
Review of DNSP Demand Forecasts

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Overview of presentation

- **Background**
- **DNSP and MMA comparison**
- **DNSP and other comments and concerns**
- **Discussion**

What was MMA asked to do?

- Independent review of demand forecasts put forward by the DNSPs
- Customer numbers
- Energy
- Maximum demand
- For the 2004 to 2009 regulatory period
- Forecast

Basis of Review

Were the:

- Approach
- Assumptions
- Balance between recent trends and key drivers
- Application of methodology

“the best that could reasonably be expected”?

DNSP: historical versus forecast, residential load growth

Residential demand	1998-2003*	Forecast 2003-2009
EnergyAustralia (EA)	2.8%	1%
Integral Energy (IE)	2.1%	2.5%
Country Energy (CE)	6.3% (??)*	1.7%
Australian Inland (AI)	??	1.4%

DNBP: historical versus forecast, Non-residential load growth

Non-residential demand	1998-2003*	Forecast 2003-2009
EnergyAustralia (EA)	3.1%	2.3%
Integral Energy (IE)	1.2%	2.3%
Country Energy (CE)	-2% (??)*	1.7%
Australian Inland (AI)	??	0.8%

Initial MMA conclusions

- Methodologies inadequate in some cases
- Results suspect in some cases
- Need for MMA forecast

MMA methodology

- *Residential: Customer Numbers*, government forecasts plus history
- *Residential: Average Usage*, taking into account history plus key drivers
- *Non-residential: Relationship with GSP* – demonstrated by EA, average for others, independent standard NIEIR GSP forecasts, consideration of cogeneration
- *Maximum Demand* based on recent trend in actual peak plus movement in key drivers

Residential Customer Numbers

DNSP	Actual growth 1998 – 2003*	DNSP Forecasts	MMA forecasts 2003 to 2009
EnergyAustralia (EA)	1.85%	0.8%	1.6%
Integral Energy (IE)	2.3%	2.1%	1.9%
Country Energy (CE)	1.5% (1996-2001)	1.4% (CE) 1.6% (NIEIR)	1.1%
Australian Inland (AI)	0.2% (1996-2001)	0%	0.1%

Residential average usage

- 2001/02 and 2002/03 were mild years
- Need to weather adjust residential for base year
- Then need to take into account history plus changes due to key drivers
- Factored into appliance model

	Historical	DNISP Forecast	MMA
EnergyAustralia (EA)	1.1% pa	-0.1% pa	0.4% pa
Integral Energy (IE)	0.1% pa	-0.4% pa	-0.1% pa
Country Energy (CE)		0.3% (NIEIR 0%)	0.3% pa
Australian Inland (AI)		1.4%	0.6% pa

MMA approach – Non-Residential

- Strong link between GSP and consumption
- Used independent forecasts of GSP
- For EA available data allowed a relationship to be used with lower elasticity
- For others used the state elasticity of 0.87
- In all cases reduced for increased “own-cogeneration” forecasts

Non-residential forecasts

DNSP	DNSP Forecast 2003* to 2009	MMA forecasts 2003 to 2009
EnergyAustralia (EA)	2.3%	2.3%
Integral Energy (IE)	2.3%	2.5%
Country Energy (CE)	1.7%	2.5%
Australian Inland (AI)	0.7%	1.8%

* Actuals or forecast

Major Concerns – EnergyAustralia

- **Cannot achieve MMA growth (now say can achieve but only because of abnormal weather)**
- **MMA residential customer growth exceeds that achieved in 1996 to 2001. EA's documented customer growth between 1998 and 2003 was 1.85% pa. MMA is forecasting some slow-down from this.**
- **MMA's average usage per residential customer is overstated. MMA says +0.4%, EA says -0.1% pa. But the historical between 1998 and 2001 were actually 1.1% pa growth. EA has never explained why this trend should turn around overnight.**

Major Concerns – EnergyAustralia

- **BASIX is being invoked as a driver.** MMA has already factored this in to some extent with a “comfort factor” half that over the previous period. MMA will look at this driver. It is, at the earliest, to be introduced from 1/7/04.
- **MMA’s non-residential consumption is inappropriate.** We have used EA’s own analysis, graph and elasticity.
- **Residential trend average starting point is too high.** Looking at this, but note overall estimated weather impact is not dissimilar. MMA may reduce average residential but increase non-residential start.

Major concerns – Country Energy

- **MMA did not use the independent and highly rigorous NIEIR forecasts** They may have been independent, they may have been rigorous, but unfortunately they bear no resemblance except in the total to the regulatory accounts or forecasts submitted by Country Energy
- **Regional growth rates should be used, rather than state-wide ones.** MMA has sympathy with this argument. However, CE's forecasts were nothing like NIEIR's.
- Moreover they are nothing like the 2002/03 regulatory accounts which show that in 2002/03, CE non-residential sector grew by almost 11% while the residential sector shrank by 3.5%. CE has criticised MMA for over-estimating non-residential and under-estimating residential

Others

- Integral does not agree with MMA approach and methodology. But given no material difference accepts them as not unreasonable.
- EUA/EAG MMA does not fully factor in air-conditioning growth. MMA is looking at this together with other comments, but does not expect significant changes.

Thank you
Questions and discussion