

Regulating Electricity, Promoting Our Energy

# INTEGRATED RESOURCE PLAN FOR ELECTRICITY - DEMAND FORECAST

# DECISION

Document Ref: 2009/003/D-01

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#### **INDEPENDENT REGULATORY COMMISSION**

### Decision

# **Electricity Supply Act 2006**

This document sets out the Decision of the Independent Regulatory Commission **2009/003/D-01 – "Integrated Resource Plan for Electricity – Demand Forecast"** - taken by the Commission at its meeting on July 29, 2009.

Effective date: July 29, 2009

By Order

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On Behalf of the Commission

July 29, 2009

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#### 1.0 Introduction

The Commission issued Consultation Document 2009/003/CD-01, **Integrated Resource Plan for Electricity – Demand Forecast**, setting out its thinking on the Demand Forecast that had been prepared by DOMLEC. The Demand Forecast is such a critical element to the Integrated Planning Process that the Commission is of the view that consensus on the forecast is needed if the IRP itself is to be credible.

The document was circulated to critical stake holders in government, industry and commerce who were invited to a roundtable face to face consultation on June 30<sup>th</sup> 2009.

This is the first of the consultations in the process of developing the IRP, the procedure for which is set out in the Commission's proceeding, **Regulatory Policy and Procedure** - **Adding Capacity to the Public Electricity Supply System**, Document Ref: 2008/002/D and reproduced in the Consultation Document for this proceeding.

The Commission is mindful that the Government is developing an overall energy policy as well as a specific policy to address the development of renewable energy. Initiatives are also ongoing to develop Dominica's geothermal resources for electricity production, a matter for which the policy and legal framework also has to be crafted. With this background of policy uncertainty the Commission has concluded that it is difficult to set meaningful strategic regulatory policies and procedures relating to the addition of significant blocks of generating capacity to the public electricity supply system. It is however important that planning process be completed such that the system requirements are known in order to facilitate decisions for the timely introduction of appropriate blocks of capacity to assure the objective of minimizing electricity costs to end users.

The critical input to the Integrated Resource Plan (IRP) and/or a Generation Expansion Plan (GEP) is the demand forecast as this will drive the decisions and timing for adding capacity. If the forecast is conservative a shortage of capacity could lead to suboptimal capacity additions while a more aggressive forecast could lead to overinvestment – both scenarios therefore having a deleterious impact on prices to consumers.

The Commission raised a number of issues in the Consultation Document that were intended to stimulate discussion and forge consensus. The feedback garnered however suggest that the methodology used by and the approach of DOMLEC to preparing the demand forecast has produced reasonable results in the past and there is therefore a measure of confidence in the results. The Commission now sets out its Decision on the Demand Forecast for electricity supply.

#### 2.0 Decision

#### **Decision 1.0**

The Commission has adopted and now approves DOMLEC's five year demand forecast as under:

	2009	2010	2011	2012	2013	5-yr Avg
Domestic	1.6%	1.0%	2.0%	1.0%	1.5%	1.4%
Commercial	2.7%	5.0%	4.0%	5.0%	4.5%	4.2%
Industrial	9%	6.0%	4.0%	2.0%	5.0%	5.2%
Hotel	-12.9%	8.9%	-3.0%	-5.0%	2.0%	-2.0%
Street Lights	2.7%	3.0%	3.0%	3.0%	3.0%	3.0%
Growth	2.4%	3.3%	2.9%	2.7%	3.1%	2.9%

#### Table 2.1 DOMLEC's Demand Forecast

#### **Decision 2.0**

In keeping with the procedure for Integrated Resource Planning, DOMLEC will update the forecast annually taking immediate prior year outturn into account.

#### 3.0 Reasons

#### 3.1 Policy and Legal Framework

#### **Policy Framework**

The Commission is mindful that the Government is developing an overall energy policy as well as a specific policy to address the development of renewable energy. The Electricity Supply Act 10 of 2006 (the Act), however, was enacted relatively recently and there are very clear signals, which should still be relevant, as to the government's policy on key issues that face the sector. The Act provides some guidance as to the overarching policy objectives which speak to:

- Competition in the delivery of services, if feasible
- Cost reflective pricing of service
- Promotion and exploitation of renewable energy resources
- Protection of consumers
- System expansion based on sound investment planning
- Due regard for renewable sources in system development.

In seeking to achieve these objectives, the Act supports a policy for the unbundling of and competition in the three service sectors of generation, transmission and distribution and supply, if feasible.

#### Legal Framework

The Act provides the legal underpinnings for the regulatory process. S. 19 provides for the powers of the Commission:

The Commission shall have sole and exclusive authority to regulate all electricity entities that are subject to this Act and shall have full powers to regulate licencees with regard to all economic and technical aspects of regulation in accordance with this Act especially with regard to tariff or electricity charges.

S. 20. 1 prescribes the general duties of the Commission:

The Commission shall, without limiting the generality of this section, have a duty to perform and exercise its functions and powers under this Act which it considers best calculated to:

- (a) encourage the expansion of electricity supply in Dominica where this is economic and cost effective and in the public interest;
- (b) encourage the operation and development of a safe, efficient and economic electricity sector in Dominica;
- (c) ensure the security and efficiency of supply of electricity in Dominica through the conduct of an efficient long – term supply planning process with due regard to future potential generation sources such as geothermal and wind energy;
- *(d) facilitate the promotion of fair and sustainable competition in the electricity sector where it is efficient to do so;*
- (e) protect the interests of all classes of consumers.... as to the terms and conditions and price of supply;
- (f) ensure the availability of health and safety guidance in relation to electricity supply to the public;
- (g) ensure that the financial viability of efficient regulated undertakings is not undermined;
- (h) facilitate the collection, publication and dissemination of information relating to standards of performance by licensed operators and for the electricity sector in Dominica for use by the electricity industry and consumers and by prospective investors in the sector; .....

#### 3.2 The Planning Process

Section 20. (1) (c) of the Act provides a duty for the Commission to "ensure the security and efficiency of the supply of electricity in Dominica, through the conduct of an efficient long term planning process with due regard for future potential generation sources such as geothermal and wind energy". There are basically two elements to the planning process first the preparation of an Integrated Resource Plan (IRP) followed by a Least Cost Expansion Plan (LCEP). The first step in this process, however, is to agree on system planning parameters. These are critical as the decisions taken will influence system reliability and investment dollars which ultimately translates into the tariff.

#### (1) Integrated Resource Plan

The Integrated Resource Planning process will:

- provide energy forecast and demand forecast;
- identify the gap in base, intermediate and peaking capacity;
- identify the time in which new capacity is required;
- identify the schedule for retiring assets; and
- identify the performance and constraints of the transmission and distribution network.

The IRP will identify the specific projects required to fill any gap between forecasted demand and supply. It will not initially specify technology types, unit size, or similar details. If a competition is held inputs received from that process will establish, ex-post, the least cost options. If a competition is not held the Least Cost Expansion Plan will inform the decision making.

The IRC will review the IRP prepared by the utility to ensure the veracity of the techniques and associated data used to identify investment opportunities, as well as ensuring that the results faithfully reflect the outcomes of the utility's modeling.

(2) Least Cost Planning

While the IRP will identify the long run development needs for the system and investment opportunities for power producers the Least Cost Expansion Plan produces more granular results and selects the technology of the plant to be added in by modeling various scenario and selecting the least cost options for the assumptions made. This process is important particularly if generation is to be added without the benefit of competition. It also serves as a useful barometer for analyzing the options that result from a competition.

The Commission has adopted the procedure outlined at Table 3.1 for the preparation of the IRP/GEP.

Step	Activity
1	IRC and DOMLEC agree on the system planning parameters; these are codified
2	IRC and DOMLEC agree on the assumptions to input into the IRP/Demand Forecast
3	DOMLEC prepares a draft IRP and submits to the IRC
4	IRC reviews plans but simultaneously makes public for a consultation (the government's views will be important at this stage so that it can provide inputs based on its known policies or other economic planning goals.
5	IRC reviews the results of the consultation incorporate these into feedback to the DOMLEC
6	DOMLEC adjusts the plan to reflect the feedback from the IRC and resubmits.
7	IRC approves and make public.

#### Table 3.1 The Planning Process.

#### 3.3 The Demand Forecast

DOMLEC's Demand Forecast is attached as Appendix 1.

#### Highlights

DOMLEC forecasts that overall, the average long term annual demand is expected to grow at 2.9% over the five years period 2009 – 2013 (see Table 4.1).

Table 3.2 DOMLEC's Demand Forecast

	2009	2010	2011	2012	2013	5-yr Avg
Domestic	1.6%	1.0%	2.0%	1.0%	1.5%	1.4%

Commercial	2.7%	5.0%	4.0%	5.0%	4.5%	4.2%
Industrial	9%	6.0%	4.0%	2.0%	5.0%	5.2%
Hotel	-12.9%	8.9%	-3.0%	-5.0%	2.0%	-2.0%
Street Lights	2.7%	3.0%	3.0%	3.0%	3.0%	3.0%
Growth	2.4%	3.3%	2.9%	2.7%	3.1%	2.9%

#### Forecasting Methodology

DOMLEC states that it uses a combination of historical data and market research to develop its forecast. It gathers data from agencies such as the Physical Planning Corporation, Invest Dominica and interpolations from the national budget. It also consults with large customers to garner information on investment plans.

DOMLEC notes that demand grew at an average 3.3% over the previous 5 years although in 2005 the rate of growth in demand fell by 66.4%. It attributes the growth in part to successful implementation of its Revenue Protection and Loss Reduction Strategy.

The company notes that all sectors have recorded growth in March 2009 when compared with April 2008 and that the primary growth areas have been in the Industrial and Hotel sectors. It ascribes improved system reliability as a factor in the increased demand in the Industrial sector.

#### Opportunities for Growth

DOMLEC offers the following as factors that will influence demand in the upcoming period:

- Continued improvement in system reliability leading to increased business customers' confidence
- New housing construction as part of the "Housing Revolution Project"
- Some expansion in the hotel sector towards 2012
- Energy conservation by Domestic customers responding the impact fuel price volatility on tariff
- Uncertainty in the uptake of self generation opportunities

#### Economic outlook

The following is a summary of DOMLEC's considerations;

- Despite its recovery since Hurricane Dean in 2007, the changes in the global environment is likely to impact negatively on the banana sub sector which may result in a weakening demand for electricity by the agricultural sector generally.
- If Government's plans to reenergize the off –shore sector materializes there may be strong demand for electricity due to increased air conditioning load and usage

of electronic equipment. This may be impacted, however, by the speed with which the Government is able strengthen its regulatory framework for compliance with OECD policies.

- The impact of the global financial crisis along with the decline in purchasing power will result in cutbacks in consumer spending for consumer goods and social activities translating in contraction in economic activity.
- In the short term demand is expected to be moderate increasing by 2.8%. Demand is expected to be higher than the long term average in 2010 as a result of the general election which is constitutionally due and typically there is increased economic activity during such periods.
- Even as an average 2.9% growth is projected, uncertainty over the implementation of some planned major developments makes it difficult to project these impacts on demand.

#### 3.4 Consultations

The Commission raised a number of consultation issues and offered its own comments on DOMLEC's submission. These are considered below.

The Commission notes that in 2003, growth in kWh sales was – 2.30% but over the five year period 2004 to 2008 the average annual growth rate was 3.3%. Table 3.3 provides a summary of the growth over the six year period 2003 to 2008.

It is interesting to note that despite the impact of increased fuel prices, all sectors reported growth in 2008. While the Commission would expect to see some elasticity in demand with fuel prices (and therefore billed price of electricity) in overall terms the demand growth in 2008 does not seem to reflect this.

The question of the potential for growth in the housing (domestic) sector has been touched on by DOMLEC but it is not clear what inputs has gone into the projections for the other sectors. For instance the hotel sector is projected to decline over the five year period – what are the specific indicators leading to this conclusion? The Commission did not receive any specific responses to this comment, but suffice it to say that the consultation confirmed that DOMLEC had in fact consulted with the relevant stakeholders and there was no apparent disagreement with the result.

Energy Sold (kWh x 1000)	2008	2007	2006	2005	2004	2003
Domestic	34,051	33,732	34,176	33,492	33,062	32,942
Commercial	30,278	28,788	26,469	24,993	24,017	21,669
Industrial	6,004	5,600	5,357	5,504	5 <i>,</i> 508	4,354
Hotel	2,028	2,002	2,439	2,649	2,704	2,473
Lighting	0	1	0	1	1	2
Street Lighting	1,325	1,298	1,130	1,150	1,127	1,295
Total	73,686	71,421	69,571	67,789	66,419	62,735
Growth (%)	3.20	2.70	2.60	2.10	5.90	-2.30

# Table 3.3DOMLEC Electricity Sales (kWh) 2003 - 2008

DOMLEC makes the comment that to some extent the growth rate over the period 2004 to 2008 could be attributed to the successful implementation of its Revenue Protection and Loss Reduction Strategy. Table 3.4 provides detail of DOMLEC's reported system losses over the period while Figure 3.1 provides a correlation between growth rate and system losses over the same period.

# Table 3.4DOMLEC System Losses 2003 - 2008

Losses	2008	2007	2006	2005	2004	2003
Losses (% of Gross Generation)	12.10	13.70	15.10	17.10	14.30	17.90
Losses (% of Net Generation)	12.50	14.10	15.50	17.30	14.50	18.20

The Commission is of the view that any impact on kW Demand growth rate by this programme would be minimal as the demand would be agnostic of the conversion of non paying customers to legitimate customers. There may be some impact on energy (kWh) sales though as energy produced is transferred to from losses to sales.



While the Commission would agree that with a small economy and public electricity supply system such as Dominica's it would be unnecessary to construct complex forecasting models at significant expense, it believes that consideration if not correlation of electricity demand with some the key economic indicators would add some rigour to the analysis e.g. Gross Domestic Product (GDP), changes in Consumer Price Index (CPI). Table 3.5 and figure 3.2 shows the movements of these indicators over the period 2003 – 2008.

Table 3.5kWh/kW growth and changes in GDP and CPI

Year	2003	2004	2005	2006	2007	2008
Growth (%) Sales (kWh)	-2.30	5.90	2.10	2.60	2.70	3.20
Growth (%) Peak Demand (kW)	-0.90	2.10	8.90	0.70	0.20	1.10
GDP*	2.18	6.28	3.37	5.15	3.43	3.44
Change in CPI* * Source ECCB	1.45	2.39	1.68	2.6	3.16	5.04

Changes in energy demand tend to lag economic performance but in DOMLEC's case it is difficult to make any such correlation. The Commission is of the view though that in the circumstances there is no compelling factor to suggest that other than a general steady but modest growth in demand for electric energy will continue in tandem with continued modest growth in the economy over time.



While the discussion has been specifically related to energy (kWh) sales growth, the relationship to growth in Demand (kW) has not been specifically addressed. Although this will lead to the process for capacity planning in terms of strategies to meet maximum demand, it would be useful to make the correlation as growth in energy sales (or for that matter energy produced) is not necessarily proportionate to growth in peak demand. Table 3.6, which provides DOMLEC's reported peak Demand over the period 2003 to 2008 illustrates the point.

Table 3.6DOMLEC Peak Demand 2003 - 2008

	2008	2007	2006	2005	2004	2003
Peak Demand	14,663	14,501	14,467	14,368	13,190	12,923
Growth (%)	1.10	0.20	0.70	8.90	2.10	-0.90
Load Factor (Av kW/Peak KW)	0.68	0.68	0.67	0.66	0.68	0.68

Figure 3.3 shows the Peak Demand (kW) and Energy Sales (kWh) for the comparative periods.



The Commission has not been able to fully rationalise the variations in the demand and energy but takes note of the following for the years 2004 and 2005:

- 2005 was reportedly the hottest year in twenty two years and reflected in the highest demand on the DOMLEC system,
- Energy sales, at 67,789 kWh in 2005, were the highest then recorded (although reflecting only 2.1% growth over the previous year).
- Energy sales in 2004 increased by 5.9% over the previous year although energy produced (gross generation) increased by only 1%.
- Losses as a %age of gross generation improved by 3.6%. The impact of the loss reduction programme probably accounts for this when noting that gross generation increased by 1% in 2004 over 2003.
- Both energy and demand growths seem to be levelling off since 2007 and the DOMLEC forecast appears to be confirming this trend.
- The impact of Hurricane Ivan on economic activity in Dominica may have impacted on energy sales in late 2004 through the first quarter of 2005.

### 3.5 Conclusions

The consultations have not introduced any new information which the Commission feels should be factored into the development of the forecast. In fact, every indication is that the stakeholders believe that thus far the DOMLEC forecast have been credible. The Commission has itself questioned certain aspects of the forecast methodology but subsequent analysis has not persuaded the Commission that the forecast is flawed. The Commission therefore approves the forecast as submitted by DOMLEC.

## 4.0 Attachment 1 - DOMLEC's Demand Forecast

#### **Demand Forecasting Methodology**

Domlec uses a combination of historical data and market research to project demand. The long term growth rate is a significant indicator of where demand is projected. The average growth rate over the last five years is combined with current market conditions to estimate the potential market growth.

Secondary data gathered from the relevant public sector agencies such as the Physical Planning Corporation, provides an indication of approved planning permits during the year and likely construction date and scope of operations. Invest Dominica Authority is a good source of information about government and private sector projects although the information is generally lacking in terms of energy consumption data. The national budget is also a critical source of information about government's development plans, especially in the areas of housing and industries.

Private sector agencies such as the Dominica Hotel and Tourism Association and Dominica Association of Industry and Commerce are a good source of information about potential business expansion and new opportunities. The company also consults with several large customers across all customer classes to gather information about their investment plans. DOMLEC DEMAND FORECAST FOR THE PERIOD 2009 – 2013

#### **Historical Trend**

Energy demand has grown at an average rate of 3.3% over the last five years. The growth rate in demand fell sharply in 2005 by 66.4%. In 2004 the demand for electricity increased by 5.9% compared with only 2.1% in 2005. The growth in demand over the last five years (5) can in part be attributed to the successful implementation of a Revenue Protection and Loss Reduction Strategy. In fact, the company reported it lowest ever system losses of 12.5% in 2008.

#### **Current Market Conditions**

Demand for electricity increased significantly during the month of March 2009. Overall demand increased by 7.9% this month compared with April 2008. All sectors reported growth which ranged from a minimum of 4.7% in the Commercial sector to a maximum of 45.4% in the Hotel sector. The extraordinary growth in the Hotel and Industrial sector is attributed to the high level of load shedding which occurred in April 2008, which forced Ross University, our largest single customer, to self generate. Ross University's demand increased by 108,100 kWh over April last year largely because of the increased energy consumed at their warehouse. This accounts for 79% of the growth in the Industrial Sector for April.

The Hotel sector continues to perform better than last year, demand increased by 45.4% over April 2008. This is because Fort Young Hotel is back on the grid. For the greater part of 2008, the Fort Young Hotel self generated. It is therefore not surprising that Fort Young Hotel accounts for 43,800 kWh or 89% of the increase in the sector for April.

The current global economic crisis has caused a fall in demand for oil and, as a consequence, fuel prices are lower than they were at the same time last year. Fuel prices for April increased slightly from \$5.32/IG to \$6.07/IG, whereas fuel prices dropped considerably when compared with \$10.86/IG in April last year. At the same time, the Fuel Surcharge rate increased from 20.09 cents/kWh in April to 22.54 cents/kWh in May or by 12.2%. Over the last two months, we have witnessed an increase in fuel surcharge and we predict this trend is likely to continue as there are indications that some larger refineries are shutting down for maintenance and demand may be getting stronger because the recession is not as deep as earlier forecast.

See graph below for details.



The graph below shows sales trends for the year to date and monthly budget projections for 2009.



For the year to date, demand increased over the same period last year by 6.2%. This is reflected across all sectors. The primary growth areas however, have been in the Industrial sector of 29.6% and Hotel sector of 20.7%. Two factors contributing to this increase is the lower fuel surcharge, improved reliability of supply and less self generation by business customers. It is already mentioned above how improved reliability is responsible for the significant increased demand in the Industrial sector.

System loss of 12.4% for this month (April) represents a slight increase over the previous month. System loss is below the level achieved for 2008 of 12.5% of Net Generation. For the year to date, system loss is 11.5%, level with the target for 2009. Due to delays in the implementation of the AMI project, only little progress has been made in reducing



non-technical losses so far this year. Over 3,500 AMI electronic meters will be installed in the capital city by year end. See the graph for further details.

#### **Opportunities for Growth**

We believe that the negative impact of higher energy cost and widespread self generation which dominated the market for the greater part of 2008 is over and the market has now stabilized. Domestic consumers are very price sensitivity and will respond quickly by conserving energy at the slight indication of overall price increase, and this will put a downward pressure demand. Improvement in reliability due to investment in new generation plant has increased business customers confidence. Government has announced plans for the construction of a number of new houses as part of a "Housing Revolution Project". The impact of this project will be mild to moderate in the Domestic Sector assuming an average monthly <u>net</u> increase in consumption of 150kWh for each of the projected 500 households.

Our research indicates that while there has been discussion about new construction in the hotel sector, there are no definite plans for new construction in the immediate short term. We believe that during the next five years, most likely 2012, there will be some expansion in the hotel sector in response to planned enhancement of Melville Hall Airport, to include night landing. What is uncertain is whether amendments to the Electricity Supply Act will allow widespread self generation.

#### Competition

There are growing signs that the largest customers are becoming increasing dissatisfied with the high tariffs and they are of the opinion that it is more cost effective to self generate. In fact, even government agencies are evaluating options in that respect. Given that about 12% of our customers' accounts for about 60% of our revenue, this is a very serious competitive threat, which could significantly reduce our market share. If this trend were to continue, Domlec would become less cost effective, as diseconomies of scale would be experienced.

In the recent past, customers have been enquiring about how they can produce their own power. Some are seeking authorization to self generate and others want to find out their rights to use alterative sources of power such as wind and solar for private use. These sources of renewable energy are becoming increasingly more attractive due to rising fuel prices.

#### **Economic Outlook**

The passage of Hurricane Dean in 2007 caused a major setback to the economic recovery process. The agriculture sector was the hardest hit. The recovery process has been fairly short for the banana sub-sector; production has increased steadily. At the moment, structural changes in the sector are the greatest threat to its successful recovery. The agriculture sector, in particular bananas, is a major contributor to the economy, and therefore, the current state of affairs (conflicts between the key players) of the industry is reflected in the weak performance of the domestic sector for electricity. It is likely that changes in the global environment will further depress banana production and cause greater uncertainty about the prospect for the local industry.

Given the trend of continuous decline in the banana sector, there is little scope or hope for sustainable income generation from this industry. Recent changes in production standards such as Euro-GAP Certification have made it increasingly difficult for our farmers to be competitive on the international market and there are no tangible plans for the expansion of the local agro-industry.

In the 2006/2007 national budget, the government announced plans to re-energize the offshore sector, there is likely to be strong demand for electricity from this sector because of its heavy usage of air conditioning and electronic equipment. It will however take some time, likely two – three years to get the necessary regulatory framework in place to ensure compliance with OECD policies. The OECD is seeking to strengthen regulatory policies aimed at reducing money laundering and eliminating tax havens for offshore financial service companies. There is no doubt that this will further contract the sector as businesses will be forced to relocate to more attractive markets in search of and to maintain a competitive tax advantage.

The trend over the past twelve months of rising fuel prices has caused the cost of living to escalate to levels unprecedented in recent times. This has resulted in a financial crisis the like of which we have not seen since the great depression of the 1930s. Given the sharp decline in purchasing power, consumer spending is expected to decline. Purchases of goods such as electronic items will be deferred, social activities will be cut back, and this will translate into a contraction of economic activity.

In the short term, demand is expected to be moderate; increasing slightly by 2.86%. This is below the long term average of 3.3% and will be driven primarily by an average of  $3_{\star}9\%$  growth in the Commercial and 6.3% growth in the Industrial Sectors over the next three years. In 2010, demand is projected to increase above the long term average because general election is constitutionally due in 2010 and typically there is increased economic activity associated with such political events as the government usual rushes to complete ongoing projects.

Beyond 2010, demand is projected to increase by an average 2.9% annually for the balance of the projected period. Uncertainty about whether any of the planned major developments such as hotels etc. will be connected to the grid, makes its difficult to accurately project their likely impact. It is possible Domlec will be used as standby, which means a new tariff regime would have to be developed to address this new environment.

Overall, the long term demand is expect to increase on average, annually by 2.9% over the next five years. See tables below for details.

<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>5-yr Avg</u>
1.6%	1.0%	2.0%	1.0%	1.5%	1.4%
2.7%	5.0%	4.0%	5.0%	4.5%	4.2%
9.0%	6.0%	4.0%	2.0%	5.0%	5.2%
-12.9%	8.9%	-3.0%	-5.0%	2.0%	-2.0%
2.7%	3.0%	3.0%	3.0%	3.0%	3.0%
2.4%	3.3%	2.9%	2.7%	3.1%	2.9%
	1.6% 2.7% 9.0% -12.9% <u>2.7%</u>	1.6% 1.0%   2.7% 5.0%   9.0% 6.0%   -12.9% 8.9%   2.7% 3.0%	1.6% 1.0% 2.0%   2.7% 5.0% 4.0%   9.0% 6.0% 4.0%   -12.9% 8.9% -3.0%   2.7% 3.0% 3.0%	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2009 2010 2011 2012 2013   1.6% 1.0% 2.0% 1.0% 1.5%   2.7% 5.0% 4.0% 5.0% 4.5%   9.0% 6.0% 4.0% 2.0% 5.0%   -12.9% 8.9% -3.0% -5.0% 2.0%   2.7% 3.0% 3.0% 3.0% 3.0%   2.4% 3.3% 2.9% 2.7% 3.1%