	1,903.14		0.00		0.00		1,903.14
89220	79.84		0.00		0.00		79.84
89310	53,923.88		222.53		-387.49		53,758.93
89315	1,776.71		0.00		0.00		1,776.71
90100	26,170.02		107.43		0.00		26,277.45
90200	87,388.41		1,074.29		0.00		88,462.70
90205	768.46		0.00		0.00		768.46
90310	104,308.98		0.00		0.00		104,308.98
90315	399.57		0.00		0.00		399.57
90320	65,125.19		322.29		198.65		65,646.12
90321	5,273.64		0.00		0.00		5,273.64
90325	19.96		0.00		0.00		19.96
90330	43,857.80		0.00		0.00		43,857.80
90500	79.84		0.00		0.00		79.84
91010	6,379.68		0.00		0.00		6,379.68
91500	0.00		120.86		0.00		120.86
91610	27,663.38		0.00		0.00		27,663.38
91620	62,375.13		0.00		0.00		62,375.13

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR MAR/2002 - MAR/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
91760	159.68	0.00	65.07	224.75
91810	60.00	0.00	41.12	101.12
92000	103,731.08	0.00	0.00	103,731.08
92110	0.00	268.57	0.00	268.57
92611	4,328.99	0.00	0.00	4,328.99
92630	5,391.75	0.00	0.00	5,391.75
92900	9,654.71	0.00	0.00	9,654.71
92905	1,994.84	0.00	0.00	1,994.84
93230	3,331.20	0.00	0.00	3,331.20
	1,324,387.01	5,455.00	2,784.14	1,332,626.15

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR APR/2002 - APR/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
84000	7,913.86	0.00	0.00	7,913.86
84100	18,261.36	0.00	0.00	18,261.36
84400	8,647.35	0.00	0.00	8,647.35
84810	8,621.70	0.00	0.00	8,621.70
87000	62,859.29	0.00	0.00	62,859.29
87100	2,342.26	0.00	0.00	2,342.26
87400	2,132.98	0.00	0.00	2,132.98
87500	25,602.63	0.00	0.00	25,602.63
87810	448.02	163.26	1,719.76	27,485.65
87815	5,585.90	4.97	0.00	452.99
87825	9,478.29	0.00	10.72	5,596.62
87827	26,453.80	0.00	0.00	9,478.29
87828	17,828.83	0.00	0.00	26,453.80
87830	379.24	21.20	0.00	17,850.03
87910	0.00	0.00	0.00	379.24
87930	26,568.21	4.97	0.00	4.97
87940	10,170.23	1,003.67	0.00	27,571.88
87970	88,812.34	0.00	0.00	10,170.23
88030	22,386.66	116.17	151.47	89,079.99
88600	5,497.05	0.00	0.00	22,386.66
88700	71,265.80	0.00	0.00	5,497.05
88701	4,688.08	590.13	0.00	72,647.13
88710	2,018.69	0.00	791.20	4,866.00
88720	0.00	39.75	177.92	2,058.44
88730	0.00	19.87	0.00	19.87
88900	1,912.08	19.87	192.52	212.39
89200	47,650.86	0.00	0.00	1,912.08
89201	334.37	349.76	16.35	48,016.97
89210	1,437.12	0.00	35.29	369.66
89310	33,525.68	0.00	0.00	1,437.12
89315	968.24	164.68	568.18	34,258.54
90100	17,446.68	0.00	0.00	968.24
90200	57,307.40	79.50	0.00	17,526.18
90205	279.44	794.99	0.00	58,102.39
90310	70,877.99	0.00	0.00	279.44
90315	19.96	0.00	0.00	70,877.99
90320	43,629.22	0.00	0.00	19.96
90321	3,138.31	238.50	260.55	44,128.26
90330	28,867.26	0.00	0.00	3,138.31
91010	4,995.15	0.00	0.00	28,867.26
91500	0.00	0.00	0.00	4,995.15
91610	18,419.43	89.44	0.00	89.44
91620	41,052.62	0.00	0.00	18,419.43
91810	15.00	0.00	0.00	41,052.62
92000	81,784.49	0.00	0.00	15.00
92110	0.00	198.75	0.00	81,784.49
92611	4,328.99	0.00	0.00	198.75
92640	39.92	0.00	0.00	4,328.99
				39.92

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR APR/2002 - APR/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
92900	3,777.92		0.00		20.78		3,798.70
92905	4,751.60		0.00		0.00		4,751.60
93230	2,220.80		0.00		0.00		2,220.80
	896,743.10		3,993.64		3,944.74		904,681.48

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR MAY/2002 - MAY/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
84000	7,913.86	0.00	0.00	7,913.86
84100	20,693.48	0.00	0.00	20,693.48
84400	7,944.16	0.00	0.00	7,944.16
84810	7,944.16	0.00	0.00	7,944.16
86330	133.04	0.00	0.00	133.04
87000	62,013.84	60.78	0.00	62,074.62
87100	2,463.71	28.16	0.00	2,491.87
87500	24,367.02	154.19	0.34	24,521.55
87810	1,170.94	4.69	199.50	1,375.13
87815	3,620.78	0.00	19.13	3,639.91
87825	9,496.98	0.00	0.00	9,496.98
87827	21,926.77	0.00	154.53	22,081.30
87828	22,100.10	20.02	0.00	22,120.12
87830	119.76	0.00	0.00	119.76
87910	0.00	4.69	0.00	4.69
87930	25,596.29	947.95	0.00	26,544.24
87940	9,160.41	0.00	0.00	9,160.41
87970	95,398.67	109.72	256.02	95,764.41
88030	24,025.55	0.00	0.00	24,025.55
88600	3,193.47	0.00	0.00	3,193.47
88700	68,949.05	557.37	666.94	70,173.36
88701	1,227.38	0.00	0.00	1,227.38
88710	1,783.37	37.54	0.00	1,820.91
88720	79.84	18.77	0.00	98.61
88730	416.08	18.77	53.28	488.14
88900	2,158.80	0.00	0.00	2,158.80
89200	47,322.66	330.34	40.46	47,693.46
89201	1,152.92	0.00	37.94	1,190.86
89210	1,516.96	0.00	0.00	1,516.96
89310	33,531.05	155.53	-154.79	33,531.79
89315	860.08	0.00	0.00	860.08
89320	39.92	0.00	0.00	39.92
90100	17,446.68	75.09	0.00	17,521.77
90200	57,398.59	750.85	0.00	58,149.44
90205	678.64	0.00	0.00	678.64
90310	72,409.73	0.00	0.00	72,409.73
90315	59.88	0.00	0.00	59.88
90320	41,829.55	225.26	385.77	42,440.57
90321	3,302.15	0.00	0.00	3,302.15
90325	99.80	0.00	0.00	99.80
90330	25,914.41	0.00	0.00	25,914.41
91010	4,376.15	0.00	0.00	4,376.15
91500	0.00	84.47	0.00	84.47
91610	18,837.44	0.00	0.00	18,837.44
91620	59,145.05	0.00	0.00	59,145.05
91810	45.00	0.00	33.88	78.88
92000	70,293.86	0.00	0.00	70,293.86
92110	0.00	187.71	0.00	187.71

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR MAY/2002 - MAY/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
92611	4,328.99	0.00	0.00	0.00	0.00	4,328.99	
92630	580.60	0.00	0.00	0.00	0.00	580.60	
92900	3,999.09	0.00	0.00	0.85	0.00	3,999.94	
92905	2,778.48	0.00	0.00	0.00	0.00	2,778.48	
93230	2,231.21	0.00	0.00	0.00	0.00	2,231.21	
	894,076.40	3,771.92		1,693.82		899,542.15	

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR JUN/2002 - JUN/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
84000	7,913.86	0.00	0.00	0.00	7,913.86		
84100	19,902.52	0.00	0.00	0.00	19,902.52		
84400	8,251.32	0.00	0.00	0.00	8,251.32		
84810	8,251.32	0.00	0.00	0.00	8,251.32		
87000	60,808.39	0.00	0.00	0.00	60,808.39		
87100	2,463.70	58.16	0.00	0.00	2,490.64		
87500	23,600.40	26.94	0.00	0.00	24,129.25		
87810	3,951.28	147.54	381.31	0.00	3,955.77		
87815	5,147.14	4.49	0.00	27.96	5,175.10		
87825	10,064.35	0.00	0.00	4.35	10,068.70		
87827	19,428.38	0.00	0.00	0.00	19,428.38		
87828	17,981.91	19.16	0.00	0.00	18,001.07		
87830	174.65	0.00	0.00	0.00	174.65		
87910	0.00	4.49	0.00	0.00	4.49		
87920	79.84	0.00	0.00	0.00	79.84		
87930	30,811.08	907.03	0.00	0.00	31,718.11		
87940	8,813.08	0.00	0.00	0.00	8,813.08		
87960	159.68	0.00	0.00	0.00	159.68		
87970	92,440.28	104.99	344.54	0.00	92,889.81		
88030	25,025.99	0.00	0.00	0.00	25,025.99		
88600	2,689.30	0.00	5.14	0.00	2,694.44		
88700	60,705.78	533.32	605.13	0.00	61,844.23		
88701	787.67	0.00	1.22	0.00	788.89		
88710	1,803.12	35.92	0.00	0.00	1,839.04		
88720	0.00	17.96	0.00	0.00	17.96		
88730	2,583.56	17.96	114.27	0.00	2,715.79		
88900	2,355.41	0.00	0.00	0.00	2,355.41		
89200	43,370.90	316.09	420.05	0.00	44,107.04		
89201	1,831.15	0.00	41.50	0.00	1,872.65		
89210	1,556.88	0.00	0.00	0.00	1,556.88		
89310	32,258.76	148.82	758.17	0.00	33,165.75		
89315	908.24	0.00	0.00	0.00	908.24		
90100	17,446.68	71.84	0.00	0.00	17,518.52		
90200	57,778.34	718.44	0.00	0.00	58,496.78		
90205	732.85	0.00	0.00	0.00	732.85		
90310	76,389.29	0.00	0.00	0.00	76,389.29		
90315	50.46	0.00	0.00	0.00	50.46		
90320	39,657.11	215.53	117.33	0.00	39,989.97		
90321	3,066.70	0.00	0.00	0.00	3,066.70		
90330	24,924.82	0.00	0.00	0.00	24,924.82		
91010	4,522.84	0.00	0.00	0.00	4,522.84		
91500	0.00	80.82	0.00	0.00	80.82		
91610	19,452.24	0.00	0.00	0.00	19,452.24		
91620	42,871.00	0.00	0.00	0.00	42,871.00		
91760	0.00	0.00	5.16	0.00	5.16		
91810	60.00	0.00	194.94	0.00	254.94		
92000	70,414.57	0.00	0.00	0.00	70,414.57		
92110	0.00	179.61	0.00	0.00	179.61		

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR JUN/2002 - JUN/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
92611	4,416.71	0.00	0.00	4,416.71
92630	200.00	0.00	0.00	200.00
92640	79.84	0.00	0.00	79.84
92900	4,475.51	0.00	1.00	4,476.51
92905	1,732.91	0.00	0.00	1,732.91
93020	20.21	0.00	0.00	20.21
93230	2,241.62	0.00	0.00	2,241.62
	866,653.64	3,609.12	3,022.09	873,284.84

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR JUL/2002 - JUL/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL	CLEARING	CLEARING	CLEARING			
84000	8,096.54	0.00	0.00	0.00	8,096.54		
84100	19,543.37	0.00	0.00	0.00	19,543.37		
84400	8,331.18	0.00	0.00	0.00	8,331.18		
84810	8,331.18	0.00	0.00	0.00	8,331.18		
87000	61,247.07	0.00	0.00	0.00	61,247.07		
87100	2,498.41	63.15	0.00	0.00	2,561.56		
87500	24,176.64	29.25	0.00	0.00	24,205.89		
87810	9,483.49	160.18	0.00	0.00	9,643.67		
87815	6,692.82	4.88	0.00	0.00	6,697.70		
87825	6,772.07	0.00	0.00	0.00	6,772.07		
87827	18,074.54	0.00	0.00	0.00	18,074.54		
87828	13,300.54	9.18	0.00	0.00	13,309.72		
87830	698.60	0.00	0.00	0.00	698.60		
87910	0.00	4.88	0.00	0.00	4.88		
87930	29,210.17	984.79	0.00	0.00	30,194.96		
87940	12,055.31	0.00	0.00	0.00	12,055.31		
87960	159.68	0.00	0.00	0.00	159.68		
87970	93,397.81	113.99	0.00	0.00	93,511.80		
88030	23,657.93	0.00	0.00	0.00	23,657.93		
88600	3,151.12	0.00	0.00	0.00	3,151.12		
88700	57,256.10	524.65	0.00	0.00	57,780.75		
88701	2,909.33	0.00	0.00	0.00	2,909.33		
88702	1,712.33	0.00	0.00	0.00	1,712.33		
88710	2,082.56	39.00	0.00	0.00	2,121.56		
88720	0.00	19.50	0.00	0.00	19.50		
88730	957.96	19.50	0.00	0.00	977.46		
88900	2,542.80	0.00	0.00	0.00	2,542.80		
89200	47,894.14	0.00	0.00	0.00	47,894.14		
89201	2,459.89	314.61	0.00	0.00	2,774.50		
89210	1,277.44	0.00	0.00	0.00	1,277.44		
89310	32,724.97	161.58	0.00	0.00	32,886.55		
89315	1,412.26	0.00	0.00	0.00	1,412.26		
90100	17,446.68	78.00	0.00	0.00	17,524.68		
90200	60,192.98	780.03	0.00	0.00	60,973.01		
90205	179.64	0.00	0.00	0.00	179.64		
90310	74,082.94	0.00	0.00	0.00	74,082.94		
90315	439.86	0.00	0.00	0.00	439.86		
90320	37,908.70	234.01	156.30	0.00	38,299.01		
90321	2,820.41	0.00	0.00	0.00	2,820.41		
90325	40.42	0.00	0.00	0.00	40.42		
90330	25,161.24	0.00	0.00	0.00	25,161.24		
91010	4,458.00	0.00	0.00	0.00	4,458.00		
91500	0.00	87.75	0.00	0.00	87.75		
91610	19,161.02	0.00	0.00	0.00	19,161.02		
91620	43,300.47	0.00	0.00	0.00	43,300.47		
92000	82,249.36	0.00	0.00	0.00	82,249.36		
92110	0.00	195.01	0.00	0.00	195.01		
92611	4,416.71	0.00	0.00	0.00	4,416.71		

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR JUL/2002 - JUL/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
92630	3,330.00	0.00	0.00	3,330.00
92640	91.86	0.00	0.00	91.86
92900	4,941.39	0.00	0.00	4,941.39
92905	1,779.10	0.00	0.00	1,779.10
93230	2,220.80	0.00	0.00	2,220.80
	886,329.83	3,823.92	1,881.35	892,035.10

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR AUG/2002 - AUG/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
84000	8,096.54	0.00	0.00	8,096.54
84100	19,184.92	0.00	0.00	19,184.92
84400	8,185.81	0.00	0.00	8,185.81
84810	8,160.16	0.00	0.00	8,160.16
87000	61,911.07	0.00	0.00	61,911.07
87100	2,474.50	32.17	0.00	2,506.67
87500	23,842.11	176.17	0.00	24,320.28
87810	19,584.64	5.36	302.00	19,590.00
87815	9,191.34	0.00	0.00	9,191.34
87825	7,361.96	0.00	27.35	7,389.31
87827	19,261.97	0.00	0.00	19,261.97
87828	11,608.75	5.05	105.01	11,613.80
87830	340.25	0.00	0.00	340.25
87910	0.00	5.36	0.00	5.36
87920	21.07	0.00	0.00	21.07
87930	26,510.70	1,083.09	0.00	27,593.79
87940	11,760.83	0.00	0.00	11,760.83
87970	94,168.53	125.36	0.00	94,472.11
88030	24,131.42	0.00	178.21	24,131.42
88600	2,529.62	0.00	0.00	2,529.62
88700	61,632.66	553.41	0.00	63,551.22
88701	2,734.65	0.00	1,365.15	2,734.65
88710	2,069.40	0.00	0.00	2,069.40
88720	0.00	42.89	0.00	42.89
88730	0.00	21.45	0.00	21.45
88900	0.00	21.45	0.00	21.45
89200	2,262.24	0.00	2.77	2,262.24
89201	43,892.29	333.60	0.00	44,252.70
89210	2,832.61	0.00	26.81	2,863.09
89230	1,256.76	0.00	30.48	1,286.76
89310	151.80	0.00	0.00	151.80
89315	33,135.09	0.00	0.00	33,135.09
90100	924.51	177.71	356.81	1,458.03
90200	17,600.98	0.00	0.00	17,600.98
90205	57,190.25	85.79	0.00	57,276.04
90310	201.82	857.89	0.00	1,059.71
90315	74,442.64	0.00	0.00	74,442.64
90320	81.69	0.00	0.00	81.69
90321	40,706.59	257.37	309.79	41,273.75
90330	2,474.25	0.00	0.00	2,474.25
91010	26,117.92	0.00	0.00	26,117.92
91500	4,474.88	0.00	0.00	4,474.88
91610	0.00	96.51	0.00	96.51
91620	18,894.72	0.00	0.00	18,894.72
91760	70,264.45	0.00	0.00	70,264.45
91810	0.00	0.00	2.17	2.17
92000	100.00	0.00	7.22	107.22
92110	72,332.88	0.00	0.00	72,332.88
	0.00	214.47	0.00	214.47

PIEDMONT NATURAL GAS
TENNESSEE OEM PAYROLL REPORT

FOR AUG/2002 - AUG/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
92611	4,416.71	0.00	0.00	4,416.71
92630	326.20	0.00	0.00	326.20
92900	7,241.32	0.00	9.58	7,250.90
92905	463.09	0.00	0.00	463.09
93230	2,262.40	0.00	0.00	2,262.40
	908,810.99	4,164.56	2,723.35	915,698.90

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR SEP/2002 - SEP/2002

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ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
84000	12,144.81	0.00	0.00	12,144.81
84100	30,375.76	0.00	0.00	30,375.76
84400	14,203.82	0.00	0.00	14,203.82
84810	13,939.79	0.00	0.00	13,939.79
86330	138.00	0.00	0.00	138.00
87000	93,290.34	108.17	0.00	93,398.51
87100	3,852.00	50.11	0.00	3,902.11
87500	37,699.97	274.41	0.00	38,361.43
87600	0.00	0.00	4.59	4.59
87810	15,796.85	8.35	0.00	15,805.20
87815	10,701.03	0.00	42.86	10,743.89
87825	18,607.66	0.00	0.00	18,607.66
87827	29,426.23	0.00	164.93	29,591.16
87828	21,123.52	15.72	26.11	21,165.35
87830	662.40	0.00	0.00	662.40
87910	0.00	8.35	0.00	8.35
87920	417.20	0.00	0.00	417.20
87930	41,448.80	1,687.04	0.00	43,135.84
87940	15,126.91	0.00	0.00	15,126.91
87960	56.22	0.00	0.00	56.22
87970	155,201.68	195.27	150.48	155,547.43
88030	37,927.14	0.00	0.00	37,927.14
88600	3,794.43	0.00	0.00	3,794.43
88700	98,983.98	898.78	0.00	100,263.44
88701	281.21	0.00	17.74	298.95
88710	2,675.99	66.81	0.00	2,742.80
88720	0.00	33.41	0.00	33.41
88730	293.25	33.41	80.65	407.31
88900	3,370.25	0.00	0.00	3,370.25
89200	66,258.32	538.95	206.50	67,003.78
89201	2,585.29	0.00	72.08	2,657.37
89210	2,656.50	0.00	0.00	2,656.50
89230	2,104.50	0.00	0.00	2,104.50
89310	52,137.29	0.00	0.00	52,137.29
89315	4,702.08	276.80	983.72	5,397.81
90100	26,401.47	0.00	0.00	26,401.47
90200	89,453.33	133.63	0.00	89,586.96
90205	72.45	1,336.27	0.00	1,408.72
90310	108,905.24	0.00	0.00	108,905.24
90315	197.02	0.00	0.00	197.02
90320	60,570.91	0.00	0.00	60,570.91
90321	3,597.83	400.88	493.86	4,091.69
90325	134.55	0.00	0.00	134.55
90330	38,936.66	0.00	0.00	38,936.66
91010	6,733.47	0.00	0.00	6,733.47
91500	0.00	150.33	0.00	150.33
91610	28,574.88	0.00	0.00	28,574.88
91620	65,797.92	0.00	0.00	65,797.92

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR SEP/2002 - SEP/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
91760	0.00	0.00	10.64	10.64
91810	30.00	0.00	0.00	30.00
92000	106,580.67	0.00	0.00	106,580.67
92110	0.00	334.07	0.00	334.07
92611	4,416.73	0.00	0.00	4,416.73
92630	1,480.00	0.00	0.00	1,480.00
92640	41.40	0.00	0.00	41.40
92900	10,271.56	0.00	139.16	10,410.72
92905	165.60	0.00	0.00	165.60
93230	3,456.00	0.00	0.00	3,456.00
	1,347,800.91	6,550.77	3,161.05	1,357,512.73

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR OCT/2002 - OCT/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
84000	8,096.54	0.00	0.00	8,096.54
84100	20,224.52	0.00	0.00	20,224.52
84110	0.00	0.00	2.97	2.97
84400	8,226.17	0.00	0.00	8,226.17
84810	8,212.86	0.00	0.00	8,212.86
87000	63,727.28	70.22	0.00	63,797.50
87100	2,538.00	32.53	0.00	2,570.53
87500	29,201.58	178.14	311.77	29,691.50
87600	21.07	0.00	3.65	24.72
87810	1,605.87	5.42	0.00	1,611.29
87815	6,045.42	0.00	13.18	6,058.60
87825	26,887.38	0.00	0.00	26,887.38
87827	41,733.88	0.00	91.92	41,825.80
87828	11,306.08	15.77	0.00	11,321.85
87830	657.23	0.00	0.00	657.23
87910	0.00	5.42	0.00	5.42
87930	24,750.54	1,095.19	0.00	25,845.73
87940	12,605.47	0.00	0.00	12,605.47
87960	1,625.20	0.00	0.00	1,625.20
87970	145,578.19	126.77	147.05	145,852.01
88030	29,444.99	0.00	0.00	29,444.99
88600	2,529.62	0.00	0.00	2,529.62
88700	55,237.42	609.51	96.71	55,943.65
88701	126.78	0.00	0.00	126.78
88710	2,398.27	43.37	10.34	2,451.99
88720	0.00	21.69	0.00	21.69
88730	441.60	21.69	13.78	477.07
88900	2,304.00	0.00	0.00	2,304.00
89200	45,993.11	363.56	181.15	46,537.82
89201	2,068.56	0.00	36.70	2,105.26
89210	2,290.80	0.00	0.00	2,290.80
89220	82.80	0.00	0.00	82.80
89230	1,628.40	0.00	0.00	1,628.40
89310	32,393.55	179.69	38.12	32,611.36
89315	879.36	0.00	0.00	879.36
90100	17,600.98	86.75	0.00	17,687.73
90200	59,071.46	867.48	0.00	59,938.94
90205	82.80	0.00	0.00	82.80
90310	69,415.97	0.00	0.00	69,415.97
90315	108.68	0.00	0.00	108.68
90320	41,238.71	260.24	219.52	41,718.47
90321	2,083.50	0.00	0.00	2,083.50
90330	26,714.35	0.00	0.00	26,714.35
91010	4,519.28	0.00	0.00	4,519.28
91500	0.00	97.59	0.00	97.59
91610	19,954.94	0.00	0.00	19,954.94
91620	42,835.58	0.00	0.00	42,835.58
91760	0.00	0.00	34.65	34.65

PIEDMONT NATURAL GAS
TENNESSEE OEM PAYROLL REPORT
FOR OCT/2002 - OCT/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
91810	45.00		0.00		19.13	64.13	
92000	83,278.28		0.00		0.00	83,278.28	
92110	0.00		216.87		0.00	216.87	
92611	4,416.71		0.00		0.00	4,416.71	
92900	9,399.19		0.00		420.81	9,820.00	
92905	77.63		0.00		0.00	77.63	
93230	2,304.00		0.00		0.00	2,304.00	
	974,009.60		4,297.93		1,641.46	979,948.98	

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR NOV/2002 - NOV/2002

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
84000	8,096.54		0.00		0.00		8,096.54
84100	19,641.45		0.00		0.00		19,641.45
84400	8,498.25		0.00		0.00		8,498.25
84810	8,431.72		0.00		0.00		8,431.72
87000	63,313.85		65.69		0.00		63,379.54
87100	2,538.00		30.43		0.00		2,568.43
87500	25,474.25		166.64		0.00		25,640.89
87600	210.70		0.00		0.00		210.70
87810	799.27		5.07		0.00		804.34
87815	4,906.50		0.00		0.00		4,930.23
87825	25,406.15		0.00		0.00		25,406.15
87827	41,172.70		0.00		0.00		41,308.26
87828	12,637.10		21.24		135.56		12,658.34
87830	165.60		0.00		0.00		165.60
87910	0.00		5.07		0.00		5.07
87930	26,997.08		1,024.46		0.00		28,021.54
87940	11,737.17		0.00		0.00		11,737.17
87960	4,102.51		0.00		0.00		4,102.51
87970	126,699.09		118.58		0.00		127,005.68
88030	26,577.13		0.00		0.00		26,577.13
88600	2,529.62		0.00		0.00		2,529.62
88700	49,358.08		600.51		568.96		50,527.55
88701	1,841.64		0.00		170.67		2,012.31
88710	2,221.80		0.00		0.00		2,262.37
88720	0.00		40.57		0.00		20.29
88730	2,028.60		20.29		0.00		2,067.60
88900	2,474.00		0.00		0.00		2,474.00
89000	0.00		0.00		28.59		28.59
89200	40,891.35		356.03		247.81		41,495.20
89201	1,623.40		0.00		60.32		1,683.72
89210	2,139.00		0.00		0.00		2,139.00
89230	2,011.35		0.00		0.00		2,011.35
89310	30,952.10		168.09		676.88		31,797.06
89315	39.37		0.00		0.00		39.37
90100	17,600.98		81.15		0.00		17,682.13
90200	59,443.02		81.15		0.00		60,254.48
90310	68,913.33		0.00		0.00		68,913.33
90315	41.40		0.00		0.00		41.40
90320	41,051.67		243.44		292.81		41,587.92
90321	3,276.00		0.00		0.00		3,276.00
90325	20.70		0.00		0.00		20.70
90330	26,133.88		0.00		0.00		26,133.88
91010	4,563.68		0.00		0.00		4,563.68
91500	0.00		91.29		0.00		91.29
91610	20,125.21		0.00		0.00		20,125.21
91620	62,509.35		0.00		0.00		62,509.35
91810	137.80		0.00		0.00		137.80
92000	76,462.13		0.00		0.00		76,462.13

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PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR NOV/2002 - NOV/2002

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Run Date 12/20/2002
Run Time 10:07:17

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
92110	0.00	202.86	0.00	202.86
92611	4,416.71	0.00	0.00	4,416.71
92900	3,752.12	0.00	0.00	3,752.12
93230	2,304.00	0.00	0.00	2,304.00
	946,267.35	4,073.15	2,412.06	952,752.56

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR DEC/2002 - DEC/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
84000	8,256.84	0.00	0.00	8,256.84
84100	22,421.88	0.00	0.00	22,421.88
84110	0.00	0.00	0.57	0.57
84400	9,635.86	0.00	0.00	9,635.86
84810	9,569.33	0.00	0.00	9,569.33
87000	62,956.21	0.00	0.00	62,956.21
87100	2,628.00	29.35	0.00	2,657.35
87500	25,027.97	160.72	0.00	25,188.69
87810	238.05	4.85	110.44	353.34
87815	2,832.90	0.00	0.00	2,832.90
87825	14,964.81	0.00	54.07	15,018.88
87827	23,840.98	0.00	0.00	23,840.98
87828	7,278.72	20.49	0.00	7,300.21
87910	0.00	4.89	14.52	19.41
87920	251.40	0.00	0.00	251.40
87930	36,409.57	988.10	0.00	37,397.67
87940	15,709.42	0.00	0.00	15,709.42
87960	1,664.88	0.00	0.00	1,664.88
87970	105,104.83	0.00	0.00	105,104.83
88030	23,584.19	114.37	226.01	23,924.57
88600	2,587.32	0.00	0.00	2,587.32
88700	58,354.86	0.00	0.00	58,354.86
88701	1,456.76	579.19	0.00	2,035.95
88710	1,739.72	0.00	1,168.50	2,908.22
88720	0.00	39.13	0.00	39.13
88730	2,511.60	19.57	0.00	2,531.17
88900	2,560.00	19.57	0.00	2,579.57
89200	44,785.54	0.00	35.28	44,820.82
89201	2,144.03	0.00	0.00	2,144.03
89210	1,656.00	343.40	69.75	2,069.15
89230	2,497.80	0.00	69.90	2,567.70
89310	31,855.08	0.00	0.00	31,855.08
89315	103.50	162.12	0.00	265.62
89320	193.15	0.00	13.37	206.52
90100	18,082.70	0.00	0.00	18,082.70
90200	64,435.48	78.27	0.00	64,513.75
90310	73,990.94	782.65	0.00	74,773.59
90315	46.58	0.00	0.00	46.58
90320	40,090.58	0.00	0.00	40,090.58
90321	2,839.50	234.80	63.18	3,137.48
90330	25,439.74	0.00	0.00	25,439.74
91010	4,618.56	0.00	0.00	4,618.56
91500	0.00	88.05	0.00	88.05
91610	19,282.90	0.00	0.00	19,282.90
91620	38,228.58	0.00	0.00	38,228.58

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR DEC/2002 - DEC/2002

ACCOUNT	DIRECT PAYROLL	TRANSPORTATION CLEARING	STORES CLEARING	TOTAL
92000	78,254.10	0.00	0.00	78,254.10
92110	0.00	195.66	0.00	195.66
92611	4,416.71	0.00	0.00	4,416.71
92630	1,110.00	0.00	0.00	1,110.00
92640	1,242.40	0.00	0.00	1,242.40
92900	5,811.14	0.00	0.00	5,811.14
92905	165.60	0.00	0.00	165.60
93070	0.00	0.00	33.26	33.26
93230	2,304.00	0.00	0.00	2,304.00
	904,520.72	3,928.56	1,858.96	910,308.24

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR JAN/2003 - JAN/2003

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Run Date 02/19/2003
Run Time 13:56:08

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
84000	8,256.84	0.00	0.00	0.00	0.00	8,256.84	
84100	23,795.27	0.00	0.00	0.00	0.00	23,795.27	
84400	9,724.02	0.00	0.00	0.00	0.00	9,724.02	
84810	9,812.72	0.00	0.00	0.00	0.00	9,812.72	
87000	64,965.27	0.00	60.38	0.00	0.00	65,025.65	
87100	2,574.00	27.97	27.97	0.00	0.00	2,601.97	
87500	27,104.29	153.16	537.44	0.00	0.00	27,794.90	
87810	196.65	4.66	0.00	0.00	0.00	201.31	
87815	2,517.02	0.00	60.15	0.00	0.00	2,577.17	
87825	7,543.53	0.00	0.00	0.00	0.00	7,543.53	
87827	19,740.15	0.00	0.00	0.00	0.00	19,740.15	
87828	8,594.24	19.52	0.00	0.00	0.00	8,613.76	
87910	0.00	4.66	0.00	0.00	0.00	4.66	
87930	37,183.94	941.63	0.00	0.00	0.00	38,125.57	
87940	10,150.98	0.00	0.00	0.00	0.00	10,150.98	
87960	1,158.66	0.00	0.00	0.00	0.00	1,158.66	
87970	94,093.71	108.99	185.97	0.00	0.00	94,388.67	
88030	20,849.57	0.00	0.00	0.00	0.00	20,849.57	
88600	2,832.03	0.00	0.00	0.00	0.00	2,832.03	
88700	63,432.62	551.95	843.53	0.00	0.00	64,828.10	
88701	217.35	0.00	29.05	0.00	0.00	246.40	
88710	2,041.71	37.29	0.00	0.00	0.00	2,079.00	
88720	0.00	18.65	0.00	0.00	0.00	18.65	
88730	3,472.20	18.65	48.12	0.00	0.00	3,538.97	
88900	3,961.04	0.00	0.00	0.00	0.00	3,961.04	
89200	47,784.79	327.25	11.91	0.00	0.00	48,123.95	
89201	155.00	0.00	48.38	0.00	0.00	203.38	
89210	1,671.33	0.00	0.00	0.00	0.00	1,671.33	
89230	1,676.20	0.00	0.00	0.00	0.00	1,676.20	
89310	31,246.98	154.50	-60.21	0.00	0.00	31,341.26	
89315	344.06	0.00	0.00	0.00	0.00	344.06	
90100	18,082.70	74.58	0.00	0.00	0.00	18,157.28	
90200	64,190.95	745.84	0.00	0.00	0.00	64,936.79	
90205	93.15	0.00	0.00	0.00	0.00	93.15	
90310	77,504.07	0.00	0.00	0.00	0.00	77,504.07	
90315	228.81	0.00	0.00	0.00	0.00	228.81	
90320	38,589.91	223.75	182.74	0.00	0.00	38,996.40	
90321	2,239.47	0.00	0.00	0.00	0.00	2,239.47	
90325	20.70	0.00	0.00	0.00	0.00	20.70	
90330	24,568.67	0.00	0.00	0.00	0.00	24,568.67	
91010	4,618.56	0.00	0.00	0.00	0.00	4,618.56	
91500	0.00	83.91	0.00	0.00	0.00	83.91	
91610	19,282.90	0.00	0.00	0.00	0.00	19,282.90	
91620	39,983.09	0.00	0.00	0.00	0.00	39,983.09	
92000	87,187.21	0.00	0.00	0.00	0.00	87,187.21	
92110	0.00	186.46	0.00	0.00	0.00	186.46	
92611	4,328.99	0.00	0.00	0.00	0.00	4,328.99	
92630	1,189.01	0.00	0.00	0.00	0.00	1,189.01	

PIEDMONT NATURAL GAS
TENNESSEE OEM PAYROLL REPORT

FOR JAN/2003 - JAN/2003

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
92640	15.53		0.00		0.00		15.53
92900	3,791.62		0.00		0.00		3,791.62
93230	2,304.00		0.00		0.00		2,304.00
	895,315.51		3,743.81		1,887.08		900,946.40

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR FEB/2003 - FEB/2003

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
84000	8,256.84		0.00		0.00		8,256.84
84100	23,405.20		0.00		0.00		23,405.20
84400	8,803.77		0.00		0.00		8,803.77
84810	8,777.16		0.00		0.00		8,777.16
87000	67,796.52		0.00		0.00		67,796.52
87100	2,721.60		32.24		0.00		2,753.84
87500	32,314.08		176.55		0.00		32,490.63
87810	41.40		5.37		0.00		46.77
87815	2,460.91		0.00		37.91		2,498.82
87825	9,501.30		0.00		6.18		9,507.48
87827	26,604.84		0.00		101.13		26,705.97
87828	12,553.75		16.88		0.00		12,570.63
87830	217.60		0.00		0.00		217.60
87910	0.00		5.37		0.00		5.37
87920	37.48		0.00		0.00		37.48
87930	25,158.74		0.00		0.00		25,158.74
87940	14,997.72		1,085.39		0.00		16,083.11
87960	2,261.23		0.00		0.00		2,261.23
87970	120,909.25		0.00		0.00		120,909.25
88030	22,702.03		125.63		212.20		22,939.86
88600	2,733.33		0.00		0.00		2,733.33
88700	61,522.47		0.00		0.00		61,522.47
88701	682.88		609.89		692.10		1,384.77
88710	1,833.90		0.00		62.56		1,896.46
88720	64.00		42.99		0.00		107.00
88730	2,533.20		21.49		0.00		2,554.69
88900	4,863.25		21.49		0.00		4,884.74
89200	45,310.53		0.00		0.00		45,310.53
89201	1,724.38		363.37		0.63		2,088.38
89210	1,780.20		0.00		94.07		1,874.27
89230	2,586.85		0.00		0.00		2,586.85
89310	34,380.21		0.00		0.00		34,380.21
89315	1,432.74		178.08		502.94		2,113.76
90100	18,082.70		0.00		0.00		18,082.70
90200	66,973.27		85.97		0.00		67,059.24
90205	371.60		859.71		0.00		1,231.31
90310	74,662.98		0.00		0.00		74,662.98
90315	502.35		0.00		0.00		502.35
90320	41,909.50		0.00		0.00		41,909.50
90321	4,293.28		257.91		218.52		4,769.71
90325	41.40		0.00		0.00		41.40
90330	26,792.05		0.00		0.00		26,792.05
91010	4,618.56		0.00		0.00		4,618.56
91500	0.00		96.72		0.00		96.72
91610	19,282.90		0.00		0.00		19,282.90
91620	51,258.84		0.00		0.00		51,258.84
91760	925.76		0.00		61.43		987.19
92000	83,322.57		0.00		0.00		83,322.57

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR FEB/2003 - FEB/2003

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
92110	0.00		214.93		0.00		214.93
92520	82.80		0.00		0.00		82.80
92611	4,328.99		0.00		0.00		4,328.99
92630	1,295.91		0.00		0.00		1,295.91
92640	15.53		0.00		0.00		15.53
92900	7,843.76		0.00		0.00		7,843.76
92900	2,304.00		0.00		0.00		2,304.00
92230							
	959,878.11		4,269.59		1,993.75		966,141.45

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR MAR/2003 - MAR/2003

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Run Date 04/22/2003
Run Time 10:50:45

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
84000	12,385.26	0.00	0.00	0.00	0.00	12,385.26	
84100	30,479.40	0.00	0.00	0.00	0.00	30,479.40	
84110	0.00	0.00	0.00	4.32	0.00	4.32	
84400	12,715.39	0.00	0.00	0.00	0.00	12,715.39	
84700	158.03	0.00	0.00	0.00	0.00	158.03	
84810	12,635.56	0.00	0.00	0.00	0.00	12,635.56	
87000	93,701.93	0.00	0.00	0.00	0.00	93,701.93	
87100	3,834.00	83.85	0.00	0.00	0.00	3,917.85	
87500	39,117.71	38.84	264.49	0.00	0.00	39,421.04	
87810	2,419.26	6.47	0.00	558.99	0.00	2,984.72	
87815	8,243.24	0.00	0.00	21.02	0.00	8,264.26	
87825	9,716.77	0.00	0.00	15.63	0.00	9,732.40	
87827	41,644.07	0.00	0.00	267.45	0.00	41,911.52	
87828	22,103.71	22.19	2.21	2.21	0.00	22,128.12	
87830	259.01	0.00	0.00	0.00	0.00	259.01	
87910	0.00	6.47	0.00	0.00	0.00	6.47	
87930	33,977.18	1,294.69	0.00	0.00	0.00	35,271.87	
87940	17,013.03	0.00	0.00	0.00	0.00	17,013.03	
87960	145.65	0.00	0.00	0.00	0.00	145.65	
87970	163,039.34	151.36	0.00	124.35	0.00	163,315.05	
88030	35,348.57	0.00	0.00	0.00	0.00	35,348.57	
88600	4,384.68	0.00	0.00	0.00	0.00	4,384.68	
88700	93,636.46	763.21	0.00	-319.55	0.00	94,080.11	
88701	0.00	0.00	63.53	0.00	0.00	63.53	
88710	2,700.19	0.00	0.00	0.00	0.00	2,700.19	
88720	0.00	77.68	0.00	0.00	0.00	77.68	
88730	0.00	25.89	0.00	0.00	0.00	25.89	
88900	3,734.00	51.79	0.00	0.00	0.00	3,785.79	
89200	8,260.68	0.00	0.00	3.98	0.00	8,264.66	
89201	56,488.00	463.31	169.13	12.98	0.00	57,120.44	
89210	342.71	0.00	0.00	0.00	0.00	342.71	
89230	2,775.70	25.89	0.00	0.00	0.00	2,801.59	
89310	3,734.00	0.00	0.00	0.00	0.00	3,734.00	
89310	44,271.83	214.55	0.00	0.00	0.00	44,486.38	
89315	89315	1,015.94	-182.91	0.00	0.00	89,132.03	
89320	165.60	0.00	0.00	0.00	0.00	165.60	
90100	27,124.05	103.58	0.00	0.00	0.00	27,227.63	
90200	89,691.75	1,139.33	0.00	0.00	0.00	90,831.08	
90205	615.12	0.00	0.00	0.00	0.00	615.12	
90310	99,495.94	0.00	0.00	0.00	0.00	99,495.94	
90315	747.30	0.00	0.00	0.00	0.00	747.30	
90320	75,138.22	310.73	594.28	0.00	0.00	76,043.22	
90321	7,827.40	0.00	0.00	0.00	0.00	7,827.40	
90325	871.15	0.00	0.00	0.00	0.00	871.15	
90330	41,128.84	0.00	0.00	0.00	0.00	41,128.84	
91010	6,927.84	0.00	0.00	0.00	0.00	6,927.84	
91500	0.00	103.58	0.00	0.00	0.00	103.58	
91610	28,924.35	0.00	0.00	0.00	0.00	28,924.35	
91620	53,833.17	0.00	0.00	0.00	0.00	53,833.17	

PIEDMONT NATURAL GAS
TENNESSEE O&M PAYROLL REPORT

FOR MAR/2003 - MAR/2003

ACCOUNT	DIRECT		TRANSPORTATION		STORES		TOTAL
	PAYROLL		CLEARING		CLEARING		
91760	494.95		0.00		0.00		494.95
91810	35.00		0.00		0.00		35.00
92000	124,184.51		0.00		0.00		124,184.51
92110	0.00		258.94		0.00		258.94
92611	4,449.32		0.00		0.00		4,449.32
92630	1,314.00		0.00		0.00		1,314.00
92640	82.80		0.00		0.00		82.80
92900	9,656.59		0.00		0.00		9,656.59
92905	1,642.72		0.00		0.00		1,642.72
93230	3,456.00		0.00		0.00		3,456.00
	1,338,087.92		5,406.83		1,336.40		1,344,831.14

NO. 127. Provide corrected schedules for "Computation of Average Accumulated Depreciation" and "Computation of Average Accumulated Amortization." This request refers to Staff's previous conversation with Bill Morris.

RESPONSE:

See attached.

PIEDMONT NATURAL GAS COMPANY, INC.
 COMPUTATION OF AVERAGE ACCUMULATED DEPRECIATION
 THIRTEEN MONTHS ENDING OCTOBER 31, 2004 (TENNESSEE)

****REVISED****

	Accumulated Depreciation	
Balance @ December 31, 2002	165,580,648	
Allocated Joint Property @ December 31	11,683,175	
Adjusted Balance @ December 31, 2002	177,263,823	
Projected Additions January 2003	1,340,832	
Projected Balance @ January 31, 2003	178,604,655	
Projected Additions February 2003	1,344,999	
Projected Balance @ February 28, 2003	179,949,654	
Projected Additions March 2003	1,349,438	
Projected Balance @ March 31, 2003	181,299,092	
Projected Additions April 2003	1,353,619	
Projected Balance @ April 30, 2003	182,652,711	
Projected Additions May 2003	1,357,950	
Projected Balance @ May 31, 2003	184,010,661	
Projected Additions June 2003	1,361,992	
Projected Balance @ June 30, 2003	185,372,653	
Projected Additions July 2003	1,366,157	
Projected Balance @ July 31, 2003	186,738,810	
Projected Additions August 2003	1,371,554	
Projected Balance @ August 31, 2003	188,110,364	
Projected Additions September 2003	1,376,797	
Projected Balance @ September 30, 2003	189,487,161	
Projected Additions October 2003	1,382,272	
Projected Balance @ October 31, 2003	190,869,433	190,869,433
Projected Additions November 2003	1,387,341	
Projected Balance @ November 30, 2003	192,256,774	192,256,774
Projected Additions December 2003	1,392,586	
Projected Balance @ December 31, 2003	193,649,360	193,649,360
Projected Additions January 2004	1,402,311	
Projected Balance @ January 31, 2004	195,051,671	195,051,671
Projected Additions February 2004	1,406,400	
Projected Balance @ February 28, 2004	196,458,071	196,458,071
Projected Additions March 2004	1,410,865	
Projected Balance @ March 31, 2004	197,868,936	197,868,936
Projected Additions April 2004	1,414,902	
Projected Balance @ April 30, 2004	199,283,838	199,283,838
Projected Additions May 2004	1,419,048	
Projected Balance @ May 31, 2004	200,702,886	200,702,886
Projected Additions June 2004	1,422,949	
Projected Balance @ June 30, 2004	202,125,835	202,125,835
Projected Additions July 2004	1,426,971	
Projected Balance @ July 31, 2004	203,552,806	203,552,806
Projected Additions August 2004	1,432,324	
Projected Balance @ August 30, 2004	204,985,130	204,985,130
Projected Additions September 2004	1,437,412	
Projected Balance @ September 30, 2004	206,422,542	206,422,542
Projected Additions October 2004	1,442,741	
Projected Balance @ October 31, 2004	207,865,283	207,865,283

Thirteen Month Average for Attrition Period

199,314,813

PIEDMONT NATURAL GAS COMPANY, INC.
 COMPUTATION OF AVERAGE ACCUMULATED AMORTIZATION
 THIRTEEN MONTHS ENDING OCTOBER 31, 2004 (TENNESSEE)

****REVISED****

	Accumulated Depreciation	
Balance @ December 31, 2002	74,126	
Allocated Joint Property @ December 31	0	
Adjusted Balance @ December 31, 2002	74,126	
Projected Additions January 2003	1,626	
Projected Balance @ January 31, 2003	75,752	
Projected Additions February 2003	1,626	
Projected Balance @ February 28, 2003	77,378	
Projected Additions March 2003	1,626	
Projected Balance @ March 31, 2003	79,004	
Projected Additions April 2003	1,626	
Projected Balance @ April 30, 2003	80,630	
Projected Additions May 2003	1,626	
Projected Balance @ May 31, 2003	82,256	
Projected Additions June 2003	1,626	
Projected Balance @ June 30, 2003	83,882	
Projected Additions July 2003	1,626	
Projected Balance @ July 31, 2003	85,508	
Projected Additions August 2003	1,626	
Projected Balance @ August 31, 2003	87,134	
Projected Additions September 2003	1,626	
Projected Balance @ September 30, 2003	88,760	
Projected Additions October 2003	1,626	
Projected Balance @ October 31, 2003	90,386	90,386
Projected Additions November 2003	1,626	
Projected Balance @ November 30, 2003	92,012	92,012
Projected Additions December 2003	1,626	
Projected Balance @ December 31, 2003	93,638	93,638
Projected Additions January 2004	1,626	
Projected Balance @ January 31, 2004	95,264	95,264
Projected Additions February 2004	1,626	
Projected Balance @ February 28, 2004	96,890	96,890
Projected Additions March 2004	1,626	
Projected Balance @ March 31, 2004	98,516	98,516
Projected Additions April 2004	1,626	
Projected Balance @ April 30, 2004	100,142	100,142
Projected Additions May 2004	1,504	
Projected Balance @ May 31, 2004	101,646	101,646
Projected Additions June 2004	1,504	
Projected Balance @ June 30, 2004	103,150	103,150
Projected Additions July 2004	1,504	
Projected Balance @ July 31, 2004	104,654	104,654
Projected Additions August 2004	1,504	
Projected Balance @ August 30, 2004	106,158	106,158
Projected Additions September 2004	1,504	
Projected Balance @ September 30, 2004	107,662	107,662
Projected Additions October 2004	1,504	
Projected Balance @ October 31, 2004	109,166	109,166
Thirteen Month Average for Attrition Period		<u>99,945</u>

NO. 128. State the Company's position regarding placing gas inventory within the PGA mechanism versus including it as a component of rate base.

RESPONSE:

The Company would not be opposed to including the carrying costs on gas inventories as a recovery item in the PGA mechanism. The rate of return applied to the inventories would be the overall rate of return approved in the Company's last rate case.

NO. 129. Refer to the Company's working paper DIST-1. Explain GTI Funding in more detail, including the benefits to the customer.

RESPONSE:

GTI funding refers to the voluntary funding for the Gas Technology Institute, formerly the Gas Research Institute (GRI), by participating natural gas utility companies. Prior to 1999, funding for the GRI was through a Federal Energy Regulatory Commission (FERC) approved surcharge by interstate pipeline suppliers. The \$185,000 GTI funding in this rate case represents 1-cent per dekatherm of sales on the Nashville Gas system. In 1998, the FERC-approved R&D funding included in interstate pipeline rates was 1.74 cents per dekatherm. In January 2003, Ron Edelstein of GTI appeared before the Tennessee Gas Forum and explained the concept of voluntary funding and the benefits afforded by the GTI. A copy of his presentation is included with this response. Also included is an abstract of the benefits of GRI R&D susults that have been placed in commercial use 1998 through 2002. A listing of those LDCs that have voluntary GTI funding is also attached.

Continuation of a Gas-Consumer-Benefits R&D Program for Tennessee



Ron Edelstein
January, 2003
Nashville, Tennessee

gti

Agenda

- What has been accomplished by GTI consumer-interest R&D?
- What benefits for Tennessee Gas Consumers?
- Current state of R&D funding
- Fundamental principles
- Results to date
- Why should Tennessee participate?
- Where do we go from here?

gti

What's Been Accomplished?

2001 R&D Results (continued):

- **Residential/Commercial: Increased Efficiency, Safety, and Reliability**
 - Indoor Emissions from Cooking
- **Industrial: Increased Efficiency, Reduced Emissions**
 - Oscillating Combustion Burner
 - Radiant Heater Characterization
- **Exploration & Production: Supply Reliability**
 - New Gas Exploration Concepts
 - StreamAnalyzer Software
 - Gas Composition Database
 - Unconventional Natural Gas Database

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What's Been Accomplished?

2001 R&D Results (continued):

- **Pipeline: Safety, O&M Cost Reduction**
 - Gas Sampling Standard
 - Ultrasonic Meter Installation Effects
 - Orifice Meter Operational & Installation Effects
 - Gas Storage Well Rehabilitation and Damage Prevention
 - Satellite Radar Interferometry Measurement of Slope Movement
 - Software for Air Emissions Measurements from Compressor Stations

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Any Other Options to Consortium R&D?

- No R&D: no ability to choose projects, field test prototypes, delayed deployment, consortium R&D may be eliminated
- Internal Company R&D: no leverage, possible duplication of effort, no critical mass
- A.G.A. "Alliance" Initiative: National program proposed, but distribution R&D only; consortium R&D program will be complementary with this effort

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Fundamental Principles

- Maintain a Constant Cost for consumer-interest R&D to LDC's Customers *and* Continue Investment in R&D
- Funds are for collaborative gas consumer interest R&D, *not* earmarked for GTI
- Customer choice: LDC's (with regulatory authority oversight) will decide what funding level, what projects, and where the dollars will be placed

gti

Summary of Voluntary Program Results to Date

- Twelve state Public Utility Commissions have approved the recovery of gas consumer interest R&D for one or more LDC's in that state
 - MS, AL, WY, ID, WA: Purchased Gas Adjustment (PGA)
 - KY: "Tariff rider"
 - NC: O&M expense in a deferred account
 - NY: "Tariff leaves," deferred accounting
 - UT, IL, NJ, NH: Approved in base rates, plus
 - OK/TX/NY/MT: Recovery on intrastate gas
 - Municipals: over 40 companies

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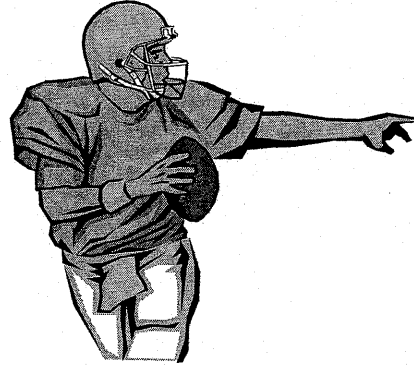
Pending Cases

- Florida: Teco
- OR: NW Natural
- NM: PNM

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Where do we go from here?

- Comments? Questions?
- Next Steps?



gti.

**Benefits of GRI RD&D Results
That Have Been Placed in Commercial Use
in 1998 Through 2002**

Prepared by:

**Athanasios D. Bournakis
Energy Resources Center
University of Illinois at Chicago**

May 2003

Abstract

This report provides brief descriptions for twenty-eight new GRI RD&D products commercialized in 2002 and three enhancements of previously introduced products. The economic benefits are quantified for ninety-eight items commercialized between 1998 and 2002 that are known to have produced significant economic benefits for their users. The calculated ratio of the benefits to gas customers to total GRI costs incurred in 1998 through the end of 2002 was 8 to 1.

Acknowledgments

The author gratefully acknowledges the significant contribution provided by Irene D. Banas, senior engineer at the Energy Resources Center of the University of Illinois at Chicago, in evaluating the benefits of GRI's Exploration & Production, Environment & Safety, Pipeline and Distribution RD&D results.

Introduction

Between January 1, 2002 and December 31, 2002, twenty-eight GRI RD&D results were placed in commercial service. In addition, enhanced versions of three previously commercialized items were placed in use*. Those items are listed in Table 1, and brief descriptions of the thirty-one items are included in Appendix A. With these new additions, some 153 GRI RD&D results have entered the commercial marketplace during the 5-year period between January 1998 and December 2002. The full list of the 153 items is included in Appendix B. As one measure of the value of the GRI RD&D program, the economic benefits accruing to users of 98 out of the 153 products can be compared to the total outlays of GRI during the past five years. This paper highlights the new GRI products that have entered the market during the past year and presents the results of the benefit-to-cost analysis of GRI's RD&D results during the past five years.

Notable additions to the list of GRI RD&D results placed in commercial service in 2002 are:

- A summary report of GRI's research on condensate-induced corrosion pertaining to mid- and high-efficiency gas furnaces and boilers, condensing heat exchangers, and venting guidelines for higher efficiency gas appliances,
- A gas heating system for a gas-fired commercial steam cooker that enables multi-point heating,
- Development of advanced U-shaped Si-SiC radiant tubes,
- A patented Forced Internal Recirculation burner that combines staged combustion with internal recirculation of partial combustion products to reduce the formation of both thermal and prompt NO_x,
- A low-cost advanced NGV fueling dispenser,
- Efficiency improvements for the John Deere PowerTech 8.1L and the Mack Truck E7G natural gas engines used in many medium-duty NGVs,
- A tool for splitting old service lines to allow larger plastic pipe to be inserted,
- Techniques to predict and model stress behavior and rock slippage to predict the integrity of gas storage caverns in thin salt beds,
- A manual of best environmental management practices to serve as a reference document and field guide for pipeline construction,
- A more accurate seismic signal analysis method for identifying potential gas reservoirs, and
- Screening criteria for evaluating the ecological impacts at E&P sites.

* For tangible products (hardware, software) we interpret "commercialized" to mean that the product is commercially available, economically viable without subsidies, and has been sold in meaningful quantities. For the less tangible reports and other information products, we require that the products have been used in a commercial enterprise and have generated demonstrable economic benefits to the users. "Enhanced" products have been augmented in a commercially significant way, with or without GRI support. The augmentation may be a technical improvement in a product line, expansion of a product catalog, or expansion of the product market into new areas not available to the original product at its time of introduction.

Table 1. GRI RD&D Results That Have Been Placed in Commercial Use in 2002

RESIDENTIAL

1. Summary Report of GRI's Venting Research
2. Gas Venting Safety Assessment
3. Accurate Assessment of Heat Pump Efficiency

COMMERCIAL

4. Comparison of Radiant and Convective Unit Heaters
5. Gas-Fired Commercial Steam Cooker

INDUSTRIAL

6. Advanced U-Shaped Radiant Tubes *
7. Low-NO_x Retrofit Burners for Fire-Tube Boilers
8. Low-Cost Multi-Gas Continuous Emissions Monitor

TRANSPORTATION

9. Advanced NGV Fueling Dispenser
10. Reference Guide of Best Practices for Medium-and Heavy-Duty NGV Fuel System Design
11. Clean Cities Initiative to Evaluate NGV Technology
12. Resource Guide for Heavy-Duty LNG Vehicles
13. Regional Natural Gas Vehicle Fueling Infrastructure Standards
14. Heavy-Duty Engine Efficiency Improvements (Deere 8.1L and Mack Truck E7G) *

DISTRIBUTION

15. Pipe Splitting Tool *
16. Gas Distribution Cost Database
17. Effect of Bomb Blasts on Gas Distribution Equipment
18. Assessment of PVC Pipe
19. Effect of Utility Cuts on Pavement Quality
20. Plastic Pipe Informational Web Site
21. Evaluation of the Performance of Carbon Monoxide Alarms
22. Worker Exposure to Hazardous Substances Database

PIPELINE

23. Predicting the Integrity of Storage Caverns in Thin Salt Beds
24. ASME Standard for Pipeline Integrity Management
25. NACE Standard for Direct Assessment of Pipeline Corrosion
26. Revegetation of Rights-of-Way in Wetlands
27. Reference Manuals of Best Practices for Horizontal Directional Drilling and its Effect in Wetlands
28. Best Environmental Practices for Pipeline Construction
29. Integrated Vegetation Management

EXPLORATION AND PRODUCTION

30. Enhanced Seismic Spectral Processor
31. Evaluating Ecological Impacts at E&P Sites

* Enhancement to a previous product.

Benefits Results

The full list of the 153 items placed in commercial use between January 1998 and December 2002 is included in Appendix B, but we chose to focus the benefits analysis of GRI's RD&D on 98 of the 153 items that are known to have produced significant *quantifiable economic* benefits for their users. The 98 items are listed in Table 2. Benefits to product users in typical applications were calculated by comparing the economics of the GRI-sponsored products with the economics of products that would have been used in the absence of the GRI product. Product cost and performance data were obtained from product vendors, from field test results, or from product users. The measure of product benefit is the net present value of the incremental cash flow to the user (cost savings minus incremental cost) over the product lifetime using a real discount rate of 5% (above inflation). The GRI Baseline [1] national average projections of energy prices were used, when appropriate, to estimate cost savings. Total benefits were calculated by multiplying the unit benefits by the sales projected by product vendors from the first year in which the product was sold through 2007. The results are shown in Table 2. A range of product sales is shown to protect proprietary vendor sales projections.

As shown in Table 2, calculated economic benefits for the 98 items are estimated to be between \$4.0 and \$7.1 billion. Table 3 shows the expected value of benefits, at about \$5.5 billion, and the breakdown of the economic benefits by sector. We estimate that the 98 items account for most of the economic benefits that would be calculated for the entire set of 153 products. Omitted items often offer significant benefits to their users, but have not achieved widespread use as have the 98 high impact items. In addition, some of the omitted items are designed to produce benefits that are not easily expressed in economic terms. For example, RD&D results provide test methods for new gas equipment, technologies to meet existing or anticipated air emissions requirements, and information that is useful to the gas industry in developing the gas resources and delivering them to consumers.

Table 2. Summary of Benefits of GRI RD&D Results That Have Been Placed in Commercial Use in 1998 Through 2002

	Sales or Applications Projected Through 2007 (in units)			Year of First Sale	Net Present Value of Benefits** (Million 2002\$)		
RESIDENTIAL							
Flammable Vapors	12,900	to	20,300	1998	\$127.6	to	\$200.5
COMMERCIAL							
Alturdyne Hybrid Electric/Gas Engine Chiller	183	to	336	1998	\$186.1	to	\$341.1
kitchenCOST™ Software	545	to	1,000	1998/99	\$35.0	to	\$64.2
DesiCalc™ Software	340	to	620	1998	\$3.7	to	\$6.8
Low-NO _x Power Burner	1,770	to	3,100	1998	\$16.3	to	\$28.5
ASHRAE Standard 155P for Boilers	3,530	to	7,400	1998	\$49.4	to	\$103.7
Modulating Indirect-Fired Make-Up Air Unit with Clean Modulation	1,570	to	2,880	1999	\$5.5	to	\$10.1
GATC: AERCO Benchmark Boiler	1,200	to	2,400	1999	\$22.0	to	\$44.1
PITCO Gas Fryers	66,200	to	121,800	1999	\$38.4	to	\$72.7
AUTOFRY™ Deep Fat Fryer	1,890	to	3,780	1999	\$6.9	to	\$13.8
York 600 RT 134a Chiller	53	to	83	2000	\$28.3	to	\$44.4
Tecogen 150 RT 134a Chiller	56	to	91	2000	\$2.0	to	\$3.3
INDUSTRIAL							
Process Application of Composite Radiant Tubes	30,600	to	53,000	1994/99	\$28.3	to	\$49.1
Multi-Variable Controls (MVC® for Industrial Applications)	16	to	30	1998	\$153.2	to	\$280.9
RAPIDFIRE™ Products	13	to	23	1998	\$120.5	to	\$210.8
Natural Gas Cofiring in Biomass-Fueled Stoker Boilers	13	to	20	1999	\$105.1	to	\$165.2
Ultra-Low-NO _x Boiler Burner	120	to	180	1999	\$56.5	to	\$84.8
METHANE de-NOX® Reburn Technology	6	to	11	1999	\$132.1	to	\$226.5
Forced Convection Heater (FCH) Systems - Automotive	11	to	19	2000	\$13.8	to	\$23.0
Oscillating Combustion Burner	125	to	225	2001	\$15.7	to	\$28.1
POWER GENERATION							
SOAPP Modules	900	to	1,900	1998	\$22.1	to	\$46.4
IR PowerWorks Microturbine Cogeneration Systems	2,080	to	3,270	2000	\$38.0	to	\$59.8
Advanced High-Output Gas Engine-Generator (Caterpillar 3500® Series)	30	to	52	2001	\$30.8	to	\$52.9
TRANSPORTATION							
CNG Cylinder Maintenance Handbook	243,000	to	510,500	1998	\$31.6	to	\$66.5
Ford Crown Victoria Natural Gas Vehicle - Extended Range Package	1,180	to	3,500	1998	\$5.4	to	\$16.1

	Sales or Applications Projected Through 2007 (in units)		Year of First Sale	Net Present Value of Benefits** (Million 2002\$)			
Risk Management Program for Liquid Natural Gas Vehicle Refueling Stations	49	to	85	1998	\$22.9	to	\$40.1
NGV Cylinders Types 1 and 2	24,000	to	58,700	1999	\$4.5	to	\$10.9
Advanced NGV Fueling Dispenser	63	to	138	2002	\$0.9	to	\$2.1
DISTRIBUTION							
Plastic Pipe Across (and on) Bridges	3,700	to	7,900	1995/99	\$56.0	to	\$117.6
Pipe Hawk™ (Buried Pipe Locator)	56	to	99	1998	\$12.9	to	\$22.6
Optical Methane Detector (OMD)	137	to	206	1998	\$31.5	to	\$47.3
Predictive Control District Regulators	260	to	470	1998	\$68.0	to	\$124.7
Main/Services Tester	675	to	1,240	1998	\$129.4	to	\$237.3
Distribution Internal Inspection System - Magnetic Flux Leakage (MFL)	14	to	25	1998	\$21.6	to	\$39.5
TUBIS™ Software for Repair/Replace Decisions	10	to	19	1999	\$18.1	to	\$33.2
DrillPath™ Software for Directional Drilling Operations	460	to	690	1996/99	\$1.9	to	\$2.8
Starline® 2000 Renewal Technology	54,900	to	100,600	1999	\$0.8	to	\$1.5
Guided Mole	40	to	70	1999	\$4.3	to	\$7.5
Gas Holder Manual of Practice	7	to	12	1999	\$6.0	to	\$11.0
One-Step Paving	250	to	450	2000	\$2.0	to	\$4.0
Soil Compaction Supervisor	390	to	680	2000	\$7.4	to	\$13.0
Self-Loading, High-Efficiency Trailer for Coiled PE Pipe	17	to	43	2001	\$41.7	to	\$108.5
Cold-Mix Restoration of Pavement Cuts	88	to	230	2001	\$6.6	to	\$17.1
Imaging Underground Utility Structures	240	to	450	2001	\$5.3	to	\$9.7
Comparative Evaluation of PE Pipe Materials	49	to	98	2001	\$45.2	to	\$90.3
Directional Drilling for Plastic Pipe under Railroad Crossings	34	to	74	2001	\$9.5	to	\$20.6
PE LIFESPAN FORECASTING™	111	to	205	1994/01	\$85.5	to	\$158.3
Pipe Splitting Tool	7	to	14	1998/02	\$7.1	to	\$14.2
Gas Distribution Cost Database	450	to	800	2002	\$11.4	to	\$20.3
Assessment of PVC Pipe	4,000	to	8,000	2002	\$18.1	to	\$36.2
Worker Exposure to Hazardous Substances	***			2002	\$8.4	to	\$25.3
PIPELINE							
NO _x Portable Analyzer Operator Guidelines	130	to	200	1998	\$27.6	to	\$43.4
Oxidation Catalyst Costs for Aldehyde Control	106	to	186	1998	\$23.7	to	\$41.4
TurboCharger Testing Facility	590	to	1,040	1998	\$5.7	to	\$10.0
Magnetostriuctive Sensor	440	to	770	1998	\$7.5	to	\$13.1
Breeze Haz™ Environment and Safety Offsite Consequence Modeling Software	3,040	to	5,340	1999	\$13.3	to	\$23.3
Emeritus Report B31.8 Code, Federal Pipeline Safety Regulations	***			2000	\$18.4	to	\$55.2
Elastic Wave Vehicle Tool	***			2000	\$64.6	to	\$139.9
Advanced Leak Detection and Repair at Gas Processing Plants – Hi-Flow™ Sampler	370	to	660	2000	\$155.0	to	\$276.8

	Sales or Applications Projected Through 2007 (in units)		Year of First Sale	Net Present Value of Benefits** (Million 2002\$)		
API 14.1 Gas Sampling Standard.	5	to 11	2001	\$4.8	to	\$10.4
Ultrasonic Meter Installation Effects	2,500	to 5,000	2001	\$62.7	to	\$125.5
Orifice Meter Operational Effects	23	to 43	2001	\$36.2	to	\$67.3
DamageExpert™ Software	31	to 66	2001	\$51.9	to	\$112.5
Satellite Radar Interferometry Measurement of Slope Movement	17	to 38	2001	\$40.6	to	\$88.0
AIRCalc™ Software	146	to 268	2001	\$75.4	to	\$138.3
Predicting the Integrity of Storage Caverns in Thin Salt Beds	3	to 12	2002	\$0.4	to	\$1.5
ASME Standard for Pipeline Integrity Management	189,000	to 389,000	2002	\$3.2	to	\$6.7
NACE Standard for Direct Assessment of Pipeline Corrosion	100,000	to 350,000	2002	\$0.3	to	\$1.0
Reference Manuals of Best Practices for Horizontal Directional Drilling and its Effects in Wetlands	75	to 250	2002	\$1.9	to	\$6.2
Best Environmental Practices for Pipeline Construction	600	to 1,200	2002	\$2.5	to	\$4.9
EXPLORATION AND PRODUCTION						
Offshore Atlas, Vol 2.	192	to 313	1998	\$13.3	to	\$21.6
Coalbed Methane Reservoir Gas-In-Place Analytical Techniques	150	to 270	1999	\$49.7	to	\$90.5
GRI Sulfur Recovery Workshop Proceedings	295	to 440	1998	\$3.0	to	\$4.4
Calcite Scale Handbook/ASTM Standards	1,300	to 2,040	1998	\$32.7	to	\$51.3
Drill String Safety Valves (DSSVs)	4,310	to 6,470	1998	\$43.4	to	\$65.0
Mesa-GRIP Seismic Survey Design Software	136	to 187	1998	\$57.4	to	\$78.9
Crosswell Seismic Imaging	190	to 300	1998	\$150.1	to	\$235.9
Fracturing Information and Diagnostics	12,600	to 19,800	1998	\$211.3	to	\$332.0
• M-Site Advanced Diagnostics Insights						
• Hydraulic Fracture Mapping System						
• Downhole Tiltmeters						
• Fracture Fluid Characterization Facility (FFCF) Insights						
Unconventional Natural Gas Database	111	to 196	1999/01	\$10.2	to	\$18.0
Downhole Gas/Water Separation CD-ROM	75	to 130	1999	\$8.3	to	\$14.4
Advanced Crosswell Seismic Source	200	to 400	1999	\$32.1	to	\$63.6
High Power VSP Mechanical Seismic Source	520	to 755	1999	\$24.2	to	\$35.3
Advanced Stimulation Technologies CD-ROM	45	to 83	1999	\$5.5	to	\$10.0
Coiled Tubing Standards	3	to 5	1999	\$14.9	to	\$28.8
GRI-MSTR™ Software and Report to Predict Toxicity of Produced Water Discharged to the Marine Environment	275	to 435	1999	\$12.0	to	\$18.9
Glycol Dehydrator Emissions Calculation Program - GLYCalc 4.0	760	to 1,400	1992/00	\$72.4	to	\$134.0
ProTreat™ Software for Amine Gas Treating Applications	45	to 75	2000	\$129.7	to	\$216.2
Cased Hole Resistivity Tool	800	to 1,300	2000	\$11.7	to	\$19.0

	Sales or Applications Projected Through 2007 (in units)			Year of First Sale	Net Present Value of Benefits** (Million 2002\$)		
Cased Hole Pressure Tool	725	to	1,245	2000	\$101.5	to	\$173.9
Well Siting in Carbonates – EGI Report	92	to	138	2000	\$68.7	to	\$103.1
Portfolio of Emerging Natural Gas Resources – Rocky Mountain Basins	630	to	950	2000	\$143.1	to	\$214.6
Mercury Contamination Training Workshop	300	to	500	2000	\$2.9	to	\$4.8
New Gas Exploration Concepts	52	to	81	2001	\$219.2	to	\$344.4
StreamAnalyzer™ Software	330	to	720	2001	\$69.6	to	\$153.1
Enhanced Seismic Spectral Processor	200	to	370	2002	\$25.6	to	\$47.4
TOTAL					\$4,010	to	\$7,103
(million of 2002 dollars, 5% discount rate)							

* Enhancement to a previous product for a new market application.

** Net present value calculations based on a real discount rate of 5% (excluding inflation), stated in 2002 dollars.

*** Benefits are based on user feedback about technical and market influence of the group of the information items.

Table 3. Total Expected Benefits by Sector

	Quantified GRI RD&D Results	Net Present Value of Benefits (Million 2002\$)
• Residential	1	\$128
• Commercial	11	\$541
• Industrial	8	\$884
• Power Generation	3	\$143
• Transportation	5	\$129
• Distribution	23	\$1,025
• Pipeline	19	\$790
• Exploration and Production	28	\$1,869
TOTAL	98	\$5,509

GRI RD&D Costs

Between January 1998 and December 2002, GRI outlays totaled \$592 million. For comparison to the RD&D benefits calculated above, the cost cash flow stream was converted to an equivalent net present value lump sum expenditure at the beginning of 2002. As with the benefits calculation, a 5% real discount rate was used in the net present value calculation. The calculated equivalent cost was \$690 million. These costs include all outlays made by GRI during the past 5-year period, not just the costs incurred to produce the 153 RD&D products. Consequently, a portion of the calculated cost will yet generate benefits as additional products are commercialized in the future.

Benefit-to-Cost Ratio

Dividing the calculated benefits by the costs results in a calculated benefit-to-cost ratio range of 5.8 : 1 to 10.3 : 1 (benefits of \$4.0 to \$7.1 billion divided by outlays of \$690 million) with an expected value of 8.0 : 1 (\$5.5 billion divided by \$690 million). In a similar analysis carried out in 2002 for RD&D items placed in commercial use between 1997 and 2001, the calculated ratio of the benefits to gas customers to total GRI costs incurred during the same period was 9.2 to 1 [Reference 2].

Conclusions

GRI's planning and budget allocation process strives to put in place a program with the maximum ratio of benefits to RD&D costs for the mutual benefit of the gas customer and the gas industry. The economic evaluation of GRI's commercially successful RD&D results have consistently shown that benefits far exceed the costs of the RD&D program.

Analysis of the benefits of approximately 98 of the 153 GRI RD&D items placed in commercial service between January 1998 and December 2002 shows that GRI RD&D will return about \$8.0 for every dollar invested in GRI during the same period. In addition to the fact that only a portion of GRI's commercialized RD&D items are included in the benefits calculation, all of the costs of GRI's operations during the 1998 to 2002 period have been included in the calculation of the benefit-to-cost ratio.

References

1. P.D. Holtberg, J.C. Cochener, "Baseline Projection Data Book: 2001 Edition of the GRI Baseline Projection of U.S. Energy Supply and Demand to 2020," GRI-01/0002.1 and GRI-01/0002.2, GRI, March 2001.
2. A.D. Bournakis, and G.D. Pine, " Benefits of GRI RD&D Results That Have Been Placed in Commercial Use in 1997 Through 2000," Gas Research Institute, May 2002, GRI-02/0074.

Appendix A

GRI RD&D Results That Have Been Placed in Commercial Use in 2002

RESIDENTIAL

Summary Report of GRI's Venting Research. High-efficiency gas space-heating furnaces offer the attraction of saving consumers energy costs and conserving U.S. energy resources. However, moisture condensation from the flue gases leads to corrosion of furnace heat exchangers and gas vents and to other venting problems. GRI RD&D, conducted over many years, comprehensively characterized and addressed these problems. However, continuing efforts by DOE to conserve fuels has led to recurring attempts to increase furnace efficiency, even though it is inescapable that high-efficiency furnaces cause moisture to condense. To insure that the results of GRI's RD&D on condensing furnaces and their venting are widely available for future policy decisions, GRI offered testimony and comments at the DOE Venting Workshop, held May 8, 2002. GRI also published a report, summarizing the RD&D results on which the testimony and comments were based. The summary report lists the GRI reports with abstracts pertaining to mid- and high-efficiency gas furnaces and boilers dealing with condensate-induced corrosion, condensing heat exchangers, and venting guidelines for higher efficiency gas appliances. The report provides a historical perspective of the issues and research that led to the development of the gas vent design tables and identifies the assumptions made in formulating the tables. It discusses the factors that influence condensation and corrosion in appliances and vents and the benefits and problems of stainless steel and high-temperature plastic vents and masonry chimneys. It also discusses the effects of expected contaminants in combustion gases.

Gas Venting Safety Assessment. Gas furnaces and water heaters rely on the buoyancy of warm combustion products to carry the combustion products up through the gas vent and out of homes. At the same time, outdoor air infiltrates through many small openings in the home to replace the air and combustion products that leave the home through the gas vent. As homes have become tighter to save energy, there is increased concern that combustion products will not vent properly but will, instead, spill into the home, leading to undesirable indoor concentrations of moisture, carbon monoxide, and nitrogen oxides. When kitchen exhaust fans, fireplaces, or similar devices are operated, outdoor air can actually be pulled down the gas vent, preventing any combustion products from leaving the home. This situation is called backdrafting when the gas appliance is operating and downdrafting when it is not operating. GRI investigated gas venting in detail, and found that the customary quick tests for gas vent spillage do not adequately assess whether a problem exists in a given residence. Longer-term tests are required because gas vent spillage is an intermittent phenomenon that can occur in some homes only under certain combinations of outdoor temperature and wind conditions. American Society for Testing and Materials Standard E 1998 summarizes different methods for assessing backdrafting and spillage from vented combustion appliances. It describes the equipment needed, test procedures, data reporting, results and interpretation, and technician and test time required for each method. It also discusses the advantages and uncertainties of each method. In 2002, as a result of GRI's research, ASTM modified the standard to recognize the importance of longer-term tests and recommend how those tests should be performed. The modified standard, issued as ASTM E 1998-02, recognizes that longer-term monitoring of gas vent spillage can provide more definitive results than short-term testing, lead to better assessment of spillage problems, and ultimately provide a greater margin of safety for building occupants.

Accurate Assessment of Heat Pump Efficiency. In the late 1990s, devices called comfort controllers became available in the market for use with electric heat pumps. Comfort controllers are resistance heaters that boost the heating capacity of heat pumps and provide delivered air temperatures higher than typically produced by the heat pump alone, creating a feeling of warmth or comfort. Because resistance heaters are not nearly as energy efficient as heat pumps, their use could degrade efficiency below the

NAECA minimum efficiency levels mandated by federal law. In 2001, DOE published a notice of proposed rulemaking for heat pump test procedures seeking to modify its standard test procedure for heat pump efficiency to account for such devices as comfort controllers. GRI RD&D reviewed the proposed rules and found that the assumptions and approaches specified would not fully account for all of the energy used by heat pumps that incorporate comfort controllers. In 2001, GRI published a report of its findings and identified modifications in the test procedures that would properly evaluate the energy consumption and performance of heat pumps with comfort controllers. Because the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) maintains Standard 90.1, which regulates energy use in buildings, attention focused on insuring that ASHRAE 90.1 contained appropriate language. In 2002, ASHRAE changed the standard to include language requiring that energy supplied to comfort controllers be counted as input energy to the heat pump.

COMMERCIAL

Comparison of Radiant and Convective Unit Heaters. Radiant infrared heater manufacturers claim that radiant heaters mounted near the ceiling with the radiant output directed toward the floor can maintain comfort conditions for occupants with much less fuel consumption than warm-air type space heating equipment, particularly in industrial and commercial spaces that have high ceilings. A plausible explanation is that radiant heaters warm the floor and other surfaces near the floor, and these surfaces re-radiate heat to the occupants and warm the air near the floor. In contrast, warm-air heating equipment, such as unit heaters, heat a space unevenly, with much of the warm air output rising to the ceiling, increasing heat loss through the roof, and with significantly less of the heat being available to the occupants. No known established testing substantiates this reasoning. Although warm-air heating systems do have a tendency to create a vertical temperature gradient with warmer air at ceiling level, tubular infrared heaters also appreciably heat the air around themselves and, to some degree, they also warm the ceiling-level air in addition to contributing to floor level comfort conditions. To provide definitive information, GRI RD&D compared the actual performance of a typical warm-air unit heater used in high ceiling areas with the performance of a typical tubular infrared heater. The tests assessed fuel consumption and other key performance attributes, including differences in vertical temperature gradients, response to thermostat controls, and user comfort. GRI published the results of these tests in 2002. The report presents test data and conclusions about the performance of radiant heaters relative to warm-air unit heaters. It was found that each type of heater has advantages and disadvantages. Unit heaters have quicker response and cost less, but their efficiency is much lower when providing the same level of comfort to occupants, especially in buildings that have little roof insulation, where they are typically used. The radiant heaters were quieter, but they provided less comfort to occupants. Although unit heaters generate some local hot spots in the building, the radiant heaters generally overheat occupants' upper extremities and underheat their lower extremities.

Gas-Fired Commercial Steam Cooker. Commercial steam cookers are usually heated by electric elements mounted at the bottom of the cooker to boil water and at the top to prevent condensation that would drip onto the food. The need for multiple-point heating around the cooking cavity has been an obstacle to the use of gas, even though gas cookers would heat up faster and be less expensive to operate than electric steamers. GRI RD&D developed a gas heating system for a steam cooker that enables multi-point heating and does not require an expensive boiler. The gas burners are directly fired into the cast-aluminum cooking cavity, which also holds the source of water for steaming, thus avoiding the need for a separate boiler. GRI's innovative design provides secondary heating of the walls and top of the cooking cavity, slightly superheating the steam and generating a dry-steam cooking environment. This design delivers more cooking energy in less time than existing designs, enables quick heat recovery, and costs less to clean and maintain. Performance testing showed that the gas-fired steamer safely provides equivalent cooking characteristics to electric steam cookers. The steamer became commercially available

in early 2002 as Stellar Steam's Sirius Steamer, manufactured by ColburnTreat LLC. Stellar offers the full-featured steamer in four sizes. The new steamer offers a better choice of energy services to commercial food preparers. It is faster and less expensive to operate than currently available steam cookers.

INDUSTRIAL

***Advanced U-Shaped Radiant Tubes.** Industrial furnaces for heat-treating metals use special atmospheres to nitride or carburize the metals. The burners in these furnaces are fired through radiant tubes to keep the combustion products from contaminating those special atmospheres. Normally, the inlet and the outlet of these tubes are on the same side of the furnace, so U-shaped tubes are used. Current practice is to use tubes made of high-alloy steels that have a service temperature of 2100°F. However, metal creep and other deterioration processes shorten the life of these tubes. Silicon carbide tubes would perform better than metal tubes, but their high cost limited their commercial use. GRI RD&D developed processes for making tubes inexpensively from silicon and silicon carbide (Si-SiC). Si-SiC tubes allow service temperatures as high as 2450°F and have longer life than steel alloy, especially the U-bend portion of the tubes. Small diameter (2.75 and 3.25 inches) straight tubes were placed in service in 1989 and have performed well, but further RD&D was needed to scale up to larger diameters of 4.5 and 6.5 inches and to produce U-shaped tubes (only 17 percent of all radiant tubes currently in service are straight tubes, and 78 percent of all tubes have diameters of four to seven inches). The RD&D successfully developed processes for producing inexpensive U-shaped tubes with diameters of 4.5 and 5.125 inches. Schunk-Inex, Inc. made these large size U-shaped tubes commercially available in 2002. The higher service temperature of the Si-SiC tubes allows higher furnace efficiency and productivity. The larger U-shaped Si-SiC tubes will make these advantages available to a much larger fraction of U.S. heat-treating furnace operators, who now have 250,000 tubes of all kinds in service.

Low-NO_x Retrofit Burners for Fire-Tube Boilers. Gas-fired boilers and heaters typically emit 100 ppm of NO_x when no control methods are used, however, regulations usually require that these units emit no more than 10-30 ppm. Existing technology can achieve 25-30 ppm and can meet many regulatory limits, but these limits are becoming more stringent. In California, they are as low as 5 ppm, and anticipated future limits are 2 ppm. External control methods, such as the use of catalysts and flue gas recirculation can decrease NO_x emission, but these methods are costly. Burner redesign is usually preferable, and GRI pursued that path to develop the Forced Internal Recirculation (FIR) burner, which successfully achieved less than 10 ppm NO_x in field installations while keeping carbon monoxide levels below 50 ppm. The patented FIR burner combines staged combustion with internal recirculation of partial combustion products to reduce the formation of both thermal and prompt NO_x. The burner can operate at low levels of excess air, and this enables higher efficiencies than other low-NO_x burners. GRI licensed the technology to Johnston Boiler Company for use in fire-tube boilers. Johnston began selling the burners in 2002.

Low-Cost Multi-Gas Continuous Emissions Monitor. Single-gas continuous emissions monitors are costly to install, maintain, and calibrate for use in natural gas combustion facilities. GRI along with Emission Monitoring, Inc. developed a portable FTIR (Fourier-transform infrared) analyzer that can simultaneously measure all pollutants of interest with the required sensitivity. The analyzer can be used for stack emissions compliance testing and monitoring, emissions credit trading, ambient air monitoring, engine design optimization, selective catalytic reduction performance monitoring, and combined optimization of efficiency and emissions. Its robust design and easy-to-use data collection and analysis software enable practical operation in hostile industrial environments. The analyzer provides simultaneous analysis and display of more than 30 gases. Samples can be acquired and analyzed in less than a second, making transient analysis possible. The analyzer is relatively small and lightweight, and it has part-per-billion sensitivity for many gas species and a user-friendly software design that enables

calibration and operation by minimally trained personnel. On-Line Products, Inc. made the analyzer commercially available as its model 2030 MultiGas™ Analyzer in 2002. A special feature is a unique calibration system, which uses permanent gas calibration spectra to avoid the time required for calibration and the cost of calibration gas cylinders. The MultiGas software has multi-point calibration curves that cover a range from parts per billion to 100%. Calibrations for many gas species are provided with the instrument, and users can generate additional calibrations from gases of known concentration. The MultiGas Analyzer will enable large gas users to comply with expected environmental regulations for emissions monitoring. The analyzer performs the same measurements as a trailer-sized set of single-gas analyzers, while also providing real time data for aldehydes and other volatile organic compounds for which there are no suitable alternative analyzers. As a result, it enables emissions monitoring at much lower capital and operating costs.

TRANSPORTATION

Advanced NGV Fueling Dispenser. A typical compressed natural gas dispenser for a NGV fueling station costs from \$21,000 to \$32,000 or more, depending on features. This high cost inhibits the use of natural gas vehicles by limiting the number of fueling stations available and increasing the cost of gas delivered. To mitigate this problem, GRI sponsored RD&D at GTI and Tulsa Gas Technologies. The RD&D improved the electronic controls to enable complete filling of a vehicle tank and communication with a card reader, receipt printer, and keypad. It also developed new dispenser cabinet designs that provide lower-cost solutions to the issues of keeping the electronics safely away from any possible contact with combustible gases. The new equipment was tested and certified by the Canadian Standards Association under ANSI/CSA standard NGV 4.1-1999. The prototypes evolved into the Tulsa Gas Technologies 7000 Series dispenser, which became commercially available in 2002. The new dispenser costs \$4,500 to \$13,000 less than previous systems with similar capabilities.

Reference Guide of Best Practices for Medium-and Heavy-Duty NGV Fuel System Design. Problems with NGV operation and performance can often be traced back to insufficient experience with gaseous fuel delivery systems. Most vehicle developers and operators are familiar with conventional liquid fuel delivery systems, but few are familiar with the high-pressure piping systems used for compressed natural gas (CNG) or the cryogenic systems for liquefied natural gas (LNG). To ameliorate this problem, GRI developed the Reference Guide for Integration of Natural Gas Vehicle Fuel Systems. It is a reference for those who develop, build, or maintain medium- and heavy-duty vehicles fueled by natural gas. It provides tools and resources for achieving greater safety and reliability in NGV fuel systems and NGV service. The Guide presents current industry practices and the recommendations of the project team for developing and maintaining on-board fuel systems for medium-duty, heavy-duty, transit, school bus, and paratransit NGVs. It is the most comprehensive source available of the design, manufacturing, operation, and maintenance segments of the vehicle life cycle. It will help designers, manufacturers, and users of NGVs avoid potential problems with fuel systems and locate appropriate references to learn more about specific topics. The Guide was compiled from interviews and workshops with vehicle builders, component suppliers, and vehicle users and from detailed reviews of the technical literature, codes and standards, and analyses of failure modes and effects. It covers both CNG and LNG systems and their components, and it contains information on design, maintenance, material compatibility, component selection, relevant codes and standards, safety, and reliability. GRI published the Guide in 2002. It is available on CD and in notebook form. The practices recommended in these reference guides will improve the quality of vehicle design, thus enhancing vehicle safety.

Clean Cities Initiative to Evaluate NGV Technology. When this joint GRI-DOE RD&D began in 1997, the use of natural gas vehicles was encouraged by public policies but was retarded by a lack of information about NGV technology and uncertainties about vehicle fueling capacities and locations.

Proposals were solicited for projects to improve understanding; support broader use; and demonstrate the security, efficiency, safety, reliability, and environmental characteristics of NGV technology. A team of GRI, DOE, and industry experts selected six proposals for implementation. The six projects achieved the following and the results have been disseminated to the industry: 1) Atlanta FuelNet Project added 7 CNG stations, serving 26 different fleets. The software and experience from this project can be applied in other cities; 2) Natural Gas Passenger Ferry Project – fully planned natural-gas-fueled ferry systems for Boston and New York. Local businesses, environmentalists, and regulators in other cities are now considering natural-gas-fueled ferries; 3) Chicago Airport Infrastructure Project – installed a fueling station at the airport in 2000 and expanded it in 2001. The station delivers about 130,000 gge per year and enables increased use of NGVs at this airport. The project also enabled the introduction of the Fuelman fleet credit card into the Chicago area. The project also helped the City of Chicago Department of Environment obtain a Congestion Mitigation and Air Quality grant that led to the installation of nine new NGV fueling systems; 4) Salt Lake City Olympic Infrastructure Project – installed three stations at educational institutions for use by school buses and transit buses. The station also supported the use of NGV buses at the 2002 Winter Olympic Games; 5) Central Valley (California) Medium-Duty Vehicle and Infrastructure Project – supported the design, production, and performance monitoring of two medium-duty road repair trucks and a comparison of their performance to a similar diesel powered truck. The project also installed a LNG (liquefied natural gas) to CNG station at the City of Tulare, supplying 3 heavy-duty LNG trucks and 37 light- and medium-duty CNG vehicles. The station also strengthens the California-Arizona-Nevada Clean Transportation Corridor; 6) West Virginia I-79 Corridor Project – installed two CNG fueling stations. The stations strengthened the NGV corridor through West Virginia. In addition to the six projects, analysis of the proposed Clean Diesel Rule indicated that the NGV industry should continue to improve exhaust emissions and fuel efficiency so it can provide attractive alternatives to heavy-duty diesel engines.

Resource Guide for Heavy-Duty LNG Vehicles. The use of liquefied natural gas for heavy-duty vehicles has been hindered by a lack of information for fleet managers and other decision makers to use in evaluating vehicle fuel alternatives. To help remedy this situation, GRI developed the Resource Guide for Heavy-Duty LNG Vehicles, Infrastructure, and Support Operations. The guide answers questions about LNG fuel in fleet vehicles, such as how to begin implementation, likely costs and benefits, safety, availability, and potential problems. The guide also provides contact information for representatives of companies that are now using LNG, manufacturers and suppliers of the LNG and supporting equipment, and technical and governmental reference materials. The information in the guide is useful to both new and existing end-users of heavy-duty LNG vehicles, to help them conduct their implementation cost-effectively with minimal disruptions. This Resource Guide includes planning and handling issues that can occur before and during purchase decisions, after the point of sale of equipment or acceptance of funding, and after the vehicles are on the road. GTI published the Guide in 2002. The guide will help potential NGV users appropriately consider the use of LNG, anticipate important issues, successfully install the necessary infrastructure, and deploy LNG-fueled vehicles.

Regional Natural Gas Vehicle Fueling Infrastructure Standards. If natural gas vehicles are to become a significant factor in U.S. transportation, adequate fueling facilities must be available. However, investment in fueling facilities will not occur until there are many natural gas vehicles in service. Therefore, a key tenet of the NGV Industry Strategy is the need for fueling infrastructure development, mainly focused on fleet customers during the initial phase and publicly accessible for use by various customers. GRI teamed with regional stakeholders in the Chicago metropolitan area to develop strategies and resources to expand the NGV fueling infrastructure and to demonstrate pathways for infrastructure development. A successful program, the NGV Regional Cooperative, was formed. Specific project tasks included fueling station optimization, manufacturing, testing, and installation; start-up and training; and coordination of service, maintenance, and emergency backup supplies. The Cooperative's members worked together to develop the two standardized state-of-the-art skid-mounted NGV fueling systems and

install nine NGV fueling stations, using these systems, throughout the greater Chicago metropolitan area. The use of standardized fueling systems enabled rapid installation and deployment of fueling infrastructure with minimal costs for site preparation and engineering and improved maintenance support. One of the two standardized systems can deliver the equivalent of 500 gallons per day and the other can deliver 70 gallons per day. Each system provides fast filling, achieving fill times of three to seven minutes. The systems have one fast-fill dispenser with a single hose and should provide sufficient fueling capability for several years of growth in the size of the NGV fleet. Because the systems are modular, additional delivery capacity can be added to meet future growth. The systems are transportable and can be relocated easily, if necessary. GTI was the prime contractor for the City of Chicago and worked with Peoples Energy and NICOR to facilitate NGV station installation, start-up, and training. The nine NGV fueling stations went into service in 2002. Three of them are located in the City of Chicago, and six are strategically located in near or distant suburbs. The results are available in a GTI report, GTI-02/0178, "Development of a Regional Natural Gas Vehicle Infrastructure".

***Heavy-Duty Engine Efficiency Improvements (Deere 8.1L and Mack Truck E7G).** Engine efficiency is extremely important in natural gas vehicles because their range is limited by the difficulty of storing large amounts of natural gas on a vehicle. The ranges of NGVs are typically much shorter than those of liquid-fuel-powered vehicles, and range is directly proportional to engine efficiency. GRI undertook RD&D to improve the efficiency of the John Deere PowerTech 8.1L engine and Mack Truck E7G engine, which are used in many medium-duty NGVs. The main goal of the John Deere RD&D was to increase the efficiency of the natural gas engines, both at full and part load, to make it more competitive with diesel engines. In addition, the low emissions nature of the engine was to be maintained. John Deere improved the performance of its 250-horsepower 8.1 L engine. Knock reduction was achieved over the entire speed and load range of the engine using high-volume automotive components. Also, GRI undertook RD&D to improve the efficiency of the Mack Truck E7G engine while keeping NO_x emissions below 2.5 g/bhp-hr. Mack improved the efficiency and NO_x emissions of its 425-horsepower engine by air-assisting the turbocharger. Planned future changes for the Mack engine include delaying intake valve closing and the use of exhaust gas recirculation. The improved engines became commercially available in 2002. Improving the efficiency of NGV engines will reduce vehicle operating costs and increase range.

DISTRIBUTION

***Pipe Splitting Tool.** When a copper or polyethylene gas service line must be replaced, it is better to restore it by pulling new plastic pipe through it. This saves the cost of excavating, backfilling, and site restoration. However, in some cases, the inside diameter of the plastic pipe insert would be too small to deliver enough gas. Therefore, GRI developed a tool for splitting old service lines to allow larger plastic pipe to be inserted. The tool can be used to replace copper or plastic service lines from 1/2 to 1-1/4 inches in diameter. Depending on the condition of the plastic or copper pipe, the tool head may split the old pipe as it travels through the line, pushing and expanding the existing pipe into the surrounding soil while simultaneously pulling in the new pipe. In other situations, even when the splitting head does not split a fitting such as a repair coupling, the tool will extrude the old line out in one piece while pulling in the new pipe. The new tool offers LDCs a way to replace gas service lines that are too small to be restored by inserting smaller plastic pipe through them. Savings in distribution costs will accrue because fewer excavations and reduced worker time will now be needed to replace customer service lines. The new tool has passed its qualification testing, and TT Technologies, Inc. began marketing it in 2002 under the name Grundocrack Jr. and Grundowing splitter system.

Gas Distribution Cost Database. U.S. gas distribution companies spend \$5.5 billion per year to install new or replacement mains and services and another \$2.8 billion to maintain and operate the distribution system. To help reduce this cost, GRI developed a detailed database of the components of these overall

costs. The data are reported by company category, based on customer density (number of customers per mile of main) and the fraction of gas main under paving. These aspects are major factors in gas distribution costs. The first version of the database was so useful that GRI published Version 2, based on data from 28 LDCs, in 1998. The popularity of Version 2 led GRI to extend the database, using data from 40 LDCs, representing more than 60 percent of U.S. gas consumers. The data from the 40 companies was extrapolated to the entire gas distribution industry. The extended database was published in 2002, as Version 3. The database is used to guide GRI's RD&D by providing information on potential markets for new technology and calculating the benefits of that technology. The database can be used by LDCs to benchmark their construction, repair, replacement, renewal, leak identification and pinpointing, automation and communication protocols, and other operations and maintenance practices against those of other companies and national averages. This helps the LDCs decide where to focus their attention to improve corporate performance and reduce costs. The database also helps users understand what elements comprise a cost and how those elements affect overall cost of service. The database describes the nature of the activities that characterize the cost element and the key cost variables for those activities. In addition, it provides information on charges for employee benefits, overhead, transportation and tools, and other applicable administrative factors. The database contains statistical information, such as length of mains and numbers of services by pipe size and material, causes of leaks, number of excavations, and number of pressure regulators.

Effect of Bomb Blasts on Gas Distribution Equipment. The terrorist attacks in New York and Washington in 2001 and the 1997 bombing of the Murrah Building in Oklahoma City have increased the gas industry's interest in protecting its critical infrastructure. GRI considered approaches to preventing or mitigating the escape of natural gas in such instances. Burning gas could hinder rescue teams who respond to such emergencies and could cause additional damage. The approaches included infrastructure changes, hardware innovations, and revised standard operating procedures. Two tests were conducted in a full-scale building to evaluate bomb blast effects on the exterior and interior piping systems. This led to the development of potential remedies to mitigate the effects of terrorist bombings to exposed gas infrastructure. The tests revealed the vulnerabilities of natural gas piping systems outside and inside the building. The results of the GRI RD&D were published in 2002 and included specific recommendations. The RD&D developed general guidelines and many specific examples of incidents that gas companies should consider when upgrading their disaster prevention, training, communications, and response plans. A comprehensive evaluation approach was suggested, including three stages of response: awareness, evaluation, and implementation. It was recommended that pre-incident planning should give special attention to the number of shut-off valves; quickly identifying the location of valves that will isolate damaged parts of a gas distribution network; and the need for shut-off valves well away from gas meter sets, which are especially vulnerable to damage from vehicle impact, external explosion, or other physical abuse. The RD&D also identified a number of examples of potential technology solutions, including: valves that would automatically shut down a feeder line when an excess flow condition occurs; distributed controls to allow local rerouting of the network to bypass problem areas without shutting off downstream customers; hardened or armor-protected exposed piping and meter sets; piping that would self-seal around a leak; sensors that would annunciate a leak; techniques for rapidly locating and tracing pipe; and remotely operated valves for emergency shut-off inside buildings.

Assessment of PVC Pipe. Most of the plastic piping used for gas distribution is polyethylene (PE). Polyvinyl chloride (PVC) piping, used by some companies, is less expensive and somewhat stronger, but uncertainty about predicting its service life has impeded its adoption. GRI has conducted extensive RD&D on PE pipe to characterize the tendency for cracks to grow slowly from small flaws, such as surface scratches, ultimately causing the pipe to fail in long-term service. That RD&D resulted in a short-term quality control test (ASTM Test Method F1473) that reflects the ability of polyethylene pipe and fittings to resist long-term crack growth and computer software (PE LIFESPAN FORECASTING™) that predicts the service life of PE piping systems. However, similar RD&D had not been done for PVC

pipng. GRI undertook research to extend the methods that were developed for PE pipe to PVC pipe. In 2002, GRI developed software that prompts users for readily available system information such as pipe size, PVC resin type, hypothesized or actual flaw sizes, service temperature, and operating pressure. The software uses the data to calculate pipe life expectancy and parametric studies can be conducted with one execution of the program. The software can also be used to specify the maximum values of different service parameters in order for new gas piping systems to achieve their intended design lives. The extensive on-line help facility and user's manual provide detailed information on how to specify input data and interpret the results, which are presented in graphical and tabular form. The enhanced ability to predict PVC pipe service life will give LDCs more confidence in using a less expensive alternative to PE piping, thus reducing gas distribution costs.

Effect of Utility Cuts on Pavement Quality. A 1998 theoretical study, based on finite element analysis (FEA) modeling of the effect of utility cuts in asphalt concrete pavement indicated that the walls of the cut moved inward about 0.003 inches, thus creating a stress on the paving material. The study recommended that repair of the paving should involve removing pavement for several feet around the cut, then tamping both the backfill and the exposed crushed stone base before restoring the pavement. Because this recommended procedure would significantly increase the cost of restoring utility cuts, GRI and others commissioned research to characterize the issues more fully. The GRI research was more complete than the original study. It not only included FEA modeling, but it also verified the accuracy of the model with controlled laboratory experiments. This validation demonstrated that FEA is able to make reasonably accurate predictions of the stiffness of both the original and repaired pavement. The GRI research went beyond the original study by analyzing not only the open excavation, but also the restored backfill and pavement. The research also thoroughly considered the effect of traffic loads on the restored pavement. Like the earlier study, the GRI research found that the excavation produces small horizontal displacement and plastic strains. The GRI research further found that the restored pavement system stiffness, as measured by response to simulated traffic loading, is unaffected by the residual strains. It also found that the stiffness of the backfill material has only a small effect on the pavement stiffness. The research concluded that the restoration procedure recommended in the earlier study is not supported by the experimentally validated FEA modeling. When pavement is restored, without cutting it back, with materials whose properties are close to those of the original paving materials, the cut and restoration have a negligible impact on the structural performance of the pavement system. GRI published the reports of the research in 2002 and made them widely available.

Plastic Pipe Informational Web Site. The use of plastic piping by gas distribution companies has increased significantly, and there are frequent introductions of new plastic pipe materials and technologies. It has become difficult for the engineering and operations staff of LDCs to keep up with the changes. GRI developed a Web site to provide a central source of pertinent, up-to-date information on the safe and effective use of plastic piping systems. The Web site lists relevant publications of GRI and the Plastic Pipe Institute, as well as specifications and test methods of the American Society of Testing and Materials. It also lists U.S. Department of Transportation Pipeline Safety Regulations (Code of Federal Regulations Title 49, Part 192), "Federal Minimum Safety Standards: Transportation of Natural and Other Gases by Pipeline", which, by inclusion, references all applicable code requirements. Technical information available on the site includes: material properties and engineering and procurement considerations for plastic pipe; pipe installation techniques, joining, squeeze-off, and purging; mechanical and electrofusion fittings and valves; and new technologies, such as magnetic pipe, Polyamide 11 pipe, the self-loading trailer, and the scratch/ovality tester. The Web site consolidates information pertinent to engineering considerations, procurement, quality control, construction and maintenance practices, and new technologies.

Evaluation of the Performance of Carbon Monoxide Alarms. Residential carbon monoxide (CO) alarms began gaining popular acceptance in 1992. Between 1992 and 1998, about 20 million alarms were

shipped and an estimated 8-15% of homes had at least one. Unfortunately, their growing popularity was accompanied by increased numbers of false or nuisance alarms. Most alarm manufacturers complied with Underwriters Laboratories' standard UL-2034, but research by GRI, the Consumer Products Safety Commission, and others showed that such compliance did not guarantee adequate performance of the alarms. A significant fraction of the alarms tested, falsely indicated dangerous CO concentrations when dangerous conditions did not actually exist. UL-2034 was updated in October 1998 to improve upon this situation, although the standard did not call for the time-of-manufacture quality control testing and in-service testing that was recommended by GRI and the Consumer Products Safety Commission. Since then, GRI has performed further research to assess whether CO alarms certified according to the 1998 version of UL-2034 perform better than earlier alarms; whether alarms are especially prone to failure to alarm at low relative humidity; and the accuracy of the digital displays on alarms. GRI concluded that UL-2034 should specify more complete sensitivity testing, both at the time of manufacture and later, over a presumed three-year service life. GRI also recommends that, whenever possible, gas companies, appliance manufacturers, and other resellers of alarms require that alarms in their jurisdiction be certified according to the Canadian National Standard CSA 6.19-01 or International Approval Services Standard 6-9, which require such testing. In 2002, GRI released a report detailing its findings and recommendations. The report includes an algorithm that integrates the two factors that characterize CO hazards: concentration and exposure time. The report also includes guidelines for quality assurance sampling and testing of CO alarms to insure their reliability.

Worker Exposure to Hazardous Substances Database. Both the gas industry and regulatory agencies are increasingly interested in protecting workers from exposure to hazardous chemicals. However, there has been no ready source of information for gas companies to assess the possibilities for worker exposure, and there was no common format for companies to share information. GRI developed a Microsoft® Access database, based on information from 29 gas companies and from literature sources to provide well-organized, valuable information on employee health and safety operational exposure. The database contains information that will support good industrial hygiene practices in gas transmission and distribution companies. The database provides sorted information on exposure issues, work practices, and control technologies. There are more than 600 exposure data points for asbestos and for lead, chromium, and cadmium-based paints. Most of the data indicate a high level of compliance with OSHA Permissible Exposure Limits. The database was designed for each gas company that contributed confidential data to have a private code for accessing its own company-confidential data. The database program allows users to create custom reports based on company category (transmission or distribution) or confidential company-specific codes, hazardous substance of interest, and the geographic region or state of interest. The database also provides telephone numbers and Web site links for all state and federal agencies that have jurisdiction over employee safety and health.

PIPELINE

Predicting the Integrity of Storage Caverns in Thin Salt Beds. The rising need for natural gas storage to accommodate winter peak demands has met with a scarcity of places to store large volumes of natural gas underground, near the point of use. Gas has been stored in depleted oil and gas formations and in porous aquifers by displacing the water with pressurized gas. However, there are not enough suitable formations in the northeastern U.S. to meet the heavy winter demand for gas in that region. Caverns in salt domes are used to store gas in these regions, and GRI RD&D helped determine the engineering characteristics of those formations. Stresses in the salt caused by the swings in pressure and temperature that occur when injecting and removing gas could damage the integrity of the cavern walls. Creating caverns in thin salt beds that are interleaved with other rock layers are an extremely interesting alternative. The engineering conditions to maintain their integrity are more complex than salt domes. GRI research developed techniques to predict and model stress behavior and rock slippage in a wide variety of

basins that have thin salt beds. The research evaluated how such factors as the ratio of cavern height to diameter, the number and thickness of non-salt layers, and the thickness of salt and non-salt roof beam thickness affect cavern deformation and bedding-plane slippage. The report includes a detailed step-by-step process to assess design and operating conditions for caverns in bedded salt.

ASME Standard for Pipeline Integrity Management. U.S. gas pipeline operators have been working with regulators for the past nine years to develop a more systematic, standardized approach to managing pipeline safety and integrity. GRI and the gas pipeline industry undertook a number of performance- and reliability-based initiatives to address the technical concerns that must be resolved in order to create a standard on integrity management. Intensive work by many technical experts led to twenty GRI reports that provided the foundation of technical information needed to complete the standard. These reports are referenced in the standard. On January 31, 2002, ASME International (formerly, the American Society of Mechanical Engineers) issued a supplement to its B31.8 2001 standard, "ASME B31.8S 2001 Supplement to B31.8 on Managing System Integrity of Gas Pipelines," covering the management of gas pipeline system integrity. The Supplement provides a systematic, comprehensive, integrated approach to managing pipeline system safety and integrity. It applies to on-shore ferrous-metal gas pipelines, and it is specifically designed to give pipeline operators the information they need to develop and implement effective integrity management programs using proven industry practices and processes. The Supplement covers all parts of pipeline systems, including pipe, valves, appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. The Supplement is unusual for a B31.8 standard in that it is a process standard, describing the process an operator may use to develop an integrity management program. It provides two approaches for developing an integrity management program, a prescriptive approach and a performance-based approach. Many pipeline operators have begun to use performance-management principles to improve the safety of their systems. The use of comprehensive, systematic, integrated integrity management programs will improve the safety of pipeline systems.

NACE Standard for Direct Assessment of Pipeline Corrosion. Natural gas pipeline operators and pipeline regulators are adopting performance-based management practices to improve pipeline safety and manage the cost of providing safe operation. Direct assessment, one approach to performance-based management, is a reliability-based method requiring that a wide variety of knowledge and experience be taken into account in interpreting direct inspection and sampling techniques. Direct assessment is a relatively new method that is especially important for assessing the condition of piping that cannot be reached by in-line inspection devices or taken out of service for hydrostatic testing. The essential element of direct assessment is the continuous improvement of the cathodic protection systems and evaluation of potential corrosion damage. NACE International (formerly the National Association of Corrosion Engineers) has taken responsibility for standardizing the direct assessment of external corrosion. NACE International Task Group 041 wrote Standard RP0502-2002, entitled "Pipeline External Corrosion Direct Assessment Methodology," and officially released it as a standard in 2002. ECDA, as described in this standard recommended practice, specifically addresses onshore buried ferrous-metal pipelines. The standard guides pipeline operators in applying ECDA to typical pipeline systems. It is flexible enough for operators to tailor the process to their specific pipeline situations. GRI provided technical leadership, technical data and analysis that accelerated this ANSI process and enabled the NACE International committee to develop a comprehensive standard in less than a year. The NACE standard will help pipeline companies apply direct assessment of external corrosion in the best possible ways, enhance public safety and reduce future costs and service interruptions resulting from unplanned incidents.

Revegetation of Rights-of-Way in Wetlands. Natural gas pipeline construction often crosses environmentally sensitive wetlands. Cut-and-trench construction clears vegetation in a 50- to 100-foot-wide corridor and excavates a trench up to 10 feet wide. In order to protect the wetlands, recent regulatory requirements have trended to be more prescriptive, and they may be inflexible and costly and still may not

adequately protect some wetlands. GRI developed consistent ways to identify appropriate goals and techniques for restoring wetlands crossed by natural gas pipeline construction. The RD&D focused on identifying functional effects on wetlands that may result from cut-and-trench crossings and de-emphasized effects that do not occur at those crossings. The RD&D demonstrated that major wetland functions can be maintained after pipeline crossings and that the cut-and-trench method can be environmentally acceptable and cost-effective. The results show that many wetlands are resilient and recover quickly from the effects of cut-and-trench crossings. These results may help applicants and regulators understand when cut-and-trench crossings are appropriate and help avoid mandatory requirements for more costly crossing alternatives. The evaluation process will help gas companies flexibly and cost-effectively meet wetland revegetation goals. GRI's recommended approach incorporates aspects of the U.S. Army Corps of Engineers' hydrogeomorphic method and the U.S. Bureau of Land Management's method for determining proper functional conditions. GRI verify the efficacy of the evaluation process and developed a database tool that can be used by gas companies when applying the decision process. The database tool is based on Microsoft® Access and can be used on personal computers, laptops, or pocket computers. The efficacy of the database tool was tested through field surveys at eleven cut-and-trench crossing sites. GRI published the results of this RD&D in two reports, GRI-00/0112, "An Approach for Determining and Meeting Wetland Revegetation Goals in Pipeline Construction Rights-of-Way" and GRI-02/0116, "Evaluation of Wetland Revegetation in Pipeline Rights-of-Way in Michigan and Field Verification of the GRI Wetland Evaluation Database."

Reference Manuals of Best Practices for Horizontal Directional Drilling and its Effect in Wetlands.

The three most prevalent pipeline construction techniques used for wetland crossings are trench-and-lay construction, trench-and-push construction, and horizontal directional drilling (HDD). Trench-and-lay construction has inherently high environmental impacts. Trench-and-push construction often has short-term, localized impacts to water quality, aquatic species habitat, and vegetation. It costs about twice as much as trench-and-lay construction. HDD costs more than trench-and-push construction for pipe diameters larger than 12 inches; and it costs, on average, two to three times as much as trench-and-lay construction for 12- to 36-inch pipes. HDD has emerged as the technology often preferred by regulatory agencies for pipeline construction that crosses wetlands because, theoretically, it is the least intrusive technique. HDD can install the pipeline below the surface without having heavy machinery enter the wetland. However, in some cases, the bentonite mud that is used to lubricate drilling, transport spoils, and stabilize the hole can inadvertently travel up through fractures in the soil and into or above the saturated root zone of wetlands. If sizable volumes of inadvertent drilling mud returns are deposited in a wetland, they may impair water quality, aquatic species habitats, and the vegetative community, at least for the short-term. GRI research examined the effects of inadvertent mud returns at five wetland sites, and reaffirmed that, when drill mud returns are properly removed from the surface, the pre-existing vegetation rebounds fully within one to two growing seasons. Invasive pioneer species had not displaced pre-existing vegetation at any of the sites as a result of the HDD returns. The areas that had been disturbed by cleanup machinery showed no discernable, long-term impacts, although the speed at which one site rebounded was slowed by overly aggressive cleanup operations. The results were published in GRI-99/0236, "Evaluating the Effects of Muds on Wetlands from Horizontal Drilling: Field Investigations Topical Report," GRI-01/0233, "Evaluating the Effects of Muds on Wetlands from Horizontal Directional Drilling: The Relationship of Subsurface and Geophysical Conditions to Inadvertent Returns," and GRI-02/0145, "Evaluating the Effects of Muds on Wetlands From Horizontal Directional Drilling: Phase II Field Investigations". In addition, GRI developed an HDD best management practices manual for use as a comprehensive decision-making tool that covers many facets of HDD planning, engineering, construction, and environmental protection and mitigation, including management of drilling mud and contingency planning. The manual covers construction, engineering, and environmental best practices. The manual provides technical guidance on predicting and managing mud releases during HDD operations. The manual will help pipeline companies use the most effective techniques for construction that crosses wetlands.

Best Environmental Practices for Pipeline Construction. The U.S. Environmental Protection Agency has noted that water runoff associated with construction activities can have serious water quality impacts, such as pollution of waterways and drinking supplies. Erosion and sediment transport can disturb fish and wildlife habitats, clog streams and storm drains, and cause silting of reservoirs and other bodies of water. If gas pipeline construction does not follow acceptable practices, companies are subject to fines, litigation, and poor public relations. GRI developed a manual of best management practices to serve as a reference document and field guide. The manual will help users establish site-specific best management practices (BMPs) for erosion and sediment control during natural gas pipeline construction projects. It supplements the erosion control baseline BMPs outlined in Federal Energy Regulatory Commission guidance documents. The alternative BMPs presented in the Manual represent current, up-to-date technologies that, if implemented correctly and appropriately, should provide equal or better protection than the baseline BMPs presented in FERC's Upland Erosion Control, Revegetation, and Maintenance Plan and Wetland and Waterbody Construction and Mitigations Procedures. The alternative BMPs provide the pipeline industry a wider range of protection measure alternatives that can be considered for implementation, but these BMPs do not replace the baseline BMPs presented in FERC's Plan and Procedures documents. The Manual also presents controls that represent new technologies or are appropriate for specific sites or projects. The Manual will help pipeline companies identify BMPs appropriate for use on a specific site or project to control erosion and meet regulatory requirements at minimum cost.

Integrated Vegetation Management. Vegetation management on natural gas pipeline rights-of-way (ROWs) is required by both regulations and operational necessity. ROW plants are most commonly maintained as grass communities or as regularly mowed woody plant communities. Vegetation is usually managed by mechanical means, such as mowing, use of chainsaws, and other physical means of cutting. The technique of integrated vegetation management (IVM) could be more effective and less costly. IVM integrates the use of physical, chemical, horticultural, and biological treatments to ecologically control vegetation in ways that are compatible with the environment, economically feasible, and socially acceptable. GRI investigated the opportunities and benefits of IVM for gas pipelines. The technical literature showed that IVM could be applied to pipeline ROWs. A survey of gas companies indicated that 80% of their ROW management uses mechanical methods, and the companies, for the most part, have given little consideration to using IVM. The research, summarized in a report published by GRI, found that IVM is not addressed under current ROW agreements. Easement contract language and ways to use ROWs to enhance wildlife habitats require additional attention. IVM controls vegetation by identifying the plant communities that require attention and using a combination of control options, including mechanical cutting, tillage practices, and biological and chemical herbicide controls. IVM techniques offer pipeline companies the opportunity to reduce the cost of caring for their ROWs at a fundamental and continuing level. In addition to cost savings, IVM techniques can diversify ecological conditions for plant and animal communities in the ROWs and, thereby, help meet the needs of landowners and local interest groups and facilitate good relationships with fish and wildlife and environmental agencies.

EXPLORATION AND PRODUCTION

Enhanced Seismic Spectral Processor. Seismic signals are usually processed using traditional Fourier analysis. However, when signal frequency changes with time, Fourier transforms can give misleading results because they only provide time-averaged information. More accurate seismic analysis of potential gas reservoirs means that fewer unproductive wells will be drilled, and the average cost of finding and producing natural gas will decrease. GRI research developed a signal analysis method, called enhanced spectral processing (ESP), which uses wavelet transforms to extract time-dependent information, thereby allowing very high-resolution analysis. The research demonstrated the high resolution of the technique

through synthetic modeling and case studies based on actual seismic data. The results for several gas reservoirs showed the ability of this method to identify hydrocarbon-bearing formations. In 2002, Fusion Geophysical began using the technique commercially, under the name INSPECT, to provide services to E&P companies.

Evaluating Ecological Impacts at E&P Sites. The use of screening criteria for ecological risk-management decisions for hazardous waste sites is gaining momentum and is helping to focus attention on sites that may truly benefit from the ecological risk assessment (ERA) process. U.S. EPA risk managers recognize that, although the ERA process is a valuable tool, it is not necessarily needed for every ecological risk decision. Resources spent on ERAs that do not provide meaningful information for risk management decisions are wasted. GRI developed screening criteria applicable to natural gas E&P sites, based on precedents for the use of screening criteria in regulatory programs throughout the United States and Canada. The American Society of Testing and Materials (ASTM) Risk-Based Corrective Action (RBCA) Standard Guide for the Protection of Ecological Resources (known as Eco-RBCA) (in process) has highlighted the issue that every site does not need an ERA, and has led EPA to acknowledge that industry and government must consider how to differentiate between sites that need ERAs and those that do not. The GRI RD&D supported the GRI/American Petroleum Institute Upstream RBCA and the Petroleum Environmental Research Forum 99-01 projects. The RD&D identified a variety of categories and specific screening criteria that may be useful for ecological risk-management decisions. The RD&D considered the release of natural gas, natural gas liquids, drilling fluids, and produced water. Useful screening criteria for E&P sites should be based on environmental performance, proximity of release to relevant ecological receptors, and the significance of the ecological exposures. The GRI report, "Evaluating Potential Ecological Impacts at Exploration & Production Sites: A Compilation of Screening Criteria", is the first published, coordinated effort to compile screening criteria that could be used to evaluate potential ecological impacts to E&P sites.

* Enhancement to a previous product.

Appendix B
GRI RD&D Results That Have Been Placed in Commercial Use in 1998 Through 2002

RESIDENTIAL

1. Combo Systems Sizing and Installation Guidelines – 1992/2000
2. Flammable Vapors – 1998
3. NAECA Water Heater Assessment - 2000
4. Indoor Emissions from Cooking – 2001
5. Summary Report of GRI's Venting Research - 2002
6. Gas Venting Safety Assessment - 2002
7. Accurate Assessment of Heat Pump Efficiency - 2002

COMMERCIAL

8. GATC Quick Response Activities – 1995/1999
(Life-Cycle Cost Model for Food Service Technologies)*
9. BinMaker™ Pro: The Weather Summary Tool – 1997/2000
10. TecoFROST™ Gas Engine Driven Refrigeration - 1997/98
11. Alturdyne Hybrid Electric/Gas Engine Chiller - 1998
12. kitchenCOST™ Software- 1998/99
13. DesiCalc™ Software - 1998
14. Low-NO_x Power Burner - 1998
15. ASHRAE Standard 155P for Boilers - 1998
16. Modulating Indirect-Fired Make-Up Air Unit - 1999
17. GATC: AERCO Benchmark Boiler - 1999
18. Engine Rooftop Heat Pump (Goettl 15-20 ton) - 1999
19. PITCO Gas Fryers - 1999
20. AUTOFRY™ Deep Fat Fryer - 1999
21. Analysis of Commercial Sizing and Installation Guidelines - 2000
22. Gas Cooling Guide – Pro Version - 2000
23. York 600 RT 134a Chiller - 2000
24. Tecogen 150 RT 134a Chiller - 2000
25. Trane Single Effect Horizon Chiller - 2000
26. Chiller Application Briefs - 2000
27. Restaurant Kiosk Ventilation and High-Performance Gas Countertop – 2000
28. Comparison of Radiant and Convective Unit Heaters - 2002
29. Gas-Fired Commercial Steam Cooker - 2002

INDUSTRIAL

30. Process Application of Composite Radiant Tubes (and Case Studies) and Advanced U-Shaped Radiant Tubes - 1994/99/2002
31. Industrial Boiler Gas Cofiring (including Biomass) - 1995/99
32. High Performance Infrared Burners (and Application Tools) – 1995/99
33. RAPIDFIRE™ Products - 1998
34. METHANE de-NOX® Controls for Stoker Boilers - 1999

35. Ultra-Low-NO_x Burner for Boiler Retrofit - 1999
36. Forced Convection Heater (FCH) Systems – Automotive – 2000
37. Oscillating Combustion Burner - 2001
38. Radiant Heater Characterization Facility - 2001
39. Low-NO_x Retrofit Burners for Fire-Tube Boilers - 2002
40. Low-Cost Multi-Gas Continuous Emissions Monitor - 2002

POWER GENERATION

41. DGen Pro™ Software – 1998/99/2000
42. SOAPP™ Modules – 1998/99
43. Fuel-Lean Gas Reburn (including Amine-Enhanced FLGR) - 1998
44. Microturbines (Capstone and Honeywell) - 1999
45. Distributed Generation Guidebook for Municipal Utilities - 1999
46. IR PowerWorks Microturbine Cogeneration Systems – 2000
47. Advanced High-Output Gas Engine-Generator (Caterpillar 3500® Series) - 2001

TRANSPORTATION

48. Ford Crown Victoria Natural Gas Vehicle - 1995/98
49. Cummins C8.3G Engine – 1996/2001
50. John Deere 8.1L Engine – 1996/99/2002
51. Caterpillar Dual-Fuel Truck Engine - 1996/98
52. MACK E7G Refuse Hauler – 1996/2002
53. John Deere 6.8L – 1998/99
54. CNG Cylinder Maintenance Handbook - 1998
55. Risk Management Program for Liquid Natural Gas Vehicle Refueling Stations - 1998
56. NGV Cylinders (Types 1 and 2) - 1999
57. Glass-Fiber-Wrapped Fuel Tanks for NGVs - 2000
58. Advanced NGV Fueling Dispenser
59. Best Practices for Medium-and Heavy-Duty NGV Fuel System Design - 2002
60. Clean Cities Initiative to Evaluate NGV Technology - 2002
61. Resource Guide for Heavy-Duty LNG Vehicles - 2002
62. Regional Natural Gas Vehicle Fueling Infrastructure Standards - 2002

DISTRIBUTION

63. Design Methods to Prevent Rapid Crack Propagation in Polyethylene Pipe - 1984/98
64. Field Failure Catalog for Polyethylene (PE) Pipe - 1987/98
65. PE LIFESPAN FORECASTING™ – 1994/2001
66. Plastic Pipe Across Bridges – 1995/99
67. DrillPath™ Guided Boring Software – 1996/99
68. Utility Communications Architecture (UCA™) Protocol for Gas Distribution Systems - 1998
69. Optical Methane Detector (OMD) - 1998
70. Distribution Internal Inspection System - Magnetic Flux Leakage (MFL) - 1998
71. Pipe Hawk™ (Buried Pipe Locator) - 1998
72. Predictive Control District Regulators - 1998

73. Pipe Splitting Tool - 1998/02
74. Main/Services Tester - 1998
75. TUBIS™ Software for Repair/Replace Decisions - 1999
76. Pipe Ovality and Scratch Depth Measurement Device and Guidelines - 1999
77. Plastic Pipe Repair Techniques - 1999
78. Starline® 2000 Renewal Technology - 1999
79. Guided Mole - 1999
80. Gas Holder Manual of Practice - 1999
81. Precision Pipe Locator - 2000
82. One-Step Paving - 2000
83. Bare Steel Maintenance Optimization System (BASMOS) Software - 2000
84. Soil Compaction Supervisor - 2000
85. Self-Loading, High-Efficiency Trailer for Coiled PE Pipe - 2001
86. Cold-Mix Restoration of Pavement Cuts - 2001
87. Imaging Underground Utility Structures - 2001
88. Comparative Evaluation of PE Pipe Materials - 2001
89. Directional Drilling for Plastic Pipe under Railroad Crossings - 2001
90. Gas Distribution Cost Database - 2002
91. Effect of Bomb Blasts on Gas Distribution Equipment- 2002
92. Assessment of PVC Pipe - 2002
93. Effect of Utility Cuts on Pavement Quality - 2002
94. Plastic Pipe Informational Web Site - 2002
95. Evaluation of the Performance of Carbon Monoxide Alarms - 2002
96. Worker Exposure to Hazardous Substances - 2002

PIPELINE

97. Meter Research Facility - 1991/98
98. Clock Spring® Composite Pipeline Repair Material – 1995/99
99. Risk Assessment/Risk Management Guidelines – 1996/99
- 100.Orifice Meter Information - 1990/92/97/98
- 101.NO_x Portable Analyzer Operator Guidelines - 1998
- 102.Oxidation Catalyst Costs for Aldehyde Control - 1998
- 103.Magnetostrictive Sensor - 1998
- 104.TurboCharger Testing Facility - 1998
- 105.Breeze Haz™ Environment and Safety Offsite Consequence Modeling Software - 1999
- 106.Emeritus Report B31.8 Code, Federal Pipeline Safety Regulations - 2000
- 107.Elastic Wave Vehicle Tool - 2000
- 108.Advanced Leak Detection and Repair at Gas Processing Plants – Hi-Flow™ Sampler - 2000
- 109.API 14.1 Gas Sampling Standard - 2001
- 110.Ultrasonic Meter Installation Effects -2001
- 111.Orifice Meter Operational Effects - 2001
- 112.Orifice Plate Installation Effects - 2001
- 113.Gas Storage Well Rehabilitation and Damage Prevention - DamageExpert™ Software -2001
- 114.Satellite Radar Interferometry Measurement of Slope Movement - 2001
- 115.AIRCalc™ Software – 2001
- 116.Predicting the Integrity of Storage Caverns in Thin Salt Beds - 2002
- 117.ASME Standard for Pipeline Integrity Management - 2002
- 118.NACE Standard for Direct Assessment of Pipeline Corrosion - 2002

- 119.Revegetation of Rights-of-Way in Wetlands - 2002
- 120.Reference Manuals of Best Practices for Horizontal Directional Drilling and its Effects in Wetlands - 2002
- 121.Best Environmental Practices for Pipeline Construction - 2002
- 122.Integrated Vegetation Management - 2002

EXPLORATION AND PRODUCTION

- 123.Advanced Process Control for Gas Processing/Industrial Applications (Multi-Variable Control (MVC®)) - 1991/98
- 124.Glycol Dehydrator Emissions Calculation Program – GLYCalc - 1992/2000
- 125.Gas Composition Database – 1996/2001
- 126.Calcite Scale Handbook - 1998
- 127.ASTM Standards - 1998
- 128.Drill String Safety Valves (DSSVs) - 1998
- 129.Mesa-GRIP Seismic Survey Design Software - 1998
- 130.Crosswell Seismic Imaging - 1998
 - Fracturing Information and Diagnostics - 1998
- 131.M-Site Advanced Diagnostics Insights - 1998
- 132.Hydraulic Fracture Mapping System - 1998
- 133.Downhole Tiltmeters - 1998
- 134.Fracturing Fluid Characterization Facility (FFCF) Insights - 1998
- 135.GRI Sulfur Recovery Workshop Proceedings – 1998
- 136.Unconventional Natural Gas Database – 1999/2001
- 137.Nitrogen Removal Requirements Report - 1999
- 138.Downhole Gas/Water Separation CD-ROM - 1999
- 139.Advanced Crosswell Seismic Source - 1999
- 140.High Power VSP Mechanical Seismic Source - 1999
- 141.Advanced Stimulation Technologies CD-ROM - 1999
- 142.Coiled Tubing Standards - 1999
- 143.GRI-MSTR™ Software and Report to Predict Toxicity of Produced Water Discharged to the Marine Environment – 1999
- 144.ProTreat™ Software for Amine Gas Treating Applications - 2000
- 145.Cased Hole Resistivity Tool - 2000
- 146.Cased Hole Pressure Tool - 2000
- 147.Well Siting in Carbonates – EGI Report - 2000
- 148.Portfolio of Emerging Natural Gas Resources – Rocky Mountain Basins - 2000
- 149.Mercury Contamination Training Workshop – 2000
- 150.New Gas Exploration Concepts - 2001
- 151.StreamAnalyzer™ Software - 2001
- 152.Enhanced Seismic Spectral Processor - 2002
- 153.Evaluating Ecological Impacts at E&P Sites - 2002

** This product is no longer available for sale or it has been superseded by a new model incorporating the GRI technology.

The following LDC's have a voluntary gas-consumer-benefits R&D charge (beyond the FERC-approved charge) in the indicated states:

Alabama Gas Corp.: Alabama
Atmos Energy: Illinois, (West Kentucky Gas) Kentucky, (Mississippi Valley Gas) Mississippi
Avista: Idaho, Washington State
Central Hudson Gas & Electric: New York
Consolidated Edison: New York
Energy West: Montana (on intrastate gas)
Intermountain Gas: Idaho
KeySpan Energy New York: New York
National Fuel: New York
New York State Electric & Gas: New York
Niagara Mohawk: New York
NiSource: (Northern Utilities) New Hampshire, (Columbia Gas Kentucky) Kentucky
NW Natural Gas: Oregon
ONEOK: Oklahoma (intrastate)
Orange & Rockland: New York
Public Service Electric & Gas: New Jersey
Rochester Gas & Electric: New York
Questar Gas Co.: Utah, Wyoming
TECO Peoples Gas: Florida
TXU: Texas (intrastate)

NO. 130. Provide the calculation for the Company's annual inflation rate of 2.0%.

RESPONSE:

There is no "calculation" of the annual inflation rate of inflation, per se. The 2.0% annual inflation rate estimate is based on an analysis of the projections of the Gross Domestic Product (GDP) price deflator made by various financial forecasters. The supporting documentation of these forecasts is included in response to Item 43.