

July 6, 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 12 - GAS**

Dear Ms. Massaro:

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

The responses to the Twelfth Set included with this filing are listed 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 (781) 907-2153.

Very truly yours,



Celia B. O'Brien

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 6, 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
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	Larry.r.allen@navy.mil	
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Matthew Kahal c/o Exeter Associates 10480 Little Patuxent Parkway Suite 300 Columbia, MD 21044	mkahal@exeterassociates.com	
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	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		Paul M. Normand		
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		

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 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 6-3-GAS	6/8/2012	6/26/2012	Evelyn M. Kaye	Att. DIV 6-3-GAS	
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 6-10-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		
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)

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
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		Maureen P. Heaphy		
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	
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	

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
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		

DATA SET	DATA REQUEST	DATE ISSUED	DATE FILED	WITNESS	ATTACHMENT	CONFIDENTIAL ATTACHMENT
DIVISION SET 11						
Division Set 11	Division 11-1-ELEC/GAS	6/25/2012		Michael D. Laflamme		
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		Michael D. Laflamme		
Division Set 11	Division 11-5-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-6-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-7-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-8-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-9-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-10-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-11-ELEC/GAS	6/25/2012		Michael D. Laflamme		
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		Michael D. Laflamme		
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		Michael D. Laflamme		
Division Set 11	Division 11-17-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-18-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-19-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-20-ELEC/GAS	6/25/2012		Michael D. Laflamme		
Division Set 11	Division 11-21-ELEC/GAS	6/25/2012		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		A. Leo Silvestrini		
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		A. Leo Silvestrini		
Division Set 12	Division 12-4-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-5-GAS	6/28/2012		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		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		A. Leo Silvestrini		
Division Set 12	Division 12-10-GAS	6/28/2012		A. Leo Silvestrini		
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		A. Leo Silvestrini		
Division Set 12	Division 12-13-GAS	6/28/2012		A. Leo Silvestrini		
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		A. Leo Silvestrini		
Division Set 12	Division 12-17-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-18-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-19-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-20-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-21-GAS	6/28/2012		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		A. Leo Silvestrini		
Division Set 12	Division 12-25-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-26-GAS	6/28/2012		A. Leo Silvestrini		
Division Set 12	Division 12-27-GAS	6/28/2012		Ann E. Leary		
Division Set 12	Division 12-28-GAS	6/28/2012		Ann E. Leary		
Division Set 12	Division 12-29-GAS	6/28/2012		Ann E. Leary		
Division Set 12	Division 12-30-GAS	6/28/2012		Ann E. Leary		

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 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		

Division 12-2-GAS

Request:

Re: the Direct Testimony of witness Silvestrini at page 4 of 18, lines 5-17, please:

- a. Provide the data, workpapers (including electronic spreadsheet files with all cell references and cell formulas), and other analyses upon which National Grid relies to assess that a 10-year average remains reasonable and appropriate for defining "normal" weather for ratemaking purposes;
- b. Provide the daily temperature data for the period January 1, 2002 through December 31, 2011, that was used in the determination of "normal weather" degree days by day for January 1, 2011 through December 31, 2011;
- c. Explain and provide all analyses, texts, and other authoritative documents which support the inclusion of the period to be weather-normalized (i.e., January 1, 2011 through December 31, 2011) in the historic period used to compute "normal weather" degree days.

Response:

- a. There are no data, workpapers, or other analyses upon which National Grid relied to assess that a 10-year average remains reasonable and appropriate for defining "normal" weather for ratemaking purposes. In using the 10-year average to define "normal," the Company relied on the precedent established in its last gas rate case, Docket No. 3943. However, there is support for using a 10-year average for gas ratemaking purposes as demonstrated in the presentation the American Gas Association gave at a recent National Oceanic and Atmospheric conference. Please see Attachment DIV 12-2-GAS. Furthermore, National Grid uses 10-year averages for its electric utilities in New York, Massachusetts and Rhode Island.
- b. Please see Attachment DIV 12-2-GAS.
- c. There are no analyses, texts, or other authoritative documents which support the inclusion of the period to be weather-normalized (i.e., January 1, 2011 through December 31, 2011) in the historic period used to compute "normal weather" degree days. The Company relied on the precedent established in its last gas rate case, Docket No. 3943, and on practices and precedents in its other jurisdictions in New York, Massachusetts, and New Hampshire.

**Historic Daily Average Temperature
January**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	27	41	39	44	30	44	34	13	33	42	35
2	29	33	32	36	37	42	24	23	26	43	33
3	29	32	43	49	34	39	13	30	20	30	32
4	27	34	45	42	31	48	22	30	27	30	34
5	35	29	36	36	36	54	32	33	24	32	35
6	35	28	29	30	34	59	43	30	28	25	34
7	37	23	21	33	28	48	47	33	32	29	33
8	27	30	20	32	32	49	53	34	26	31	33
9	34	39	9	31	42	38	49	25	23	30	32
10	43	34	8	37	38	32	42	22	20	29	31
11	38	27	15	34	44	30	48	26	23	26	31
12	37	30	29	33	46	44	43	24	27	29	34
13	36	30	28	46	40	47	39	26	24	25	34
14	35	22	7	48	52	38	35	26	29	19	31
15	35	23	4	29	29	40	33	14	35	20	26
16	34	23	4	27	20	34	30	11	36	27	25
17	35	23	25	22	32	19	28	12	34	18	25
18	33	11	31	11	47	30	41	24	36	29	29
19	26	17	22	16	38	39	33	29	34	37	29
20	29	25	17	24	47	26	26	27	37	30	29
21	29	17	21	11	48	21	20	21	35	26	25
22	34	14	25	13	36	25	28	24	32	19	25
23	37	11	17	17	35	29	33	27	32	13	25
24	43	19	13	14	34	32	26	27	31	7	25
25	36	23	10	21	39	23	24	13	48	22	26
26	42	30	15	23	33	9	28	17	41	23	26
27	42	19	20	12	32	18	29	24	36	28	26
28	44	11	24	12	44	35	34	33	28	24	29
29	52	25	22	19	42	24	35	30	16	30	30
30	43	27	19	32	43	23	40	29	14	27	30
31	34	34	20	24	36	28	31	22	22	21	27
Total	1097	784	670	858	1159	1067	1043	750	909	821	919

**Historic Daily Average Temperature
February**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	39	34	23	23	38	30	39	32	27	20	31
2	31	37	28	25	38	34	41	38	26	28	33
3	27	42	32	30	47	29	39	31	30	20	33
4	33	42	37	34	43	21	34	21	29	23	32
5	25	30	31	41	47	15	45	14	29	26	30
6	30	25	32	37	38	20	43	17	24	38	30
7	33	26	37	40	34	19	35	30	24	33	31
8	40	20	23	34	29	22	32	45	27	28	30
9	33	27	34	44	29	23	30	33	32	21	31
10	36	29	42	36	26	24	32	33	32	20	31
11	35	23	33	32	28	25	19	47	36	18	30
12	30	23	28	33	23	30	21	48	32	25	29
13	33	12	36	34	24	21	40	35	29	31	29
14	25	13	37	31	33	29	35	33	33	45	31
15	36	12	23	43	41	19	38	35	36	29	31
16	45	10	22	43	42	23	27	32	33	28	30
17	37	21	25	34	43	29	33	31	33	41	33
18	35	24	30	25	24	29	52	30	39	47	33
19	35	28	35	21	20	18	37	39	39	32	30
20	40	37	33	26	25	36	28	26	40	27	32
21	51	38	39	29	32	40	26	33	35	24	35
22	42	37	39	30	33	34	28	35	39	26	34
23	37	35	38	31	36	28	30	29	36	31	33
24	36	30	32	24	32	27	31	28	41	29	31
25	37	22	34	25	26	34	34	29	43	41	33
26	48	14	37	24	21	33	36	37	36	33	32
27	42	21	38	28	18	34	33	47	35	30	33
28	30	28	43	27	22	39	23	42	35	38	33
29	-	-	43	-	-	-	20	-	-	-	33
30											
31											
Total	1001	740	964	884	892	765	961	921	930	832	917

**Historic Daily Average Temperature
March**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	32.0	29.0	48.0	30.0	28.0	34.0	35.0	28.0	42.0	34.0	34
2	35.0	39.0	50.0	30.0	26.0	40.0	35.0	21.5	43.0	38.2	36
3	48.0	24.0	46.0	24.0	24.0	42.0	37.0	20.5	36.0	25.4	33
4	35.0	21.0	44.0	25.0	28.0	37.0	52.0	19.5	37.0	27.2	33
5	26.0	38.0	41.0	30.0	36.0	31.0	50.0	26.5	39.0	44.2	36
6	38.0	29.0	49.0	34.0	32.0	15.0	38.0	39.0	45.0	53.9	37
7	43.0	19.0	43.0	40.0	34.0	16.0	40.0	47.5	45.0	45.4	37
8	44.0	34.0	33.0	30.0	36.0	21.0	51.0	53.0	50.0	35.6	39
9	54.0	36.0	32.0	18.0	40.0	19.0	38.0	37.5	46.0	34.7	36
10	44.0	21.0	34.0	22.0	54.0	36.0	33.0	37.5	42.0	40.0	36
11	32.0	26.0	41.0	25.0	51.0	44.0	36.0	44.0	42.0	47.3	39
12	37.0	42.0	40.0	34.0	46.0	42.0	40.0	35.0	45.0	45.4	41
13	38.0	32.0	36.0	34.0	48.0	47.0	36.0	29.5	42.0	44.3	39
14	53.0	25.0	31.0	34.0	50.0	54.0	43.0	35.0	47.0	40.6	41
15	43.0	35.0	47.0	37.0	39.0	48.0	39.0	43.0	41.0	35.9	41
16	44.0	47.0	35.0	38.0	38.0	32.0	41.0	39.0	46.0	40.0	40
17	35.0	51.0	29.0	37.0	34.0	33.0	39.0	39.5	46.0	44.8	39
18	33.0	47.0	30.0	37.0	32.0	31.0	36.0	42.5	55.0	58.3	40
19	36.0	35.0	30.0	39.0	31.0	34.0	42.0	43.0	54.0	50.7	39
20	35.0	37.0	30.0	38.0	31.0	39.0	46.0	35.0	56.0	38.1	39
21	42.0	51.0	42.0	36.0	35.0	31.0	37.0	35.0	54.0	36.5	40
22	27.0	57.0	29.0	41.0	38.0	45.0	39.0	41.5	48.0	40.5	41
23	33.0	48.0	29.0	38.0	44.0	48.0	38.0	28.5	46.0	37.4	39
24	43.0	46.0	40.0	36.0	41.0	43.0	37.0	34.5	49.0	34.9	40
25	38.0	40.0	47.0	41.0	39.0	42.0	36.0	43.0	52.0	36.7	41
26	44.0	52.0	50.0	38.0	44.0	40.0	48.0	38.0	42.0	36.3	43
27	48.0	51.0	53.0	37.0	48.0	58.0	41.0	51.0	33.0	35.7	46
28	44.0	48.0	40.0	43.0	41.0	51.0	39.0	47.0	37.0	36.6	43
29	44.0	56.0	41.0	47.0	45.0	44.0	36.0	44.0	49.0	39.5	45
30	53.0	45.0	38.0	50.0	52.0	49.0	35.0	43.5	51.0	43.1	46
31	52.0	36.0	41.0	44.0	53.0	44.0	40.0	46.0	47.0	40.2	44
Total	1253	1197	1219	1087	1218	1190	1233	1168	1407	1240.75	1223

**Historic Daily Average Temperature
April**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	51	35	44	45	57	43	57	37	53	38	46
2	47	44	41	48	57	42	46	47	53	46	47
3	51	40	41	48	46	42	41	52	52	48	46
4	41	34	44	48	42	39	43	48	61	47	45
5	38	34	38	50	36	40	50	51	59	51	45
6	40	38	41	49	42	35	42	45	59	45	44
7	36	33	46	56	46	35	43	44	71	45	45
8	47	32	45	50	46	36	46	40	63	44	45
9	58	35	49	50	44	42	42	45	50	43	46
10	56	41	48	50	47	41	60	48	50	45	49
11	49	39	43	46	49	40	48	42	59	55	47
12	48	52	48	43	53	40	60	39	53	56	49
13	64	49	49	43	58	44	47	43	50	51	50
14	63	45	56	46	54	47	45	47	51	54	51
15	62	61	48	45	59	45	49	48	57	47	52
16	62	65	46	46	56	48	48	46	46	40	50
17	75	36	53	49	52	41	53	54	44	54	51
18	69	41	57	59	58	43	61	60	48	53	55
19	63	47	63	53	61	48	61	49	52	51	55
20	63	50	58	67	60	49	55	45	59	47	55
21	53	50	49	50	50	59	57	52	57	50	53
22	43	46	61	47	45	58	56	53	57	45	51
23	42	48	51	55	49	61	63	51	57	49	53
24	47	45	54	51	48	63	66	56	56	62	55
25	45	46	45	47	56	54	57	56	52	60	52
26	45	50	48	53	48	50	53	70	54	57	53
27	47	56	59	53	52	51	48	60	45	64	54
28	47	59	49	53	50	55	52	70	42	62	54
29	43	64	54	52	49	57	51	54	53	65	54
30	45	55	65	52	53	61	47	51	59	62	55
31											
Total	1540	1370	1493	1504	1523	1409	1547	1496.5	1622	1535.85	1507

Historic Daily Average Temperature

May

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	51	52	62	54	54	59	47	60	65	54	56
2	47	61	60	51	47	58	49	61	65	54	55
3	51	55	55	50	50	57	47	54	71	57	55
4	55	52	50	48	64	57	52	54	70	58	56
5	54	50	51	49	66	53	54	51	66	52	55
6	58	51	55	47	62	48	59	54	68	57	56
7	61	62	70	45	56	48	65	59	61	58	58
8	59	51	51	48	55	57	65	62	62	58	57
9	53	57	51	52	51	69	53	62	50	60	56
10	63	57	55	58	51	70	56	58	50	56	57
11	58	56	70	53	58	63	53	52	49	55	57
12	52	54	72	56	56	59	48	55	46	56	55
13	46	56	61	52	54	60	58	55	55	57	55
14	53	58	56	55	52	57	58	56	57	52	55
15	54	57	72	57	54	64	57	61	64	57	60
16	61	49	64	55	55	66	54	61	63	54	58
17	67	50	56	57	60	52	62	57	63	50	57
18	47	53	65	55	61	44	63	48	53	55	54
19	48	62	63	56	59	49	55	54	55	63	56
20	49	59	60	54	59	62	54	63	67	60	59
21	49	57	63	51	57	58	59	70	68	64	60
22	54	52	58	53	55	58	54	72	61	56	57
23	58	50	62	51	53	59	59	61	67	54	57
24	66	50	57	48	60	66	62	68	67	67	61
25	56	53	56	46	60	80	63	67	71	70	62
26	55	50	52	51	66	76	65	55	81	64	61
27	67	55	61	58	70	67	69	53	65	69	63
28	66	59	59	65	71	72	60	54	66	71	64
29	66	64	57	65	70	68	62	58	65	73	65
30	69	63	59	64	71	69	67	69	72	76	68
31	70	63	59	59	66	66	65	64	69	76	66
Total	1763	1718	1842	1663	1823	1891	1794	1828	1952	1861.3	1794

**Historic Daily Average Temperature
June**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	73	58	53	60	74	73	71	57	74	71	66
2	66	61	66	57	67	75	69	67	71	69	67
3	61	61	63	64	58	64	71	66	71	62	64
4	59	56	60	69	59	61	63	62	73	61	62
5	68	58	60	74	64	68	60	58	73	58	64
6	63	68	54	65	65	62	57	62	72	66	63
7	53	59	59	74	57	60	71	70	66	73	64
8	57	64	73	75	57	65	84	68	63	80	69
9	65	60	80	77	62	62	86	58	60	80	69
10	67	69	68	74	60	65	83	60	62	73	68
11	71	66	63	77	65	74	78	61	61	64	68
12	57	66	61	78	66	69	70	68	63	57	65
13	57	60	62	83	72	58	68	70	66	60	66
14	59	68	64	75	68	59	72	62	67	59	65
15	55	66	76	55	70	63	63	61	68	64	64
16	60	58	76	59	71	64	64	61	65	72	65
17	66	58	76	66	73	73	69	60	70	73	68
18	66	59	70	62	75	72	64	60	72	74	67
19	68	66	72	60	78	72	65	69	71	74	69
20	67	66	64	61	77	71	69	67	77	70	69
21	68	63	66	67	71	71	74	66	78	74	70
22	73	58	66	68	72	66	74	62	76	70	68
23	75	68	72	66	76	64	72	66	77	67	70
24	73	71	69	70	71	66	72	63	79	67	70
25	69	77	69	80	70	75	73	68	74	67	72
26	77	81	69	82	75	80	71	71	76	67	75
27	79	79	67	75	76	84	75	71	77	79	76
28	79	73	69	73	72	82	77	67	84	73	75
29	76	71	71	80	73	68	81	70	79	77	75
30	72	76	71	71	74	71	79	71	69	73	73
31											
Total	1999	1964	2009	2097	2068	2057	2145	1942	2134	2073.25	2046

**Historic Daily Average Temperature
July**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	79	73	72	73	73	67	78	67	67	71	72
2	85	72	73	74	77	65	76	67	70	71	73
3	88	70	73	70	78	67	77	69	71	71	73
4	88	77	74	68	79	67	70	70	80	78	75
5	76	82	67	69	75	73	69	68	83	80	74
6	75	81	74	68	70	76	74	69	88	80	76
7	71	78	74	64	70	74	78	65	84	81	74
8	78	80	71	60	74	78	81	68	79	76	74
9	81	71	73	69	75	74	81	63	79	76	74
10	73	68	73	77	75	76	77	63	79	73	73
11	67	68	72	83	77	77	73	63	80	78	74
12	67	72	67	73	76	75	75	71	79	83	74
13	74	75	64	68	73	73	76	68	80	80	73
14	75	70	67	75	76	75	79	67	76	68	73
15	78	72	72	79	74	78	77	69	75	73	75
16	74	67	72	76	78	76	78	72	79	75	75
17	70	73	75	75	81	75	80	75	84	80	77
18	83	74	73	77	83	69	82	77	82	81	78
19	77	73	73	84	76	76	84	72	76	82	77
20	69	72	77	82	73	75	83	71	79	78	76
21	71	72	76	77	78	72	81	67	79	82	76
22	75	76	73	81	77	73	75	73	78	87	77
23	84	77	76	77	74	67	73	71	72	84	76
24	67	75	69	73	73	74	75	70	80	81	74
25	67	77	68	77	76	76	76	73	81	72	74
26	66	76	70	82	77	74	75	77	74	71	74
27	68	79	67	84	80	79	71	78	76	76	76
28	72	77	64	72	82	80	74	77	76	76	75
29	84	71	73	73	81	79	78	77	80	75	77
30	84	70	73	77	80	77	75	80	73	81	77
31	84	69	80	72	79	78	77	73	70	79	76
Total	2350	2287	2225	2309	2370	2295	2378	2190	2409	2399.35	2322

**Historic Daily Average Temperature
August**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	84	71	77	75	86	79	78	75	68	80	77
2	78	80	79	81	88	80	76	71	69	80	78
3	81	80	78	83	85	82	75	75	75	72	79
4	82	78	76	77	76	83	75	75	81	73	78
5	84	76	66	86	79	76	72	78	82	73	77
6	71	77	67	75	73	74	67	71	77	78	73
7	71	75	64	73	79	79	70	70	70	74	72
8	71	76	66	79	78	82	70	67	75	81	75
9	73	76	70	80	73	73	68	65	82	75	73
10	76	79	72	78	77	61	70	79	79	79	75
11	77	78	75	83	70	69	69	79	78	73	75
12	77	78	74	80	67	76	69	71	74	72	74
13	80	79	75	89	67	77	70	66	72	74	75
14	86	79	75	84	72	69	74	69	68	75	75
15	80	78	69	70	73	71	71	77	68	69	73
16	85	79	65	71	75	76	72	78	75	67	74
17	84	70	67	78	75	72	73	79	81	74	75
18	83	70	68	72	73	67	76	82	75	76	74
19	85	74	75	70	72	63	71	82	74	77	74
20	72	77	78	74	78	66	63	80	77	76	74
21	74	78	71	79	70	63	66	82	70	76	73
22	73	81	66	79	73	67	69	81	70	74	73
23	67	72	68	72	74	70	67	80	66	70	71
24	65	66	67	71	70	78	69	79	63	71	70
25	72	70	64	71	66	81	73	75	68	77	72
26	73	74	63	73	67	79	67	79	73	79	73
27	73	78	72	72	62	75	67	69	69	74	71
28	69	68	79	76	65	73	69	70	69	73	71
29	65	68	78	78	63	71	68	62	78	71	70
30	66	75	78	73	70	73	68	66	78	72	72
31	63	64	74	78	65	74	73	66	82	73	71
Total	2340	2324	2216	2380	2261	2279	2185	2298	2286	2307.9	2287

**Historic Daily Average Temperature
September**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	62	63	72	76	64	72	73	64	83	71	70
2	65	61	66	75	66	66	72	64	82	68	69
3	70	66	68	74	66	71	69	64	75	73	70
4	74	71	74	73	67	73	76	67	72	75	72
5	69	71	62	68	66	66	77	72	66	76	69
6	67	67	61	66	68	65	75	62	65	68	66
7	67	68	71	67	69	77	72	61	73	62	69
8	72	65	76	70	69	81	69	67	73	62	70
9	74	59	76	68	72	71	69	65	66	70	69
10	76	60	70	66	61	67	64	61	65	69	66
11	70	66	65	63	59	69	61	60	64	64	64
12	62	64	63	77	59	66	61	66	59	72	65
13	67	67	69	76	58	63	69	72	62	74	68
14	71	73	62	75	65	64	69	67	68	77	69
15	75	71	61	73	66	61	73	69	62	72	68
16	70	72	68	69	68	58	63	61	59	57	65
17	68	67	73	71	69	58	63	57	65	56	65
18	67	68	63	71	71	58	61	61	62	59	64
19	67	70	55	70	71	59	55	58	64	59	63
20	66	75	59	70	65	69	57	58	64	61	64
21	72	68	63	71	59	69	63	61	60	68	65
22	73	66	68	70	58	71	56	64	72	70	67
23	73	67	68	73	64	71	58	70	68	71	68
24	63	64	64	59	71	67	57	72	70	76	66
25	65	65	63	57	61	72	57	57	77	74	65
26	62	67	67	71	61	78	63	53	67	75	66
27	68	69	64	63	58	73	68	62	63	72	66
28	66	67	64	59	61	71	69	66	71	69	66
29	58	61	56	62	57	65	67	62	74	70	63
30	60	57	58	53	53	61	64	54	73	67	60
31											
Total	2039	1995	1969	2056	1922	2032	1970	1897	2044	2056.6	1997

**Historic Daily Average Temperature
October**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011 10 Year Average
1	70	54	62	56	59	57	67	50	69	69	61
2	76	53	61	62	60	60	56	51	60	63	60
3	67	48	56	62	61	68	56	62	54	60	59
4	62	52	56	65	68	73	53	64	58	60	61
5	71	50	49	67	60	72	48	59	59	61	60
6	57	48	49	71	54	74	53	57	56	55	57
7	62	49	57	73	56	63	54	64	58	53	59
8	54	58	59	73	53	64	54	56	61	65	60
9	51	63	63	62	61	60	66	56	56	72	61
10	56	59	60	55	63	58	61	55	54	74	60
11	57	60	56	58	56	61	58	51	61	68	59
12	59	57	57	55	64	53	57	47	58	58	56
13	59	60	57	58	48	50	60	49	54	61	56
14	50	54	52	61	48	53	58	45	53	66	54
15	46	58	59	59	48	52	60	40	53	61	54
16	57	53	56	57	49	56	61	41	53	60	54
17	54	49	49	54	49	55	53	43	55	62	52
18	49	48	50	55	63	70	48	43	53	62	54
19	50	40	48	56	58	68	46	45	52	58	52
20	51	42	51	51	55	63	48	49	53	64	53
21	48	57	48	47	49	63	48	56	51	58	52
22	44	47	49	43	46	67	44	61	44	59	50
23	41	39	47	47	50	70	41	54	48	51	49
24	43	39	49	44	48	63	46	58	49	50	49
25	44	42	48	46	49	50	53	55	60	54	50
26	49	57	48	45	47	52	55	53	69	50	53
27	52	61	52	43	44	63	53	46	69	46	53
28	46	53	45	43	56	50	45	52	66	41	50
29	40	59	47	41	49	43	40	48	51	40	46
30	40	51	53	54	51	50	39	49	49	40	48
31	42	52	64	55	54	53	46	60	49	42	52
Total	1647	1612	1657	1718	1676	1854	1627	1619	1735	1781.95	1694

**Historic Daily Average Temperature
November**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2001-2010 10 Year Average
1	44	64	51	55	57	58	52	52	42	45	52
2	36	63	47	51	46	48	38	48	41	47	46
3	36	65	48	48	42	47	41	50	40	50	47
4	40	49	42	55	41	49	49	45	46	49	47
5	43	49	49	59	38	46	57	44	54	42	48
6	46	57	48	59	44	47	57	42	48	44	49
7	37	51	51	51	47	43	58	40	43	53	47
8	44	39	46	51	57	37	58	55	42	56	48
9	55	33	36	49	62	41	51	52	52	53	48
10	60	36	32	49	54	38	45	59	47	57	48
11	64	39	44	38	51	37	42	51	46	52	46
12	54	52	39	40	57	37	40	48	51	44	46
13	47	50	35	47	55	48	45	51	53	54	48
14	45	38	35	55	58	46	56	57	47	61	50
15	52	38	46	47	59	54	63	59	51	63	53
16	42	36	40	59	62	41	54	54	52	58	50
17	42	42	40	42	57	38	41	44	57	47	45
18	41	44	49	36	47	39	34	42	48	40	42
19	37	52	54	35	45	38	29	47	38	41	42
20	44	53	42	44	40	35	29	58	41	59	44
21	42	48	44	46	38	44	29	49	37	50	43
22	47	48	46	43	40	54	25	47	49	40	44
23	40	45	41	30	46	35	28	47	55	43	41
24	40	41	48	36	49	29	33	48	43	41	41
25	41	41	50	28	42	39	44	49	35	49	42
26	43	37	35	30	44	50	37	50	42	55	42
27	31	44	38	41	52	49	39	45	36	47	42
28	24	54	49	49	46	40	39	48	36	59	44
29	31	50	44	56	47	44	38	45	38	57	45
30	43	43	42	54	60	37	34	50	38	57	46
31											
Total	1291	1401	1311	1383	1483	1288	1285	1476	1348	1514.9	1376

**Historic Daily Average Temperature
December**

Day	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2001-2010 10 Year Average
1	32	43	50	44	64	30	51	39	51	44	45
2	31	28	39	39	49	24	43	43	39	42	38
3	25	23	37	34	38	33	36	59	37	42	36
4	23	31	34	29	35	28	43	47	36	43	35
5	24	26	42	27	28	28	35	39	31	50	33
6	29	29	29	31	35	27	29	33	29	55	33
7	25	29	39	26	46	29	28	33	31	53	34
8	35	30	48	27	26	37	19	36	27	44	33
9	22	27	38	31	31	32	36	39	22	44	32
10	28	36	43	29	44	31	53	38	20	45	37
11	31	47	47	32	42	34	40	27	36	33	37
12	37	35	40	32	41	42	48	27	41	39	38
13	36	28	41	20	49	28	27	35	44	40	35
14	44	29	28	18	47	34	34	42	26	40	34
15	41	36	25	21	48	28	53	44	20	48	36
16	33	34	29	41	45	31	43	33	26	49	36
17	26	42	36	33	44	28	33	20	26	40	33
18	29	37	28	29	48	23	35	22	29	30	31
19	34	33	35	29	39	29	25	25	29	33	31
20	51	33	22	28	35	34	18	23	29	43	32
21	40	30	20	26	44	29	27	27	34	47	32
22	42	45	35	28	35	33	21	26	37	53	36
23	39	50	46	40	51	45	21	20	35	46	39
24	37	48	41	42	42	46	40	29	33	36	39
25	35	44	28	40	38	35	43	32	27	34	36
26	33	36	27	46	47	32	31	40	26	42	36
27	31	42	20	36	38	38	44	43	26	42	36
28	31	40	19	35	37	41	53	35	26	46	36
29	34	42	36	47	32	43	37	22	30	30	35
30	31	45	33	40	34	35	35	22	32	41	35
31	42	44	37	31	35	35	20	28	37	41	35
Total	1031	1122	1072	1011	1267	1022	1101	1028	972	1314.2	1094

Division 12-6-GAS

Request:

Re: the Direct Testimony of witness Silvestrini at page 6 of 18, lines 6-10, please:

- a. Provide the data, analyses, workpapers (including electronic spreadsheet files with all cell references and cell formulas), studies and other documents upon which the Company relies to assess the relationship between heating degree day measures and natural gas use for water heating;
- b. Provide the Company's assessment of the amount of gas use in each month for each rate classification that is the result of water heating requirements.

Response:

- a. The Company has no such data, analyses, workpapers, studies or other documents upon which it assessed the relationship between heating degree day measures and natural gas use for water heating.
- b. The Company has no assessment of the amount of gas use in each month for each rate classification that is the result of water heating. The Company does not meter natural gas use for water heating separately from natural gas for other end uses.

Division 12-8-GAS

Request:

Re: Schedule ALS-2, please provide actual gas service volumes and revenue by year for the 2005 through 2011 period for:

- i. NGV service
- ii. Gas Lights
- iii. Manchester St.
- iv. Marketers

Response:

Please see Attachment DIV 12-8-GAS.

The Narragansett Electric Company d/b/a National Grid
2005-2011 Historical Actual Volumes (Dth)

	<u>Total 2005</u>	<u>Total 2006</u>	<u>Total 2007</u>	<u>Total 2008</u>	<u>Total 2009</u>	<u>Total 2010</u>	<u>Total 2011</u>
i. NGV Service	17,770	15,396	12,032	11,794	16,378	2,626	-
ii. Gas Lights	3,461	3,394	3,586	3,459	3,390	3,396	3,400
iii. Manchester Street	9,387	5,756	9,316	11,265	10,670	14,497	17,099
iv. Marketers	-	-	-	-	-	-	-

The Narragansett Electric Company d/b/a National Grid
2005-2011 Historical Actual Revenue (\$)

	<u>Total 2005</u>	<u>Total 2006</u>	<u>Total 2007</u>	<u>Total 2008</u>	<u>Total 2009</u>	<u>Total 2010</u>	<u>Total 2011</u>
i. NGV Service	\$154,295	\$164,849	\$145,139	\$144,763	\$174,691	\$30,593	\$0
ii. Gas Lights	\$18,496	\$18,486	\$18,218	\$17,430	\$19,303	\$19,262	\$19,303
iii. Manchester Street	\$69,283	\$78,986	\$91,296	\$111,923	\$93,128	-\$154,495	\$132,613
iv. Marketers	\$147,029	\$431,111	\$694,816	\$644,517	\$826,297	\$360,853	\$1,144,577

Division 12-11-GAS

Request:

Re: the Direct Testimony of witness Silvestrini at pages 8-9, please:

- a. Provide the data, analyses and studies upon which the Company relies to assess that 1.3% growth customer count represents modest growth by industry standards;
- b. Provide the data, analyses, and studies relied upon to assess the “decline in population” for Rhode Island;
- c. Provide actual year-by-year customer additions from 2005 to 2011.

Response:

- a. The Company relied upon the data from the nine gas service territories in the United States served by National Grid to assess that 1.3 percent growth in customer counts represents a modest growth rate. The 1.3 percent value is the overall rate of growth during the six-year period from 2005 to 2011, and represents an average annual rate of 0.2 percent. Rhode Island has the lowest annual average growth rate over the period from 2007 to 2011 (the period for which comparative data is available) among the nine gas service territories as shown in the table below.

Service Territory	2007-2011 Average Annual Customer Growth Rate
Rhode Island	0.2%
New York City	0.6%
Long Island	0.9%
Boston Gas	0.9%
Colonial Gas – Cape Cod	1.3%
Colonial Gas – Lowell	1.0%
Essex Gas	0.8%
New Hampshire	0.8%
Upstate New York	0.5%

- b. The data the Company relied upon to assess the “decline in population” for Rhode Island is presented in Schedule ALS-7, Economic Datasets, Page 2 of 2, under the column heading “FPOPCA, POP” (Population), which shows an annual compound growth rate from 2006 to 2011 of -0.1 percent.

Division 12-11-GAS, page 2

- c. The actual year-by-year customer additions from 2005 to 2011 are presented in Schedule ALS-5, Calendar Year End Number of Customers by Rate Class (2005-2011), on the line labeled "Annual Change."

Division 12-14-GAS

Request:

Re: Schedule ALS-4 attached to the Direct Testimony of witness Silvestrini, please:

- a. Verify that the forecasted deliveries presented in Schedule ALS-4 are intended to represent forecasted deliveries under normal weather conditions;
- b. Verify that the (797,480) Annual change shown in the column headed "2012" represents the difference between forecasted normal weather deliveries for 2012 and actual (non-weather-normalized) deliveries for 2011;
- c. Demonstrate the manner in which the "Average Annual Percentage Change" would be altered if the change from 2011 to 2012 was based on the difference between forecasted normal weather deliveries for 2012 and estimated normal weather deliveries for 2011.

Response:

- a. The Company verifies that the forecasted deliveries presented in Schedule ALS-4 are intended to represent forecasted deliveries under normal weather conditions.
- b. The Company verifies that the (797,480) annual change shown in the column headed "2012" represents the difference between forecasted normal weather deliveries for 2012 and actual (non-weather-normalized) deliveries for 2011.
- c. The "Average Annual Percentage Change" would change from -0.9 percent to -0.6 percent if the change from 2011 to 2012 was based on the difference between forecasted normal weather deliveries for 2012 and estimated normal weather deliveries for 2011, as shown in the following table:

	2011	2012	2013	2014
	Actual	Normal	Normal	Normal
Annual Change	35,206,428	34,408,948	34,680,803	34,295,965
Average Annual Change		(797,480)	271,855	(384,838)
Annual Percentage Change		-2.3%	0.8%	-1.1%
Average Annual Percentage Change				-0.9%
	Normal	Normal	Normal	Normal
	34,975,584	34,408,948	34,680,803	34,295,965
Annual Change		(566,636)	271,855	(384,838)
Average Annual Change				(226,540)
Annual Percentage Change		-1.6%	0.8%	-1.1%
Average Annual Percentage Change				-0.6%

Division 12-15-GAS

Request:

Re: Schedule ALS-5 attached to the Direct Testimony of witness Silvestrini, please:

- a. Document by year for each year of the period 2005 through 2011 the number of Residential Non-Heat customers that transferred to Residential Heating service:
 - i. For rate classification 1012
 - ii. For rate classification 1101
- b. For those Residential Non-Heat and Low Income Residential Non-Heat accounts that were lost and did not transfer to Residential Heat service or Residential Low Income Heat service, provide the Company's understanding of what happened to those customers. (i.e., Were the dwellings abandoned? Did the customers replace gas appliances with electric appliances? Other?)
- c. Explain the factors causing the total residential customer count to decline in 2011 when for all prior years and for each of the forecasted years total residential customers increase in every year.

Response:

- a. The Company does not maintain records of the number of Residential Non-Heat customers that transfer to Residential Heating service. The only data it maintains is the total number of customers in each category. It can only identify the net change in the number of Residential Non-Heat customers and the net change in the number of Residential Heat customers.
- b. The Company does not maintain records on the Residential Non-Heat and Low Income Residential accounts that were lost and did not transfer to Residential Heat service or Residential Low Income Heat service, so it does not know what happened to those customers.
- c. The numbers of residential customers presented on Schedule ALS-5 are the number of active and open residential meters that had a bill rendered during December of each year. The reason for the decline in the number of residential customers in 2011 as compared to 2010 is that fewer bills were rendered in December 2011 than in December 2010 indicating that there were fewer active meters. The number of total residential customers increases in every year of the forecast because the growth rate is following the long-term historical trend.

Division 12-22-GAS

Request:

Re: the Direct Testimony of witness Silvestrini at page 12-13, please verify that the basis for the forecast of delivery volumes the Company presents in this proceeding is consistent with the basis for the Company's estimation of:

- a. Design Peak Day Demand in its most recent long range supply plan;
- b. Design Winter Requirements in its most recent long ranges supply plan.

Response:

- a. The Company verifies that the forecast of delivery volumes that it presents in this proceeding is consistent with its estimation of Design Peak Day Demand in its most recent long range supply plan.
- b. The Company verifies that the forecast of delivery volumes that it presents in this proceeding is consistent with its estimation of Design Winter Requirements in its most recent long range supply plan.

Division 12-23-GAS

Request:

Re: the Direct Testimony of witness Silvestrini at page 13-14, please:

- a. Provide the data, analyses, workpapers (including electronic spreadsheet files with all cell references and cell formulas) and other documents and studies upon which the Company has relied to test and verify the reasonableness of the results of the Moody's economic forecasting model for Rhode Island.
- b. Provide documentation for the Moody's economic forecasting model for Rhode Island upon which the Company has relied.

Response:

- a. Please see Attachment DIV 12-23-1-GAS.
- b. Please see Attachment DIV 12-23-2-GAS.

Macro Economic Service Provider Consolidation Study Recommendation

James A. Cross, *VP Electric Supply and Strategic Analysis*



nationalgrid

The power of action.™

Recommendation

To ensure the consistency of the economic assumptions that drive our forecasts throughout the Company, we are recommending that we consolidate to Moody's *Economy.com* for macroeconomic services.



Moody's and Global Insight Comparison Study *Background*

- ◆ Macro economic inputs used in forecasts for
 - ◆ 5 electric companies & 9 gas companies
 - ◆ Across 4 states and different regulatory authorities
 - ◆ Over 50 distinct regions (*state, metro and county levels*)
 - ◆ Over 15 different economic and demographic indicators
 - ◆ Gross Domestic/State/Metro Product (GDP/GSP/GMP)
 - ◆ Industry Sector Output (*manufacturing, commercial, etc.*)
 - ◆ Employment (*overall and industry sector specific*)
 - ◆ Real Income
 - ◆ Total Households / Total Population
 - ◆ CPI



What Other Utilities & Agencies Are Doing

- ◆ Of 25 major investor-owned electric and gas utilities in the US, the majority are using Moody's (EEI Load Forecasting Group 2009 survey):
 - ◆ Moody's -- 17 utilities
 - ◆ Global Insight – 2 utilities
 - ◆ Conference board – 1 utility
 - ◆ Woods and Poole – 2 utilities
 - ◆ None/Not disclosed – 3 utilities
- ◆ NYISO, ISO-NE, PJM Load Forecasting Depts using Moody's
- ◆ NYSERDA using Regional Economic Models, Inc (REMI)



Parameters of Study

- ◆ Variables were compared at 3 levels
 - ◆ State (3)
 - ◆ Metropolitan Service Area (MSA) (14)
 - ◆ County (7)
- ◆ Compared over 50 variables in four broad categories
 - ◆ Population / Housing
 - ◆ Employment (Labor)
 - ◆ Income
 - ◆ GSP / GMP
- ◆ Compared 2009 long-term forecast for prospective consistency
- ◆ Compared forecasts from years 2005-2009 for historical accuracy
- ◆ Detailed product offerings
 - ◆ Ease of use
 - ◆ Available Variables / MSA
 - ◆ Timing of information
 - ◆ Reports
 - ◆ Access to experts and processes
- ◆ Costs

Variables

- ◆ All needed variables are available at the state, MSA, and county level for the 2009 forecast data
- ◆ MSA are determined by government agencies and are the same for both services
 - ◆ The MSA geographic regions were redefined in 2005
 - ◆ Moody's offers an Upstate NY package in addition to its standard offerings for the NY ISO which is used by the electric forecasting group



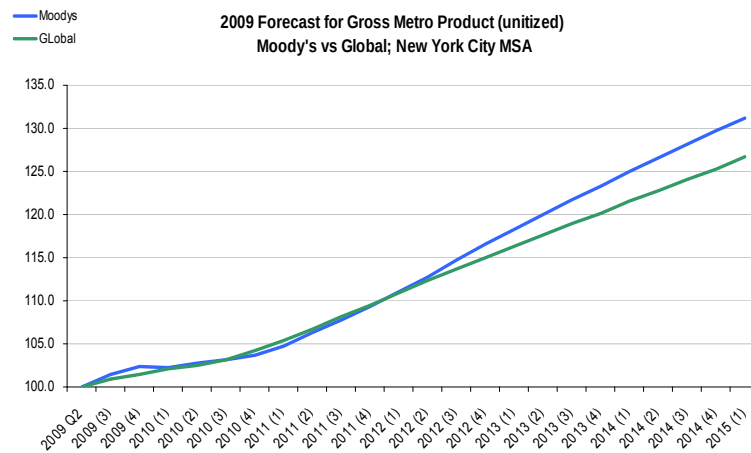
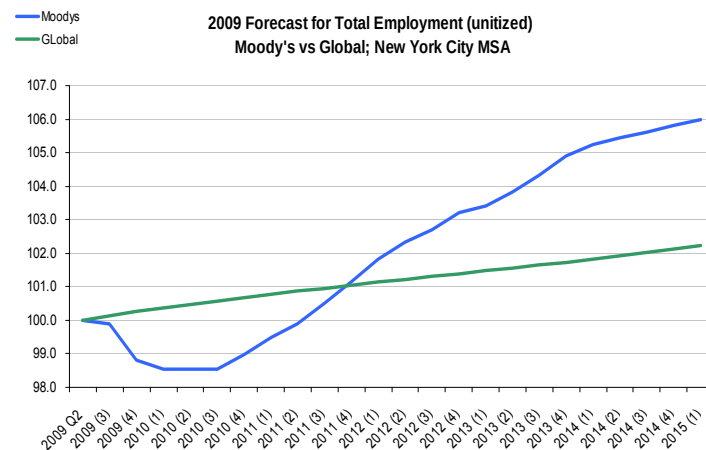
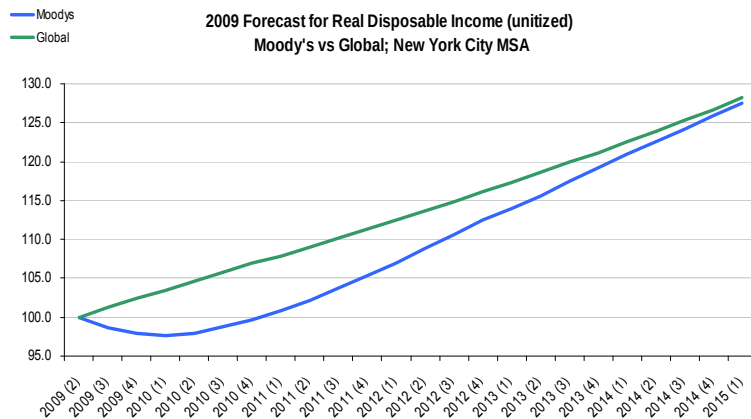
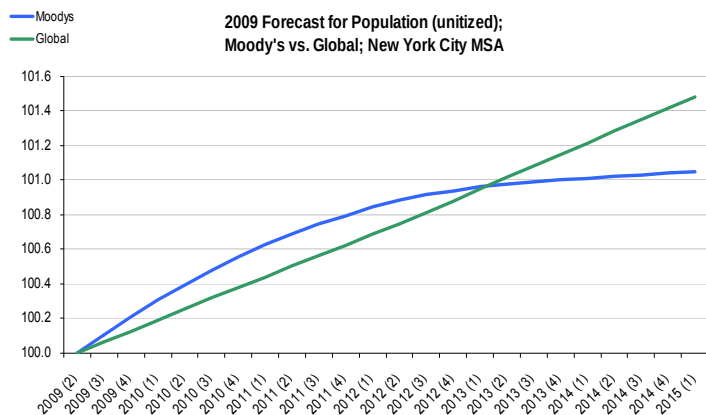
2009 Macro Forecast

2009 Forecast Comparison Moody's vs. Global Insight Average Annual Growth Rate from 2009-2015;								
Variables	New York City	Long Island	Boston	Syracuse	Albany	MA	NH	RI
Total Population	0.0%	0.0%	-0.1%	-0.1%	-1.1%	-0.5%	-0.3%	0.0%
Total Households	-0.7%	-0.3%	0.6%	-1.0%	-1.0%	0.1%	-1.1%	-0.4%
Total Employment	0.9%	1.3%	2.8%	2.0%	2.8%	0.6%	2.9%	1.4%
Disposable Personal Income	-3.9%	-5.8%	4.7%	-5.8%	-2.1%	0.7%	0.7%	-0.8%
GMP	1.4%	1.1%	1.3%	0.3%	0.5%	1.5%	3.4%	6.7%

- ◆ On average, the difference between Moody's and Global's forecast for the next five years do not differ more than +/- 2%
 - ◆ Switching to Moody's will have little effect on the gas load forecasts

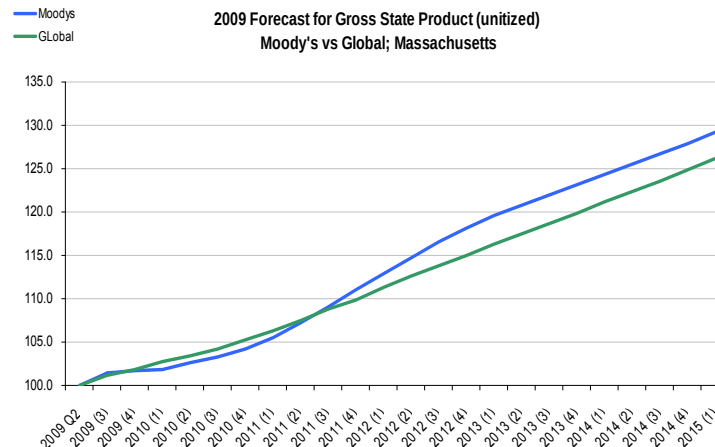
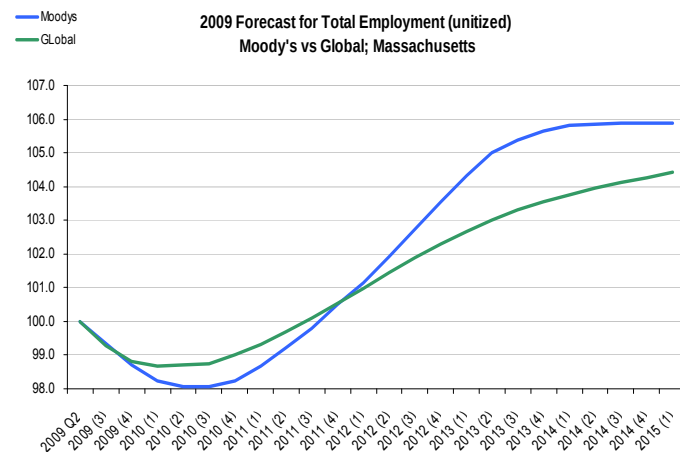
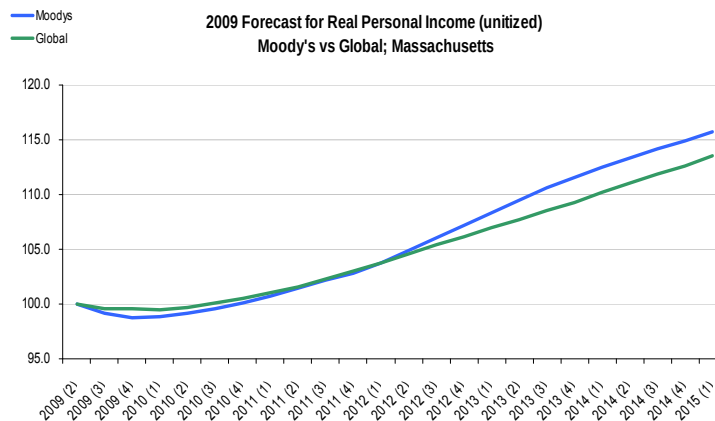
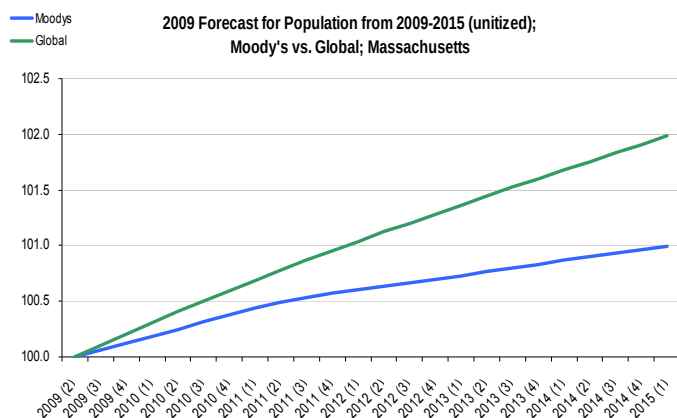
2009 Forecast Graphs

Moody's vs. Global; New York City MSA, FY 2010 – FY2015



2009 Forecast Graphs

Moody's vs. Global; Massachusetts, FY 2010 – FY2015





2005-2009 Historical Accuracy

Prospective Analysis: Forecast Accuracy, Average Absolute Error from 2005-2009																
	New York City		Long Island		Boston		Syracuse		Albany		MA		NH		RI	
Variables	M	G	M	G	M	G	M	G	M	G	M	G	M	G	M	G
Total Population	0.7%	0.7%	2.1%	2.1%	1.8%	2.6%	1.1%	1.1%	2.7%	0.5%	0.4%	0.6%	1.4%	1.5%	2.1%	2.1%
Total Households	0.6%	1.6%	1.8%	1.8%	2.0%	2.4%	8.4%	1.7%	0.4%	1.5%	0.3%	2.0%	2.2%	2.2%	3.0%	2.4%
Total Employment (Construction)	6.7%	5.2%	6.1%	4.5%	1.9%	2.5%	4.7%	2.5%	3.3%	1.6%	2.1%	0.5%	8.3%	1.2%	7.8%	1.9%
Disposable Personal Income	3.2%	3.0%	3.1%	1.7%	2.5%	1.6%	7.8%	2.5%	2.5%	1.3%	1.2%	2.3%	2.9%	2.0%	1.6%	1.7%
GMP (2008 only)	1.8%	0.7%	2.4%	1.1%	1.5%	0.4%		1.6%		1.6%	4.0%	2.0%	7.1%		5.1%	

- ◆ On average, Moody's and Global have similar error on their forecast accuracy, ~ 2% on average.
- ◆ Forecasts become inaccurate based on the government restatement and other non foreseen events
 - ◆ Neither Global or Moody's accurately predicted the current recession
 - ◆ The 2010 forecasts will be dramatically different based on recovery from recession



Additional Product Offerings

- ◆ Moody's provides different scenario forecasts (*at no additional cost*)
- ◆ Moody's chief Economist and cofounder, Mark Zandi is more well known
- ◆ Global Insight offers a newsletter regarding fuel pricing that the gas load forecasting group uses in addition to Wood Mackenzie data
 - ◆ Global Insight was acquired by IHS / Cera to consolidate energy services

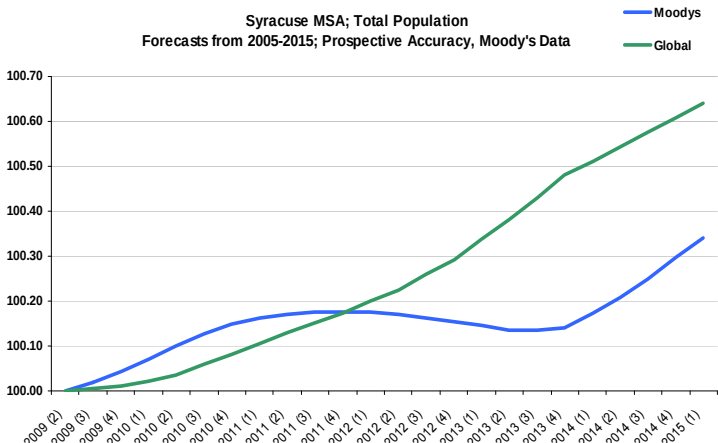
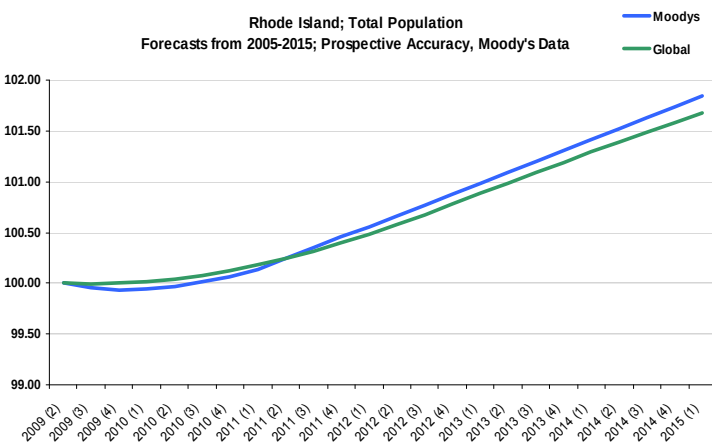
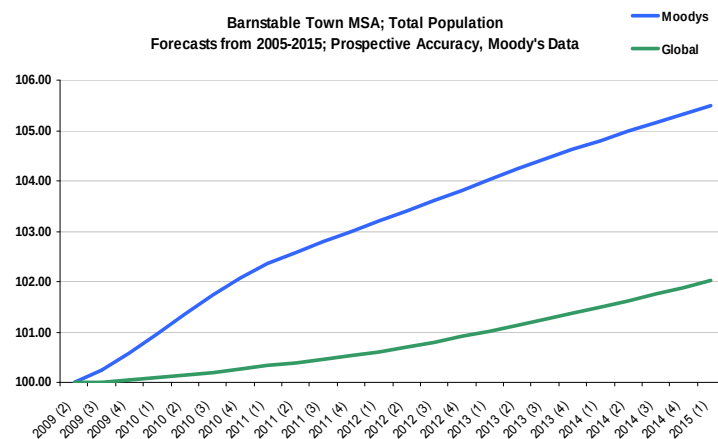
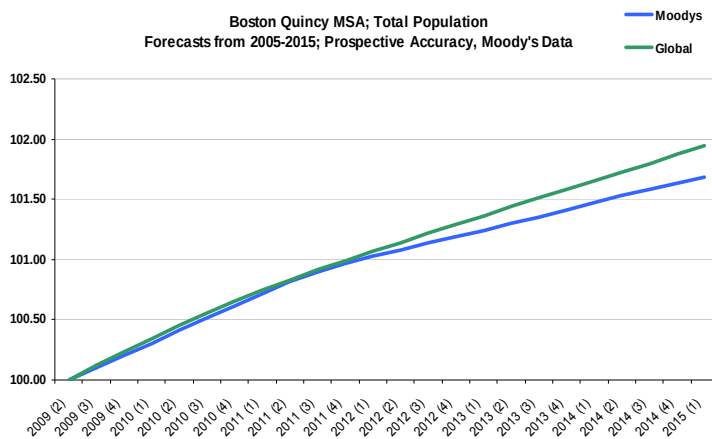


Conclusion

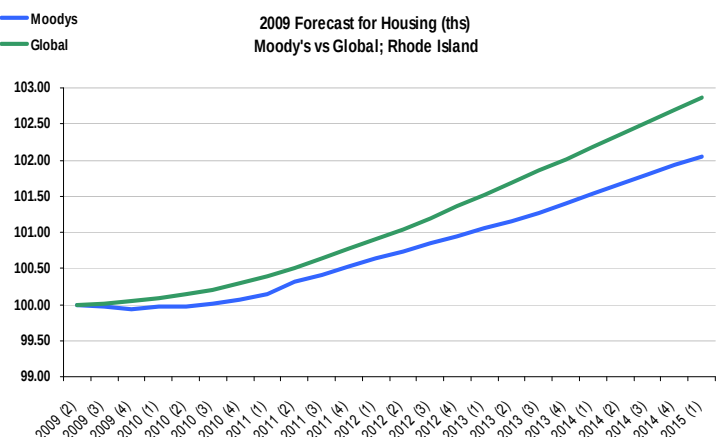
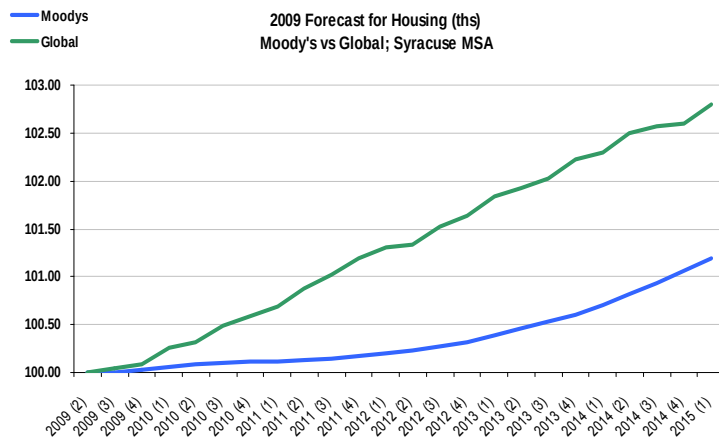
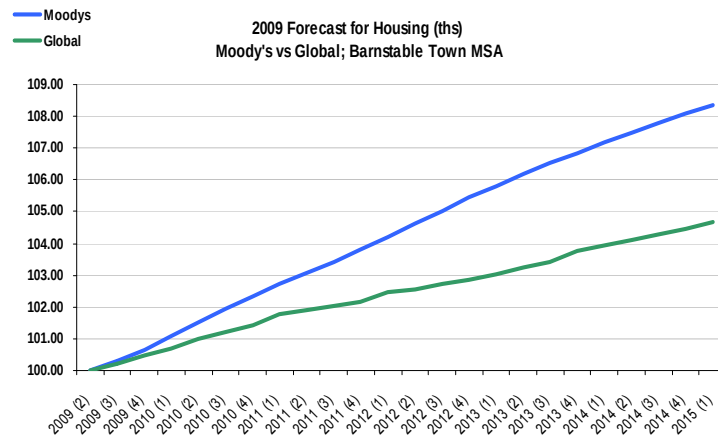
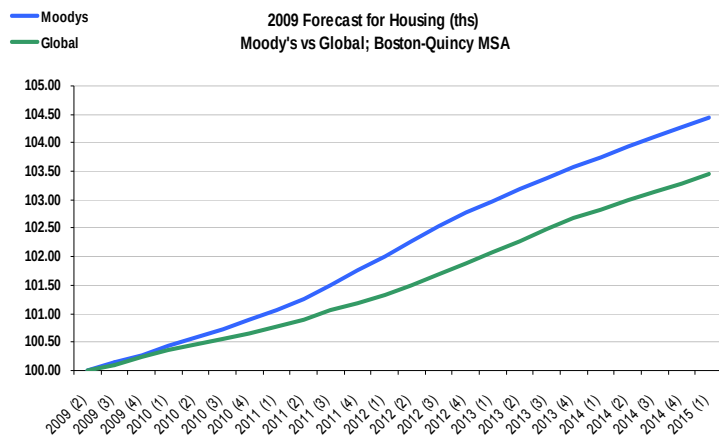
- ◆ Both providers offer the same quality data and accuracy
 - ◆ All MSA, state, and county offering as the same
 - ◆ All variables available
- ◆ Decision to consolidate to Moody's is based on desire to remain consistent with the NE and NY ISOs and to obtain different long term scenario forecasts
 - ◆ All users in company are covered with consolidation
- ◆ Continue to have Global Insight service for the next forecast cycle to ease the consolidation

APPENDIX

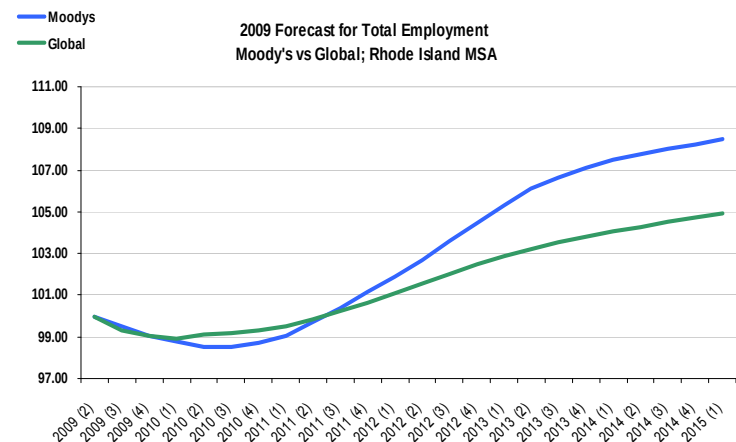
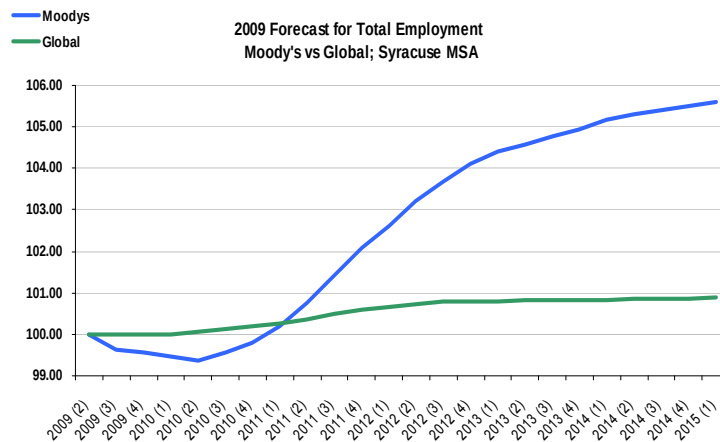
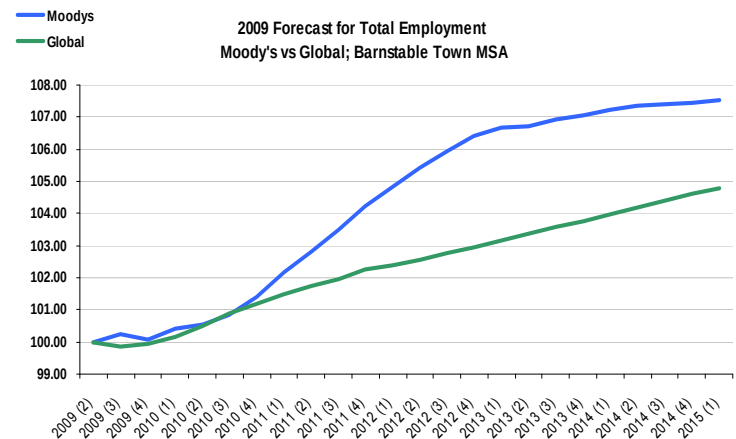
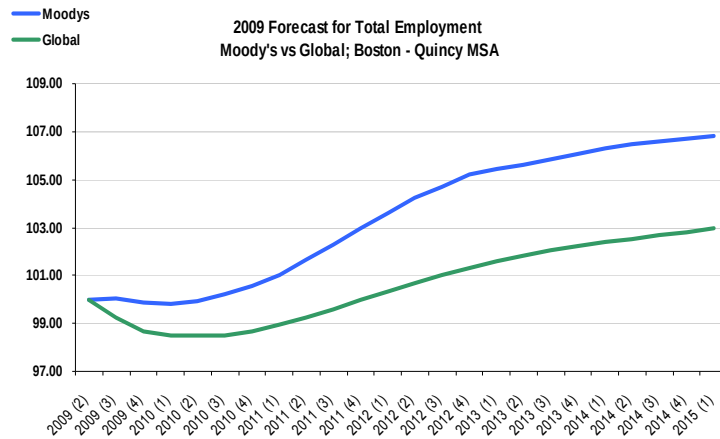
2009 Forecast Graphs Population (unitized)



2009 Forecast Graphs Housing (unitized)

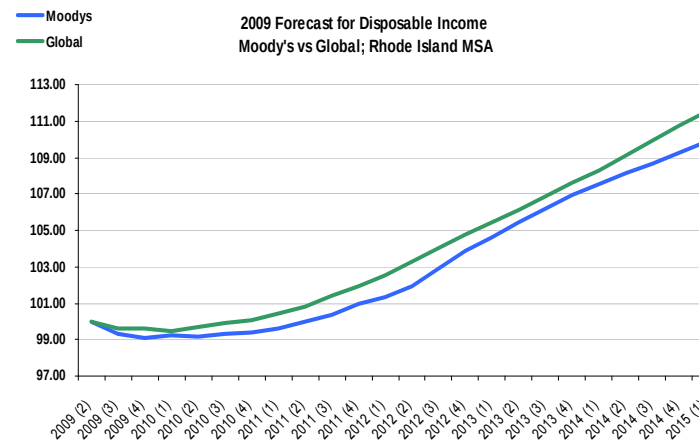
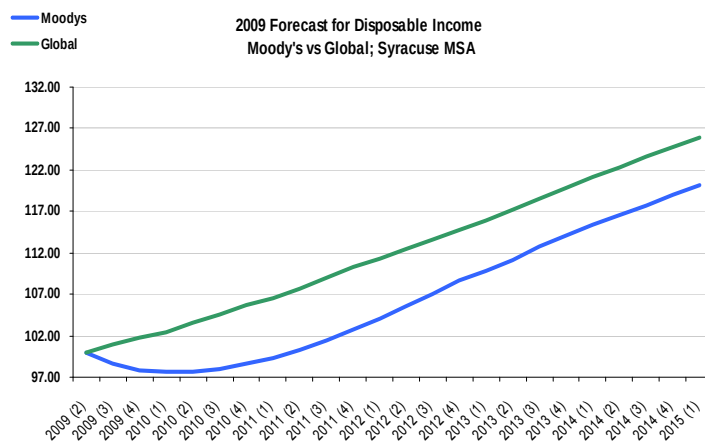
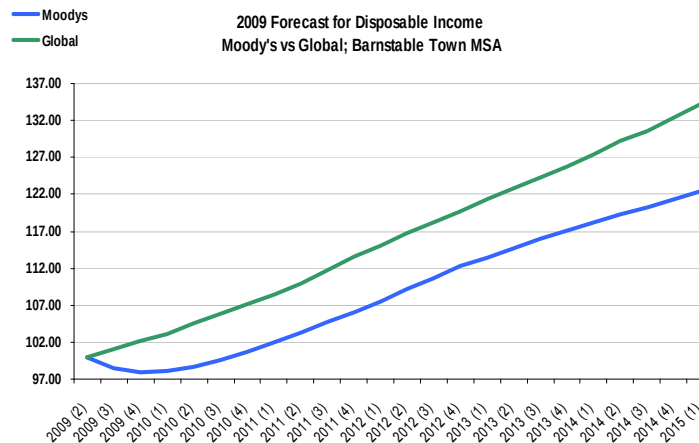
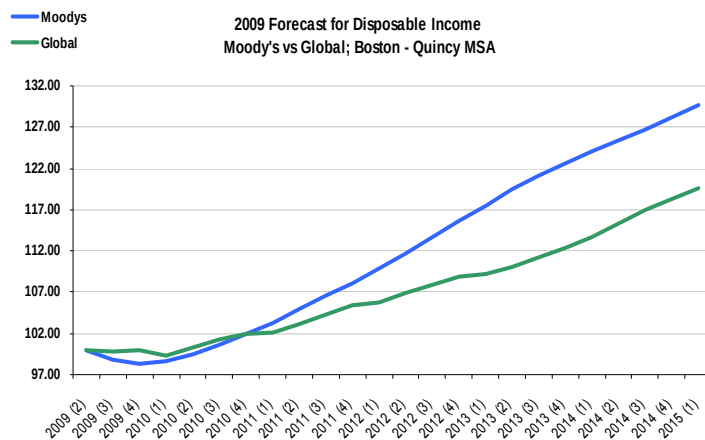


2009 Forecast Graphs Total Employment (unitized)

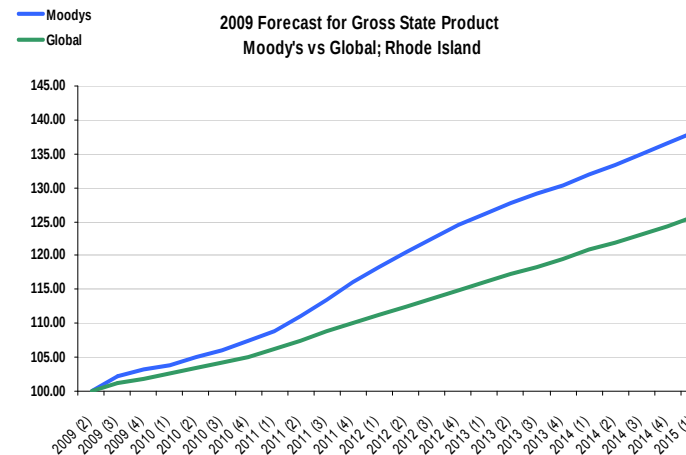
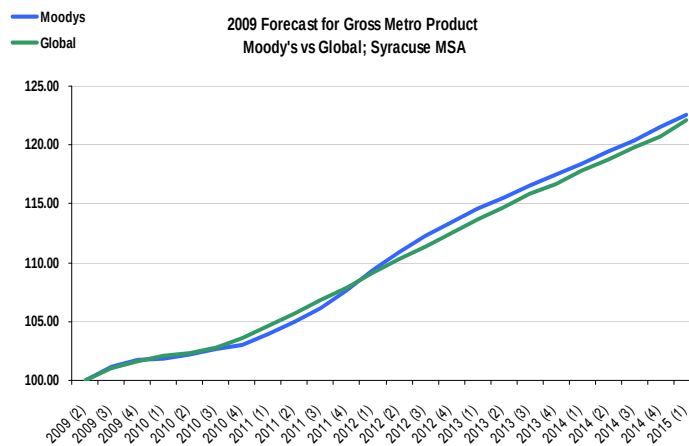
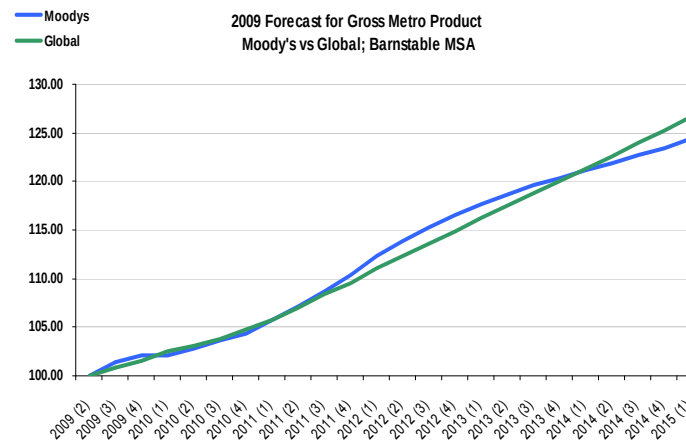
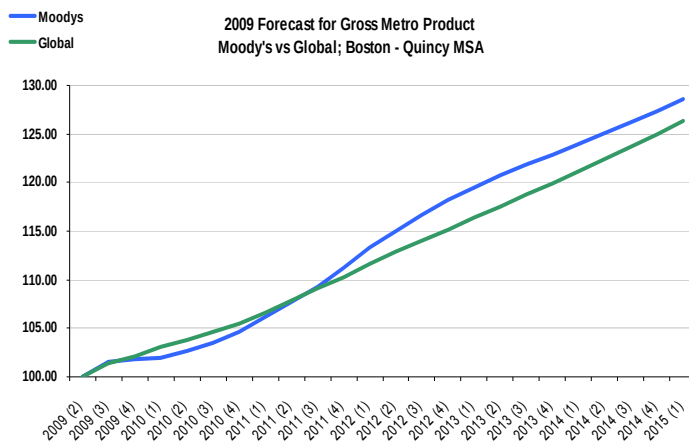


2009 Forecast Graphs

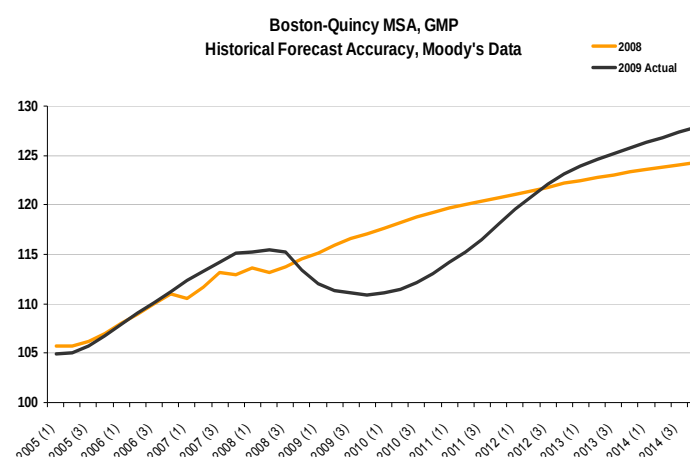
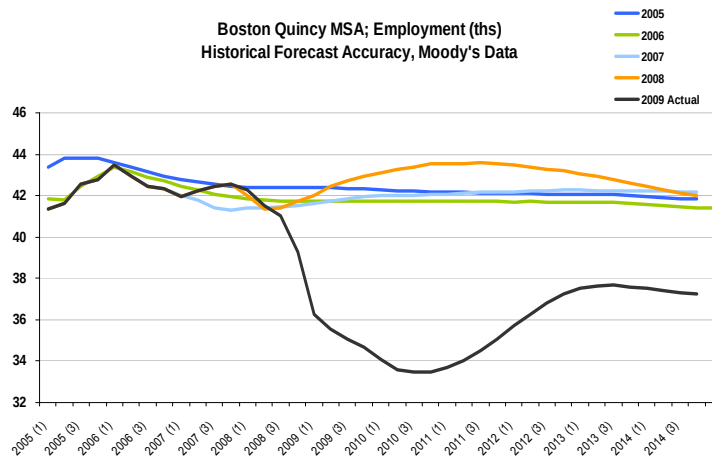
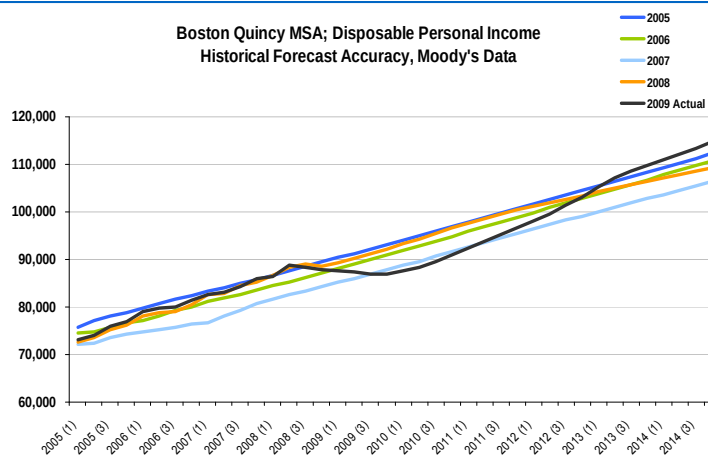
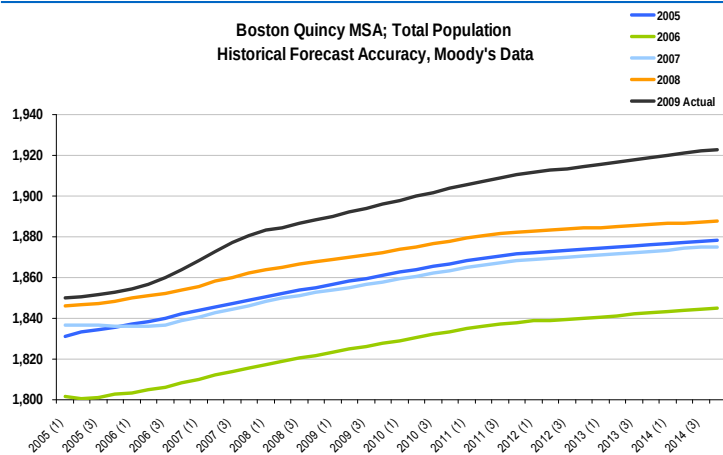
Disposable Income (unitized)



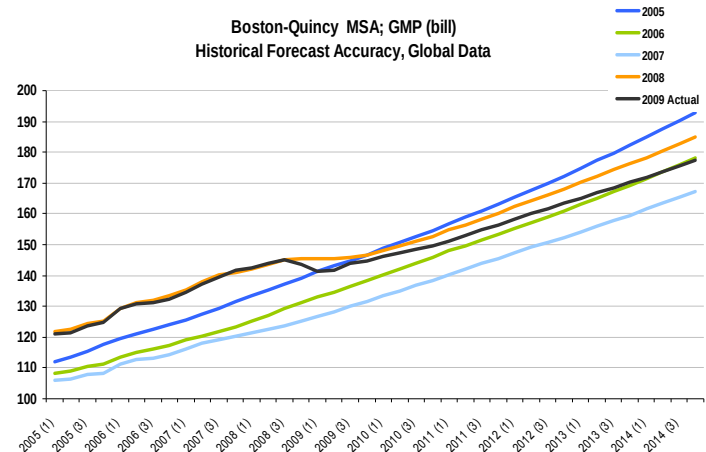
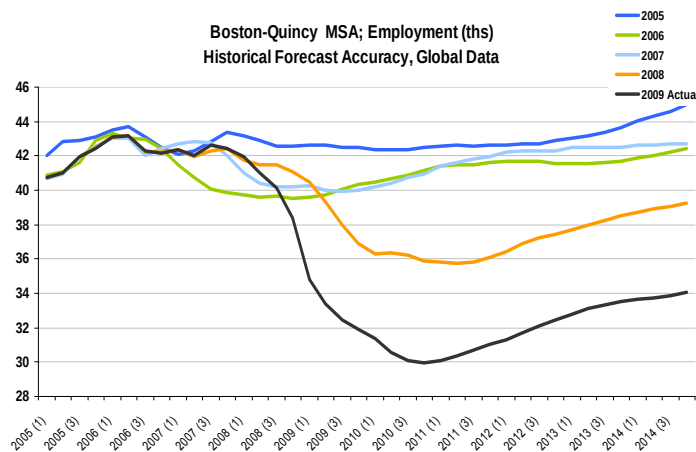
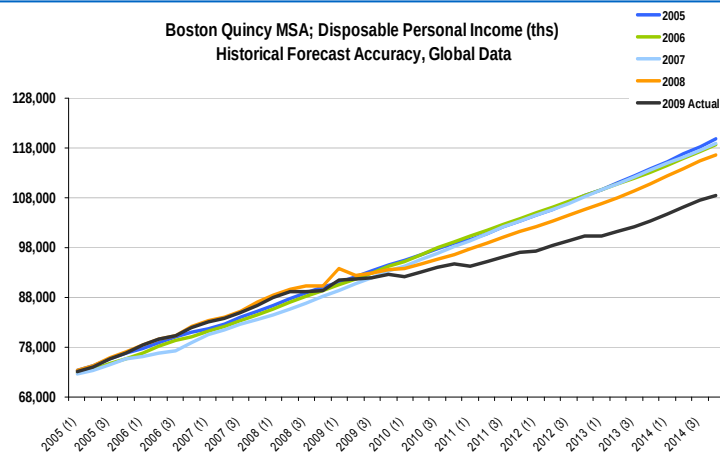
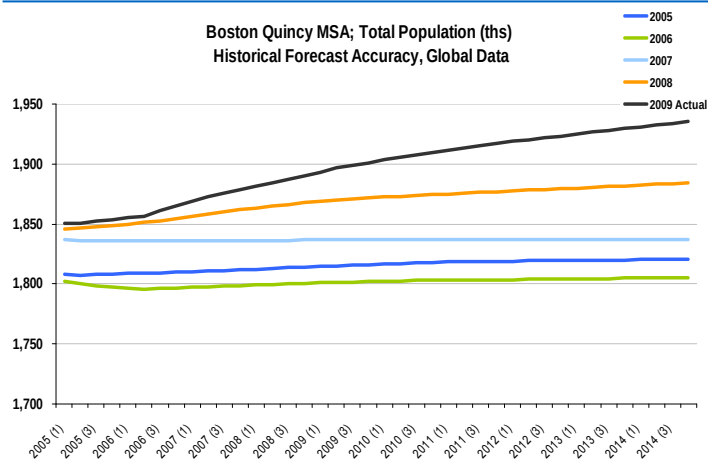
2009 Forecast Graphs Gross Metro / State Product (unitized)



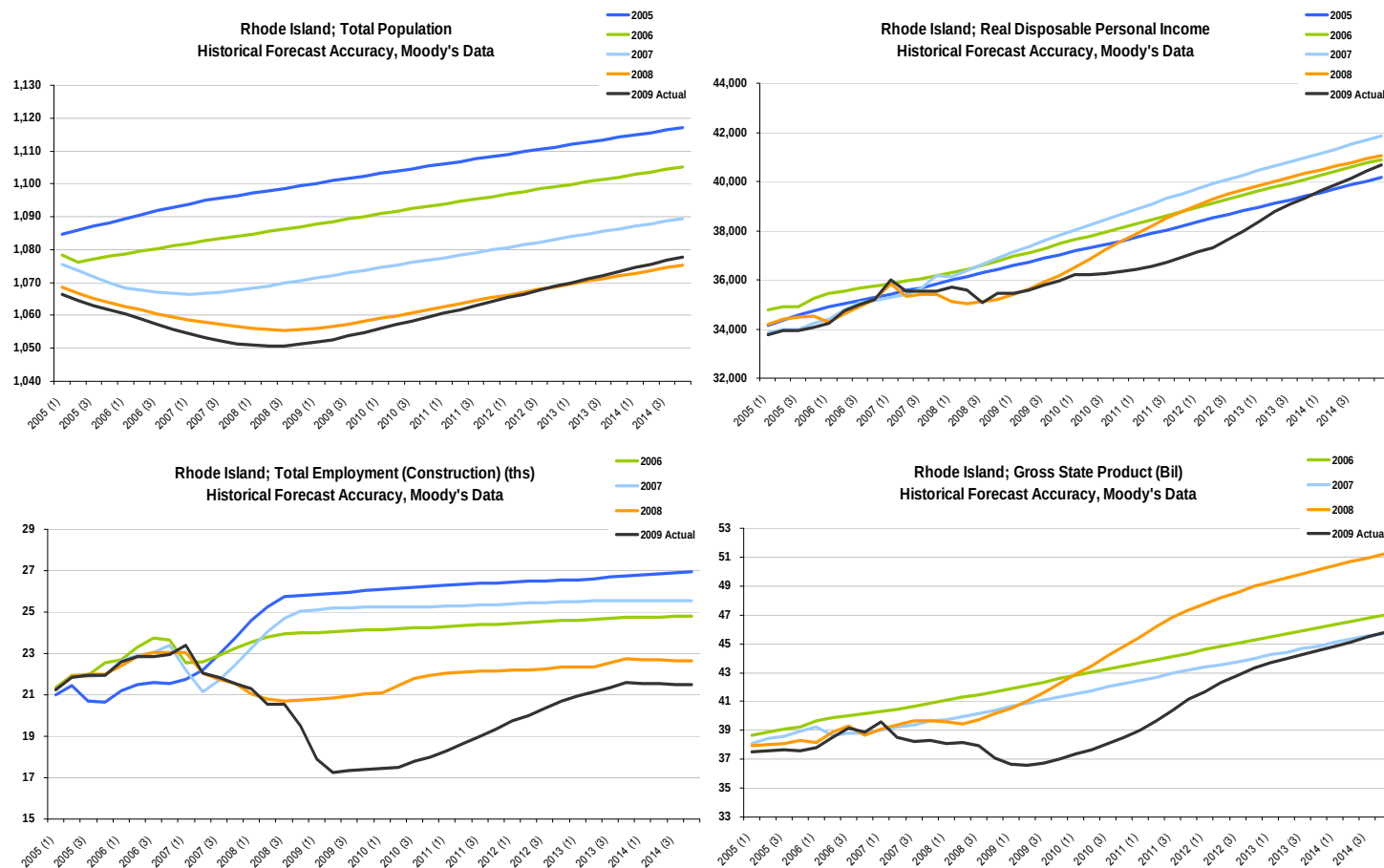
Accuracy Graphs Moody's– Boston (MSA)



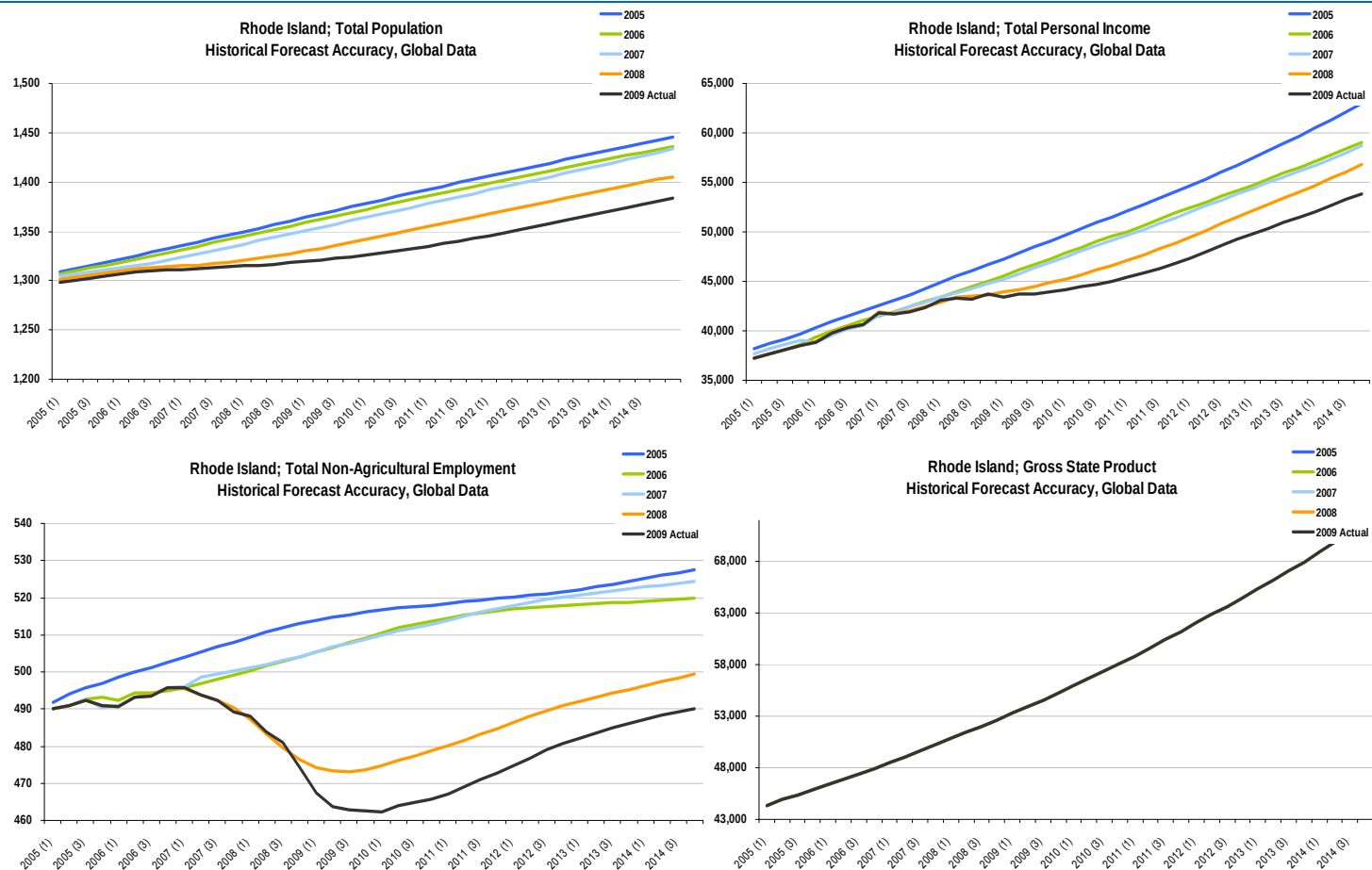
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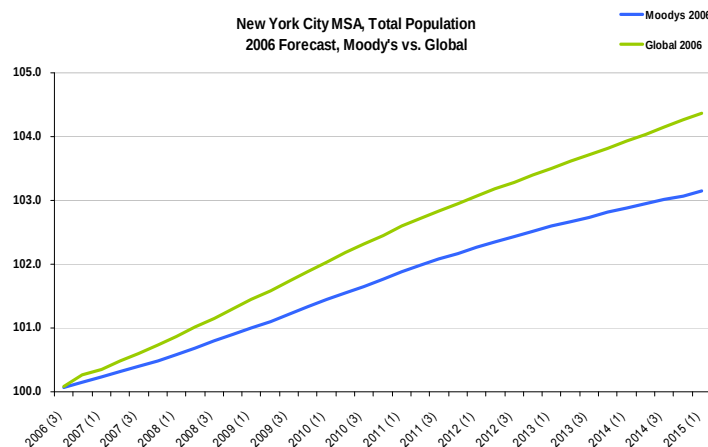
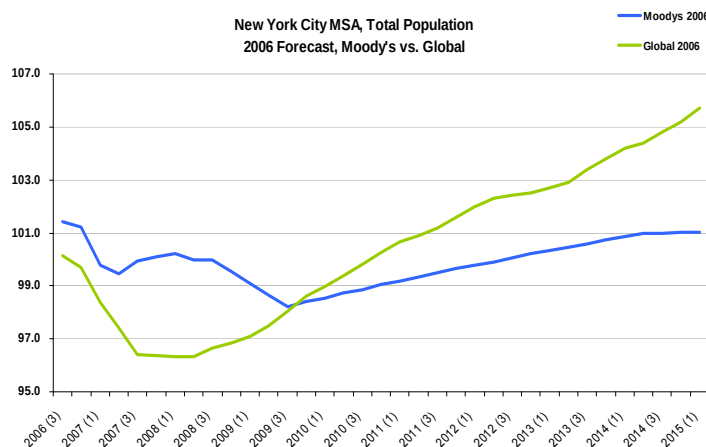
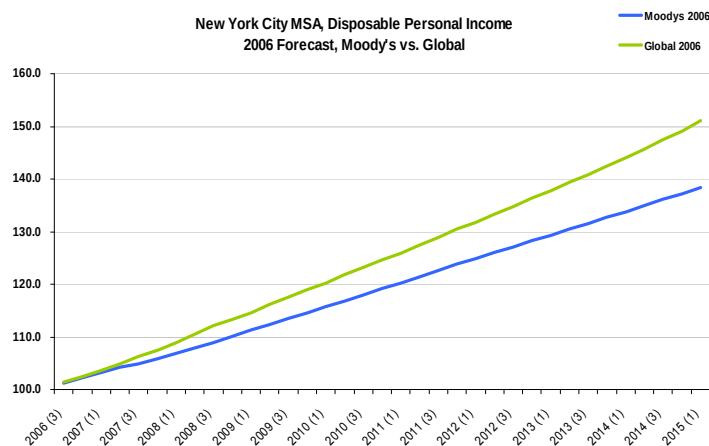
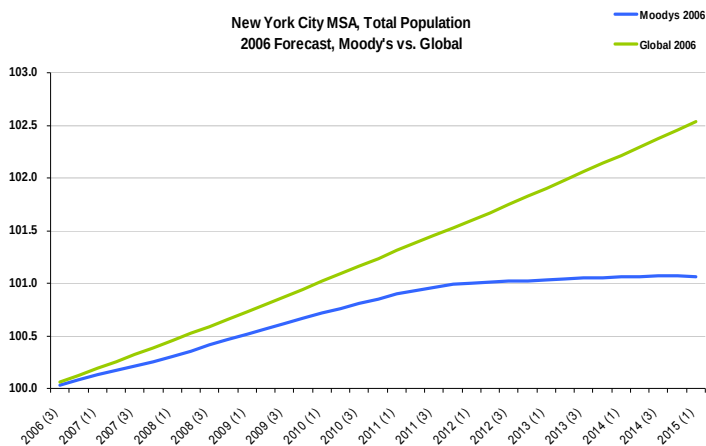
Accuracy Graphs Moody's– Rhode Island



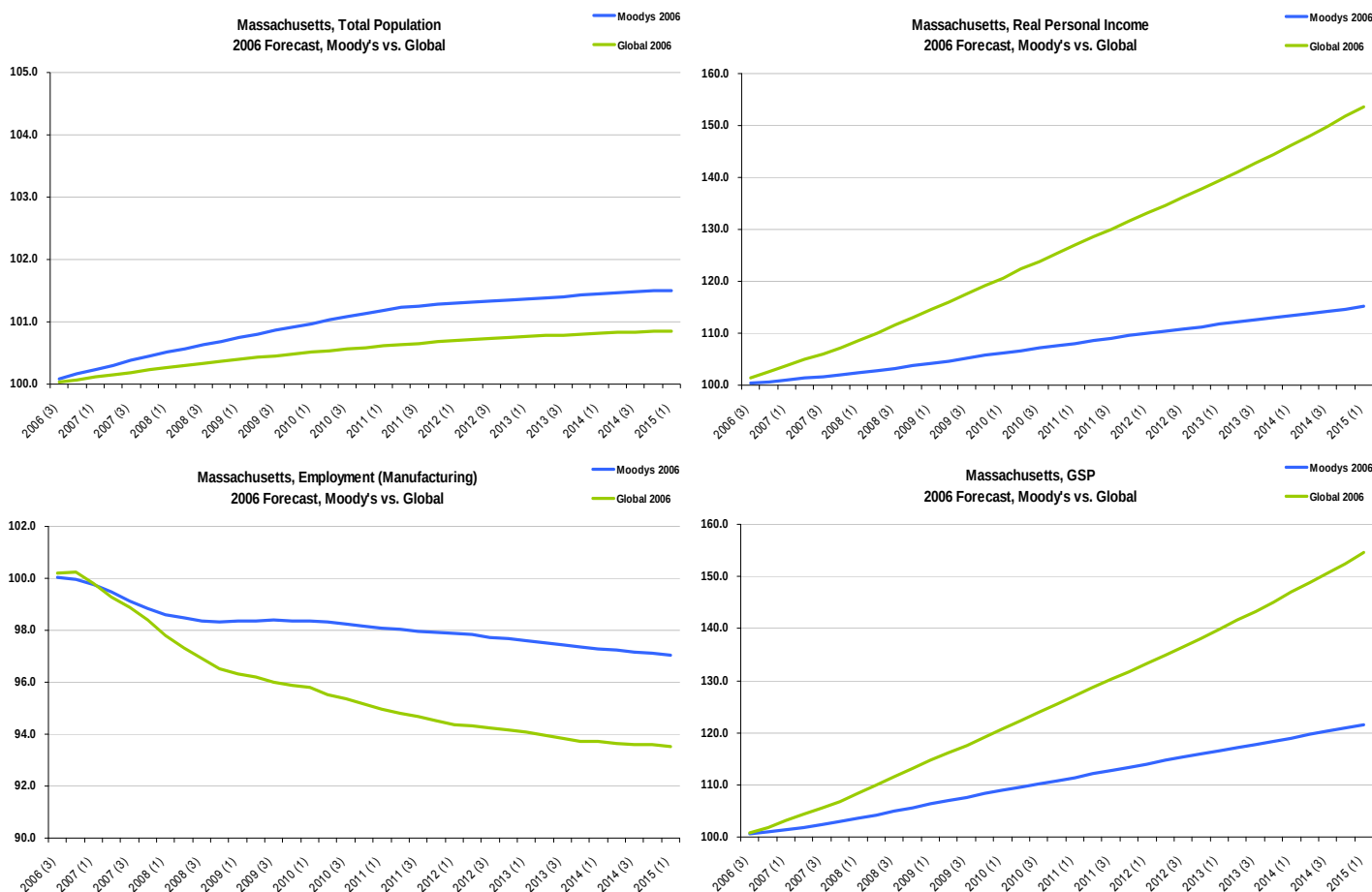
Accuracy Graphs Global– Rhode Island



2006 Forecast Graphs New York City, MSA, Q2 2006 – Q1 2015



2006 Forecast Graphs Massachusetts, Q2 2006 – Q1 2015



The Moody's Economy.com U.S. State Economic Model System

Steven G. Cochrane

The Moody's Economy.com economic and demographic projections for U.S. states are produced each month with a quarterly frequency large-scale simultaneous econometric model system. This article describes the design of the state model system.

The motivation for building the model system is to provide a state-of-the-art system of simultaneous econometric state models that have enhanced simulation properties and are more compatible in design with the Moody's Economy.com U.S. macroeconomic model. The model system also is designed to allow for web-based client access.

The model system is designed with the following parameters in mind: 1) the models are easy to use; 2) the models are intuitive with real world logic; 3) equation specifications are bottom-up as much as possible; 4) the models produce stable quarterly-frequency forecasts over a 30-year time span; 5) aggregate model behavior tracks the U.S. macroeconomic model; 6) the models incorporate policy levers and are useful for policy analysis and simulation; 7) the models integrate with the existing Moody's Economy.com regional forecast system and detailed databases; and 8) the state models are compatible with the Moody's Economy.com web-based forecasting system. The system requirement of stability through 150 forecast periods was of paramount importance and had an overriding influence on model design and equation estimation.

The state model system is designed to reflect each state's comparative economic advantage, to fully model the unique economic structure of each state, and to account for the effects of macroeconomic assumptions on the individual state

economies. Comparative advantages are estimated through relative business costs and demographic characteristics. State industrial structure is captured through detailed specifications of output and employment by industry. Macro assumptions drive the state models through links to U.S. forecasts of factors such as interest rates, energy prices and global trade.

As with the previous system of state models in use prior to July 2006, there is no mechanism to force state level totals to equal U.S. totals. Constraining the sum-of-states to equal the U.S. total would add a layer of complexity to the forecast process that could potentially produce counterintuitive results. Further, the sum of state totals for most historical economic data series do not add up to national estimates, which are often gathered from different samples or using different methods. Sum of state totals for top line forecast variables, however, are routinely checked during the monthly forecasting process so that differences with the U.S. remain within historical ranges.

Model structure. The new state model system is fundamentally an output-based industry model that is simultaneously interactive with a demographic model. Simultaneity in the models is controlled by the Gauss-Seidel algorithm, which iterates toward a stable solution as determined by pre-selected convergence criteria. In practice the system is very stable—requiring a minimal number of iterations at standard convergence criteria.

In the solution process, output influences employment, employment influences migration, migration influences population, population creates demand

for output, and so on (see Chart 1). Key factors that determine relative state performance within this construct are industrial mix, labor costs, energy costs, tax rates, net migration and other demographic factors.

The major benefit of the output-based structure of the model is that it allows for the inclusion of cost-of-doing business variables and productivity variables as key determinants of output and employment.

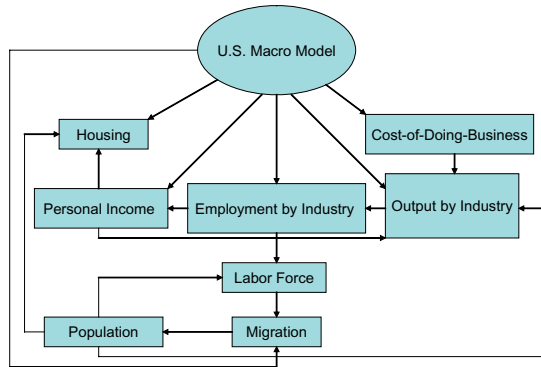
The ability to model the location of industrial output and its subsequent impact on establishment employment is a key feature of this system. It enhances the quality of state output forecasts and makes for a very flexible platform for policy analysis.

Output. The increasingly globalized framework of industrial production makes the locational analysis of production decisions of paramount importance. Capturing the dynamic of industrial location decisions is therefore vital in shaping a long-term regional forecast.

NAICS-based gross state product data from the Bureau of Economic Analysis are used to model industrial output by industry. This approach gains from recent improvements by the BEA in the timeliness of GSP data releases.

In the model system GSP is linked to U.S. GDP through econometric equations that contain a cost-of-doing business (CDB) component. The forecasted CDB component is equivalent to the estimated historical cost-of-doing business structure, which combines a state's labor costs, energy costs, and tax rates, all relative to the U.S. As relative business costs increase in a state, the state's share of industrial output will decrease as businesses seek their lowest cost location.

Chart 1: Flow Chart for State Models, Main Links



Service industry output tends to be driven more by local demand conditions than by national demand and relative business costs. Local demand proxy variables for service industry output include population and personal income.

In forecasting output by industry instead of aggregate output, more forecast control is given to analysts. This also provides more forecast control over the state level detailed databases that allocate gross product down to the four-digit NAICS level of detail.

Labor. Once output is determined, employment by industry is then derived as a function of state level output by industry and U.S. level productivity by industry. This configuration allows for the analysis and manipulation of industry-specific productivity in constructing state forecast scenarios. Employment data by industry are based on data from the BLS's Current Employment Survey and Quarterly Census of Employment and Wages.

During months when employment data are available for the second month of the first forecast quarter, employment series for the first forecast quarter are lined up to the second month of the quarter's employment level. It is assumed that the data for the second month of the quarter are a good estimate of that quarter's average employment level. Forecasters have the ability to make an addfactor adjustment to industry employment if they believe that the second month of the quarter estimate is out of character.

A state's labor force is a function of working age population and the lagged employment-to-population ratio. The

net migration (see Chart 2). Historical total population data are based on Census midyear estimates where the midyear estimates are assigned to the second quarter of the year and then the remaining quarters are interpolated.

Birth rates and death rates are also calculated by state but these variables do not often provide much variability to the population forecast as they typically range only within a narrow band. Birth rate historical data come from the Census Bureau and are forecasted as a function of the U.S. birth rate from the U.S. macroeconomic forecast. State death rate data originate from The Centers for Disease Control and Prevention and are similarly forecasted as a function of the U.S. death rate from the U.S. macro model.

Once aggregate population is established, then population cohorts are determined using cohort shares calculated from state level Census Bureau projections. Typically, the Census Bureau projects population for about 25 years, thus ending prior to the end of our long-term forecasts. Cohort shares are extended through the end of our forecast period at their last Census value. Also, an assumption regarding the distribution of net migration

unemployment rate is a function of the labor force, total employment, and lagged unemployment.

Demographics.

Population growth is a key factor in a state's economic comparative advantage. State population is modeled on an aggregate basis where the key forecast variable is

across age cohorts is made by the Census Bureau in their projections and so that assumption is imbedded in the state population cohort forecasts.

Population flows in response to job availability, retirement, and immigration law are modeled through the net migration equations. Net migration is linked to state job creation and the movement of state unemployment relative to the U.S. rate. As the ratio of state unemployment to national unemployment increases, out-migration to other states will increase.

Net-migration data can be difficult to work with because they are the sum of two time series that can behave independently, namely in-migration and out-migration. Fortunately, the IRS tracks in-migration and out-migration by state and this provides the basis for modeling the two components of net-migration separately. IRS migration ratios were applied to Census net-migration data to estimate in-migration and out-migration series that sum to the historical Census data. These estimated data are the basis for calculating econometric equations for in-migration and for out-migration.

Migration data are also available separated by its domestic and international components. Each state has a forecast equation for net international migration that is based on its historical share of U.S. international migration.

Aggregate households are first forecasted as a function of state population and the U.S. population-to-households ratio, and then the aggregate is shared out into age cohorts. Since the sum of the Census household cohorts

Chart 2: State Models, Demographic Links

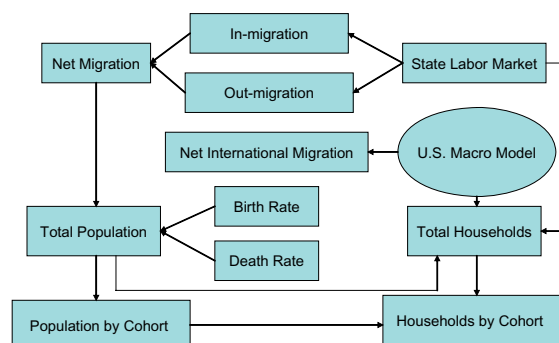


Table 1: Moody's Economy State Model Variable Categories

1. Demographics
– Components of Change
a. Migration
b. Births/Deaths
– Population (incl. age cohort breakdowns)
– Households (incl. age cohort breakdowns)
2. Labor Markets; Gross Product
– Moody's Economy.com Cost of Doing Business Index
– Gross State Product by BLS Supersector
– Industry Employment by BLS Supersector
– Labor Force
3. Income
– Personal Income by component
– Household Income
– Average Earnings/Effective Wage Rate
4. Credit Quality/Banking
– Consumer Credit
– ABA/MBA delinquency rates
– Bankruptcy Filings (Personal & Corporate)
– Bank Deposits
5. Real Estate
– Residential Permits (Nonres. available for CA only)
– Housing Starts
– Housing Completions
– Existing Home Sales
– Mortgage Originations
– Home Prices (NAR & OFHEO)
– Mobile Home Sales
– Rental Vacancy Rate
– Moody's Economy.com Housing Affordability Index
6. Consumer
– Retail Sales
– Vehicle Registrations

The state model system projects two separate measures of house price—the median sales price of single-family homes and the repeat-purchase house price index from OFHEO. The house-price forecasts are driven over the long term by demographic, income, and labor market factors. Proxies for these factors include relative growth of the working age population, disposable personal income, and the unemployment rate. In the near term, house prices are determined by a more complex set of supply and demand factors, which are thoroughly described in *Is the Price Right?* (see *Regional Financial Review*, March 2006, pp. 11-25).

Credit quality. Finally, income and employment trends drive forecasts for several measures of credit quality that are publicly available at the state level. These include personal bankruptcy filings, the dollar volume of consumer credit as estimated by the Federal Reserve, consumer credit delinquency rates from the American Bankers Association and mortgage delinquency rates from the Mortgage Bankers Association. A complete list of all forecast variables is in Table 1.

Equation estimation. Stochastic equations were estimated in EViews using the ordinary least squares technique. Most equations were estimated as panel regressions, where within-state time series data are combined with observations grouped by region. Cross section effects were fixed. Most panel groups were formed with 50 states plus the District of Columbia. Occasionally panels were grouped by Census Region or Division. In panel regressions elasticities on explanatory variables will be constant across states, enhancing the consistency of individual state performance. Variations in state performance will come from the differing mix of industries by state, from differing exogenous assumptions by state, and from differing trends in historical data.

Forecast stability. The state models are used to provide 30-year forecasts of economic and demographic variables that are updated every month. While underlying economic conditions sometimes do change on a monthly basis, state forecasts should not change in a capricious manner. The forecast line-up procedures ensure stability from forecast to forecast. The first step in the monthly forecast cycle is to

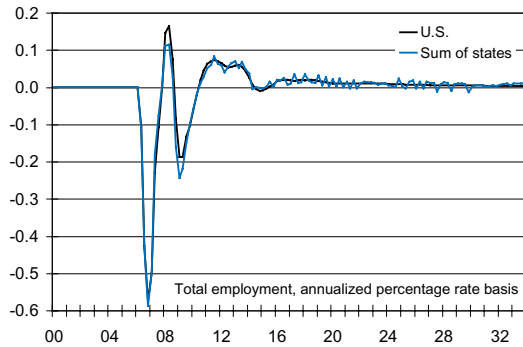
does not total to the currently used household construct, the difference between the sum of the age cohorts and total households is shared back into the cohorts so that households will sum from the bottom up.

Income. The Bureau of Economic Analysis provides quarterly estimates of state personal income by several income categories. Personal income is the link between state employment and demand for consumer goods and services. Wage and salary income makes up the majority of personal income and is directly related to employment levels. In the state models system, wage and salary income is the product of total employment and the

effective wage rate. The historical effective wage rate is calculated as the total wage bill divided by total employment; it is forecast as a function of U.S. average hourly earnings, and state and U.S. productivity. The non-wage components of income are generally functions of their equivalent U.S. concept and state wages and salaries.

Housing. Moody's Economy.com estimates single and multifamily housing permits and starts by state. In the state models, housing permits are driven by labor market conditions and structural demand. Housing starts are a lagged function of permits. Total housing starts feed back into construction output and so are directly linked to construction employment.

Chart 3: Scenario Analysis of State and U.S. Models
Cyclical scenario growth rate minus baseline growth rate



update state level historical data. All forecast series are then lined to the new historical data, keeping the previous month's forecast levels or growth rates as appropriate. New exogenous forecast series from the U.S. model are then brought into the state model and the system is solved simultaneously with no variables excluded. At this point, analysts review the forecast and may make small addfactor corrections. The models are solved again and analysts review the forecast a second time.

Changes to the monthly forecast will come from one or more of three sources. First, new or revised historical data can shift series in the near term. Second, changes to the U.S. forecast on a month-to-month basis will show up in the state forecast. Third, analysts may make changes to the state forecast

based on exogenous information regarding near-term economic trends. Extensive diagnostics are used in the forecast process to ensure that forecasts are stable from month to month and are consistent with states of similar location or economic structure.

Model performance. An important aspect of model performance for the state modeling system is its response to alternative scenarios generated by the Moody's Economy.com U.S. macroeconomic model. A well-behaved response to alternative macro model scenarios is essential for providing forecast risk analysis. It also ensures users that the regional impacts of their macroeconomic scenarios are meaningful.

Chart 3 shows the response of the state modeling system to a cyclical U.S. forecast generated by the Moody's Economy.com U.S. macroeconomic model. The chart shows the difference in total employment growth rates between the baseline scenario and a cyclical scenario for the U.S. macro model and the sum-of-state outputs for the state models.

The change in the state models tracks the change in the U.S. model

very closely through the scenario when there is a rapid divergence away from the baseline total employment growth rate in the first quarter of 2006. The peaks in divergence for both model systems occur at the same periods and are very close in magnitude. The growth rate difference for the U.S. model converges back to a small and stable delta value after about 40 forecast periods. The state models track this convergence.

Scenario analysis. The Moody's Economy.com state models are designed to provide a useful and flexible platform for state-level scenario analysis. The models can be used to determine aggregate economic impacts of events such as plant openings and closings, changes in state business costs, changes to immigration law, disasters, and so forth. Also, the forecast series from state level scenarios can be used as exogenous inputs to the 379 U.S. metropolitan area models.

Web-based access. Like the U.S. macroeconomic model, the system of state econometric models can be accessed through the Moody's Economy.com web-based interface. The interface allows users to design macroeconomic scenarios with the U.S. model and then use the output of their U.S. scenarios as exogenous inputs for state-level scenarios with the state models. The web-based system of state models has exactly the same forecasting and simulation properties as the models used to generate the monthly economic and demographic forecasts.