



Audit of Integral Energy's D-Factor Claim for FY09/10

Final Report to Integral Energy

20 January 2011

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1. Introduction

1.1. SCOPE OF WORK

Integral Energy (IE) commissioned Futura Consulting to audit its justification and claim for recovery of expenses associated with DM programs under the D-factor for FY09/10. Specific issues we were to review in relation to each the DM programs selected by IE for inclusion in its D-factor submission to the AER for FY09/10 were as follows:

- Was there a need for capacity augmentation?
- Did the DM program involve measures and strategies that appropriately targeted the time of peak demand on the network element in question?
- How much money has been expended on the DM programs in FY09/10, and are those costs reasonable?
- What was the value of the deferral to be provided by the DM program, and has this been calculated in accordance with the AER's *Guideline: Calculation of Avoided Distribution Costs*?
- How much revenue has Integral Energy foregone, and has this been calculated in accordance with the AER's *Guideline: Methodology for Estimating foregone Revenue*?

1.2. DATA SOURCES USED

Futura Consulting accessed and cited the following information sources to conduct the review of Integral Energy's Demand Management programs in FY09/10 for the D-factor determination.

- ***D-factor Determination Summary:*** Each program has a summary sheet that briefly describes the DM program or measure, the payments made and the peak reductions achieved.
- ***DM Program Financial Models and Summaries:*** For each DM program, the model calculates the financial effects from the deferral of the supply side option in terms of capital and operational costs. The associated summary provides a supplemental source of information characterising the network constraint in terms of hours and MVA at risk.
- ***Quotes by the Substation Asset Management Technical Officers:*** These quotes are done as a costing step when looking at the preferred supply side option. The costs included have not generally been used as the deferral value because they are done much later than the DM programs are approved. However they have served as another useful source of costing information that informs the reasonableness of the initial cost estimate.

- **Equipment Costing Reference:** This document provides an approximate cost reference for a wide range of augmentation works and hardware that may be required. It is typically used by the network planning group as the first source of cost estimation in developing supply-side options. These are the estimates that are most often available at the time the DM programs are developed and approved, and therefore have generally served as the cost estimates used in developing the ADC Caps in the detailed program reviews later in this report.
- **Strategic Asset Management Plan (SAMP):** The SAMP is a document that forecasts capital expenditure over a rolling 10 year period.
- **Request for Proposals (RFPs) for DM Services:** In some cases, an RFP was issued to solicit proposals for DM program services and measures. These documents describe the constraint, the load forecast, and give indicative program payments available.
- **Customer monitoring and verification data:** Integral Energy provided complete details of monitoring and verification reports for all DM programs.
- **Energy and demand revenue foregone:** Integral Energy provided spreadsheets detailing the calculation of energy and demand revenue foregone for all DM programs.
- **Integral personnel:** Futura also had access to Integral Energy personnel responsible for the DM network planning process, specific asset augmentation plans, and DM program design and implementation experience. These sources were exceedingly valuable in accessing the appropriate information and resolving remaining questions.

1.3. OVERVIEW OF AUDIT FINDINGS

Based on our professional judgement and experience in DM programs for network augmentation deferral, review of the network and program documentation provided by Integral Energy, and detailed discussions with Integral Energy's DM program implementation staff, Futura Consulting concludes that the information provided on each of the DM programs contained in Integral Energy's D-factor claim for FY09/10 is correct.

1.4. PROGRAM BY PROGRAM FINDINGS

Programs implemented by Integral Energy, under the D-factor include:

- Programs implemented (or approved) in FY09/10;
 - Rooty Hill, and Granville;

- Programs operational in FY09/10; and
 - Chipping/Norton, Windsor/Richmond, Parramatta, Liverpool, Minto, and Bawley Point,
- Programs that concluded prior to FY09/10;
 - Castle Hill, Nowra, Wetherill Park, Westmead, Campbelltown, Unanderra, Leabons Lane, and Blacktown Solar Cities.

A summary of Futura Consulting's D-factor audit findings for FY09/10 for each of the programs listed above is presented in tabular form below.

CHIPPING NORTON ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY08/09 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY08/09 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The loads on the Moorebank subtransmission are summer afternoon peaking, and the measures implemented under the Chipping Norton DM program in FY09/10 (power factor correction) adequately addressed the season and hours of this constraint

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Chipping Norton DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$178,104	Review of invoices presented by IE confirms the payments to DM consultants and customers were correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$179,156	The total DM costs claimed are correct

The costs associated with the Chipping Norton DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY08/09	Audited in FY08/09 - not included in the present review
Deferral period	1 year	Audited in FY08/09 - not included in the present review
ADC in reference year (\$k 08/09)	\$1,109	Audited in FY08/09 - not included in the present review
DM costs prior to FY09/10 (PV) (\$k 08/09)	\$88	The DM costs prior to FY09/10 are correct

CHIPPING NORTON ZS

Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$1,124	The maximum allowable cost recovery in FY09/10 is correct
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Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone	
Item	Reported Result	Comment
kWh Reduction	539,134	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (k)	\$11.425	The energy revenue foregone calculation is correct
kVA Reduction	2,033	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone	\$144.926	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff class and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$70.604	Review of IE's spreadsheets of the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct
The estimated additional amount to reflect time value of money is correct		

WINDSOR RICHMOND ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY08/09 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY08/09 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The loads on the ZS are summer afternoon peaking, and the measures implemented and dispatched under the Windsor Richmond DM program in FY09/10 (power factor correction and cogeneration) adequately addressed the season and hours of this constraint

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Windsor Richmond DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$61,596	Review of invoices presented by IE confirms the payments to DM consultants and customers are correct
Independent review of FY08/09 d-factor claim	\$1,052	Windsor Richmond was not part of the Independent review of IE's FY07/08 d-factor claim
Total (ex GST)	\$62,648	The total DM costs claimed are correct
	The costs associated with the Windsor Richmond DM program are correct and reasonable	

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY08/09	Audited in FY08/09 - not included in the present review
Deferral period	1 year	Audited in FY08/09 - not included in the present review
ADC in reference year (\$k 08/09)	\$747	Audited in FY08/09 - not included in the present review

WINDSOR RICHMOND ZS

DM costs prior to FY09/10 (PV) (\$k 08/09)	\$54	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY08/09 (\$k 09/10)	\$762	The maximum allowable cost recovery in FY09/10 is correct

Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
kWh Reduction	75,898	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$2.259	The energy revenue foregone calculation is correct
kVA Reduction	212	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$9.329	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff class and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional Amount to reflect time value of money	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$15.622	Review of IE's spreadsheets of the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect time value of money is correct

LIVERPOOL ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY06/07 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY06/07 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The DM measures implemented in FY09/10, which included CRT monitor upgrades, energy efficiency lighting projects, chiller upgrades, motor controls and upgrades, and curtailable loads and cogeneration in the C&I sector adequately addressed the constraint on the Liverpool ZS

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Liverpool DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service provider and customer payments (ex GST)	\$148,117	Review of invoices presented by IE confirms that the payment claimed is correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$149,169	The total DM costs claimed are correct

The costs associated with the Liverpool DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY06/07	Audited in FY06/07 - not included in the present review
Deferral period	1 year	Audited in FY06/07 - not included in the present review
ADC in reference year (\$k 06/07)	\$858	Audited in FY07/08 - not included in the present review
DM costs prior to FY09/10 (PV) (\$k 06/07)	\$305	The DM costs prior to FY09/10 are correct

LIVERPOOL ZS

Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$737	The maximum allowable cost recovery in FY09/10 is correct
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Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment
kWh Reduction	3,514,338	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$85.280	The energy revenue foregone calculation is correct
kVA Reduction	3,997	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$474.203	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$149.129	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect the time value of money is correct

PARRAMATTA ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY04/05 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY04/05 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The Parramatta ZS is summer peaking, and the measures implemented under the Parramatta I DM program in FY09/10 (power factor correction, curtailable loads in the C&I sector, and energy efficiency improvements to chillers and lighting in the commercial sector) adequately addressed the season and hours of this constraint.

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Parramatta DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service provider and customer payments (ex GST)	\$43,535	Review of invoices presented by IE confirms that the payment claimed is correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$44,587	The total DM costs claimed are correct

The costs associated with the Parramatta DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY04/05	Audited in FY04/05 - not included in the present review
Deferral period	3 years Extended to FY09/10	Audited in FY08/09 - not included in the present review
ADC in reference year (\$k 04/05)	\$5,374 for 5 year deferral	Audited in FY08/09 to reflect the additional 2 years of deferral

PARRAMATTA ZS

DM costs prior to FY09/10 (PV) (\$k 04/05)	\$253	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$8,255	The maximum allowable cost recovery in FY09/10 is correct
Based on Futura Consulting's review, the calculations associated with the ADC cap are correct		

Audit topic area	Energy and demand revenue foregone for FY09/10	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
kWh Reduction	1,885,018	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$56.952	The energy revenue foregone calculation is correct
kVA Reduction	4,117	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$465.639	The demand revenue foregone calculation is correct
Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct		

Audit topic area	Additional amount to reflect time value of money	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$119.357	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct
The estimated additional amount to reflect the time value of money is correct		

MINTO ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY07/08 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY07/08 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The DM measures implemented in FY09/10 (power factor correction, and curtailable loads in the C&I sector adequately addressed the constraint on this network element

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Minto DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service provider and customer payments (ex GST)	\$212,087	Review of invoices presented by IE confirms that the payment claimed is correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$213,139	The total DM costs claimed are correct

The costs associated with the Minto DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY07/08	Audited in FY07/08 - not included in the present review
Deferral period	7 years	Audited in FY07/08 - not included in the present review
ADC in reference year (\$k 07/08)	\$1,838	Audited in FY07/08 - not included in the present review
DM costs prior to FY09/10 (PV) (\$k 07/08)	\$107	The DM costs prior to FY09/10 are correct

MINTO ZS

Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$2,095	The maximum allowable cost recovery in FY09/10 is correct
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Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment
kWh Reduction	699,636	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$16.814	The energy revenue foregone calculation is correct
kVA Reduction	1,897	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$209.080	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$92.390	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect the time value of money is correct

BAWLEY POINT ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY07/08 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY07/08 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The 1,259 kVA back-up generator initially commissioned in FY07/08 to provide additional capacity over the holiday Christmas and Easter holiday periods when the peak demand in the Bawley Point, Termeil and Kioloa areas exceeds the network capacity was re-commissioned for FY09/10. The distributed generation solution adequately addressed the season and hours of this constraint

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Bawley Point DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service providers and customer incentive payments (ex GST)	\$199,980	Review of the internal invoice listing presented by IE confirms that the payment claimed to external DM service providers claimed is correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$201,032	The total DM costs claimed are correct

The costs associated with the Bawley Point DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Reference year	FY07/08	Audited in FY07/08 - not included in the present review
Deferral period	3 years	Audited in FY08/09 - not included in the present review
ADC in reference year (\$k 07/08)	\$1,355 for 3 year deferral	Extended from a 2 year deferral to a 3 year deferral

BAWLEY POINT ZS

DM costs prior to FY09/10 (PV) (\$k 07/08)	\$734	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$752	The maximum allowable cost recovery in FY09/10 is correct

Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic Area		Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment	
kWh Reduction	0	There was no foregone energy associated with the Bawley Point DM program	
Tariff Basis	n/a	n/a	
DUOS Rate(s)	n/a	n/a	
Total energy revenue foregone (\$k)	\$0	n/a	
kVA Reduction	0	There was no foregone demand associated with the Bawley Point DM program	
Tariff Basis	n/a	n/a	
DUOS Rate(s)	n/a	n/a	
Total demand revenue foregone (\$k)	\$0	n/a	
The distributed generation solution did not result in any foregone energy or demand revenue			

Audit topic Area		Additional Amount to reflect time value of money	
Item	Reported Result	Comment	
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$42.305	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct	
The estimated additional amount to reflect the time value of money is correct			

GRANVILLE ZS

Audit topic area	Load forecasts
Network element and constraint	The Granville area has been subject to steady growth since the adoption of the Parramatta City Council LEP 2001 with commercial centres, employment lands, and medium and high rise residential re-development leading to summer afternoon peak loads on the ZS. Based on Futura Consulting's professional judgement and review of Integral Energy's Summer Demand Forecast (SDF) 2010 to 2019, which was the load forecast current at the time of approval of the Granville DM program, the expected load at risk on the Granville ZS was 3.2MVA in FY11/12

Audit topic area	Supply-side augmentation
Description and cost	Based on Futura Consulting's professional judgement and comparison of the information documented in Integral Energy's SAMP with the Network Planning Branches Equipment Costing Reference, the project cost of \$32m for the construction of the 132kV Granville ZS with 2x45 MVA transformer and 132kV subtransmission system is reasonable

Audit topic area	Non-tariff measures implemented in FY09/10
Description	Parsons Brinckerhoff was contracted via a public tendering process in FY09/10 to approach customers, to perform free level 1 audits and to implement approved DM initiatives. The target will be commercial and industrial customers in the Granville ZS catchment who can contribute to load reduction targets on peak summer afternoon days. The audits have successfully identified several DM projects that will be implemented in FY10/11

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Granville DM program
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$0	Review of invoices presented by IE confirms the payments to DM consultants and customers were correct
Independent review of FY08/09 d-factor claim	\$0	Granville was not part of the independent review of IE's FY08/09 d-factor claim
Total (ex GST)	\$0	The total DM costs claimed are correct

There were no costs associated with the Granville DM program in FY09/10

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY09/10	Reflects the approval year and signing of contracts with Parsons Brinckerhoff to conduct the Granville DM program
Deferral period	2 years	Agrees with requirement of the (SDF) 2010 to 2019

GRANVILLE ZS

ADC in reference year (\$k 09/10)	\$885	The calculation of the ADC in the reference year is correct
DM costs prior to FY09/10 (PV) (\$k 09/10)	\$0	The program was approved for implementation in FY09/10
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$885	The maximum allowable cost recovery in FY09/10 is correct

Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
kWh Reduction	0	
Tariff Basis	n/a	
DUOS Rate(s)	n/a	
Total energy revenue foregone (\$k)	0	
kVA Reduction	0	
Tariff Basis	n/a	
DUOS Rate(s)	n/a	
Total demand revenue foregone (\$k)	0	
No foregone energy or demand revenue has been claimed for the Granville DM program in FY09/10		

Audit topic area	Additional amount to reflect time value of money	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$0	n/a
As there was no expenditure in FY09/10, there is no claim for an additional amount to reflect the time value of money		

ROOTY HILL ZS

Audit topic area	Load forecasts
Network element and constraint	Increases in industrial loads coincident with residential conditioning loads air have caused the Rooty Hill ZS to be summer afternoon peaking. Based on Futura Consulting's professional judgement and review of Integral Energy's Summer Demand Forecast (SDF) 2008 to 2017, which was the load forecast current at the time of approval of the Rooty Hill DM program, the expected load at risk on the Rooty Hill ZS was 5.4MVA in FY09/10

Audit topic area	Supply-side augmentation
Description and cost	Based on Futura Consulting's professional judgement and comparison of the information documented in Integral Energy's SAMP with the Network Planning Branches Equipment Costing Reference, the project cost of \$23m for the construction of North Glendenning ZS with 2x45 MVA transformers and 132kV subtransmission system to offload Rooty Hill is reasonable

Audit topic area	Non-tariff and tariff measures implemented in FY09/10
Description	The Rooty Hill ZS is summer peaking, and the measures implemented under the Rooty Hill DM program in FY09/10 (power factor correction and curtailable loads in the C&I sector) adequately addressed the season and hours of this constraint. IE also commenced implementation of an air-conditioner cycling tariff program, and a peak time rebate (PTR) tariff program in the residential sector in FY09/10 to address the constraint on the Rooty Hill ZS

Audit topic area	Breakdown of FY 09/10 non-tariff and tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$15,000	Administrative costs are correct
Marketing (ex GST)	\$4,930	Marketing costs were incurred for the tariff PTR program
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$61,910	Review of invoices presented by IE confirms the payments to DM consultants and customers were correct
Independent review of FY08/09 d-factor claim	\$0	Rooty Hill was not part of the independent review of IE's FY08/09 d-factor claim
Total (ex GST)	\$81,840	The total DM costs claimed are correct

The costs associated with the Rooty Hill DM program are correct and reasonable

Audit topic Area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY09/10	Reflects the first year of expenditure on the DM program
Deferral period	2 years	Agrees with requirement of the (SDF) 2008 to 2017

ROOTY HILL ZS

ADC in reference year (\$k 09/10)	\$1,100	The calculation of the ADC in the reference year is correct (the amount is pro-rata the total ADC of 2,772 (\$k 09/10) reflecting a target level of DM that IE considers to be achievable)
DM costs prior to FY09/10 (PV) (\$k 09/10)	\$0	The program was implemented in FY09/10
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$1,100	The maximum allowable cost recovery in FY09/10 is correct

Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone (Non-tariff measures)	
Item	Reported Result	Comment
kWh Reduction	514	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$0.018	The energy revenue foregone calculation is correct
kVA Reduction	94	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$12.737	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff class and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$19.906	Review of IE's spreadsheets of the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect time value of money is correct

CASTLE HILL ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY04/05 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY04/05 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY06/07 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Castle Hill DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$0	No payments were made to DM consultants or customers
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Castle Hill DM program are correct and reasonable

Audit topic Area	Calculation of avoided distribution cost (ADC)	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Reference year	FY02/03	Audited in FY04/05 - not included in the present review
Deferral period	3 years to FY05/06	Audited in FY04/05 - not included in the present review
ADC in reference year (\$k 02/03)	\$611 for 3 year deferral	Audited in FY04/05 - not included in the present review

CASTLE HILL ZS

DM costs prior to FY09/10 (PV) (\$k 02/03)	\$150	The DM costs claimed prior to FY09/10 are correct
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Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$899	The maximum allowable cost recovery for FY09/10 is correct
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Based on Futura Consulting's review, all calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone for FY09/10	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
kWh Reduction	3,227,222	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone	\$86.753	The energy revenue foregone calculation is correct
kVA Reduction	909	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$108.622	The demand revenue foregone calculation is correct
Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct		

Audit topic Area	Additional amount to reflect time value of money	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$41.336	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct
The estimated additional amount to reflect the time value of money is correct		

NOWRA ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY04/05 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY04/05 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY06/07 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Nowra DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$0	No payments were made to DM consultants or customers
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Nowra DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Reference year	FY02/03	Audited in FY04/05 - not included in the present review
Deferral period	3 years	Audited in FY04/05 - not included in the present review
ADC in reference year (\$k 02/03)	\$435	Audited in FY04/05 - not included in the present review

NOWRA ZS

DM costs prior to FY09/10 (PV) (\$k 02/03)	\$43	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$765	The maximum allowable cost recovery in FY09/10 is correct
Based on Futura Consulting's review, the calculations associated with the ADC cap are correct		

Audit topic area	Energy and demand revenue foregone for FY09/10	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
kWh Reduction	0	All DM measures were power factor correction. There is no foregone energy, as energy is charged on the basis of kWh, which is not affected by power factor correction
Tariff Basis	n/a	
DUOS Rate(s)	n/a	
Total energy revenue foregone (\$k)	\$0	
kVA Reduction	436	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$52.095	The demand revenue foregone calculation is correct
Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct		

Audit topic area	Additional amount to reflect time value of money	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$11.184	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct
The estimated additional amount to reflect the time value of money is correct		

WESTMEAD ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY05/06 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY05/06 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY 09/10
Description	The program was concluded in FY07/08 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Westmead DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$0	No payments were made to DM consultants or customers
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Westmead DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Reference year	FY04/05	Audited in FY05/06 - not included in the present review
Deferral period	2 years	Audited in FY05/06 - not included in the present review
ADC in reference year (\$k 04/05)	\$699	Audited in FY05/06 - not included in the present review

WESTMEAD ZS

DM costs prior to FY09/10 (PV) (\$k 04/05)	\$167	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$858	The maximum allowable cost recovery in FY09/10 is correct
Based on Futura Consulting's review, the calculations associated with the ADC cap are correct		

Audit topic area	Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment
kWh Reduction	5,238,906	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N10	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$34.434	The energy revenue foregone calculation is correct
kVA Reduction	1,811	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N10/N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$142.189	The demand revenue foregone calculation is correct
Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct		

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$37.390	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct
The estimated additional amount to reflect the time value of money is correct		

WETHERILL PARK ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY04/05 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY04/05 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY07/08 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Wetherill Park DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$0	No payments were made to DM consultants or customers
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Wetherill Park DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY03/04	Audited in FY04/05 - not included in the present review
Deferral period	3 years	Audited in FY04/05 - not included in the present review
ADC in reference year (\$k 03/04)	\$2,924 for 3 year deferral	Audited in FY04/05 - not included in the present review

WETHERILL PARK ZS

DM costs prior to FY09/10 (PV) (\$k 03/04)	\$108	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$4,994	The maximum allowable cost recovery in FY09/10 is correct
Based on Futura Consulting's review, the calculations associated with the ADC cap are correct		

Audit topic area	Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment
kWh Reduction	201,822	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$4.103	The energy revenue foregone calculation is correct
kVA Reduction	5,447	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19/N21	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$356.269	The demand revenue foregone calculation is correct
Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct		

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$76.058	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct
The estimated additional amount to reflect the time value of money is correct		

CAMPBELLTOWN ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY05/06 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY05/06 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY08/09 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Campbelltown DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service provider and customer payments (ex GST)	\$0	No payments were made to DM consultants or customers
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Campbelltown DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY05/06	Audited in FY05/06 - not included in the present review
Deferral period	1 year	Audited in FY05/06 - not included in the present review
ADC in reference year (\$k 03/04)	\$515	Audited in FY05/06 - not included in the present review

CAMPBELLTOWN ZS

DM costs prior to FY09/10 (PV) (\$k 03/04)	\$258	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$392	The maximum allowable cost recovery in FY09/10 is correct

Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone for FY09/10	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
kWh Reduction	155,160	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$3.189	The energy revenue foregone calculation is correct
kVA Reduction	1,418	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$171.363	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$36.954	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect the time value of money is correct

UNANDERRA ZS

Audit topic area	Load forecasts
Network element and constraint	Audited in FY06/07 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY06/07 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY08/09 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY09/10 non-tariff program costs	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Unanderra DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service provider and customer payments (ex GST)	\$0	Review of invoices presented by IE confirms that the payment claimed is correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Unanderra DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
<i>Item</i>	<i>Reported Result</i>	<i>Comment</i>
Reference year	FY06/07	Audited in FY06/07 - not included in the present review
Deferral period	2 years	Audited in FY06/07 - not included in the present review
ADC in reference year (\$k 07/08)	\$1,413	Audited in FY06/07 - not included in the present review

UNANDERRA ZS

DM costs prior to FY09/10 (PV) (\$k 07/08)	\$317	The DM costs prior to FY09/10 are correct
Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$1,460	The maximum allowable cost recovery in FY09/10 is correct

Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment
kWh Reduction	93,328	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$1.687	The energy revenue foregone calculation is correct
kVA Reduction	2,415	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$139.800	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$29.996	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect the time value of money is correct

LEABONS LANE ZS (COMMERCIAL AND BLACKTOWN SOLAR CITIES (BSC) NON-TARIFF RESIDENTIAL)

Audit topic area	Load forecasts
Network element and constraint	Audited in FY074/08 - not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY07/08 - not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY08/09 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Leabons Lane (Commercial and Blacktown Solar Cities (BSC) Non-tariff Residential) DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM service provider and customer payments (ex GST)	\$0	Review of invoices presented by IE confirms that the payment claimed is correct
Independent review of FY08/09 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct

The costs associated with the Leabons Lane (Commercial and BSC Non-tariff Residential) DM program are correct and reasonable

Audit topic area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY03/04	Audited in FY04/05 - not included in the present review
Deferral period	Extended to FY09/10	Audited in FY08/09 - not included in the present review
ADC in reference year (\$k 03/04)	\$986	Audited in FY07/08 - not included in the present review
DM costs prior to FY09/19 (PV) (\$k 03/04)	\$399	The DM costs prior to FY09/10 are correct

Leabons Lane ZS (Commercial and Blacktown Solar Cities (BSC) Non-tariff Residential

Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$1,042	The maximum allowable cost recovery in FY08/09 is correct
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Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone for FY09/10	
Item	Reported Result	Comment
kWh Reduction	1,495,260	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N19/N29/N70	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$95.914	The energy revenue foregone calculation is correct
kVA Reduction	4,857	Review of monitoring and verification data presented by IE confirms that the measured demand foregone is correct
Tariff Basis	N19	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total demand revenue foregone (\$k)	\$109.102	The demand revenue foregone calculation is correct

Based on review of the customer monitoring and verification data, in combination with the customer's tariff classes, and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$43.365	Review of IE's spreadsheets for the additional amount for equivalent recovery in Year t+1 (\$k) confirms that the calculation is correct

The estimated additional amount to reflect the time value of money is correct

BLACKTOWN NORTH / MARAYONG ZS (BSC NON-TARIFF RESIDENTIAL)

Audit topic area	Load forecasts
Network element and constraint	Audited in FY07/08 – not included in the present review

Audit topic area	Supply-side augmentation
Description and cost	Audited in FY07/08 – not included in the present review

Audit topic area	Non-tariff measures implemented in FY09/10
Description	The program was concluded in FY08/09 and no DM measures were implemented in FY09/10

Audit topic area	Breakdown of FY 09/10 non-tariff program costs	
Item	Reported Result	Comment
Program set-up (ex GST)	\$0	No set-up costs were incurred
Administration (ex GST)	\$0	No administrative costs have been claimed for the Blacktown North / Marayong ZS (BSC Non-tariff Residential) DM program for FY09/10
Marketing (ex GST)	\$0	No marketing costs were incurred
Legal (ex GST)	\$0	No legal costs were incurred
External DM consultants and customer incentive payments (ex GST)	\$0	Review of invoices presented by IE confirms the payments to DM consultants and customers are correct
Independent review of FY07/08 d-factor claim	\$1,052	Review of invoices presented by IE confirms that the payment claimed is correct
Total (ex GST)	\$1,052	The total DM costs claimed are correct
The costs associated with the Blacktown North/Marayong BSC non-tariff DM program are correct and reasonable		

Audit topic Area	Calculation of avoided distribution cost (ADC)	
Item	Reported Result	Comment
Reference year	FY05/06	Audited in FY07/08 - not included in the present review
Deferral period	1 year	Audited in FY07/08 - not included in the present review
ADC in reference year (\$k 05/06)	\$931	Audited in FY07/08 - not included in the present review

Blacktown North/ Marayong ZS (BSC Non-tariff Residential)

DM costs prior to FY09/10 (PV) (\$k 05/06)	\$215	The DM program costs prior to FY 09/10 are correct
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Maximum Allowable Cost Recovery in FY09/10 (\$k 09/10)	\$1,050	The maximum allowable cost recovery in FY09/10 is correct
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Based on Futura Consulting's review, the calculations associated with the ADC cap are correct

Audit topic area	Energy and demand revenue foregone	
Item	Reported Result	Comment
kWh Reduction	1,440,780	Review of monitoring and verification data presented by IE confirms that the measured energy foregone is correct
Tariff Basis	N29/N70	The tariff basis is correct
DUOS Rate(s)	FY09/10 (ex GST)	The DUOS rates used are correct.
Total energy revenue foregone (\$k)	\$94.520	The energy revenue foregone calculation is correct
kVA Reduction	0	There was no peak demand reduction claimed for the Blacktown North/Marayong BSC non-tariff DM program
Tariff Basis	n/a	
DUOS Rate(s)	n/a	
Total demand revenue foregone (\$k)	\$0	

Based on review of the customer monitoring and verification data, in combination with the customer's tariff class and 2009/10 network tariffs, the estimated foregone revenue for FY09/10 is correct

Audit topic area	Additional amount to reflect time value of money	
Item	Reported Result	Comment
Additional Amount for Equivalent Recovery in Year t+1 (\$k)	\$20.112	Review of IE's spreadsheets of the additional amount for equivalent recovery in Year t (\$k) confirms that the calculation is correct

The estimated additional amount to o reflect time value of money is correct

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