

July 30, 2012

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 4323 - Application for Approval of a Change in Electric and Gas Base Distribution Rates Pursuant to R.I.G.L. Sections 39-3-10 and 39-3-11 Responses to Division Data Requests - Set 17 - ELEC

Dear Ms. Massaro:

Enclosed is an original and ten (10) copies of National Grid's¹ responses to the Division's Seventeenth Set of Data Requests in the above-captioned proceeding.

The enclosed responses complete the Seventeenth Set, as indicated in the enclosed discovery log.

Thank you for your attention to this transmittal. If you have any questions, please feel free to contact me at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

Enclosures

cc: Docket 4323 Service List
Leo Wold, Esq.
Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid (herein referred to as "National Grid" or the "Company").

Certificate of Service

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate were electronically submitted, hand delivered and mailed to the individuals listed below.

/S/
Janea Dunne

July 30, 2012
Date

**National Grid (NGrid) – Request for Change in Electric & Gas Distribution Rates
Docket No. 4323 – Service List updated on 6/22/12**

Name/Address	E-mail Distribution	Phone
Celia B. O'Brien, Esq. National Grid 280 Melrose St. Providence, RI 02907	Celia.obrien@us.ngrid.com	781-907-2153
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	Joanne.scanlon@us.ngrid.com	
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	dmacrae@riag.ri.gov	
	Steve.scialabba@ripuc.state.ri.us	
	David.stearns@ripuc.state.ri.us	
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Dr. Kay Davoodi, P.E. Utility Rates and Studies Office NAVFACHQ- Building 33 1322 Patterson Ave SE Washington Navy Yard, D.C. 20374-5065	Khojasteh.davoodi@navy.mil	202-685-3319
	Larry.r.allen@navy.mil	
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	enicholson@exeterassociates.com	
Bruce Gay Monticello Consulting 4209 Buck Creek Court North Charleston, SC 29420	bruce@monticelloconsulting.com	
Matthew Kahal c/o Exeter Associates 10480 Little Patuxent Parkway Suite 300 Columbia, MD 21044	mkahal@exeterassociates.com	
File original & 11 copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	Lmassaro@puc.state.ri.us	401-780-2107
	Anault@puc.state.ri.us	
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	Nucci@puc.state.ri.us	
	Dshah@puc.state.ri.us	
	Sccamara@puc.state.ri.us	

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
DIVISION SET 1						
Division Set 1	Division 1-1-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme	Att. DIV 1-1-ELEC	
Division Set 1	Division 1-2-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme	Att. DIV 1-2-ELEC	
Division Set 1	Division 1-3-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme	Att. DIV 1-3-ELEC	
Division Set 1	Division 1-4-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme	Att. DIV 1-4-ELEC	
Division Set 1	Division 1-5-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme		
Division Set 1	Division 1-6-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-6-ELEC	
Division Set 1	Division 1-7-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-8-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme	Att. DIV 1-8-ELEC	
Division Set 1	Division 1-9-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-9-ELEC	
Division Set 1	Division 1-10-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme		
Division Set 1	Division 1-11-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-11-ELEC	
Division Set 1	Division 1-12-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-13-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-13-ELEC	
Division Set 1	Division 1-14-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-15-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-16-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-17-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-18-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-19-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-20-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme		
Division Set 1	Division 1-21-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-21-ELEC	
Division Set 1	Division 1-22-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-23-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-23-ELEC	
Division Set 1	Division 1-24-ELEC	5/9/2012	5/25/2012	Michael D. Laflamme		
Division Set 1	Division 1-25-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-26-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-27-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-27-ELEC	
Division Set 1	Division 1-28-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
Division Set 1	Division 1-29-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme	Att. DIV 1-29-ELEC	
Division Set 1	Division 1-30-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
Division Set 1	Division 1-31-ELEC	5/9/2012	5/23/2012	Michael D. Laflamme		
DIVISION SET 2						
Division Set 2	Division 2-1-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-1-GAS	
Division Set 2	Division 2-2-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-2-GAS	
Division Set 2	Division 2-3-GAS	5/14/2012	5/25/2012	Michael D. Laflamme		
Division Set 2	Division 2-4-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-4-GAS	
Division Set 2	Division 2-5-GAS	5/14/2012	5/25/2012	Michael D. Laflamme		
Division Set 2	Division 2-6-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-6-GAS	
Division Set 2	Division 2-7-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-7-GAS	
Division Set 2	Division 2-8-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-8-GAS	
Division Set 2	Division 2-9-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-9-GAS	
Division Set 2	Division 2-10-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-11-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-12-GAS	5/14/2012	5/25/2012	Michael D. Laflamme	Att. DIV 2-12-GAS	
Division Set 2	Division 2-13-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-14-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-15-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-16-GAS	5/14/2012	5/29/2012	Michael D. Laflamme	Att. DIV 2-16-1-GAS Att. DIV 2-16-2-GAS Att. DIV 2-16-3-GAS	
Division Set 2	Division 2-17-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-18-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-19-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-20-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-21-GAS	5/14/2012	5/29/2012	Michael D. Laflamme	Att. DIV 2-21-GAS	
Division Set 2	Division 2-22-GAS	5/14/2012	5/29/2012	Michael D. Laflamme	Att. DIV 2-22-GAS	
Division Set 2	Division 2-23-GAS	5/14/2012	5/29/2012	Michael D. Laflamme	Att. DIV 2-23-GAS	
Division Set 2	Division 2-24-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		
Division Set 2	Division 2-25-GAS	5/14/2012	5/29/2012	Michael D. Laflamme		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
DIVISION SET 3						
Division Set 3	Division 3-1-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme	Att. DIV 3-1-ELEC/GAS	
Division Set 3	Division 3-2-ELEC/GAS	5/30/2012	6/13/2012	Michael D. Laflamme	Att. DIV 3-2-ELEC/GAS	
Division Set 3	Division 3-3-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert	Att. DIV 3-3-ELEC/GAS	
Division Set 3	Division 3-4-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert		
Division Set 3	Division 3-5-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert	Att. DIV 3-5-ELEC/GAS	
Division Set 3	Division 3-6-ELEC/GAS	5/30/2012	6/13/2012	Michael D. Laflamme	Att. DIV 3-6-ELEC/GAS (Redacted)	Att. DIV 3-6-ELEC/GAS (Confidential)
Division Set 3	Division 3-7-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme	Att. DIV 3-7-1-ELEC/GAS Att. DIV 3-7-2-ELEC/GAS Att. DIV 3-7-3-ELEC/GAS	
Division Set 3	Division 3-8-ELEC/GAS	5/30/2012	6/12/2012	Legal Department and Robert B. Hevert		
Division Set 3	Division 3-9-ELEC/GAS	5/30/2012	6/11/2012	Mustally Hussain	Att. DIV 3-9-1-ELEC/GAS Att. DIV 3-9-2-ELEC/GAS Att. DIV 3-9-3-ELEC/GAS Att. DIV 3-9-4-ELEC/GAS Att. DIV 3-9-5-ELEC/GAS Att. DIV 3-9-6-ELEC/GAS Att. DIV 3-9-7-ELEC/GAS Att. DIV 3-9-8-ELEC/GAS Att. DIV 3-9-9-ELEC/GAS	
Division Set 3	Division 3-10-ELEC/GAS	5/30/2012	6/11/2012	Mustally Husain	Att. DIV 3-10-ELEC/GAS	
Division Set 3	Division 3-11-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme	Att. DIV 3-11-ELEC/GAS	
Division Set 3	Division 3-12-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme		
Division Set 3	Division 3-13-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme		
Division Set 3	Division 3-14-ELEC/GAS	5/30/2012	6/13/2012	Michael D. Laflamme		
Division Set 3	Division 3-15-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme		
Division Set 3	Division 3-16-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme		
Division Set 3	Division 3-17-ELEC/GAS	5/30/2012	6/11/2012	Michael D. Laflamme	Att. DIV 3-17-ELEC/GAS	
Division Set 3	Division 3-18-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert		
Division Set 3	Division 3-19-ELEC	5/30/2012	6/12/2012	Robert B. Hevert		
Division Set 3	Division 3-20-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert		
Division Set 3	Division 3-21-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert		
Division Set 3	Division 3-22-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert	Att. DIV 3-22-ELEC/GAS	
Division Set 3	Division 3-23-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert	Att. DIV 3-23-ELEC/GAS	
Division Set 3	Division 3-24-ELEC/GAS	5/30/2012	6/13/2012	Robert B. Hevert	Att. DIV 3-24-ELEC/GAS	
Division Set 3	Division 3-25-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert	Att. DIV 3-25-ELEC/GAS	
Division Set 3	Division 3-26-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert		
Division Set 3	Division 3-27-ELEC/GAS	5/30/2012	6/12/2012	Robert B. Hevert		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
DIVISION SET 4						
Division Set 4	Division 4-1-GAS	6/7/2012	6/29/2012	Paul M. Normand	See Attached Page	See Attached Page
Division Set 4	Division 4-2-GAS	6/7/2012	6/19/2012	Paul M. Normand		
Division Set 4	Division 4-3-GAS	6/7/2012	6/20/2012	Ann E. Leary		
Division Set 4	Division 4-4-GAS	6/7/2012	6/19/2012	Paul M. Normand		
Division Set 4	Division 4-5-GAS	6/7/2012	6/19/2012	Paul M. Normand		
Division Set 4	Division 4-6-GAS	6/7/2012	6/20/2012	Ann E. Leary		
Division Set 4	Division 4-7-GAS	6/7/2012	6/20/2012	Ann E. Leary		
Division Set 4	Division 4-8-GAS	6/7/2012	6/19/2012	Ann E. Leary	Att. DIV 4-8-1-GAS Att. DIV 4-8-2-GAS Att. DIV 4-8-3-GAS Att. DIV 4-8-4-GAS Att. DIV 4-8-5-GAS	
Division Set 4	Division 4-9-GAS	6/7/2012	6/20/2012	Ann E. Leary		
Division Set 4	Division 4-10-GAS	6/7/2012	6/19/2012	Ann E. Leary	Att. DIV 4-10-GAS	
Division Set 4	Division 4-11-GAS	6/7/2012	6/20/2012	Ann E. Leary		
Division Set 4	Division 4-12-GAS	6/7/2012	6/20/2012	Ann E. Leary	Att. DIV 4-12-GAS	
Division Set 4	Division 4-13-GAS	6/7/2012	6/19/2012	Ann E. Leary and Michael D. Laflamme		
DIVISION SET 5						
Division Set 5	Division 5-1-ELEC	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 5-1-ELEC	
Division Set 5	Division 5-2-ELEC	6/8/2012	6/29/2012	Evelyn M. Kaye	Att. DIV 5-2-1-ELEC Att. DIV 5-2-2-ELEC Att. DIV 5-2-3-ELEC	
Division Set 5	Division 5-3-ELEC	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 5-3-1-ELEC Att. DIV 5-3-2-ELEC	
Division Set 5	Division 5-3-ELEC (Corrected)	6/8/2012	7/2/2012	Evelyn M. Kaye		
Division Set 5	Division 5-4-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye	Att. DIV 5-4-ELEC	
Division Set 5	Division 5-5-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye	Att. DIV 5-5-1-ELEC Att. DIV 5-5-2-ELEC	
Division Set 5	Division 5-6-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye	Att. DIV 5-6-1-ELEC Att. DIV 5-6-2-ELEC Att. DIV 5-6-3-ELEC	
Division Set 5	Division 5-7-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye		
Division Set 5	Division 5-8-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye		

Division Set 4

Division 4-1-GAS

ATTACHMENT

**CONFIDENTIAL
ATTACHMENT**

1-18 Design Winter Sales RATE YEAR Rev 4-2-12.xls

Att DIV 5-12 Meter Cost Detail MAC_B.xls

Attach 1-2B(Test Year PLT ACCUMDEPR Acct) with Rate Year Adj 4-6.xls

Attach 1-17 with Back-up (CY11_Charge_off (W Philibin 02 15 12)).xls

Attach 1-24 (Services Inv Allocator) MAC.xls

Attach 1-26 RATE YEAR (REG ACCNT 903000 CustRecordsColl Exp).xls

Attach 1-27 RATE YEAR (ACCNT 908000 Cust Assistance Exp).xls

Attach 1-29 with backup (6967 RI GAS SALES REPORT DEC11) MAC.xls

Attachment to 1-11 (Rev Proof & Bill Detm)_A.xls

Bill Impact-(2014 Base Rates and ISR for Rate Year template)_H AEL_1.xls

NG RI Design Day Rate Year Rev 3-20-12 (LS).xls

NG RI Gas Rate Design 4-16-12 B PMN - 7.xls

Ngrid No 1-28 (Deposits) (3).docx

RDA & ISR Adj by Rate Class.xls

RI Gas Allocated COS 4-13-12 MAC.xlsx

NGRI-GCOS Rate Year Revised 4-16-12 WITH ISR & RDA Revenues
PRO.xls

NGRI-GCOS Rate Year Revised 4-16-12 WITH ISR & RDA Revenues
PRO.xls

(REDACTED)

(CONFIDENTIAL)

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
Division Set 5	Division 5-9-ELEC	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 5-9-ELEC	
Division Set 5	Division 5-10-ELEC	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 5-10-1-ELEC Att. DIV 5-10-2-ELEC	
Division Set 5	Division 5-11-ELEC	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 5-11-1-ELEC Att. DIV 5-11-2-ELEC Att. DIV 5-11-3-ELEC Att. DIV 5-11-4-ELEC	
Division Set 5	Division 5-12-ELEC	6/8/2012	6/26/2012	Evelyn M. Kaye		
Division Set 5	Division 5-13-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye		
Division Set 5	Division 5-14-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye	Att. DIV 5-14-ELEC	
Division Set 5	Division 5-15-ELEC	6/8/2012	6/22/2012	Evelyn M. Kaye	Att. DIV 5-15-ELEC	
Division Set 5	Division 5-16-ELEC	6/8/2012	6/29/2012	Evelyn M. Kaye	Att. DIV 5-16-1-ELEC Att. DIV 5-16-2-ELEC Att. DIV 5-16-3-ELEC Att. DIV 5-16-4-ELEC (REDACTED)	Att. DIV 5-16-2-ELEC Att. DIV 5-16-3-ELEC Att. DIV 5-16-4-ELEC (CONFIDENTIAL)
Division Set 5	Division 5-16-ELEC (Supplemental)	6/8/2012	7/20/2012	Evelyn M. Kaye	Att. DIV 5-16-1-ELEC Att. DIV 5-16-2-ELEC Att. DIV 5-16-3-ELEC Att. DIV 5-16-4-ELEC Supplemental (REDACTED)	Att. DIV 5-16-2-ELEC Att. DIV 5-16-3-ELEC Att. DIV 5-16-4-ELEC Supplemental (CONFIDENTIAL)
DIVISION SET 6						
Division Set 6	Division 6-1-GAS	6/8/2012	7/2/2012	Evelyn M. Kaye	Att. DIV 6-1-GAS	
Division Set 6	Division 6-2-GAS	6/8/2012	7/2/2012	Evelyn M. Kaye	Att. DIV 6-2-1-GAS Att. DIV 6-2-2-GAS	
Division Set 6	Division 6-2(d)-GAS (Supplemental)	6/8/2012	7/20/2012	Evelyn M. Kaye	Att. DIV 6-2(d)-GAS (Supplemental)	
Division Set 6	Division 6-3-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-3-GAS	
Division Set 6	Division 6-3-GAS (Supplemental)	6/8/2012	7/20/2012	Evelyn M. Kaye	Att. DIV 6-3-GAS (Supplemental)	
Division Set 6	Division 6-4-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-4-1-GAS Att. DIV 6-4-2-GAS	
Division Set 6	Division 6-5-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-5-GAS	
Division Set 6	Division 6-6-GAS	6/8/2012	7/2/2012	Evelyn M. Kaye	Att. DIV 6-6-1-GAS Att. DIV 6-6-2-GAS Att. DIV 6-6-3-GAS (REDACTED)	Att. DIV 6-6-2-GAS Att. DIV 6-6-3-GAS (CONFIDENTIAL)
Division Set 6	Division 6-7-GAS	6/8/2012	6/22/2012	Evelyn M. Kaye		
Division Set 6	Division 6-8-GAS	6/8/2012	6/22/2012	Evelyn M. Kaye		
Division Set 6	Division 6-9-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye		
Division Set 6	Division 6-9-GAS (Supplemental)	6/8/2012	7/20/2012	Evelyn M. Kaye	Att. DIV 6-9-GAS (Supplemental)	
Division Set 6	Division 6-10-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-10-1-GAS Att. DIV 6-10-2-GAS	
Division Set 6	Division 6-11-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye		
Division Set 6	Division 6-12-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye		
Division Set 6	Division 6-13-GAS	6/8/2012	6/22/2012	Evelyn M. Kaye		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
Division Set 6	Division 6-14-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-14-GAS	
Division Set 6	Division 6-15-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-15-1-GAS Att. DIV 6-15-2-GAS Att. DIV 6-15-3-GAS	
Division Set 6	Division 6-16-GAS	6/8/2012	7/2/2012	Evelyn M. Kaye	Att. DIV 6-16-1-GAS Att. DIV 6-16-2-GAS Att. DIV 6-16-3-GAS Att. DIV 6-16-4-GAS Att. DIV 6-16-5-GAS (REDACTED)	Att. DIV 6-16-1-GAS Att. DIV 6-16-2-GAS Att. DIV 6-16-3-GAS Att. DIV 6-16-4-GAS Att. DIV 6-16-5-GAS (CONFIDENTIAL)
Division Set 6	Division 6-16-GAS (Supplemental)	6/8/2012	7/23/2012	Evelyn M. Kaye	Att. DIV 6-16-1-GAS Att. DIV 6-16-2-GAS Att. DIV 6-16-3-GAS Att. DIV 6-16-4-GAS Att. DIV 6-16-5-GAS Att. DIV 6-16-6-GAS Att. DIV 6-16-7-GAS Supplemental (REDACTED)	Att. DIV 6-16-1-GAS Att. DIV 6-16-2-GAS Att. DIV 6-16-3-GAS Att. DIV 6-16-4-GAS Att. DIV 6-16-5-GAS Supplemental (CONFIDENTIAL)
DIVISION SET 7						
Division Set 7	Division 7-1-GAS	6/12/2012	7/5/2012	Evelyn M. Kaye	Att. DIV 7-1-GAS	
Division Set 7	Division 7-2-ELEC	6/12/2012	7/5/2012	Evelyn M. Kaye	Att. DIV 7-2-GAS	
Division Set 7	Division 7-3-ELEC/GAS	6/12/2012	7/5/2012	Evelyn M. Kaye	Att. DIV 7-3-1-ELEC/GAS Att. DIV 7-3-2-ELEC/GAS Att. DIV 7-3-3-ELEC/GAS	
Division Set 7	Division 7-4-ELEC/GAS	6/12/2012	7/5/2012	Evelyn M. Kaye		
Division Set 7	Division 7-5-ELEC/GAS	6/12/2012	6/28/2012	Evelyn M. Kaye	Att. DIV 7-5-ELEC/GAS	
Division Set 7	Division 7-6-ELEC	6/12/2012	6/25/2012	Evelyn M. Kaye		
Division Set 7	Division 7-7-GAS	6/12/2012	6/25/2012	Evelyn M. Kaye		
Division Set 7	Division 7-8-ELEC/GAS	6/12/2012	6/28/2012	Evelyn M. Kaye		
DIVISION SET 8						
Division Set 8	Division 8-1-ELEC	6/14/2012	6/25/2012	Michael D. Laflamme	Att. DIV 8-1-ELEC	
Division Set 8	Division 8-2-ELEC	6/14/2012	6/25/2012	Michael D. Laflamme	Att. DIV 8-2-ELEC	
Division Set 8	Division 8-3-ELEC	6/14/2012	7/3/2012	Michael D. Laflamme	Att. DIV 8-3-ELEC	
Division Set 8	Division 8-4-ELEC	6/14/2012	6/25/2012	Michael D. Laflamme		
Division Set 8	Division 8-5-ELEC	6/14/2012	7/5/2012	Michael D. Laflamme	Att. DIV 8-5-ELEC	
Division Set 8	Division 8-6-ELEC	6/14/2012	7/6/2012	Michael D. Laflamme	Att. DIV 8-6-ELEC	
Division Set 8	Division 8-7-ELEC	6/14/2012	7/12/2012	Maureen P. Heaphy	Att. DIV 8-7-ELEC	
Division Set 8	Division 8-8-ELEC	6/14/2012	6/25/2012	Michael D. Laflamme		
Division Set 8	Division 8-9-ELEC	6/14/2012	6/27/2012	Michael D. Laflamme		
Division Set 8	Division 8-10-ELEC	6/14/2012	6/25/2012	Michael D. Laflamme		
Division Set 8	Division 8-11-ELEC	6/14/2012	6/27/2012	Michael D. Laflamme		
Division Set 8	Division 8-12-ELEC	6/14/2012	6/27/2012	Michael D. Laflamme		
Division Set 8	Division 8-13-ELEC	6/14/2012	7/6/2012	Michael D. Laflamme		
Division Set 8	Division 8-14-ELEC	6/14/2012	6/27/2012	Michael D. Laflamme		
Division Set 8	Division 8-15-ELEC	6/14/2012	6/27/2012	Michael D. Laflamme	Att. DIV 8-15-1-ELEC Att. DIV 8-15-2-ELEC	

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Division Set 8	Division 8-16-ELEC	6/14/2012	6/27/2012	Michael D. Laflamme	Att. DIV 8-16-ELEC	
DIVISION SET 9						
Division Set 9	Division 9-1-GAS	6/14/2012	7/2/2012	Michael D. Laflamme		
Division Set 9	Division 9-2-GAS	6/14/2012	7/2/2012	Michael D. Laflamme	Att. DIV 9-2-GAS	
Division Set 9	Division 9-3-GAS	6/14/2012	6/27/2012	Michael D. Laflamme		
Division Set 9	Division 9-4-GAS	6/14/2012	6/27/2012	Michael D. Laflamme & Susan L. Fleck		
Division Set 9	Division 9-5-GAS	6/14/2012	6/27/2012	A. Leo Silvestrini		
Division Set 9	Division 9-6-GAS	6/14/2012	6/27/2012	A. Leo Silvestrini	Att. DIV 9-6-GAS	
Division Set 9	Division 9-7-GAS	6/14/2012	6/27/2012	A. Leo Silvestrini		
Division Set 9	Division 9-8-GAS	6/14/2012	6/27/2012	A. Leo Silvestrini	Att. DIV 9-8-GAS	
Division Set 9	Division 9-9-GAS	6/14/2012	6/27/2012	A. Leo Silvestrini		
DIVISION SET 10						
Division Set 10	Division 10-1-ELEC	6/22/2012	7/3/2012	Howard S. Gorman	Att. DIV 10-1-1-ELEC Att. DIV 10-1-2-ELEC	
Division Set 10	Division 10-2-ELEC	6/22/2012	7/3/2012	Jeanne A. Lloyd	Att. DIV 10-2-1-ELEC Att. DIV 10-2-2-ELEC Att. DIV 10-2-3-ELEC Att. DIV 10-2-4-ELEC Att. DIV 10-2-5(1)-ELEC to Att. DIV 10-2-5(11)-ELEC Att. DIV 10-2-3-ELEC Att. DIV 10-2-4-ELEC Att. DIV 10-2-5-ELEC Att. DIV 10-2-6-ELEC Att. DIV 10-2-7-ELEC Att. DIV 10-2-8-ELEC Att. DIV 10-2-9-ELEC	
Division Set 10	Division 10-3-ELEC	6/22/2012	7/5/2012	Evelyn M. Kaye	Att. DIV 10-3-1-ELEC Att. DIV 10-3-2-ELEC	
Division Set 10	Division 10-4-ELEC	6/22/2012	7/3/2012	Alfred P. Morrissey	Att. DIV 10-4-ELEC	
Division Set 10	Division 10-5-ELEC	6/22/2012	7/5/2012	Howard S. Gorman	Att. DIV 10-5-ELEC	
Division Set 10	Division 10-6-ELEC	6/22/2012	6/28/2012	Howard S. Gorman		
Division Set 10	Division 10-7-ELEC	6/22/2012	6/28/2012	Howard S. Gorman	Att. DIV 10-7-ELEC	
Division Set 10	Division 10-8-ELEC	6/22/2012	6/28/2012	Howard S. Gorman		

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DIVISION SET 11						
Division Set 11	Division 11-1-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme	Att. DIV 11-1-1-ELEC/GAS Att. DIV 11-1-2-ELEC/GAS	
Division Set 11	Division 11-2-ELEC/GAS	6/25/2012	7/6/2012	Maureen P. Heaphy		
Division Set 11	Division 11-3-ELEC/GAS	6/25/2012	7/6/2012	Maureen P. Heaphy		
Division Set 11	Division 11-4-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme	Att. DIV 11-4-ELEC/GAS	
Division Set 11	Division 11-5-ELEC/GAS	6/25/2012	7/10/2012	Michael D. Laflamme		
Division Set 11	Division 11-6-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme	Att. DIV 11-6-1-ELEC/GAS Att. DIV 11-6-2-ELEC/GAS	
Division Set 11	Division 11-7-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme	Att. DIV 11-7-ELEC/GAS	
Division Set 11	Division 11-8-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme	Att. DIV 11-8-1-ELEC/GAS Att. DIV 11-8-2-ELEC/GAS Att. DIV 11-8-3-ELEC/GAS Att. DIV 11-8-4-ELEC/GAS Att. DIV 11-8-5-ELEC/GAS	
Division Set 11	Division 11-9-ELEC/GAS	6/25/2012	7/12/2012	Michael D. Laflamme	Att. DIV 11-9-ELEC/GAS	
Division Set 11	Division 11-10-ELEC/GAS	6/25/2012	7/12/2012	Michael D. Laflamme		
Division Set 11	Division 11-11-ELEC/GAS	6/25/2012	7/10/2012	Michael D. Laflamme	Att. DIV 11-11-ELEC/GAS	
Division Set 11	Division 11-12-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme	Att. DIV 11-12-ELEC/GAS	
Division Set 11	Division 11-13-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		
Division Set 11	Division 11-14-ELEC/GAS	6/25/2012	7/12/2012	Michael D. Laflamme	Att. DIV 11-14-ELEC/GAS	
Division Set 11	Division 11-15-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		
Division Set 11	Division 11-16-ELEC/GAS	6/25/2012	7/10/2012	Michael D. Laflamme		
Division Set 11	Division 11-17-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme		
Division Set 11	Division 11-18-ELEC/GAS	6/25/2012	7/12/2012	Michael D. Laflamme	Att. DIV 11-18-ELEC/GAS	
Division Set 11	Division 11-19-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme	Att. DIV 11-19-ELEC/GAS	
Division Set 11	Division 11-20-ELEC/GAS	6/25/2012	7/12/2012	Michael D. Laflamme	Att. DIV 11-20-ELEC/GAS	
Division Set 11	Division 11-21-ELEC/GAS	6/25/2012	7/13/2012	Michael D. Laflamme		
Division Set 11	Division 11-22-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		
Division Set 11	Division 11-23-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		
Division Set 11	Division 11-24-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		
Division Set 11	Division 11-25-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		
Division Set 11	Division 11-26-ELEC/GAS	6/25/2012	7/6/2012	Michael D. Laflamme		

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DIVISION SET 12						
Division Set 12	Division 12-1-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini	Att. DIV 12-1-GAS	
Division Set 12	Division 12-2-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini	Att. DIV 12-2-GAS	
Division Set 12	Division 12-3-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini	Att. DIV 12-3-1-GAS Att. DIV 12-3-2-GAS	
Division Set 12	Division 12-4-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-5-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-6-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini		
Division Set 12	Division 12-7-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-8-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini	Att. DIV 12-8-GAS	
Division Set 12	Division 12-9-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-10-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini	Att. DIV 12-10-1-GAS Att. DIV 12-10-2-GAS Att. DIV 12-10-3-GAS	
Division Set 12	Division 12-11-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini		
Division Set 12	Division 12-12-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-13-GAS	6/28/2012	7/13/2012	A. Leo Silvestrini	Att. DIV 12-13-GAS	
Division Set 12	Division 12-14-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini		
Division Set 12	Division 12-15-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini		
Division Set 12	Division 12-16-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-17-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini	Att. DIV 12-17-GAS	
Division Set 12	Division 12-18-GAS	6/28/2012	7/13/2012	A. Leo Silvestrini	Att. DIV 12-18-GAS	
Division Set 12	Division 12-19-GAS	6/28/2012	7/13/2012	A. Leo Silvestrini		
Division Set 12	Division 12-20-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-21-GAS	6/28/2012	7/10/2012	A. Leo Silvestrini		
Division Set 12	Division 12-22-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini		
Division Set 12	Division 12-23-GAS	6/28/2012	7/6/2012	A. Leo Silvestrini	Att. DIV 12-23-1-GAS Att. DIV 12-23-2-GAS	
Division Set 12	Division 12-24-GAS	6/28/2012	7/13/2012	A. Leo Silvestrini	Att. DIV 12-24-1-GAS Att. DIV 12-24-2-GAS Att. DIV 12-24-3-GAS	
Division Set 12	Division 12-25-GAS	6/28/2012	7/13/2012	A. Leo Silvestrini		
Division Set 12	Division 12-26-GAS	6/28/2012	7/13/2012	A. Leo Silvestrini		
Division Set 12	Division 12-27-GAS	6/28/2012	7/13/2012	Ann E. Leary	Att. DIV 12-27-GAS	
Division Set 12	Division 12-28-GAS	6/28/2012	7/13/2012	Ann E. Leary	Att. DIV 12-28-GAS	
Division Set 12	Division 12-29-GAS	6/28/2012	7/10/2012	Ann E. Leary		
Division Set 12	Division 12-30-GAS	6/28/2012	7/10/2012	Ann E. Leary		

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DIVISION SET 13						
Division Set 13	Division 13-1-GAS	7/11/2012	7/23/2012	Paul M. Normand		
Division Set 13	Division 13-2-GAS	7/11/2012	7/24/2012	Paul M. Normand	Att. DIV 13-2-1-GAS Att. DIV 13-2-2-GAS Att. DIV 13-2-3-GAS Att. DIV 13-2-4-GAS Att. DIV 13-2-5-GAS Att. DIV 13-2-6-GAS Att. DIV 13-2-7-GAS	
Division Set 13	Division 13-3-GAS	7/11/2012	7/23/2012	Paul M. Normand		
Division Set 13	Division 13-4-GAS	7/11/2012	7/23/2012	Ann E. Leary	Att. DIV 13-4-GAS	
Division Set 13	Division 13-5-GAS	7/11/2012	7/23/2012	Paul M. Normand		
Division Set 13	Division 13-6-GAS	7/11/2012	7/23/2012	Ann E. Leary		
Division Set 13	Division 13-7-GAS	7/11/2012	7/23/2012	Ann E. Leary		
Division Set 13	Division 13-8-GAS	7/11/2012	7/16/2012	A. Leo Silvestrini		
Division Set 13	Division 13-9-GAS	7/11/2012	7/17/2012	A. Leo Silvestrini		
Division Set 13	Division 13-10-GAS	7/11/2012	7/17/2012	A. Leo Silvestrini		
Division Set 13	Division 13-11-GAS	7/11/2012	7/17/2012	A. Leo Silvestrini		
Division Set 13	Division 13-12-GAS	7/11/2012	7/17/2012	A. Leo Silvestrini		
Division Set 13	Division 13-13-GAS	7/11/2012	7/17/2012	A. Leo Silvestrini		
DIVISION SET 14						
Division Set 14	Division 14-1-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-2-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-3-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-4-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-5-GAS (Redacted)	7/11/2012	7/24/2012	Evelyn M. Kaye		
Division Set 14	Division 14-5-GAS (Confidential)	7/11/2012	7/24/2012	Evelyn M. Kaye		
Division Set 14	Division 14-6-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-7-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-8-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-9-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-10-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-11-GAS	7/11/2012	7/23/2012	Evelyn M. Kaye		
Division Set 14	Division 14-12-GAS (Redacted)	7/11/2012	7/24/2012	Evelyn M. Kaye	Att. DIV 14-12-GAS	
Division Set 14	Division 14-12-GAS (Confidential)	7/11/2012	7/24/2012	Evelyn M. Kaye		
Division Set 14	Division 14-13-GAS (Redacted)	7/11/2012	7/24/2012	Evelyn M. Kaye		
Division Set 14	Division 14-13-GAS (Confidential)	7/11/2012	7/24/2012	Evelyn M. Kaye		

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DIVISION SET 15						
Division Set 15	Division 15-1-ELEC	7/17/2012	7/26/2012	Michael D. Laflamme	Att. DIV 15-1-ELEC	
Division Set 15	Division 15-2-ELEC	7/17/2012	7/26/2012	Michael D. Laflamme		
Division Set 15	Division 15-3-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme	Att. DIV 15-13-ELEC	
Division Set 15	Division 15-4-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme		
Division Set 15	Division 15-5-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme		
Division Set 15	Division 15-6-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme		
Division Set 15	Division 15-7-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme		
Division Set 15	Division 15-8-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme		
Division Set 15	Division 15-9-ELEC	7/17/2012	7/26/2012	Michael D. Laflamme		
Division Set 15	Division 15-10-ELEC	7/17/2012	7/26/2012	Michael D. Laflamme		
Division Set 15	Division 15-11-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme		
Division Set 15	Division 15-12-ELEC	7/17/2012				
Division Set 15	Division 15-13-ELEC	7/17/2012	7/24/2012	Michael D. Laflamme	Att. DIV 15-13-ELEC	
Division Set 15	Division 15-14-ELEC	7/17/2012	7/26/2012	Michael D. Laflamme		
Division Set 15	Division 15-15-ELEC	7/17/2012	7/26/2012	Michael D. Laflamme	Att. DIV 15-15-ELEC	
DIVISION SET 16						
Division Set 16	Division 16-1-GAS	7/17/2012	7/26/2012	Michael D. Laflamme	Att. DIV 16-1-GAS	
Division Set 16	Division 16-2-GAS	7/17/2012	7/26/2012	Michael D. Laflamme	Att. DIV 16-2-GAS	
Division Set 16	Division 16-3-GAS	7/17/2012	7/26/2012	Michael D. Laflamme		
Division Set 16	Division 16-4-GAS	7/17/2012				
Division Set 16	Division 16-5-GAS	7/17/2012	7/24/2012	A. Leo Silvestrini	Att. DIV 16-5-GAS	
DIVISION SET 17						
Division Set 17	Division 17-1-ELEC	7/17/2012	7/27/2012	Howard S. Gorman		
Division Set 17	Division 17-2-ELEC	7/17/2012	7/30/2012	Alfred P. Morrissey and Jeanne A. Lloyd	Att. DIV 17-2-1-ELEC Att. DIV 17-2-2-ELEC Att. DIV 17-2-3-ELEC Att. DIV 17-2-4-ELEC	
Division Set 17	Division 17-3-ELEC	7/17/2012	7/26/2012	Howard S. Gorman		
Division Set 17	Division 17-4-ELEC	7/17/2012	7/30/2012	Jeanne A. Lloyd	Att. DIV 17-4-ELEC	
Division Set 17	Division 17-5-ELEC	7/17/2012	7/26/2012	Jeanne A. Lloyd		
DIVISION SET 18						
Division Set 18	Division 18-1-ELEC	7/20/2012	7/26/2012	Evelyn M. Kaye	Att. DIV 18-1-ELEC	
Division Set 18	Division 18-2-ELEC	7/20/2012	7/26/2012	Evelyn M. Kaye		
Division Set 18	Division 18-3-ELEC	7/20/2012	7/27/2012	Evelyn M. Kaye		
Division Set 18	Division 18-4-ELEC	7/20/2012				
Division Set 18	Division 18-5-ELEC	7/20/2012	7/30/2012	Evelyn M. Kaye		
Division Set 18	Division 18-6-ELEC	7/20/2012				

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DIVISION SET 19						
Division Set 19	Division 19-1-ELEC/GAS	7/25/2012				
Division Set 19	Division 19-2-ELEC/GAS	7/25/2012				
Division Set 19	Division 19-3-ELEC/GAS	7/25/2012				
Division Set 19	Division 19-4-ELEC/GAS	7/25/2012				
Division Set 19	Division 19-5-ELEC/GAS	7/25/2012				
Division Set 19	Division 19-6-ELEC/GAS	7/25/2012				
Division Set 19	Division 19-7-ELEC/GAS	7/25/2012	7/30/2012	Maureen P. Heaphy	Att. DIV 19-7-ELEC/GAS	
Division Set 19	Division 19-8-ELEC/GAS	7/25/2012	7/30/2012	Maureen P. Heaphy		
Division Set 19	Division 19-9-ELEC/GAS	7/25/2012				

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
COMMISSION SET 1						
Commission Set 1	Commission 1-1-ELEC/GAS	5/24/2012	6/6/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-2-ELEC/GAS	5/24/2012	6/7/2012	Maureen P. Heaphy		
Commission Set 1	Commission 1-3-ELEC/GAS	5/24/2012	6/7/2012	Michael D. Laflamme	Att. COMM 1-3-1-ELEC/GAS Att. COMM 1-3-2-ELEC/GAS	
Commission Set 1	Commission 1-4-ELEC/GAS	5/24/2012	6/7/2012	Timothy D. Horan		
Commission Set 1	Commission 1-5-ELEC/GAS	5/24/2012	6/6/2012	Maureen P. Heaphy		
Commission Set 1	Commission 1-6-ELEC	5/24/2012	6/7/2012	Stephen F. Doucette and Maureen P. Heaphy		
Commission Set 1	Commission 1-7-ELEC	5/24/2012	6/7/2012	Stephen F. Doucette and Maureen P. Heaphy		
Commission Set 1	Commission 1-8-ELEC	5/24/2012	6/6/2012	Stephen F. Doucette		
Commission Set 1	Commission 1-9-ELEC	5/24/2012	6/7/2012	Stephen F. Doucette and Maureen P. Heaphy		
Commission Set 1	Commission 1-10-ELEC	5/24/2012	6/6/2012	Stephen F. Doucette		
Commission Set 1	Commission 1-11-ELEC	5/24/2012	6/6/2012	Stephen F. Doucette		
Commission Set 1	Commission 1-12-ELEC	5/24/2012	6/6/2012	Stephen F. Doucette		
Commission Set 1	Commission 1-13-ELEC/GAS	5/24/2012	6/4/2012	Evelyn M. Kaye		
Commission Set 1	Commission 1-14-ELEC/GAS	5/24/2012	6/4/2012	Evelyn M. Kaye		
Commission Set 1	Commission 1-15-ELEC/GAS	5/24/2012	6/6/2012	Evelyn M. Kaye		
Commission Set 1	Commission 1-16-ELEC/GAS	5/24/2012	6/4/2012	Evelyn M. Kaye and Michael D. Laflamme		
Commission Set 1	Commission 1-17-ELEC/GAS	5/24/2012	6/4/2012	Evelyn M. Kaye		
Commission Set 1	Commission 1-18-ELEC/GAS	5/24/2012	6/4/2012	Evelyn M. Kaye		
Commission Set 1	Commission 1-19-ELEC/GAS	5/24/2012	6/4/2012	Evelyn M. Kaye	Att. COMM 1-19-ELEC/GAS	
Commission Set 1	Commission 1-20-ELEC	5/24/2012	6/6/2012	Michael R. Hrycin	Att. COMM 1-20-1-ELEC Att. COMM 1-20-2-ELEC	
Commission Set 1	Commission 1-21-ELEC	5/24/2012	6/6/2012	Michael R. Hrycin	Att. COMM 1-21-ELEC	
Commission Set 1	Commission 1-22-ELEC	5/24/2012	6/6/2012	Michael R. Hrycin	Att. COMM 1-22-ELEC	
Commission Set 1	Commission 1-23-ELEC	5/24/2012	6/7/2012	Michael R. Hrycin		
Commission Set 1	Commission 1-24-ELEC	5/24/2012	6/7/2012	Michael R. Hrycin		
Commission Set 1	Commission 1-25-ELEC	5/24/2012	6/6/2012	Michael R. Hrycin		
Commission Set 1	Commission 1-26-ELEC	5/24/2012	6/6/2012	Michael R. Hrycin		
Commission Set 1	Commission 1-27-GAS	5/24/2012	6/6/2012	Jeffrey P. Martin		
Commission Set 1	Commission 1-28-GAS	5/24/2012	6/6/2012	Jeffrey P. Martin		
Commission Set 1	Commission 1-29-ELEC	5/24/2012	6/4/2012	Alfred P. Morrissey		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
Commission Set 1	Commission 1-30-ELEC	5/24/2012	6/4/2012	Alfred P. Morrissey		
Commission Set 1	Commission 1-31-ELEC	5/24/2012	6/4/2012	Alfred P. Morrissey		
Commission Set 1	Commission 1-32-ELEC	5/24/2012	6/4/2012	Alfred P. Morrissey		
Commission Set 1	Commission 1-33-ELEC	5/24/2012	6/7/2012	Alfred P. Morrissey		
Commission Set 1	Commission 1-34-ELEC	5/24/2012	6/7/2012	Alfred P. Morrissey		
Commission Set 1	Commission 1-35-ELEC/GAS	5/24/2012	6/6/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-36-ELEC/GAS	5/24/2012	6/7/2012	Michael D. Laflamme	Att. COMM 1-36-ELEC/GAS	
Commission Set 1	Commission 1-37-GAS	5/24/2012	6/7/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-38-ELEC	5/24/2012	6/6/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-39-ELEC/GAS	5/24/2012	6/7/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-40-ELEC/GAS	5/24/2012	6/7/2012	Ann E. Leary & Jeanne Lloyd	Att. COMM 1-40-ELEC/GAS	
Commission Set 1	Commission 1-41-ELEC/GAS	5/24/2012	6/6/2012	Robert B. Hevert		
Commission Set 1	Commission 1-42-ELEC/GAS	5/24/2012	6/6/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-43-ELEC/GAS	5/24/2012	6/6/2012	Michael D. Laflamme		
Commission Set 1	Commission 1-44-ELEC/GAS	5/24/2012	6/7/2012	Maureen P. Heaphy	Att. COMM 1-44-ELEC/GAS	
Commission Set 1	Commission 1-45-ELEC/GAS	5/24/2012	6/6/2012	Stephen F. Doucette		
Commission Set 1	Commission 1-46-GAS	5/24/2012	6/7/2012	Ann E. Leary		
COMMISSION SET 2						
Commission Set 2	Commission 2-1-ELEC/GAS	7/10/2012	7/24/2012	Maureen P. Heaphy	Att. COMM 2-1-ELEC/GAS	
Commission Set 2	Commission 2-2-ELEC/GAS	7/10/2012	7/19/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-3-ELEC/GAS	7/10/2012	7/23/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-4-ELEC/GAS	7/10/2012	7/23/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-5-ELEC/GAS	7/10/2012	7/19/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-6-ELEC/GAS	7/10/2012	7/24/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-7-ELEC/GAS	7/10/2012	7/19/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-8-ELEC/GAS	7/10/2012	7/24/2012	Maureen P. Heaphy	Att. COMM 2-8-ELEC/GAS	
Commission Set 2	Commission 2-9-ELEC/GAS	7/10/2012	7/20/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-10-ELEC/GAS	7/10/2012	7/24/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-11-ELEC/GAS	7/10/2012	7/19/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-12-ELEC/GAS	7/10/2012	7/19/2012	Maureen P. Heaphy		
Commission Set 2	Commission 2-13-ELEC/GAS	7/10/2012	7/20/2012	Maureen P. Heaphy		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
Commission Set 2	Commission 2-14-ELEC/GAS	7/10/2012	7/24/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-15-ELEC/GAS	7/10/2012				
Commission Set 2	Commission 2-16-ELEC/GAS	7/10/2012	7/30/2012	Timothy D. Horan	Att. COMM 2-16-1-ELEC/GAS Att. COMM 2-16-2-ELEC/GAS	
Commission Set 2	Commission 2-17-ELEC/GAS	7/10/2012	7/18/2012	Robert B. Hevert		
Commission Set 2	Commission 2-18-ELEC/GAS	7/10/2012	7/18/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-19-ELEC	7/10/2012	7/16/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-20-GAS	7/10/2012	7/19/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-21-ELEC/GAS	7/10/2012	7/16/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-22-ELEC/GAS	7/10/2012	7/26/2012	Stephen F. Doucette		
Commission Set 2	Commission 2-23-ELEC/GAS	7/10/2012				
Commission Set 2	Commission 2-24-GAS	7/10/2012	7/23/2012	Ann E. Leary		
Commission Set 2	Commission 2-25-ELEC/GAS	7/10/2012	7/23/2012	Evelyn M. Kaye	Att. COMM 2-25-1-ELEC/GAS Att. COMM 2-25-2-ELEC/GAS	
Commission Set 2	Commission 2-26-ELEC/GAS	7/10/2012	7/23/2012	Evelyn M. Kaye		
Commission Set 2	Commission 2-27-GAS	7/10/2012	7/16/2012	Evelyn M. Kaye		
Commission Set 2	Commission 2-28-ELEC/GAS	7/10/2012	7/16/2012	Evelyn M. Kaye		
Commission Set 2	Commission 2-29-ELEC/GAS	7/10/2012	7/16/2012	Evelyn M. Kaye		
Commission Set 2	Commission 2-30-ELEC/GAS	7/10/2012	7/16/2012	Evelyn M. Kaye		
Commission Set 2	Commission 2-31-ELEC	7/10/2012	7/24/2012	Evelyn M. Kaye	Att. COMM 2-31-ELEC/GAS	
Commission Set 2	Commission 2-32-GAS	7/10/2012	7/23/2012	Evelyn M. Kaye		
Commission Set 2	Commission 2-33-ELEC	7/10/2012	7/20/2012	Michael R. Hrycin		
Commission Set 2	Commission 2-34-ELEC	7/10/2012	7/20/2012	Michael R. Hrycin		
Commission Set 2	Commission 2-35-ELEC	7/10/2012	7/27/2012	Michael R. Hrycin	Att. COMM 2-35-1-ELEC Att. COMM 2-35-2-ELEC	
Commission Set 2	Commission 2-36-GAS	7/10/2012	7/24/2012	Jeffrey P. Martin		
Commission Set 2	Commission 2-37-ELEC/GAS	7/10/2012	7/19/2012	Jeffrey P. Martin		
Commission Set 2	Commission 2-38-ELEC	7/10/2012	7/16/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-39-GAS	7/10/2012	7/16/2012	A. Leo Silvestrini		
Commission Set 2	Commission 2-40-ELEC/GAS	7/10/2012	7/17/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-41-ELEC	7/10/2012	7/17/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-42-ELEC/GAS	7/10/2012	7/16/2012	Michael D. Laflamme		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
Commission Set 2	Commission 2-43-ELEC/GAS	7/10/2012	7/24/2012	Maureen P. Heaphy & Michael D. Laflamme	Att. COMM 2-43-ELEC/GAS	
Commission Set 2	Commission 2-44-ELEC/GAS	7/10/2012	7/16/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-45-ELEC	7/10/2012	7/20/2012	Michael D. Laflamme	Att. COMM 2-45-ELEC	
Commission Set 2	Commission 2-46-ELEC	7/10/2012	7/16/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-47-ELEC	7/10/2012	7/20/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-48-ELEC	7/10/2012	7/30/2012	Michael D. Laflamme		
Commission Set 2	Commission 2-49-ELEC/GAS	7/10/2012	7/18/2012	Michael D. Laflamme	Att. DIV 2-49-ELEC/GAS	

Division 17-2-ELEC

Request:

- 1) Please provide supporting documentation for the forecasted kWh usage and customer counts presented in Workpaper JAL-2, page 15.

Response:

The development of the kWh usage and customer count forecast is described in the Direct Testimony of Company Witness Alfred P. Morrissey (please see Page 5, Line 18 through Page 17, Line 18). Attachment DIV 17-2-1-ELEC provides the econometric models described in the testimony and used to produce the kWh usage and customer count forecast, by revenue class. Attachment DIV 17-2-2-ELEC provides the inputs to the econometric models. The allocation of the revenue class kWh and customer count forecast to rate classes, as described on Page 17, Lines 8-18 of Company Witness Morrissey's testimony, is carried out in the following attached Excel workbooks, Attachment DIV 17-2-3-ELEC and Attachment DIV 17-2-4-ELEC, which are being provided electronically on a CD-ROM.

The forecasted kWh deliveries for the Rate Year period February 1, 2013 through January 31, 2014 of 7,858,419,293 and monthly customer counts for the same period of 5,927,047 is consistent with the information shown on Schedule JAL-2, Page 11 of 17, and Schedule HSG-3A (Line 1 for MWh and Line 9 for monthly customer counts), with the exception of the kWh and customer counts related to outdoor lighting classes S-10 and S-14.

For the outdoor lighting classes, the Company develops cost allocation factors and rate design billing units based upon the number of installed luminaires and standards, rather than the number of lighting customers. Therefore, the forecasted kWh and luminaire/standard count is developed independently from the forecast supported by Company Witness Morrissey and described above. The luminaire and standard counts utilized in the allocated cost of service study and rate design are the year end December 31, 2011 inventory, which best represents the expected level of inventory during the rate year. The forecasted kWhs associated with this level of inventory are calculated as the annual kWh for each luminaire type indicated on the S-1 or S-14 tariff multiplied by the number of each type of luminaire in service as of December 31, 2011.

A comparison of the results of the forecast produced by Company Witness Morrissey as included in Attachment DIV 17-2-3-ELEC and Attachment DIV 17-2-4-ELEC and the kWh and customer counts utilized in the allocated cost of service study and rate design and shown on Schedule HSG-3A and Schedule JAL-2, respectively, is as follows:

Division 17-2-ELEC, page 2

Rate Year Monthly Customer Counts

	Att. DIV 17-2-3-ELEC/ Att. DIV 17-2-4-ELEC	Schedule HSG-3A/ Schedule JAL-2
Rate A-16/A-60	5,171,946	5,171,946
Rate C-06	606,655	606,655
Rate G-02	100,425	100,425
G-/b-32/G-32	12,655	12,655
Rate B-62/G-62	168	168
Rate S-10/S-14	35,186	109,971
Rate X-01	<u>12</u>	<u>12</u>
 Total	 5,927,047	 6,001,832

Rate Year MWh Deliveries

	Att. DIV 17-2-3-ELEC/ Att. DIV 17-2-4-ELEC	Schedule HSG-3A/ Schedule JAL-2
Rate A-16/A-60	3,122,131	3,122,131
Rate C-06	597,989	597,989
Rate G-02	1,297,414	1,297,414
G-/b-32/G-32	2,221,230	2,221,230
Rate B-62/G-62	525,192	525,192
Rate S-10/S-14	71,615	65,617
Rate X-01	<u>22,848</u>	<u>22,848</u>
 Total	 7,858,419	 7,852,421

Attachment 1
KWh Usage and Customer Count Forecast Models
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KWh Usage and Customer Count Forecast
Residential KWh Per Customer Model

The AUTOREG Procedure

Dependent Variable u_49_r
 KWh Per Customer

Ordinary Least Squares Estimates

SSE	147525.979	DFE	258
MSE	571.80612	Root MSE	23.91247
SBC	2452.6692	AIC	2431.21351
Regress R-Square	0.9262	Total R-Square	0.9262
Durbin-Watson	1.2643		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	-442.9986	48.7142	-9.09	<.0001	
rypc	1	5.9063	0.4127	14.31	<.0001	Per Capita Income
dsummer2003on	1	50.7613	5.3427	9.50	<.0001	Summer 2003 on
cdd_49	1	0.9639	0.0228	42.29	<.0001	Cooling Degree Days
hdd_49	1	0.2118	0.005749	36.84	<.0001	Heating Degree Days
Bdays	1	20.7963	1.5295	13.60	<.0001	Days Billed

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	558.8	1.000000																						*****
1	203.0	0.363232																						*****

Preliminary MSE 485.1

KWh Usage and Customer Count Forecast
Residential KWh Per Customer Model

The AUTOREG Procedure

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.363232	0.058118	-6.25

Yule-Walker Estimates

SSE	124327.792	DFE	257
MSE	483.76573	Root MSE	21.99468
SBC	2413.2208	AIC	2388.18916
Regress R-Square	0.9135	Total R-Square	0.9378
Durbin-Watson	1.7639		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	-411.8294	46.2563	-8.90	<.0001	
rypc	1	6.4181	0.5580	11.50	<.0001	Per Capita Income
dsummer2003on	1	37.3216	5.8805	6.35	<.0001	Summer 2003 on
cdd_49	1	0.9705	0.0230	42.14	<.0001	Cooling Degree Days
hdd_49	1	0.2087	0.006430	32.45	<.0001	Heating Degree Days
Bdays	1	19.3322	1.3856	13.95	<.0001	Days Billed

KWh Usage and Customer Count Forecast
Residential Electric Heat KWh Per Customer Model

The AUTOREG Procedure

Dependent Variable u_49_reh
 KWh Per Customer

Ordinary Least Squares Estimates

SSE	775729.712	DFE	161
MSE	4818	Root MSE	69.41323
SBC	1914.70889	AIC	1896.00093
Regress R-Square	0.9610	Total R-Square	0.9610
Durbin-Watson	0.7894		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	371.3649	163.4675	2.27	0.0244	
time	1	-13.9834	1.4227	-9.83	<.0001	Linear Time Trend
price	1	-946.6844	341.7279	-2.77	0.0063	Elec Price, lag12
cdd_49	1	1.5374	0.0784	19.61	<.0001	Cooling Degree Days
hdd_49	1	1.0510	0.0203	51.85	<.0001	Heating Degree Days
Bdays	1	13.2607	5.1662	2.57	0.0112	Days Billed

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	4645.1	1.000000																						*****
1	2738.7	0.589589																						*****

Preliminary MSE 3030.4

KWh Usage and Customer Count Forecast
Residential Electric Heat KWh Per Customer Model

The AUTOREG Procedure

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.589589	0.063855	-9.23

Yule-Walker Estimates

SSE	485806.541	DFE	160
MSE	3036	Root MSE	55.10255
SBC	1842.3974	AIC	1820.57144
Regress R-Square	0.9457	Total R-Square	0.9756
Durbin-Watson	1.6611		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	224.6984	128.2821	1.75	0.0818	
time	1	-15.3911	2.5424	-6.05	<.0001	Linear Time Trend
price	1	-504.9135	340.6991	-1.48	0.1403	Elec Price, lag12
cdd_49	1	1.4522	0.0690	21.04	<.0001	Cooling Degree Days
hdd_49	1	1.0392	0.0212	49.01	<.0001	Heating Degree Days
Bdays	1	17.1397	3.7015	4.63	<.0001	Days Billed

KWh Usage and Customer Count Forecast
Commercial KWh Deliveries Model

The AUTOREG Procedure

Dependent Variable K_49_C
 Commercial KWh

Ordinary Least Squares Estimates

SSE	2.13368E16	DFE	255
MSE	8.36736E13	Root MSE	9147330
SBC	9253.52362	AIC	9221.34008
Regress R-Square	0.9495	Total R-Square	0.9495
Durbin-Watson	1.3970		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	-3.9842E8	18997719	-20.97	<.0001	
CommEmpl	1	603879	37003	16.32	<.0001	Commercial Empl
CommProd	1	2.24311E9	145476431	15.42	<.0001	Commercial Productivity
cdd_49	1	243564	8980	27.12	<.0001	Cooling Degree Days
hdd_49	1	25105	2274	11.04	<.0001	Heating Degree Days
Bdays	1	6972549	582116	11.98	<.0001	Days Billed
d10	1	13743185	2219827	6.19	<.0001	Oct
css0804	1	32932468	9208793	3.58	0.0004	CSS0804
css0809	1	39251076	9235993	4.25	<.0001	CSS0809

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	8.082E13	1.000000																						*****
1	2.378E13	0.294233																						*****

Preliminary MSE 7.382E13

KWh Usage and Customer Count Forecast
Commercial KWh Deliveries Model

The AUTOREG Procedure

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.294233	0.059968	-4.91

Yule-Walker Estimates

SSE	1.90498E16	DFE	254
MSE	7.49993E13	Root MSE	8660211
SBC	9229.2591	AIC	9193.49961
Regress R-Square	0.9214	Total R-Square	0.9549
Durbin-Watson	1.8744		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	-3.9436E8	19219458	-20.52	<.0001	
CommEmpl	1	620175	48861	12.69	<.0001	Commercial Empl
CommProd	1	2.17588E9	191040823	11.39	<.0001	Commercial Productivity
cdd_49	1	232923	9270	25.13	<.0001	Cooling Degree Days
hdd_49	1	22621	2459	9.20	<.0001	Heating Degree Days
Bdays	1	6924876	550710	12.57	<.0001	Days Billed
d10	1	9811985	1943655	5.05	<.0001	Oct
css0804	1	35256338	8330127	4.23	<.0001	CSS0804
css0809	1	30055324	8385578	3.58	0.0004	CSS0809

KWh Usage and Customer Count Forecast
Industrial KWh Deliveries Model

The AUTOREG Procedure

Dependent Variable K_49_I
 Industrial KWh

Ordinary Least Squares Estimates

SSE	1.15168E16	DFE	248
MSE	4.64389E13	Root MSE	6814610
SBC	9090.88799	AIC	9037.30568
Regress R-Square	0.8211	Total R-Square	0.8211
Durbin-Watson	1.5574		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	60268141	13636995	4.42	<.0001	
MfgEmpl	1	595471	36888	16.14	<.0001	Mfg Employment
cdd_49	1	30593	4516	6.77	<.0001	Cooling Degree Days
Bdays	1	945771	421368	2.24	0.0257	Days Billed
elecprice	1	-1.6393E8	28451688	-5.76	<.0001	Real Elec Price
css3	1	17538043	6886740	2.55	0.0115	CSS3
d907	1	-20088733	6909390	-2.91	0.0040	Jul90
d00m2	1	20778192	6866100	3.03	0.0027	Feb00
d00m6	1	15762551	6856193	2.30	0.0223	Jun00
Ju108	1	-22411234	6934231	-3.23	0.0014	Jul08
Dec08	1	-20687809	7029950	-2.94	0.0036	Dec08
Apr09	1	-38594906	6962026	-5.54	<.0001	Apr09
May09	1	32637419	6963591	4.69	<.0001	May09
d2009on	1	-13407352	1846808	-7.26	<.0001	d2009on
d2011m4on	1	-7488530	2752625	-2.72	0.0070	2011m4on

KWh Usage and Customer Count Forecast
Industrial KWh Deliveries Model

The AUTOREG Procedure

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	4.379E13	1.000000																						
1	9.404E12	0.214745																						

Preliminary MSE 4.177E13

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.214745	0.062144	-3.46

Yule-Walker Estimates

SSE	1.08329E16	DFE	247
MSE	4.3858E13	Root MSE	6622538
SBC	9080.45141	AIC	9023.29695
Regress R-Square	0.7665	Total R-Square	0.8318
Durbin-Watson	1.9510		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	58140346	13601064	4.27	<.0001	
MfgEmpl	1	584950	44358	13.19	<.0001	Mfg Employment
cdd_49	1	29948	5031	5.95	<.0001	Cooling Degree Days
Bdays	1	907008	412524	2.20	0.0288	Days Billed
elecprice	1	-1.3626E8	31753758	-4.29	<.0001	Real Elec Price
css3	1	25895609	6511578	3.98	<.0001	CSS3
d907	1	-15910587	6528035	-2.44	0.0155	Jul90
d00m2	1	24130105	6492904	3.72	0.0003	Feb00
d00m6	1	17433041	6499836	2.68	0.0078	Jun00
Ju108	1	-20467320	6548807	-3.13	0.0020	Jul08
Dec08	1	-22852645	6650689	-3.44	0.0007	Dec08

KWh Usage and Customer Count Forecast
Industrial KWh Deliveries Model

The AUTOREG Procedure

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Apr09	1	-37706705	6742185	-5.59	<.0001	Apr09
May09	1	32692131	6740562	4.85	<.0001	May09
d2009on	1	-13623077	2219243	-6.14	<.0001	d2009on
d2011m4on	1	-7095396	3251419	-2.18	0.0300	2011m4on

KWh Usage and Customer Count Forecast
Streetlighting KWh Deliveries Model

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model K_49_S
Dependent Variable K_49_S
Label Streetlighting KWh

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	2.454E14	8.181E13	193.80	<.0001
Error	260	1.098E14	4.221E11		
Corrected Total	263	3.552E14			

Root MSE 649729.497 R-Square 0.69099
Dependent Mean 5331424.91 Adj R-Sq 0.68743
Coeff Var 12.18679

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variable Label
Intercept	1	13967826	392779.0	35.56	<.0001	Intercept
hlight	1	-23012.1	1022.086	-22.51	<.0001	Hours of Daylight
d2	1	-920663	163292.2	-5.64	<.0001	Feb
d11	1	-479036	160633.3	-2.98	0.0031	Nov

Durbin-Watson 1.532978
Number of Observations 264
First-Order Autocorrelation 0.223057

Residential Customer Count Forecast Input Data
Residential Customer Model

The AUTOREG Procedure

Dependent Variable C_49_R
Residential Customers

Ordinary Least Squares Estimates

SSE	6540907860	DFE	261
MSE	25060950	Root MSE	5006
SBC	5260.63107	AIC	5249.90322
Regress R-Square	0.8915	Total R-Square	0.8915
Durbin-Watson	0.6227		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	796.8600	9184	0.09	0.9309	
HHQ	1	1009	22.7564	44.32	<.0001	RI Households
d2011on	1	7846	1504	5.22	<.0001	

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	24776166	1.000000																						*****
1	16915443	0.682730																						*****

Preliminary MSE 13227478

Residential Customer Count Forecast Input Data
Residential Customer Model

The AUTOREG Procedure

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.682730	0.045314	-15.07

Yule-Walker Estimates

SSE	3436328804	DFE	260
MSE	13216649	Root MSE	3635
SBC	5096.90512	AIC	5082.60132
Regress R-Square	0.6266	Total R-Square	0.9430
Durbin-Watson	2.5638		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	6561	20560	0.32	0.7499	
HHQ	1	993.6378	50.9448	19.50	<.0001	RI Households
d2011on	1	10983	2584	4.25	<.0001	

Residential Customer Count Forecast Input Data
Residential Electric Heat Customer Model

The AUTOREG Procedure

Dependent Variable C_49_REH
Residential Customers With Electric Heat

Ordinary Least Squares Estimates

SSE	19471220.3	DFE	262
MSE	74318	Root MSE	272.61261
SBC	3719.39517	AIC	3712.24327
Regress R-Square	0.8540	Total R-Square	0.8540
Durbin-Watson	0.8690		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	20013	33.6518	594.71	<.0001	
time	1	-103.4052	2.6419	-39.14	<.0001	Linear Time Trend

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	73754.6	1.000000																						*****
1	41659.8	0.564843																						*****

Preliminary MSE 50223.4

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.564843	0.051079	-11.06

Residential Customer Count Forecast Input Data
Residential Electric Heat Customer Model

The AUTOREG Procedure

Yule-Walker Estimates

SSE	13250896.3	DFE	261
MSE	50770	Root MSE	225.32137
SBC	3623.74909	AIC	3613.02124
Regress R-Square	0.6265	Total R-Square	0.9006
Durbin-Watson	2.3988		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	20013	63.1406	316.95	<.0001	
time	1	-103.4576	4.9448	-20.92	<.0001	Linear Time Trend

Residential Customer Count Forecast Input Data
Commercial Customer Model

The AUTOREG Procedure

Dependent Variable C_49_C
Commercial Customers

Ordinary Least Squares Estimates

SSE	485012290	DFE	261
MSE	1858285	Root MSE	1363
SBC	4573.79361	AIC	4563.06577
Regress R-Square	0.9363	Total R-Square	0.9363
Durbin-Watson	0.1731		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	16846	564.1266	29.86	<.0001	
CommOutput	1	1021	17.3609	58.82	<.0001	Commercial Output
d2011on	1	419.8878	422.0489	0.99	0.3207	

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	1837168	1.000000																						*****
1	1674179	0.911283																						*****

Preliminary MSE 311517

Residential Customer Count Forecast Input Data
Commercial Customer Model

The AUTOREG Procedure

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.911283	0.025538	-35.68

Yule-Walker Estimates

SSE	73641534.7	DFE	260
MSE	283237	Root MSE	532.19984
SBC	4083.51332	AIC	4069.20952
Regress R-Square	0.4289	Total R-Square	0.9903
Durbin-Watson	2.0133		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	24412	2052	11.90	<.0001	
CommOutput	1	782.3874	62.3009	12.56	<.0001	Commercial Output
d2011on	1	2266	518.5804	4.37	<.0001	

Residential Customer Count Forecast Input Data
Industrial Customer Model

The AUTOREG Procedure

Dependent Variable C_49_I
Industrial Customers

Ordinary Least Squares Estimates

SSE	2517239.26	DFE	262
MSE	9608	Root MSE	98.01930
SBC	3179.31064	AIC	3172.15874
Regress R-Square	0.7798	Total R-Square	0.7798
Durbin-Watson	0.0669		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	1639	25.4890	64.30	<.0001	
MfgEmpl	1	11.3610	0.3730	30.46	<.0001	Mfg Employment

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	1	
0	9535.0	1.000000																						*****
1	9149.3	0.959553																						*****

Preliminary MSE 755.7

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.959553	0.017426	-55.06

Residential Customer Count Forecast Input Data
Industrial Customer Model

The AUTOREG Procedure

Yule-Walker Estimates

SSE	166682.671	DFE	261
MSE	638.63092	Root MSE	25.27115
SBC	2470.7075	AIC	2459.97965
Regress R-Square	0.1262	Total R-Square	0.9854
Durbin-Watson	2.5319		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t	Variable Label
Intercept	1	1672	120.2170	13.91	<.0001	
MfgEmpl	1	10.5634	1.7209	6.14	<.0001	Mfg Employment

VARIABLE KEY

Sheet	Description	Variables	Description
ResKWh	Residential KWh Per Customer Model Input Data	Year Month hdd_49 cdd_49 Bdays u_49_r elecprice rypc dsummer2003on	Year Month Heating Degree Days Cooling Degree Days Days Billed KWh Per Customer Electric Price Per Capital Income Summer 2003 on
ResHeatKWh	Residential Electric Heat KWh Per Customer Model Input Data	Year Month hdd_49 cdd_49 Bdays u_49_reh price time d6	Year Month Heating Degree Days Cooling Degree Days Days Billed Residential Electric Heat KWh Per Customer Electric Price, lagged 12 months Linear Time Trend Month 6
CommKWh	Commercial KWh Deliveries Model Input Data	Year Month K_49_C hdd_49 cdd_49 Bdays d10 CommEmpl CommProd css0804 css0809	Year Month Commercial KWh Deliveries Heating Degree Days Cooling Degree Days Days Billed Month 10 Commercial Employment Commercial Output per Worker CSS Billing Correction CSS Billing Correction
IndKWh	Industrial KWh Deliveries Model Input Data	Year Month K_49_I cdd_49 Bdays MfgEmpl elecprice Jul08 Dec08 Apr09 May09 d2009on d2011m4on d907 d00m2 d00m6 css3	Year Month Industrial KWh Deliveries Cooling Degree Days Days Billed Manufacturing Employment Electricity Price Jul-2008 Dec-2008 Apr-2009 May-2009 2009 on Apr-2001 on Jul-1990 Feb-2000 Jun-2000 CSS Billing Correction
SLKWh	Streetlighting KWh Deliveries Model	Year Month K_49_S hlight d2 d11	Year Month Streetlighting KWh Deliveries Hours of Daylight February November
ResCus	Residential Customer Model	Year Month C_49_R HHQ d2011on	Year Month Number of Residential Customers Number of Households 2011 on
ResHeatCus	Residential Electric Heat Customer model	Year Month C_49_REH time	Year Month Number of Residential Customers with Electric Heat Linear Time Trend
ComCus	Commercial Customer Model	Year Month C_49_C CommOutput d2011on	Year Month Number of Commercial Customers Commercial Output 2011 on
IndCus	Industrial Customer Model	Year Month C_49_I MfgEmpl	Year Month Number of Industrial Customers Manufacturing Employment

Year	Month	hdd_49	cdd_49	Bdays	u_49_r	elecprice	rypc	dsummer2003on	
1990	1	1201.1		0	32.41999817	686.3843076	0.14551042	27.78774039	0
1990	2	856.8		0	29.86000061	555.0925503	0.147654376	27.66426389	0
1990	3	870.3		0	30.28000069	545.4205466	0.149571105	27.66187191	0
1990	4	650.1		0	30.19000053	492.0625929	0.150088109	27.73209016	0
1990	5	357.8		4.5	30.19000053	445.2331432	0.149944357	27.78187347	0
1990	6	157.4		39.1	30.62000084	441.305975	0.149250092	27.74221824	0
1990	7	11.3		173.8	29.61000061	488.7802996	0.151711356	27.61749886	0
1990	8	1.9		260.5	29.22999954	544.6548232	0.151867568	27.4371788	0
1990	9	38.5		180	30.28000069	510.1679986	0.151123197	27.23943813	0
1990	10	123.1		52.6	29.32999992	425.3372549	0.153250801	27.05513649	0
1990	11	406.1		0	31	481.8961073	0.152872122	26.91891012	0
1990	12	701.8		0	31.61000061	552.1127494	0.152949767	26.85113777	0
1991	1	1005.4		0	33.13999939	633.9200313	0.157736005	26.83107609	0
1991	2	950.2		0	30	558.8124097	0.164071872	26.82591802	0
1991	3	827.5		0	30.32999992	533.3245082	0.160422438	26.80738741	0
1991	4	554.5		0	30.13999939	483.1487075	0.160793123	26.76988974	0
1991	5	277.4		24.1	30.19000053	430.3384176	0.162284148	26.7126934	0
1991	6	56.9		124.5	30.65999985	460.5823305	0.161441746	26.64338811	0
1991	7	8.3		214.3	29.79999924	510.2911036	0.167572273	26.58854642	0
1991	8	0.2		277.2	28.95000076	517.1867521	0.167361033	26.58210904	0
1991	9	28.3		172.6	30.28000069	509.8848395	0.16675824	26.63905174	0
1991	10	199.9		39	29.13999939	432.7572712	0.16806532	26.71840391	0
1991	11	429.5		0	30.95000076	479.9083679	0.166903015	26.76298582	0
1991	12	726.3		0	31.89999962	559.0078598	0.166220304	26.7391337	0
1992	1	1040.9		0	33.04000092	634.0462202	0.162029494	26.68905465	0
1992	2	1053.7		0	30.04000092	580.3913619	0.160976537	26.68051244	0
1992	3	890.3		0	30.19000053	544.9085354	0.159831996	26.74973051	0
1992	4	702.3		0	29.76000023	494.3933602	0.164886074	26.85356755	0
1992	5	420.3		7.4	30.61000061	449.4437987	0.165060621	26.91773914	0
1992	6	128.3		57.5	30.52000046	435.2068862	0.165138704	26.90577503	0
1992	7	17.3		130.7	29.37999916	451.8626699	0.164934254	26.89133275	0
1992	8	6.9		147.3	29.37999916	474.0496787	0.163661945	26.98791722	0
1992	9	25.6		128.9	30.37999916	488.862176	0.162758344	27.240519	0
1992	10	240		34.5	30.61000061	448.2407299	0.162626102	27.51095347	0
1992	11	559.7		0	30.95000076	483.4652583	0.161917741	27.60397284	0
1992	12	819.1		0	31.85000038	569.6287672	0.160515693	27.40846834	0
1993	1	1017.1		0	31.95000076	623.0494449	0.156999907	27.0817993	0
1993	2	1098.8		0	29.79999924	576.7147015	0.156297266	26.88339238	0
1993	3	1045.4		0	30.04000092	566.1879914	0.156347539	26.95179699	0
1993	4	653.8		0	29.89999962	491.7551303	0.156792292	27.20659757	0
1993	5	254.7		15.2	30.37999916	425.3120731	0.157252831	27.47571279	0
1993	6	91.8		68.2	30.70999908	426.2143755	0.156762549	27.63019688	0
1993	7	5.1		266.7	30.56999969	512.7150623	0.159617455	27.68581815	0
1993	8	0.1		239.7	29.65999985	533.2895909	0.159089985	27.70915022	0
1993	9	28		216.9	30.46999931	514.3704341	0.158873958	27.74225846	0
1993	10	264.6		28.3	30.52000046	455.5027551	0.159336864	27.75954605	0
1993	11	548.9		0	31.19000053	479.5521134	0.158602857	27.71441308	0
1993	12	775.2		0	30	532.0530583	0.157701907	27.58826505	0
1994	1	1149.3		0	32.27999992	642.461075	0.155064938	27.45221184	0
1994	2	1236		0	29.84400024	586.5550655	0.155967822	27.41021532	0
1994	3	1003.8		0	30.32000008	569.2023134	0.155743378	27.50771974	0
1994	4	591.4		0	30.03600006	477.5541074	0.156286986	27.66752546	0
1994	5	346.3		0.3	30.31200027	427.3214991	0.156468212	27.75615089	0

Year	Month	hdd_49	cdd_49	Bdays	u_49_r	elecprice	rypc	dsummer2003on
1994	6	133.3	55.5	30.62400017	442.5378479	0.155524	27.69361037	0
1994	7	2.5	250.5	30.03199959	567.2532299	0.152685697	27.55808751	0
1994	8	3.6	263.9	29.34799995	604.2381961	0.152228333	27.48175171	0
1994	9	47.6	76	30.27200012	475.3564687	0.153330733	27.55381605	0
1994	10	215.5	12.4	29.87999992	431.5293574	0.153578477	27.72286563	0
1994	11	358.7	0	30.83600006	451.3379122	0.153319932	27.89524953	0
1994	12	704.3	0	31.4420002	542.3777876	0.151989689	28.00460428	0
1995	1	914	0	32.04000092	598.2883193	0.150991209	28.07011243	0
1995	2	1002.5	0	29.85000038	551.0427858	0.1505998	28.1323824	0
1995	3	880.2	0	30.32999992	536.3336253	0.14989095	28.22434566	0
1995	4	622.5	0	30.19	468.9800096	0.150187721	28.34089625	0
1995	5	351.6	2.1	30.19	431.4160586	0.150021784	28.45611739	0
1995	6	91.5	78.7	30.61	445.8224517	0.149596929	28.55078937	0
1995	7	11.5	212.9	30.8	530.926811	0.151589686	28.61662276	0
1995	8	0	334.3	29.52	610.8566064	0.150784751	28.65079927	0
1995	9	31.3	145.1	29.95	485.5761234	0.151933966	28.65174127	0
1995	10	171.4	13.3	29.8	420.219426	0.152588597	28.62809241	0
1995	11	469.3	0	30.14	457.4489184	0.151788691	28.59186485	0
1995	12	914.7	0	30.66	557.1719363	0.154058176	28.55702245	0
1996	1	1202	0	32.42	659.9694435	0.154431233	28.5487857	0
1996	2	1096.2	0	29.85	565.7586144	0.155017003	28.593846	0
1996	3	966.8	0	30.28	549.2165871	0.154577314	28.70166828	0
1996	4	701.7	0	30.19	477.9420193	0.154898731	28.83641074	0
1996	5	357.5	10.6	30.19	433.4658405	0.154968889	28.93953051	0
1996	6	142.7	73.2	30.61	448.6041248	0.154251459	28.97783749	0
1996	7	6.9	151.8	30.71	496.6749802	0.154117181	28.98355891	0
1996	8	2.1	170.3	29.66	516.8358809	0.1538418	29.01373941	0
1996	9	19.6	157.2	30.53	529.174133	0.153311261	29.1018828	0
1996	10	235	17.7	30.33	453.2185912	0.153799315	29.2193196	0
1996	11	512.5	0	30.95	479.0356695	0.153060527	29.31840479	0
1996	12	850.9	0	32.33	565.8005837	0.152202976	29.37155198	0
1997	1	1008.9	0	32.67	622.854392	0.155559517	29.42012967	0
1997	2	990.9	0	30.05	551.7758687	0.156214712	29.51866947	0
1997	3	850.8	0	30.19	510.7140007	0.15655976	29.69580333	0
1997	4	639.8	0	29.38	475.6326334	0.157031056	29.89613252	0
1997	5	386.7	0	28.95	419.9397014	0.157682584	30.01510247	0
1997	6	198.4	45.7	29.81	433.0957432	0.157025844	29.99889938	0
1997	7	18.3	260.7	30.67	554.3129126	0.15398928	29.92268487	0
1997	8	4.1	226.5	29.57	544.156228	0.152136092	29.90821845	0
1997	9	18.5	108	29.95	497.8056435	0.15029698	30.03425543	0
1997	10	179.4	31.9	29.48	437.917153	0.148495804	30.25213794	0
1997	11	525.6	0	30.9	480.7839429	0.146773029	30.47477215	0
1997	12	931.6	0	33.48	588.2124857	0.145148499	30.6377641	0
1998	1	987.7	0	32.95	630.6548339	0.022002644	30.75460975	0
1998	2	912.3	0	30.19	546.4130772	0.141974073	30.85374739	0
1998	3	804.7	0	30.05	500.6740414	0.142183586	30.96146666	0
1998	4	537.9	0	29.38	459.2847749	0.142417161	31.07478459	0
1998	5	293.2	4.9	29.71	431.8125583	0.14282333	31.16773786	0
1998	6	104.5	53.9	30.52	454.1234004	0.142027653	31.23079022	0
1998	7	13.1	168.2	29.38	523.2014231	0.14081597	31.28231615	0
1998	8	0.2	257.9	29.38	593.6234434	0.139928781	31.35444272	0
1998	9	11.4	191.7	30.38	550.1182112	0.140216049	31.45627726	0
1998	10	172.7	46.4	30.62	470.3080754	0.141051693	31.54439412	0

Year	Month	hdd_49	cdd_49	Bdays	u_49_r	elecprice	rypc	dsummer2003on	
1998	11	478.4		0	30	478.425495	0.141060409	31.56050718	0
1998	12	693.9		0	32.81	548.1899615	0.139939975	31.47093237	0
1999	1	1105.785714		0	33.04761905	632.3154609	0.132515283	31.3316121	0
1999	2	926.2380952		0	30.14285714	553.1088307	0.127054798	31.234322	0
1999	3	873.8333333		0	30	535.5484143	0.127349539	31.22697289	0
1999	4	530.4047619		0	29.38095238	462.0406396	0.127995791	31.30632469	0
1999	5	308.0238095	0.761904762	29.04761905	421.3518663	0.125864536	31.4402825	0	0
1999	6	67.28571429	85.76190476	29.80952381	469.9280488	0.125084895	31.59621176	0	0
1999	7	7.523809524	279.6428571	30.52380952	625.8948268	0.122403585	31.73643835	0	0
1999	8	1.857142857	302.9285714	29.61904762	664.8357702	0.121688465	31.82714726	0	0
1999	9	14.19047619	171.5952381	30.52380952	567.5043472	0.122578796	31.85384957	0	0
1999	10	195.2619048	31.80952381	30.52380952	478.8291598	0.123302217	31.87807461	0	0
1999	11	446.9761905		0	30.0952381	472.371854	0.123122226	31.98426232	0
1999	12	687.8333333		0	32.38095238	569.1344077	0.122193265	32.2116067	0
2000	1	953.2619048		0	30.47619048	600.5929676	0.123031435	32.47417137	0
2000	2	1142.47619		0	29.85714286	605.0814496	0.124278525	32.63118675	0
2000	3	769.4047619		0	30.38095238	531.1101609	0.08893364	32.61662049	0
2000	4	553.3809524		0	29.38095238	473.4410256	0.088521672	32.53446746	0
2000	5	398.452381	18.07142857	29.38095238	464.7691706	0.12259214	32.54232698	0	0
2000	6	169.1190476	47.95238095	30.85714286	469.9250284	0.123701988	32.73362749	0	0
2000	7	23.88095238	196.7857143	30.47619048	573.6257517	0.12387057	32.99419972	0	0
2000	8	4.095238095	159.5952381	29.66666667	554.9317972	0.125668588	33.14432609	0	0
2000	9	27.23809524	126.5952381	30.47619048	559.5960878	0.127255439	33.07911836	0	0
2000	10	208.2619048	36.88095238	30.52380952	485.5332943	0.136086496	32.9439374	0	0
2000	11	430.047619		0	29.85714286	477.6249682	0.144259196	32.95803105	0
2000	12	886.0714286		0	31.33333333	573.017356	0.142909474	33.25246855	0
2001	1	1218.47619		0	33.0952381	689.2235109	0.143994698	33.69390329	0
2001	2	982.3571429		0	29.0952381	541.0787838	0.146321377	34.03493892	0
2001	3	962.1190476		0	29.80952381	542.8451727		34.14649609	0
2001	4	691.2380952		0	29.38095238	505.6212528	0.147848407	34.08873399	0
2001	5	314.9761905	30.80952381	29.38095238	432.1221878	0.150881853	33.9802633	0	0
2001	6	139.1428571	54	30.85714286	475.9417811	0.150106584	33.92394938	0	0
2001	7	6.19047619	195.6904762	30.42857143	597.2771396	0.148825745	33.92791486	0	0
2001	8	1.880952381	224.4761905	29.71428571	615.9053393	0.149034788	33.97253174	0	0
2001	9	14.76190476	193.5	30.52380952	614.9306657	0.148224362	34.04128475	0	0
2001	10	151.7142857	49.28571429	30.52380952	493.3711341	0.145541499	34.13736157	0	0
2001	11	403.2142857		0	30.57142857	486.9270043	0.137842695	34.27144925	0
2001	12	594.0238095		0	31.9047619	543.0448035	0.137122773	34.44017266	0
2002	1	1020.785714		0	33.28571429	660.3205451	0.129350602	34.61017973	0
2002	2	897.047619		0	29.66666667	548.677281	0.12119236	34.72677585	0
2002	3	820.3333333		0	29.14285714	508.3675408	0.121111438	34.7650187	0
2002	4	614.7857143		0	29.38095238	494.5314575	0.1208977	34.74807393	0
2002	5	393.1190476	10.16666667	29.52380952	456.7146499	0.121028921	34.70628876	0	0
2002	6	186.2857143	34.76190476	30.71428571	477.4910693	0.120381198	34.66823422	0	0
2002	7	33.38095238	248.2142857	30.42857143	632.5467757	0.118843692	34.63014717	0	0
2002	8	0	318.3333333	29.80952381	717.7673283	0.118259717	34.58001421	0	0
2002	9	5.976190476	229.2619048	29.95238095	618.6308172	0.118638025	34.52115239	0	0
2002	10	92.76190476	86.42857143	29.28571429	489.7732058	0.119418222	34.4956015	0	0
2002	11	523.5714286		0	30.95238095	519.8406672	0.119038814	34.55962063	0
2002	12	927.8333333		0	33.14285714	639.9344254	0.117765974	34.73858121	0
2003	1	1149.1		0	33.38095238	695.6887892	0.117171034	34.968174	0
2003	2	1229.45		0	29.66666667	617.8746748	0.121071456	35.13999444	0
2003	3	1030.76		0	29.14285714	583.9789365	0.118055112	35.20010044	0

Year	Month	hdd_49	cdd_49	Bdays	u_49_r	elecprice	rypc	dsummer2003on	
2003	4	703.98		0	29.47619048	517.5395815	0.118676142	35.17791761	0
2003	5	427.74		10.2	29.47619048	473.6459942	0.119278492	35.1266665	0
2003	6	227.95	10.214	30.66666667	487.9208363	0.122585706	35.10137667	1	
2003	7	35.11904762	191.7380952	30.52380952	643.5536045	0.1267394	35.1370846	1	
2003	8	0	294.1190476	29.71428571	740.7575489	0.125853985	35.26618209	1	
2003	9	13.02380952	209.7857143	30.52380952	671.1472956	0.126023103	35.4872484	1	
2003	10	154.4285714	50.52380952	29.61904762	522.6542283	0.127010318	35.72523428	1	
2003	11	451.5714286		0	30.14285714	508.4769855	0.127075769	35.88125063	0
2003	12	829.9047619		0	33.23809524	634.015043	0.125922807	35.8908029	0
2004	1	1088.095238		0	32.28571429	696.6676226	0.126462232	35.80599165	0
2004	2	1216.666667		0	28.52380952	635.8995529	0.128304758	35.72030824	0
2004	3	880.1666667		0	29.80952381	577.1446052	0.128249506	35.69815391	0
2004	4	717.0714286		0	29.47619048	534.2235387	0.128188259	35.7466062	0
2004	5	344.9285714	11.38095238	29.38095238	472.2774152	0.128416238	35.85290042	0	
2004	6	165.4047619	46.35714286	31.66666667	522.2525592	0.12772978	35.99756402	1	
2004	7	22.61904762	155.5714286	31	616.0493632	0.126804482	36.14900538	1	
2004	8	2.5	202.3333333	29.71428571	669.583464	0.128766622	36.27182783	1	
2004	9	19.64285714	202.9285714	31.19047619	676.7335967	0.134386032	36.33211661	1	
2004	10	158.5952381	73.11904762	30.42857143	540.9555268	0.135158849	36.32401654	1	
2004	11	499.1190476		0	30.23809524	521.4165511	0.132660388	36.24577988	0
2004	12	825.4285714		0	33	639.3578495	0.131430349	36.11090764	0
2005	1	1027.785714		0	30.95238095	667.4154672	0.131945242	35.97333269	0
2005	2	1124.571429		0	28.52380952	616.82185	0.133453187	35.90698902	0
2005	3	1097.833333		0	30.95238095	619.0879968	0.133267042	35.9483134	0
2005	4	686		0	29.38095238	532.8395646	0.133652216	36.05186674	0
2005	5	426.9285714	1.142857143	29.38095238	469.4105211	0.133774982	36.14486893	0	
2005	6	227.9761905	64.52380952	30.71428571	537.4805367	0.132380496	36.17265072	1	
2005	7	26.80952381	221.6428571	30.61904762	686.2113613	0.130605463	36.1556206	1	
2005	8	13.5952381	346.952381	29.66666667	807.2049336	0.129369802	36.13785112	1	
2005	9	17.11904762	263.4047619	30.38095238	738.0631717	0.129130664	36.15195774	1	
2005	10	96.11904762	99.5952381	29.85714286	568.1668109	0.134790233	36.18928185	1	
2005	11	430.6904762		0	30.19047619	530.2904322	0.145629114	36.22593195	0
2005	12	882.8809524		0	33.19047619	649.8850073	0.145045558	36.25405248	0
2006	1	1007.547619		0	32	678.3566825	0.15080775	36.30871292	0
2006	2	841.6428571		0	28.80952381	563.951759	0.161632678	36.43003502	0
2006	3	1025.928571		0	30.9047619	606.7500201	0.161097417	36.64731502	0
2006	4	622.4047619		0	29.66666667	509.3130112	0.161239334	36.92581555	0
2006	5	361.2619048		0	29.38095238	459.7337637	0.161011735	37.19572721	0
2006	6	141.0952381	61.33333333	30.85714286	523.4427519	0.159629657	37.40313253	1	
2006	7	12.69047619	248.8333333	30.47619048	700.4049202	0.157979627	37.5346319	1	
2006	8	23.14285714	337.452381	29.66666667	818.8966413	0.157328799	37.58934068	1	
2006	9	29.07142857	135.2380952	30.52380952	613.527684	0.156448663	37.58489273	1	
2006	10	160.9047619	28.80952381	29.71428571	502.0138261	0.153560231	37.60375843	1	
2006	11	406.8809524		0	29.57142857	499.9325422	0.153775506	37.74337914	0
2006	12	610.3809524		0	32.42857143	600.6939717	0.152768822	38.04798835	0
2007	1	847.9761905		0	31.2	667.3625175	0.147945379	38.38673117	0
2007	2	1091.095238		0	29.25	617.6675785	0.141573888	38.55699813	0
2007	3	1001.785714		0	29.95	606.3673694	0.140799414	38.46910553	0
2007	4	689.8333333		0	30.9	531.4225186	0.140902884	38.23142686	0
2007	5	356.7857143	6.5	29.55	477.2702847	0.140839828	38.04332714	0	
2007	6	111.2857143	79.64285714	31.63157895	533.5453143	0.140033062	38.03691049	1	
2007	7	16.76190476	189.6666667	30.75	640.8369926	0.139212139	38.13782648	1	
2007	8	3.30952381	291.547619	29.35	757.8038795	0.138409669	38.19986202	1	

Year	Month	hdd_49	cdd_49	Bdays	u_49_r	elecprice	rypc	dsummer2003on	
2007	9	17.30952381	196.452381		30.15	681.8270877	0.138221262	38.13472897	1
2007	10	78.92857143	96.47619048		29.3	546.1275077	0.138304716	38.03574307	1
2007	11	355.6428571		0	30.95	519.598869	0.138288013	38.04941237	0
2007	12	901.8333333		0	31.3	657.5431799	0.136935536	38.26415692	0
2008	1	976.6904762		0	32.25	705.0884125	0.138934361	38.58394034	0
2008	2	931.3		0	29.5	611.9995034	0.143688175	38.83498497	0
2008	3	870.5		0	29.25	584.4218477	0.143565278	38.90616682	0
2008	4	620.225		0	30	534.1281138	0.143343412	38.78539684	0
2008	5	327.25	1.075		28.9	447.8560457	0.143214829	38.49255367	0
2008	6	134.425	76.35		31.2	516.1321719	0.141289636	38.08962322	1
2008	7	8.175	267.85		30.5	704.4387731	0.141741843	37.74398682	1
2008	8	0.5	295		31.15	790.3322317	0.162492759	37.65789411	1
2008	9	18.7	143.875		31.15	613.9453853	0.171071973	37.92539406	1
2008	10	168.45	33.325		29.1	486.0982983	0.174194597	38.30580292	1
2008	11	478		0	30.6	502.7256088	0.175471864	38.4587261	0
2008	12	829.125		0	31.7	603.5612532	0.175645331	38.1751418	0
2009	1	1150.675		0	32.35	728.5854121	0.16561111	37.65588919	0
2009	2	1123.8		0	29.55	590.7074487	0.149603729	37.26559552	0
2009	3	916.225		0	29.8	564.747873	0.149265036	37.19515177	0
2009	4	680.875		0	31.25	531.0093535	0.149130121	37.32933867	0
2009	5	317.45	11.85		29.6	457.0778263	0.149277707	37.44141392	0
2009	6	143.35	29.725		30.5	476.0148	0.148645101	37.36825453	1
2009	7	30.375	90.825		31.6	558.3283564	0.147641876	37.17708571	1
2009	8	2.2	231.275		28.9	691.9215821	0.146533035	37.01150796	1
2009	9	30.25	180.15		30.5	699.0628566	0.146148561	36.97643033	1
2009	10	221.725	20.425		30.3	494.5936733	0.146821875	37.03053314	1
2009	11	427.15		0	29.35	488.8659627	0.146774544	37.09065006	0
2009	12	672.4		0	31.9	573.1292779	0.145904501	37.10388442	0
2010	1	1174.75		0	32.2	710.5939714	0.145122232	37.10881036	0
2010	2	1029.325		0	29.55	605.4901119	0.145624228	37.1687767	0
2010	3	776.15		0	30.3	565.6908956	0.14815475	37.32423075	0
2010	4	457.6		0	31.15	521.9511367	0.152172883	37.54692776	0
2010	5	255.225	17.975		29	472.391191	0.153062745	37.77234532	0
2010	6	64.45	103.4		30.3	528.09631	0.151896519	37.95178263	1
2010	7	7.1	324.575		31.9	818.3024043	0.149487664	38.07681769	1
2010	8	0.625	320.05		30.05	804.9736867	0.149220579	38.15325094	1
2010	9	17.275	198.275		30.65	683.1567836	0.149690632	38.18490324	1
2010	10	133.65	59.625		29.1	514.1140872	0.150496429	38.1845884	1
2010	11	407.95		0	29.5	498.1720583	0.149321025	38.16646103	0
2010	12	815.825		0	31.5	602.7878428	0.147278946	38.14846965	0
2011	1	1134.225		0	31	696.1833236	0.146643987	38.16259159	0
2011	2	1149.775		0	29.2	625.7687	0.147648823	38.23973206	0
2011	3	921.325		0	29.95	588.9908171	0.147434142	38.3907439	0
2011	4	696.75		0	30.8	534.9707918	0.139346583	38.56618919	0
2011	5	341.425	1.975		30.05	471.224581	0.12369369	38.67761916	0
2011	6	116.55	82.725		30.7	525.0745847	0.122216718	38.66562019	1
2011	7	17.7	214.425		31.15	725.0732948	0.120380397	38.53817841	1
2011	8	0	314.4		30.4	817.2301984	0.119533109	38.32605358	1
2011	9	19.15	179.775		30.65	670.446296	0.120388721	38.07866626	1
2011	10	99.7	76.4		29.25	530.4679141	0.121379778	37.86126287	1
2011	11	443.35		0	30.95	520.671869	0.121417551	37.74972567	0
2011	12	615.575		0	31.2	563.5750847	0.12076589	37.78763667	0
2012	1	1057.763095		0	31.05		0.146643987	37.91902957	0

Year	Month	hdd_49	cdd_49	Bdays	u_49_r	elecprice	rypc	dsummer2003on
2012	2	1063.467381		0	29.4	0.147648823	38.04759714	0
2012	3	934.1007619		0	30.5	0.147434142	38.1137658	0
2012	4	648.9525238	0.145		30.85	0.139346583	38.13542047	0
2012	5	355.211381	7.226547619		30.4	0.12369369	38.15220593	0
2012	6	151.8772619	58.90330476		31.1	0.122216718	38.19775242	1
2012	7	21.07309524	215.3341667		30.35	0.120380397	38.2751778	1
2012	8	4.587261905	295.1463095		31.05	0.119533109	38.38086169	1
2012	9	18.75178571	193.9146429		30.8	0.120388721	38.49886376	1
2012	10	136.5263095	62.4727381		29.1	0.121379778	38.59745073	1
2012	11	442.392619	3.563452381		29.7	0.121417551	38.6379536	0
2012	12	791.1186905		0	31.3	0.12076589	38.60083954	0
2013	1	1057.763095		0	31.85	0.146643987	38.53366971	0
2013	2	1063.467381		0	29.43333333	0.147648823	38.5078096	0
2013	3	934.1007619		0	30.01666667	0.147434142	38.56169207	0
2013	4	648.9525238	0.145		31.06666667	0.139346583	38.67219257	0
2013	5	355.211381	7.226547619		29.55	0.12369369	38.78478484	0
2013	6	151.8772619	58.90330476		30.5	0.122216718	38.86057377	1
2013	7	21.07309524	215.3341667		31.55	0.120380397	38.90368551	1
2013	8	4.587261905	295.1463095		29.78333333	0.119533109	38.93539104	1
2013	9	18.75178571	193.9146429		30.6	0.120388721	38.97112709	1
2013	10	136.5263095	62.4727381		29.55	0.121379778	39.01591451	1
2013	11	442.392619	3.563452381		29.93333333	0.121417551	39.07142035	0
2013	12	791.1186905		0	31.53333333	0.12076589	39.13765296	0
2014	1	1057.763095		0	31.85	0.146643987	39.21568157	0
2014	2	1063.467381		0	29.43333333	0.147648823	39.2993472	0
2014	3	934.1007619		0	30.01666667	0.147434142	39.38970447	0
2014	4	648.9525238	0.145		31.06666667	0.139346583	39.48992066	0
2014	5	355.211381	7.226547619		29.55	0.12369369	39.59385737	0
2014	6	151.8772619	58.90330476		30.5	0.122216718	39.70091635	1
2014	7	21.07309524	215.3341667		31.55	0.120380397	39.81214192	1
2014	8	4.587261905	295.1463095		29.78333333	0.119533109	39.93268847	1
2014	9	18.75178571	193.9146429		30.6	0.120388721	40.0581601	1
2014	10	136.5263095	62.4727381		29.55	0.121379778	40.17999001	1
2014	11	442.392619	3.563452381		29.93333333	0.121417551	40.28616957	0
2014	12	791.1186905		0	31.53333333	0.12076589	40.36936709	0

Year	Month	hdd_49	cdd_49	Bdays	u_49_reh	price	time	d6	
1998	1	987.7		0	32.95	1719.391478	0.155559517	8.083333333	0
1998	2	912.3		0	30.19	1589.108625	0.156214712	8.166666667	0
1998	3	804.7		0	30.05	1368.760777	0.15655976	8.25	0
1998	4	537.9		0	29.38	1091.878021	0.157031056	8.333333333	0
1998	5	293.2	4.9	29.71	820.5526206	0.157682584	8.416666667	0	0
1998	6	104.5	53.9	30.52	695.5840437	0.157025844	8.5	1	0
1998	7	13.1	168.2	29.38	703.9013741	0.15398928	8.583333333	0	0
1998	8	0.2	257.9	29.38	781.7548537	0.152136092	8.666666667	0	0
1998	9	11.4	191.7	30.38	723.1908164	0.15029698	8.75	0	0
1998	10	172.7	46.4	30.62	716.0077162	0.148495804	8.833333333	0	0
1998	11	478.4	0	30	943.3606693	0.146773029	8.916666667	0	0
1998	12	693.9	0	32.81	1214.384683	0.145148499	9	0	0
1999	1	1105.785714	0	33.04761905	1758.445906	0.021687018	9.083333333	0	0
1999	2	926.2380952	0	30.14285714	1586.255782	0.140222327	9.166666667	0	0
1999	3	873.8333333	0	30	1493.818891	0.140515759	9.25	0	0
1999	4	530.4047619	0	29.38095238	1052.494655	0.140991638	9.333333333	0	0
1999	5	308.0238095	0.761904762	29.04761905	772.8478147	0.141669071	9.416666667	0	0
1999	6	67.28571429	85.76190476	29.80952381	663.3532406	0.14118901	9.5	1	0
1999	7	7.523809524	279.6428571	30.52380952	752.3676393	0.140224242	9.583333333	0	0
1999	8	1.857142857	302.9285714	29.61904762	832.5931625	0.1393765	9.666666667	0	0
1999	9	14.19047619	171.5952381	30.52380952	741.1733284	0.139663579	9.75	0	0
1999	10	195.2619048	31.80952381	30.52380952	721.1916514	0.140284677	9.833333333	0	0
1999	11	446.9761905	0	30.0952381	877.2089106	0.139946136	9.916666667	0	0
1999	12	687.8333333	0	32.38095238	1259.347908	0.138739837	10	0	0
2000	1	953.2619048	0	30.47619048	1606.806394	0.131214144	10.083333333	0	0
2000	2	1142.47619	0	29.85714286	1882.589038	0.125761689	10.166666667	0	0
2000	3	769.4047619	0	30.38095238	1377.112214	0.126066844	10.25	0	0
2000	4	553.3809524	0	29.38095238	1062.718949	0.126888581	10.333333333	0	0
2000	5	398.452381	18.07142857	29.38095238	956.0995878	0.125005015	10.416666667	0	0
2000	6	169.1190476	47.95238095	30.85714286	735.9002369	0.124520022	10.5	1	0
2000	7	23.88095238	196.7857143	30.47619048	782.1674923	0.122453763	10.583333333	0	0
2000	8	4.095238095	159.5952381	29.66666667	758.808404	0.121321209	10.666666667	0	0
2000	9	27.23809524	126.5952381	30.47619048	772.2247383	0.122170702	10.75	0	0
2000	10	208.2619048	36.88095238	30.52380952	735.9132878	0.122732664	10.833333333	0	0
2000	11	430.047619	0	29.85714286	902.3773491	0.122326597	10.916666667	0	0
2000	12	886.0714286	0	31.33333333	1425.834555	0.121286332	11	0	0
2001	1	1218.47619	0	33.0952381	2022.46378	0.121963406	11.083333333	0	0
2001	2	982.3571429	0	29.0952381	1583.086451	0.12303403	11.166666667	0	0
2001	3	962.1190476	0	29.80952381	1516.100573	0.088790427	11.25	0	0
2001	4	691.2380952	0	29.38095238	1274.988909	0.088435955	11.333333333	0	0
2001	5	314.9761905	30.80952381	29.38095238	792.4061535	0.121667584	11.416666667	0	0
2001	6	139.1428571	54	30.85714286	725.8787026	0.123075187	11.5	1	0
2001	7	6.19047619	195.6904762	30.42857143	804.7657215	0.123373993	11.583333333	0	0
2001	8	1.880952381	224.4761905	29.71428571	794.3935654	0.125206374	11.666666667	0	0
2001	9	14.76190476	193.5	30.52380952	792.2722409	0.126790559	11.75	0	0
2001	10	151.7142857	49.28571429	30.52380952	710.8118899	0.13554021	11.833333333	0	0
2001	11	403.2142857	0	30.57142857	867.5195614	0.143459647	11.916666667	0	0
2001	12	594.0238095	0	31.9047619	1070.145383	0.141868621	12	0	0
2002	1	1020.785714	0	33.28571429	1622.327839	0.142806848	12.083333333	0	0
2002	2	897.047619	0	29.66666667	1398.538106	0.14515506	12.166666667	0	0

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2002	3	820.3333333		0	29.14285714	1222.137595		12.25	0	
2002	4	614.7857143		0	29.38095238	1076.444153	0.146808943	12.33333333	0	
2002	5	393.1190476	10.16666667	29.52380952	829.1114981	0.150249315	12.41666667		0	
2002	6	186.2857143	34.76190476	30.71428571	728.6341305	0.149614207		12.5	1	
2002	7	33.38095238	248.2142857	30.42857143	790.462506	0.148427172	12.58333333		0	
2002	8		0	318.3333333	29.80952381	844.7126832	0.148703362	12.66666667	0	
2002	9	5.976190476	229.2619048	29.95238095	779.7585873	0.147891899		12.75	0	
2002	10	92.76190476	86.42857143	29.28571429	679.7426973	0.145026602	12.83333333		0	
2002	11	523.5714286		0	30.95238095	967.2546324	0.137182444	12.91666667	0	
2002	12	927.8333333		0	33.14285714	1489.184113	0.136433012		13	0
2003	1	1149.1		0	33.38095238	1740.284809	0.128388197	13.08333333		0
2003	2	1229.45		0	29.66666667	1841.338565	0.120170397	13.16666667		0
2003	3	1030.76		0	29.14285714	1620.071677	0.12012991		13.25	0
2003	4	703.98		0	29.47619048	1213.990191	0.120019513	13.33333333		0
2003	5	427.74	10.2	29.47619048	918.5501931	0.120334504	13.41666667		0	
2003	6	227.95	10.214	30.66666667	767.2557652	0.119848059		13.5	1	
2003	7	35.11904762	191.7380952	30.52380952	809.5505129	0.118484375	13.58333333		0	
2003	8		0	294.1190476	29.71428571	878.7016112	0.117951014	13.66666667		0
2003	9	13.02380952	209.7857143	30.52380952	813.7532943	0.118272593		13.75	0	
2003	10	154.4285714	50.52380952	29.61904762	710.3390341	0.11898573	13.83333333		0	
2003	11	451.5714286		0	30.14285714	883.1406603	0.118358984	13.91666667		0
2003	12	829.9047619		0	33.23809524	1391.154181	0.116918308		14	0
2004	1	1088.095238		0	32.28571429	1717.535649	0.116338972	14.08333333		0
2004	2	1216.666667		0	28.52380952	1838.315304	0.119570545	14.16666667		0
2004	3	880.1666667		0	29.80952381	1445.663897	0.117024281		14.25	0
2004	4	717.0714286		0	29.47619048	1221.483267	0.117798858	14.33333333		0
2004	5	344.9285714	11.38095238	29.38095238	832.5524608	0.118582606	14.41666667		0	
2004	6	165.4047619	46.35714286	31.66666667	741.4032249	0.122088081		14.5	1	
2004	7	22.61904762	155.5714286		31	782.7313489	0.126419497	14.58333333		0
2004	8	2.5	202.3333333	29.71428571	816.1011608	0.125560127	14.66666667		0	
2004	9	19.64285714	202.9285714	31.19047619	833.7918159	0.125730271		14.75	0	
2004	10	158.5952381	73.11904762	30.42857143	718.6150301	0.126620924	14.83333333		0	
2004	11	499.1190476		0	30.23809524	918.0924962	0.126538914	14.91666667		0
2004	12	825.4285714		0	33	1298.749256	0.12516535		15	0
2005	1	1027.785714		0	30.95238095	1571.644687	0.12571977	15.08333333		0
2005	2	1124.571429		0	28.52380952	1651.122322	0.12735212	15.16666667		0
2005	3	1097.833333		0	30.95238095	1585.688326	0.127364946		15.25	0
2005	4	686		0	29.38095238	1153.229319	0.127400227	15.33333333		0
2005	5	426.9285714	1.142857143	29.38095238	830.8191403	0.127875055	15.41666667		0	
2005	6	227.9761905	64.52380952	30.71428571	786.4132012	0.127351791		15.5	1	
2005	7	26.80952381	221.6428571	30.61904762	816.6590084	0.126519112	15.58333333		0	
2005	8	13.5952381	346.952381	29.66666667	931.4091696	0.128532796	15.66666667		0	
2005	9	17.11904762	263.4047619	30.38095238	863.2255879	0.134133815		15.75	0	
2005	10	96.11904762	99.5952381	29.85714286	723.8805144	0.134841355	15.83333333		0	
2005	11	430.6904762		0	30.19047619	851.3520829	0.132369486	15.91666667		0
2005	12	882.8809524		0	33.19047619	1343.515444	0.131087352		16	0
2006	1	1007.547619		0	32	1543.177364	0.131518217	16.08333333		0
2006	2	841.6428571		0	28.80952381	1285.159833	0.132914172	16.16666667		0
2006	3	1025.928571		0	30.9047619	1475.5509	0.132744444		16.25	0
2006	4	622.4047619		0	29.66666667	1034.062575	0.133214818	16.33333333		0

Year	Month	hdd_49	cdd_49	Bdays	u_49_reh	price	time	d6	
2006	5	361.2619048		0	29.38095238	764.0089276	0.133467481	16.41666667	0
2006	6	141.0952381	61.33333333	30.85714286	715.488987	0.132189835		16.5	1
2006	7	12.69047619	248.8333333	30.47619048	840.2089512	0.130518052		16.58333333	0
2006	8	23.14285714	337.452381	29.66666667	922.4164984	0.129286269		16.66666667	0
2006	9	29.07142857	135.2380952	30.52380952	746.8424558	0.129045811		16.75	0
2006	10	160.9047619	28.80952381	29.71428571	670.3950139	0.134695951		16.83333333	0
2006	11	406.8809524		0	29.57142857	797.2945504	0.145390905	16.91666667	0
2006	12	610.3809524		0	32.42857143	1073.608897	0.144669545	17	0
2007	1	847.9761905		0	31.2	1325.954488	0.150489582	17.08333333	0
2007	2	1091.095238		0	29.25	1545.753599	0.161264894	17.16666667	0
2007	3	1001.785714		0	29.95	1495.719245	0.160701254	17.25	0
2007	4	689.8333333		0	30.9	1153.917553	0.160911835	17.33333333	0
2007	5	356.7857143	6.5	29.55	824.4161521	0.160784989		17.41666667	0
2007	6	111.2857143	79.64285714	31.63157895	703.5407184	0.15933744		17.5	1
2007	7	16.76190476	189.6666667	30.75	760.4799429	0.157760962		17.58333333	0
2007	8	3.30952381	291.547619	29.35	865.9726539	0.157134061		17.66666667	0
2007	9	17.30952381	196.452381	30.15	799.1243598	0.156211958		17.75	0
2007	10	78.92857143	96.47619048	29.3	676.0242123	0.153269705		17.83333333	0
2007	11	355.6428571		0	30.95	778.7869996	0.153353943	17.91666667	0
2007	12	901.8333333		0	31.3	1329.483262	0.152250522	18	0
2008	1	976.6904762		0	32.25	1528.535561	0.147388038	18.08333333	0
2008	2	931.3		0	29.5	1413.046091	0.140847938	18.16666667	0
2008	3	870.5		0	29.25	1318.816172	0.140092206	18.25	0
2008	4	620.225		0	30	1085.622562	0.140269731	18.33333333	0
2008	5	327.25	1.075	28.9	719.9732177	0.140373224		18.41666667	0
2008	6	134.425	76.35	31.2	698.7654112	0.139687994		18.5	1
2008	7	8.175	267.85	30.5	800.6946301	0.139028815		18.58333333	0
2008	8	0.5	295	31.15	876.8325564	0.13824164		18.66666667	0
2008	9	18.7	143.875	31.15	732.2834814	0.138044968		18.75	0
2008	10	168.45	33.325	29.1	580.5437594	0.138087302		18.83333333	0
2008	11	478		0	30.6	688.4268152	0.137966394	18.91666667	0
2008	12	829.125		0	31.7	1094.171985	0.136363773	19	0
2009	1	1150.675		0	32.35	1482.847166	0.138371392	19.08333333	0
2009	2	1123.8		0	29.55	1359.740524	0.14300257	19.16666667	0
2009	3	916.225		0	29.8	1214.644479	0.142904865	19.25	0
2009	4	680.875		0	31.25	999.2088136	0.142717753	19.33333333	0
2009	5	317.45	11.85	29.6	673.0356553	0.142812157		19.41666667	0
2009	6	143.35	29.725	30.5	608.8302605	0.141084088		19.5	1
2009	7	30.375	90.825	31.6	659.9006426	0.141712667		19.58333333	0
2009	8	2.2	231.275	28.9	762.4329485	0.162506418		19.66666667	0
2009	9	30.25	180.15	30.5	761.9576011	0.171017371		19.75	0
2009	10	221.725	20.425	30.3	626.5682461	0.174164592		19.83333333	0
2009	11	427.15		0	29.35	725.0851146	0.175409492	19.91666667	0
2009	12	672.4		0	31.9	968.26029	0.175556758	20	0
2010	1	1174.75		0	32.2	1511.286651	0.165419446	20.08333333	0
2010	2	1029.325		0	29.55	1331.747521	0.149407503	20.16666667	0
2010	3	776.15		0	30.3	1137.078537	0.149101354	20.25	0
2010	4	457.6		0	31.15	853.7187044	0.148933987	20.33333333	0
2010	5	255.225	17.975	29	672.2962983	0.149148878		20.41666667	0
2010	6	64.45	103.4	30.3	618.2458924	0.14855666		20.5	1

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2010	7	7.1	324.575		31.9	861.6409507	0.14758054	20.58333333	0
2010	8	0.625	320.05		30.05	849.0565592	0.1464924	20.66666667	0
2010	9	17.275	198.275		30.65	742.1024617	0.14609149	20.75	0
2010	10	133.65	59.625		29.1	606.863792	0.146720603	20.83333333	0
2010	11	407.95	0		29.5	723.5375582	0.146593134	20.91666667	0
2010	12	815.825	0		31.5	1066.217744	0.145703902	21	0
2011	1	1134.225	0		31	1463.931454	0.144838839	21.08333333	0
2011	2	1149.775	0		29.2	1376.301231	0.145298943	21.16666667	0
2011	3	921.325	0		29.95	1218.803147	0.147799567	21.25	0
2011	4	696.75	0		30.8	994.2202838	0.151842913	21.33333333	0
2011	5	341.425	1.975		30.05	703.993089	0.152800629	21.41666667	0
2011	6	116.55	82.725		30.7	628.0997417	0.151726445	21.5	1
2011	7	17.7	214.425		31.15	768.1943785	0.149397154	21.58333333	0
2011	8	0	314.4		30.4	849.5530521	0.149099007	21.66666667	0
2011	9	19.15	179.775		30.65	716.9739227	0.149601196	21.75	0
2011	10	99.7	76.4		29.25	597.658139	0.150343972	21.83333333	0
2011	11	443.35	0		30.95	740.0425826	0.149053108	21.91666667	0
2011	12	615.575	0		31.2	875.6418673	0.146934622	22	0
2012	1	1057.763095	0		31.05		0.14621862	22.08333333	0
2012	2	1063.467381	0		29.4		0.147231137	22.16666667	0
2012	3	934.1007619	0		30.5		0.14703301	22.25	0
2012	4	648.9525238	0.145		30.85		0.139057283	22.33333333	0
2012	5	355.211381	7.226547619		30.4		0.123471378	22.41666667	0
2012	6	151.8772619	58.90330476		31.1		0.122111572	22.5	1
2012	7	21.07309524	215.3341667		30.35		0.120327867	22.58333333	0
2012	8	4.587261905	295.1463095		31.05		0.119487584	22.66666667	0
2012	9	18.75178571	193.9146429		30.8		0.120330801	22.75	0
2012	10	136.5263095	62.4727381		29.1		0.121296558	22.83333333	0
2012	11	442.392619	3.563452381		29.7		0.121237475	22.91666667	0
2012	12	791.1186905	0		31.3		0.120567596	23	0
2013	1	1057.763095	0		31.85		0.14621862	23.08333333	0
2013	2	1063.467381	0	29.43333333			0.147231137	23.16666667	0
2013	3	934.1007619	0	30.01666667			0.14703301	23.25	0
2013	4	648.9525238	0.145	31.06666667			0.139057283	23.33333333	0
2013	5	355.211381	7.226547619	29.55			0.123471378	23.41666667	0
2013	6	151.8772619	58.90330476	30.5			0.122111572	23.5	1
2013	7	21.07309524	215.3341667	31.55			0.120327867	23.58333333	0
2013	8	4.587261905	295.1463095	29.78333333			0.119487584	23.66666667	0
2013	9	18.75178571	193.9146429	30.6			0.120330801	23.75	0
2013	10	136.5263095	62.4727381	29.55			0.121296558	23.83333333	0
2013	11	442.392619	3.563452381	29.93333333			0.121237475	23.91666667	0
2013	12	791.1186905	0	31.53333333			0.120567596	24	0
2014	1	1057.763095	0	31.85			0.14621862	24.08333333	0
2014	2	1063.467381	0	29.43333333			0.147231137	24.16666667	0
2014	3	934.1007619	0	30.01666667			0.14703301	24.25	0
2014	4	648.9525238	0.145	31.06666667			0.139057283	24.33333333	0
2014	5	355.211381	7.226547619	29.55			0.123471378	24.41666667	0
2014	6	151.8772619	58.90330476	30.5			0.122111572	24.5	1
2014	7	21.07309524	215.3341667	31.55			0.120327867	24.58333333	0
2014	8	4.587261905	295.1463095	29.78333333			0.119487584	24.66666667	0

Year	Month	hdd_49	cdd_49	Bdays	u_49_reh	price	time	d6
2014	9	18.75178571	193.9146429		30.6	0.120330801	24.75	0
2014	10	136.5263095	62.4727381		29.55	0.121296558	24.83333333	0
2014	11	442.392619	3.563452381	29.93333333		0.121237475	24.91666667	0
2014	12	791.1186905		0	31.53333333	0.120567596	25	0

Year	Month	K_49_C	hdd_49	cdd_49	Bdays	d10	CommEmpl	CommProd	css0804	css0809	
1990	1	239408096	1201.1		0	32.41999817	0	325.6035477	0.081775571	0	0
1990	2	211400320	856.8		0	29.86000061	0	326.6218744	0.081613705	0	0
1990	3	213019392	870.3		0	30.28000069	0	326.6761465	0.081534941	0	0
1990	4	202671184	650.1		0	30.19000053	0	325.9246145	0.081541807	0	0
1990	5	196882480	357.8		4.5	30.19000053	0	324.7164562	0.081623685	0	0
1990	6	203704544	157.4		39.1	30.62000084	0	323.4101136	0.081736645	0	0
1990	7	221427872	11.3		173.8	29.61000061	0	322.27245	0.081753789	0	0
1990	8	238088976	1.9		260.5	29.22999954	0	321.5291586	0.081515636	0	0
1990	9	233044064	38.5		180	30.28000069	0	321.250356	0.080992838	0	0
1990	10	204148624	123.1		52.6	29.32999992	1	320.9076857	0.080494086	0	0
1990	11	210589264	406.1		0		31	319.8192776	0.080433473	0	0
1990	12	214734336	701.8		0	31.61000061	0	317.551767	0.081055527	0	0
1991	1	225942208	1005.4		0	33.13999939	0	314.4387466	0.082053659	0	0
1991	2	213556400	950.2		0		30	311.3235507	0.082859901	0	0
1991	3	209668208	827.5		0	30.32999992	0	308.5564051	0.083165968	0	0
1991	4	198276096	554.5		0	30.13999939	0	306.2241658	0.083099782	0	0
1991	5	197787136	277.4		24.1	30.19000053	0	304.5025076	0.082948734	0	0
1991	6	219150944	56.9		124.5	30.65999985	0	303.3357416	0.082960708	0	0
1991	7	223975232	8.3		214.3	29.79999924	0	302.334989	0.083154232	0	0
1991	8	218607440	0.2		277.2	28.95000076	0	300.9704527	0.083472894	0	0
1991	9	239011216	28.3		172.6	30.28000069	0	299.1033535	0.083830356	0	0
1991	10	200271136	199.9		39	29.13999939	1	297.4865626	0.084107762	0	0
1991	11	211702336	429.5		0	30.95000076	0	297.1770773	0.084165246	0	0
1991	12	217804576	726.3		0	31.89999962	0	298.7808868	0.083932795	0	0
1992	1	234629104	1040.9		0	33.04000092	0	301.4671084	0.0835643	0	0
1992	2	222284416	1053.7		0	30.04000092	0	303.7825122	0.083296214	0	0
1992	3	214193392	890.3		0	30.19000053	0	304.8805959	0.083246473	0	0
1992	4	204550560	702.3		0	29.76000023	0	304.9990557	0.083307984	0	0
1992	5	197273280	420.3		7.4	30.61000061	0	304.715995	0.083299161	0	0
1992	6	206124976	128.3		57.5	30.52000046	0	304.5466126	0.083154087	0	0
1992	7	218219584	17.3		130.7	29.37999916	0	304.6680366	0.083170218	0	0
1992	8	222167424	6.9		147.3	29.37999916	0	305.1514182	0.083774559	0	0
1992	9	227507248	25.6		128.9	30.37999916	0	305.9655954	0.085071606	0	0
1992	10	213586784	240		34.5	30.61000061	1	306.8739577	0.086345423	0	0
1992	11	209105744	559.7		0	30.95000076	0	307.5642333	0.086632062	0	0
1992	12	220493760	819.1		0	31.85000038	0	307.829646	0.08540493	0	0
1993	1	225779552	1017.1		0	31.95000076	0	307.801892	0.083489602	0	0
1993	2	221561248	1098.8		0	29.79999924	0	307.7229027	0.082249415	0	0
1993	3	220717744	1045.4		0	30.04000092	0	307.7974495	0.082394276	0	0
1993	4	208351776	653.8		0	29.89999962	0	308.173303	0.083452373	0	0
1993	5	197301024	254.7		15.2	30.37999916	0	308.9802137	0.084480566	0	0
1993	6	210419088	91.8		68.2	30.70999908	0	310.214339	0.084800666	0	0
1993	7	234406176	5.1		266.7	30.56999969	0	311.5063162	0.084634048	0	0
1993	8	240821440	0.1		239.7	29.65999985	0	312.3718731	0.084501705	0	0
1993	9	243287664	28		216.9	30.46999931	0	312.4925487	0.08471717	0	0
1993	10	214010528	264.6		28.3	30.52000046	1	312.2002227	0.084974602	0	0
1993	11	209671424	548.9		0	31.19000053	0	312.0037985	0.084781451	0	0
1993	12	214851664	775.2		0		30	312.2521891	0.08388555	0	0
1994	1	229998304	1149.3		0	32.27999992	0	312.8046377	0.082791769	0	0
1994	2	220437600	1236		0	29.84400024	0	313.320526	0.082287863	0	0
1994	3	229006128	1003.8		0	30.32000008	0	313.6178537	0.082734552	0	0
1994	4	200468320	591.4		0	30.03600006	0	313.7553875	0.083661432	0	0
1994	5	196994032	346.3		0.3	30.31200027	0	313.8617264	0.084238732	0	0
1994	6	214137872	133.3		55.5	30.62400017	0	314.0467653	0.083936478	0	0
1994	7	250808832	2.5		250.5	30.03199959	0	314.309304	0.08314308	0	0
1994	8	252351120	3.6		263.9	29.34799995	0	314.6151962	0.082555872	0	0

Year	Month	K_49_C	hdd_49	cdd_49	Bdays	d10	CommEmpl	CommProd	css0804	css0809	
1994	9	228246832	47.6		76	30.27200012	0	314.9403454	0.082656158	0	0
1994	10	209224400	215.5		12.4	29.87999992	1	315.3498324	0.083185061	0	0
1994	11	205659168	358.7		0	30.83600006	0	315.9246036	0.083668623	0	0
1994	12	223515104	704.3		0	31.4420002	0	316.679226	0.083784089	0	0
1995	1	233228464	914		0	32.04000092	0	317.4247406	0.083670094	0	0
1995	2	219871600	1002.5		0	29.85000038	0	317.8652766	0.083613737	0	0
1995	3	220780160	880.2		0	30.32999992	0	317.9239899	0.083789685	0	0
1995	4	204136800	622.5		0	30.19	0	317.9146781	0.084111442	0	0
1995	5	200707760	351.6		2.1	30.19	0	318.3076963	0.084381945	0	0
1995	6	221490000	91.5		78.7	30.61	0	319.3458204	0.084459088	0	0
1995	7	237816784	11.5		212.9	30.8	0	320.5723277	0.084369946	0	0
1995	8	263743296	0		334.3	29.52	0	321.2990216	0.084197334	0	0
1995	9	236645376	31.3		145.1	29.95	0	321.078442	0.084015012	0	0
1995	10	212025168	171.4		13.3	29.8	1	320.3082188	0.083843684	0	0
1995	11	212475088	469.3		0	30.14	0	319.6296798	0.083693446	0	0
1995	12	221292432	914.7		0	30.66	0	319.5022569	0.08358179	0	0
1996	1	239894560	1202		0	32.42	0	319.8241671	0.083543346	0	0
1996	2	227917408	1096.2		0	29.85	0	320.2870587	0.083616245	0	0
1996	3	224111328	966.8		0	30.28	0	320.6804755	0.083811343	0	0
1996	4	207690592	701.7		0	30.19	0	320.987456	0.084064945	0	0
1996	5	200632656	357.5		10.6	30.19	0	321.2424954	0.084279932	0	0
1996	6	221229088	142.7		73.2	30.61	0	321.5244615	0.084399265	0	0
1996	7	234990224	6.9		151.8	30.71	0	322.0190633	0.084479197	0	0
1996	8	241410448	2.1		170.3	29.66	0	322.9614947	0.084616813	0	0
1996	9	251182928	19.6		157.2	30.53	0	324.3977104	0.084864979	0	0
1996	10	212041680	235		17.7	30.33	1	325.9964768	0.085176701	0	0
1996	11	219931264	512.5		0	30.95	0	327.2835323	0.085472206	0	0
1996	12	230458000	850.9		0	32.33	0	327.9569192	0.085727713	0	0
1997	1	236479248	1008.9		0	32.67	0	328.2707159	0.086089237	0	0
1997	2	227076160	990.9		0	30.05	0	328.6199698	0.086703846	0	0
1997	3	217218464	850.8		0	30.19	0	329.3184149	0.087622862	0	0
1997	4	209110480	639.8		0	29.38	0	330.3791928	0.088476356	0	0
1997	5	199422512	386.7		0	28.95	0	331.6621753	0.08867061	0	0
1997	6	213712400	198.4		45.7	29.81	0	332.9981133	0.087932277	0	0
1997	7	256085968	18.3		260.7	30.67	0	334.1048978	0.086808585	0	0
1997	8	252979136	4.1		226.5	29.57	0	334.6717509	0.086110548	0	0
1997	9	245507760	18.5		108	29.95	0	334.5531472	0.086375036	0	0
1997	10	223108048	179.4		31.9	29.48	1	334.1969521	0.087226425	0	0
1997	11	228128640	525.6		0	30.9	0	334.213924	0.088018191	0	0
1997	12	240874848	931.6		0	33.48	0	334.9965615	0.088283629	0	0
1998	1	245233876	987.7		0	32.95	0	336.2612321	0.088130813	0	0
1998	2	231488380	912.3		0	30.19	0	337.4114671	0.087868824	0	0
1998	3	218959469	804.7		0	30.05	0	338.1699196	0.087698207	0	0
1998	4	214590418	537.9		0	29.38	0	338.7058047	0.087608411	0	0
1998	5	213447506	293.2		4.9	29.71	0	339.3083882	0.087529748	0	0
1998	6	233494440	104.5		53.9	30.52	0	340.2082444	0.087418504	0	0
1998	7	247530886	13.1		168.2	29.38	0	341.3478409	0.087338545	0	0
1998	8	273265643	0.2		257.9	29.38	0	342.5881011	0.087389108	0	0
1998	9	261959762	11.4		191.7	30.38	0	343.7176278	0.087606782	0	0
1998	10	241869651	172.7		46.4	30.62	1	344.5471064	0.087857712	0	0
1998	11	219420966	478.4		0	30	0	344.8647846	0.087957286	0	0
1998	12	238147689	693.9		0	32.81	0	344.6070644	0.087794014	0	0
1999	1	259271989	1105.785714		0	33.04761905	0	344.1941007	0.08748476	0	0
1999	2	224678093	926.2380952		0	30.14285714	0	344.199526	0.08724133	0	0
1999	3	232725061	873.8333333		0	30	0	344.9403537	0.087189778	0	0
1999	4	218464715	530.4047619		0	29.38095238	0	346.1474972	0.0873269	0	0

Year	Month	K_49_C	hdd_49	cdd_49	Bdays	d10	CommEmpl	CommProd	css0804	css0809
1999	5	216916696	308.0238095	0.761904762	29.04761905	0	347.2723077	0.087604344	0	0
1999	6	242406339	67.28571429	85.76190476	29.80952381	0	347.9826554	0.087941895	0	0
1999	7	280533360	7.523809524	279.6428571	30.52380952	0	348.5863387	0.088190668	0	0
1999	8	279784600	1.857142857	302.9285714	29.61904762	0	349.6263122	0.08817796	0	0
1999	9	274316271	14.19047619	171.5952381	30.52380952	0	351.3454694	0.087866096	0	0
1999	10	244726015	195.2619048	31.80952381	30.52380952	1	353.3003719	0.087604775	0	0
1999	11	227963833	446.9761905	0	30.0952381	0	354.8049834	0.087847713	0	0
1999	12	260991507	687.8333333	0	32.38095238	0	355.4325166	0.088800889	0	0
2000	1	244738679	953.2619048	0	30.47619048	0	355.587684	0.089910661	0	0
2000	2	262815264	1142.47619	0	29.85714286	0	355.9184299	0.090330344	0	0
2000	3	241977160	769.4047619	0	30.38095238	0	356.8428577	0.089657812	0	0
2000	4	233122579	553.3809524	0	29.38095238	0	358.0640142	0.088545537	0	0
2000	5	224468051	398.452381	18.07142857	29.38095238	0	359.0083521	0.088031925	0	0
2000	6	260596550	169.1190476	47.95238095	30.85714286	0	359.3245858	0.088737393	0	0
2000	7	280614707	23.88095238	196.7857143	30.47619048	0	359.2984314	0.090084365	0	0
2000	8	274811735	4.095238095	159.5952381	29.66666667	0	359.4402895	0.091091884	0	0
2000	9	285075177	27.23809524	126.5952381	30.47619048	0	360.086907	0.091092138	0	0
2000	10	266287239	208.2619048	36.88095238	30.52380952	1	361.0920872	0.090542118	0	0
2000	11	247304539	430.047619	0	29.85714286	0	362.1498565	0.090216409	0	0
2000	12	267875906	886.0714286	0	31.33333333	0	362.9930924	0.090626727	0	0
2001	1	289086148	1218.47619	0	33.0952381	0	363.4803394	0.091500137	0	0
2001	2	259897577	982.3571429	0	29.0952381	0	363.4996891	0.092255576	0	0
2001	3	250142000	962.1190476	0	29.80952381	0	363.082778	0.092577093	0	0
2001	4	234865277	691.2380952	0	29.38095238	0	362.5534862	0.092563519	0	0
2001	5	247660191	314.9761905	30.80952381	29.38095238	0	362.3939984	0.09244833	0	0
2001	6	267494121	139.1428571	54	30.85714286	0	362.8763872	0.092423087	0	0
2001	7	287357812	6.19047619	195.6904762	30.42857143	0	363.6736893	0.092465228	0	0
2001	8	295766119	1.880952381	224.4761905	29.71428571	0	364.2588414	0.092480821	0	0
2001	9	302971600	14.76190476	193.5	30.52380952	0	364.3018906	0.092431253	0	0
2001	10	282482129	151.7142857	49.28571429	30.52380952	1	364.1644962	0.092443928	0	0
2001	11	259334227	403.2142857	0	30.57142857	0	364.4033758	0.092694434	0	0
2001	12	254169850	594.0238095	0	31.9047619	0	365.3545631	0.09326299	0	0
2002	1	281226621	1020.785714	0	33.28571429	0	366.6695078	0.093936539	0	0
2002	2	270827143	897.047619	0	29.66666667	0	367.6918017	0.094375489	0	0
2002	3	254756545	820.3333333	0	29.14285714	0	368.1040979	0.094442637	0	0
2002	4	249005367	614.7857143	0	29.38095238	0	368.082433	0.094332375	0	0
2002	5	244198305	393.1190476	10.16666667	29.52380952	0	367.9680094	0.094365901	0	0
2002	6	257096615	186.2857143	34.76190476	30.71428571	0	368.0592838	0.09472876	0	0
2002	7	297045633	33.38095238	248.2142857	30.42857143	0	368.4221634	0.095164329	0	0
2002	8	300385581	0	318.3333333	29.80952381	0	369.0519173	0.095267463	0	0
2002	9	303748302	5.976190476	229.2619048	29.95238095	0	369.8771439	0.094859072	0	0
2002	10	297461840	92.76190476	86.42857143	29.28571429	1	370.7516157	0.094437582	0	0
2002	11	274949534	523.5714286	0	30.95238095	0	371.4890524	0.094694885	0	0
2002	12	296612211	927.8333333	0	33.14285714	0	371.9872653	0.095991897	0	0
2003	1	293827767	1149.1	0	33.38095238	0	372.4178809	0.097666269	0	0
2003	2	284742054	1229.45	0	29.66666667	0	372.9889084	0.098642617	0	0
2003	3	276804294	1030.76	0	29.14285714	0	373.8621551	0.09840179	0	0
2003	4	255449269	703.98	0	29.47619048	0	374.9233447	0.097419336	0	0
2003	5	258285498	427.74	10.2	29.47619048	0	375.8944696	0.096572313	0	0
2003	6	264310513	227.95	10.214	30.66666667	0	376.5976496	0.096491457	0	0
2003	7	302815313	35.11904762	191.7380952	30.52380952	0	377.0873944	0.097021603	0	0
2003	8	323150721	0	294.1190476	29.71428571	0	377.506904	0.097749132	0	0
2003	9	319729128	13.02380952	209.7857143	30.52380952	0	377.9509774	0.098312605	0	0
2003	10	282467541	154.4285714	50.52380952	29.61904762	1	378.4521101	0.098639191	0	0
2003	11	269074789	451.5714286	0	30.14285714	0	379.0081255	0.098730336	0	0
2003	12	287603265	829.9047619	0	33.23809524	0	379.6009508	0.098598922	0	0

Year	Month	K_49_C	hdd_49	cdd_49	Bdays	d10	CommEmpl	CommProd	css0804	css0809		
2004	1	306252396	1088.095238		0	32.28571429	0	380.1699215	0.098302431	0	0	
2004	2	279904909	1216.666667		0	28.52380952	0	380.6058298	0.097933518	0	0	
2004	3	279188803	880.1666667		0	29.80952381	0	380.8716055	0.097581278	0	0	
2004	4	266261970	717.0714286		0	29.47619048	0	381.0011319	0.097413365	0	0	
2004	5	259298209	344.9285714	11.38095238	29.38095238		0	381.0467873	0.0976406	0	0	
2004	6	289155172	165.4047619	46.35714286	31.66666667		0	381.0739286	0.098312755	0	0	
2004	7	311191925	22.61904762	155.5714286		31	0	381.1608457	0.099037836	0	0	
2004	8	311694010		2.5	202.3333333	29.71428571	0	381.3940912	0.099273363	0	0	
2004	9	326519102	19.64285714	202.9285714	31.19047619		0	381.7973111	0.098702415	0	0	
2004	10	296114232	158.5952381	73.11904762	30.42857143		1	382.2539488	0.097711129	0	0	
2004	11	269555196	499.1190476		0	30.23809524	0	382.5980354	0.096894712	0	0	
2004	12	293972227	825.4285714		0		33	0	382.739904	0.0966707	0	0
2005	1	293490846	1027.785714		0	30.95238095	0	382.8333294	0.096911935	0	0	
2005	2	281994897	1124.571429		0	28.52380952	0	383.0880413	0.097291263	0	0	
2005	3	288985912	1097.833333		0	30.95238095	0	383.654709	0.097587697	0	0	
2005	4	270399127		686		0	29.38095238	0	384.4897118	0.097758424	0	0
2005	5	262146186	426.9285714	1.142857143	29.38095238		0	385.436484	0.097799284	0	0	
2005	6	284181856	227.9761905	64.52380952	30.71428571		0	386.3467701	0.097732986	0	0	
2005	7	323142378	26.80952381	221.6428571	30.61904762		0	387.072589	0.097609771	0	0	
2005	8	334406172	13.5952381	346.952381	29.66666667		0	387.4728857	0.09748837	0	0	
2005	9	346491956	17.11904762	263.4047619	30.38095238		0	387.4499014	0.097403946	0	0	
2005	10	306440528	96.11904762	99.5952381	29.85714286		1	387.1073977	0.097300966	0	0	
2005	11	274363579	430.6904762		0	30.19047619	0	386.6030245	0.09710041	0	0	
2005	12	314901656	882.8809524		0	33.19047619	0	386.1300133	0.096763605	0	0	
2006	1	299868565	1007.547619		0		32	0	385.9997132	0.096378191	0	0
2006	2	264670990	841.6428571		0	28.80952381	0	386.5245053	0.096099114	0	0	
2006	3	301927881	1025.928571		0	30.9047619	0	387.8152099	0.096028962	0	0	
2006	4	270845360	622.4047619		0	29.66666667	0	389.3985919	0.096265433	0	0	
2006	5	259532608	361.2619048		0	29.38095238	0	390.4711931	0.096908398	0	0	
2006	6	292264115	141.0952381	61.33333333	30.85714286		0	390.5817382	0.097910019	0	0	
2006	7	323335021	12.69047619	248.8333333	30.47619048		0	390.2367515	0.098815865	0	0	
2006	8	340476229	23.14285714	337.452381	29.66666667		0	390.2774431	0.099026461	0	0	
2006	9	324380636	29.07142857	135.2380952	30.52380952		0	391.2034425	0.098252049	0	0	
2006	10	287928373	160.9047619	28.80952381	29.71428571		1	392.5173689	0.097159947	0	0	
2006	11	268581080	406.8809524		0	29.57142857	0	393.4104672	0.096688003	0	0	
2006	12	300799135	610.3809524		0	32.42857143	0	393.3475122	0.097382094	0	0	
2007	1	304430355	847.9761905		0		31.2	0	392.6545229	0.098598896	0	0
2007	2	281027272	1091.095238		0		29.25	0	391.9836157	0.099253278	0	0
2007	3	294902857	1001.785714		0		29.95	0	391.7139149	0.098763434	0	0
2007	4	271380088	689.8333333		0		30.9	0	391.7326265	0.097571133	0	0
2007	5	276744279	356.7857143		6.5		29.55	0	391.7639914	0.09654993	0	0
2007	6	301761314	111.2857143	79.64285714	31.63157895		0	391.5634336	0.096288821	0	0	
2007	7	314895628	16.76190476	189.6666667	30.75		0	391.0479346	0.096482874	0	0	
2007	8	339356400	3.30952381	291.547619	29.35		0	390.1786932	0.096518733	0	0	
2007	9	334520554	17.30952381	196.452381	30.15		0	389.0362541	0.096048531	0	0	
2007	10	310242441	78.92857143	96.47619048		29.3	1	387.8866263	0.095528587	0	0	
2007	11	286916840	355.6428571		0	30.95	0	387.0750022	0.095666993	0	0	
2007	12	309538050	901.8333333		0	31.3	0	386.7979617	0.096849478	0	0	
2008	1	319536209	976.6904762		0	32.25	0	386.7722002	0.098433756	0	0	
2008	2	289248333		931.3	0	29.5	0	386.5730094	0.099370123	0	0	
2008	3	274757414		870.5	0	29.25	0	385.9320417	0.099045707	0	0	
2008	4	310991717		620.225	0	30	0	385.0491229	0.097727451	1	0	
2008	5	257109347		327.25	1.075	28.9	0	384.3064136	0.096005999	0	0	
2008	6	288617754		134.425	76.35	31.2	0	383.9084987	0.094490534	0	0	
2008	7	322447806		8.175	267.85	30.5	0	383.5400385	0.09375264	0	0	
2008	8	347216053		0.5	295	31.15	0	382.6941194	0.094353275	0	0	

Year	Month	K_49_C	hdd_49	cdd_49	Bdays	d10	CommEmpl	CommProd	css0804	css0809	
2008	9	339951141	18.7	143.875		31.15	0	381.1204152	0.096413827	0	1
2008	10	295519841	168.45	33.325		29.1	1	379.1620833	0.098847194	0	0
2008	11	280623983	478	0		30.6	0	377.3736925	0.100153507	0	0
2008	12	283665673	829.125	0		31.7	0	376.1188084	0.099419351	0	0
2009	1	340407433	1150.675	0		32.35	0	375.1464469	0.097690044	0	0
2009	2	299933015	1123.8	0		29.55	0	374.1055231	0.096730221	0	0
2009	3	289369949	916.225	0		29.8	0	372.6847597	0.097526551	0	0
2009	4	277298071	680.875	0		31.25	0	370.9953445	0.099467033	0	0
2009	5	281491937	317.45	11.85		29.6	0	369.3977471	0.101249741	0	0
2009	6	277794313	143.35	29.725		30.5	0	368.1520311	0.101953074	0	0
2009	7	305087784	30.375	90.825		31.6	0	367.334814	0.101947979	0	0
2009	8	317249136	2.2	231.275		28.9	0	366.9493128	0.102066539	0	0
2009	9	330345112	30.25	180.15		30.5	0	366.97751	0.102810706	0	0
2009	10	296124607	221.725	20.425		30.3	1	367.2666047	0.103714544	0	0
2009	11	268965674	427.15	0		29.35	0	367.633526	0.10401243	0	0
2009	12	296146550	672.4	0		31.9	0	367.9354443	0.103270508	0	0
2010	1	317387689	1174.75	0		32.2	0	368.1495347	0.102087972	0	0
2010	2	291671920	1029.325	0		29.55	0	368.2788042	0.101446959	0	0
2010	3	296101644	776.15	0		30.3	0	368.3620674	0.101860955	0	0
2010	4	282213114	457.6	0		31.15	0	368.480022	0.102935567	0	0
2010	5	267678164	255.225	17.975		29	0	368.7284023	0.103894183	0	0
2010	6	294605225	64.45	103.4		30.3	0	369.1338908	0.10420065	0	0
2010	7	356012595	7.1	324.575		31.9	0	369.5107922	0.104088749	0	0
2010	8	352099163	0.625	320.05		30.05	0	369.6016244	0.104056158	0	0
2010	9	339049781	17.275	198.275		30.65	0	369.2459587	0.104429573	0	0
2010	10	292670771	133.65	59.625		29.1	1	368.5848997	0.105028486	0	0
2010	11	271349782	407.95	0		29.5	0	367.853872	0.105511206	0	0
2010	12	288217096	815.825	0		31.5	0	367.2926551	0.105630644	0	0
2011	1	305999592	1134.225	0		31	0	367.1558951	0.10544802	0	0
2011	2	299740660	1149.775	0		29.2	0	367.6691193	0.105147341	0	0
2011	3	294343427	921.325	0		29.95	0	368.9038682	0.104867433	0	0
2011	4	275535750	696.75	0		30.8	0	370.4853532	0.104708733	0	0
2011	5	277976583	341.425	1.975		30.05	0	371.7640241	0.10478156	0	0
2011	6	297201507	116.55	82.725		30.7	0	372.282382	0.105149101	0	0
2011	7	332693073	17.7	214.425		31.15	0	372.0666363	0.105789378	0	0
2011	8	356712356	0	314.4		30.4	0	371.3056645	0.106661449	0	0
2011	9	326472722	19.15	179.775		30.65	0	370.2618613	0.107650013	0	0
2011	10	301488272	99.7	76.4		29.25	1	369.270093	0.108582264	0	0
2011	11	286075397	443.35	0		30.95	0	368.7026448	0.109240668	0	0
2011	12	285327706	615.575	0		31.2	0	368.7873833	0.109487489	0	0
2012	1		1057.763095	0		31.05	0	369.2885171	0.109459713	0	0
2012	2		1063.467381	0		29.4	0	369.7910237	0.109383744	0	0
2012	3		934.1007619	0		30.5	0	370.0344245	0.109424055	0	0
2012	4		648.9525238	0.145		30.85	0	370.0757352	0.109581003	0	0
2012	5		355.211381	7.226547619		30.4	0	370.0724549	0.109800197	0	0
2012	6		151.8772619	58.90330476		31.1	0	370.1540455	0.110035799	0	0
2012	7		21.07309524	215.3341667		30.35	0	370.3348224	0.110278624	0	0
2012	8		4.587261905	295.1463095		31.05	0	370.5936948	0.110535426	0	0
2012	9		18.75178571	193.9146429		30.8	0	370.8968293	0.110797142	0	0
2012	10		136.5263095	62.4727381		29.1	1	371.2230191	0.111056557	0	0
2012	11		442.392619	3.563452381		29.7	0	371.5473569	0.111299326	0	0
2012	12		791.1186905	0		31.3	0	371.8567756	0.11151581	0	0
2013	1		1057.763095	0		31.85	0	372.1794574	0.111714879	0	0
2013	2		1063.467381	0	29.43333333	0	0	372.526228	0.111894522	0	0
2013	3		934.1007619	0	30.01666667	0	0	372.9361367	0.112071617	0	0
2013	4		648.9525238	0.145	31.06666667	0	0	373.419924	0.112251464	0	0

Year	Month	K_49_C	hdd_49	cdd_49	Bdays	d10	CommEmpl	CommProd	css0804	css0809
2013	5		355.211381	7.226547619	29.55	0	373.9515012	0.11242464	0	0
2013	6		151.8772619	58.90330476	30.5	0	374.5210775	0.1125866	0	0
2013	7		21.07309524	215.3341667	31.55	0	375.135488	0.112728626	0	0
2013	8		4.587261905	295.1463095	29.78333333	0	375.8174518	0.112842742	0	0
2013	9		18.75178571	193.9146429	30.6	0	376.5579292	0.112923597	0	0
2013	10		136.5263095	62.4727381	29.55	1	377.3847436	0.112995146	0	0
2013	11		442.392619	3.563452381	29.93333333	0	378.3144882	0.113086403	0	0
2013	12		791.1186905	0	31.53333333	0	379.3522332	0.113215214	0	0
2014	1		1057.763095	0	31.85	0	380.4781354	0.113367046	0	0
2014	2		1063.467381	0	29.43333333	0	381.5681324	0.113505163	0	0
2014	3		934.1007619	0	30.01666667	0	382.6433887	0.113618333	0	0
2014	4		648.9525238	0.145	31.06666667	0	383.7528995	0.113713711	0	0
2014	5		355.211381	7.226547619	29.55	0	384.8890941	0.113798243	0	0
2014	6		151.8772619	58.90330476	30.5	0	386.0734172	0.113881023	0	0
2014	7		21.07309524	215.3341667	31.55	0	387.3051154	0.113963296	0	0
2014	8		4.587261905	295.1463095	29.78333333	0	388.5959196	0.114045094	0	0
2014	9		18.75178571	193.9146429	30.6	0	389.8889261	0.114122486	0	0
2014	10		136.5263095	62.4727381	29.55	1	391.1712817	0.114195501	0	0
2014	11		442.392619	3.563452381	29.93333333	0	392.4044594	0.114262961	0	0
2014	12		791.1186905	0	31.53333333	0	393.5662199	0.114324763	0	0

Year	Month	K_49_I	cdd_49	Bdays	MfgEmpl	elecprice	Jul08	Dec08	Apr09	May09	d2009on	d2011m4on	d907	d00m2	d00m6	css3
2010	4	78339952	0	31.15	40.18187365	0.152172883	0	0	0	0	1	0	0	0	0	0
2010	5	73159595	17.975	29	40.19266711	0.153062745	0	0	0	0	1	0	0	0	0	0
2010	6	77243537	103.4	30.3	40.22570599	0.151896519	0	0	0	0	1	0	0	0	0	0
2010	7	83496315	324.575	31.9	40.2672684	0.149487664	0	0	0	0	1	0	0	0	0	0
2010	8	86240701	320.05	30.05	40.30423075	0.149220579	0	0	0	0	1	0	0	0	0	0
2010	9	86187864	198.275	30.65	40.32944853	0.149690632	0	0	0	0	1	0	0	0	0	0
2010	10	76306395	59.625	29.1	40.36028357	0.150496429	0	0	0	0	1	0	0	0	0	0
2010	11	74563205	0	29.5	40.42019709	0.149321025	0	0	0	0	1	0	0	0	0	0
2010	12	70665505	0	31.5	40.51908729	0.147278946	0	0	0	0	1	0	0	0	0	0
2011	1	71332498	0	31	40.62484709	0.146643987	0	0	0	0	1	0	0	0	0	0
2011	2	77258991	0	29.2	40.68626464	0.147648823	0	0	0	0	1	0	0	0	0	0
2011	3	76682519	0	29.95	40.69079962	0.147434142	0	0	0	0	1	0	0	0	0	0
2011	4	69428999	0	30.8	40.70392524	0.139346583	0	0	0	0	1	1	0	0	0	0
2011	5	79672013	1.975	30.05	40.82220507	0.12369369	0	0	0	0	1	1	0	0	0	0
2011	6	77156404	82.725	30.7	41.07535791	0.122216718	0	0	0	0	1	1	0	0	0	0
2011	7	76363772	214.425	31.15	41.29158689	0.120380397	0	0	0	0	1	1	0	0	0	0
2011	8	86557066	314.4	30.4	41.22922036	0.119533109	0	0	0	0	1	1	0	0	0	0
2011	9	76458184	179.775	30.65	40.76849449	0.120388721	0	0	0	0	1	1	0	0	0	0
2011	10	73599381	76.4	29.25	40.13623541	0.121379778	0	0	0	0	1	1	0	0	0	0
2011	11	69714534	0	30.95	39.66809155	0.121417551	0	0	0	0	1	1	0	0	0	0
2011	12	67936555	0	31.2	39.59141566	0.12076589	0	0	0	0	1	1	0	0	0	0
2012	1	0	0	31.05	39.79227312	0.146643987	0	0	0	0	1	1	0	0	0	0
2012	2	0	0	29.4	40.03361272	0.147648823	0	0	0	0	1	1	0	0	0	0
2012	3	0	0	30.5	40.15716777	0.147434142	0	0	0	0	1	1	0	0	0	0
2012	4	0.145	0	30.85	40.17836157	0.139346583	0	0	0	0	1	1	0	0	0	0
2012	5	7.226547619	0	30.4	40.16684153	0.12369369	0	0	0	0	1	1	0	0	0	0
2012	6	58.90330476	0	31.1	40.17860855	0.122216718	0	0	0	0	1	1	0	0	0	0
2012	7	215.3341667	0	30.35	40.21204349	0.120380397	0	0	0	0	1	1	0	0	0	0
2012	8	295.1463095	0	31.05	40.24664283	0.119533109	0	0	0	0	1	1	0	0	0	0
2012	9	193.9146429	0	30.8	40.26579617	0.120388721	0	0	0	0	1	1	0	0	0	0
2012	10	62.4727381	0	29.1	40.27127056	0.121379778	0	0	0	0	1	1	0	0	0	0
2012	11	3.563452381	0	29.7	40.26975401	0.121417551	0	0	0	0	1	1	0	0	0	0
2012	12	0	0	31.3	40.26727069	0.12076589	0	0	0	0	1	1	0	0	0	0
2013	1	0	0	31.85	40.26823276	0.146643987	0	0	0	0	1	1	0	0	0	0
2013	2	0	0	29.43333333	40.27589644	0.147648823	0	0	0	0	1	1	0	0	0	0
2013	3	0	0	30.01666667	40.29170466	0.147434142	0	0	0	0	1	1	0	0	0	0
2013	4	0.145	0	31.06666667	40.31112664	0.139346583	0	0	0	0	1	1	0	0	0	0
2013	5	7.226547619	0	29.55	40.32609224	0.12369369	0	0	0	0	1	1	0	0	0	0
2013	6	58.90330476	0	30.5	40.33164898	0.122216718	0	0	0	0	1	1	0	0	0	0
2013	7	215.3341667	0	31.55	40.33096395	0.120380397	0	0	0	0	1	1	0	0	0	0
2013	8	295.1463095	0	29.78333333	40.33006154	0.119533109	0	0	0	0	1	1	0	0	0	0
2013	9	193.9146429	0	30.6	40.33390606	0.120388721	0	0	0	0	1	1	0	0	0	0
2013	10	62.4727381	0	29.55	40.34420959	0.121379778	0	0	0	0	1	1	0	0	0	0
2013	11	3.563452381	0	29.93333333	40.36155171	0.121417551	0	0	0	0	1	1	0	0	0	0
2013	12	0	0	31.53333333	40.38589463	0.12076589	0	0	0	0	1	1	0	0	0	0
2014	1	0	0	31.85	40.4152872	0.146643987	0	0	0	0	1	1	0	0	0	0
2014	2	0	0	29.43333333	40.44465843	0.147648823	0	0	0	0	1	1	0	0	0	0
2014	3	0	0	30.01666667	40.47348102	0.147434142	0	0	0	0	1	1	0	0	0	0
2014	4	0.145	0	31.06666667	40.50391236	0.139346583	0	0	0	0	1	1	0	0	0	0
2014	5	7.226547619	0	29.55	40.5373033	0.12369369	0	0	0	0	1	1	0	0	0	0
2014	6	58.90330476	0	30.5	40.57623877	0.122216718	0	0	0	0	1	1	0	0	0	0
2014	7	215.3341667	0	31.55	40.62430484	0.120380397	0	0	0	0	1	1	0	0	0	0
2014	8	295.1463095	0	29.78333333	40.68630173	0.119533109	0	0	0	0	1	1	0	0	0	0
2014	9	193.9146429	0	30.6	40.76100043	0.120388721	0	0	0	0	1	1	0	0	0	0
2014	10	62.4727381	0	29.55	40.84124589	0.121379778	0	0	0	0	1	1	0	0	0	0
2014	11	3.563452381	0	29.93333333	40.91618217	0.121417551	0	0	0	0	1	1	0	0	0	0
2014	12	0	0	31.53333333	40.97882767	0.12076589	0	0	0	0	1	1	0	0	0	0

Year	Month	K_49_S	hlight	d2	d11
1990	1	7942936	319.55	0	0
1990	2	6690505	308.96	1	0
1990	3	6595807	371.87	0	0
1990	4	5676227	390.35	0	0
1990	5	5174870	428.96	0	0
1990	6	4643331	427.91	0	0
1990	7	4918170	435.23	0	0
1990	8	5524441	412.64	0	0
1990	9	6169974	370.62	0	0
1990	10	6989227	351.64	0	0
1990	11	7436138	314.85	0	1
1990	12	7812464	310.17	0	0
1991	1	7741715	319.55	0	0
1991	2	6510952	308.96	1	0
1991	3	6470136	371.87	0	0
1991	4	5510990	390.35	0	0
1991	5	4754319	428.96	0	0
1991	6	4528694	427.91	0	0
1991	7	4790756	435.23	0	0
1991	8	5307481	412.64	0	0
1991	9	5954159	370.62	0	0
1991	10	6861012	351.64	0	0
1991	11	7313875	314.85	0	1
1991	12	7689883	310.17	0	0
1992	1	7588927	319.55	0	0
1992	2	6372588	308.96	1	0
1992	3	6262351	371.87	0	0
1992	4	5386924	390.35	0	0
1992	5	4888847	428.96	0	0
1992	6	4393573	427.91	0	0
1992	7	4674696	435.23	0	0
1992	8	5215013	412.64	0	0
1992	9	5705448	370.62	0	0
1992	10	6610574	351.64	0	0
1992	11	6976226	314.85	0	1
1992	12	7506302	310.17	0	0
1993	1	7439772	319.55	0	0
1993	2	6077349	308.96	1	0
1993	3	5941422	371.87	0	0
1993	4	5236882	390.35	0	0
1993	5	2942980	428.96	0	0
1993	6	4236640	427.91	0	0
1993	7	4507725	435.23	0	0
1993	8	5033778	412.64	0	0
1993	9	5591225	370.62	0	0
1993	10	6407773	351.64	0	0
1993	11	6799180	314.85	0	1
1993	12	7262503	310.17	0	0
1994	1	7167919	319.55	0	0
1994	2	6021906	308.96	1	0

Year	Month	K_49_S	hlight	d2	d11
1994	3	5438193	371.87	0	0
1994	4	4999021	390.35	0	0
1994	5	4377787	428.96	0	0
1994	6	4084958	427.91	0	0
1994	7	4291117	435.23	0	0
1994	8	4801255	412.64	0	0
1994	9	5333263	370.62	0	0
1994	10	6159248	351.64	0	0
1994	11	6498834	314.85	0	1
1994	12	6955308	310.17	0	0
1995	1	6846941	319.55	0	0
1995	2	5730165	308.96	1	0
1995	3	5617678	371.87	0	0
1995	4	4829918	390.35	0	0
1995	5	4271277	428.96	0	0
1995	6	3931659	427.91	0	0
1995	7	4151794	435.23	0	0
1995	8	4639014	412.64	0	0
1995	9	5171753	370.62	0	0
1995	10	5950063	351.64	0	0
1995	11	6164052	314.85	0	1
1995	12	6726868	310.17	0	0
1996	1	6371305	319.55	0	0
1996	2	5556584	308.96	1	0
1996	3	5204757	371.87	0	0
1996	4	4604490	390.35	0	0
1996	5	3931545	428.96	0	0
1996	6	3839253	427.91	0	0
1996	7	4074967	435.23	0	0
1996	8	4592712	412.64	0	0
1996	9	5118063	370.62	0	0
1996	10	5887715	351.64	0	0
1996	11	6291794	314.85	0	1
1996	12	6683813	310.17	0	0
1997	1	6599119	319.55	0	0
1997	2	5566411	308.96	1	0
1997	3	5494287	371.87	0	0
1997	4	4674895	390.35	0	0
1997	5	4269767	428.96	0	0
1997	6	3837877	427.91	0	0
1997	7	3239705	435.23	0	0
1997	8	4219434	412.64	0	0
1997	9	4748758	370.62	0	0
1997	10	5782615	351.64	0	0
1997	11	5488371	314.85	0	1
1997	12	7403037	310.17	0	0
1998	1	6646750	319.55	0	0
1998	2	6094655	308.96	1	0
1998	3	5250358	371.87	0	0
1998	4	4630347	390.35	0	0

Year	Month	K_49_S	hlight	d2	d11
1998	5	4142454	428.96	0	0
1998	6	4037166	427.91	0	0
1998	7	3136833	435.23	0	0
1998	8	4195974	412.64	0	0
1998	9	5019963	370.62	0	0
1998	10	5539965	351.64	0	0
1998	11	5880303	314.85	0	1
1998	12	6812270	310.17	0	0
1999	1	6952639	319.55	0	0
1999	2	5823887	308.96	1	0
1999	3	5240681	371.87	0	0
1999	4	4596170	390.35	0	0
1999	5	4092827	428.96	0	0
1999	6	3955492	427.91	0	0
1999	7	3908377	435.23	0	0
1999	8	4144656	412.64	0	0
1999	9	5019510	370.62	0	0
1999	10	5514006	351.64	0	0
1999	11	5845784	314.85	0	1
1999	12	6821137	310.17	0	0
2000	1	6379844	319.55	0	0
2000	2	6074573	308.96	1	0
2000	3	5160083	371.87	0	0
2000	4	4513686	390.35	0	0
2000	5	4249630	428.96	0	0
2000	6	4189506	427.91	0	0
2000	7	3966256	435.23	0	0
2000	8	4113222	412.64	0	0
2000	9	5097542	370.62	0	0
2000	10	5434750	351.64	0	0
2000	11	5770130	314.85	0	1
2000	12	6743810	310.17	0	0
2001	1	6959470	319.55	0	0
2001	2	5856967	308.96	1	0
2001	3	5210000	371.87	0	0
2001	4	4757511	390.35	0	0
2001	5	4164375	428.96	0	0
2001	6	4210467	427.91	0	0
2001	7	3898102	435.23	0	0
2001	8	4057182	412.64	0	0
2001	9	5026184	370.62	0	0
2001	10	5384887	351.64	0	0
2001	11	5879400	314.85	0	1
2001	12	6669549	310.17	0	0
2002	1	7066578	319.55	0	0
2002	2	5982642	308.96	1	0
2002	3	5063830	371.87	0	0
2002	4	4740004	390.35	0	0
2002	5	3917852	428.96	0	0
2002	6	4345473	427.91	0	0

Year	Month	K_49_S	hlight	d2	d11
2002	7	4014240	435.23	0	0
2002	8	4305273	412.64	0	0
2002	9	4671269	370.62	0	0
2002	10	5370986	351.64	0	0
2002	11	6315799	314.85	0	1
2002	12	6509807	310.17	0	0
2003	1	7135182	319.55	0	0
2003	2	6086242	308.96	1	0
2003	3	5109319	371.87	0	0
2003	4	5067708	390.35	0	0
2003	5	4218635	428.96	0	0
2003	6	3986864	427.91	0	0
2003	7	4187810	435.23	0	0
2003	8	4120375	412.64	0	0
2003	9	4826015	370.62	0	0
2003	10	5274968	351.64	0	0
2003	11	6455310	314.85	0	1
2003	12	6586004	310.17	0	0
2004	1	7037543	319.55	0	0
2004	2	5783110	308.96	1	0
2004	3	5323770	371.87	0	0
2004	4	5135403	390.35	0	0
2004	5	4261799	428.96	0	0
2004	6	4220430	427.91	0	0
2004	7	3504455	435.23	0	0
2004	8	4872798	412.64	0	0
2004	9	5320218	370.62	0	0
2004	10	5317717	351.64	0	0
2004	11	6062845	314.85	0	1
2004	12	6639691	310.17	0	0
2005	1	6599461	319.55	0	0
2005	2	5366153	308.96	1	0
2005	3	6042259	371.87	0	0
2005	4	4753628	390.35	0	0
2005	5	4267821	428.96	0	0
2005	6	4282885	427.91	0	0
2005	7	3994966	435.23	0	0
2005	8	4139688	412.64	0	0
2005	9	5120444	370.62	0	0
2005	10	5322123	351.64	0	0
2005	11	5988356	314.85	0	1
2005	12	7007933	310.17	0	0
2006	1	6626381	319.55	0	0
2006	2	5716394	308.96	1	0
2006	3	6056180	371.87	0	0
2006	4	4772574	390.35	0	0
2006	5	4285112	428.96	0	0
2006	6	4299199	427.91	0	0
2006	7	4004346	435.23	0	0
2006	8	4150393	412.64	0	0

Year	Month	K_49_S	hlight	d2	d11
2006	9	5142428	370.62	0	0
2006	10	5342111	351.64	0	0
2006	11	5797862	314.85	0	1
2006	12	6975903	310.17	0	0
2007	1	7251346	319.55	0	0
2007	2	5930293	308.96	1	0
2007	3	5380911	371.87	0	0
2007	4	4854218	390.35	0	0
2007	5	4280199	428.96	0	0
2007	6	4319291	427.91	0	0
2007	7	4005506	435.23	0	0
2007	8	2744085	412.64	0	0
2007	9	5157991	370.62	0	0
2007	10	5343033	351.64	0	0
2007	11	6006112	314.85	0	1
2007	12	7001465	310.17	0	0
2008	1	7410815	319.55	0	0
2008	2	5737030	308.96	1	0
2008	3	5628169	371.87	0	0
2008	4	4781912	390.35	0	0
2008	5	4258853	428.96	0	0
2008	6	4049531	427.91	0	0
2008	7	4398344	435.23	0	0
2008	8	4277560	412.64	0	0
2008	9	5309872	370.62	0	0
2008	10	5647865	351.64	0	0
2008	11	5966637	314.85	0	1
2008	12	6869435	310.17	0	0
2009	1	6891500	319.55	0	0
2009	2	6290094	308.96	1	0
2009	3	5478115	371.87	0	0
2009	4	4896819	390.35	0	0
2009	5	4088413	428.96	0	0
2009	6	4396268	427.91	0	0
2009	7	4036467	435.23	0	0
2009	8	1995836	412.64	0	0
2009	9	7437437	370.62	0	0
2009	10	5563974	351.64	0	0
2009	11	5930979	314.85	0	1
2009	12	6843602	310.17	0	0
2010	1	109553	319.55	0	0
2010	2	5753848	308.96	1	0
2010	3	5355268	371.87	0	0
2010	4	5067160	390.35	0	0
2010	5	3929399	428.96	0	0
2010	6	2420246	427.91	0	0
2010	7	4171296	435.23	0	0
2010	8	4285432	412.64	0	0
2010	9	4727608	370.62	0	0
2010	10	4933590	351.64	0	0

Year	Month	K_49_S	hlight	d2	d11
2010	11	6317530	314.85	0	1
2010	12	6182106	310.17	0	0
2011	1	6758320	319.55	0	0
2011	2	5599074	308.96	1	0
2011	3	5008166	371.87	0	0
2011	4	5121357	390.35	0	0
2011	5	3774836	428.96	0	0
2011	6	3839679	427.91	0	0
2011	7	3976099	435.23	0	0
2011	8	4124201	412.64	0	0
2011	9	4536668	370.62	0	0
2011	10	5102617	351.64	0	0
2011	11	6169775	314.85	0	1
2011	12	6102451	310.17	0	0
2012	1		319.55	0	0
2012	2		308.96	1	0
2012	3		371.87	0	0
2012	4		390.35	0	0
2012	5		428.96	0	0
2012	6		427.91	0	0
2012	7		435.23	0	0
2012	8		412.64	0	0
2012	9		370.62	0	0
2012	10		351.64	0	0
2012	11		314.85	0	1
2012	12		310.17	0	0
2013	1		319.55	0	0
2013	2		308.96	1	0
2013	3		371.87	0	0
2013	4		390.35	0	0
2013	5		428.96	0	0
2013	6		427.91	0	0
2013	7		435.23	0	0
2013	8		412.64	0	0
2013	9		370.62	0	0
2013	10		351.64	0	0
2013	11		314.85	0	1
2013	12		310.17	0	0
2014	1		319.55	0	0
2014	2		308.96	1	0
2014	3		371.87	0	0
2014	4		390.35	0	0
2014	5		428.96	0	0
2014	6		427.91	0	0
2014	7		435.23	0	0
2014	8		412.64	0	0
2014	9		370.62	0	0
2014	10		351.64	0	0
2014	11		314.85	0	1
2014	12		310.17	0	0

Year	Month	C_49_R	HHQ	d2011on
1990	1	381113	377.2896576	0
1990	2	381562	377.6087582	0
1990	3	381636	377.9577942	0
1990	4	381675	378.287823	0
1990	5	381669	378.6194184	0
1990	6	381582	378.9303894	0
1990	7	381505	379.2408031	0
1990	8	381498	379.5401101	0
1990	9	382164	379.8193359	0
1990	10	382158	380.0974464	0
1990	11	382758	380.3575684	0
1990	12	383485	380.6183472	0
1991	1	383937	380.8717569	0
1991	2	384153	381.0931556	0
1991	3	384294	381.328186	0
1991	4	384282	381.5441538	0
1991	5	384208	381.7556616	0
1991	6	383796	381.9496765	0
1991	7	383307	382.1399344	0
1991	8	383497	382.3212545	0
1991	9	383968	382.4897461	0
1991	10	384276	382.6582465	0
1991	11	384681	382.8175062	0
1991	12	385935	382.9798584	0
1992	1	386310	383.1416034	0
1992	2	386558	383.2934909	0
1992	3	386543	383.4575806	0
1992	4	386516	383.6191543	0
1992	5	386450	383.790114	0
1992	6	385642	383.9605103	0
1992	7	385509	384.1424365	0
1992	8	385779	384.3294894	0
1992	9	385956	384.5142517	0
1992	10	386645	384.7080292	0
1992	11	387589	384.8979627	0
1992	12	388387	385.0964966	0
1993	1	389019	385.2966653	0
1993	2	389315	385.4768228	0
1993	3	389305	385.6728821	0
1993	4	389350	385.8568585	0
1993	5	389021	386.0398186	0
1993	6	388426	386.209137	0
1993	7	388499	386.3755217	0
1993	8	388448	386.5337042	0
1993	9	388914	386.679718	0
1993	10	389464	386.8241685	0
1993	11	390063	386.9589521	0
1993	12	390589	387.0944214	0
1994	1	391060	387.2271282	0
1994	2	391334	387.3446188	0

Year	Month	C_49_R	HHQ	d2011on
1994	3	389203	387.4718018	0
1994	4	391314	387.5919195	0
1994	5	391914	387.713766	0
1994	6	390603	387.8304443	0
1994	7	390874	387.9507276	0
1994	8	390846	388.0716821	0
1994	9	391061	388.1902771	0
1994	10	391605	388.3155093	0
1994	11	392093	388.4409296	0
1994	12	392898	388.5767517	0
1995	1	393966	388.7204656	0
1995	2	395715	388.8573404	0
1995	3	396229	389.0167236	0
1995	4	396041	389.1789964	0
1995	5	395913	389.3558839	0
1995	6	395757	389.5370178	0
1995	7	396043	389.7352096	0
1995	8	396217	389.9439425	0
1995	9	396639	390.1550293	0
1995	10	396931	390.3816351	0
1995	11	397687	390.6085469	0
1995	12	398380	390.8503418	0
1996	1	397951	391.0988355	0
1996	2	398839	391.3360604	0
1996	3	398768	391.5931702	0
1996	4	398857	391.8439376	0
1996	5	398806	392.1035156	0
1996	6	398325	392.3536682	0
1996	7	398268	392.6098892	0
1996	8	398552	392.8640786	0
1996	9	398810	393.1087341	0
1996	10	399188	393.3609817	0
1996	11	399921	393.606057	0
1996	12	400579	393.8620605	0
1997	1	401118	394.1220974	0
1997	2	401354	394.3596194	0
1997	3	401431	394.6240845	0
1997	4	401343	394.8804602	0
1997	5	401535	395.1462967	0
1997	6	401198	395.4052734	0
1997	7	401080	395.6754663	0
1997	8	401298	395.9488841	0
1997	9	401700	396.2170715	0
1997	10	402018	396.498762	0
1997	11	402662	396.7777846	0
1997	12	403246	397.0751343	0
1998	1	398498	397.383402	0
1998	2	403985	397.6704213	0
1998	3	404171	397.9961548	0
1998	4	404358	398.318244	0

Year	Month	C_49_R	HHQ	d2011on
1998	5	404339	398.6587867	0
1998	6	404172	398.9968567	0
1998	7	404318	399.3558728	0
1998	8	404481	399.7247872	0
1998	9	404801	400.091095	0
1998	10	405417	400.4795206	0
1998	11	406134	400.8669318	0
1998	12	406514	401.2815857	0
1999	1	407014	401.7123428	0
1999	2	407284	402.1134893	0
1999	3	407462	402.5681458	0
1999	4	407583	403.0163153	0
1999	5	407777	403.4872952	0
1999	6	407582	403.9506226	0
1999	7	407680	404.4366073	0
1999	8	407904	404.9273602	0
1999	9	408542	405.4039307	0
1999	10	409201	405.8953931	0
1999	11	409806	406.3685437	0
1999	12	410460	406.8536377	0
2000	1	410584	407.3320872	0
2000	2	411015	407.7661115	0
2000	3	411135	408.2061157	0
2000	4	411280	408.6011029	0
2000	5	407864	408.9780879	0
2000	6	407541	409.3154602	0
2000	7	407724	409.638302	0
2000	8	408004	409.9366194	0
2000	9	408163	410.2033386	0
2000	10	408688	410.4585559	0
2000	11	409328	410.6913525	0
2000	12	409944	410.9238892	0
2001	1	410508	411.1543753	0
2001	2	411214	411.3637886	0
2001	3	411213	411.5997009	0
2001	4	411211	411.8350761	0
2001	5	411064	412.090269	0
2001	6	411035	412.3536377	0
2001	7	410959	412.6462406	0
2001	8	410899	412.9570937	0
2001	9	411052	413.2714844	0
2001	10	411552	413.6067986	0
2001	11	412216	413.9393451	0
2001	12	413070	414.2894897	0
2002	1	413115	414.6435883	0
2002	2	413276	414.9618361	0
2002	3	413565	415.3061218	0
2002	4	413749	415.6255639	0
2002	5	414242	415.9378246	0
2002	6	413292	416.2198792	0

Year	Month	C_49_R	HHQ	d2011on
2002	7	413676	416.4885231	0
2002	8	413802	416.7359034	0
2002	9	413795	416.9577942	0
2002	10	413948	417.1719453	0
2002	11	414491	417.3678538	0
2002	12	414871	417.5621643	0
2003	1	415368	417.7514813	0
2003	2	416253	417.9196998	0
2003	3	416455	418.104187	0
2003	4	416419	418.2825203	0
2003	5	416448	418.4693007	0
2003	6	415999	418.6553345	0
2003	7	416187	418.8547083	0
2003	8	416253	419.0578927	0
2003	9	416394	419.2536926	0
2003	10	416561	419.4506013	0
2003	11	416977	419.6317258	0
2003	12	417737	419.8048096	0
2004	1	418091	419.9588899	0
2004	2	418479	420.0805972	0
2004	3	418429	420.1808472	0
2004	4	418451	420.2433208	0
2004	5	418308	420.2690319	0
2004	6	417906	420.2538757	0
2004	7	417538	420.1954171	0
2004	8	417707	420.0964961	0
2004	9	418103	419.966156	0
2004	10	418612	419.7998316	0
2004	11	419077	419.6124918	0
2004	12	419696	419.3961487	0
2005	1	420671	419.1612241	0
2005	2	421291	418.9368058	0
2005	3	421504	418.6789246	0
2005	4	421478	418.4255668	0
2005	5	421362	418.1724823	0
2005	6	421358	417.9497375	0
2005	7	421378	417.7524653	0
2005	8	422083	417.5814397	0
2005	9	421597	417.4301147	0
2005	10	421819	417.2793508	0
2005	11	422009	417.1380924	0
2005	12	422827	416.9981079	0
2006	1	423385	416.8650024	0
2006	2	423644	416.7500243	0
2006	3	423882	416.6274109	0
2006	4	423790	416.5114652	0
2006	5	423556	416.3886699	0
2006	6	422835	416.260498	0
2006	7	422582	416.1142739	0
2006	8	422461	415.9601876	0

Year	Month	C_49_R	HHQ	d2011on
2006	9	417244	415.8117981	0
2006	10	423185	415.6659751	0
2006	11	423717	415.5321764	0
2006	12	424379	415.3999023	0
2007	1	424876	415.2726972	0
2007	2	425502	415.163254	0
2007	3	426244	415.0498962	0
2007	4	426244	414.9498176	0
2007	5	425851	414.8584886	0
2007	6	425164	414.783905	0
2007	7	424533	414.7224009	0
2007	8	424173	414.6745095	0
2007	9	423816	414.6382141	0
2007	10	423347	414.6085024	0
2007	11	423338	414.5863532	0
2007	12	424283	414.5697021	0
2008	1	413539	414.5586087	0
2008	2	428944	414.5519172	0
2008	3	428586	414.5470886	0
2008	4	415810	414.5433856	0
2008	5	428775	414.5402622	0
2008	6	430379	414.5379028	0
2008	7	429231	414.5359662	0
2008	8	428159	414.5336921	0
2008	9	428255	414.5302124	0
2008	10	427393	414.5245729	0
2008	11	429489	414.517441	0
2008	12	415570	414.5089111	0
2009	1	428616	414.4997263	0
2009	2	429593	414.4911272	0
2009	3	430291	414.4815063	0
2009	4	429785	414.4723308	0
2009	5	430767	414.4632516	0
2009	6	422297	414.4551086	0
2009	7	429850	414.4476247	0
2009	8	417035	414.4413569	0
2009	9	429756	414.4367065	0
2009	10	424614	414.4336272	0
2009	11	429455	414.4325601	0
2009	12	424450	414.4336853	0
2010	1	429716	414.4373771	0
2010	2	430061	414.4433271	0
2010	3	431013	414.4533081	0
2010	4	418862	414.4666562	0
2010	5	430856	414.483724	0
2010	6	419354	414.5026855	0
2010	7	429726	414.5264976	0
2010	8	417964	414.5660364	0
2010	9	424904	414.6323853	0
2010	10	429864	414.7378289	0

Year	Month	C_49_R	HHQ	d2011on
2010	11	429860	414.8618962	0
2010	12	411280	414.9931946	0
2011	1	430861	415.1119497	1
2011	2	431150	415.2093777	1
2011	3	413595	415.3114929	1
2011	4	431044	415.4039339	1
2011	5	431154	415.4678112	1
2011	6	431657	415.4689941	1
2011	7	430699	415.392353	1
2011	8	418452	415.2851519	1
2011	9	430620	415.2131958	1
2011	10	431498	415.2175222	1
2011	11	430322	415.2780826	1
2011	12	418754	415.3620911	1
2012	1		415.4367215	1
2012	2		415.4921748	1
2012	3		415.5358887	1
2012	4		415.5644507	1
2012	5		415.589035	1
2012	6		415.6188049	1
2012	7		415.6633132	1
2012	8		415.7149572	1
2012	9		415.7619019	1
2012	10		415.8002309	1
2012	11		415.8323124	1
2012	12		415.8682861	1
2013	1		415.9129277	1
2013	2		415.957897	1
2013	3		416.0075073	1
2013	4		416.051173	1
2013	5		416.0920524	1
2013	6		416.1289062	1
2013	7		416.1674597	1
2013	8		416.2169848	1
2013	9		416.2869873	1
2013	10		416.3907007	1
2013	11		416.5167786	1
2013	12		416.6654968	1
2014	1		416.8252643	1
2014	2		416.9744824	1
2014	3		417.1405945	1
2014	4		417.2985284	1
2014	5		417.4580683	1
2014	6		417.6090088	1
2014	7		417.7623485	1
2014	8		417.9173168	1
2014	9		418.0737	1
2014	10		418.2446874	1
2014	11		418.4134643	1
2014	12		418.5830994	1

Year	Month	C_49_REH	time
1990	1	19914	0.083333333
1990	2	19937	0.166666667
1990	3	19943	0.25
1990	4	19992	0.333333333
1990	5	20051	0.416666667
1990	6	20063	0.5
1990	7	20066	0.583333333
1990	8	20066	0.666666667
1990	9	20112	0.75
1990	10	20034	0.833333333
1990	11	20031	0.916666667
1990	12	20053	1
1991	1	20020	1.083333333
1991	2	20069	1.166666667
1991	3	20092	1.25
1991	4	20122	1.333333333
1991	5	20094	1.416666667
1991	6	20176	1.5
1991	7	20103	1.583333333
1991	8	20077	1.666666667
1991	9	20100	1.75
1991	10	20038	1.833333333
1991	11	19987	1.916666667
1991	12	19917	2
1992	1	19929	2.083333333
1992	2	19873	2.166666667
1992	3	19871	2.25
1992	4	19837	2.333333333
1992	5	19810	2.416666667
1992	6	19755	2.5
1992	7	19740	2.583333333
1992	8	19758	2.666666667
1992	9	19712	2.75
1992	10	19705	2.833333333
1992	11	19948	2.916666667
1992	12	19962	3
1993	1	19948	3.083333333
1993	2	19919	3.166666667
1993	3	19898	3.25
1993	4	19862	3.333333333
1993	5	19824	3.416666667
1993	6	19756	3.5
1993	7	19793	3.583333333
1993	8	19779	3.666666667
1993	9	19753	3.75
1993	10	19777	3.833333333
1993	11	19759	3.916666667
1993	12	19782	4
1994	1	19771	4.083333333
1994	2	19696	4.166666667

Year	Month	C_49_REH	time
1994	3	17744	4.25
1994	4	19728	4.333333333
1994	5	19711	4.416666667
1994	6	19611	4.5
1994	7	19631	4.583333333
1994	8	19645	4.666666667
1994	9	19577	4.75
1994	10	19578	4.833333333
1994	11	19577	4.916666667
1994	12	19604	5
1995	1	19590	5.083333333
1995	2	19578	5.166666667
1995	3	19565	5.25
1995	4	19527	5.333333333
1995	5	19450	5.416666667
1995	6	19459	5.5
1995	7	19463	5.583333333
1995	8	19434	5.666666667
1995	9	19422	5.75
1995	10	19346	5.833333333
1995	11	19379	5.916666667
1995	12	19424	6
1996	1	19309	6.083333333
1996	2	19360	6.166666667
1996	3	19375	6.25
1996	4	19364	6.333333333
1996	5	19359	6.416666667
1996	6	19310	6.5
1996	7	19285	6.583333333
1996	8	19282	6.666666667
1996	9	19265	6.75
1996	10	19281	6.833333333
1996	11	19340	6.916666667
1996	12	19343	7
1997	1	19336	7.083333333
1997	2	19312	7.166666667
1997	3	19306	7.25
1997	4	19305	7.333333333
1997	5	19281	7.416666667
1997	6	19258	7.5
1997	7	19238	7.583333333
1997	8	19232	7.666666667
1997	9	19228	7.75
1997	10	19189	7.833333333
1997	11	19188	7.916666667
1997	12	19168	8
1998	1	18987	8.083333333
1998	2	19176	8.166666667
1998	3	19162	8.25
1998	4	19159	8.333333333

Year	Month	C_49_REH	time
1998	5	19194	8.416666667
1998	6	19240	8.5
1998	7	19285	8.583333333
1998	8	19315	8.666666667
1998	9	19317	8.75
1998	10	19310	8.833333333
1998	11	19303	8.916666667
1998	12	19312	9
1999	1	19309	9.083333333
1999	2	19110	9.166666667
1999	3	19088	9.25
1999	4	19084	9.333333333
1999	5	19082	9.416666667
1999	6	19055	9.5
1999	7	19054	9.583333333
1999	8	19042	9.666666667
1999	9	19039	9.75
1999	10	19045	9.833333333
1999	11	19056	9.916666667
1999	12	19074	10
2000	1	19049	10.083333333
2000	2	19048	10.166666667
2000	3	19035	10.25
2000	4	19025	10.333333333
2000	5	18195	10.416666667
2000	6	18153	10.5
2000	7	18168	10.583333333
2000	8	18158	10.666666667
2000	9	18150	10.75
2000	10	18152	10.833333333
2000	11	18145	10.916666667
2000	12	18145	11
2001	1	18153	11.083333333
2001	2	18149	11.166666667
2001	3	18136	11.25
2001	4	18122	11.333333333
2001	5	18136	11.416666667
2001	6	18129	11.5
2001	7	18128	11.583333333
2001	8	18152	11.666666667
2001	9	18131	11.75
2001	10	18133	11.833333333
2001	11	18148	11.916666667
2001	12	18214	12
2002	1	18564	12.083333333
2002	2	18619	12.166666667
2002	3	18649	12.25
2002	4	18667	12.333333333
2002	5	18664	12.416666667
2002	6	18441	12.5

Year	Month	C_49_REH	time
2002	7	18603	12.58333333
2002	8	18631	12.66666667
2002	9	18603	12.75
2002	10	18589	12.83333333
2002	11	18619	12.91666667
2002	12	18581	13
2003	1	18623	13.08333333
2003	2	18667	13.16666667
2003	3	18723	13.25
2003	4	18657	13.33333333
2003	5	18648	13.41666667
2003	6	18603	13.5
2003	7	18619	13.58333333
2003	8	18620	13.66666667
2003	9	18593	13.75
2003	10	18594	13.83333333
2003	11	18598	13.91666667
2003	12	18608	14
2004	1	18598	14.08333333
2004	2	18544	14.16666667
2004	3	18536	14.25
2004	4	18526	14.33333333
2004	5	18490	14.41666667
2004	6	18481	14.5
2004	7	18444	14.58333333
2004	8	18436	14.66666667
2004	9	18426	14.75
2004	10	18443	14.83333333
2004	11	18444	14.91666667
2004	12	18485	15
2005	1	18502	15.08333333
2005	2	18533	15.16666667
2005	3	18529	15.25
2005	4	18507	15.33333333
2005	5	18495	15.41666667
2005	6	18468	15.5
2005	7	18455	15.58333333
2005	8	18474	15.66666667
2005	9	18454	15.75
2005	10	18429	15.83333333
2005	11	18436	15.91666667
2005	12	18454	16
2006	1	18431	16.08333333
2006	2	18413	16.16666667
2006	3	18399	16.25
2006	4	18378	16.33333333
2006	5	18370	16.41666667
2006	6	18342	16.5
2006	7	18344	16.58333333
2006	8	18329	16.66666667

Year	Month	C_49_REH	time
2006	9	17868	16.75
2006	10	18331	16.83333333
2006	11	18350	16.91666667
2006	12	18343	17
2007	1	18347	17.08333333
2007	2	18336	17.16666667
2007	3	18322	17.25
2007	4	18327	17.33333333
2007	5	18301	17.41666667
2007	6	18235	17.5
2007	7	18223	17.58333333
2007	8	18211	17.66666667
2007	9	18157	17.75
2007	10	18090	17.83333333
2007	11	18061	17.91666667
2007	12	18102	18
2008	1	17688	18.08333333
2008	2	18225	18.16666667
2008	3	18180	18.25
2008	4	17791	18.33333333
2008	5	18221	18.41666667
2008	6	18347	18.5
2008	7	18250	18.58333333
2008	8	18233	18.66666667
2008	9	18234	18.75
2008	10	18019	18.83333333
2008	11	19116	18.91666667
2008	12	17612	19
2009	1	18013	19.08333333
2009	2	18152	19.16666667
2009	3	18148	19.25
2009	4	18131	19.33333333
2009	5	18174	19.41666667
2009	6	18116	19.5
2009	7	18207	19.58333333
2009	8	17755	19.66666667
2009	9	18208	19.75
2009	10	18045	19.83333333
2009	11	18152	19.91666667
2009	12	18003	20
2010	1	18151	20.08333333
2010	2	18156	20.16666667
2010	3	18208	20.25
2010	4	17814	20.33333333
2010	5	18208	20.41666667
2010	6	17833	20.5
2010	7	18134	20.58333333
2010	8	17769	20.66666667
2010	9	18036	20.75
2010	10	18112	20.83333333

Year	Month	C_49_REH	time
2010	11	18052	20.91666667
2010	12	17493	21
2011	1	18090	21.08333333
2011	2	18109	21.16666667
2011	3	17602	21.25
2011	4	18113	21.33333333
2011	5	18087	21.41666667
2011	6	18197	21.5
2011	7	18109	21.58333333
2011	8	17709	21.66666667
2011	9	18100	21.75
2011	10	18098	21.83333333
2011	11	18059	21.91666667
2011	12	17608	22
2012	1		22.08333333
2012	2		22.16666667
2012	3		22.25
2012	4		22.33333333
2012	5		22.41666667
2012	6		22.5
2012	7		22.58333333
2012	8		22.66666667
2012	9		22.75
2012	10		22.83333333
2012	11		22.91666667
2012	12		23
2013	1		23.08333333
2013	2		23.16666667
2013	3		23.25
2013	4		23.33333333
2013	5		23.41666667
2013	6		23.5
2013	7		23.58333333
2013	8		23.66666667
2013	9		23.75
2013	10		23.83333333
2013	11		23.91666667
2013	12		24
2014	1		24.08333333
2014	2		24.16666667
2014	3		24.25
2014	4		24.33333333
2014	5		24.41666667
2014	6		24.5
2014	7		24.58333333
2014	8		24.66666667
2014	9		24.75
2014	10		24.83333333
2014	11		24.91666667
2014	12		25

Year	Month	C_49_C	CommOutput	d2011on
1990	1	43942	26.62641598	0
1990	2	44096	26.65682135	0
1990	3	44103	26.63552019	0
1990	4	44280	26.57648204	0
1990	5	44379	26.50455359	0
1990	6	44488	26.43445763	0
1990	7	44619	26.34699397	0
1990	8	44702	26.20965383	0
1990	9	44749	26.01897817	0
1990	10	44849	25.8311709	0
1990	11	44837	25.72417509	0
1990	12	44777	25.73932586	0
1991	1	44821	25.80084954	0
1991	2	44694	25.79623875	0
1991	3	44651	25.66139227	0
1991	4	44653	25.44716135	0
1991	5	44474	25.25809737	0
1991	6	44429	25.16494777	0
1991	7	44373	25.14043377	0
1991	8	44335	25.12287455	0
1991	9	44338	25.07394057	0
1991	10	44271	25.02092902	0
1991	11	44271	25.01198173	0
1991	12	44229	25.07751483	0
1992	1	44209	25.19188786	0
1992	2	44184	25.30393317	0
1992	3	44114	25.38023444	0
1992	4	44122	25.40885657	0
1992	5	44198	25.38258683	0
1992	6	44258	25.32429549	0
1992	7	44262	25.33930715	0
1992	8	44230	25.56392547	0
1992	9	44240	26.02898443	0
1992	10	44250	26.49716181	0
1992	11	44295	26.64492385	0
1992	12	44296	26.29016933	0
1993	1	44299	25.69825743	0
1993	2	44290	25.31002888	0
1993	3	44271	25.3607479	0
1993	4	44231	25.71779352	0
1993	5	44225	26.1028232	0
1993	6	44218	26.30638262	0
1993	7	44219	26.36404045	0
1993	8	44221	26.39595581	0
1993	9	44171	26.47348434	0
1993	10	44130	26.52908976	0
1993	11	44195	26.45213484	0
1993	12	44484	26.19344652	0
1994	1	44550	25.8976492	0
1994	2	44408	25.78247657	0

Year	Month	C_49_C	CommOutput	d2011on
1994	3	44303	25.94703265	0
1994	4	44179	26.24922496	0
1994	5	44495	26.4393139	0
1994	6	44084	26.3599793	0
1994	7	43989	26.13264362	0
1994	8	43944	25.97333187	0
1994	9	43911	26.03175901	0
1994	10	43944	26.23239493	0
1994	11	43943	26.43297651	0
1994	12	44005	26.5326805	0
1995	1	43815	26.55895778	0
1995	2	42788	26.5779036	0
1995	3	42561	26.63875097	0
1995	4	42743	26.74026208	0
1995	5	42739	26.85942267	0
1995	6	42813	26.97165665	0
1995	7	42802	27.04667007	0
1995	8	42816	27.0525209	0
1995	9	42808	26.97540929	0
1995	10	42820	26.85582104	0
1995	11	42886	26.75090927	0
1995	12	42925	26.70457043	0
1996	1	42962	26.71918098	0
1996	2	42941	26.78120114	0
1996	3	42920	26.87666141	0
1996	4	42978	26.98379287	0
1996	5	43063	27.07429563	0
1996	6	43123	27.13642807	0
1996	7	43140	27.20391195	0
1996	8	43274	27.32797255	0
1996	9	43431	27.53000494	0
1996	10	43475	27.7673045	0
1996	11	43589	27.97364547	0
1996	12	43695	28.11499673	0
1997	1	43701	28.26057547	0
1997	2	43669	28.49261528	0
1997	3	43648	28.85582186	0
1997	4	43647	29.23074721	0
1997	5	43659	29.40868738	0
1997	6	43661	29.28128229	0
1997	7	43759	29.00317356	0
1997	8	43728	28.81876784	0
1997	9	43758	28.89704024	0
1997	10	43805	29.15080553	0
1997	11	43870	29.4169051	0
1997	12	43938	29.57471225	0
1998	1	42499	29.63497565	0
1998	2	45724	29.64794876	0
1998	3	45863	29.65689556	0
1998	4	45966	29.67347746	0

Year	Month	C_49_C	CommOutput	d2011on
1998	5	46010	29.69957775	0
1998	6	46121	29.74049575	0
1998	7	46109	29.81282382	0
1998	8	46131	29.93846849	0
1998	9	46261	30.1119953	0
1998	10	46457	30.27112041	0
1998	11	46427	30.33337034	0
1998	12	46588	30.25443752	0
1999	1	46682	30.11173822	0
1999	2	46801	30.02842442	0
1999	3	46874	30.07527292	0
1999	4	46907	30.22798777	0
1999	5	46931	30.42256261	0
1999	6	46930	30.60225408	0
1999	7	46925	30.74206196	0
1999	8	46972	30.82933514	0
1999	9	47027	30.87135477	0
1999	10	47120	30.95079952	0
1999	11	47187	31.16880637	0
1999	12	47311	31.56272339	0
2000	1	47437	31.97112381	0
2000	2	47546	32.15023437	0
2000	3	47592	31.99374972	0
2000	4	47584	31.70497047	0
2000	5	52173	31.60419624	0
2000	6	52215	31.8855269	0
2000	7	52225	32.36717117	0
2000	8	52246	32.74209322	0
2000	9	52216	32.80108631	0
2000	10	52228	32.69404239	0
2000	11	52261	32.67185946	0
2000	12	52350	32.89687575	0
2001	1	52383	33.25850089	0
2001	2	52427	33.53487305	0
2001	3	52407	33.61314821	0
2001	4	52386	33.55922666	0
2001	5	52368	33.50272003	0
2001	6	52448	33.53815591	0
2001	7	52519	33.62717055	0
2001	8	52599	33.68695671	0
2001	9	52485	33.67288016	0
2001	10	52401	33.66479633	0
2001	11	52350	33.77816482	0
2001	12	52424	34.07405881	0
2002	1	52535	34.44366446	0
2002	2	52559	34.70109375	0
2002	3	52636	34.76472162	0
2002	4	52754	34.72209011	0
2002	5	52911	34.72363282	0
2002	6	52412	34.86579945	0

Year	Month	C_49_C	CommOutput	d2011on
2002	7	52925	35.06064807	0
2002	8	52970	35.15863972	0
2002	9	52907	35.08620261	0
2002	10	52986	35.01288614	0
2002	11	53090	35.17811307	0
2002	12	53147	35.70776321	0
2003	1	53182	36.37266504	0
2003	2	53274	36.79260213	0
2003	3	53374	36.78870535	0
2003	4	53402	36.52478334	0
2003	5	53421	36.30099856	0
2003	6	53446	36.33845589	0
2003	7	53546	36.58562355	0
2003	8	53654	36.90097237	0
2003	9	53738	37.15734502	0
2003	10	53789	37.33020983	0
2003	11	53885	37.41959975	0
2003	12	54001	37.42824456	0
2004	1	54071	37.37162739	0
2004	2	54136	37.27406789	0
2004	3	54141	37.16593816	0
2004	4	54198	37.11460246	0
2004	5	54176	37.20563697	0
2004	6	54117	37.46442767	0
2004	7	54132	37.7493452	0
2004	8	54102	37.86227414	0
2004	9	54141	37.68431646	0
2004	10	54244	37.35046504	0
2004	11	54152	37.07172663	0
2004	12	54305	36.99973457	0
2005	1	54347	37.10111856	0
2005	2	54471	37.27111932	0
2005	3	54541	37.43997964	0
2005	4	54513	37.58710829	0
2005	5	54492	37.69541218	0
2005	6	54527	37.75882335	0
2005	7	54600	37.78206665	0
2005	8	54912	37.77410005	0
2005	9	54679	37.73914915	0
2005	10	54689	37.66592364	0
2005	11	54739	37.53931208	0
2005	12	54826	37.36333191	0
2006	1	54934	37.20195401	0
2006	2	55057	37.14466263	0
2006	3	55142	37.24149216	0
2006	4	55165	37.48562397	0
2006	5	55171	37.83993782	0
2006	6	55233	38.24186551	0
2006	7	55222	38.56158209	0
2006	8	55215	38.64779411	0

Year	Month	C_49_C	CommOutput	d2011on
2006	9	54827	38.43653982	0
2006	10	55271	38.13696666	0
2006	11	55378	38.0380726	0
2006	12	55451	38.30500436	0
2007	1	55498	38.71530235	0
2007	2	55234	38.9056586	0
2007	3	55638	38.68701156	0
2007	4	55719	38.22179637	0
2007	5	55765	37.82478612	0
2007	6	55813	37.70318137	0
2007	7	55799	37.72942868	0
2007	8	55830	37.65955293	0
2007	9	55882	37.36636073	0
2007	10	55920	37.05426133	0
2007	11	56176	37.03030165	0
2007	12	56280	37.46118085	0
2008	1	54929	38.07144043	0
2008	2	56248	38.41380738	0
2008	3	56254	38.22491181	0
2008	4	55036	37.62986947	0
2008	5	56346	36.89572103	0
2008	6	56380	36.27571912	0
2008	7	56463	35.95789134	0
2008	8	56425	36.10844362	0
2008	9	56168	36.74527791	0
2008	10	56428	37.479108	0
2008	11	56788	37.79529886	0
2008	12	55209	37.39348766	0
2009	1	56270	36.648073	0
2009	2	56716	36.18730991	0
2009	3	56697	36.34665938	0
2009	4	56484	36.90180631	0
2009	5	56494	37.40142633	0
2009	6	55946	37.53423123	0
2009	7	56635	37.449042	0
2009	8	55517	37.45324632	0
2009	9	56456	37.72921671	0
2009	10	56189	38.09088854	0
2009	11	56581	38.23845624	0
2009	12	56014	37.9968803	0
2010	1	56718	37.58363948	0
2010	2	56572	37.36076469	0
2010	3	56942	37.52171191	0
2010	4	56178	37.9296999	0
2010	5	56878	38.30873594	0
2010	6	56219	38.46399153	0
2010	7	56953	38.461916	0
2010	8	56401	38.45932512	0
2010	9	56968	38.56019781	0
2010	10	57435	38.71191412	0

Year	Month	C_49_C	CommOutput	d2011on
2010	11	57247	38.81270551	0
2010	12	55466	38.79735953	0
2011	1	57778	38.7158621	1
2011	2	57534	38.65943036	1
2011	3	56552	38.68600181	1
2011	4	57489	38.79305178	1
2011	5	57693	38.95401449	1
2011	6	57679	39.14515769	1
2011	7	57872	39.36069812	1
2011	8	56864	39.60400022	1
2011	9	57684	39.85869413	1
2011	10	57974	40.09618278	1
2011	11	57568	40.27732339	1
2011	12	57046	40.37760466	1
2012	1		40.42221492	1
2012	2		40.44912664	1
2012	3		40.49066736	1
2012	4		40.55327022	1
2012	5		40.63402839	1
2012	6		40.73019599	1
2012	7		40.84001476	1
2012	8		40.96373195	1
2012	9		41.09430881	1
2012	10		41.22675048	1
2012	11		41.35297034	1
2012	12		41.46790938	1
2013	1		41.57798303	1
2013	2		41.68364422	1
2013	3		41.79555587	1
2013	4		41.91693306	1
2013	5		42.04136285	1
2013	6		42.1660549	1
2013	7		42.28850827	1
2013	8		42.40827158	1
2013	9		42.52227574	1
2013	10		42.64264413	1
2013	11		42.78222454	1
2013	12		42.94844422	1
2014	1		43.13368217	1
2014	2		43.30995294	1
2014	3		43.47530394	1
2014	4		43.63796645	1
2014	5		43.79970272	1
2014	6		43.96643573	1
2014	7		44.13856767	1
2014	8		44.31745827	1
2014	9		44.49509362	1
2014	10		44.67000064	1
2014	11		44.83729559	1
2014	12		44.99436464	1

Year	Month	C_49_I	MfgEmpl
1990	1	2628	98.02885768
1990	2	2610	97.2108745
1990	3	2609	96.4581062
1990	4	2599	95.80486662
1990	5	2588	95.33244342
1990	6	2563	95.06494647
1990	7	2561	94.95195621
1990	8	2548	94.91300777
1990	9	2532	94.83287523
1990	10	2539	94.48359948
1990	11	2543	93.61203506
1990	12	2538	92.11120983
1991	1	2526	90.33117565
1991	2	2532	88.89408281
1991	3	2520	88.05480964
1991	4	2521	87.64688875
1991	5	2520	87.39134647
1991	6	2520	87.06094829
1991	7	2510	86.73777761
1991	8	2506	86.60489649
1991	9	2501	86.7592508
1991	10	2508	87.01711786
1991	11	2502	87.1128515
1991	12	2496	86.87367101
1992	1	2494	86.41640002
1992	2	2495	85.98032094
1992	3	2498	85.6998574
1992	4	2510	85.52070057
1992	5	2507	85.33170384
1992	6	2510	85.04652491
1992	7	2494	84.67580151
1992	8	2484	84.25745653
1992	9	2485	83.85342206
1992	10	2487	83.51674605
1992	11	2492	83.30860099
1992	12	2483	83.27278592
1993	1	2492	83.39239877
1993	2	2502	83.61518189
1993	3	2494	83.89065685
1993	4	2492	84.11141721
1993	5	2482	84.12451331
1993	6	2461	83.8610286
1993	7	2459	83.46544347
1993	8	2464	83.15299732
1993	9	2443	83.07648915
1993	10	2464	83.14642873
1993	11	2466	83.20626867
1993	12	2463	83.14857254
1994	1	2490	83.01578863
1994	2	2541	82.90759348

Year	Month	C_49_I	MfgEmpl
1994	3	2549	82.87412988
1994	4	2565	82.87330664
1994	5	2564	82.82998738
1994	6	2586	82.69569251
1994	7	2583	82.51006332
1994	8	2599	82.34091352
1994	9	2620	82.24510795
1994	10	2613	82.21532789
1994	11	2608	82.22831639
1994	12	2605	82.25620595
1995	1	2587	82.25419148
1995	2	2598	82.17768221
1995	3	2584	81.97241223
1995	4	2595	81.55047331
1995	5	2596	80.82479074
1995	6	2588	79.82167657
1995	7	2583	78.90163277
1995	8	2569	78.53444922
1995	9	2576	78.9693913
1995	10	2571	79.7379523
1995	11	2583	80.16225584
1995	12	2583	79.80825625
1996	1	2583	79.00223986
1996	2	2575	78.36072074
1996	3	2574	78.2259016
1996	4	2572	78.33853898
1996	5	2594	78.23262816
1996	6	2586	77.62327459
1996	7	2591	76.79232158
1996	8	2582	76.20883586
1996	9	2574	76.19214199
1996	10	2568	76.51017286
1996	11	2559	76.77496393
1996	12	2563	76.71834912
1997	1	2557	76.44032261
1997	2	2550	76.17985221
1997	3	2550	76.0746614
1997	4	2540	76.08578029
1997	5	2536	76.11627818
1997	6	2532	76.09739429
1997	7	2527	76.07408191
1997	8	2521	76.13042821
1997	9	2515	76.29977618
1997	10	2512	76.47610935
1997	11	2508	76.50995062
1997	12	2500	76.31641457
1998	1	2436	76.01432204
1998	2	2606	75.80510431
1998	3	2605	75.77462191
1998	4	2608	75.78302158

Year	Month	C_49_I	MfgEmpl
1998	5	2610	75.60386307
1998	6	2587	75.10965325
1998	7	2586	74.4783753
1998	8	2578	73.98688234
1998	9	2574	73.82589575
1998	10	2570	73.83951153
1998	11	2573	73.77853507
1998	12	2575	73.48450038
1999	1	2571	73.07673299
1999	2	2565	72.78910317
1999	3	2568	72.72664146
1999	4	2573	72.76886703
1999	5	2574	72.71065994
1999	6	2563	72.41788931
1999	7	2560	71.99055232
1999	8	2555	71.60425028
1999	9	2546	71.39647395
1999	10	2539	71.31925993
1999	11	2530	71.27716706
1999	12	2531	71.2039223
2000	1	2526	71.11934338
2000	2	2515	71.07570005
2000	3	2513	71.10338435
2000	4	2512	71.18880589
2000	5	2629	71.30200761
2000	6	2614	71.40912883
2000	7	2610	71.46791021
2000	8	2618	71.43303018
2000	9	2614	71.29567621
2000	10	2593	71.14788642
2000	11	2598	71.1123564
2000	12	2591	71.23799769
2001	1	2586	71.34139119
2001	2	2583	71.17653266
2001	3	2575	70.59593267
2001	4	2567	69.70099868
2001	5	2554	68.73174388
2001	6	2553	67.86843233
2001	7	2545	67.12999164
2001	8	2536	66.46959311
2001	9	2526	65.88042909
2001	10	2524	65.34881677
2001	11	2526	64.87914467
2001	12	2521	64.47137034
2002	1	2517	64.100867
2002	2	2513	63.76660642
2002	3	2499	63.43252001
2002	4	2493	63.08367422
2002	5	2489	62.73257733
2002	6	2432	62.38377443

Year	Month	C_49_I	MfgEmpl
2002	7	2488	62.05158422
2002	8	2478	61.74858633
2002	9	2446	61.49093409
2002	10	2442	61.2474796
2002	11	2440	60.98205424
2002	12	2443	60.67095272
2003	1	2439	60.32470379
2003	2	2450	59.99408356
2003	3	2440	59.68064009
2003	4	2437	59.36475473
2003	5	2428	59.03840189
2003	6	2426	58.69668445
2003	7	2423	58.37785165
2003	8	2408	58.13060771
2003	9	2402	57.98570701
2003	10	2404	57.87382966
2003	11	2390	57.70295575
2003	12	2395	57.42438898
2004	1	2393	57.12157886
2004	2	2384	56.9366949
2004	3	2384	56.93764203
2004	4	2385	57.04733498
2004	5	2372	57.1365649
2004	6	2361	57.11488823
2004	7	2368	57.0162405
2004	8	2354	56.91602245
2004	9	2349	56.86554192
2004	10	2345	56.82571733
2004	11	2339	56.73258084
2004	12	2335	56.54275509
2005	1	2332	56.27601971
2005	2	2331	55.99606138
2005	3	2332	55.72753775
2005	4	2326	55.4820876
2005	5	2321	55.28489564
2005	6	2320	55.13351792
2005	7	2315	54.9743886
2005	8	2323	54.73240156
2005	9	2296	54.38298584
2005	10	2291	54.00407687
2005	11	2286	53.71219828
2005	12	2278	53.58197837
2006	1	2281	53.55259765
2006	2	2271	53.52423958
2006	3	2257	53.42550854
2006	4	2240	53.26697699
2006	5	2233	53.09504505
2006	6	2214	52.9381385
2006	7	2206	52.7719066
2006	8	2190	52.55089946

Year	Month	C_49_I	MfgEmpl
2006	9	2192	52.2686778
2006	10	2200	51.99193537
2006	11	2189	51.8156956
2006	12	2192	51.79073084
2007	1	2192	51.82535615
2007	2	2144	51.78633696
2007	3	2187	51.59342594
2007	4	2183	51.30234255
2007	5	2173	51.03408243
2007	6	2165	50.86466965
2007	7	2164	50.74150723
2007	8	2158	50.56492268
2007	9	2159	50.28559983
2007	10	2159	49.96902283
2007	11	2150	49.72152577
2007	12	2148	49.6080058
2008	1	2040	49.56021668
2008	2	2100	49.47288059
2008	3	2102	49.26944596
2008	4	2095	48.96941652
2008	5	2117	48.63106628
2008	6	2083	48.2995866
2008	7	2075	47.98210822
2008	8	2081	47.66770269
2008	9	2066	47.33965544
2008	10	2078	46.90371564
2008	11	2085	46.25456055
2008	12	1931	45.34457419
2009	1	2052	44.30181039
2009	2	2068	43.39074579
2009	3	2040	42.70007597
2009	4	2055	42.18291526
2009	5	2052	41.78304881
2009	6	2017	41.43459866
2009	7	2064	41.14294441
2009	8	2033	40.93250316
2009	9	2025	40.81979346
2009	10	2033	40.75717537
2009	11	2011	40.68374566
2009	12	1999	40.55964501
2010	1	2053	40.40773542
2010	2	2011	40.28226632
2010	3	2038	40.20827989
2010	4	2024	40.18187365
2010	5	2013	40.19266711
2010	6	1998	40.22570599
2010	7	2007	40.2672684
2010	8	2004	40.30423075
2010	9	2026	40.32944853
2010	10	2016	40.36028357

Year	Month	C_49_I	MfgEmpl
2010	11	2007	40.42019709
2010	12	1917	40.51908729
2011	1	2009	40.62484709
2011	2	2003	40.68626464
2011	3	2009	40.69079962
2011	4	1994	40.70392524
2011	5	1989	40.82220507
2011	6	2006	41.07535791
2011	7	2004	41.29158689
2011	8	1964	41.22922036
2011	9	2006	40.76849449
2011	10	2008	40.13623541
2011	11	1977	39.66809155
2011	12	1948	39.59141566
2012	1		39.79227312
2012	2		40.03361272
2012	3		40.15716777
2012	4		40.17836157
2012	5		40.16684153
2012	6		40.17860855
2012	7		40.21204349
2012	8		40.24664283
2012	9		40.26579617
2012	10		40.27127056
2012	11		40.26975401
2012	12		40.26727069
2013	1		40.26823276
2013	2		40.27589644
2013	3		40.29170466
2013	4		40.31112664
2013	5		40.32609224
2013	6		40.33164898
2013	7		40.33096395
2013	8		40.33006154
2013	9		40.33390606
2013	10		40.34420959
2013	11		40.36155171
2013	12		40.38589463
2014	1		40.4152872
2014	2		40.44465843
2014	3		40.47348102
2014	4		40.50391236
2014	5		40.5373033
2014	6		40.57623877
2014	7		40.62430484
2014	8		40.68630173
2014	9		40.76100043
2014	10		40.84124589
2014	11		40.91618217
2014	12		40.97882767

Division 17-4-ELEC

Request:

With regard to Jeanne Lloyd's Workpaper JAL-6:

- a. Please provide documentation that supports how the three Standard Offer Service Administrative costs listed in Workpaper JAL-6, page 10 (Estimated GIS Cost, Estimated CWC, and Estimate of Other Administrative Costs) were allocated to the three customer groups.
- b. Please define "Estimated GIS Cost" on line 1 of Workpaper JAL-6, page 10.
- c. Please describe the expense items within "Other Administrative Costs" on line 3 of Workpaper JAL-6, page 10.

Response:

- a. The Standard Offer Service ("SOS") Administrative costs listed in Workpaper JAL-6, Page 10 are the actual Generation Information System ("GIS"), Cash Working Capital ("CWC"), and Other Administrative costs for calendar year 2011 as filed and approved by the Commission in Docket No. 4314. For reference, a copy of Schedule JAL-5 from Docket No. 4314 is provided as Attachment DIV 17-4-ELEC.

In the annual reconciliation of SOS Administrative Costs, GIS costs are allocated to the three customer classes each month based upon each customer class's share of that month's SOS expense.

CWC expense is allocated to each customer class based upon each customer class's share of SOS base revenue.

Other Administrative costs are allocated based upon each customer class's share of SOS base revenue and SOS Adjustment Factor Revenue, plus SOS Administrative Cost Adjustment Revenue.

- b. The "Estimated GIS Cost" on Line 1 of Workpaper JAL-6, Page 10 is the actual 2011 GIS Cost as filed with the Commission in Docket No. 4314.
- c. "Estimated Other Administrative Costs" on Line 3 of Workpaper JAL-6, Page 10 are the Other Administrative Costs incurred during 2011 and approved by the Commission in Docket No. 4314 for recovery in the SOS Administrative Cost Adjustment Factors effective April 1, 2012. Other Administrative Costs include the administrative costs of

Division 17-4-ELEC, page 2

complying with the requirements of Renewable Energy Standard established in R.I.G.L. Section 39-26-1, the costs of creating the environmental disclosure label, the costs associated with the procurement of SOS, including requests for bids, contract negotiation, and execution and contract administration.

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Feb-2012

The Narragansett Electric Company
d/b/a National Grid
R.I.P.U.C. Docket No. ____
Schedule JAL-5
Page 1 of 12

**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Industrial Group†**

Reconciliation

		(Under)/Over Beginning Balance (a)	Total SOS Admin. Cost Adj. Revenue (b)	SOS Admin. Expense (c)	Monthly (Under)/Over (d)	Adjustments (e)	(Under)/Over Ending Balance (f)
(1)	Jan-11	\$0	\$26,525	\$38,307	(\$11,781)		(\$11,781)
	Feb-11	(\$11,781)	\$71,152	\$74,576	(\$3,424)		(\$15,205)
	Mar-11	(\$15,205)	\$63,844	\$68,265	(\$4,422)		(\$19,627)
	Apr-11	(\$19,627)	\$54,300	\$57,583	(\$3,283)		(\$22,910)
	May-11	(\$22,910)	\$60,362	\$63,276	(\$2,914)		(\$25,824)
	Jun-11	(\$25,824)	\$62,228	\$63,479	(\$1,251)		(\$27,075)
	Jul-11	(\$27,075)	\$63,966	\$64,868	(\$902)		(\$27,978)
	Aug-11	(\$27,978)	\$86,199	\$80,214	\$5,984		(\$21,993)
	Sep-11	(\$21,993)	\$74,586	\$75,851	(\$1,265)		(\$23,258)
	Oct-11	(\$23,258)	\$72,684	\$72,196	\$489		(\$22,769)
	Nov-11	(\$22,769)	\$70,764	\$69,134	\$1,630		(\$21,139)
	Dec-11	(\$21,139)	\$66,259	\$71,140	(\$4,881)		(\$26,020)
(2)	Jan-12	(\$26,020)	\$36,288	\$27,787	\$8,501		(\$17,519)
	Totals	\$0	\$809,157	\$826,676	(\$17,519)	\$0	(\$17,519)
	Interest (3)						(\$283)
	Ending Balance with Interest						<u>(\$17,802)</u>

- (1) Reflects kWhs consumed after January 1
(2) Reflects kWhs consumed prior to January 1
(3) [(Beginning Balance \$0 + Ending Balance -\$17,519) ÷ 2] x [(3.26% 2/12)] x [(3.22% x 10/12)]

Column Notes:

- Column (a) Column (f) from previous row
Column (b) per Page 2, Column (c)
Column (c) from page 3, Column (i)
Column (d) Column (b) - Column (c)
Column (e)
Column (f) Column (a) + Column (d) + Column (e)

† Consists of rate class B-32, B-62, G-32, G-62 and X-01

S:\RADATA\2011 neco\Reconciliations\Recs_2011 neco.xls\SOS Admin-Ind p2
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The Narragansett Electric Company
d/b/a National Grid
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STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT - BASE REVENUE
Industrial Group

Revenue

	Total SOS Admin. Cost <u>Adj. Revenue</u>	SOS Admin. Cost Reconciliation Adjustment <u>Factor Revenue</u>	Base SOS Admin. Cost <u>Adj. Revenue</u>
	(a)	(b)	(c)
(1) Jan-11	\$26,525	\$0	\$26,525
Feb-11	\$71,152	\$0	\$71,152
Mar-11	\$63,844	\$0	\$63,844
Apr-11	\$58,159	\$3,859	\$54,300
May-11	\$71,674	\$11,312	\$60,362
Jun-11	\$73,807	\$11,579	\$62,228
Jul-11	\$75,861	\$11,895	\$63,966
Aug-11	\$102,219	\$16,020	\$86,199
Sep-11	\$88,461	\$13,875	\$74,586
Oct-11	\$86,202	\$13,518	\$72,684
Nov-11	\$83,976	\$13,211	\$70,764
Dec-11	\$78,614	\$12,355	\$66,259
(2) Jan-12	\$43,075	\$6,788	\$36,288
Totals	\$923,568	\$114,411	\$809,157

(1) Reflects kWhs consumed after to January 1 41.89%
(2) Reflects kWhs consumed prior to January 1 57.01%

Column Notes:

Column (a) from Company revenue reports
Column (b) per Page 4, Column (i)
Column (c) Column (a) - Column (b)

S:\RADATA1\2011 neco\Reconciliations\Recs_2011 neco.xls\SOS Admin-Ind p3
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The Narragansett Electric Company
d/b/a National Grid
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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Industrial Group**

Expense

<u>Month</u>	<u>Standard Offer Service Revenue</u>				<u>Uncollectible Expense</u> (e)	<u>GIS</u> (f)	<u>CWC</u> (g)	<u>Other Admin</u> (h)	<u>Total</u> (i)
	<u>SOS Base Rev</u> (a)	<u>SOS Adj Factor Rev</u> (b)	<u>SOS Admin Cost Adj Rev</u> (c)	<u>Total SOS Rev</u> (d)					
Jan-11	\$2,471,763	\$56,450	\$26,525	\$2,554,738	\$24,015	\$465	\$23,534	(\$9,707)	\$38,307
Feb-11	\$4,819,851	\$100,289	\$71,152	\$4,991,293	\$46,918	\$476	\$23,534	\$3,647	\$74,576
Mar-11	\$4,044,099	\$93,871	\$63,844	\$4,201,814	\$39,497	\$428	\$23,534	\$4,806	\$68,265
Apr-11	\$3,302,968	\$66,667	\$58,159	\$3,427,794	\$32,221	\$475	\$23,534	\$1,353	\$57,583
May-11	\$3,863,631	\$48,614	\$71,674	\$3,983,919	\$37,449	\$447	\$23,534	\$1,846	\$63,276
Jun-11	\$3,940,766	\$48,245	\$73,807	\$4,062,818	\$38,190	\$580	\$23,534	\$1,174	\$63,479
Jul-11	\$4,062,187	\$49,562	\$75,861	\$4,187,610	\$39,364	\$707	\$23,534	\$1,263	\$64,868
Aug-11	\$5,651,497	\$66,752	\$102,219	\$5,820,468	\$54,712	\$780	\$23,534	\$1,187	\$80,214
Sep-11	\$4,991,156	\$57,812	\$88,461	\$5,137,429	\$48,292	\$814	\$23,534	\$3,210	\$75,851
Oct-11	\$4,745,010	\$56,317	\$86,202	\$4,887,529	\$45,943	\$528	\$23,534	\$2,191	\$72,196
Nov-11	\$4,387,082	\$55,048	\$83,976	\$4,526,106	\$42,545	\$554	\$23,534	\$2,501	\$69,134
Dec-11	\$4,508,964	\$51,479	\$78,614	\$4,639,056	\$43,607	\$485	\$23,534	\$3,514	\$71,140
Jan-12	\$2,891,616	\$21,327	\$43,075	\$2,956,019	\$27,787				\$27,787
Totals	\$53,680,590	\$772,432	\$923,568	\$55,376,590	\$520,540	\$6,740	\$282,411	\$16,985	\$826,676

Column Notes:

- Column (a) per Schedule JAL-2, Page 6 column (b)
- Column (b) per Schedule JAL-2, Page 9, column (b) for Jan 2011 through April 2011 (Industrial Allocation) and Schedule JAL-2, Page 10, column (b) for April 2011 through Dec 2011
- Column (c) Page 1, Column (a)
- Column (d) Column (a) + Column (b) + Column (c)
- Column (e) Column (d) x 0.94%
- Column (f) from ISO monthly bill
- Column (g) per Schedule JAL-6, page 1, line 13 ÷ 12 months
- Column (h) expenses per company records; Jan-2011 includes prior period adjustment
- Column (i) Column (e) + Column (f) + Column (g) + Column (h)

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The Narragansett Electric Company
d/b/a National Grid
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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Industrial Group**

Standard Offer Service Administrative Cost Adjustment Prior Period Over/(Under) Recovery

**Incurred: January 2010 through December 2010
Recovery Period: April 2011 through March 2012**

Month	Beginning Over/(Under) Recovery Balance (a)	Charge/(Refund) (b)	Ending Over/(Under) Recovery Balance (c)	Interest Balance (d)	Interest Rate (e)	Interest (f)	Ending Over/(Under) Recovery w/Interest (g)
Jan-11	(\$141,067)		(\$141,067)	(\$141,067)	3.260%	(\$383)	(\$141,450)
Feb-11	(\$141,450)		(\$141,450)	(\$141,450)	3.260%	(\$384)	(\$141,834)
Mar-11	(\$141,834)		(\$141,834)	(\$141,834)	3.220%	(\$381)	(\$142,215)
(1) Apr-11	(\$142,215)	\$3,859	(\$138,356)	(\$140,285)	3.220%	(\$376)	(\$138,732)
May-11	(\$138,732)	\$11,312	(\$127,421)	(\$133,077)	3.220%	(\$357)	(\$127,778)
Jun-11	(\$127,778)	\$11,579	(\$116,199)	(\$121,988)	3.220%	(\$327)	(\$116,526)
Jul-11	(\$116,526)	\$11,895	(\$104,632)	(\$110,579)	3.220%	(\$297)	(\$104,928)
Aug-11	(\$104,928)	\$16,020	(\$88,908)	(\$96,918)	3.220%	(\$260)	(\$89,168)
Sep-11	(\$89,168)	\$13,875	(\$75,293)	(\$82,231)	3.220%	(\$221)	(\$75,514)
Oct-11	(\$75,514)	\$13,518	(\$61,996)	(\$68,755)	3.220%	(\$184)	(\$62,180)
Nov-11	(\$62,180)	\$13,211	(\$48,969)	(\$55,575)	3.220%	(\$149)	(\$49,118)
Dec-11	(\$49,118)	\$12,355	(\$36,763)	(\$42,941)	3.220%	(\$115)	(\$36,878)
Jan-12	(\$36,878)	\$11,906	(\$24,972)	(\$30,925)	3.220%	(\$83)	(\$25,055)
Feb-12	(\$25,055)	\$0	(\$25,055)	(\$25,055)	3.220%	(\$67)	(\$25,122)
Mar-12	(\$25,122)	\$0	(\$25,122)	(\$25,122)	2.780%	(\$58)	(\$25,181)
(2) Apr-12	(\$25,181)	\$0	(\$25,181)	(\$25,181)	2.780%	(\$58)	(\$25,239)

Column Notes:

- (a) Column (g) of previous row; Beginning balance per R.I.P.U.C. Docket No. 4226 Dated February 2011, Schedule JAL-7, Page 1, Line 1 plus line 3
- (b) per Column (i)
- (c) Column (a) + Column (b)
- (d) (Column (a) + Column (c)) ÷ 2
- (e) Customer Deposit Rate
- (f) [Column (d) * Column (e)] ÷ 12
- (g) Column (c) + Column (f)

Standard Offer Service Administrative Cost Reconciliation Adjustment Factor Revenue - Industrial Group

Factor - Industrial Group: \$0.00018
Effective Date: 04/01/2011

Month	Industrial Group SOS kWhs (h)	Industrial Group SOS Admin Cost Reconciliation Adj Factor Revenue (i)
Jan-11		
Feb-11		
Mar-11		
(1) Apr-11	21,438,288	\$3,859
May-11	62,842,342	\$11,312
Jun-11	64,326,103	\$11,579
Jul-11	66,082,003	\$11,895
Aug-11	89,001,847	\$16,020
Sep-11	77,082,776	\$13,875
Oct-11	75,099,972	\$13,518
Nov-11	73,396,584	\$13,211
Dec-11	68,638,476	\$12,355
Jan-12	66,145,915	\$11,906
Feb-12	-	\$0
Mar-12	-	\$0
(2) Apr-12	-	\$0

- (1) Reflects usage after April 1
- (2) Reflects usage prior to April 1

Column Notes:

- (h) from Company reports
- (i) column (h) x SOS Admin. Cost Reconciliation Adj. Factor - Industrial Group

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The Narragansett Electric Company
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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Commercial Group†**

<u>Month</u>	<u>(Under)/Over Beginning Balance</u> (a)	<u>Total SOS Admin. Cost Adj. Revenue</u> (b)	<u>SOS Admin. Expense</u> (c)	<u>Monthly (Under)/Over</u> (d)	<u>Adjustments</u> (e)	<u>(Under)/Over Ending Balance</u> (f)
(1) Jan-11	\$0	\$51,703	\$70,956	(\$19,253)		(\$19,253)
Feb-11	(\$19,253)	\$117,034	\$130,117	(\$13,083)		(\$32,336)
Mar-11	(\$32,336)	\$113,238	\$127,157	(\$13,920)		(\$46,256)
Apr-11	(\$46,256)	\$107,786	\$114,936	(\$7,150)		(\$53,406)
May-11	(\$53,406)	\$99,832	\$108,346	(\$8,514)		(\$61,919)
Jun-11	(\$61,919)	\$108,837	\$111,604	(\$2,767)		(\$64,686)
Jul-11	(\$64,686)	\$129,866	\$125,475	\$4,391		(\$60,296)
Aug-11	(\$60,296)	\$138,409	\$132,043	\$6,365		(\$53,930)
Sep-11	(\$53,930)	\$126,815	\$127,302	(\$487)		(\$54,417)
Oct-11	(\$54,417)	\$111,691	\$114,009	(\$2,318)		(\$56,735)
Nov-11	(\$56,735)	\$104,773	\$110,559	(\$5,786)		(\$62,521)
Dec-11	(\$62,521)	\$102,297	\$112,524	(\$10,226)		(\$72,748)
(2) Jan-12	(\$72,748)	\$61,620	\$41,789	\$19,831		(\$52,917)
Totals	\$0	\$1,373,900	\$1,426,816	(\$52,917)	\$0	(\$52,917)
Interest (3)						(\$854)
Ending Balance with Interest						<u>(\$53,770)</u>

- (1) Reflects kWhs consumed after January 1
(2) Reflects kWhs consumed prior to January 1
(3) [(Beginning Balance \$0 + Ending Balance -\$52,917) ÷ 2] x [(3.26% 2/12)] x [(3.22% x 10/12)]

Column Notes:

- Column (a) Column (f) from previous row
Column (b) per Page 6 Column (c)
Column (c) from page 7 Column (i)
Column (d) Column (b) - Column (c)
Column (e)
Column (f) Column (a) + Column (d) + Column (e)

† Consists of rate class C-06, G-02, S-06, S-10 and S-14

S:\RADATA\1\2011 neco\Reconciliations\Recs_2011 neco.xls\SOS Admin-Comm p6
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The Narragansett Electric Company
d/b/a National Grid
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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT - BASE REVENUE
Commercial Group**

		SOS Admin. Cost Reconciliation Adjustment <u>Factor Revenue</u> (b)	Base SOS Admin. Cost <u>Adj. Revenue</u> (c)
	Total SOS Admin. Cost <u>Adj. Revenue</u> (a)		
(1)	Jan-11	\$0	\$51,703
	Feb-11	\$0	\$117,034
	Mar-11	\$0	\$113,238
	Apr-11	\$9,147	\$107,786
	May-11	\$21,928	\$99,832
	Jun-11	\$23,853	\$108,837
	Jul-11	\$28,444	\$129,866
	Aug-11	\$30,312	\$138,409
	Sep-11	\$27,782	\$126,815
	Oct-11	\$24,491	\$111,691
	Nov-11	\$22,866	\$104,773
	Dec-11	\$22,560	\$102,297
(2)	Jan-12	\$13,499	\$61,620
	Totals	\$224,882	\$1,373,900

(1) Reflects kWhs consumed after to January 1
(2) Reflects kWhs consumed prior to January 1

41.89%
57.01%

Column Notes:
Column (a) from Company revenue reports
Column (b) per Page 8 Column (i)
Column (c) Column (a) - Column (b)

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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Commercial Group†**

Expense

Month	Standard Offer Service Revenue				Uncollectible Expense (e)	GIS (f)	CWC (g)	Other Admin (h)	Total (i)
	SOS Base Rev (a)	SOS Adj Factor Rev (b)	SOS Admin Cost Adj Rev (c)	Total SOS Rev (d)					
Jan-11	\$5,050,773	\$94,320	\$51,703	\$5,196,796	\$48,850	\$1,005	\$40,847	(\$19,745)	\$70,956
Feb-11	\$8,444,681	\$158,848	\$117,034	\$8,720,563	\$81,973	\$924	\$40,847	\$6,372	\$130,117
Mar-11	\$7,843,981	\$147,037	\$113,238	\$8,104,256	\$76,180	\$861	\$40,847	\$9,270	\$127,157
Apr-11	\$7,244,530	\$95,624	\$116,933	\$7,457,087	\$70,097	\$1,050	\$40,847	\$2,943	\$114,936
May-11	\$6,602,035	\$26,699	\$121,760	\$6,750,495	\$63,455	\$917	\$40,847	\$3,128	\$108,346
Jun-11	\$7,047,433	\$28,192	\$132,690	\$7,208,315	\$67,758	\$916	\$40,847	\$2,083	\$111,604
Jul-11	\$8,389,170	\$33,252	\$158,309	\$8,580,732	\$80,659	\$1,381	\$40,847	\$2,589	\$125,475
Aug-11	\$9,148,679	\$35,596	\$168,720	\$9,352,995	\$87,918	\$1,371	\$40,847	\$1,908	\$132,043
Sep-11	\$8,310,541	\$32,602	\$154,596	\$8,497,739	\$79,879	\$1,267	\$40,847	\$5,310	\$127,302
Oct-11	\$7,152,035	\$28,744	\$136,182	\$7,316,961	\$68,779	\$1,103	\$40,847	\$3,280	\$114,009
Nov-11	\$6,763,140	\$26,524	\$127,639	\$6,917,302	\$65,023	\$867	\$40,847	\$3,822	\$110,559
Dec-11	\$6,813,762	\$26,097	\$124,857	\$6,964,716	\$65,468	\$934	\$40,847	\$5,275	\$112,524
Jan-12	\$4,358,533	\$11,949	\$75,119	\$4,445,601	\$41,789				\$41,789
Totals	\$93,169,293	\$745,483	\$1,598,782	\$95,513,557	\$897,827	\$12,596	\$490,159	\$26,234	\$1,426,816

Column Notes:

- Column (a) per Schedule JAL-2 Page 11 column (b)
- Column (b) per Schedule JAL-2 Page 9 column (b) for Jan 2011 through April 2011 (Commercial allocation) plus Schedule JAL-2 Page 18 column (b) for Jan 2011 through April 2011 (Commercial allocation); and Schedule JAL-2 Page 14 column (b) for April 2011 through Dec 2011
- Column (c) per Page 6, column (a)
- Column (d) column (a) + column (b) + column (c)
- Column (e) Column (d) x 0.94%
- Column (f) from ISO monthly bill
- Column (g) per Schedule JAL-6, page 1, line 14 ÷ 12 months
- Column (h) expenses per company records; Jan-2011 includes prior period adjustment
- Column (i) column (e) + column (f) + column (g) + column (h)

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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Commercial Group**

Standard Offer Service Administrative Cost Adjustment Prior Period Over/(Under) Recovery

Incurred: January 2010 through December 2010
Recovery Period: April 2011 through March 2012

Month	Beginning Over/(Under) Recovery Balance (a)	Charge/(Refund) (b)	Ending Over/(Under) Recovery Balance (c)	Interest Balance (d)	Interest Rate (e)	Interest (f)	Ending Over/(Under) Recovery w/Interest (g)
Jan-11	(\$314,811)		(\$314,811)	(\$314,811)	3.260%	(\$855)	(\$315,666)
Feb-11	(\$315,666)		(\$315,666)	(\$315,666)	3.260%	(\$858)	(\$316,524)
Mar-11	(\$316,524)		(\$316,524)	(\$316,524)	3.220%	(\$849)	(\$317,373)
(1) Apr-11	(\$317,373)	\$9,147	(\$308,226)	(\$312,799)	3.220%	(\$839)	(\$309,065)
May-11	(\$309,065)	\$21,928	(\$287,137)	(\$298,101)	3.220%	(\$800)	(\$287,937)
Jun-11	(\$287,937)	\$23,853	(\$264,083)	(\$276,010)	3.220%	(\$741)	(\$264,824)
Jul-11	(\$264,824)	\$28,444	(\$236,380)	(\$250,602)	3.220%	(\$672)	(\$237,053)
Aug-11	(\$237,053)	\$30,312	(\$206,741)	(\$221,897)	3.220%	(\$595)	(\$207,337)
Sep-11	(\$207,337)	\$27,782	(\$179,555)	(\$193,446)	3.220%	(\$519)	(\$180,074)
Oct-11	(\$180,074)	\$24,491	(\$155,583)	(\$167,829)	3.220%	(\$450)	(\$156,034)
Nov-11	(\$156,034)	\$22,866	(\$133,167)	(\$144,601)	3.220%	(\$388)	(\$133,555)
Dec-11	(\$133,555)	\$22,560	(\$110,996)	(\$122,275)	3.220%	(\$328)	(\$111,324)
Jan-12	(\$111,324)	\$23,679	(\$87,645)	(\$99,484)	3.220%	(\$267)	(\$87,911)
Feb-12	(\$87,911)	\$0	(\$87,911)	(\$87,911)	3.220%	(\$236)	(\$88,147)
Mar-12	(\$88,147)	\$0	(\$88,147)	(\$88,147)	2.780%	(\$204)	(\$88,352)
(2) Apr-12	(\$88,352)	\$0	(\$88,352)	(\$88,352)	2.780%	(\$205)	(\$88,556)

Column Notes:

- (a) Column (g) of previous row; Beginning balance per R.I.P.U.C. Docket No. 4226, Schedule JAL-7, Page 1, Line 15
- (b) per Column (i)
- (c) Column (a) + Column (b)
- (d) (Column (a) + Column (c)) ÷ 2
- (e) Customer Deposit Rate
- (f) [Column (d) * Column (e)] ÷ 12
- (g) Column (c) + Column (f)

Standard Offer Service Administrative Cost Reconciliation Adjustment Factor Revenue - Commercial Group

Factor - Commercial Group: \$0.00023
Effective Date: 04/01/2011

Month	Commercial Group SOS kWhs (h)	Commercial Group SOS Admin Cost Reconciliation Adj Factor Revenue (i)
Jan-11		
Feb-11		
Mar-11		
(1) Apr-11	39,771,246	\$9,147
May-11	95,340,703	\$21,928
Jun-11	103,709,661	\$23,853
Jul-11	123,667,671	\$28,444
Aug-11	131,790,019	\$30,312
Sep-11	120,789,489	\$27,782
Oct-11	106,480,974	\$24,491
Nov-11	99,419,153	\$22,866
Dec-11	98,086,179	\$22,560
Jan-12	102,952,670	\$23,679
Feb-12	-	\$0
Mar-12	-	\$0
(2) Apr-12	-	\$0

- (1) Reflects usage after April 1
- (2) Reflects usage prior to April 1

Column Notes:

- (h) from Company reports
- (i) column (h) x SOS Admin. Cost Reconciliation Adj. Factor-Commercial Group

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The Narragansett Electric Company
d/b/a National Grid
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STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Residential Group†

<u>Month</u>	(Under)/Over Beginning <u>Balance</u> (a)	Total SOS Admin. Cost <u>Adj. Revenue</u> (b)	SOS Admin. <u>Expense</u> (c)	Monthly <u>(Under)/Over</u> (d)	<u>Adjustments</u> (e)	(Under)/Over Ending <u>Balance</u> (f)
(1) Jan-11	\$0	\$146,037	\$190,744	(\$44,708)		(\$44,708)
Feb-11	(\$44,708)	\$313,729	\$358,631	(\$44,902)		(\$89,610)
Mar-11	(\$89,610)	\$282,868	\$342,545	(\$59,677)		(\$149,287)
Apr-11	(\$149,287)	\$255,376	\$295,594	(\$40,217)		(\$189,505)
May-11	(\$189,505)	\$212,862	\$241,540	(\$28,679)		(\$218,183)
Jun-11	(\$218,183)	\$238,011	\$254,162	(\$16,151)		(\$234,335)
Jul-11	(\$234,335)	\$328,302	\$313,220	\$15,082		(\$219,253)
Aug-11	(\$219,253)	\$359,762	\$330,481	\$29,281		(\$189,972)
Sep-11	(\$189,972)	\$303,752	\$303,271	\$482		(\$189,490)
Oct-11	(\$189,490)	\$240,805	\$259,010	(\$18,205)		(\$207,695)
Nov-11	(\$207,695)	\$235,560	\$256,965	(\$21,405)		(\$229,100)
Dec-11	(\$229,100)	\$248,119	\$268,476	(\$20,357)		(\$249,456)
(2) Jan-12	(\$249,456)	\$162,535	\$103,445	\$59,090		(\$190,366)
Totals	\$0	\$3,327,719	\$3,518,085	(\$190,366)	\$0	(\$190,366)
Interest (3)						(\$3,071)
Ending Balance with Interest						<u>(\$193,437)</u>

- (1) Reflects kWhs consumed after January 1
(2) Reflects kWhs consumed prior to January 1
(3) $[(\text{Beginning Balance } \$0 + \text{Ending Balance } -\$190,366) \div 2] \times [(3.26\% / 2/12)] \times [(3.22\% \times 10/12)]$

Column Notes:

- Column (a) Column (f) from previous row
Column (b) Per Page 10 Column (c)
Column (c) Per Page 11 Column (i)
Column (d) Column (b) - Column (c)
Column (e)
Column (f) Column (a) + Column (d) + Column (e)

† Consists of rate class A-16 and A-60

S:\RADATA\2011 neco\Reconciliations\Recs_2011 neco.xls\SOSAdmin-Res p10
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STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT - BASE REVENUE
Residential Group

		SOS Admin. Cost Reconciliation Adjustment Factor Revenue	Base SOS Admin. Cost Adj. Revenue
	Total SOS Admin. Cost Adj. Revenue (a)	(b)	(c)
(1)	Jan-11	\$0	\$146,037
	Feb-11	\$0	\$313,729
	Mar-11	\$0	\$282,868
	Apr-11	\$28,609	\$255,376
	May-11	\$64,437	\$212,862
	Jun-11	\$71,851	\$238,011
	Jul-11	\$99,139	\$328,302
	Aug-11	\$108,595	\$359,762
	Sep-11	\$91,692	\$303,752
	Oct-11	\$72,689	\$240,805
	Nov-11	\$71,129	\$235,560
	Dec-11	\$74,915	\$248,119
(2)	Jan-12	\$49,097	\$162,535
	Totals	\$732,154	\$3,327,719

(1) Reflects kWhs consumed after to January 1 41.89%
(2) Reflects kWhs consumed prior to January 1 57.01%

Column Notes:
Column (a) from Company revenue reports
Column (b) per Page 12 Column (i)
Column (c) Column (a) - Column (b)

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STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
Residential Group

Month	Standard Offer Service Revenue				Uncollectible Expense (e)	GIS (f)	CWC (g)	Other Admin (h)	Total (i)
	SOS Base Rev (a)	SOS Adj Factor Rev (b)	SOS Admin Cost Adj Rev (c)	Total SOS Rev (d)					
Jan-11	\$15,034,121	\$226,433	\$146,037	\$15,406,591	\$144,822	\$3,038	\$101,421	(\$58,537)	\$190,744
Feb-11	\$24,440,382	\$353,011	\$313,729	\$25,107,122	\$236,007	\$2,857	\$101,421	\$18,346	\$358,631
Mar-11	\$22,036,639	\$321,127	\$282,868	\$22,640,634	\$212,822	\$2,404	\$101,421	\$25,897	\$342,545
Apr-11	\$19,125,278	\$178,342	\$283,985	\$19,587,605	\$184,123	\$2,319	\$101,421	\$7,730	\$295,594
May-11	\$13,812,990	(\$78,849)	\$277,299	\$14,011,440	\$131,708	\$1,920	\$101,421	\$6,492	\$241,540
Jun-11	\$15,350,291	(\$91,975)	\$309,862	\$15,568,178	\$146,341	\$1,902	\$101,421	\$4,498	\$254,162
Jul-11	\$21,174,622	(\$126,824)	\$427,441	\$21,475,239	\$201,867	\$3,452	\$101,421	\$6,479	\$313,220
Aug-11	\$23,197,612	(\$139,135)	\$468,358	\$23,526,834	\$221,152	\$3,109	\$101,421	\$4,798	\$330,481
Sep-11	\$19,593,087	(\$117,465)	\$395,445	\$19,871,067	\$186,788	\$2,644	\$101,421	\$12,417	\$303,271
Oct-11	\$15,531,462	(\$93,168)	\$313,495	\$15,751,788	\$148,067	\$2,461	\$101,421	\$7,061	\$259,010
Nov-11	\$15,195,314	(\$91,167)	\$306,688	\$15,410,835	\$144,862	\$2,166	\$101,421	\$8,515	\$256,965
Dec-11	\$16,005,104	(\$95,911)	\$323,035	\$16,232,227	\$152,583	\$2,178	\$101,421	\$12,294	\$268,476
Jan-12	\$10,840,732	(\$47,571)	\$211,632	\$11,004,794	\$103,445				\$103,445
Totals	\$231,337,633	\$196,849	\$4,059,873	\$235,594,354	\$2,214,587	\$30,451	\$1,217,055	\$55,992	\$3,518,085

Column Notes:

- Column (a) per Schedule JAL-2 Page 15 column (b)
- Column (b) per Schedule JAL-2 Page 18 column (b) for Jan 2011 through April 2011(Residential allocation) and Schedule JAL-2 Page 19 column (b) for April 2011 through Dec 2011
- Column (c) per Page 10 column (a)
- Column (d) column (a) + column (b) + column (c)
- Column (e) Column (d) x 0.94%
- Column (f) from ISO monthly bill
- Column (g) per Schedule JAL-6, page 1, line 15 ÷ 12 months
- Column (h) expenses per company records; Jan-2011 includes prior period adjustment
- Column (i) column (e) + column (f) + column (g) + column (h)

S:\RADATA\12011 neco\Reconciliations\Recs_2011 neco.xls\SOS Admin-Res p12
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**STANDARD OFFER SERVICE ADMINISTRATIVE COST ADJUSTMENT
RESIDENTIAL GROUP**

Standard Offer Service Administrative Cost Adjustment Prior Period Over/(Under) Recovery

Incurred: January 2010 through December 2010
Recovery Period: April 2011 through March 2012

Month	Beginning Over/(Under) Recovery Balance (a)	Charge/(Refund) (b)	Ending Over/(Under) Recovery Balance (c)	Interest Balance (d)	Interest Rate (e)	Monthly Interest (f)	Ending Over/(Under) Recovery w/ Interest (g)
Jan-11	(\$946,498)		(\$946,498)	(\$946,498)	3.260%	(\$2,571)	(\$949,069)
Feb-11	(\$949,069)		(\$949,069)	(\$949,069)	3.260%	(\$2,578)	(\$951,648)
Mar-11	(\$951,648)		(\$951,648)	(\$951,648)	3.220%	(\$2,554)	(\$954,201)
(1) Apr-11	(\$954,201)	\$28,609	(\$925,592)	(\$939,897)	3.220%	(\$2,522)	(\$928,114)
May-11	(\$928,114)	\$64,437	(\$863,677)	(\$895,896)	3.220%	(\$2,404)	(\$866,081)
Jun-11	(\$866,081)	\$71,851	(\$794,230)	(\$830,156)	3.220%	(\$2,228)	(\$796,457)
Jul-11	(\$796,457)	\$99,139	(\$697,318)	(\$746,888)	3.220%	(\$2,004)	(\$699,323)
Aug-11	(\$699,323)	\$108,595	(\$590,727)	(\$645,025)	3.220%	(\$1,731)	(\$592,458)
Sep-11	(\$592,458)	\$91,692	(\$500,766)	(\$546,612)	3.220%	(\$1,467)	(\$502,233)
Oct-11	(\$502,233)	\$72,689	(\$429,543)	(\$465,888)	3.220%	(\$1,250)	(\$430,794)
Nov-11	(\$430,794)	\$71,129	(\$359,665)	(\$395,229)	3.220%	(\$1,061)	(\$360,725)
Dec-11	(\$360,725)	\$74,915	(\$285,810)	(\$323,268)	3.220%	(\$867)	(\$286,678)
Jan-12	(\$286,678)	\$86,120	(\$200,557)	(\$243,618)	3.220%	(\$654)	(\$201,211)
Feb-12	(\$201,211)	\$0	(\$201,211)	(\$201,211)	3.220%	(\$540)	(\$201,751)
Mar-12	(\$201,751)	\$0	(\$201,751)	(\$201,751)	2.780%	(\$467)	(\$202,218)
(2) Apr-12	(\$202,218)	\$0	(\$202,218)	(\$202,218)	2.780%	(\$468)	(\$202,687)

Column Notes:

- (a) Column (g) of previous row; Beginning balance per R.I.P.U.C. Docket No, 4226 Schedule JAL-7, Page 1, Line 7 minus Line 13
- (b) per Column (i)
- (c) Column (a) + Column (b)
- (d) (Column (a) + Column (c)) ÷ 2
- (e) Customer Deposit Rate
- (f) [Column (d) * Column (e)] ÷ 12
- (g) Column (c) + Column (f)

Standard Offer Service Administrative Cost Reconciliation Adjustment Factor Revenue - Residential Group

Factor - Residential Group: \$0.00032
Effective Date: 04/01/2011

Month	Residential SOS Admin Cost Reconciliation Residential Group SWS kWhs (h)	Adj Factor Revenue (i)
Jan-11		
Feb-11		
Mar-11		
(1) Apr-11	89,402,905	\$28,609
May-11	201,365,448	\$64,437
Jun-11	224,535,891	\$71,851
Jul-11	309,809,319	\$99,139
Aug-11	339,360,069	\$108,595
Sep-11	286,537,964	\$91,692
Oct-11	227,154,387	\$72,689
Nov-11	222,277,085	\$71,129
Dec-11	234,109,770	\$74,915
Jan-12	269,126,292	\$86,120
Feb-12	-	\$0
Mar-12	-	\$0
(2) Apr-12	-	\$0

- (1) Reflects usage after April 1
- (2) Reflects usage prior to April 1

Column Notes:

- (h) from Company reports
- (i) column (h) x SOS Admin. Cost Reconciliation Adj. Factor-Residential Group