Submission No 63

INQUIRY INTO URANIUM MINING AND NUCLEAR FACILITIES (PROHIBITIONS) REPEAL BILL 2019

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Dear Standing Committee into State Development,

I offer the following submission to the Inquiry into Mark Latham MLC's *Uranium Mining and Nuclear Facilities (Prohibitions) Repeal Bill 2019*.

I am not an expert in nuclear power. Though, that should signal not that you shouldn't listen to me, but that I have as much experience with uranium mining and nuclear facilities as do most of the Members considering the legislation.

I hope the Legislative Council defeats the Bill. In the case that it does not, I hope that the Legislative Assembly defeats the Bill. Beyond the Lucas Heights medical facility, I hope Australia remains free of permanent nuclear facilities. Though, I note the occasion temporary arrivals of nuclear submarines from visiting forces, though often wish we were in a position to reject their entering our territorial waters.

In making my argument I intend to offer thoughts on the following issues:

- Looking at the problem arse about face
- Other solutions
- Surprisingly excellent or gobsmackingly stupid unintended consequences
- NIMBYs
- Regulatory issues
- Aboriginal and Torres Strait Islander issues
- Submissions to date
- Big Boys Toys
- Water
- Waste
- Specific concerns about nuclear power

I recognise that we do have problems with carbon emissions. I am a member of a range of organisations which are attempting to explain, deal with and compel Government to significantly reduce emissions. I have worked for the bureaucracy during periods where it has attempted either to reduce its own emissions or to influence the behaviour of citizens to cause them to reduce broader emissions.

To me it is obvious that we must reduce emissions and as quickly as possible. But that doesn't mean that we do this without careful consideration and planning. Taking a step back to actually look at the problem, to define it properly, should not be out of the realm of possibility. I recognise that groups like Extinction Rebellion may disagree with that sentiment. But I don't think that addressing climate change should be an act done irresponsibly and without thought or regard for people, industry and our way of life.

I would be quite happy for the Committee to make my submission to the Inquiry public.

Thank you for your time.

Looking at the problem arse about face

The only reasons to be looking at changing our energy mix are the desire to reduce our carbon emissions (whether to provide cleaner air for the community or to stop or reverse climate change; or for any other reason) or because of coal fields being spent. Evidently the latter is not the case. Whether a person believes in climate change or no, as a community we should be cognisant of attempting to improve the quality of the air we breathe, minimising respiratory diseases; also the tourism industry should benefit with improvement in views; and agriculture should also see benefits with improvements in quality of rain water.

But the points at which to start to address the problem seem not to have been properly and fully considered prior to embarking on the journey to solve the problem.

I would argue that prior to engaging in solving a problem, we should first define the problem properly; especially as there are multiple problems which require solution.

I further argue that the following things are the problems:

- New South Wales has previously been committed to reducing our carbon emissions, having been a world leader in introducing the first cap and trade system; we now lag behind; and, New South Wales should return to leading the world.
- New South Wales currently has five operational coal fired power stations all due to be decommissioned by 2035, presenting an energy production gap.
- Coal fired power stations, and coal mining, cause, among other health issues, increases in particles in the atmosphere which negatively impact on human respiratory systems; New South Wales might be able to reduce expenditure on some parts of the health system by reducing coal mining and closing coal fired power stations.
- A diverse range of transport options employed by people travelling in New South Wales causes significant emissions of both carbon and particles into our atmosphere; New South Wales may be able to reduce expenditure on some parts of the health system by employing different vehicles in the transport industry in New South Wales.
- New South Wales is a net importer of energy; a problem which will be unhelped in the medium term by decommissioning of five coal fired power stations which represent more than 50% of power generation facilities in New South Wales.

That said it is possible to view the problem as deeper than that with which we have been presented. That is, at this moment, New South Wales produces a significant amount of power which is simply unused.

The term “baseload power” refers not to demand for electricity; but for the amount of electricity supplied by one or a number of facilities.

It is patently untrue to say that we, as a community, *need* baseload power. And we can see that it is untrue by the volume of power produced which goes unused. Certainly it might be true to say that in exceptional periods power demand spikes such that baseload power may be insufficient. But it might be as true to say that poles and wires are insufficiently maintained or upgraded to carry the

volume of power required during such demand spikes. Perhaps, also, that power is not supplied from a location helpful to where demand might occur. Either way, consumers pay for additional power produced but not consumed through higher than necessary power rates.

In other words, Government and industry demanding that any replacement energy model meet requirements of the baseload power arrangements currently in place is Government and industry demanding that future power generation continue to engage in oversupply.

And while I concede that the nuclear power industry and coal fired power generation proponents have found the term “baseload power” convenient to dissuade the community from change from our current model of power production and dissemination; I don’t think that term is particularly helpful to actually addressing the questions at hand or, indeed the problem/s we face.

This attitude toward power production and distribution which focusses on what we currently have, rather than what we need, is a concerning form of conservatism; and causes a range of assumptions about methods and processes which *should* be employed in the future. Focusing on supply-side economics rather than on meeting the actual needs and wants of the community sounds like decision makers are seeking to engage in economic failure.

There’s much colloquial talk about game changers and industry disruption as being good things. To my mind, it would seem prudent to consider this point as being an opportunity to review and consider how disrupting the electricity industry might be a game changer for energy production and distribution. NB. Personally, I rather dislike these ridiculous buzz words, but they may be useful here.

It’s fair to say that proximity of power production to power use is important because electricity doesn’t travel very far before becoming relatively unuseful. We can look to the origination of AC/DC power distribution; where power was originally conveyed as a Direct Current by Thomas Edison’s power company which resulted in very short range distribution of power; whereas Nikola Tesla worked on and developed a system to distribute the more conductive Alternating Current such as to cause power to be distributed across a much larger range and thus cause increased access to electricity; however even an Alternating Current can not be distributed endlessly, in terms of distance at least.

While that’s a pretty simplistic overview of the situation, we can see that in that situation Thomas Edison had every incentive to block Tesla and AC distribution of power such as to retain and continue to make money from his significant investment. Ultimately Tesla’s system won and, to extrapolate across time, most Australians now have access to electricity, raising the standard of living of most.

At this point in our energy journey we confront a slightly different problem. And it is worth considering the Edison/Tesla situation. Are community members simply conducting themselves like Edison because they are attempting to retain control of the discussion and the outcomes. Is the Committee being seduced by actors in this Inquiry telling the Committee that one thing or another is “impossible” because it is convenient for them to retain market share and to profit from entrenched industries; rather than looking at what potential might exist in other options.

Realistically, before we try to "solve" a thing, we need to clearly define which problems we are hoping to solve. The Bill itself, the second reading speech and the Parliamentary Library Paper do not point to a clear answer to the question of what is the problem; unless of course the problem is simply that uranium mining and nuclear power is demanded by the community but is currently prohibited by legislation; a conclusion which could not be drawn from even the most supportive of the public opinion surveys researched by the Parliamentary Library.

What the community demands is electricity or power to continue operating businesses, telecommunications, banking, fridges and all of the things which have become part of their lives. Neither the community nor individual consumers necessarily cares how power is created, beyond the question of climate change and/or environmental impact, the community and, indeed, individual consumers care that power is available to them when they turn a power point on.

To me, this suggests that the very basic problem mix is:

- New South Welsh residents need power to conduct their lives; whether in business or at work, or in their private spheres.
    - Power, in this space, is not restricted to plug in the wall requirements; it includes transport.
    - It is worth also considering that power, for the purposes of this submission does imply some level of political agency; but is otherwise restricted to things for which electricity must be artificially created to power non-human/non-vegetation objects.
- New South Wales will experience changes in its demand level for power over time.
- New South Wales must attempt to undertake realistic forecasts about what levels of power will be required, across the whole of the community and, within those forecasts, look at where fluctuations must occur; look at differences between day time and night time consumption needs; and with consideration of the timing of likely demand surges throughout operational years.
- New South Wales believes that reducing carbon emissions is important, for whatever reason.
- Any future energy production and distribution mix must conform to these standards.

To date, we seem to have been looking through a prism of rhetoric which is unhelpful to determining both what the problem is and what must be done to solve the problem.

Ultimately, my point is that politicians are looking at this problem arse about face. And it is Bills like this which effectively offer the proposition that politicians (far more so than their constituents) want nuclear for nuclear's sake; rather than power for electricity's sake at a time when, globally, the world is attempting to reduce its reliance on nuclear power generation which, naturally, would have to be the time that Australia would start thinking this spent idea was a good one.

And that looking at the issue arse about face causes additional problems, for example, causing a blinkered approach to nuclear from proponents who advocate for Governments taking a technology agnostic approach while articulating a Riccardian position on nuclear energy but offering an extremely Malthusian view on all other forms of technology.

Other solutions

Notwithstanding that the problem appears to be a dummy spit over the absence of a particular industry in Australia's economy rather than a genuine attempt to solve a specific problem that New South Welsh constituents might have; it is worth indicating that many solutions might be available.

Until such time as the problem is clearly defined as being a thing which actually needs to be solved, I shall assume that in spite of appearances the problem we might be trying to solve is the problem I have outlined last in the above section.

So, in the case that our goal is, simply, to power New South Wales now and into the future while replacing significant carbon emitting generators with safer generators, surely we must then move to exploring the gamut of solutions.

I want to be clear about my view; that is, no one option will achieve all of our needs and no one option is perfect and employing a mixture of renewable energy options is my preference.

Solar power generation, wind generation, tidal generation, hydro power generation and geothermic power generation are examples of energy options offered by the renewable sector. These power options involve relatively low risk to the community and, to the extent there may be problems, they are options where any risk or problems resulting from generation are localised to the direct impact. I have said a few times over the last couple of months that if the worst thing a power source can do is fall on a person and kill them then that is still much better than the worst case scenario for nuclear power.

Given that power is the broader problem, we also must be obliged to consider distribution of power. And, perhaps, the method of distribution is the primary part of our power system which must change; repurposing our existing infrastructure to look more like a networked hub and spoke model. That is, power distribution is more powerful the closer it is to the generator of that power, perhaps we need to look at the network of power production as servicing a series of cells of various sizes. So, an industrial area, in say the Hunter, may be a larger hub of power use requiring greater servicing and generally greater access to power; where a small rural town like, say, Ungarie might be a hub by itself, but be somewhat smaller in terms of demand for electricity than, say, the industrial area of the Hunter.

If we were to consider the look of power generation and distribution as being more like a series of hubs (or cells) of power use we can then start looking at creating a network of power generation to service those cells.

As a start point, we might look at, say, solar generation; particularly for smaller mostly residential cells of use. And we might implement a model compelling (or providing incentives for) people to acquire adequate solar cells generate power to service their needs with the option of releasing additional power produced to the hub, or cell. We might also compel all new builds (and possibly retrofit existing buildings) to engage in geothermic heating/cooling technology, for example running piped water or air underground and then through walls to encourage steady temperatures throughout buildings; doing this would also cause a reduction in future anticipated power needs.

We might then look at, say, analysing how much power is needed in any one hub or cell of power use. Forecasting power needs for, say, the now; five years from now; ten years from now; and, twenty years from now. And for each cell of power use determine how much battery storage, employing the South Australian model, might be required to meet the needs of that cell across a period of time; certainly to cover overnight where solar is unlikely to generate; but potentially over, say, a week or so such as to ameliorate the risks of bushfire and other risks.

We can then look to create a network of hubs or cells joining batteries to create a method of engaging in redundancy coverage. So, instead of operating along the current model of power effectively being produced in specific and finite areas and directed out from location of production to use in one direction; we link cell batteries to allow for power to move in a controlled fashion between cells in either direction. But we ensure that each individual cell is linked to multiple other cells. In the case that a bushfire affected some power lines, causing an outage, we could anticipate that it would be unlikely to affect all power lines feeding or producing from a cell would be affected unless the whole of the relevant cell were affected; in which case isolating the cell might cause a localised power outage, but that the remainder of the network would remain unaffected by the power outage.

We can then assess the whole technology mix; particularly looking at additional power sources of, say, wind, tides and pumped hydro generation as being useful to increase power availability for industrial areas and/or power demand spikes. Which is not to say that these power sources should necessarily be relegated as solely fulfilling these demands; but that if sufficient solar and geothermal power and battery storage were deployed throughout New South Wales then we might have enough power generation capacity to service domestic demand.

None of this is to discount solar farms, like those on the Moree Plains or in Royalla, and other existing renewable energy generators, like the Crookwell Wind Farms; nor, indeed, is it to suggest that this is a definitive and technically deep plan; but it is to suggest that there are other ways to address problems rather than taking a knee jerk reactionary path to automatically defaulting to nuclear.

If we must abolish our primary source of power generation because of climate change and/or merely because we would generally wish to develop healthier sources of power we should view this as an opportunity to rethink the entire model of power production, distribution and use. Taking the opportunity to rethink our whole model of power production, distribution and use might cause us to allow a number of changes; perhaps there are better methods of distribution; perhaps there are ways we can reduce potential impacts of bushfires; perhaps we could reduce the chances that bushfires might be started by damaged power infrastructure; perhaps there are better ways of doing the whole thing.

Accurate demand forecasting coupled with a networked hub and spoke power distribution model would significantly reduce the need for the introduction of a significant power generator like a nuclear power generator.

Surprisingly excellent or gobsmackingly stupid unintended consequences

Forgive me for shifting off nuclear power for a brief moment. But I would rather like to remind the Legislative Council that governments across time and jurisdictions have made a range of decisions with a similar range of results on the scale of surprisingly excellent through to gobsmackingly stupid. The governments making these decisions and the houses of parliament overseeing these decisions are comprised similarly to the Legislative Council to which you find your good selves elected. It is worth noting, as well, that surprisingly excellent through to gobsmackingly stupid decisions are as easily made by individuals and lesser groups as they are by governments.

Upon searching your memories and considering decisions you have made previously, you must be aware that you, whether in Parliament or in private, have from time to time made decisions which have had unexpected results.

Some examples of decisions made by people not dissimilar to yourselves:

- An innocent decision to provide the aristocracy with hunting fodder in Australia resulted in an horrific rabbit problem, which stubbornly persists today.
- Our attempts to thwart the cane beetle resulted in the importation of the cane toad; innocent enough to wish to remove a pest from a crop; but we would now consider the cane toad as being a bit of a pest, a pest which has spread quickly and forcefully and continues to do both.
- Prior to the commencement of the *Charter of Budget Honesty Act* interest rate decisions made by the Treasurer of the day were probably not designed to destroy employment prospects for a generation of people, yet the 1980 recession (John Howard) and the 1991 recession (Paul Keating) both caused significant portions of the male labour market to never be employed again.
- A bottle of Grange.
- A Gold Coast apartment.
- An Aldi bag.
- Destroying some native grasslands.

These are examples from the top of my head. But my point is that when making decisions people don't necessarily think about the range of potential results.

NIMBYs

The only sport shared by all Australians is NIMBYism; fair chance we'd win Olympic Gold for participation in such a sport. Everyone's all for even the painful elements of society… so long as those things are nowhere near them.

Nuclear is a MUCH more dangerous and contentious proposition than a school or a church or a gaol or a rehab centre. The concerns a community might have relating to the latter things might be more immediately prevalent, traffic, noise, potential of escape … these things are relatively immediate. But that shouldn't cause the Committee to come to the conclusion that those are the only dangers; nor, indeed, are they the limits of the potential dangers a community may see in the prospect of particular developments.

For every day operations of nuclear power generators may not be particularly dangerous (though, I note that I am yet to see a model which would look attractive in an Australian vista); but for the 'on the off chance' situation nuclear presents a clear and present danger. We seem to be a country at least moderately prone to natural disasters … droughts, floods, fires, cyclones, etc. The unpredictability of our natural disasters would seem to be a very good disincentive for any community approached to host a nuclear power generator to reject such a proposition.

Even if we were to exclude the potential of natural disasters, which would be a short-sighted and irresponsible act, if we look at unintended consequences; do we genuinely think that the people who did the thing or decided on the thing were necessarily anticipating and/or inviting the consequences which occurred? Something as small as a rabbit will make the aristocracy happy … but, evidently, has the potential to cripple our agricultural sector. Best laid plans and best intentions may be employed … but bad things happen, even when you'd rather them not do so.

As both individuals and communities we have been perpetually subjected to random decisions by governments. When it comes to mining exploration and extraction communities are, in most ways, ignored. For example, when coal seam gas companies decided to use licences to explore their options governments were stunned to discover that farmers didn't really like miners just randomly accessing their properties but with no notice, no access arrangements and no compensation for either use of productive land or compensation for destruction of productive land. Evidently, miners were surprised by this too. But that is the way that mining exploration and extraction have been prioritised in our legislative frameworks for centuries.

Various communities have been forced to accept mining, power generation, gaols, rehab centres, churches, schools, hospitals regardless of the circumstances in which they find themselves. But it seems to me that nuclear presents a different situation. In the case that the Legislative Council and the Legislative Assembly allow a Bill to pass removing our protections from nuclear mining and power we must demand greater protections through the planning processes for a much more expansive radius of concern.

I flag this because various governments at all jurisdictional levels have had a tendency to ignore community concerns, regardless of the issues raised. On top of which we can see significant erosion in building standards across the last twenty years; and it's not just in Sydney.

Perhaps this is yet another item for the arse about face section but it is of significant concern. And it should, particularly, concern you. Well, perhaps only two of you; Mr Fang and Mr Veitch; because Sydney (where the rest of you seem to reside) will always have the numbers to force the "other" of New South Wales to bear the responsibility of subsiding and supporting Sydney. Some community groups fair better than others, which we will cover in slightly more depth later. Arguably, when it comes to things being forced upon them, rural and regional communities tend to be worse off than metropolitan communities.

Can you imagine a moment in the past or future of New South Wales where a power plant would be proposed and approved for and successfully established in Parramatta … or Newtown… or Vaucluse? It would seem logical, to maximise the efficiency and economics of power distribution you send it along the shortest distance possible. So, clearly, generating power in Parramatta or Newtown or Vaucluse would be extremely logical propositions. While I'd have to admit it would be entertaining to see; I can't imagine a government having a crack at getting that across the line … could you imagine the outcry? Some community groups fair better than others, which we will cover in slightly more depth later. Arguably, when it comes to things being forced upon them, rural and regional communities tend to be worse off than metropolitan communities.

So, Sydney requires servicing; but would not countenance actual production in their own communities which, essentially, pushes power production (the risk, the health and economic impacts and the eye sores) to rural and regional New South Wales; whether or not we like it.

In the current environment a decision to reverse our Government's (our successive governments, even) position on nuclear mining and power would result in forcing nuclear power generation on rural and regional communities; mostly just because there are enough people in Sydney to dissuade Government from even trying to put a nuclear power generator there. So, the Government would be pushing nuclear power generation on to rural and regional communities without the safeguard that an effective dispute to development process might provide… but also with woeful building standards and worse regulatory enforcement; and, what? Then those communities are just expected to cross their fingers and hope for the best?

No Government (regardless of political persuasion and regardless of jurisdiction) has conducted itself with such an exemplary level of competence and conduct to not warrant serious concern at the potential implementation of such a change of Government policy.

Regulatory issues

I am conscious that I have just cast aspersions over regulatory bodies without necessarily having provided either a frame of reference or justification for such a comment.

Clear examples of regulatory failure in just the last couple of years include Mascot and Opal Towers; ASIC and APRA leading to a Royal Commission into our financial sector; all elements of aged and disability services and care. The particularly annoying part about this list is that it is far from exhaustive. As a people, we treat each other pretty badly. And our governments, deliberately or otherwise, engage in significant failures; mostly failing the people, more so than themselves. These examples are examples of governments, through supposed regulators, treating communities very poorly. Sadly, these examples are not merely examples of singular or rare failures; these examples seem to indicate systemic failures which seem to be increasing in both severity and frequency across time and sectors rather than minor transgressions of community standards.

I don't think that society cares any less for itself, communities and individuals than it once did. I would argue, however, that political, bureaucratic and business elites have become increasingly isolated from society. Feedback through a web site is not a replacement for interacting, in person, with real people; scheduling the occasional interaction with people or groups to have a photo op while at most other times filling your diaries with targeted discussions with vested interests or, indeed, engaging in the hyper competitive world of office politics or, indeed, representative politics are no substitutes for deep community engagement through, say, local associations, unions, charities, churches or even professional associations. I wonder, slightly tangentially, whether electorates are, perhaps, too big to give the community adequate access to supposed representatives.

Management and executives are detached from workforces in a similar way to the political elite and the people; reducing the internal safeguards of having to face their workforces when making questionable decisions and engaging in unethical conduct and failing to adhere to good governance practices … and regulators are not immune to such issues.

We can see from the Royal Commission into our financial system, or the Hayne Inquiry, that regulatory capture was a significant issue raised regularly throughout the course of proceedings. While the activities of ASIC were very much in the frame it would surprise me if the same were not true of every regulator, to varying degrees.

We can also see, from media observation of issues in the Murray Darling Basin (particularly relating to water use in the tributaries to the Darling River) that regulators are not even immune to political interference. We saw accusations that the regulator was not as much influenced by politicians but seemed to receive directions from politicians which fell outside the remit of the influence politicians were supposed to have in relation to that regulator's activities.

Indeed, regulators can also be, in effect, usurped by politicians; rendering prosecution for alleged illegal conduct highly contentious activity which might ultimately fail; as might be the result in the case of extraordinary increases in illegal land clearing on the alleged say so of former MLA Kevin Humphries.

In large part regulator failures in these spaces can, at least partly, be attributed to lack of funding, resourcing, staffing and training; but these failures are, clearly, also partly a gross failure of judgment by individuals comprising the regulators; or, worse, that regulator failures might be directed .

It is in this section that I would like to turn, briefly, to the triumvirate of the Westminster System. I have spent much time in many parts of this submission addressing, particularly, the Executive and potential failures by the Executive.

I have mentioned concerns I have about the Legislature and its effectiveness and reliability in the space of responsible government; though I would like to add that the workload of the Legislature is sufficient to mean that there are a couple of problems with suggesting that it is an effective and timely body to be overseeing items like this. The workload, I submit, of the Legislature is significant; particularly for the Legislative Council. The volume of committees and inquiries which engage the time of Members in addition to sitting periods of the Council and engaging in some kind of actual community engagement leaves little time, I would argue. Sitting periods are dominated by procedural requirements but are the most flexible of the elements of the Council. Arguably, short of special sittings and suspensions of Standing Orders the Legislature would struggle to be responsive to an immediate problem with a uranium mine or nuclear facility.

The Judiciary is probably the most effective penaliser of wrong doers (though, this point might be quite contestable and controversial). But, to the extent that it is, the judiciary isn't really set up to be immediately responsive to a problem with a uranium mine or nuclear facility. And, in the context of a potential disaster, an injunction will probably not help if the threat is imminent; and, arguably, "nuclear" isn't really a field of expertise we see in the Australian legal profession which might be fine when setting up a nuclear facility (because the legal will mostly be about contract negotiations and creating shell companies through which risk can be dispersed, minimised, absolved or ignored); but might be a problem when it comes to working out whether it was the widget, the weather or the wanker at fault for causing a nuclear failure.

Aboriginal and Torres Strait Islander Issues

Repeatedly throughout Australia's history we, the white largely Anglo population, have given little thought or regard for Aboriginal and Torres Strait Islander Australia.

When "we" decided the British Armed Forces could engage in nuclear testing at Woomera, did we even bother warning traditional owners that they were about to be glassed? Hell no, we didn't even bother warning our own people and/or wearing appropriate protective clothing and eyewear! And now? We have entirely dispossessed a population of their traditional lands, of ceremony or any kind of productive use of their country for the duration of our human species.

When "we" started mining Jabiru did we actually and genuinely consult with traditional owners? Well, they weren't, at least by the law of the land, traditional owners at that point, were they? Or did we just go ahead and mine?

When "we" started extracting coal from various locations in New South Wales, say, the Hunter or Lithgow, did we consult with traditional owners? Or did we just go ahead and mine?

Now that other countries won't or can't dispose of their nuclear waste and they're sending it back expecting us to deal with it are we thinking that maybe we'd have been better off consulting with traditional owners? Nah. No, instead, we're trying to push Aboriginal people into yet another position where they are forced to destroy their own access to the lands they've finally been granted access to in order that we can dispose of yet another bad decision.

So in this space where a decision will be made to either reaffirm our commitment to remaining nuclear free with the exception of Lucas Heights medical facility or to trash our commitment to future generations; where will Aboriginal people fall?

I find it doubtful that this Government or, indeed, any future government will engage with any community at all in genuine consultation about uranium extraction and/or nuclear power. I find it doubtful because when it comes to mining and power generation governments often don't engage in genuine consultation.

… I find this concerning.

"We" still can't decide whether or not to hold a Referendum to determine whether First Nations People should be included. But "we" expect First Nations People to tolerate, indeed to welcome, nuclear power; with its potential to ruin country in perpetuity.

It is incomprehensible that we continue to persistently fail to learn from the past.

Submissions to date

Of the 26 submissions the Committee have chosen to make public to date I see a gender gap.

The submissions from males have all been in support of nuclear power; the submissions from females are anti-nuclear power.

I'm not sure that I would charge women with having greater imagination than men; and thus a greater capacity to imagine the future than men; and it does seem slightly illogical that such a prominent gender split is so highly evident within submissions received, yet that is what we have been presented with.

This causes me to worry that the Committee can, potentially, view this process whether consciously or otherwise, through a gender prism. At least one Member of the Committee is on record on several issues relating to women as being largely dismissive of the concerns of women with, seemingly, little regard for the manner in which both those concerns or, indeed, their own dismissals of those issues have on the broader community and society.

I sincerely hope that the Committee has received far more submissions than the 26 selected for publication. I sincerely hope that the Committee has heard from a range of voices across the spectrum of the community. And, in the case that the Committee has not heard from more than 26 individuals or organisations during the course of this Inquiry, might I ask that the Government provide resources sufficient for the Committee to tour some parts of rural and regional New South Wales engaging in open fora to gain a better understanding of the gamut of community views; perhaps, alternatively, the Committee could hold targeted hearings seeking the views of specific communities on any individual day of hearing (say the nuclear industry one day; First Nations Peoples on another day; metropolitan residents; regional residents; rural residents). The potential impact of something like nuclear energy should be something properly discussed within the community before the Parliament comes to a view.

And no one, at all, benefits from seeing this issue through a gendered lens; particularly a gendered lens which doesn't necessarily represent the diversity of views held across a range of communities.

Big Boys Toys

This section could otherwise be called “What the Inquiry should be about v What the Inquiry seems actually to be about”.

My understanding of what this Inquiry was set up to do is relatively naïve, it would seem.

Mr Latham sought to revive the White/Green Paper practice at a State level; seemingly failing, largely because White/Green Papers are highly resource intensive and costly which is why their need and requirement tend to be determined by those occupying the Treasury Benches who can direct public sector resources and personnel to such Inquiries; I am disappointed that this seems to have failed as I think it an admirable pursuit.

Notwithstanding that failure, Mr Latham’s Bill seems to be posing the questions: uranium mining yes or no? And nuclear power generation yes or no?

I am concerned that the Committee seems to have veered off course slightly, if still broadly relevantly to the questions.

In fact, far from being concerned with what I think is the essential question this Inquiry should first address (ignoring that my actual view is that before the Committee even gets to looking at this question it has to address some more serious and fundamental issues that it has failed to provide engagement on), this Inquiry seems largely concerned with … oo, look, shiny, new thing.

The Committee has been seduced by the sexy sounding small-scale nuclear generation before even coming to grips with whether or not nuclear power generation is even appropriate for Australia’s needs; or, indeed, whether Australians (the New South Welsh, particularly) even want nuclear power. You’ve just skipped straight past it to the middle bit.

While I have provided plenty of examples of politicians making really stupid decisions; big boys toys are not sufficient reason to be excluding the essential questions from your consideration.

In my own life, there are a pair of Chanel sunglasses that I’d really like. I’ve decided that. However, while I’ve made that decision I make that decision without looking in my wallet to see that I simply don’t have the money to purchase them. If I am the beneficiary of a sufficient windfall gain, perhaps I might get those sunglasses; but, in all likelihood, I will probably redirect such funds to a different activity or object. But there are a pair of Chanel sunglasses that I’d really like.

Perhaps if you are entertaining the idea of small scale nuclear power generation in the same way that I entertain the purchase of a pair of Chanel sunglasses maybe it will be okay; but if you’re entertaining the idea of big boys toys without doing the fundamental work on whether we want it, whether we need it and whether there is literally ANY other option then I would argue that you are engaging in extremely irresponsible conduct.

Water

I am dying to ask; I have been dying to ask since John Barilaro MLA started talking about small scale nuclear; I have been gagging to ask since Mark Latham MLC decided to propose lifting nuclear prohibitions …:

Where the actual fridge-magnet are we getting the water from?

I'm going to reiterate that I'm not a nuclear expert … but my understanding is that nuclear fission, for electricity production, requires or causes significant temperatures which means cooling is required; and that cooling occurs by adding water.

I realise that the models of small scale nuclear that the Committee is looking at seem to have a desalinising module; which, presumably, means the Government will definitely be putting nuclear power stations along our beaches (that's going to THRILL tourists and general beach goers, by the way; not to mention cripple property prices in the 100km surrounding any proposed facility).

However, Mr Barilaro MLA's comments suggested that he sees small scale nuclear throughout rural and regional New South Wales. And, while I recognise that Mr Barilaro is the Leader of the National Party AND that the National Party currently holds the water portfolio, it seems strange to me that he hasn't noticed that the overwhelming majority of New South Wales barely has enough water to sustain itself as it currently exists (if, indeed, it even has that – see Wilcannia, Pooncarie, Menindee, Dubbo, Tamworth, Walgett). And, I am left to return to the question where the actual fridge magnet are we getting this magical water from?

It seems to me that west of the beach New South Wales water is under significant pressure; it's not just on the western side of the Great Divide, it's coastal areas too. But on the western side of the Great Divide the Government is pushing more and more communities, animals, agricorps and miners on to bore water. If there is already insufficient water to cover our highest priorities; what on earth makes the Legislative Council think that there will be anywhere near enough water to cool nuclear power plants on an ongoing basis. And the demand that the Government is forcing us to place on the Great Artesian Basin already is something that, if you are a responsible Committee, you should probably be demanding a long-run study of the impact we're causing.

Severe drought is a good opportunity to actually properly consider the volume of water we don't have to meet even our most basic survival needs. Adding more essential services which are merely going to sap the resources which barely meet our most basic survival needs is a recipe for disaster.

Waste

I am concerned about tailings dams and the manner in which they are corruptible and/or destructible. In the case of flood or tidal wave; how safe are such facilities? I am concerned that our history pretty strongly suggests that we will not adequately or accurately regulate these waste receptacles to adequately cope with the spectrum of natural disasters that we are aware are possible; let alone the gamut of possibilities we're yet to hear or think about.

I am also concerned about regulator quality, corruptibility and/or susceptibility to problematic or unconscionable conduct. Unlike the things for which we already have regulators; it is possible that a failure from regulators of waste products from nuclear facilities will have a species existence long impact on a significant radius of people, land, plants, things around such a failure.

Nuclear waste seems, generally, to be thought of as being spent uranium. While I recognise, again, that the small scale reactors the Committee seems most enamoured with process material for a significantly longer period of time than large scale reactors; it is worth noting that this type of waste, is still problematic whether spent uranium or spent thorium.

Sure, spent uranium is probably slightly more problematic from the perspective of enriched weaponry. But, both spent uranium and spent thorium have significant radiation levels with impossible half-lives associated with them… and we still have nowhere to safely dispose of either type of material. This is one of those things where it would be **REALLY REALLY** helpful if the decision maker could also consider the end of life of the product they're considering.

At the point of decommissioning of a power station; I'm wondering whether it's actually possible to decommission a nuclear power plant. My understanding is that, to date, no facility has been entirely successfully decommissioned to the satisfaction of international nuclear regulators or watchdogs. And no one is quite sure that it will be possible to do so.

In the area of waste alone there seem to be too many variable factors which the Committee would be leaving to chance if the Inquiry returned a suggestion that people should actually consider voting for Mr Latham MLC's Bill.

And the question you could, at this point, ask yourselves is: is this really a legacy you want to leave for your constituents? … personally, I think I would run for the hills to avoid such a thing being my legacy.

Specific concerns about nuclear power

I think that, while I indicated that I am presenting a case against nuclear, the concerns I have raised so far have gone to the governance, accountability and transparency of Government, whether through regulators or directly through decision makers who are supposed to be accountable to the community. I think it is also fair to say that I have, at least implicitly, questioned the ethics and conduct of corporate and/or non-Government entities. Broadly speaking, I think it is not untrue to say that I have also indicated that the distance between the people and the elites across government and non-government or corporate entities are sufficient to have reduced the level of accountability that previously existed.

The problem with nuclear is that it is virtually permanent.

The half-life of nuclear material is barely an indicator of when radiation would deplete.

I mentioned Woomera earlier. I recognise that problems with Woomera are really in a similar space as the Bikini Atoll and the like; though, arguably no more problematic.

But Chernobyl and Fukushima show us that there are long-lasting impacts of problems with nuclear power and no clear indication as to when things might get back to normal.

Chernobyl is starting to look like a 30 year proposition; but, realistically, we're still not sure about the extent to which there are ongoing issues. That Chernobyl is inland and on a relatively stable land mass might cause it to be a relatively strong proposition for rehabilitation …

Fukushima, on the other hand, is severely problematic. If we look at the impact that the Fukushima meltdown has had on the broader economics of the disaster we're seeing a crippling of the livelihoods of a large number of people (agrarian, mostly) and a significant and quick shift of population. Worse, we're seeing the fishing industry crippled.

That the only logical place to locate a nuclear facility in Australia is on the beach; in addition to causing dreadful impacts on tourism because of ugly; any serious problems with nuclear would result in crippling of our commercial AND recreational fishing industries. In fact, because there's water involved fullstop any problem would result in the crippling of the parts of our fishing industry associated with the body of water that is relevant to that particular plant.

In the case that you made a decision today to remove the uranium mining and nuclear power prohibitions and determined a location: it's still going to take a minimum of 20 years to get even a small scale nuclear power facility built and up and running (which would make it too late to ameliorate the loss of coal fired power generation capacity by at least five years); the nuclear enriched material might last for 40 years before we have to dispose of it …

To be blunt, most of you will be dead by the time we have to dispose of the first batch of nuclear waste.

Even if there are no problems (which if you discounted the chances of would be incredibly irresponsible) with the facility/ies the legacy you are considering leaving for us is to force us to dispose of waste none of us thought we needed in the first place.

… so, in the worst case scenario…

You are making a choice to cause significant problems throughout New South Wales and, potentially, South-Eastern Australia.

To return to the unintended consequences section; how many of the decisions listed were assessed against the worst case scenario?

Did the person who imported rabbits realise that rabbits would breed like, well, rabbits?

Did the person who made the final decision on cane toads anticipate that cane toads would be a dreadful, colonising and spreading pest?

Did John Howard realise that the 1980s recession would cause life-long unemployment for a significant segment of the male labour market?

If those people knew that these options were a significant chance of causing these problems, do we think decision makers would have travelled down these paths?

If you knew that there was a significant chance that there could be problems with the facilities themselves, the waste from the facilities, the interaction with our water systems and/or possibly just the ugly tourism elements and damage to nearby property prices … will you really make that decision?

Conclusion

I acknowledge that nuclear power technology has moved forward. But I am also aware that the technology for renewable power similarly moves forward. Technology agnosticism must work both ways if we are genuinely going to attack a problem.

My view is that the downside of taking a good look at what our actual needs are and thinking about how we might best meet them is small, admittedly it causes a slight delay to the start point to actually arriving at a good decision on reducing carbon emissions; but an attempt to guard against significant and negative long-run unintended consequences shouldn't be dismissed out of hand.

I remain of the view that I don't think the Committee have adequately identified what the actual problem is.

The bottom lines for me are:

1. We have plenty of renewable energy sources; we should exploit those.
2. We should avoid technology which has the biggest downside.
3. Our polity is not conducive to good results in the space of dangerous activities.
4. WE DO NOT HAVE ENOUGH WATER TO SUPPORT NUCLEAR POWER IN ANY LOCATION
5. Our regulatory frameworks don't inspire confidence that we would be protected in the event of problems, which are possible.

We're looking at problems arse about face not anticipating that our decisions range from surprisingly excellent to gobsmackingly stupid because big boys toys are shiny, new and oo, look, right over there.

As I indicated above I am happy for my submission to be made public and with my name associated with it. I am also happy for the Committee to contact me should they see fit to do so.

Thank you for your time.

Katherine Stewart