

Coalition Senators' Dissenting Report

1.1 Coalition Senators fundamentally reject the central tenant, conclusions and most recommendations of the Chair's draft report. The Coalition Senators question the wisdom and considerable public expenditure of conducting a Senate Inquiry with hearings in locations around Eastern Australia to produce a report that is so biased that it could have been written before the Inquiry even commenced.

1.2 Coalition Senators reject the proposition contained within the Chair's report that the Coalition Government is responsible for the ill-informed and misguided decisions of the South Australian Labor Government in destroying the supply of cheap energy for households and businesses in that State.

1.3 The electrical network was designed to transmit reliable and affordable electricity to consumers. Distributed generation will continue to be part of the modern electrical grid as it is now. Generation type is the issue. The Coalition Government has adopted a technology agnostic approach with the central aim to keep energy secure, reliable and affordable for all Australians.

1.4 It is a perverse but tragic irony that South Australia was the envy of the nation under the Premiership of Sir Thomas Playford (1938 – 1965) due to his vision of supplying cheap, reliable energy to that State through the generation of electricity using locally available coal.

1.5 In so doing Sir Thomas was able to attract industries such as motor vehicle and naval shipbuilding manufacturing which led to sustained high employment and cheap domestic power for generations.

1.6 Coalition Senators note the contrast existing with the current situation in South Australia which now has the nation's highest electricity prices, the least reliable supply of power, lost industry, high unemployment and a sense of despair.

1.7 The Chair's report fails to outline that the primary cause of this reversal has been the ill-considered policy of the Weatherill Labor Government to shut down the State's largest base load coal fired power station at Port Augusta while promoting an ideologically driven expansion of wind generated electricity with its attendant failure to deliver reliable and affordable power to the citizens of that State.

1.8 Coalition Senators reject the proposition advanced in the Chair's report that natural gas has little or no role to play in the supply of electricity into the Eastern Australian grid. Quite the opposite is true. Without gas fired peaking stations to balance and stabilise intermittent energy on the grid, the entire grid system could be destabilised. This was supported by evidence from submissions and hearings with calls for renewable energy generation to be required to partner with complementary 'firm and dispatchable' capacity, such as gas generation, among others.

1.9 The very fact that, in his desperation, the South Australian Premier has now committed some \$550 million of his taxpayers' dollars to purchase gas fired electricity infrastructure is further evidence of the importance of this power source to “keep the lights on.”

1.10 It is beyond the comprehension of Coalition Senators that South Australia, Victoria and New South Wales could impose moratoria on the exploration and extraction of onshore natural gas in their States in the face of supply shortages, rising electricity prices and international experience where countries are increasingly turning to natural gas for supply of reliable, sustainable and affordable electricity.

1.11 As South Australian households and businesses are coming to learn: 'Gas is good'. This lesson will be reinforced by the Victorian community in coming months and years following the closure of the coal fired Hazelwood power station in Victoria following policies of the Andrews Labor Government to increase coal royalties and force costs up to a level which accelerated the closure of that State's largest base load power station which supplies up to 25% of Victoria's energy demand.

1.12 Coalition Senators point to the experience of the USA following the development of the shale gas industry in that country in recent years. Transition to natural gas powered electricity has allowed the USA to drive down greenhouse gas emissions (GHG) while American manufacturers are now paying one third the price of electricity to that of their German competitors. This has encouraged a flood of manufacturing activity back to the United States, creating more high paid jobs and economic activity.

1.13 Furthermore the USA is now becoming a net exporter of hydrocarbons and will soon compete with Australia for LNG contracts in our traditional markets.

1.14 The Chair's report speaks of natural gas being, at best, a transition source of energy. If 50 to 100 years is regarded as being 'transitional' then this may be an accurate description. However coal and gas will continue to be the dominant sources of energy for electricity throughout the world for many generations to come.

1.15 The Chair's report is dismissive of coal as a generator for electricity. Coalition Senators note that 78% of the electricity supplied to the National Electricity Market (NEM) is generated from coal and 9% from gas. Under current policy settings no fossil fuel based investment will occur – an oversupply of generation capacity plagues new investment into the NEM. This would mean that in the absence of any reliable base-load alternative, further black outs can be expected.

1.16 The Coalition Senators highlight that the Chair's report ignores the evidence from submissions and hearings urging caution in the transition to alternative and renewable energy generation due to the impact that this has on baseload power. Further, evidence supported a managed and gradual stepdown from conventionally-generated baseload power with backup options in place. The Chair's report repeatedly ignores the importance of baseload power and the incapacity for wind or solar generated power to provide the essential baseload power requirements.

1.17 Importantly, a study by Dr Wheatley of the 2014 NEM data clearly showed that the integration of wind energy into the grid was not reducing emissions by the amounts claimed.¹ It also found that wind energy displaces gas from the grid rather

1 Dr Joseph Wheatley, *CO₂ Emissions Savings from Wind Power in the National Electricity Market (NEM)*, 2015.

than coal fired power. In the interests of ensuring a safe reliable supply of electricity in the future, this analysis should be extended.

1.18 Coalition Senators note that China is in the midst of a revolution of building High Energy Low Emission (HELE) power stations and continue to source high energy low polluting thermal coal from Australian mines. Possibly the greatest contribution our country is making to the reduction of GHG's internationally is to supply this form of thermal coal. With Australia emitting less than 1.5% of the world's GHG's, our greatest contribution globally may be to supply high energy, low polluting coal to the burgeoning economies of China and India as they transition their populations from subsistence living to middle class aspiration.

1.19 Coalition Senators are keenly watching the advances in Carbon Capture and Storage technologies in both Australia and overseas to contain and dispose of carbon dioxide underground. The CCS project for Gorgon on Barrow Island offshore Western Australia is set to be commissioned in 2017 while reports from China indicate promising results associated with the new HELE efficient coal producing power stations.

1.20 Coalition Senators find the accusations contained in the Chair's report condemning the Turnbull government's energy policies to be false and misleading. Given that the Australian Greens Party voted against the Rudd Government's ill-conceived carbon pollution reduction scheme in the Senate in 2009, the comments contained in the Chair's report are at best hypocritical.

1.21 Then Prime Minister John Howard introduced the Renewable Energy Target set at 2% in 1997.

1.22 But this target was hijacked and set at unrealistically high levels by the incoming Labor governments of Mr Rudd and Ms Gillard in subsequent years. The ethically questionable diversion of taxpayers' monies to subsidise projects such as large scale industrial wind turbines (IWT) can be traced back to this era.

1.23 The widespread construction of IWT's in South Australia to meet unrealistic targets of 50% electricity generation from 'renewables' is at the core of that State's insecure and highly expensive power situation today.

1.24 Coalition Senators draw attention to the conclusions and recommendations of the Senate Select Committee Inquiry into wind turbines in 2015. That report highlighted the fact that this source of power is of limited value in contributing to an energy grid given the inability to supply stable synchronised power. That committee also noted the fact that most energy from wind power is delivered at low periods of demand and that the wholesale price of wind power delivered to the grid has corrupted pricing mechanisms.

1.25 The actions of other governments are illustrative. The United Kingdom has withdrawn any financial support for the construction of land based IWT's in that country.

1.26 Denmark has the highest number of IWT's in Europe/Scandinavia. It also has the highest cost of household and commercial electricity in that region. The Danish government has placed a moratorium on support for new IWT's until the next decade.

1.27 The chronic adverse health effects experienced by people residing in the proximity of IWT's will be the emerging issue for authorities and operators in years to come. The Coalition Government has committed funding to study these health effects through the National Health and Medical Research Centre.

1.28 Coalition Senators concur with comments contained in the Chair's report in relation to the potential for new and emerging power generation and storage technologies such as molten salt and molten silicon.

1.29 Battery storage, if shown to be economically viable, could have significant impact in the future with the establishment of localised 'micro-grids' and greater independence from traditional large scale power generation and distribution systems.

1.30 Coalition Senators await the conclusions of the Finkel Report before recommending further policy in this space.

1.31 Coalition Senators continue to urge the Turnbull Government to adopt a key recommendation of the Wind Turbine Inquiry and direct the Productivity Commission to conduct research into the impact of wind turbine generation on retail electricity prices in Australia. At the same time, this research should be expanded to include the cost of battery storage and the Frequency Ancillary Control Services required to support renewable energy generation.

1.32 A recent report by BAEconomics has advised that the bill to prop up green power has hit \$3 billion per year.

1.33 Coalition Senators note that the AEMC completed a comprehensive market review into the integration of energy storage in 2015. Further, given the evidence presented to the committee the Coalition Senators have concerns regarding the efficacy and cost of current battery storage technologies.

1.34 The Chair's report briefly discussed the recent announcement from the Prime Minister to investigate expansion of pumped hydro capacity at the Snowy Hydro scheme.

1.35 Contrary to the assertions contained in the Chair's report, advice from the executives of Snowy Hydro is that such a proposal is eminently practicable. Coalition Senators understand that much of the data required to undertake a feasibility study is already available given the wealth of knowledge that exists in the scheme and the advanced meteorological data compiled over many years in the region. The Snowy Mountains Scheme 2.0 plan will increase the generation of the Snowy Hydro scheme by 50 per cent, adding 2000 megawatts of reliable, baseload renewable energy to the NEM.

1.36 Advice to Coalition Senators is that such an expansion, once completed, could provide power to support the grid during periods of high demand, such as extremely hot weather, for an uninterrupted 187 hours. This contrasts with the predicted contribution of power from battery storage under similar circumstances of one hour.

1.37 The Renewable Energy Target (RET) acts as a tax on energy consumers and conventional energy suppliers to fund a subsidy to selected renewable energy generators. After 16 years of operation it has become clear that the objectives of the

Act have not been reflected in the outcomes. While the investment in renewable energy sources has increased, from a carbon abatement perspective, the Act has been ineffective in its objective to reduce greenhouse gas emissions within the electricity sector.

1.38 The RET is causing retail electricity prices to rise significantly. Energy generated by wind turbines do not reduce greenhouse gas emissions within the electricity sector by the amount claimed. In fact, there is some evidence that the addition of wind energy onto the grid actually increases carbon emissions. This is the great tragedy of the scheme.

1.39 It is a legislated requirement that 600 million renewable energy certificates (RECs) will be issued between now and 2031, adding a cost of at least \$50 billion to power bills. This represents a significant wealth transfer to wind power companies from Australian power consumers and achieves no measurable benefit to the environment.

1.40 South Australia's disastrous electricity supply situation had its origins with the decision of that State Government to move towards 50% of electricity being delivered from renewable sources without adequate backup from synchronous base load generation or guaranteed supply from alternative sources.

1.41 Coalition Senators fear a similar outcome if or when the Labor Premiers of Victoria and Queensland attempt to carry out similar plans in their States. It is interesting to note that the incoming Labor Premier of Western Australia very quickly reversed a statement of his Shadow Energy Minister to commit to such a target in the days leading up to the recent WA State election.

1.42 Coalition Senators note the change in language by the leader of the Federal Opposition Mr Bill Shorten from his original undertaking to increase the supply of electricity supplied by renewable means to 50%. This aim seems to have become 'aspirational' as the reality of the South Australian debacle has played out.

1.43 Bloomberg New Energy Finance estimates that around 25.4 gigawatts of new large-scale renewables, representing some \$48.2 billion of new investment, would be required to meet Federal Labor's renewable electricity target by 2030. It is predicted that a 50% target would require around 43 terawatt hours (TWh) of additional renewable energy generation by 2030. This is a substantially lower quantity than may be expected at first, primarily due to projections that the continuing uptake of small-scale PV is likely to contribute an additional 22.5 TWh of generation to the Australian energy market by 2030.

1.44 If current policies are to be met, it is forecast that around 52.1 TWh of large-scale generation and 32.2 TWh of small-scale supply will already be in place by 2030 (including large-hydro). If achieved, the current 33 TWh Large-scale Renewable Energy Target (LRET) will require some 21.4 TWh of new large-scale generation.

1.45 Coalition Senators note that other reputable sources predict much higher costs would be imposed on long suffering household and commercial consumers if Labor's 50% target became reality.

1.46 The statement contained in the Chair's report that Australia could move to a 100% reliance on renewable sources for electricity generation is not supported by the evidence presented to the Committee.

Coalition Senators' responses to the recommendations of the Chair's report.

Recommendation 1:

1.47 Coalition Senators do not support the recommendations made by the Senate Environment and Communications References Committee in its report into the retirement of coal fired power stations as outlined in the Coalition's dissenting report. The majority report of that inquiry does not adequately or fairly reflect the evidence presented to the Committee. Fundamentally, and contrary to the recommendations, Coalition Senators do not believe that the best way to achieve an effective transition is to force the exit of coal-fired power generation from the electricity system. Further the Coalition Senators object to the ideologically driven conclusions which are counter to the Government's technology agnostic policy approach.

Recommendation 2:

1.48 The Federal Government, in conjunction with the COAG Energy Council, is currently developing a long-term national blueprint for the national energy sector through the Finkel Review. A final report to the Energy Council is expected mid-2017. Coalition Senators refute the assertion that the review is not focused on the stable supply of electricity in the future.

Recommendation 3:

1.49 Coalition Senators note that the Australian Electricity Market Commission (AEMC) completed a comprehensive market review into the integration of energy storage in 2015 and is in the process of examining market rules to ensure the electricity system remains reliable and affordable.

Recommendation 4:

1.50 Coalition Senators reject this recommendation and note that the review of climate change policies which follows the Government's commitment to review its policies when it set Australia's target to reduce emissions by 26 to 28 per cent below 2005 levels by 2030 is underway and set to be completed by the end of 2017.

1.51 Coalition Senators note that the Renewable Energy Target (RET) acts as a tax on energy consumers and is causing retail electricity prices to rise significantly. The RET is not reducing emissions within the electricity sector by the amount claimed.

Recommendation 5:

1.52 Coalition Senators note that the Federal Government, in conjunction with the COAG Energy Council, is currently developing a long-term national blueprint for the national energy sector through the Finkel Review. The final report to the Energy Council is expected mid-2017.

1.53 Coalition Senators comment that the market price is currently averaged over 30 minutes. If generators were expected to jump on and off the grid every 5 minutes,

the stability of the grid will be compromised. Many generators need more than half an hour to synchronise to the grid and have set forward contracts. To transition from one generator to another generator, a smooth and comparable synchronised transition is needed. Some larger generators can take up to 38 hours to build up a head of steam. As was made clear during the Inquiry, Pelican Point takes 4 hours to be available to the grid.

Recommendation 6:

1.54 Coalition Senators note that the Australian Energy Market Commission (AEMC) was established in 2005 by the Council of Australian Governments (COAG) as part of new governance arrangements to oversee the nation's main energy markets and provide advice to the nation's energy ministers.

1.55 Coalition Senators agree with prioritising the long term interests of the consumer – to keep energy secure, reliable and affordable.

Recommendation 7:

1.56 Coalition Senators note that the AEMC completed a comprehensive market review into the integration of energy storage in 2015 and is in the process of examining market rules to ensure the electricity system remains reliable and affordable.

1.57 The Coalition Senators regard this recommendation as redundant as the COAG Energy Council Independent Review Terms of Reference for the 'Blueprint for Energy Security in the National Electricity Market' includes consideration of any national policy, legislative and rule changes required to maintain the security, reliability and affordability of the NEM in light of the transition taking place.

Recommendation 8:

1.58 Coalition Senators reject this recommendation as a price on carbon was rejected by the Australian public in the 2013 federal election.

Recommendation 9:

1.59 Coalition Senators note that the AEMC has begun a review of the Frequency Operating Standards that will be completed by 22 December 2017.

1.60 Coalition Senators note that a change of frequency is a major problem for modern electrical equipment. The grid is designed for a stable supply of electricity harmonised at 50 Hertz.

Recommendation 10:

1.61 Coalition Senators note that the AEMC completed a comprehensive market review into the integration of energy storage in 2015 and is in the process of examining market rules to ensure the electricity system remains reliable and affordable.

1.62 The Coalition Senators regard this recommendation as redundant as at the Coalition Government's request, ARENA and the Clean Energy Finance Corporation agreed to work together on a new funding round for large-scale storage and other flexible capacity projects, including pumped hydro. The Coalition Government is

making energy storage infrastructure a critical priority to ensure better integration of wind and solar into the energy market and more efficient use of conventional power.

Recommendation 11:

1.63 Coalition Senators note that the Government will not duplicate or override the existing statutory responsibilities of other jurisdictions. The Prime Minister has announced a feasibility study of Snowy Hydro 2.0 which has the capacity to substantially increase the resilience and security of the electricity grid.

1.64 The Coalition Senators regard this recommendation as redundant as at the Coalition Government's request, ARENA and the Clean Energy Finance Corporation agreed to work together on a new funding round for large-scale storage and other flexible capacity projects, including pumped hydro. The Government is making energy storage infrastructure a critical priority to ensure better integration of wind and solar into the energy market and more efficient use of conventional power.

1.65 In summary, Coalition senators reject the substantial text and recommendations of the Chair's report into this Inquiry.

Senator Chris Back

Senator Jonathon Duniam