SUBMISSION: SSI – 12590060, THE HUNTER POWER PROJECT

I am a rural resident of the Cessnock LGA, living approximately 10 mins drive from the proposed site. I am a chemical engineer who worked at Newcastle Steelworks until 1999, when retrenched with the front-end closure. I worked as the Operations Manager on the last blast furnace reline in 1996, a 90 day, $90m project. I have followed the Planning Proposal for the Hydro site with interest and have attended several drop-in sessions on the proposal.

I am writing to object to the Hunter Power Project. I share the broad concerns of many others, listed briefly below, but as a local resident will largely focus on more local issues.

Broad concerns:

- Shortfall of dispatchable power is 154MW and doesn't justify a 750MW power station
- Taxpayers should not be paying for this – if it was truly needed, private industry would step up and invest in it
- $600 million dollars of taxpayers' money could be better spent on many things, including diversifying the Hunter's economy away from fossil fuels and providing fossil fuel workers with a path to transition to sustainable jobs of the future
- We are in a climate crisis and the next 10 years are critical to reduce emissions – the International Energy Agency has told us there can be no new fossil fuel power projects or new fossil fuel extraction projects if we are to achieve net zero emissions by 2050
- To reach zero emissions by 2050, we must replace retiring fossil fuel generation with zero emission technology, not gas that will run for 30 years, emitting 15 million tCO2 e over that time
- In addition to CO2 emissions, there will be methane (CH4) emissions during extraction, transport, storage and usage – CH4 is up to 86 times more effective at trapping heat in the atmosphere then CO2, when viewed over the critical 20 year timeframe
- Snowy Hydro already has the gas fired Colongra Power Station on the Central Coast which was used for less than 1% of the time last year – it makes no sense to be building another expensive asset that will also only be used for 2% of the time
- Gas is expensive and makes electricity expensive too – this plant will not drive down power prices in NSW
- Gas will only become more expensive if we have to rely on unconventional gasfields like Narrabri, further driving up power prices
- This plant could be used to justify development of the Narrabri gasfield and the Queensland-Hunter gas pipeline – neither of which have a place if we are to keep global temperature increases below 2 degrees
- There is no existing gas supply to Kurri, requiring another approval process and another $200m for the pipeline, making it even less likely that this project will ever break even let alone provide a return on investment

Workforce

The EIS 2.5.2 states “During operation, the Proposal would be operated remotely from Snowy Hydro’s control centre in Cooma. On site staff would manage plant availability, regular maintenance requirements, functional tests, and facility upkeep. Permanent site staff numbers are not expected to exceed an average of 10 full time equivalent persons (FTE).” The aluminium smelter was the biggest employer in Kurri and the Cessnock LGA for many years, with around 600 people laid off when it finally closed. The unemployment figures quoted in the EIS show that in 2016, unemployment levels in Kurri-Abermain were still higher than for Regional NSW at 9.5% vs 6.6%, and that is probably still the case. The redevelopment of the Hydro site was meant to provide a significant number of ongoing jobs for the local workforce – with only 10 positions, this project is not what is required from an employment perspective.

Fig 2.3 provides a graph of expected construction jobs – approx. 80 for ~6months, ramping up to 260 for 4 months, then stepping down to 50 for the final 3 months. While local people might hope to get employment during the construction phase, previous experience with the Hunter Expressway construction has shown us that the figure may be as low as 10%. And when construction is complete, those jobs disappear, leaving unemployment in Kurri right back where it started.

In my experience, it will very much depend on who the construction contract is let to. I have seen projects where welding of heavy shell plates was required and the welders were largely Koreans from the ship building industry.

Inadequate assessment of alternatives to the proposal

In an EIS prepared for Snowy Hydro, it seems strange that pumped hydro would be so readily dismissed in 4.4 Alternatives to the Proposal. “Hydro-electric and pumped hydro storage facilities are geographically constrained, are high cost and have long development lead times.”

Snowy Hydro already has pumped hydro generation through its Tumut 3 Power Station. “Tumut 3 Power Station is a pumped-hydro facility which is capable of generating and pumping by recycling water between Talbingo Reservoir and Jounama Pondage. It was the first major pumped-hydro plant built in Australia and remains the largest such facility in Australia today.” There is, however, no readily available information on how often this pumped hydro power station actually operates. Surely maximizing the operation of this renewable energy asset would be one way of offsetting the loss of generation from the closure of the Liddell Power Station?

A feasibility study has already been done into increasing the generation from pumped hydro at Shoalhaven Hydro. According to Origin's website: "This assessment determined that while the addition of a 235 MW unit is technically feasible, it is not commercially feasible in the current economic environment. Origin will continue to consider this expansion project for our portfolio in the future."

It could equally be argued that the proposed gas fired power plant at Kurri is not commercially feasible either – that is why private enterprise hasn't stepped up to build it. An injection of $600m of taxpayers' money might make the Shoalhaven Hydro expansion feasible and that would have the added advantage of not generating the gas plant's 500 299 tCO2e emissions per annum.

Meanwhile business has put its hand up to build a grid-scale battery in Kurri - the world's biggest battery at 1200MW, around 8 times larger than the Hornsdale "big battery". Perhaps Snowy Hydro should not have dismissed batteries so readily? The Hydro site would be better suited than the HEZ site, as it is already flat and cleared, whereas HEZ contains the habitat and breeding sites for the critically endangered Regent Honeyeater.

The EIS 4.4 states "The Proposal's main purpose and objective is to meet a specific need, which is to provide dispatchable capacity to the NEM when the needs of electricity consumers are highest." This looks only at the supply side of the equation, rather than also looking at the demand side of the equation.

With the closure of Liddell Power Station, it seems an ideal time to review off-peak electricity charges. The reason lower off-peak electricity charges apply at night is to consume the power generated from coal fired power stations running at their baseload ie where they can't be turned down any further. The major use of off-peak electricity is to heat hot water, which represents about 20% of the average household's electricity consumption. Some 50% of households still have electric hot water services.

The uptake of rooftop solar has been so strong that there are now calls for people to pay a "tax" to feed their renewable energy into the grid, or even be prevented from feeding into the grid. Why not move the lower "off peak" electricity rates to the daytime, when solar energy generation is at its maximum? Heat water while the sun shines. This would leave more baseload power from the remaining coal fired power stations to feed 24 hr/day operations such as Tomago Aluminium.

Inadequate assessment of alternative locations

In relation to alternative locations, the EIS 4.4.3 states “The sites in Greater Sydney were excluded primarily due to difficulties in addressing likely noise impacts to existing neighbours” and “The alternative sites in the Newcastle region were discounted for a variety of reasons including the land being unavailable, difficulties in addressing likely noise impacts to nearby receivers”.

Looking at Fig 2.4 Hydro Kurri Kurri rezoning concept master plan, the proposed residential areas marked R2 appear to be at least as close as the “nearby receivers” at the Colongra site. Why would it be assumed that “nearby receivers” in the Kurri case are going to be any less sensitive to noise than in the Central Coast area? Or is it being assumed that those houses will never be built, due to the proximity of the gas fired power station? The residential areas identified in the Kurri master plan form an important part of the strategy to increase employment in the area and mustn’t be lightly thrown away.

It is not clear where the “Port Stephens industrial/semi-rural” alternative site is, but the obvious place to build a gas fired power station would seem to be the place that AGL were/are considering building their gas fired power station ie Tomago. Let’s face it – at least it had access to the Jemena Gas Network and proximity to the Newcastle Gas Storage Facility. This would be a saving of $200million over the proposed Kurri site.

One of the requirements listed for a suitable site includes “An extensive buffer area to limit impacts on other land uses in terms of noise and visibility”. The site at Kurri will be directly adjacent to other industrial users. The EIS 16.2.2 Operational Noise states “When the planned industrial lots adjacent to the Proposal Site are occupied, the occupiers of those lots would experience noise from the Proposal. However, the levels would remain below the operational noise criteria for industrial receivers” ie 61dB(A) under standard conditions and 64dB(A) under noise enhancing conditions, compared with the Industrial Noise Criterion of 68dB(A).

The noise levels may just sneak under the maximums allowed, but what industry is going to voluntarily set up next to a gas plant, making loud infrequent noise with no warning? People in Kurri are relying on this industrial area to be a success and provide hundreds of jobs well into the future. The risk is that a gas fired power plant may actually discourage other industries from setting up here – particularly those from the renewable energy sector or those who are trying to reduce their carbon footprint.

Inadequate Community Consultation

The EIS 5.4 states “The key steps in the community engagement process during EIS preparation have included:

▪ Announcement of the Proposal, and establishment of dedicated Proposal email address, 1-800 hotline number and webpage”

As a resident of the Cessnock LGA, living about 10mins drive from the Hydro site who has attended various community information sessions on the Hydro Planning Proposal, I have to say that I saw no announcement of the Proposal (other than from Scott Morrison) and was unaware of the dedicated email, 1800 hotline number or webpage until reading it in the EIS.

The EIS further states “With respect to community stakeholders these included:

▪ Nearby residents, property owners and businesses with a 4 km radius of the Proposal Site. This was identified as being the area where residents and businesses are most likely to be interested in the Proposal

▪ The Cessnock, Kurri Kurri and broader community

▪ The local business community

▪ Local interest groups such as community groups, environmental groups and resident groups

▪ The Community Reference Group for the Hydro Kurri Kurri Site Redevelopment Project”

The fact that the local Kurri Kurri Noticeboard is alive with comments and questions about the proposal tells me that the project has not been well communicated to “The Cessnock, Kurri Kurri and broader community”. People obviously still have questions about the proposal!

The EIS, 5.5.2 Future Consultation, states “During the public exhibition of the EIS, the appropriate level of engagement will be undertaken to ensure a good understanding of the EIS by interested community members. This may be an open house or subsequent CWG meeting held within the vicinity of Kurri Kurri.” As far as I am aware, no “open house” has taken place and people clearly don’t have a good understanding of the project and the implications for Kurri long term.

I believe Snowy Hydro has taken a very narrow view of who might be impacted by this proposal and has done a very poor job of informing people who live in the surrounding suburbs of Kurri Kurri, Weston, Heddon Greta and Cliftleigh. If people had understood how few jobs were involved, more people would have objected to the proposal.

Inadequate social impact assessment

As noted in the EIS 19.2.3, “The aluminium smelter was a significant employer and economic influence for Kurri Kurri.” This is an understatement! The smelter was the biggest employer of local people for many years and approximately 600 people lost their jobs when it closed. The main impact of the smelter closure was a rise in unemployment as shown in the EIS: in 2016, unemployment levels in Kurri-Abermain were 9.5%, still higher than for Regional NSW at 6.6%.

Local people have been hanging onto the prospect of new industries and new jobs in the area, following the rezoning of the smelter land, via Planning Proposal 18/2015/2 Hydro Kurri Kurri. In 21.4, the EIS states “The master planning proposal is expected to result in social and economic benefits for Kurri Kurri and the region, predominantly with regard to employment and supporting social infrastructure.” The impact on job generation of a gas fired power station, stuck in the middle of a brand-new industrial area, hasn’t been assessed.

If we want this new industrial area to succeed, it needs to have something going for it. Unfortunately, that is not gas - the drawback of the gas fired power station on-site is that the ready availability of gas may encourage other industries to also use gas as their heating fuel. The days of cheap gas are over and if we have to rely on coal seam gas from Narrabri, we can guarantee it will be more expensive than current gas. This means that industries would be saddling themselves with a high-cost utility which would undermine the profitability of their business. Or require them to do an expensive electrification later. This is not good for ongoing, long-term employment in Kurri.

It is vital to the social fabric of Kurri that significant employment becomes available within the Hydro redevelopment. If we want the Hydro industrial area to survive and thrive into the future, the focus needs to be on renewable energy not gas, low emissions intensity processes and industries of the future, not the past. Unfortunately, I can’t see this type of industry setting up adjacent to a gas fired power station!

Conclusion

I urge the Department of Planning and Minister Stokes to reject this proposal. A gas fired power station at Kurri is not justified and will not deliver what Kurri needs – diverse jobs in industries with a future.