

Senate Standing Committee on Environment and Communications
Legislation Committee
Answers to questions on notice
Environment and Energy portfolio

Question No: 188
Hearing: Supplementary Budget Estimates
Outcome: Outcome 5
Program: International Climate Change and Energy Innovation Division (ICCEID)
Topic: Coal-Fired Power Stations
Hansard Page: 9
Question Date: 21 October 2016
Question Type: Spoken

Senator Chisholm, Anthony asked:

Senator CHISHOLM: I just wanted to ask about Australia's fleet of coal-fired power stations. In particular, I wanted to focus on their expected productive life.

Mr Heferen: There are a number of coal-fired stations, as you would be aware, including four big brown coal stations in Victoria and then a number of black coal stations in both New South Wales and Queensland and some in Western Australia, not part of the NEM but part of the WA system. I know there are timelines of anticipated closure for a number of stations, but it might be best if we took that on notice.

Senator CHISHOLM: Sure. Just specifically, then, do you know how many are due for retirement in the next 15 years?

Dr de Brouwer: That will be in that information. I do not have the numbers here, but for most power stations companies nominate what the life of that asset is. That is what we would be collecting—the nominated life of the assets. Some of that is within the next 15 years, but I cannot recall which power stations. We will come back to the committee with that.

Answer:

The technical life of a power station is a reflection of its design and construction, and the estimated time to make a return on its capital costs. A power station will not necessarily close at the end of its technical life.

The decision to close is commercial: the owners of a power station may choose to extend its life by investing in major upgrades or refurbishments, or may choose to close it earlier than its technical life. There are many factors that contribute to such a decision, including wholesale electricity prices, availability and cost of fuel, operating and maintenance costs, wider strategic decisions or portfolio optimisation.

Consequently, the Department does not hold a view on what the technical life of a power station should be or when it should be due for retirement. We have, for reference, included a table below which outlines what Bloomberg New Energy Finance suggested technical lives of the coal-fired power stations could be.

Two coal fired power stations have announced retirements within the next 15 years, these are:

- Hazelwood in Victoria (announced for closure in March 2017) and;
- Liddell in New South Wales (announced for closure in 2022).

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Technical Operating Life of Coal Generators in Australia – Bloomberg New Energy Finance						
State	Generator	Fuel	Commissioned	Age (yrs)	Technical life ¹ (yrs)	End of technical life ¹
Victoria	Hazelwood	Brown	1964-1971	45-52	63	2027
	Loy Yang A	Brown	1984-1988	28-32	51 + 13 year extension	2048
	Loy Yang B	Brown	1993-1996	20-23	50	2043
	Yallourn	Brown	1974-1982	34-42	58	2032
New South Wales	Bayswater	Black	1985-1986	30-31	50	2035
	Eraring	Black	1982-1984	32-34	50	2033
	Liddell	Black	1971-1973	43-45	51	2022
	Mt Piper	Black	1992-1993	23	50	2042
	Vales Point	Black	1978	38	50	2028
Queensland	Callide B	Black	1988	28	50	2038
	Callide C	Black	2001	15	25	2026
	Gladstone	Black	1976	40	50	2026
	Kogan Creek	Black	2007	9	30	2037
	Millmerran	Black	2002	14	25	2027
	Stanwell	Black	1993-96	20-23	50	2043
	Tarong	Black	1984-86	30-32	50	2034
	Tarong North	Black	2003	13	50	2053
Western Australia	Collie	Black	1999	17	40	2039
	Muja AB ²	Black	1965	51	49 + 15 year extension	2029
	Muja CD	Black	1981/1986	30-35	50	2036
	Bluewaters	Black	2009	7	40	2049

¹ Bloomberg New Energy Finance, *When will Australia's coal-fired generation retire?*, 10 June 2016. The technical life of a power station is not an indication of an expected closure date. A power station can be upgraded to extend its lifespan, or a commercial decision could be made to close earlier or later than the technical life.

² Recommissioned 2014.