Public Submission Re: The KEPCO Bylong Coal Project

1. There is an unfunded and daunting legacy of mined landscapes in NSW. Few are rehabilitated to high value land use. All have changed the landscape hydrology and local water cycle in irretrievable ways. The internationally acclaimed Natural Sequence research undertaken by Peter Andrews OAM over fourty years in the Upper Bylong Valley has been declared by international expert researchers to be of national and international significance.

2. The Bylong Coal Project EIS as presented fails to recognise the full significance and value of the work of Peter Andrews on this natural hydration/natural fertility sequence experiment. This ground breaking work was known to the proponent prior to advancing the purchases of land and the proposal to mine, yet no apparent attempt has been made to adequately record or replicate the work in acknowledgement of what will be lost to the nation by proposed mining operations. The landscape rehydration patterns involved in the experiment are at a catchment scale, not a property scale. The Bylong EIS plays down the efficacy and the significance of this work.

3. It is therefore imperative that any approval to mine the Upper Bylong include:

- i. a requirement to fund a thorough, complete and independent account of the process and practice of natural sequence landscape recovery and management as demonstrated over fourty years by Peter Andrews on Tarwyn Park and adjoining properties, including all areas in the valley used in the experiment over that time.
- ii. all the lands in the Upper Bylong used to develop the experimental evidence for the Peter Andrews Natural Sequence (PANS) landscape recovery and management system be set aside and listed on the NSW and National Heritage registers. Such is there value

4. Of critical note is that these properties demonstrate a way in which the catchment hydrology functions as a whole system to secure fertility and soil moisture and to support ongoing biological productivity. The PANS has shown how saline and eroded lands can be recovered at low cost using natural hydration patterns and available biota from the top of the catchment to the natural floodplain. The value of this work to the nation and society is in excess of \$A4bn in savings and \$A411bn in recovered productivity.

5. The value of the Peter Andrews Natural Sequence as demonstrated in the Upper Bylong was known to the world and publically acknowledged prior to the purchase of coal rights in the valley. The value of this research and the demonstration property to the state, the nation and the world thus exceeds the proposed \$A300m royalties to government from the proposed Bylong Coal Project.

6. As such, any approval to mine must also be accompanied by a requirement for the proponent to establish a surrogate PANS demonstration site in the NSW Upper Hunter Valley as determined by Peter Andrews and an independent research provider.

7. In addition, and in recognition of the value of Peter Andrews research to the state and nation, it is recommended that the NSW Government, Federal Government and the Korean Government each contribute \$A12m to an independent public trust fund for the further development of the Peter Andrews Natural Sequence approach as a climate carbon management initiative (CCMI) for the international market; and that as a result of the PANS being known to the proponent prior to and property purchase or application to mine that this be a requirement of any approval to mine the Upper Bylong Valley in NSW.

This submission is made independent of any affiliations perceived or assumed. The essence of the submission has been publically stated in the national media. Peter Stevens 6th November 2015.