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Dear Robert

## Update of Labour Cost Escalators for NSW and the ACT

This letter is written to accompany the updated forecasts for labour cost escalators for Australia, NSW and the ACT that were provided on 12 November 2014. The updated forecasts and this letter were commissioned by Ausgrid on behalf of a group of DNSPs.

Independent Economics originally generated forecasts for labour costs escalators in the second half of 2013. Those forecasts were documented in our report of 12 February 2014: “Labour cost escalators for NSW, the ACT and Tasmania”. This letter identifies and explains the more significant differences between the updated forecasts and the original forecasts.

### Scope

The scope of the updated forecasts differs from the scope of the original forecasts in that forecasts for Tasmania are no longer required.

### Information

The following table compares the end dates of the historical ABS data used in the original forecasts and the updated forecasts. In all cases at least an additional year of historical data is available for the updated forecasts and in some cases there is an additional five quarters, including for the Wage Price Index.

ABS data series	Catalogue No.	Original	Updated
National accounts (quarterly)	5206.0	June qtr 2013	June qtr 2014
Labour force (monthly)	6202.0	June 2013	October 2014
Consumer price index (quarterly)	6401.0	June qtr 2013	Sep qtr 2014
Wage price index (quarterly)	6345.0	June qtr 2013	Sep qtr 2014
Average weekly earnings (semi-annual)*	6302.0	May 2013	May 2014

This letter is intended only to explain the main differences between the updated forecasts and the original forecasts. For a detailed explanation of the original forecasts, see the report of 12 February 2014, which should be read in conjunction with this letter.

This letter focusses on the key forecast tables of the original report:

- Table 4.1 (national economic forecasts)
- Table 4.5 (wage forecasts for Australia, financial years)
- Table 5.1 (wage forecasts for the utilities industry, financial years)
- Table 5.2 (wage forecasts for the professional services industry, financial years)
- Tables A.1, A.2, A.4, A.5 (calendar year tables)

The original and updated versions of each of these tables are now compared in turn.

### National economic forecasts (Table 4.1)

As forecast, the economy grew at below its trend rate in 2013-14.

The original and updated national economic forecasts are shown in the two versions of Table 4.1 that follow. Comparing the two tables, in 2013-14 GDP growth was a little faster than originally forecast at 2.8 per cent rather than 2.3 per cent, but was still below the trend rate of around 3 per cent. This forecasting error of 0.5 percentage points compares with the average error in one-year-ahead GDP growth forecasts of close to 1 percentage point. Some of the factors that had been expected to boost growth in 2014/15 – a more competitive Australian dollar and a housing construction recovery – arrived earlier than expected in 2013/14.

Although GDP growth was a little faster than expected, employment growth was slightly slower than expected at 0.8 per cent compared to 1.1 per cent. This reflected strong labour productivity growth of 2.0 per cent. Nonetheless, unemployment in 2013-14 rose to 5.8 per cent, exactly as forecast. Unemployment is the most important driver of the wage forecasts.

Headline CPI Inflation of 2.7 per cent was significantly higher than forecast. However, inflation for the ABS CPI analytical series of “market goods and services excluding volatile items” was only 2.0 per cent. Thus, the higher-than-expected inflation rate is partly explained by prices that are volatile (petrol and fresh fruit and vegetables) or affected by changes in regulations.

These developments in 2013-14 have had generally small impacts on our medium-term forecasts for compound, average annual growth in the five years to 2018-19. The forecast for GDP growth has fallen from 3.4 to 3.1 per cent, and with slower economic growth the inflation forecast has fallen from 2.5 to 2.2 per cent.

Unemployment is now seen as more entrenched. The average rate for the five years to 2018-19 is now forecast at 6.0 per cent rather than 5.2 per cent. This reflects a less optimistic assessment of the non-accelerating inflation rate of unemployment or NAIRU. However, structural reforms to improve the flexibility of the labour market would reduce the NAIRU.

Table 4.1. Economic history and economic projections, growth rates, Australia - ORIGINAL

	Real GDP growth	Employment growth	Unemployment rate	CPI inflation
History				
2000-01	1.9	2.0	6.5	6.0
2001-02	3.9	1.3	6.7	2.9
2002-03	3.2	2.6	6.2	3.0
2003-04	4.1	1.6	5.6	2.4
2004-05	3.2	2.7	5.2	2.4
2005-06	3.0	3.1	4.9	3.2
2006-07	3.8	2.9	4.5	3.0
2007-08	3.8	3.1	4.3	3.4
2008-09	1.6	1.8	4.9	3.1
2009-10	2.1	1.0	5.5	2.3
2010-11	2.4	2.6	5.0	3.1
2011-12	3.4	1.2	5.2	2.3
2012-13	2.9	1.3	5.3	2.3
Forecasts				
2013-14	2.3	1.1	5.8	1.6
2014-15	3.8	1.6	5.7	2.4
2015-16	3.9	1.5	5.4	2.3
2016-17	3.8	1.6	5.1	2.4
2017-18	3.1	1.5	4.9	2.8
2018-19	2.4	1.0	4.9	2.6

Table 4.1. Economic history and economic projections, growth rates, Australia - UPDATED

	Real GDP growth	Employment growth	Unemployment rate	CPI inflation
History				
2000-01	1.9	2.2	6.4	6.0
2001-02	3.9	1.4	6.7	2.9
2002-03	3.1	2.5	6.1	3.0
2003-04	4.2	1.4	5.6	2.4
2004-05	3.2	2.6	5.2	2.4
2005-06	3.0	3.0	4.9	3.2
2006-07	3.8	2.8	4.5	3.0
2007-08	3.7	3.0	4.2	3.4
2008-09	1.7	1.8	4.9	3.1
2009-10	2.0	0.8	5.4	2.3
2010-11	2.2	2.5	5.0	3.1
2011-12	3.6	1.2	5.2	2.3
2012-13	2.6	1.2	5.3	2.3
2013-14	2.8	0.8	5.8	2.7
Forecasts				
2014-15	2.6	1.2	6.1	2.1
2015-16	3.4	1.6	6.0	1.8
2016-17	3.5	1.5	5.9	2.2
2017-18	3.0	1.3	5.9	2.5
2018-19	2.9	1.4	5.8	2.5

## Wage Forecasts for Australia (Table 4.5)

As forecast, in the face of above-normal unemployment, wage inflation was relatively low in 2013-14. However, it was generally even lower than forecast.

The original and updated wage forecasts for Australia are shown in the two versions of Table 4.5 that follow. Comparing the two tables, in 2013/14 inflation in the overall Wage Price Index (WPI) was forecast to be low at 2.8 per cent, because of above-normal unemployment. It turned out to be slightly lower again at 2.6 per cent. For the utilities component, the outcome of 3.3 per cent almost exactly matched the forecast of 3.4 per cent. For professional services a low inflation rate of only 2.6 per cent was forecast, but the outcome was very low at only 1.9 per cent.

Similarly, with the slow labour market, wage inflation as measure by average weekly earnings (AWE) was forecast to be low at 3.1 per cent, but turned out to be even lower at 2.7 per cent.

Other forecasters have similarly over-estimated wage inflation, even after allowing for the weakness in the labour market. In the November 2014 *Statement on Monetary Policy*, the Reserve Bank of Australia identifies the puzzle.

*The extent of the slowing in wage growth appears to have been a little more pronounced than would have been expected given historical relationships between private sector wage growth and measures of the degree of spare capacity in the labour market.*

The Reserve Bank canvasses various possible explanations, but perhaps the most likely is concerns about job security. Job security has been weakened not only by the relatively high level of unemployment but also by its rising trend over the two years to mid-2014. However, from mid-2014 unemployment appears to have stabilised at just over 6 per cent. The apparent end of the rising trend in unemployment should help ease job security concerns and may see some lift in wages growth. This is consistent with the hysteresis view that wage inflation is not only driven by the level of unemployment but also by its direction of movement.

For its part, the Reserve Bank concludes that “wage growth is not expected to decline further” and that it is expected to pick up only gradually towards end of the forecast period. The Reserve Bank’s forecast period currently extends to 2016. Our updated, medium-term forecast is consistent with this view.

Compound, average annual growth in the WPI in the five years to 2018-19 is forecast at 3.4 per cent, down from 4.0 per cent in our original forecast. This downgrade takes into account both the recent puzzling weakness in wages growth as well as the downgrade to our medium-term forecast for CPI inflation. There are downgrades of similar magnitudes to our industry WPI forecasts. The medium-term growth rate for the utilities industry is downgraded from 4.4 to 3.8 per cent and for the professional services industry from 4.2 to 3.6 per cent.

Because part of the downgrade in the forecast for nominal wages growth reflects the downgrade in the forecast for CPI inflation, the downgrade is less when wages growth is re-expressed in real terms. The forecast for real, average annual growth in the WPI in the medium term has been downgraded from 1.42 to 1.15 per cent. For the utilities industry, the corresponding downgrade is from 1.81 to 1.56 per cent. For professional services it is from 1.60 to 1.34 per cent. Thus, in real terms, the forecasts for average, annual wages growth have been downgraded by around one-quarter of a percentage point.

There are also downgrades to our medium-term forecasts for nominal growth in AWE. For total AWE the downgrade is from 4.3 to 3.9 per cent, while for utilities it is from 4.7 to 4.4 per cent and for professional services it is from 4.7 to 4.5 per cent.

These downgrades in the forecasts for nominal AWE growth are largely accounted for by the downgrades in the forecasts for CPI inflation. Thus, for real AWE, the changes to the forecasts are small, being from 1.76 to 1.62 per cent for the total, 2.15 to 2.14 for utilities and 2.13 to 2.25 for professional services.

As a cross-check, the forecast for real wage growth can be compared with the forecast for labour productivity growth. From the updated version of Table 4.1, labour productivity measured as GDP per employed person is forecast to grow at a compound, average rate of 1.68 per cent in the five years to 2018-19. As noted in our report of 12 February 2014 (see Table A), the wage measure that is compatible with this measure of productivity is real AWE. As noted above, real AWE is forecast to grow at a similar, albeit slightly lower rate, of 1.62 per cent. This implies a small reduction in real unit labour costs.

As also noted in the original report (see Table A), there is no available productivity measure that is compatible with the WPI. However, the WPI abstracts from wages growth resulting from improvements in the quality of the workforce. It should therefore grow at a lower rate than AWE. This is consistent with our forecast of real WPI growth of 1.15 per cent compared to real AWE growth of 1.62 per cent.

Table 4.5. Growth in nominal wages in Australia and selected industries - ORIGINAL

	WPI Wages			AWE Wages		
	Australia	Utilities	Professional Services	Australia	Utilities	Professional Services
2007-08	4.1	4.0	4.4	3.9	2.4	7.6
2008-09	4.1	4.5	5.3	3.8	5.2	5.7
2009-10	3.0	4.3	2.9	5.3	8.9	5.8
2010-11	3.8	4.1	4.4	4.0	10.7	5.1
2011-12	3.6	3.5	4.4	4.0	2.6	2.5
2012-13	3.3	4.2	3.5	4.4	3.9	3.4
2013-14	2.8	3.4	2.6	3.1	2.5	4.3
2014-15	3.0	3.6	3.3	2.0	2.2	2.5
2015-16	3.5	4.0	3.7	3.7	4.2	4.1
2016-17	4.2	4.6	4.4	5.4	5.9	5.7
2017-18	4.6	4.9	4.8	5.6	6.1	5.9
2018-19	4.5	4.8	4.6	4.9	5.3	5.2

Table 4.5. Growth in nominal wages in Australia and selected industries - UPDATED

	WPI Wages			AWE Wages		
	Australia	Utilities	Professional Services	Australia	Utilities	Professional Services
2007-08	4.1	4.0	4.4	3.9	2.4	7.6
2008-09	4.1	4.5	5.3	3.8	5.2	5.7
2009-10	3.0	4.3	2.9	5.3	8.9	5.8
2010-11	3.8	4.1	4.4	4.0	10.7	5.1
2011-12	3.7	3.6	4.5	4.0	2.6	2.5
2012-13	3.2	4.2	3.4	4.4	3.9	3.4
2013-14	2.6	3.3	1.9	2.7	1.8	5.2
2014-15	2.7	3.3	2.7	2.7	4.0	5.0
2015-16	3.2	3.7	3.6	2.7	2.5	2.8
2016-17	3.5	3.9	3.8	4.5	4.8	4.6
2017-18	3.8	4.1	4.0	5.2	5.8	5.5
2018-19	3.8	4.0	3.9	4.4	5.0	4.7

## Wage Forecasts for the Utilities industry (Table 5.1)

As forecast, in 2013-14 wage inflation as measured by the WPI was higher in the utilities industry than for the economy as a whole. The WPI forecasts for the utilities industry were also fairly accurate.

The original and updated wage forecasts for the utilities industry are shown in the two versions of Table 5.1 that follow. Comparing the two tables, in 2013/14 inflation in the utilities component of the Wage Price Index (WPI) was 3.3 per cent for Australia, 3.0 per cent for NSW and 2.9 per cent for the ACT. These outcomes compare quite closely with the original forecasts of 3.4, 3.1 and 3.3 per cent respectively. For the more volatile AWE data, there is greater variation between forecasts and outcomes. For utilities, AWE inflation was over-predicted for Australia and the ACT but under-predicted for NSW.

Turning to the medium-term forecasts, for utilities the medium-term WPI forecasts have been downgraded for similar reasons to the aggregate WPI forecasts. As noted previously, for utilities nationally, the downgrade is from 4.4 to 3.8 per cent. For NSW and the ACT the downgrades are similar, being from 4.3 to 3.9 per cent for NSW and from 4.4 to 3.7 per cent for the ACT.

Again, the downgrades are less when wages growth is re-expressed in real terms. Forecast growth in the real WPI for utilities has been downgraded from 1.81 to 1.56 per cent nationally (as noted previously), with downgrades of 1.77 to 1.66 per cent for NSW and 1.83 to 1.46 per cent for the ACT.

For 2014-15, the forecast utilities nominal WPI growth for NSW of 4.0 per cent stands out. However, this is explained by a large rise of 1.9 per cent that has already been recorded for the September quarter 2014.

Table 5.1. Growth in nominal wages in the utilities industry - ORIGINAL

	Utilities Industry - WPI wages				Utilities Industry - AWE wages			
	Australia	NSW	Tasmania	ACT	Australia	NSW	Tasmania	ACT
2012-13	4.2	3.7	4.2	4.8	3.9	4.2	4.3	5.3
2013-14	3.4	3.1	3.2	3.3	2.5	1.9	0.8	1.6
2014-15	3.6	3.6	3.4	3.7	2.2	1.7	1.9	3.0
2015-16	4.0	3.9	3.9	4.0	4.2	3.7	4.0	5.0
2016-17	4.6	4.6	4.5	4.6	5.9	5.5	5.7	6.6
2017-18	4.9	4.9	4.8	4.9	6.1	5.8	5.9	6.6
2018-19	4.8	4.7	4.6	4.7	5.3	5.2	5.2	5.7

Table 5.1. Growth in nominal wages in the utilities industry - UPDATED

	Utilities Industry - WPI wages			Utilities Industry - AWE wages		
	Australia	NSW	ACT	Australia	NSW	ACT
2012-13	4.2	3.6	4.7	3.9	4.3	5.3
2013-14	3.3	3.0	2.9	1.8	2.7	1.0
2014-15	3.3	4.0	2.9	4.0	2.4	3.0
2015-16	3.7	3.7	3.7	2.5	1.7	3.3
2016-17	3.9	3.9	3.9	4.8	4.5	5.8
2017-18	4.1	4.1	4.1	5.8	5.6	6.5
2018-19	4.0	4.0	4.0	5.0	4.8	5.5

## Wage forecasts for the Professional Services industry (Table 5.2)

As already noted, in 2013-14 wage inflation as measured by the WPI was very low for the professional services industry at the national level. This was also the case at the regional level.

The original and updated wage forecasts for the professional services industry are shown in the two versions of Table 5.2 that follow. Comparing the two tables, in 2013/14 inflation in the professional component of the Wage Price Index (WPI) was very low at 1.9 per cent for Australia, 1.4 per cent for NSW and 1.6 per cent for the ACT. This compares with original forecasts of 2.5 or 2.6 per cent.

Turning to the medium-term forecasts, for professional services the medium-term WPI forecasts have been downgraded for similar reasons to the aggregate WPI forecasts. As noted previously, for professional services nationally, the downgrade is from 4.2 to 3.6 per cent. For NSW and the ACT the downgrades are similar, being from 4.1 to 3.6 per cent for NSW and from 4.2 to 3.5 per cent for the ACT.

Again, the downgrades are less when wages growth is re-expressed in real terms. Forecast growth in the real WPI for professional services has been downgraded from 1.60 to 1.34 per cent nationally (as noted previously), with downgrades of 1.55 to 1.33 per cent for NSW and 1.60 to 1.24 per cent for the ACT.

Table 5.2 Growth in nominal wages in the Professional Services Industry - ORIGINAL

	Professional Services Industry - WPI wages				Professional Services Industry - AWE wages			
	Australia	NSW	Tasmania	ACT	Australia	NSW	Tasmania	ACT
2012-13	3.5	3.3	3.4	3.9	3.4	3.7	3.7	4.7
2013-14	2.6	2.6	2.4	2.5	4.3	3.6	2.5	3.4
2014-15	3.3	3.2	3.1	3.3	2.5	2.0	2.3	3.4
2015-16	3.7	3.7	3.6	3.7	4.1	3.7	4.0	5.0
2016-17	4.4	4.3	4.3	4.4	5.7	5.4	5.6	6.5
2017-18	4.8	4.7	4.6	4.7	5.9	5.7	5.8	6.5
2018-19	4.6	4.6	4.5	4.6	5.2	5.0	5.1	5.6

Table 5.2 Growth in nominal wages in the Professional Services Industry - UPDATED

	Professional Services Industry - WPI wages			Professional Services Industry - AWE wages		
	Australia	NSW	ACT	Australia	NSW	ACT
2012-13	3.4	3.2	3.9	3.4	3.7	4.7
2013-14	1.9	1.4	1.6	5.2	6.0	4.3
2014-15	2.7	2.8	2.3	5.0	3.5	4.2
2015-16	3.6	3.6	3.6	2.8	2.2	3.7
2016-17	3.8	3.7	3.8	4.6	4.4	5.6
2017-18	4.0	3.9	3.9	5.5	5.3	6.2
2018-19	3.9	3.9	3.9	4.7	4.6	5.3

## Calendar Year tables

The original report included an Appendix that presented the wage forecasts on a calendar year basis rather than a financial year basis. This section compares those original calendar year forecasts with the updated calendar year forecasts. The differences follow the same patterns already discussed for the financial year tables.

Finally, a new table (Table A.5) has been added showing the forecasts for CPI inflation on a calendar year basis. It compares the updated forecasts with the original forecasts within the one table.

*Table A.1. Calendar Year Forecasts for Australia and Australian Industries - ORIGINAL*

	WPI Wages			AWE Wages		
	Australia	Utilities	Professional Services	Australia	Utilities	Professional Services
2008	4.2	4.2	4.9	3.6	3.2	6.4
2009	3.5	4.3	4.2	4.2	5.8	4.7
2010	3.4	4.6	3.6	5.1	12.3	7.3
2011	3.7	3.6	4.4	4.1	6.4	2.2
2012	3.6	4.0	4.2	4.1	2.4	3.5
2013	3.0	3.8	2.6	4.1	3.3	4.3
2014	2.9	3.5	3.1	2.1	2.2	3.0
2015	3.2	3.7	3.4	2.6	3.0	3.1
2016	3.9	4.3	4.1	4.7	5.2	5.1
2017	4.5	4.8	4.6	5.7	6.2	6.1
2018	4.6	4.9	4.7	5.2	5.7	5.5

*Table A.1. Calendar Year Forecasts for Australia and Australian Industries - UPDATED*

	WPI Wages			AWE Wages		
	Australia	Utilities	Professional Services	Australia	Utilities	Professional Services
2008	4.2	4.2	5.0	3.6	3.2	6.4
2009	3.5	4.3	4.1	4.2	5.8	4.7
2010	3.4	4.7	3.6	5.1	12.3	7.3
2011	3.8	3.6	4.4	4.1	6.4	2.2
2012	3.6	4.0	4.2	4.1	2.4	3.5
2013	2.8	3.7	2.3	4.0	2.8	4.3
2014	2.6	3.2	2.2	2.2	3.1	5.5
2015	3.0	3.5	3.4	2.7	2.9	3.4
2016	3.4	3.8	3.7	3.5	3.6	3.6
2017	3.7	4.0	3.9	5.1	5.6	5.3
2018	3.8	4.1	4.0	4.9	5.5	5.2

Table A.2. Calendar Year Forecasts for NSW and NSW Industries - ORIGINAL

	WPI Wages			AWE Wages		
	NSW	NSW - Utilities	NSW - Professional Services	NSW	NSW - Utilities	NSW - Professional Services
2012	3.5	3.8	3.6	3.8	2.0	3.2
2013	2.7	3.0	2.5	4.2	3.3	4.2
2014	2.9	3.5	3.1	1.6	1.5	2.3
2015	3.1	3.7	3.4	2.0	2.5	2.6
2016	3.8	4.3	4.0	4.2	4.8	4.7
2017	4.4	4.8	4.6	5.4	5.9	5.7
2018	4.6	4.8	4.7	4.9	5.5	5.3

Table A.2. Calendar Year Forecasts for NSW and NSW Industries - UPDATED

	WPI Wages			AWE Wages		
	NSW	NSW - Utilities	NSW - Professional Services	NSW	NSW - Utilities	NSW - Professional Services
2012	3.5	3.8	3.6	3.8	2.0	3.2
2013	2.6	2.9	1.9	4.1	3.4	4.8
2014	2.6	3.5	2.1	1.4	3.1	5.5
2015	3.0	3.9	3.4	1.3	1.2	1.9
2016	3.3	3.8	3.7	2.9	3.2	3.3
2017	3.6	4.0	3.8	4.6	5.3	5.1
2018	3.8	4.1	3.9	4.6	5.3	5.1

Table A.4. Calendar Year Forecasts for ACT and ACT Industries - ORIGINAL

	WPI Wages			AWE Wages		
	ACT	ACT - Utilities	ACT - Professional Services	ACT	ACT - Utilities	ACT - Professional Services
2012	4.0	4.5	4.7	6.7	5.2	6.5
2013	2.8	3.7	2.5	2.7	2.5	3.4
2014	3.1	3.5	3.1	2.4	2.5	3.3
2015	3.3	3.8	3.4	3.2	3.8	3.9
2016	4.0	4.3	4.1	5.2	6.0	5.9
2017	4.6	4.8	4.6	6.2	6.8	6.7
2018	4.7	4.9	4.7	5.5	6.2	6.0

Table A.4. Calendar Year Forecasts for ACT and ACT Industries - UPDATED

	WPI Wages			AWE Wages		
	ACT	ACT - Utilities	ACT - Professional Services	ACT	ACT - Utilities	ACT - Professional Services
2012	4.0	4.5	4.7	6.7	5.2	6.3
2013	2.8	3.7	2.3	0.2	2.0	3.4
2014	2.1	2.6	1.5	-2.1	2.7	5.1
2015	3.1	3.5	3.3	2.4	2.6	3.3
2016	3.5	3.8	3.7	4.1	4.6	4.7
2017	3.7	4.0	3.9	5.6	6.4	6.2
2018	3.8	4.1	3.9	5.3	6.1	5.9

Table A.5. Calendar Year Forecasts for CPI Inflation – ORIGINAL vs UPDATED

Consumer Price Index		
	Original	Updated
2001	4.4	4.4
2002	3.0	3.0
2003	2.7	2.7
2004	2.3	2.3
2005	2.7	2.7
2006	3.6	3.6
2007	2.3	2.3
2008	4.4	4.4
2009	1.8	1.8
2010	2.9	2.9
2011	3.3	3.3
2012	1.8	1.8
2013	2.0	2.4
2014	2.0	2.6
2015	2.5	1.9
2016	2.3	1.9
2017	2.6	2.4
2018	2.7	2.6

Yours sincerely



Chris Murphy  
Director