Submission to the Climate Change Authority on the Special Review of power system security, electricity prices and emissions reductions

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Healthy planet, healthy people.

Submission to the Climate Change Authority on Special Review of power system security, electricity prices and emissions reductions[1].

Doctors for the Environment Australia (DEA) is a voluntary organisation of medical doctors and students who are concerned at the adverse effects on health by environmental damage. DEA is totally independent of any political and business affiliations and so is able to give unbiased assessments of matters concerning the environment. DEA's concern is for the health and future of mankind within the biosphere which is under increasing threat with the passage of time.

DEA notes that the Climate Change Authority (CCA) will join with the Australian Energy Market Commission (AEMC) to review an Independent Review into the Future Security of the NEM. The report of this Independent Review is not yet available, so why there has to be further review of an unpublished Review is problematic and raises questions of probity.

Doctors for the Environment Australia has made an extensive submission to the Independent Review (commonly known as the Finkel review) in which we highlight the adverse health consequences of an inadequate national energy policy. Evidence strongly suggests that the current trajectory of global warming will seriously threaten multiple life-forms in the biosphere including mankind.[2]

Overview

The evidence we have reviewed indicates that Australia does not have co-ordinated energy and climate change policies which will satisfy the Paris Agreement or reduce domestic air pollution as a health necessity for Australians. Through inadequate national organisations the federal government has failed to provide energy security and has dishonestly blamed the states. It has been reckless in abolishing a tax on carbon and has tolerated rorting which has led to a progressive rise in electricity prices for which it has blamed renewable energy. The government must recognise that its inadequacies are delaying Australian participation in the international energy revolution and this will impair our economic future.

We recommend that the government listens both to the advice in the final Finkel review without prior exclusion of possible recommendations, and to the reform measures put forward by Ms Zibelman.

Priorities for Review of the NEM

Insufficient emission reduction efforts

Global warming with climate change threatens the health of mankind and the biosphere. It is essential therefore that Australia makes a stronger effort to reduce its greenhouse gas emissions in accordance with the aims of the Paris Agreement.[3] DEA notes that the criteria used to judge Australia's performance are the targets created in 2014.[4]

However, these targets are so weak as to be effectively meaningless. Currently Australia has not reduced emissions significantly and does not have policies in place to do so.[5]

Emissions reduction needs priority

As we have stated in our submission to the Independent Review of the Future Security of the NEM, emissions reduction needs to be the primary objective of changes to energy supply.[6]

Means of achieving the other two outcomes of power (i) reliability and security, and (ii) affordability, can then be found within this framework. Conversely, considering power sources first, there are many ways of achieving security and reliability which would need to be discarded immediately, such as continuing coal and embarking on nuclear, because they do not meet emissions reduction and affordability criteria respectively.

Low emissions energy sources are available

There are now multiple ways to enhance the reliability and security of energy production from renewables. These consist of battery storage, concentrated solar-thermal (with or without storage), pumped hydro, more conventional hydro, better synchronising technologies and electronic switching.[7] In addition there are other technologies which could be explored further such as wave and geothermal.

Low emissions sources are affordable

Wind and solar power are cheaper than that from coal and gas when all the externalities of health costs and pollution are taken into account[8], and if the cost of GHG damage is included, the true cost of coal-fired electricity would be close to double the nominated cost[9] and the cost of wind, solar, and storage will continue to decline[10].

Using gas to generate electricity is expensive and confers little or no advantage in reducing greenhouse gas emissions because the escape of 'fugitive emissions' during all phases of the gas chain offsets the lower emissions compared to coal combustion. Gas should be regarded as a finite resource to be used sparingly where electricity is unavailable.

Better control of operations allows workable renewable energy mix

Poor control of the energy market was acknowledged as the reason for the total blackout and other power failures in South Australia and not renewable energy. The mechanism of control needs to be updated and controlling bodies need to embrace the special characteristics of renewable technologies. Whether this extra review in which the CCA and AEMC are involved is sufficiently independent to assess these needs is questionable.[11]

The new CEO of Australian Energy Market Operator (AEMO), Audrey Zibelman, who was instrumental in New York's Reform the Energy Vision Plan (REVP) stated *"The more states that take a look at what we are doing- how do you use more distributed resources better, how do you make it part of the grid- it creates greater market opportunities".* The REVP has a plan for 50% renewable energy by 2030. The CSIRO submitted to the Senate Enquiry on the 'Resilience of electricity infrastructure in a warming world' that there is no technical impediment to reaching 100% renewables for the national electricity grid.[12]

The Australian states need to be encouraged to continue their development of renewable energy sources which suit their geographical advantages. Criticism of the states' progress serves no useful purpose and is counter-productive to Australia's efforts to reduce emissions.

Fossil-fuels on the way-out

The coal industry is in structural decline. Failing to recognise this fact will condemn communities to disruption and uncertainty as we have already seen in the Latrobe Valley in Victoria. The World Resources Institute has revealed that in the USA jobs in the renewable energy industries now far exceed those in the coal industry by a factor of five to one. This change is driven by both environmental and economic concerns.[13]

Coal is a major source of air pollution which has been recognised by the World Health Organization (WHO) as a global emergency. Pollution is not just local but harms the health of communities over wide distances.[14]

The Paris Agreement requires that countries review their emission reduction targets in line with the goal of maintaining global temperature rise to less than 2°C. Continuing to burn coal and gas to generate electricity is not compatible with that aim. The current rate of progress means that active carbon sequestration, by means as yet unknown, will be required to bring down dangerous levels of atmospheric CO_2 in the latter half of this century.[15]

References

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