

20 December 2018

Commissioners Independent Planning Commission 3/201 Elizabeth Street SYDNEY NSW 2000

Attention: Mr Gordon Kirkby

Dear Gordon.

Bylong Coal Project Response to Submissions in Relation to Water Resources

1. INTRODUCTION

This letter responds to matters raised by stakeholders in presentations and submissions received by the Independent Planning Commissions (IPC) over the potential impacts of the Bylong Coal Project (the Project) on water resources.

The presentations and submissions received by the IPC have continued to raise concerns over the potential impacts of the Project on water resources, including:

- Impacts on existing privately owned water supplies surrounding the Project;
- Uncertainties with water modelling with reference to the other mines within the region;
- Request for an independent peer review to be undertaken prior to determination;
- Compliance with the Aquifer Interference Policy in terms of impacts on KEPCO owned water supply works;
- Model used millennium drought, however should have used the drought in the 1940s as the worst case; and
- Potential hydrological changes to the Greater Blue Mountains World Heritage Area (GBMWHA).

KEPCO remains confident that the detailed assessments and approvals documentation have previously addressed the above concerns. However, to assist the IPC in its deliberations, a response to each of these specific concerns is provided in the following sections.

2. NEIGHBOURING WATER USERS

Since the acquisition of the Project in 2010, KEPCO has acknowledged the importance of the water resources to agriculture within the Bylong Valley. The Project has been carefully designed so as not to adversely impact the water resources of the Bylong Valley. A primary focus of the water assessments has been to ensure that adverse impacts to neighbouring private landholder water bores are identified and mitigated.

Comprehensive modelling and assessment has been undertaken throughout the approvals process to determine whether the Project will result in adverse impacts to neighbouring landholder water bores. This work has demonstrated that neighbouring landholder water bores will not be adversely impacted as a result of the Project.

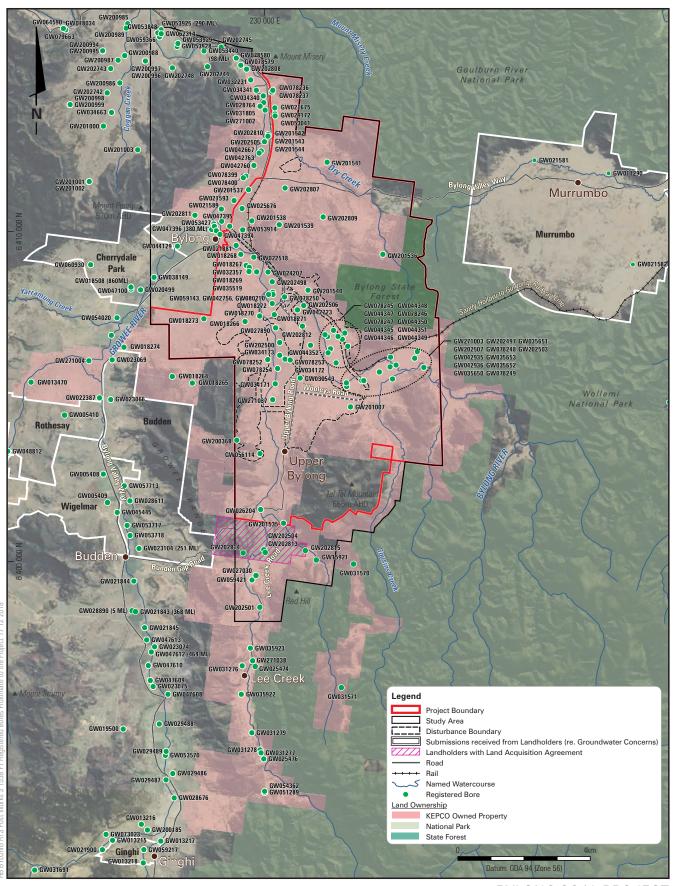
Despite these authoritative findings, some of these landholders have continued to raise concerns over the potential impacts of the Project on existing water supply works on their properties within the Bylong Valley.

In light of community queries during the public exhibition of the EIS, KEPCO and its groundwater technical consultants met with neighbouring landholders in October 2015 to present the methodology and results of the groundwater studies undertaken for the Project. KEPCO has also offered to establish monitoring on these properties to determine baseline conditions from which to compare its operational monitoring to. This has resulted in KEPCO establishing monitoring locations on and completing routine monitoring at three neighbouring landholder properties (four monitoring bores in total). The draft Water Management Plan (Appendix F of the Response to PAC Review Report) provides details for monitoring bores on other neighbouring landholders' properties which will be established for operations subject to relevant agreements with the landholders.

KEPCO has also prepared a draft Compensatory Water Supply Agreement (CWSA) for discussion with neighbouring landholders who remain concerned over the perceived impacts of the Project on their water. The draft CWSA was anticipated to provide neighbouring private landholders with both certainty and information upfront in relation to KEPCO's commitment to compensate for any unforeseen impacts as a direct result of the Project on their respective water supply bores.

Throughout the approvals process, KEPCO has acquired a large landholding both within and surrounding the Project Boundary. This landholding provides a material buffer surrounding the Project which means that any possible discernible impacts occur on KEPCO owned land. **Figure 1** illustrates the bores registered on the Government database surrounding the Project (including bores on KEPCO owned land).

Figure 1 also provides an overview of the location of properties from which landholders have provided presentations and/or submissions to the IPC in relation to potential impacts of the Project on their water supplies.









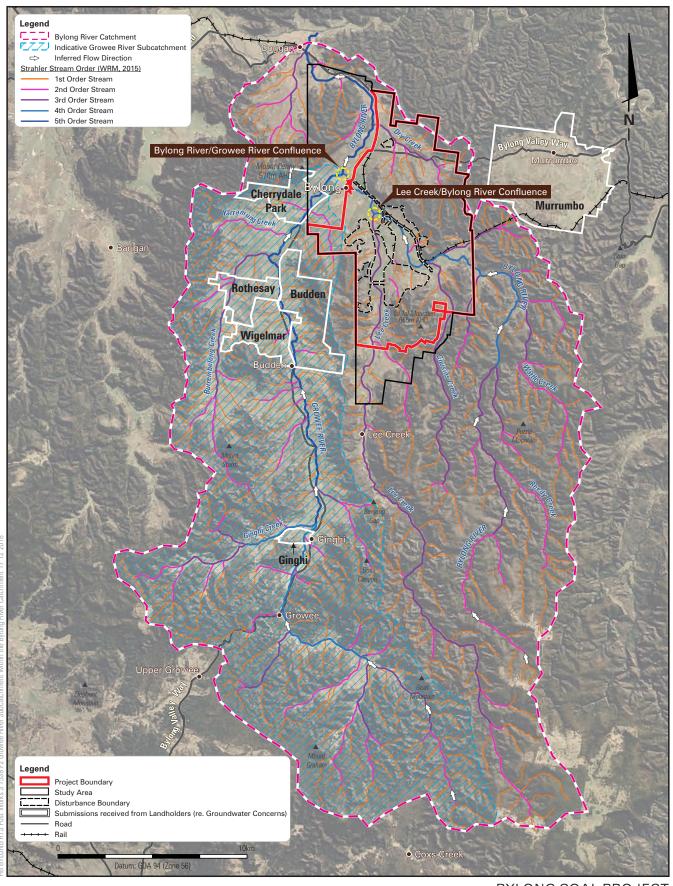


Registered Bores Proximate to the Project

As shown, the majority of submissions received are from landholders with properties located within the Growee River subcatchment, which forms a separate arm of the wider Bylong River catchment. One submission has also been received from the owners of the Murrumbo property which is located within a separate catchment which feeds the Goulburn River to the east of, and downstream of, the Project.

Figure 2 illustrates the Growee River subcatchment within the more extensive Bylong River catchment. The Growee River subcatchment is located on the western side of the Growee Ranges, to the west of and in a separate subcatchment to the Project. The properties from which landholders are predominantly raising concern are located upstream of the Growee Rivers' confluence with the Bylong River. The Growee River/Bylong River confluence is located approximately 3.9 km downstream of the Lee Creek/Bylong River confluence, immediately downstream of the proposed open cut mining operations and open cut mine infrastructure area.

Figure 3 illustrates a longitudinal cross section from the Lee Creek/Bylong River confluence (immediately downstream of the Project), downstream to the Growee River/Bylong River confluence and upstream on the Growee River where these properties are located. As shown in Figure 3, there is an approximate 10 m decrease in elevation between the Lee Creek/Bylong River confluence and the Bylong River/Growee River confluence and then a 40 m increase in elevation from this confluence upstream along of the Growee River to the boundaries of the Rothesay and Budden properties. When looking at these changes in elevation along the longitudinal cross section, together with the distance that water would need to travel through the alluvial materials, it is improbable that any impacts to neighbouring landholder bores could occur as a result of the Project. That is, the proposed mining operations are located within the upper Bylong River subcatchment (and not in the Growee River subcatchment) and due to the elevation differences of the two subcatchments (approximately 30 m as illustrated on Figure 3), water impacts would need to extend downstream of the Project to the Bylong River/Growee River confluence prior to extending upstream in the Growee River subcatchment (at a far more substantial gradient). The sections of the Growee River alluvium adjacent to these landholders will continue to receive groundwater recharge from rainfall, river bed leakage, upstream flow through the alluvium and flow from the underlying bedrock. This is consistent with the results of the modelling and uncertainty analysis which has been completed for the Project. It is also important to note that as previously explained within Section 5.9.5 of the RTS, historical weathering of the coal seams in the vicinity of the alignment of the Bylong River, Lee Creek and the Growee River has historically removed sections of the primary coal seams proposed for mining. This has resulted in there being no direct connectivity for water to travel through the coal seam between the proposed mining areas and the properties to the west of the Growee Ranges. Therefore, the only possible (but improbable) influence from the Project could be via uphill flow directly through the alluvium.



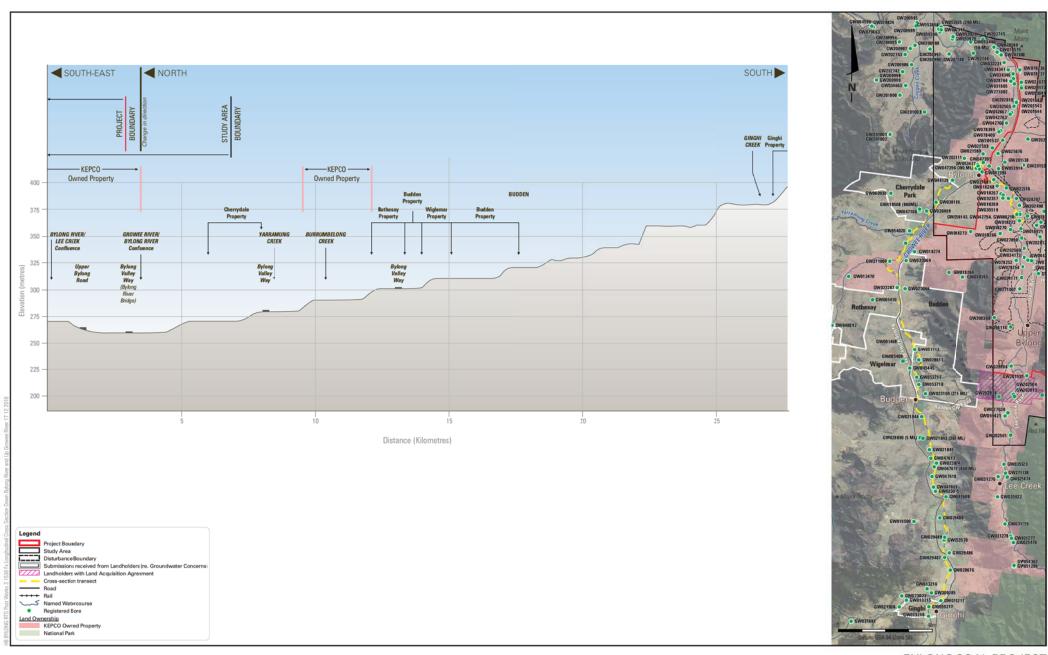








Growee River Subcatchment within the Bylong River Catchment









The modelling completed as part of the Supplementary RTS (Appendix J, (AGE 2016b)) has utilised the latest information available on the hydrological regime and has identified the potential range of impacts which may be encountered as a result of the Project. The uncertainty analysis indicated that adverse impacts on private landholders' water bores are highly improbable, even when the combined extremes are modelled to maximise drawdown effects within the alluvium. This finding is held, even when based on the scenario of applying the extremes where drought and low permeability/storages within the aquifers are combined to maximise the predicted drawdowns within the alluvial aquifer.

As part of the Response to PAC Review Report, KEPCO prepared a draft CWSA and has provided this along with the supporting guidelines for a Baseline Assessment and Borehole Impact Assessment to neighbouring landholders for review and comment. To date, KEPCO has received written feedback and queries from three landholders (out of 15 whom have been provided within this CWSA and associated documents to date). In light of the latest comments received in relation to the draft CWSA, KEPCO has also recently revised this draft CWSA and again distributed it to (and is attempting to discuss it with) the 15 neighbouring landholders for review and comment. The purpose of the revision has been to include in it a specific allowance for temporary short term water supply (for stock and domestic purposes only) to be provided within 24-hours of receiving a landholder notification. The draft CWSA has also been revised to reflect the latest recommended Development Consent conditions for the Project (from DPE's Final Assessment Report). A copy of the latest version of the draft CWSA is provided in **Appendix A**. **Appendix B** provides an update as to the status of consultations undertaken with neighbouring landholders in relation to the draft CWSA.

As part of the Response to PAC Review Report (Appendix F), KEPCO prepared a draft Water Management Plan (draft WMP) to demonstrate the methods to be implemented to monitor and manage the impacts of the Project in relation to the predictions from the EIS.

Section 7.3 of the draft WMP provides an outline of the groundwater monitoring program to be implemented to monitor the impacts of the Project on the surrounding groundwater regime. The proposed groundwater monitoring program described within the draft WMP included: KEPCO's existing monitoring network, additional monitoring sites and NSW Government owned bores within and surrounding the Project Boundary. Section 7.4.8 of the draft WMP also provides details of various Trigger Action Response Plans (TARPs) to be applied to the groundwater monitoring program. Should monitoring identify impacts from the borefield (and other Project related impacts) are extending beyond the modelled predictions, actions will be implemented to review and understand these impacts and to implement any relevant contingency measures.

The groundwater monitoring program will be undertaken in a way which assists in identifying the extent of impacts of the Project on the alluvium. In this regard, the monitoring program will assist in identifying any unforeseen impacts of the Project prior to neighbouring landholders bores being adversely affected.

3. MODELLING UNCERTAINTY

A number of submissions have continued to raise concern in relation to water modelling uncertainty. The submissions have also provided reference to the EIS studies which were completed for the neighbouring mines and that these studies under predicted impacts upon the surrounding hydrological regime.

KEPCO and its consultants have completed an extensive amount of numerical modelling (supplemented with exhaustive uncertainty analyses) to identify the likely (and most probable) impacts of the Project.

In addressing the various concerns and requests from stakeholders throughout the approvals process over the potential impacts of the Project, the modelling and uncertainty assessment undertaken is far more extensive than would have occurred during the assessment process for the three neighbouring mines. Therefore, KEPCO and its consultants are confident that the numerical modelling undertaken for the Project has identified the range of possible outcomes in relation to the potential impacts of the Project to the surrounding hydrological regime.

As identified within the Response to PAC Review Report, the uncertainty analysis has indicated that impacts to private water bores are highly improbable, even when the combined extremes are modelled to maximise drawdown effects. Further, there is a high level of confidence that the mine water management system will be able to be managed over the life of the Project to prevent the discharge of mine water from the site.

KEPCO has committed to reviewing and validating the numerical modelling throughout the life of the Project. In this regard, Schedule 4, Condition 28(c)(iv) of DPE's Recommended Development Consent conditions (Appendix H of the Final Assessment Report) requires the Water Management Plan to describe the program to be implemented for the Peer Review and validate the groundwater model against the modelled predictions.

4. FURTHER INDEPENDENT PEER REVIEW REQUESTED

Some submissions have identified that in light of the experiences at neighbouring mines (as addressed in **Section 3**) and the fact that DPE has relied upon the same Peer Reviewer whom reviewed those EIS assessments, that a new independent Peer Review of the groundwater modelling for the Project is required before the IPC make a determination of the Project.

The groundwater modelling and assessment completed for the Project has been subjected to extensive review and criticism by stakeholders and technical specialists throughout the approvals process. KEPCO and its consultants have taken on board this feedback throughout the approvals process and has developed a comprehensive numerical model including an exhaustive uncertainty analysis to identify the potential range of impacts which may be encountered as a result of the Project.

A robust Peer Review of the groundwater modelling and assessments has been completed by Dr Noel Merrick of HydroSimulations on behalf of KEPCO throughout the approvals process. This Peer Review process has included a detailed model audit which was undertaken at the request of the DPE Peer Reviewer, which concluded that the modelling has been undertaken appropriately.

Further to the Peer Review conducted on behalf of the proponent, the numerical modelling for the Project has also been subject of Peer Review and comment by technical specialists independent of the proponent, including:

- Independent Expert Scientific Committee;
- Department of Industry Crown Lands and Water Division (formally Department of Primary Industries – Division of Water); and
- Department of Planning and Environment (including the Peer Reviews and advices provided to them by Kalf & Associates).

In addition to the above, stakeholder submissions from technical specialists on the Project's groundwater modelling and assessments have also been considered and responded to (and/or addressed) by KEPCO and its consultants.

In summary, there has already been extensive technical review undertaken on the numerical modelling throughout the assessment process over the past three years, with any concerns raised either responded to or addressed within the relevant assessment documentation for the Project.

5. IMPACTS TO BYLONG RIVER

A number of submissions received by the IPC have raised concern that the Project will result in adverse impacts to flows within the Bylong River. KEPCO has previously responded to these stakeholder concerns as part of the groundwater impact assessment provided within Appendix G of the Supplementary Information report. A summary of the findings of this response is provided below.

The Project is proposed within an ephemeral creek system which experiences intermittent flows, only following significant rainfall events. Observations during KEPCOs baseline monitoring period has indicated the ephemeral creek system frequently has long periods of no surface water flow and reduces to comprise a chain of ponds, that provide windows to the alluvial water table.

Rainfall runoff modelling conducted for the Project has indicated only five flow events would occur in an average rainfall year, with maximum flows between 263 and 697 Megalitres per day (ML/day). The number of flow events would reduce to an average of 2.3 events per year over the 'Millennium Drought' scenario.

The rate of baseflow reduction predicted within the Supplementary RTS (considering impacts from borefield pumping, KEPCO's agricultural pumping and the incidental takes from open cut and underground mining) was analysed to calculate the changes in baseflow occurring on private property, beyond the buffer zone of properties purchased by KEPCO. This indicated that the predicted baseflow for the models with and without the Project are almost identical, except for a small difference in Project year 9 (i.e. the year where baseflow reduction is predicted at 920 ML/year). The majority of predicted baseflow reduction occurs within the vicinity of the proposed mining operations and within the KEPCO owned buffer zone.

The groundwater model assumes rainfall recharge occurs in climatic cycles similar to the Millennium Drought, which was adopted in the RTS and Supplementary RTS to incorporate the variability in climatic conditions. This was in response to earlier submissions that drought conditions would influence the water availability within the Bylong River water source. In the model, the peak in baseflow reduction coincides with the peak in borefield demand (Project year 9); a conservative coincidence that exacerbates the drawdown and the loss of baseflow predicted by the model. It is during this worst case year (Project year 9), that a total of 920 ML of baseflow is taken from the system, with a negligible 1.6 ML of this baseflow predicted to be taken from the system on land not owned by KEPCO.

As noted above, the rainfall runoff events for an average year were predicted to generate flows within the Bylong River of between 263 and 697 ML/day. Therefore, the maximum 2.52 ML/day of baseflow reduction for Project year 9 (which will predominantly occur on KEPCO owned land) will not detectably affect the duration of surface water flows in the Bylong River catchment. There will be even less baseflow reduction for this Project year (i.e. 1.6 ML/year (or 0.004 ML/day)) on land not currently owned by KEPCO.

KEPCO will account for all groundwater and surface water removed by the Project with water licences held for the relevant water source in accordance with NSW Aquifer Interference Policy (AIP) (DPI-Water, 2012). This means there will be no net increase in the volume of water abstracted from the Bylong River water source beyond that already approved for abstraction by KEPCO and other owners of water access licences. The only difference is that the drawdown impacts resulting from the Project's abstraction of groundwater will be monitored, whereas there is currently no requirement for the owners of water access licences to monitor their individual and cumulative impact on the water source.

6. AQUIFER INTERFERENCE POLICY

KEPCO's application (SSD 14_6367) is for mining or petroleum development. The provisions of *State Environmental Planning Policy (Mining, Petroleum, Productive and Extractive Industries)* 2007 (SEPP Mining) apply to the Project. Some of the SEPP Mining's provisions refer to the AIP (as defined in Clause 3(2)).

While the Commission may wish to consider the whole of the SEPP Mining, we draw attention, in particular, to clause 17B.

Clause 17B states:

"17B Assessment of development applications

- (1) Before determining an application for development consent for mining or petroleum development that is accompanied by a gateway certificate, the consent authority must:
 - (a) refer the application to the Minister for Regional Water for advice regarding the impact of the proposed development on water resources, and
 - (b) consider:
 - (i) any recommendations set out in the certificate, and
 - (ii) any written advice provided by the Minister for Regional Water in response to a referral under paragraph (a), and
 - (iii) any written advice of the Gateway Panel in relation to the development given as part of the consultations undertaken by the Director-General under clause 3 (4A) (b) of Schedule 2 to the Environmental Planning and Assessment Regulation 2000, and
 - (iv) any written advice of the IES Committee provided to the Gateway Panel as referred to in clause 17G (1) (whether that advice was received before or after the expiry of the 60-day period referred to in clause 17G (1) (b) (i)), and
 - (v) any cost benefit analysis of the proposed development submitted with the application.
- (2) In determining an application for development consent for mining or petroleum development that is accompanied by a gateway certificate, the consent authority must consider whether any recommendations set out in the certificate have or have not been addressed and, if addressed, the manner in which those recommendations have been addressed.
- (3) The Minister for Regional Water, when providing advice under this clause on the impact of the proposed development on water resources, must have regard to:
 - (a) the minimal impact considerations set out in the Aquifer Interference Policy, and
 - (b) the other provisions of that Policy."

We note that the development application was accompanied by a gateway certificate which was issued on 15 April 2014.

6.1 THE MINIMAL IMPACT CONSIDERATIONS IN THE AIP

Some stakeholders have stated that the impacts of the Project do not meet the relevant minimal impact considerations under the AIP. The stakeholders contend that:

- The minimal impact considerations apply to water supply works whether or not they are owned by KEPCO; and
- 2. The assessment materials do not address impacts on KEPCO-owned water supply works.

Given the concerns raised by stakeholders, if there is doubt as to the scope of the AIP, the IPC may wish to assess the Project on the assumption that the minimal impact considerations in the AIP do apply to water supply works, even if they are owned by KEPCO. The following provides information relevant to the impact of the Project on water supply works within the alluvium, both KEPCO-owned and otherwise.

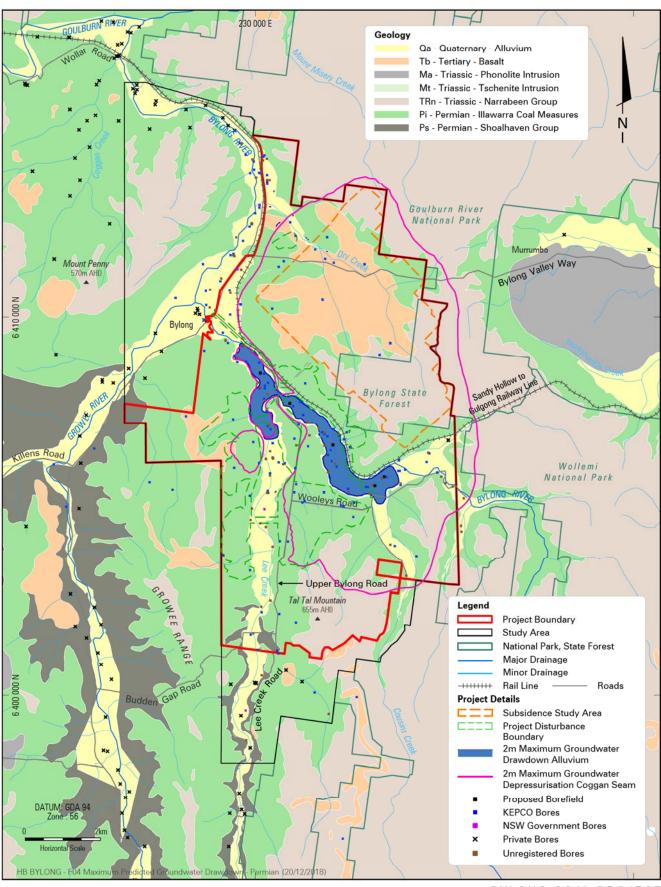
Figure 53 of the EIS presents the maximum predicted groundwater drawdown in the alluvium and depressurisation within the Permian coal seam aquifer in relation to the registered bores within and surrounding the Project Boundary (i.e. KEPCO owned, Government owned and privately owned bores). Figure 53 of the EIS identifies a number of bores on KEPCO owned land within the predicted 2 m drawdown zone within the alluvium. The EIS identified that no privately owned bores would experience drawdown greater than 2 m as a result of the Project's activities.

Figures 42 to 45 of the Response to Groundwater Submissions within Appendix H of the Response to Submissions report illustrate the predictions of groundwater drawdown within the alluvium for the uncertainty modelling completed in relation to all registered bores within the alluvium (including those located on KEPCO owned land).

Figure 6-17 of the Response to Groundwater Submissions within Appendix J of the Supplementary RTS illustrates the predicted drawdown in the alluvium in relation to the nearest private landholder bores (located on the Eagle Hill property owned by Jarvet Pty Limited) and the eight bores subject of the Project borefield. The various bores used for monitoring purposes and other bores located on KEPCO land are not shown.

Similarly, Appendix K of the Response to PAC Review Report and Appendix G of the Supplementary Information Report focuses on the worst case impacts to neighbouring private landholder bores (and not bores located on land owned by KEPCO).

Figure 4 illustrates the predicted maximum drawdown within the alluvium and depressurisation of the Permian Coggan coal seam as a result of the Project (from the base case model for the Supplementary Information Report) in relation to all registered water bores within and surrounding the Project Boundary.







BYLONG COAL PROJECT

Maximum Predicted Groundwater Drawdown in the Alluvium and Depressurisation in the Permian (Coggan Seam)

Table 1 lists all registered bores which have been predicted by AGE for modelling within Appendix G of the Supplementary Information Report to be affected by drawdown within the alluvium greater than 2 m. There are 35 registered bores within the alluvium on KEPCO's land which are predicted to be affected by drawdown greater than 2 m at some time (and not necessarily at the same time) throughout the life of the Project. There are also 17 unregistered bores (identified by KEPCO's bore census) and five bores for the proposed borefield which are predicted to be affected by drawdown greater than 2 m at some time.

Sixteen (16) of the registered bores identified within **Table 1** comprise of KEPCO's monitoring bore network at ten locations (i.e. there are sixteen bores, but only ten locations, because some monitoring bores are screened in different layers in the alluvium at the same location). Ten bores predicted to be impacted are registered on the database for irrigation use, with only one of these with a water allocation attached to it. The remaining nine bores are registered on the database for stock, domestic, recreation or unknown purposes. KEPCO will manage the impacts of these bores throughout the life of the Project to minimise any impacts to its agricultural activities.

The primary cause of drawdown in water levels at water supply works by reason of the Project is the operation of a borefield. It is also predicted that there will be recharge of the water levels from natural events (i.e. rainfall, river recharge and movement of alluvial water from upstream). For these reasons, it is predicted that any drawdown in water levels will not be permanent and that there will be no adverse impacts post-mining and after the borefield pumps are turned off. The maximum drawdown is predicted to occur throughout the open cut mine life in line with the anticipated maximum borefield demands. Once the underground mining commences, borefield demand decreases significantly.

7. WORST CASE MODELLING SCENARIO

Some submissions have commented that the use of the 'Millennium Drought' within the groundwater modelling is not considered worst case and that the drought which occurred within the 1940s may have been more appropriate to use.

Drought cycles have been represented within the groundwater modelling by calculating groundwater recharge using rainfall records from 2000 to 2013, which encompassed the 'Millennium Drought' that occurred between 1995 and 2007. This drought period was used as it was considered an appropriate period of drought during the period of the most extensive monitoring records available. That is, there would be limited groundwater monitoring information available from the 1940s, which could be used in conjunction with historical rainfall records to understand the influence of rainfall on the regional hydrological regime.

Table 1
Predicted Impacts to Registered Bores within the Alluvium

Predicted impacts to Registered Bores within the Alluvium							
Bore ID	Easting (m)	Northing (m)	Land Owner	Use	Maximum Predicted Drawdown (m)	Project Year of maximum drawdown	
GW032357	229537	6408924	KEPCO	IRRIGATION	2.5	9	
GW027890	230330	6407097	KEPCO	IRRIGATION	2.7	9	
GW033519	229761	6408808	KEPCO	IRRIGATION	2.8	9	
GW022518	229671	6409237	KEPCO	IRRIGATION	2.9	8	
GW042756	230120	6408109	KEPCO	IRRIGATION	2.9	9	
GW018272	230232	6407834	KEPCO	UNKNOWN	3.0	9	
AGE21P	230399	6407018	KEPCO	MONITORING	3.2	9	
GW080210	230252	6408105	KEPCO	RECREATION	3.2	9	
GW059143	230249	6408174	KEPCO	IRRIGATION	3.3	9	
A08-D	230231	6408492	KEPCO	MONITORING	3.6	9	
A08-S	230229	6408492	KEPCO	MONITORING	3.6	9	
GW024207	230102	6408786	KEPCO	IRRIGATION	3.6	6	
GW202498	230231	6408492	KEPCO	MONITORING	3.6	9	
AGE24P	230335	6408250	KEPCO	MONITORING	3.9	9	
A20	231188	6407756	KEPCO	MONITORING	4.8	8	
GW202506	231188	6407766	KEPCO	MONITORING	4.8	8	
A03-D	232473	6405319	KEPCO	MONITORING	4.9	5	
A03-S	232475	6405320	KEPCO	MONITORING	4.9	5	
GW202507	232475	6405320	KEPCO	MONITORING	4.9	5	
GW044345	231919	6406338	KEPCO	UNKNOWN	4.9	9	
GW078246	232220	6406839	KEPCO	DOMESTIC	4.9	9	
GW042723	230996	6407639	KEPCO	IRRIGATION	5.6	9	
A06-D	231260	6407410	KEPCO	MONITORING	6.2	9	
A06-S	231260	6407410	KEPCO	MONITORING	6.2	9	
GW035650	233477	6405763	KEPCO	STOCK	6.3	6	
GW042936	232935	6405502	KEPCO	IRRIGATION	7.2	6	
GW042935	232987	6405503	KEPCO	IRRIGATION	7.2	6	
GW271003.1	232464	6405450	KEPCO	MONITORING	7.5	8	
GW271003	232464	6405450	KEPCO	MONITORING	7.9	7	
AGE32P	231762	6406942	KEPCO	MONITORING	8.5	8	
GW078245	231826	6406890	KEPCO	DOMESTIC	8.8	8	
GW044346	232163	6406036	KEPCO	UNKNOWN	8.9	8	
GW044347	231906	6406831	KEPCO	UNKNOWN	9.1	8	
GW078247	231994	6406463	KEPCO	DOMESTIC	9.9	8	
AGE28P	232022	6406185	KEPCO	MONITORING	10.6	7	

In addition to the use of the 'Millennial Drought' scenario within the base case numerical model, AGE completed an exhaustive uncertainty analysis as part of the assessment completed for the Supplementary RTS. This uncertainty analysis allowed the recharge during the drought periods to reduce by up to 14 times lower than within the base case which, in effect increased the severity of drought conditions. The uncertainty modelling also combined the extremes of drought and low permeability/storages within the aquifers with the maximum borefield demands to maximise the predicted drawdown within the alluvial aquifer as a result of the Project.

In this regard, KEPCO and its consultants believe the numerical modelling has thoroughly considered the potential impacts of the Project during extreme worst case drought conditions.

8. DRAWDOWN IMPACTS TO GBMWHA

Some submissions have identified that the Bioregional Assessment completed by the Commonwealth Government has predicted that there may be a potential for hydrological changes to up to 137 square kilometres (km²) of land within the GBMWHA from new mining proposals. KEPCO has previously provided a response to these concerns within letter to the IPC dated 10 December 2018. This response is reproduced (in part) below.

The Bioregional Assessment cautions that:

The results do not replace the need for detailed site-specific studies, nor should they be used to supplant the results of detailed studies that may be required under state legislation.

The Bioregional Assessment also considered the potential impacts to national and world heritage areas (including the GBMWHA) and concluded that impacts to these assets will be minor.

As part of the documentation supporting the SSD Application, KEPCO has completed detailed studies of the groundwater impacts from the mining operations associated with the Project. These more detailed assessments have confirmed a much smaller zone of drawdown within the alluvial aquifers and smaller depressurisation within the Permian and Triassic aquifers than the Bioregional Assessment.

Following the release of the Bioregional Assessments in May 2018, KEPCO addressed the findings of this broad scale higher level assessment. KEPCO highlighted the differences between the broad scale modelling completed for the Bioregional Assessments and the much more detailed modelling which has been completed specifically to assess the impacts of the Project on the surrounding groundwater regime. Refer to Section 5 of Appendix G within the *Bylong Coal Project Supplementary Information Report* (Hansen Bailey, 2018).

The latest predictions for the Project's impacts on the regional hydrological regime are presented within Appendix J of the Supplementary RTS and with a comparison of impacts for the revised mine plan imposed by DPE in Appendix G of the Supplementary Information Report.

The Permian coal seam aquifer which is predicted to be depressurised as a result of the Project's mining operations are located more than 400 m below the surface topography within the Wollemi National Park and with groundwater levels in excess of 50 to 100 m below the land surface. The significant depth of groundwater below the land surface means the minor predicted drawdown within the Permian will not have any consequence for the surface hydrology within the neighbouring Wollemi National Park (which forms part of the GBMWHA). Further to this, the maximum predicted drawdown within the alluvium (including the results for the exhaustive uncertainty analysis undertaken) does not extend into or adjacent to the GBMWHA.

As a result, it is not possible that the proposed mining operations will lead to significant impacts to any surface hydrological systems within the GBMWHA as suggested within some submissions received by the IPC.

9. CONCLUSION

We trust that the above assists the Commissioners in addressing the matters raised in submissions regarding any potential residual impacts of the Project on water resources.

Please do not hesitate to contact us should you like to discuss any queries that you may have in relation to this letter or any matter relating to the Bylong Coal Project.

Yours faithfully

HANSEN BAILEY

Nathan Cooper

Principal

James Bailey Director

APPENDIX A
Revised Draft Compensatory
Water Supply Agreement



Compensatory Water Supply Agreement

KEPCO Bylong Australia Pty Ltd (**KEPCO**)

[#insert name of landholder] (Landholder)

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Compensatory Water Supply Agreement

Deta	nils	4
Agre	eed terms	5
1.	Defined terms & interpretation	5
1.1	Defined terms	5
1.2	Interpretation	6
1.3	Headings	7
2.	Commencement	7
3.	Intention	7
4.	Landholder's responsibilities	7
5.	Baseline Assessment	8
5.1	KEPCO to undertake Baseline Assessment	8
5.2	Landholder to cooperate	8
6.	Access to the Property	8
6.1	Landholder's obligations	8
6.2	Reasons for access to the Property	8
6.3	Access by KEPCO	8
7.	Trigger for Compensatory Water Supply Measures	9
7.1	Notification issued by Landholder	9
7.2	Adverse impact identified by KEPCO	9
7.3	Response to notifications	9
8.	Provision of Compensatory Water Supply Measures	10
8.1	Interim Water Supply	10
8.2	Compensatory Water Supply Measures	10
8.3	Provision of Compensatory Water Supply Measures	10
9.	Compensation	10
9.1	Method to determine value of Compensation Payment	10
9.2	Approval of Compensation Payment by Secretary	11
9.3	Making Compensation Payment	11
9.4	No further compensation claim	11
10.	Monitoring	11
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Details

Date

Parties

Name KEPCO Bylong Australia Pty Ltd ACN 075 361 769

ABN 79 075 361 769

Short form name KEPCO

Notice details Level 12, 141 Walker Street, North Sydney NSW 2060

Name [#insert name of landholder]

Short form name Landholder

Notice details [#insert address of landholder]

Background

- A KEPCO is:
 - (i) the proponent of the Project; and
 - (ii) has obtained or will obtain the Development Consent under the EPA Act.
- B The Landholder is the owner of the Property.
- C The Property is located in the area that is not predicted to be Adversely Impacted, in terms of surface water and/or groundwater supply, by the Project.
- D KEPCO acknowledges that, if the Existing Water Supply on the Property is Adversely Impacted as a direct result of the Project, it will need to provide Interim Water Supply, implement Compensatory Water Supply Measures and/or pay the Compensation Payment.
- E KEPCO has agreed to undertake the Baseline Assessment and the measures detailed in this Deed to monitor and respond to any adverse impacts on the Existing Water Supply as a direct result of the Project, on the terms and conditions set out in this Deed.

Agreed terms

1. Defined terms & interpretation

1.1 Defined terms

In this Deed:

Adversely Impacted means an impact to the quantity or quality of water in the Existing Water Supply on the Property exceeding the trigger levels and/or performance criteria in the Baseline Assessment (other than a negligible impact) as a result of the Project.

Approval means any consent, approval, authorisation, licence, registration, order, permission or concurrence required by Law.

Baseline Assessment means the baseline assessment carried out for the Existing Water Supply on the Property in accordance with clause 5.1.

Business Day means any day except for a Saturday, Sunday or public holiday in the State of New South Wales.

Claim means any claim, demand or proceeding arising out of any cause of action, including breach of contract, tort (including negligence), any other common law, equitable or statutory cause of action.

Commencement Date means the day on which this Deed is executed by all of the parties.

Compensation Payment means the amount of money agreed by the Parties or otherwise determined in accordance with clause 9.1.

Compensatory Water Supply Measures means any measures necessary to reinstate the Landholder to the position they would have been but for the Project undertaken by KEPCO which have resulted in the Existing Water Supply becoming Adversely Impacted, as agreed or determined in accordance with clause 8.1.

Condition 25 means draft condition 25 of Schedule 4 of the proposed development consent for the Project as contained in Annexure H of the DPE Assessment Report dated 4 October 2018, as modified from time to time. For abundant clarity, draft condition 25 is set out in full at Schedule 1 to this Deed.

Corporations Act means the Corporations Act 2001 (Cth).

CPI means the All Groups Consumer Price Index applicable to Sydney published by the Australian Bureau of Statistics.

Deed means this deed, including any schedules and annexures.

Development Application means State Significant Development Application No. SSD 14_6367 for the Project lodged under Division 4.1 of Part 4 of the EPA Act, as modified from time to time.

Development Consent means any development consent granted in respect of the Development Application, as approved and modified from time to time.

DPE means the NSW Department of Planning and Environment.

Environmental Impact Statement means the Environmental Impact Statement for the Bylong Coal Project dated September 2015 prepared by Hansen Bailey which is available on the Major Project Assessments Register kept by the NSW Department of Planning and Environment: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6367

EPA Act means the Environmental Planning and Assessment Act 1979 (NSW).

Existing Water Supply means surface water and/or groundwater supply lawfully available and licensed on the Property, including via existing bores and any subsequent bores installed by the Landholder, dams and other water supply infrastructure located on the Property.

GST has the same meaning as in the GST Law.

GST Law has the same meaning given to that term in A New Tax System (Goods and Services Tax) Act 1999 (Cth) and any other Act or regulation relating to the imposition or administration of the GST.

Interim Water Supply means the provision of temporary water supply by KEPCO to the Landholder for domestic water and livestock purposes only. The purpose of this supply is to temporarily mitigate the Existing Water Supply being Adversely Impacted as a direct result of the Project to the extent that such impacts will affect the availability of water supply for domestic or livestock use only pending the implementation of the Compensatory Water Supply Measures in accordance with clause 8.2.

KEPCO Notification means notice provided by KEPCO to the Landholder in accordance with clause 7.2.

Landholder Notification has the same meaning as in clause 7.1(a).

Law means:

- (a) any statute, regulation, rule, proclamation, order, ordinance or by-law whether present or future and whether Commonwealth, State, territorial or local; and
- (b) the common law.

Mining Act means the Mining Act 1992 (NSW).

Party means KEPCO and the Landholder jointly or severally, as the context requires.

Project means the Bylong Coal Project, being the proposed development of an open cut and underground coal mine generally described in the Development Application and Environmental Impact Statement and on the land described in Appendix A of the Environmental Impact Statement.

Property means the property known as [insert address] and identified as Lot [insert number] in DP [insert number] owned by the Landholder.

Secretary means the Secretary of DPE or duly authorised delegate or nominee.

Water Approval means any Approval granted in respect of the Property under the Water Legislation.

Water Legislation means the Water Act 1912 (NSW) and Water Management Act 2000 (NSW), as well as any associated legislation.

Water Management Plan means the water management plan to be prepared and implemented by KEPCO accordance with condition 28 of Schedule 4 of the Development Consent.

1.2 Interpretation

In this Deed, except where the context otherwise requires:

- (a) the singular includes the plural and vice versa, and a gender includes other genders;
- (b) another grammatical form of a defined word or expression has a corresponding meaning;
- (c) a reference to a clause, paragraph, schedule or annexure is to a clause or paragraph of, or schedule or annexure to, this agreement, and a reference to this Deed includes any schedule or annexure:
- (d) a reference to a document or instrument includes the document or instrument as novated, altered, supplemented or replaced from time to time;
- (e) a reference to A\$, \$A, dollar or \$ is to Australian currency;
- (f) a reference to time is to Sydney, Australia time;
- (g) a reference to a party is to a party to this Deed, and a reference to a party to a document includes the party's executors, administrators, successors and permitted assigns and substitutes;
- (h) a reference to a person includes a natural person, partnership, body corporate, association, governmental or local authority or agency or other entity;

- a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (j) a word or expression defined in the Corporations Act has the meaning given to it in the Corporations Act;
- (k) the meaning of general words is not limited by specific examples introduced by including, for example or similar expressions;
- any agreement, representation, warranty or indemnity by two or more parties (including where two or more persons are included in the same defined term) binds them jointly and severally;
- (m) any agreement, representation, warranty or indemnity in favour of two or more parties (including where two or more persons are included in the same defined term) is for the benefit of them jointly and severally;
- (n) words and expressions which are not defined in this Deed but which have a defined meaning in the GST Law have the same meaning as in the GST Law;
- (o) a rule of construction does not apply to the disadvantage of a party because the party was responsible for the preparation of this agreement or any part of it; and
- (p) if a day on or by which an obligation must be performed or an event must occur is not a Business Day, the obligation must be performed or the event must occur on or by the next Business Day.

1.3 Headings

Headings are for ease of reference only and do not affect interpretation.

2. Commencement

This Deed operates on and from the Commencement Date.

3. Intention

The intention of the Parties is:

- (a) to recognise, for the purposes of Condition 25, that the Parties have agreed on methods and procedures to be undertaken by KEPCO to implement any Compensatory Water Supply Measures on the Property if the Landholder's Existing Water Supply is Adversely Impacted by the Project;
- (b) for KEPCO to access the Property to undertake the Baseline Assessment;
- (c) for KEPCO to undertake ongoing monitoring and review of impacts of the Project on the surface water and/or groundwater for the Property (including piezometric, water supply and water quality information) and for the monitoring results to be made available to the Landholder upon request;
- (d) for KEPCO to carry out the Compensatory Water Supply Measures if it is determined that surface water and/or groundwater available to the Property is Adversely Impacted by the Project;
- (e) in the event that KEPCO is unable to carry out the Compensatory Water Supply Measures, to provide for compensation to the Landholder; and
- (f) to indicate when the obligations under this Deed will cease or terminate.

4. Landholder's responsibilities

The Landholder shall:

(a) use and take the Existing Water Supply on the Property prudently, in accordance with sound operating practices and in accordance with all Water Approvals;

- (b) keep, maintain and make available on request to KEPCO the records relating to the Landholder's use and take of the Existing Water Supply on the Property in accordance with all Water Approvals;
- (c) allow the installation, reading and maintenance of meters to record hours of operation of pumps and volumes of water taken from the Existing Water Supply on the Property by, and at the expense of, KEPCO; and
- (d) promptly give notice in accordance with clause 7.1 to KEPCO of any material changes observed by the Landholder in relation to the water level, water quality and pumping capacity of the Existing Water Supply on the Property.

Baseline Assessment

5.1 KEPCO to undertake Baseline Assessment

KEPCO shall, within six months of the Commencement Date, commence and continue to carry out a Baseline Assessment of any Existing Water Supply on the Property to collate as much information as is reasonably practicable regarding the quality and quantity of water in the Existing Water Supply and will provide a copy of that Baseline Assessment to the Landholder.

5.2 Landholder to cooperate

The Landholder will provide:

- (a) all information within the Landholder's knowledge, possession or control regarding any Existing Water Supply on the Property for incorporation into the Baseline Assessment prepared by KEPCO in accordance with clause 5.1; and
- (b) copies of all Water Approvals for the Property.

6. Access to the Property

6.1 Landholder's obligations

The Landholder shall allow reasonable access to KEPCO and all persons nominated by KEPCO to the Property for the purposes of performing any of KEPCO's obligations or exercising any of its rights under this Deed.

6.2 Reasons for access to the Property

The Landholder acknowledges that KEPCO will require access to the Property to, among other things:

- (a) carry out the Baseline Assessment;
- (b) carry out periodic monitoring in accordance with the Water Management Plan;
- (c) undertake an assessment following a Landholder Notification from the Landholder in accordance with clause 7.1;
- (d) deliver any Interim Water Supply; and
- (e) implement the Compensatory Water Supply Measures and to measure their effectiveness.

6.3 Access by KEPCO

Where KEPCO accesses the Property under this Deed, KEPCO:

- (a) must give 24 hours prior notice by telephone before entry, except if there is an emergency, a delivery of Interim Water Supply or a need to investigate a Landholder Notification immediately, in which case KEPCO must make every reasonable endeavour to notify the Landholder as soon as possible, by phone or other means;
- (b) must have regard to any reasonable requests of the Landholder;
- must minimise, so far as is reasonably practicable, disturbance to the Landholder and the Landholder's operations;

- (d) must comply with any land access protocols notified by the Landholder from time to time; and
- (e) must repair and reinstate, so far as is practicable and necessary, the area to the condition it was in prior to KEPCO exercising its right of access under clause 6.1.

7. Trigger for Compensatory Water Supply Measures

7.1 Notification issued by Landholder

- (a) If the Landholder considers, on reasonable grounds, that the Existing Water Supply for the Property is Adversely Impacted as a direct result of the Project, the Landholder may give written notice to KEPCO (Landholder Notification). The Landholder Notification must include:
 - (i) reasonable evidence in support obtained from the Landholder's own records (kept in accordance with this Deed); and
 - (ii) a reasonable estimate of the shortfall in surface water and/or groundwater (as the case may be) available to the Property (on a kilolitres per day basis) needed to offset the reduction in the Existing Water Supply to the extent that it has been Adversely Impacted as a direct result of the Project.
- (b) In relation to a Landholder Notification provided under clause 7.1(a), KEPCO may (at its absolute discretion) investigate and/or test the Property, the Existing Water Supply (including associated infrastructure) and the Landholder's water management practices in order to verify the evidence provided by the Landholder.

7.2 Adverse impact identified by KEPCO

If monitoring undertaken by KEPCO indicates that the Existing Water Supply is being Adversely Impacted as a direct result of the Project, KEPCO must provide notice to the Landholder about the potential impact that has been identified (**KEPCO Notification**), including:

- (a) reasonable evidence in support obtained from the monitoring; and
- (b) a reasonable estimate of the shortfall in surface water and/or groundwater (as the case may be) available to the Property (on a kilolitres per day basis) needed to offset the reduction in the Existing Water Supply to the extent that it has been Adversely Impacted as a direct result of the Project.

7.3 Response to notifications

- (a) Promptly after the Landholder Notification or the KEPCO Notification is provided in accordance with clause 7.1 or 7.2 respectively, the Parties shall meet to try to agree in good faith:
 - (i) whether or not impacts on availability of the Existing Water Supply for the Property to satisfy the Landholder's water use needs are directly attributable to the Project;
 - (ii) the shortfall in available surface water and/or groundwater as described in clause 7.1(a)(ii); and
 - (iii) whether any Compensatory Water Supply Measures proposed by KEPCO are appropriate (and the Landholder must act reasonably in considering any proposals put forward by KEPCO).
- (b) If the Parties agree that the Existing Water Supply is being Adversely Impacted as a direct result of the Project, then KEPCO shall document the nature of the agreed Compensatory Water Supply Measures in a letter to the Landholder.
- (c) If the Parties do not agree:
 - (i) that the Existing Water Supply is being Adversely Impacted as a direct result of the Project; or
 - (ii) on the nature of the Compensatory Water Supply Measures required,

either party may refer the matter for dispute resolution in accordance with the process detailed in clause 11.2.

8. Provision of Compensatory Water Supply Measures

8.1 Interim Water Supply

- (a) An Interim Water Supply must be provided by KEPCO within 24 hours of receipt of the Landholder Notification.
- (b) KEPCO must continue to provide the Interim Water Supply to the Landholder until the implementation of the Compensatory Water Supply Measures is completed in accordance with clause 8.2.
- (c) In providing the Interim Water Supply, KEPCO must ensure that the volume of water to be provided is sufficient to meet the shortfall in available surface water and/or groundwater as described in clause 7.1(a)(ii), as experienced by the Landholder during the relevant period.
- (d) Prior to the first delivery of the Interim Water Supply, the Landholder must promptly notify KEPCO of a single location for the water truck to deliver the Interim Water Supply and such location must be reasonable capable of being accessed by the water truck. If this is not feasible and practicable, the Parties must use reasonable endeavours to reach agreement on the appropriate manner and means of the delivery of the Interim Water Supply.
- (e) For the avoidance of doubt, KEPCO is not required to provide an Interim Water Supply to the Landholder for any purpose other than domestic and/or livestock use.
- (f) If an Interim Water Supply is provided by KEPCO to the Landowner and it is found that the Existing Water Supply was not Adversely Impacted as a direct result of the Project, KEPCO may (at its absolute discretion) seek a reimbursement of all costs associated with the Interim Water Supply for each and every day on which the Interim Water Supply was provided to the Landholder after 14 calendar days. For the avoidance of doubt, the Landholder will not be liable to reimburse KEPCO for any such Interim Water Supply provided in the first 14 calendar days.

8.2 Compensatory Water Supply Measures

Where the Compensatory Water Supply Measures are agreed between the Parties in accordance with clause 7.3, KEPCO shall implement the Compensatory Water Supply Measures as soon as reasonably practicable after providing the letter to the Landholder.

8.3 Provision of Compensatory Water Supply Measures

The Compensatory Water Supply Measures to be provided by KEPCO must:

- be prepared in consultation with the Department of Industry, Division of Water and approved by the Secretary in accordance with Condition 25; and
- (b) provide a compensatory water supply to the Landholder that is equivalent to the loss experienced by the Existing Water Supply that has been Adversely Impacted as a direct result of the Project.

9. Compensation

9.1 Method to determine value of Compensation Payment

(a) If agreement cannot be reached between the Parties regarding the Compensatory Water Supply Measures to be implemented at the Property under clause 7.3 or if KEPCO is unable to carry out Compensatory Water Supply Measures, the Parties shall use reasonable endeavours to determine the Compensation Payment to be made to the Landholder in lieu of the provision of Compensatory Water Supply Measures.

(b) If the Parties cannot agree on the Compensation Payment in accordance with clause 9.1(a), then either party may refer the matter to the Secretary for a determination as to the appropriate Compensation Payment to be made in accordance with Condition 25. Such determination is final and binding.

9.2 Approval of Compensation Payment by Secretary

If the Parties agree on the Compensation Payment in accordance with clause 9.1(a), then the agreed Compensation Payment will be final and binding on KEPCO and the Landholder.

9.3 Making Compensation Payment

KEPCO will pay the Compensation Payment to the Landholder within 20 Business Days of receiving written approval or a final determination (as the case may be) from the Secretary.

9.4 No further compensation claim

The Landholder agrees that the obligations of KEPCO in this Deed are accepted by the Landholder in full and final satisfaction of any Claim which the Landholder may have against KEPCO at any time in respect of the relevant or particular event whereby the Existing Water Supply was Adversely Impacted as a direct result of the Project.

10. Monitoring

Unless otherwise agreed by the Parties:

- (a) groundwater quality and levels on the Property must be monitored by KEPCO at the locations and frequencies identified in the Water Management Plan, as approved from time to time: and
- (b) monitoring results will be provided to the Landholder upon request for the purpose assessing groundwater levels at the Property.

11. Dispute resolution

11.1 Negotiation

If there is a difference between the Parties arising out of or in connection with this Deed (**Dispute**), then a Party notifying the other Party in writing of a Dispute, a representative from KEPCO must meet with the Landholder and their advisers and use all reasonable endeavours acting in good faith to resolve the Dispute within 15 Business Days.

11.2 Referral to the NSW Land and Water Commissioner

- (a) If the Dispute is not settled within 15 Business Days, either Party may refer the Dispute to the NSW Land and Water Commissioner for adjudication (if the Commissioner is willing to adjudicate the Dispute).
- (b) The Parties must use reasonable endeavours to have the Dispute Adjudicated within a further 15 Business Days.
- (c) Any such adjudication is not final or binding, however may be considered by the Secretary in the event that clause 11.3 is triggered.

11.3 Resolution by Secretary

- (a) If the Dispute is not settled or adjudicated (as the case may be) within 30 Business Days of notification, the Parties must submit the Dispute to the Secretary for resolution in accordance with Condition 25.
- (b) The determination of the Secretary is final and binding

12. Costs

12.1 Cost reimbursement

KEPCO will reimburse the reasonable legal costs of the Landholder in relation to the negotiation, preparation and execution of this Deed, subject to the provision of relevant tax invoices, up to a maximum of \$1,000 (GST exclusive).

12.2 Stamp duty

KEPCO will pay any stamp duty imposed on this Deed or the transaction envisaged by this Deed.

Dealing with the Property

13.1 Landholder not to deal adversely with Property

The Landholder shall not, during the term of this Deed, enter into any agreement or arrangement which would or might adversely affect the Landholder's ability to comply with the obligations imposed on the Landholder under this Deed.

13.2 Sale or disposal of the Property

If the Landholder transfers or otherwise disposes with the Property or any interest in the Property the Landholder must, before completion of that transfer or other dealing, novate its rights and obligations under this Deed (to the extent of the interest transferred) to the transferee under a deed of novation in a form reasonably acceptable to KEPCO under which the transferee or other party agrees with KEPCO to be bound by the terms of this Deed.

14. Termination

14.1 Termination of Deed

This Deed terminates on the earliest of:

- (a) the written agreement of the Parties;
- (b) KEPCO deciding not to proceed with the Project and providing written notice; or
- (c) the expiry or surrender of the Development Consent.

14.2 KEPCO released from further obligations

On the termination of this Deed in accordance with clause 14.1, KEPCO is released from any further obligations to provide any Compensatory Water Supply or make a Compensation Payment to the Landholder.

15. Notices and other communications

15.1 Service of notices

A notice, demand, consent, approval or communication under this Deed (Notice) must be:

- (a) in writing, in English and signed by a person duly authorised by the sender; and
- (b) hand delivered or sent by prepaid post to the recipient's address for Notices specified in the Details, as varied by any Notice given by the recipient to the sender.

15.2 Effective on receipt

A Notice given in accordance with clause 15.1 takes effect when taken to be received (or at a later time specified in it), and is taken to be received:

(a) if hand delivered, on delivery; or

(b) if sent by prepaid post, on the second Business Day after the date of posting (or on the seventh Business Day after the date of posting if posted to or from a place outside Australia),

but if the delivery or receipt is not on a Business Day or is after 5.00pm on a Business Day, the Notice is taken to be received at 9.00am on the next Business Day.

16. GST

16.1 Consideration

- (a) Any consideration to be paid or provided under or in connection with this Deed, unless specifically described in this Deed as 'GST inclusive', does not include an amount on account of GST.
- (b) If and to the extent, for any reason, a supply under or in connection with this Deed specifically described in this Deed as 'GST inclusive' is not subject to GST, the amount payable or other consideration to be provided for that supply shall be reduced by 1/11th and if and to the extent that a payment has already been made for that supply, the payee shall refund that component.

16.2 Gross up of consideration

Despite any other provision in this Deed, if a party (**Supplier**) makes a supply under or in connection with this Deed on which GST is imposed (not being a supply the consideration for which is specifically described in this Deed as 'GST inclusive'):

- (a) the consideration payable or to be provided for that supply under this Deed, but for the application of this clause (GST exclusive consideration), is increased by, and the recipient of the supply (Recipient) must also pay to the Supplier, an amount equal to the GST payable on the supply (GST Amount); and
- (b) the GST Amount must be paid to the Supplier by the Recipient without set off, deduction or requirement for demand, at the same time as the GST exclusive consideration is payable or to be provided.

16.3 Reimbursements (net down)

If a payment to a party under this Deed is a reimbursement or indemnification, calculated by reference to a loss, cost or expense incurred by that party, then the payment will be reduced by the amount of any input tax credit to which that party, or the representative member of a GST group of which that party is a member, is entitled for that loss, cost or expense.

16.4 Exclusion of GST from calculations

If a payment is calculated by reference to or as a specified percentage of another amount or revenue stream, that payment shall be calculated by reference to or as a specified percentage of the amount or revenue stream exclusive of GST.

16.5 Tax invoice

The Recipient need not pay the GST Amount until the Supplier has given the Recipient a tax invoice for the supply to which the payment relates.

16.6 GST obligations to survive termination

This clause 16 will continue to apply after expiration or termination of this Deed.

17. General

17.1 Amendments

This Deed may only be amended or varied by a later written agreement between all parties.

17.2 Assignment

KEPCO does not require the consent of the Landholder to assign this Deed or a right under this Deed.

17.3 Entire agreement

This Deed supersedes all previous agreements about its subject matter. This Deed embodies the entire agreement between the parties.

17.4 Further assurances

Each party must do all things reasonably necessary to give effect to this Deed.

17.5 No waiver

- (a) The failure of a party to require full or partial performance of a provision of this Deed does not affect the right of that party to require performance subsequently.
- (b) A right under this Deed may only be waived in writing signed by the party granting the waiver, and is effective only to the extent specifically set out in that waiver.

17.6 Relationship between parties

- (a) Nothing in this Deed:
 - (i) constitutes a partnership between the parties; or
 - (ii) except as expressly provided, makes a party an agent of another party for any purpose.
- (b) A party cannot in any way or for any purpose:
 - (i) bind another party; or
 - (ii) contract in the name of another party.
- (c) If a party must fulfil an obligation and that party is dependent on another party, then that other party must do each thing reasonably within its power to assist the other in the performance of that obligation.

17.7 Time for doing acts

- (a) If the time for doing any act or thing required to be done or a notice period specified in this Deed expires on a day other than a Business Day, the time for doing that act or thing or the expiration of that notice period is extended until the following Business Day.
- (b) If any act or thing required to be done is done after 5pm on the specified day, it is taken to have been done on the following Business Day.

17.8 Severability

- (a) A clause or part of a clause of this Deed that is illegal or unenforceable may be severed from this Deed and the remaining clauses or parts of the clause of this Deed continue in force.
- (b) If any provision is or becomes illegal, unenforceable or invalid in any jurisdiction, it is to be treated as being severed from this Deed in the relevant jurisdiction, but the rest of this Deed will not be affected.

17.9 Governing law and jurisdiction

- (a) The laws of the State of New South Wales govern this Deed.
- (b) Each party irrevocably submits to the exclusive jurisdiction of the New South Wales courts and courts competent to hear appeals from those courts.

Schedule 1- Condition 25

Compensatory Water Supply

25.

The Applicant must provide a compensatory water supply to the landowner of privately-owned land whose water supply is adversely and directly impacted (other than a negligible impact) as a result of the development, in consultation with Dol Water, and to the satisfaction of the Planning Secretary.

The compensatory water supply measures must provide an alternative supply of water that is equivalent, in quality and volume, to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.

If the Applicant and the landowner cannot agree on whether the loss of water is to be attributed to the development or the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant must provide compensation, to the satisfaction of the Planning Secretary.

However, this condition does not apply if the Applicant has a compensatory water agreement with the owner/s of the land and the Applicant has advised the Department in writing of the terms of this agreement.

Notes

- The Water Management Plan (see condition 28) is required to include trigger levels for investigating potentially adverse impacts on water supplies.
- The burden of proof that any loss of water supply is not due to mining impacts rests with the Applicant.

Signing page

EXECUTED as an deed.

Signed, sealed and delivered by KEPCO

Bylong Australia Pty Ltd ACN 075 361 769 in accordance with section 127 of the Corporations
Act 2001 (Cth) by:

| Signature of director | Signature of director/company secretary (Please delete as applicable) |
| Name of director (print) | Name of director/company secretary (print) |
| Signed, sealed and delivered by [#insert name] in the presence of |
| Signature of witness | Signature of landholder

Name of landholder (print)

Name of witness (print)

APPENDIX B
Summary of Correspondence
Regarding CWSAs

1. SUMMARY OF CORRESPONDENCE REGARDING COMPENSATORY WATER SUPPLY AGREEMENTS

KEPCO provided the Department of Planning and Environment (DPE) with a status of consultations which had been completed with neighbouring landholders in relation to the draft Compensatory Water Supply Agreement (CWSA) for inclusion within its assessment report. The draft CWSA and supporting guidelines were included within the Response to PAC Review Report to address landholder concern in relation to the potential impacts of the Project upon landholder's water resources. Consultations with landholders in relation to the draft CWSA has been ongoing since this time.

Table 1 provides an updated summary of the interactions between KEPCO Bylong Australia (and its consultants) with neighbouring landholders regarding the draft CWSA. An updated CWSA has been recently provided to landholders for review and comment. The updated CWSA includes amendments to address landholder comments as well as references to the DPE Recommended Development Consent conditions.

Table 1
Summary of Correspondence with Landholders Regarding Compensatory Water Supply Agreements

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
Justin Lewis (Sydney based)	Coggan Creek	Various dates between January to June 2018	Voicemail left, no response
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
Neil Fieldsend (liason connected with	Heatherbrae	27 March 2018	Phone call to discuss availability - NF to confirm with PK when they both will be in the area
Peter Kelleher)	Tieauielblae	15 May 2018	Follow up phone call - Confirmed meeting for 21 May 2018

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
			Introductory meeting
		21 May 2018	 CWSA and supporting guidelines provided to landowner for review and consideration.
			- Landholder to review and discuss with legal advice
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
		27 March 2018	Phone call to discuss availability
		27 Watch 2010	- NF to confirm with PK when they both will be in the area
		15 May 2018	Follow up phone call
Peter Kelleher (Returns to property	Heatherbrae	15 May 2018	- Confirmed meeting for 21 May 2018
on weekends) (liason connected with Neil Fieldsend)		21 May 2018	Introductory meeting
Neil FieldSelid)			 CWSA and supporting guidelines provided to landowner for review and consideration.
			- Landholder to review and discuss with legal advice
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
		30 January 2018	Letter sent offering requesting a meeting
		27 March 2018	Follow up email. No response
Suntala Pty Ltd -White Energy (Sydney Based)			Follow up email
	Lynwood & Baringa	15 May 2018	 Landholder advised that a new division of White Energy was responsible for the properties and that the emails have been forwarded on to the correct contacts and that he would chase up on his end
		25 May 2018	New contact details received

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
			Introductory meeting with landholder in Sydney
			- Introduced the project and discussed water needs
		27 June 2018	 CWSA and supporting guidelines provided to landowner for review and consideration.
			- Landowner requested further information
		29 June 2018	Further information requested by the landholder was sent via email
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
	Cherrydale Park	2 February 2018	Preliminary discussions held with Locaway Pty Ltd representatives
Locaway Pty Ltd		27 March 2018	Letter received from landholder's solicitor regarding more information on CWSA's after reading the Response to PAC Review Report
2002.112) 1 1) 2.12		3 August 2018	Letter sent by Minter Ellison on behalf of KEPCO to Locaway Pty Ltd lawyer in response to their letter dated 27 March 2018 regarding ongoing matters with respect to the proposed CWSA
			Introductory meeting
	Meadsville & Trialion	20 November 2017	CWSA and supporting guidelines provided to landowner for review and consideration.
lan Ross & Kay Carol Tindale			 Landholder requested that a Large Diameter (LD) water producing bore be drilled and he would sign agreement.
		21 December 2017	Letter provided to landholder confirming that a LD bore would not be drilled on the property, however offer for CWSA discussions to continue remained. No further feedback.
		19 December 2018	Updated CWSA sent to landholder for review and consideration.

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
		8 February 2018	CWSA and supporting guidelines provided to landowner for review and consideration.
		27 March 2018	Follow up phone call, voicemail left
			Follow up phone call
Peter Grieve	Arabanoo/Talooby	15 May 2018	 Landholder did not think "there is any point in an agreement for Talooby as realistically it would be very difficult to prove water loss causation from the mine"
			 Solicitor considering whether it is appropriate for a CWSA to be negotiated on Arabanoo property in light of the existing agreement with KEPCO for this property.
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
	Wingarra 26 February 2	21 November 2017	Introductory meeting
			 CWSA and supporting guidelines provided to landowner for review and consideration.
Tim Woods			Follow up phone call
		26 February 2018	Landholder had not thought about it any further and would see how things 'panned out' for the project before signing anything
		19 December 2018	Updated CWSA sent to landholder for review and consideration.

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
		30 January 2018	Letter was sent to request a meeting
		7 February 2018	Letter received from landholder requesting to review the agreement prior to meeting being confirmed
		1 March 2018	Letter and requested documents sent to landholder
		15 May 2018	Follow up email sent
		16 May 2018	Follow up phone call with no response
Timnath Pty Ltd - Ron (and Daniel)		19 October 2018	Follow up email sent to landholder
Weaver (Sydney Based)	Budden	30 October 2018	Landholder responded by email with further questions regarding the draft CWSA
(3)1 1)		2 November 2018	KEPCO responded to landholder questions via email
		17 December 2018	Follow up phone call with a voicemail left
			Follow up phone call left voicemail for owner
		18 December 2018	Seeking to discuss revised agreement which addresses concerns raised by landowner. CWSA will be sent out following contact being made with owner
		19 December 2018	Email correspondence from and back to landowner. KEPCO seeking to meet with landowner to discuss concerns and establish an appropriate path forward.
	Coggan	20 February 2018	Introductory meeting
Tony Dunn			CWSA and supporting guidelines provided to landowner for review and consideration.
			Follow up phone call
		27 March 2018	Landholder confirmed he felt it not in his best interest to sign the agreement
		19 December 2018	Updated CWSA sent to landholder for review and consideration.

HANSEN BAILEY Ref: 181220 Bylong Compensatory Water Supply Agreement

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
	Ringwood	8 February 2018	Introductory meeting - CWSA and supporting guidelines provided to landowner for review and consideration.
Lionel Braithwaite		27 March 2018	Follow up phone call - Landholder had not had time to think further about the agreement - Needs to find a solicitor to review
		15 May 2018	Follow up phone call, voicemail left
		June 2018	Discussions with the landholder's grandson confirmed he is yet to appoint a solicitor to seek legal advice before any further actions can take place
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
		21 November 2017	Introductory meeting - CWSA and supporting guidelines provided to landowner for review and consideration.
		26 February 2018	Follow up phone call - Landholders have not looked at the CWSA and will when they have more time
Maree and Brydon Perry	Rothesay	27 March 2018	Follow up phone call and voicemail left
		May 2018	Landholders agreed to sign CWSA without legal review. Details for insertion send to KEPCO legal and agreement was provided to landholders for signing
			Agreement received, landholder having second thoughts about signing
		14 November 2018	Meeting with landholder to discuss local groundwater system
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
Phil Kennedy	Wiglemar	6 December 2017	Introductory meeting with previous landholders

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
(Previous owners Jim & Sue Gunn)		May 2018	Property Sold
			Introductory meeting
		27 June 2018	 Discussions around existing monitoring equipment in property wells as a result of agreement with previous landholder, as well as discussions about potential CWSA.
			- Landholder expressed concerns relating to signing any agreements
		August 2018	Trying to secure a date for follow up meetings with water consultants to discuss water in more detail
		19 December 2018	Updated CWSA sent to landholder for review and consideration.
Jarvet Pty Limited	Eagle Hill	17 December 2018	KEPCO sent the updated CWSA and supporting guidelines to landowner for review and consideration. Offered a meeting to discuss the CWSA.
	Murrumbo	29 August 2018	Introductory meeting
			- Discussions on the status of the Project
			 CWSA and supporting guidelines provided to landowner for review and consideration.
		29 August 2018	Meeting with landholder to discuss CWSA conditions.
XLX Pty Ltd		26 September 2018	Response from landholder listing comments in relation to the CWSA.
		17 October 2018	KEPCO responded to landholders comments.
		9 November 2018	Landholder provided further response and where matters have still not been addressed.
		13 November 2018	Follow up phone call and voicemail left.
		14 November 2018	Received terms sheet from landholder for review
		17 November 2018	Follow up phone call with no response

LANDHOLDER	PROPERTY NAME	DATE	DESCRIPTION OF CORRESPONDENCE / MEETING
		18 November 2018	Follow up phone call with a message to call back to discuss the terms sheet and its alignment with the CWSA. Phone conversation scheduled for 20 December.