

Presentation
to the
NSW State Government
Planning Assessment Commission
concerning
D459/17 - Springvale Mine Extension MOD 1

by: **Geoffrey Miell**

At: **Lithgow & District Workmen's Club**, 3-7 Tank Street LITHGOW NSW 2790

On: **7 April 2017**

Springvale Extension MOD 1 implications

Key Feature	SSD 5594 as it is currently	SSD 5594 with proposed MOD 1	Comment/Note
State consent to produce expires on	31 Dec 2028, then rehabilitate	31 Dec 2028, then rehabilitate	No change
Mine Reserves, Retreat LW mining	LW416 – LW432, LW501-LW503	LW416 – LW432, LW501-LW503	No change
Hours of Operation	24 hours x 7 days	24 hours x 7 days	No change
Max. Employment (Full-time equivalent)	310	450	45% increase incl. contractors
Max. Production (Mtonnes/yr)	4.5	5.5	22% increase
Max. ROM stockpile (ktonnes)	85	200	135% increase; +0.3 ha footprint
Max. domestic road haulage (ktonnes/yr)	50	50	No change incl. waste disposal

Springvale Mine's reserves could all be depleted as soon as year 2024 if MOD 1 is approved. Possibly more jobs, but for a shorter time.

Proposed MOD 1's stated justification:

- Make up shortfall in revenue due to the mine not being operational for 8 weeks in 2015, when the NSW PAC was assessing R032/15;
- Proposed increase in production makes the mine:
 - more economically viable;
 - and improves operational flexibility to respond to market opportunities that may present;
- Increased production would result in increased royalty returns for NSW.

But what is the outlook for the coal industry, both domestically and globally? And how does MOD 1 benefit NSW and Australia's energy security?

Mt Piper power station:

- Commissioned in 1992-3 (now 25 years old) – **is the youngest coal-fired power station in NSW**;
- 2 generator units x 700 MW each gross rated generating capacity, **representing nearly 14% of NSW's current rated coal-fired generating capacity**;
- **Demand for coal is approximately 3.7 Mtonnes/yr**
(ref: *Western Rail Coal Unloader Preliminary Environmental Assessment*, SKM, Sep 2006, section 2.4)
- **Springvale Mine is currently its sole supplier of thermal coal**, fed via overland conveyor system.

Therefore Springvale Mine is a significant contributor to NSW's and the NEM's electricity generation

Other NSW coal-fired power stations:

- Munmorah: 600 MW capacity, **closed Jul 2012**, currently being demolished;
- Redbank: 143.8 MW capacity, **closed Aug 2014**;
- Wallerawang C: 1000 MW capacity, **closed Nov 2014**, currently being demolished;
- Liddell: commissioned in 1971-73, **2640 MW capacity**, **announced closure in 2022 (5 years to go)**;
- Vales Point B: commissioned in 1978, **1320 MW capacity**, sold by the NSW Government in 2015 for \$1 million (the price of an average Sydney house), **will be 50 years old in 2028 (11 years away)**;
- Eraring: commissioned in 1982-84, **2880 MW capacity**, **will be 50 years old in 2032**;
- Bayswater: commissioned in 1982-84, **2640 MW capacity**, **announced closure in 2035**.

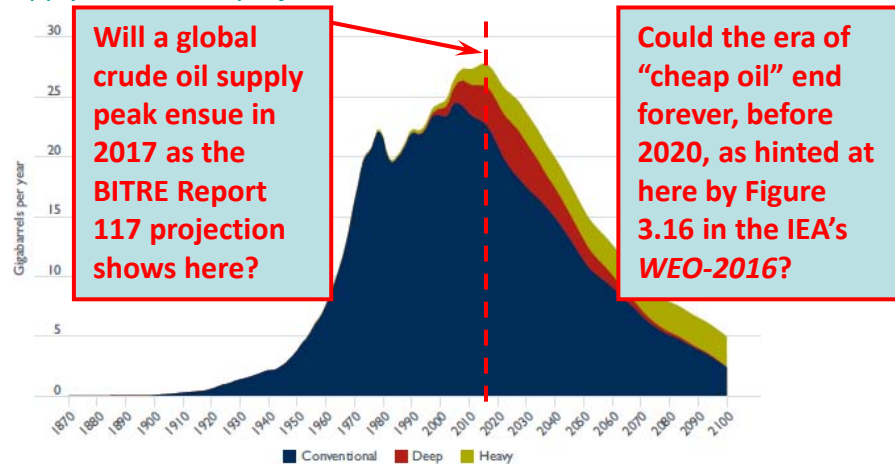
Source: *Australian Senate inquiry into the “Retirement of coal fired power stations” Interim report*, Nov 2016, Tables 2.1 & 2.2

Nearby thermal coal mines:

- Angus Place: part of the Centennial Coal group, major supplier to both Mt Piper & Wallerawang power stations in past years, placed on 'care and maintenance' status on 28 Mar 2015, **currently inactive, with current development consent lapsing on 18 August 2024**;
- Airly: part of the Centennial Coal group, placed on 'care and maintenance' status in late 2012 and reopened in Feb 2014, **currently active** using 'bord and pillar' extraction with production at around 0.8 Mtonnes/yr (less than ½ of the 1.8 Mt/yr max permissible rate), **with current development consent lapsing on 12 Oct 2035**;
- Invincible: part of the Manildra Group, **currently inactive**, seeking State Significant Development approval

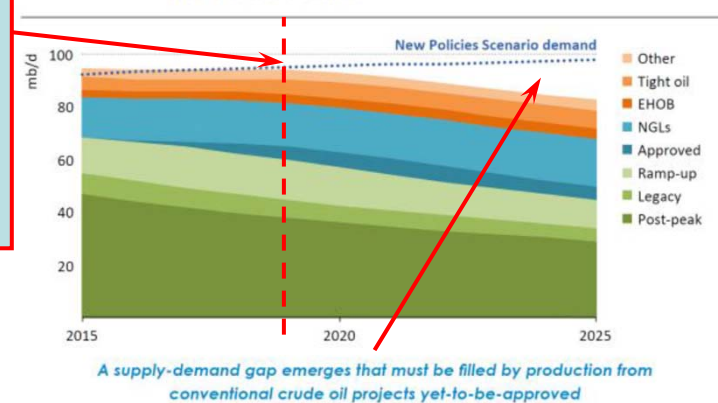
Will Springvale's overland conveyor to Mt Piper remain a handy transport asset in the 2020s?

BITRE Report 117 Transport energy futures: long-term oil supply trends and projections, prepared 2009, then suppressed



International Energy Agency's World Energy Outlook 2016, published Nov 2016

Figure 3.16 Global supply outlook from selected sources in the New Policies Scenario



Michael Hovers, BHP Billiton group's marketing petroleum vice-president, quoted in the *SMH*, 28 Feb 2017, stated:

"On our estimates, by 2025 the world will need approximately 30 million barrels a day of new supply to come online. This is a staggering one-third of current annual global demand and excludes projects already under development."

Increasing evidence suggests petroleum fuels may become more expensive soon.

If Springvale Mine exhausts its coal reserves by 2024 then transporting coal to Mt Piper power station could become much more expensive thereafter.

Top 5 coal country rankings in 2015

(all coal, both black & brown)

All Coal in year 2015	Rank 1 Country	Rank 2 Country	Rank 3 Country	Rank 4 Country	Rank 5 Country
Reserves (proved) (Mtonnes) (% world share) R/P (years)	USA 237 295 26.6 292	Russian Fed. 157 010 17.6 422	China 114 500 12.8 31	Australia 76 400 8.6 158	India 60 600 6.8 89
Production (Mtoe) (% world share)	China 1 827.0 47.7	USA 455.2 11.9	India 283.9 7.4	Australia 275.0 7.2	Indonesia 241.1 6.3
Consumption (Mtoe) (% world share)	China 1 920.4 50.0	India 407.2 10.6	USA 396.3 10.3	Japan 119.4 3.1	Russian Fed. 88.7 2.3

Mtoe = million tonnes oil equiv. = 41.87 petajoules (IEA); R/P = Reserves-to-production
Source: **BP Statistical Review of World Energy 2016**, pp30, 32-33

Current top 5 coal producer outlooks:

1. **China:** peaked at an all-time high in 2013 at 1894.6 Mtoe, declined 3.6% to 1827.0 Mtoe in 2015, declined a further 9.4% in 2016, and is expected to decline substantially further in the next few years;
2. **USA:** peaked at an all-time high in 2008 at 596.7 Mtoe, declined 23.7% to 455.3 Mtoe in 2015, is expected to decline a further 20% by around 2020;
3. **India:** increased 12.4% from 252.4 Mtoe in 2010 to 283.9 Mtoe in 2015, but a draft national electricity plan announced in December 2016 indicates there is no need to build a single new coal-fired plant in the 2020s;
4. **Australia:** with China and India likely to cease all thermal coal imports by around 2020, the seaborne thermal coal market will be in total structural decline, greatly reducing Australia's exports;
5. **Indonesia:** similar to Australia's export outlook.

Sources: **BP Statistical Review of World Energy 2016**, p32;

Hansard transcript of Senate inquiry into the "Retirement of coal fired power stations" at a public hearing on 22 Feb 2017 in Sydney, pp39-42, Witness Tim Buckley for IEEFA

07 Apr 2017

Geoffrey Miell - NSW PAC
D459/17 Springvale MOD 1

Oppose Springvale Mine Extension

MOD 1 because of these reasons:

- It could jeopardise NSW and Australia's energy security interests in the mid 2020s;
 - Evidence indicates that global coal demand has begun and is likely to continue a sustained decline, and the seaborne thermal coal market will likely be in total structural decline;
 - With Liddell power station due to retire in 5 years time and Vales Point B also likely to retire soon, existing domestic coal demand will decline in the 2020s and beyond;
 - It's unlikely new coal-fired coal plants will be built in Australia. So called "clean coal" technologies (ultra-supercritical or HELE, and CCS) are hugely expensive and already uncompetitive with other developing/emerging electricity generation technologies;
 - The "Paris Climate Agreement" locks in the demise of coal.
- MOD 1 is not needed & may jeopardise our energy security.**

Final thoughts

“It is difficult to get a man to understand something when his salary depends upon his not understanding it.”

Upton Sinclair (1878 – 1968), US novelist & socialist politician

“The difficulty lies, not in the new ideas, but escaping from the old ones...”

John Maynard Keynes (1883 – 1946), English economist

Thank you

Further background information is provided on the next slide

Further Background Information

1. **IEEFA Update: China Is Now Three Years Past Peak Coal**, by Tim Buckley, 28 Feb 2017, <http://ieefa.org/ieefa-update-china-now-three-years-past-peak-coal/>
2. **Coal imports decline by 22 per cent to 14 MT in January**, from the *Deccan Chronicle*, India, 19 Feb 2017, <http://www.deccanchronicle.com/business/economy/190217/coal-imports-decline-by-22-per-cent-to-14-mt-in-january.html>
3. **IEEFA background briefing: Australian Export Coal Quality**, by Tim Buckley, 23 Nov 2015, <http://ieefa.org/wp-content/uploads/2015/10/IEEFA-Australian-coal-briefing-note.pdf>
4. **Japan: Greater Energy Security Through Renewables – Electricity Transformation in a Post-Nuclear Economy**, by Tim Buckley & Simon Nicholas, Mar 2017, <http://ieefa.org/wp-content/uploads/2017/03/Japan-Greater-Energy-Security-Through-Renewables-March-2017.pdf>
5. **ENERGY TRANSITIONS: Coal plants keep closing down on Trump's watch**, by Benjamin Storrow, 21 Feb 2017, <http://www.eenews.net/stories/1060050333>
6. **The fallout from SaskPower's Boundary Dam CCS debacle**, by Bob Burton, 12 Nov 2015, <http://reneweconomy.com.au/the-fallout-from-saskpowers-boundary-dam-ccs-debacle-54803/>
7. **Will the US Really Be a Major Energy Exporter?**, by Richard Heinberg, 16 Nov 2017, <http://www.postcarbon.org/will-the-us-really-be-a-major-energy-exporter/>
8. **End of the "Oilocene" – The Demise of the Global Oil Industry and of the Global Economic System as we know it**, The Foundation for the Economics of Sustainability, 22 Jan 2017, <http://www.feasta.org/2017/01/22/end-of-the-oilocene-the-demise-of-the-global-oil-industry-and-of-the-global-economic-system-as-we-know-it/>