

# **Hunter Power Project (Kurri Kurri Power Station)**

## **Application No SSI-12590060**

### **Assessment of the Snowy Hydro Environmental Impact Statement**

#### **Submission**

To the Minister for Planning and Public Spaces

This Submission addresses a number of key concerns in relation to the environmental and community impacts of proposed development of the Hunter Power Project (Kurri Kurri Power Station). The key issues relate to the significant fire risks that are not addressed in the Snowy Hydro Environmental Impact Statement dated 22 April 2021 (*EIS*), the potential impact of groundwater contamination and the impact of the Project on the biodiversity of the adjacent Environmental Conservation Zone.

The proponent, Snowy Hydro, is a government owned corporation in the business of generating electricity and seeks approval for the development of a gas fired power station near Kurri Kurri, NSW(*Proposal*). The Proposal is to be constructed on the site of the former Hydro Aluminium Kurri Kurri Pty Ltd (*Hydro Aluminium*) aluminium smelter. The site is part of the land owned by Hydro Aluminium that is the subject of a rezoning master plan.

The NSW Department of Primary Industry and Environment (*DPIE*) website indicates that the Hydro Aluminium Kurri Kurri smelter remediation proposal SSD 6666 (*Remediation Proposal*) for the site includes the construction of a containment cell and associated infrastructure, relocation and treating of material from the Capped Waste Stockpile and treatment of leachate and groundwater ( <https://www.planningportal.nsw.gov.au/major-projects/project/11486>). The Containment Cell Management Plan was submitted in about Dec 2020 and indicates that construction of the Containment Cell is yet to commence.

A modification of the Remediation Proposal to provide for leachate to be treated onsite and effluent discharged into the North Dam (assumed to be one of the ‘water bodies’ marked on Fig 7-4 of the EIS) has not been approved. The EPA NSW required further information from the DPIE in relation to the Remediation Proposal to address concerns in regard to the treatment of wastewater onsite and potential risks to the downstream receiving environment of uncontrolled discharges from the Northern Dam.

In the assessment of the Remediation Proposal the EPA stated:

*The RTS Appendix 13 [to the Modification report] water balance (2018) indicates that the Northern Dam has had uncontrolled overflows three times between 2013-2016. There is no consideration of the potential impacts of these uncontrolled discharges on the downstream environment and whether further management measures are required to mitigate any identified impacts. The downstream receiving environment is Wentworth Swamp, which is mapped as potential habitat to threatened fish species. The Draft SEE has not demonstrated that the water quality within the North Dam can be sustainably irrigated or considered the potential impacts of uncontrolled discharges to the downstream receiving environment.*

And further:

*The Draft SEE does not demonstrate that the leachate storage basins and treated water holding tanks are appropriately sized to contain leachate (such as during heavy rain, the water treatment plant being offline or poor effluent discharge quality).*

...

*Recommendation*

*The containment cell leachate pond and leachate holding pond do not appear to have been designed using a water balance for the operations. Instead, it appears to be event based. It is not clear that the leachate containment and treatment system have enough capacity based on the limited information provided.*

(NSW EPA Letter to DPIE 23 Feb 2021

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-6666-MOD-1%2120210304T021651.390%20GMT>)

The EIS states that the Remediation Proposal is scheduled to be completed by 2023 and that Snowy Hydro will not take possession of the site until a site audit statement and the site is remediated. On this premise, there is no assessment of the cumulative environmental impacts of the construction of the Proposal and the environmental impacts of the Remediation Proposal. However, at [65] the EIS states that construction will overlap with the works to remediate the site. Further, the Environmental Management Plan for the Remediation Proposal states that remediation activities would take a maximum of 4 years from commencement and the Remediation Proposal requires ongoing soil and groundwater monitoring. As the activities will overlap, the cumulative impact of the Proposal and the Remediation Proposal are required to be assessed.

It is premature to assess the impacts of the Proposal as the environmental management of the existing site conditions, particularly in regard to contaminated soils and disposal of contaminated wastewater have not been

assessed or approved. The EPA have identified the potential impact of uncontrolled discharges on the habitat of threatened species in the Wentworth swamp. These environmental impacts and steps to mitigate them associated with the Remediation Proposal need to be assessed, approved, monitored and audited.

The potential cumulative impact of the Remediation Proposal and the Proposal in relation to water discharge has not been assessed. In this regard, the Department of Agriculture Water and Environment NSW concluded that the Proposal has the potential to disturb contaminated and/or acid-sulphate soils on the site and flow on impacts to surface or ground water (EIS at [7]). These impacts have not been assessed based upon the activities associated with the Remediation Proposal. Further, in assessing the risks associated with flood conditions, the EIS relies upon data from 2010 and does not take account of climate change (EIS at [224]).

The landscape buffer zone of the Proposal drains into the Wentworth swamp and this drains into the Hunter River and adjacent flood plain. The EIS states that there is negligible risk to the Hunter River flood plain due to exposure to legacy contamination on the premise that prior to construction the site is required to be remediated and validated (EIS at [9]). No assessment has been undertaken of the Remediation Proposal, including the proposed discharge of leachate into the North Dam and the cumulative impact on the surface and groundwater of the remediation with both construction and operation of the Proposal. Accordingly, it is premature to assess the potential impact of the Proposal on the Hunter River flood plain

The Proposal is part of a rezoning master plan and the site is located in the industrial zone proposed to be rezoned as Heavy Industry. The site of the Proposal is, however, immediately adjacent to an expansive area of bushland on the north and west boundary zoned for environmental conservation. The zoning masterplan includes a Biocertification Assessment of the area to be rezoned, including the Proposal site and adjacent environmental conservation zone, that has not been considered in the EIS. The Proposal states that biodiversity offsets will be required but the offset plan is said to follow approval (EIS at [112]). Assessment of the impact of the Proposal on the environmental conservation zone is not possible without the offset plan being submitted.

For the purpose of bushfire hazard reduction a 10 m asset protection zone between the bushfire prone land and the infrastructure has been allowed (EIS at [19]). The EIS does not provide any evidence to establish that a 10 meter buffer zone will be effective to mitigate the significant fire risk to adjacent bushland. The EIS indicates that the consequences of a jet fire from the Proposal or the

overpressure from a gas cloud explosion would extend beyond the western boundary which adjoins the bushland. The EIS does not indicate that an assessment of the fire risk and the impacts of climate change has been undertaken.

This Submission seeks to highlight a number of the key issues in respect of which the EIS for the Proposal does not establish that the significant environmental impacts will be reduced to as low as reasonably practical and to an acceptable level. A complete assessment of the environmental impacts of the Proposal is both premature and not feasible until the Remediation Proposal has been approved and the Remediation works have been completed, audited and monitored.

Dated 4 June 2021