



ETSA Utilities Capital Expenditure Program 2010-15



Reassessment of Deliverability

Prepared by

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1 Engagement

Energy and Management Services Pty Ltd (EMS) are engaged by the Australian Energy Regulator (AER) to reassess the deliverability of ETSA Utilities proposed capital expenditure program in the 2010-15 regulatory period taking into consideration:

- The adjustments made by the AER in their *Draft Determination*¹;
- A re-examination of the labour market in South Australia; and
- A broader review of labour markets in other Australian States.

Specifically, the reassessment is to update and enhance EMS's *2009 Deliverability Review*² and to address concerns raised by the Energy Consumers Coalition of South Australia (ECCSA).

The Terms of Reference for the engagement are shown in Appendix A.

Disclaimer

The analysis, findings, conclusions and recommendations and all written material contained in this Report represent the best professional judgement of Energy and Management Services Pty Ltd (EMS), based on the information made available.

In preparing the Report, EMS has relied upon information provided by the Client and others. Whilst this information has been reviewed to assess its reasonableness and internal consistency, EMS does not warrant the accuracy of any information so provided.

¹ AER, *South Australia - Draft Distribution Determination 2010-11 to 2014-15*, 25 November 2009. This document is referred to as *Draft Determination* throughout this reassessment report.

² EMS, *Deliverability of Proposed Works by ETSA Utilities for the 2010-2015 Regulatory Period*, 8 September 2009. This document is referred to as *2009 Deliverability Review* throughout this reassessment report.

2 Executive Summary

In its *Draft Determination*, the AER disallowed approximately 20% of the capex proposed by ETSA Utilities. Re-working the revised capex budget into ETSA Utilities' Workforce Planning Model, leaving the opex budget unchanged, yields a reduced workforce demand as follows:

Workforce Demand	2010	2011	2012	2013	2014	2015
Technical Skilled Workers	603	637	640	640	680	701
General Skilled Workers	117	219	220	220	235	243

The in-house workforce supply remains unchanged from the previous analysis described in the *2009 Deliverability Review*. The gap between in-house workforce supply and the revised workforce demand is as follows:

Workforce Gap	2010	2011	2012	2013	2014	2015
Technical Skilled Workers	50	79	59	28	40	37
General Skilled Workers	92	195	196	196	211	219

In broad terms, the in-house shortfall is 50 Technical Skilled Workers (TSWs) and 200 General Skilled Workers (GSWs) in each year of the AER allowed capex program. The TSW workforce gap is approximately half that identified in the *2009 Deliverability Review*. The GSW workforce gap is essentially unchanged.

An updated review of the South Australian labour market indicates that recruiting the required number of GSWs from within the State will be achievable. However, filling the TSW gap may be difficult if ETSA Utilities or its Contractors were to rely solely on the South Australian labour market.

A review of the Australia-wide labour markets indicates that the potential for interstate recruitment of TSWs appears to be favourable. It is likely that some of the Contractors involved in the delivery of the 2010-15 capex program will have an established Australia-wide presence and be experienced in interstate recruitment.

ETSA Utilities' success in international recruitment in the recent past provides confidence in the potential of this source of labour if recruitments from Australian sources prove inadequate.

In relation to the supply of materials and equipment, EMS continues to hold the view that ETSA Utilities is well placed to meet the materials and equipment requirements of the 2010-15 capex program.

In conclusion, EMS considers that following reassessment of the matters discussed in this report, ETSA Utilities' 2010-15 allowed capex program will be deliverable.

3 Adjusted Capital Works Program

In its *Draft Determination*, the AER has indicated its intention to make a number of adjustments to ETSA Utilities' proposed capex program for the 2010-15 regulatory period. The adjustments are summarised in Table 7.17³ and include both reductions to proposed work programs and variations to financial and escalation factors. For the purposes of reassessing the deliverability of the capex program, only the adjustments to the proposed work programs are relevant.

ETSA Utilities' original proposals⁴, the AER's draft adjustments, and the resulting capex allowances in categories relevant to the reassessment of deliverability are shown in the following Tables.

Capex Category	2010-11	2011-12	2012-13	2013-14	2014-15	Totals
Demand Driven (gross)	277.2	333.5	275.2	285.6	285.6	1,457.1
Asset Replacement	79.7	91.4	96.8	98.9	99.9	466.7
Security of Supply	15.5	45.9	65.3	33.8	9.9	170.4
Reliability	4.9	5.0	5.0	5.1	5.2	25.2
Safety and Environment	29.4	36.4	40.0	42.0	42.7	190.5
Totals	406.7	512.2	482.3	465.4	443.3	2,309.9

Table 3.1 ETSA Utilities Proposed Capex, July 2009 (\$mil 2009-10)

Capex Category	2010-11	2011-12	2012-13	2013-14	2014-15	Totals
Demand Driven (gross)	-20.3	-21.0	-21.9	-23.1	-24.6	-110.9
Asset Replacement	-36.0	-44.4	-50.6	-48.3	-48.1	-227.3
Security of Supply	-5.1	-30.3	-48.7	-19.9	-1.4	-105.4
Reliability	0	0	0	0	0	0
Safety and Environment	-5.6	-3.4	-2.8	-3.6	-3.4	-18.8
Totals	-67.0	-99.1	-124.0	-94.9	-77.5	-462.4

Table 3.2 AER Draft Determination Adjustments (\$mil 2009-10)

Capex Category	2010-11	2011-12	2012-13	2013-14	2014-15	Totals
Demand Driven (gross)	256.9	312.5	253.3	262.5	261.0	1,346.2
Asset Replacement	43.7	47.0	46.2	50.6	51.8	239.3
Security of Supply	10.4	15.6	16.6	13.9	8.5	65.0
Reliability	4.9	5.0	5.0	5.1	5.2	25.2
Safety and Environment	23.8	33.0	37.2	38.4	39.3	171.7
Totals	339.7	413.1	358.3	370.5	365.8	1,847.4

Table 3.3 AER Draft Determination Capex Allowances (\$mil 2009-10)

³ Draft Determination p175

⁴ ETSA Utilities, *Regulatory Proposal 2010-2015*, 1 July 2009, Table 6.10, p108

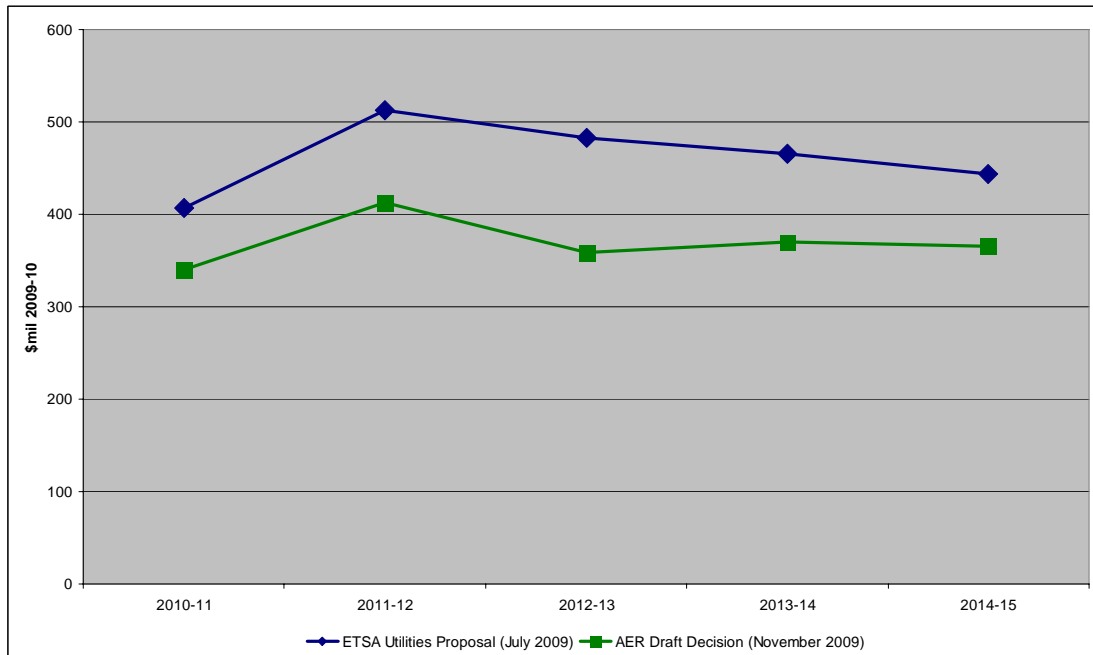


Figure 3.1 Capex Proposals and Draft Capex Allowances

4 Workforce Supply and Demand

4.1 Demand

In support of their Regulatory Proposal, ETSA Utilities provided a Workforce Planning Model⁵ and, following enquiries from the AER, further supplementary information⁶ regarding the workforce engaged on major projects, the potential for the re-assignment of work to General Skilled Workers employed by ETSA Utilities' Contractors which may occur after all other practical avenues for obtaining Technical Skilled Workers (e.g. through apprenticeships and recruitment) have been exhausted, and workforce supply issues.

The Workforce Planning Model seeks to determine the total workforce required for both capex and opex. The core of the methodology is to derive the numbers of Technical Skilled Workers (TSWs) and General Skilled Workers (GSWs) that were allocated to various categories of capex and opex in the reference year, 2006. Productivity, that is, the proportion of total hours that are available for productive work, and overtime availability, are also taken to be equal to that which occurred in the reference year.

Upon the assumption that 2006 represents a normal profile of the demand for the TSW and GSW workforce, the capex budget in each year of the next regulatory period is then back-solved to forecast the workforce demand.

As discussed in the *2009 Deliverability Review*⁷, ETSA Utilities suggests that three major projects (City West Connection Point, the Adelaide Desalination Plant, and the Kangaroo undersea cable and augmentation project) skew the baseline capex forecasts because of their abnormally high capital cost. As a consequence, back-solving the cost yields TSW and GSW numbers that are also abnormally high. EMS accepted the argument that, for major one-off projects such as these, a high level of contract labour unique to the project, will be procured and that the WPM forecasts should therefore be modified to remove the abnormality. EMS continues to hold this view.

EMS has re-worked the Workforce Planning Model by

- Replacing existing capex budget figures with new AER capex allowances (Table 3.3 above). The Model is based on capex categories that do not exactly correspond with the AER capex categories. Categories that do not have a direct correspondence were mapped across by applying the ratio of the component categories' expenditure in the original model.
- All other budgets (opex) in the model remain unchanged.
- In accordance with ETSA Utilities' normal management and accounting practices, the Workforce Planning Model is based on calendar years. EMS converted the AER financial year allowances to calendar years by simply halving each financial year allowance and summing the 'halves' into calendar years.
- To allow for the TSWs and GSWs assumed to be engaged on the three abnormally large projects, EMS subtracted the same number of employees that were

⁵ ETSA Utilities, *Regulatory Proposal 2010-2015*, Appendix OX509 (Confidential)

⁶ Supplementary Information documents AER.EU.5 and AER.EU.6

⁷ *2009 Deliverability Review* p9

subtracted, per year, in the information provided by ETSA Utilities in document AER.EU.5.

The figures are summarised in the following Tables.

Trade Skilled Workers		2010	2011	2012	2013	2014	2015
ETSA Utilities Proposal	Baseline Demand	840	830	947	898	886	868
	Demand ex major projects	708	760	867	846	867	868
AER Draft Determination	Baseline Demand	802	867	880	852	869	876
	Demand ex major projects	670	797	800	800	850	876
Change in TSW demand (ex major projects)		-38	+37	-67	-46	-17	+8

Table 4.1 TSW Demand (based on 2006 profile)

General Skilled Workers		2010	2011	2012	2013	2014	2015
ETSA Utilities Proposal	Baseline Demand	44	49	57	54	52	51
	Demand ex major projects	39	44	51	50	51	51
AER Draft Determination	Baseline Demand	49	54	55	53	54	55
	Demand ex major projects	44	49	49	49	53	55
Change in GSW demand (ex major projects)		+5	+5	-2	-1	+2	+4

Table 4.2 GSW Demand (based on 2006 profile)

As discussed in the *2009 Deliverability Review*, ETSA Utilities has proposed that, after all other practical avenues for obtaining TSWs (e.g. through apprenticeships and recruitment) have been exhausted, a significant portion of capital works will be assigned to Contractors during the next regulatory period. It is likely that Contractors will use GSWs to undertake some tasks (e.g. erection and assembly of non-electrical items) that in the Model's reference year were undertaken by ETSA Utilities' TSWs.

Accordingly, ETSA Utilities suggested that the reference year profile should be modified by re-assigning some of the TSW demand to GSWs: specifically, a reassignment of 10% in 2010-11 and 20% in 2011-12 to 2014-15 together with a 5% "inefficiency factor". EMS accepted the suggested modification and continues to accept its validity. EMS has adjusted the TSW and GSW demand figures (ex major projects) from the above Tables in accordance with the accepted modification, yielding the following results.

Workforce Demand	2010	2011	2012	2013	2014	2015
Technical Skilled Workers	603	637	640	640	680	701
General Skilled Workers	117	219	220	220	235	243

Table 4.3 Workforce Demand (modified profile due to out-sourcing)

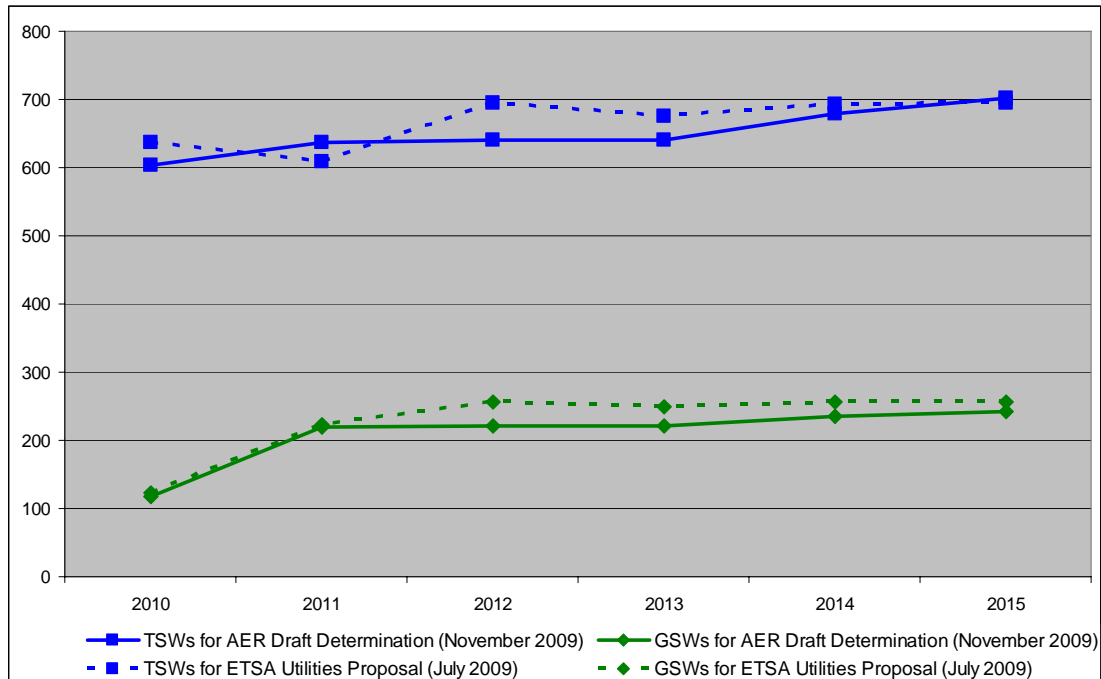


Figure 4.1 Workforce Demand

Figure 4.1 compares the workforce demand required for the AER draft capex allowances compared with the demand that would have been required for ETSA Utilities' proposed capex⁸.

4.2 In-House Supply

ETSA Utilities' Workforce Planning Model is used to forecast in-house workforce supply by building on existing staffing numbers, taking account of anticipated yearly gains (apprenticeship completions) and losses (retirements and departures). The model does not factor in any recruitment of TSWs and GSWs, nor does it assume any productivity of apprentices during the course of their apprenticeships.

The in-house labour supply estimated by the Workforce Planning Model is unchanged from that described in the *2009 Deliverability Review*, repeated in Table 4.4 below.

In-House Workforce Supply	2010	2011	2012	2013	2014	2015
Technical Skilled Workers	553	558	581	612	640	664
General Skilled Workers	25	24	24	24	24	24

Table 4.4 In-House Workforce Supply

The shortfall between the in-house supply of labour and the workforce that will be required for the AER allowed capex (providing for the modified TSW/GSW ratio arising from out-sourcing) is determined from the difference between the figures in Table 4.3 and Table 4.4, as follows:

⁸ Data from Table 4.3 above and *2009 Deliverability Review* Table 5.3, p10

Workforce Gap	2010	2011	2012	2013	2014	2015
Technical Skilled Workers	50	79	59	28	40	37
General Skilled Workers	92	195	196	196	211	219

Table 4.5 Workforce Gap

In broad terms, the in-house shortfall is 50 Technical Skilled Workers (TSWs) and 200 General Skilled Workers (GSWs) in each year of the AER allowed capex program. The TSW workforce gap is approximately half that identified in the *2009 Deliverability Review*. The GSW workforce gap is essentially unchanged.

In information provided in September 2009⁹, ETSA Utilities advised:

- It does not plan to significantly increase its qualified workforce through recruitments, relying instead upon its apprenticeship program;
- It has established contracting arrangements with two major electrical contracting companies and a number of smaller labour contracting firms. Currently, ETSA Utilities uses the services of some 75 to 90 TSWs and GSWs procured through Contractors;
- It is considering entering into alliance arrangements with major contracting companies in accordance with the recommendations of consultants engaged by ETSA Utilities to provide advice on strategies for meeting the workforce demand in the next regulatory period;
- ETSA Utilities' Construction and Maintenance Services (CaMS), a contracting arm of ETSA Utilities which does not fall under the AER's regulation and whose workforce is not factored into the Workforce Planning Model, includes approximately 50 trade, engineering and project management staff. If the need arises, these staff would be available temporarily to address labour shortfalls in the regulated work program.

Notwithstanding the temporary workforce supply available from CaMS, the deliverability of ETSA Utilities' allowed capex program depends on recruiting some 50 TSWs and 200 GSWs and retaining them for the duration of the regulatory period. In view of ETSA Utilities' intention to increase its in-house workforce only through apprenticeship completions (which are factored in to the in-house workforce supply figures), the need for external recruitment will fall to ETSA Utilities' Contractors.

It is likely that several of the Contractors engaged by ETSA Utilities will have an Australia-wide presence. As noted in the *2009 Deliverability Review*, many Australian DNSPs are currently embarking upon major capex programs and it appears unlikely that interstate transfers of existing Contractor staff will be available to the scale required. Instead, Contractors may need to attract new recruits from the available labour markets.

The state of the South Australian and Australia-wide labour markets is reviewed in the next Chapter.

⁹ Supplementary Information document AER.EU.6

5 Review of Labour Markets

5.1 South Australia

The South Australian Government published their latest review of the labour market in December 2009¹⁰. Extracts from the Review relevant to ETSA Utilities' anticipated workforce gap of 50 technical skilled workers and 200 general skilled workers include the following:

*As at September 2009, 792,100 persons were employed in South Australia. Full-time employment has decreased for seven consecutive months and is currently at a level of 525,000; however, the total number of employed persons is near the record level. Unemployment has increased over the past year, but remains below the national level, with 48,000 persons actively looking for work and the unemployment rate is currently 5.7%... Currently, the South Australian unemployment rate is lower than the Australian unemployment rate. The gap between South Australia's and Australia's unemployment rate narrowed to 0.1 of a percentage point.*¹¹

Whilst the South Australian economy is performing well, it appears that there is a significant pool of people seeking work, and given the falling trend of full time employment availability, it is likely that many of the "48,000 persons looking for work" would be seeking full time employment.

*The period August 2004 to August 2009 has seen significant differences in employment growth between industries.... The State's Electricity, Gas, Water & Waste Service industry experienced employment growth of 80.9%, equivalent to about 5,200 workers.*¹²

The rapid recent growth of the Electricity, Gas, Water and Waste Service industry may be interpreted in two ways. On the one hand, it may indicate that the supply of potential electricity workers may be somewhat depleted. On the other hand, the pool of job-seekers may view the rapid growth in the electricity industry as a promising sign of opportunity and will therefore monitor the industry closely and respond actively to any opportunities that arise.¹³

¹⁰ South Australian Government, Department of Further Education, Employment, Science and Technology, *Workforce SA, Labour Market Overview South Australia*, December 2009. Available at www.workforceinfoservice.sa.gov.au/data/assets/pdf_file/0015/18042/labourMarketOverview2009.pdf

¹¹ *op cit* p3

¹² *op cit* p4

¹³ Commentary in the January 2010 edition of *Australian Labour Market Update* published by the Department of Education, Employment and Workplace Relations (Cmwlth) (available at www.workplace.gov.au/workplace/Publications/LabourMarketAnalysis/AustralianLabourMarketUpdate.htm) includes the statement "it is often easier to obtain a job in an occupation which is experiencing strong employment growth than one growing only slowly or declining."

The Review provides data on employment growth within occupation groups over the five years 2004 to 2009:

Occupation Group	Employment Growth (5 years)
Managers	18.7%
Professionals	19.8%
Technicians and Trade Workers	11.1%
Community and Personal Service Workers	22.1%
Clerical and Administrative Workers	5.5%
Sales Workers	-0.5%
Machinery Operators and Drivers	-1.7%
Labourers	-0.2%

Table 5.1 Employment Growth by Occupation - South Australia¹⁴

The Review highlights that:

Employment in Labourers occupations showed negative growth in percentage terms and was also below the national average over the past five years.¹⁵

The recent negative growth of employment in the “Labourers” and “Machinery Operators and Drivers” groups reasonably leads to a conclusion that a pool of job-seekers suitable for filling ETSA Utilities’ GSW gap may currently be available within South Australia.

The availability of skilled workers however, may be more constrained. The Review includes a list of skill shortages in South Australia in November 2009 which includes “Electrical Powerline Trades” and “Electrician”¹⁶. The Report includes the general comment:

Skill shortages that occur at the State level commonly also exist at the national level. Skills that are in shortage nationally can be exacerbated in South Australia due to our relatively small labour pool and the attractive remuneration arrangements available in the eastern States (which encourage skills migration out of South Australia).¹⁷

It appears that the concern raised by this situation is recognised by employers and the South Australian Government:

The number of commencing apprentices and trainees rose by 5.8% from 2007 to 2008, an increase of 1,200 apprentices and trainees.¹⁸

Technicians and trade workers accounted for 28.8% of all trainee and apprenticeship commencements in South Australia in 2008, making it the lead category. A decade ago (1998) technician and trade worker apprenticeships accounted for only 19.0% of the training

¹⁴ *op cit* Figure 6, p7

¹⁵ *op cit* p6

¹⁶ *op cit* Table 2, p10

¹⁷ *op cit* p9

¹⁸ *op cit* p11

market, lagging behind Sales and Labourers as a proportion of total trainees and apprentices.

In November 2009, the South Australian Training and Skills Commission (TASC) published an update of their May 2009 report on skills and workforce development. The following extract is relevant to ETSA Utilities' requirements for 50 additional technical skilled workers:

The electrotechnology sector includes occupations involved in the generation, transmission and distribution of electricity, the provision of postal, courier and telecommunication services and printing, publishing and recording of media. The key occupations within the sector directly employ 40,600 South Australians, just over 5% of the workforce. The industry accounts for 5.1% of GSP.

The sector faces a positive future with various defence projects currently underway or in the pipeline in South Australia...

The sector is currently experiencing skills shortages across a number of key professional, associate professional and trade occupations. Over the next five years there are expected to be a significant number of job openings (between 5,000 and 10,000) with opportunities resulting from both growth and replacement demand.

The top-down modelling suggests that the sector will account for 7.5% of the total demand for qualifications over the next five years, with the largest demand for qualifications at the Certificate III level, followed by Degree or higher level. It is estimated that the sector will receive 5.0% of the total supply of publicly funded qualifications over this period.¹⁹

The difference between demand and supply of qualifications (7.5% of demand, 5.0% of supply) has grown slightly from the May 2009 figures of 6.7% of demand and 4.7% of supply²⁰.

The TASC advise that the modelling has its limitations:

It is important to keep the following points in mind in relation to these figures:

- Because only completions are captured, these estimates – by definition – include 'wastage' during the period of study.*
- The estimates exclude study which, while accredited, does not lead to a full qualification. For example, the numbers do not include individuals achieving a Statement of Attainment (skill set). Currently there are no estimates available of the number of completed skill sets.*
- The VET data includes publicly funded training only. A significant (but, again, unquantifiable) amount of training occurs outside of the publicly funded*

¹⁹ South Australian Government, Office of the Training and Skills Commission, *Skills for Jobs, Priorities for Developing South Australia's Workforce*, November 2009, p41. Available at www.tasc.sa.gov.au/Portals/0/Documents/skillsforjobs/nov09/Skillsforjobs20Nov09.pdf

²⁰ South Australian Government, Office of the Training and Skills Commission, *Skills for Jobs, Priorities for Developing South Australia's Workforce*, May 2009, p25

training system. The main exception is that contracts of training which do not attract public funding (are not eligible for User Choice) are also included.

- The higher education data excludes overseas students.
- The numbers do not capture informal and non-formal training (non-accredited training).

Hence these numbers should be considered indicative only...²¹

The reduced capex allowances provided by the AER's *Draft Determination* have halved the gap between TSW demand and supply to around 50. Even though this has relieved the situation significantly, indications are that despite the recent significant increase in trade apprenticeships and the limitations of the TASC modelling, ETSA Utilities' Contractors may experience difficulties in fully bridging the gap if they were to rely entirely on the South Australian labour market.

5.2 Australia-Wide

The Department of Education, Employment and Workplace Relations (Cmwlth) issues a monthly Vacancy Report²² that analyses trends in the Skilled Vacancy Index (SVI)²³ and the Internet Vacancy Index (IVI)²⁴.

The February 2010 Vacancy Report provides the following relevant indications about the Australia-wide labour market:

- The SVI indicates a rise in vacancies in Electronic and Electrical Trades of 6.6% in the month and 8.3% over the last 12 months.
- The IVI indicates that vacancies decreased for Machinery Operators and Drivers (down by 6.6% in the month, 11.1% over 12 months), Labourers (down by 6.5% in the month, 17.4% over 12 months) and Technicians and Trades Workers (down by 3.1% in the month, 18.2% over 12 months).
- Since the beginning of the IVI series in March 2006, the largest falls have been for Business, Finance and Human Resource Professionals (down by 44.9%), Sales, Marketing and Public Relations Professionals (down by 34.2%) and Electrotechnology and Telecommunications Trades (down by 33.2%).

The following Table, extracted from the February 2010 Vacancy Report, summarises the annual change in IVI of relevant occupation categories in each State and Territory.

²¹ South Australian Government, Office of the Training and Skills Commission, *Skills for Jobs, Priorities for Developing South Australia's Workforce*, November 2009, Appendix 1, p79

²² Available at www.skillsinfo.gov.au/skills/LMI/VacancyReport

²³ SVI is based on a count of skilled vacancies in major metropolitan newspapers in each State and the Northern Territory.

²⁴ IVI is based on a count of online vacancies newly lodged on SEEK, My Career, Career One and Australian JobSearch.

Occupation	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
Technicians and Trade Workers	-6.4	-7.9	-36.3	-5.8	-30.2	+0.5	-13.8	-11.9
Machinery Operators and Drivers	-8.6	-5.7	-24.2	-8.9	-1.9	-28.0	+15.6	-5.2
Labourers	-10.1	-12.6	-32.9	-10.1	-10.9	-31.6	-14.3	-9.1

Table 5.2 Annual Change in IVI (%)

Whilst the SVI data indicates a growing number of vacancies (indicating that employers are having difficulty filling positions) the IVI data demonstrates that, with only two exceptions, the number of vacancies has decreased in each relevant occupation across all States and Territories. In view of the fact that the internet is increasingly becoming the preferred medium for job-seekers, it is reasonable to accept that the IVI data is a more reliable indicator than the SVI.

A decreasing vacancy index means that employers are finding it easier to fill vacancies. With regard to GSW employment (corresponding to the “Machinery Operators and Drivers” and Labourers” occupations), it is noted from Table 5.2 that vacancies in South Australia have declined at approximately the same rate as several other States. Further, as discussed in Section 5.1, employment growth in the “Machinery Operators and Drivers” and “Labourers” occupations in South Australia is currently showing a negative trend. Thus it can be reasonably concluded that there are currently insufficient vacancies for the potential GSW labour pool and, as a consequence, vacancies which do occur should be filled without difficulty.

The South Australian IVI in the “Technicians and Trade Workers” occupation (corresponding to TSWs) has decreased at a lower rate than other States, indicating a somewhat tighter labour market in this occupation. As discussed in Section 5.1, skill shortages exist in the South Australian electrotechnology sector and it appears that employers are finding it more difficult in to fill TSW-type positions in South Australia than in other States. This supports the view that ETSA Utilities’ Contractors may experience difficulties in fully bridging the TSW workforce gap if they rely entirely on the South Australian labour market. The question then is: what is the potential for recruiting TSWs from other States and from overseas?

Since data on interstate recruitment are not available (no mechanism exists for employers and job-seekers to signal interstate appointments) then the focus must turn to indicators of the potential willingness of job-seekers to relocate. This essentially depends on the state of unemployment in other States. State-by-State data relating specifically to Technicians and Trade Workers is not available. The following data, however, provide a reasonable view of the unemployment level in that occupation across Australia.

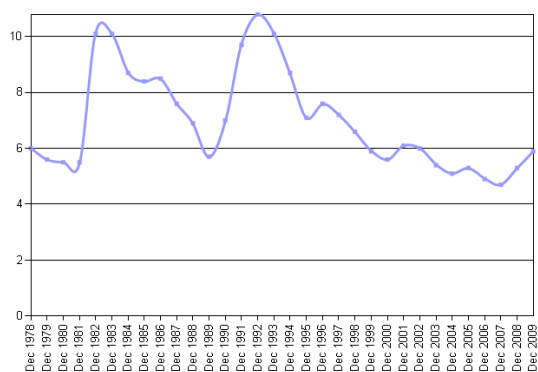
The Department of Education, Employment and Workplace Relations' monthly *Australian Labour Market Update*²⁵ provides the following Australia-wide data in the January 2010 edition:

- Percentage growth rates in employment in the 12 months to November 2009
 - Managers -5.0%
 - Professionals +3.4%
 - Technicians and Trade Workers -5.0%
 - Community and Personal Service Workers +6.9%
 - Clerical and Administrative Workers -1.6%
 - Sales Workers +0.6%
 - Machinery Operators and Drivers -8.8%
 - Labourers -0.7%

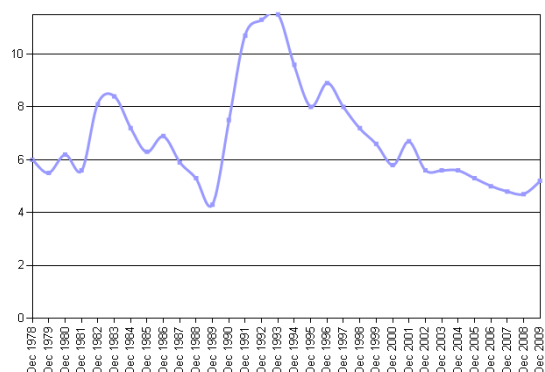
- Unemployment rate at November 2009
 - Managers 1.4%
 - Professionals 1.9%
 - Technicians and Trade Workers 3.2%
 - Community and Personal Service Workers 3.0%
 - Clerical and Administrative Workers 3.0%
 - Sales Workers 4.9%
 - Machinery Operators and Drivers 4.8%
 - Labourers 7.0%

The data show that the Technicians and Trade Workers occupation, in comparison to other occupations, is characterised over the past 12 months as having a strongly negative growth in employment and a mid-stream level of unemployment.

The following charts are time series in Unemployment Rate (%), extracted from the Commonwealth Government's *Labour Market Information Portal*²⁶.



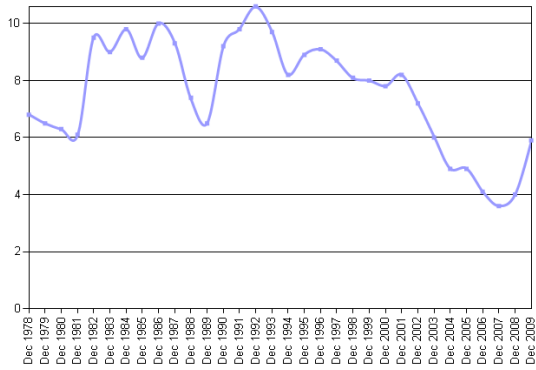
New South Wales



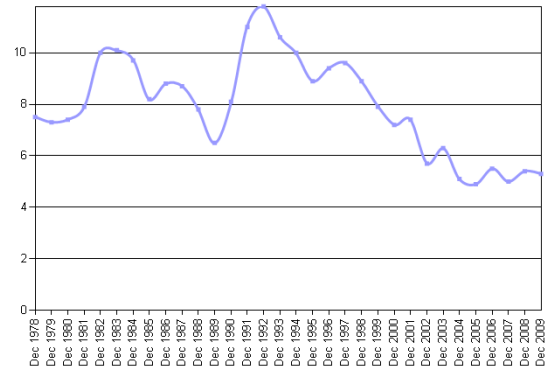
Victoria

²⁵ Available at www.workplace.gov.au/workplace/Publications/LabourMarketAnalysis/AustralianLabourMarketUpdate.htm

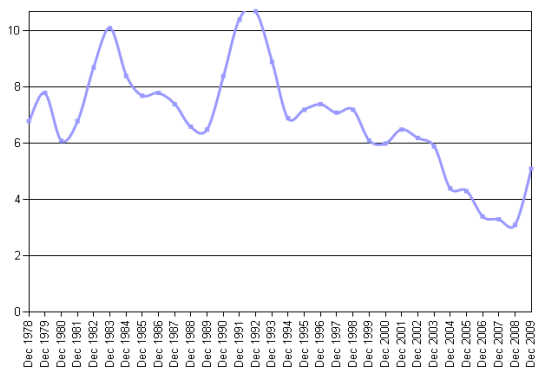
²⁶ Available at <http://www.workplace.gov.au/lmip/LabourForceData>



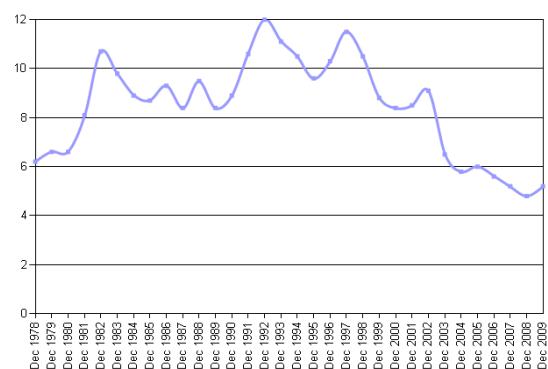
Queensland



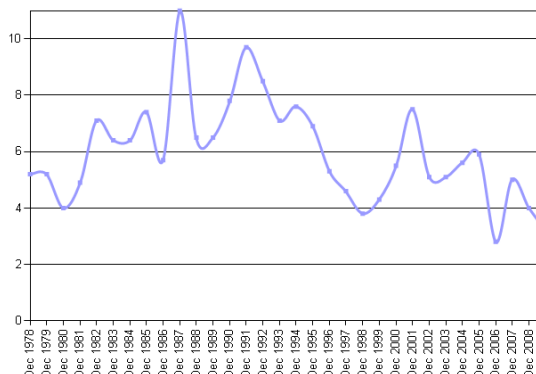
South Australia



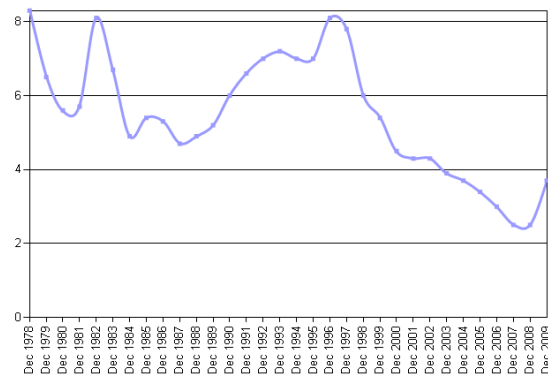
Western Australia



Tasmania



Northern Territory



Australian Capital Territory

The charts show that with only two exceptions, unemployment has shown an upward trend in 2009 in all States and Territories. In South Australia, unemployment has remained steady and has decreased in the Northern Territory.

Factoring the employment growth and unemployment rate data (page 14) into the State's unemployment trends, reasonably leads to the conclusion that the Technicians and Trade Workers occupation is characterised by a comparatively high level of unemployment in all States except South Australia and the Northern Territory. This suggests that a reasonably strong potential exists for interstate recruitment of TSWs.

5.3 International Recruitment

Changes to the General Skilled Migration program were brought into effect on 8 February 2010. The Government has revoked the Migration Occupations in Demand List (MODL) and will replace the Critical Skills List (CSL) and the Skilled Occupations List (SOL) with a new SOL formulated by Skills Australia, with draft publication anticipated in April 2010²⁷. Consequently at the time of preparing this reassessment report, it is not possible to find definitive information on the Immigration Department's position in relation to the international recruitment of persons suitable for the TSW positions.

In information provided to the AER following the site visit in August 2009, ETSA Utilities advised that it had a history of successful recruitment of qualified overseas workers. In 2006, ETSA Utilities recruited 90 transmission line and substation workers from various locations around the world. Of these, approximately 80 have been made permanent employees and have been fully integrated and productive in various work locations²⁸. Whilst ETSA Utilities has indicated that it does not intend to follow that course again, such successful international recruitment in the recent past indicates that ETSA Utilities' Contractors would be able to achieve similar results if Australian recruitment proved inadequate. The Immigration Department has provided for skilled migration in such circumstances in the past and, notwithstanding the current unavailability of definitive information, may be expected to respond positively if the lack of Australian skilled labour can be demonstrated.

5.4 Materials Procurement

In their submission to the AER, the Electricity Consumers Coalition of South Australia makes passing reference to heavy pressure which is likely to occur on material resources as a result of the capex programs being undertaken by several Australian DNSPs over the next five years.

In the *2009 Deliverability Review*, EMS provided a discussion of ETSA Utilities' procurement function with the conclusion that "the new strategic approach to procurement, the quality of existing supplier relationships and the diversity of contract types and terms will reduce the risk that procurement difficulties will adversely affect the deliverability of the proposed capex program"²⁹

ETSA Utilities' procurement function was the subject of detailed enquiry during the site visit by the AER and EMS to ETSA Utilities' offices in August 2009. Based on our experience, EMS holds the view that ETSA Utilities' procurement function benchmarks very favourably with other Australian DNSPs. Whilst we agree that there will be significant pressure on the supply of materials and equipment in the next few years, EMS continues to hold the view that ETSA Utilities is well placed to meet the materials and equipment requirements of the 2010-15 capex program.

²⁷ See Department of Immigration and Citizen FAQ Sheet available at www.immi.gov.au/skilled/general-skilled-migration/pdf/faq-sol.pdf

²⁸ Supplementary information document AER.EU.6

²⁹ *2009 Deliverability Review*, p19

6 Summary and Conclusion

In its *Draft Determination*, the AER reduced ETSA Utilities' proposed capital expenditure program by approximately 20%. Reworking the allowed capex budget figures in the Workforce Planning Model shows that the TSW gap has been reduced, in broad terms, from 100 to 50 in each year of the 2010-15 regulatory period. The GSW gap has been only slightly reduced and, within the bounds of estimating accuracy, remains at around 200 in each year of the 2010-15 regulatory period.

An updated review of the South Australian labour market indicates that recruiting the required number of GSWs from within the State will be achievable. However, filling the TSW gap may be difficult if ETSA Utilities or its Contractors were to rely solely on the South Australian labour market.

A review of the Australia-wide labour markets indicates that the potential for interstate recruitment of TSWs appears to be favourable. It is likely that some of the Contractors involved in the delivery of the 2010-15 capex program will have an established Australia-wide presence and be experienced in interstate recruitment.

ETSA Utilities' success in international recruitment in the recent past provides confidence in the potential of this source of labour if recruitments from Australian sources prove inadequate.

In relation to the supply of materials and equipment, EMS continues to hold the view that ETSA Utilities is well placed to meet the materials and equipment requirements of the 2010-15 capex program.

In conclusion, EMS considers that following reassessment of the matters discussed in this report, ETSA Utilities' 2010-15 allowed capex program will be deliverable.

7 Shortened Forms

AER	The Australian Energy Regulator
capex	capital expenditure
DNSP	distribution network services provider
<i>Draft Determination</i>	<i>AER South Australia - Draft Distribution Determination 2010-11 to 2014-15, 25 November 2009</i>
ECCSA	Energy Consumers Coalition of South Australia
EMS	Energy and Management Services Pty Limited
GSW	General Skilled Worker
IVI	Internet Vacancy Index
SVI	Skills Vacancy Index
TASC	Training and Skills Commission, South Australian Government
TSW	Trade Skilled Worker
<i>2009 Deliverability Report</i>	<i>EMS Deliverability of Proposed Works by ETSA Utilities for the 2010-2015 Regulatory Period, 8 September 2009</i>

Appendix A – Terms of Reference

Review of ETSA Utilities capex deliverability

- EMS is required to review its conclusions in relation to the deliverability of ETSA Utilities' proposed capex program (as reported in *Deliverability of Proposed Works by ETSA Utilities for the 2010 -2015 Regulatory Period*).
- The review should take account of the lower level of capex in ETSA Utilities' revised regulatory proposal (approximately 20 per cent lower than in the original regulatory proposal).
- The review should address the concerns about EMS's original review that have been raised by the Energy Consumers Coalition of South Australia (ECCSA) in its submission on the AER's draft decision for ETSA Utilities. It is expected that this will involve an assessment of updated labour and possibly other market data for both South Australia and Australia.
- EMS is to document its review in a brief report to the AER in a format that is consistent with its original report to the AER.

Appendix B – About EMS

The Business

Energy and Management Services Pty Ltd (EMS) is an energy consultancy established in 1996 specialising in providing assistance to commercial and industrial clients, agribusinesses, and small/medium enterprises in their dealings with energy companies. Our key personnel are people who have lengthy experience in the electricity distribution industry and in recent years have changed the direction of their careers to work instead as consultants for the customers rather than executives and engineers for the distributors.

EMS offers extensive experience, insight and competence from both sides of the market divide: on the one side, extensive knowledge of the DNSP operations; and on the other, practical experience of the real economic effects in, and responses of, the marketplace flowing from electricity network pricing determinations.

EMS has been engaged by the AER on several occasions since the transfer of electricity distribution regulation responsibilities to the AER from the State Authorities. EMS undertakes reviews of DNSP's submissions and proposals, provides peer assessments of other Consultant's reviews, and responds to a wide range of ad hoc enquiries and requests for advice.

The Personnel

The personnel involved in this engagement have a combined experience in the electricity distribution industry of over 80 years, encompassing both urban and rural networks.

PETER HALYBURTON

Bachelor of Science (Technology) in Electrical Engineering, University of Newcastle
Master of Business Administration, University of Newcastle
Fellow, Institution of Engineers Australia

Peter Halyburton founded Energy and Management Services after leaving Advance Energy in 1996. His career in the electricity distribution industry spanned 34 years and covered three separate DNSPs. At Shortland County Council he held several engineering positions before being appointed Assistant Divisional Engineer - Design. Peter headed a specialist group to take control of the Hunter Valley 132kV system and augment its capacity by over 200MVA to cater for coal mining expansion. In 1984 he was appointed as Deputy Chief Electrical Engineer at Peel-Cunningham County Council and in 1987 he moved to Macquarie County Council (Western Power) initially as Chief Electrical Engineer and then became the first General Manager. In 1995 he was appointed by the Minister as CEO of MidState Energy (which became Advance Energy), the successor of five DNSPs covering the Central Western area of NSW.

Peter was a Board Member of the Electricity Supply Engineers' Association for eight years and served as its President in 1992. He was Chairman and Member of a number of State Committees including the Uneconomic Lines Working Group, the Community Service Obligations Working Group, the 132kV Assets Transfer Working Group and the Electricity

Industry Insurance Working Group. He was also a Member of the Committee of Enquiry into Broken Hill City Council and Electrification of the Far Western Region in 1991.

RON CRAGGS

Bachelor of Engineering (Honours), NSW Institute of Technology (UTS)

Graduate Diploma of Management, Capricornia Institute (UCQ)

Fellow, Institution of Engineers Australia

Ron's 40 years experience in the electricity supply industry has spanned technical, engineering, administrative, and senior executive roles. After 15 years in Sydney he took up a position with a NSW rural electricity distributor with responsibility for designing and installing electrical protection systems, metering and communications, OH&S training and implementation, standardisation, procurement and logistics, pricing, economic analysis, marketing, regulatory strategy, and energy advisory services. The major re-structuring of the electricity supply industry in the mid-90s resulted in the formation of a new corporatised entity, NorthPower. Ron gained a senior management role in the new organisation, with the key tasks of establishing the wholesale trading function and merging the widely varying cultures, systems, policies and procedures in the retail side of the corporation. In 1997, Ron was appointed Corporate General Manager and Company Secretary. This role continued into Country Energy, formed in 2001 to provide energy services to all of rural and regional New South Wales.

Ron represented NSW electricity distributors as a Councillor on the Electricity and Water Ombudsman of NSW Council from its foundation in 1997 to 2005. He was appointed by the NSW Minister for Education as a member of the Council of the North Coast Institute of TAFE from 2003 to 2006.

In 2005 Ron concluded his DNSP career to seek opportunities as an engineering and management consultant. He commenced with Energy and Management Services in 2006.