

SYDNEY COASTAL COUNCILS GROUP Inc.
C/- City of Sydney Council
Level 14, 456 Kent Street
GPO Box 1591, SYDNEY NSW 2001
Phone: (02) 9246 7791
Facsimile: (02) 9265 9660
Email: info@sydneycoastalcouncils.com.au
Internet: www.sydneycoastalcouncils.com.au



Critical Infrastructure and Special Projects
Department of Planning
GPO Box 39
Sydney NSW 2001

CM021-09

cc. Mr. Peter Fitzgerald, General Manager, City of Botany Bay Council
Mr. Chris Watson, General Manager, Rockdale City Council
Mr. John Rayner, General Manager, Sutherland Shire Council

20 April 2009

**Re: Energy Australia Botany Bay Cable Project Modification Application:
Application Number: 06_0284 MOD 1**

The Sydney Coastal Councils Group (SCCG) would like to take this opportunity to provide comment on the Energy Australia Botany Bay Cable Project Modification Application: Application Number: 06_0284 MOD 1.

The SCCG understands that Energy Australia has submitted a modification request for the Botany Bay Cable Project, seeking approval to undertake dredging works within Botany Bay prior to the commencement of cable laying. This modification would enable the electricity cable to be laid at a sufficient depth that would not conflict with planned future shipping channel dredging works in the Bay by Sydney Ports Corporation.

In the event the Botany Bay Cable Project modification is approved, this submission contains a request that the NSW Department of Planning place the appropriate conditions of consent on the modified approval to address the following issues:

- Water Quality Impacts;
- Coastal Processes; and
- Aquatic Ecology

Water Quality Impacts

The potential for the proposal to have a significant negative impact on water quality due to increased turbidity caused by sediment mobilisation is noted in the Environmental Assessment. Due to a lack of available data and investigation, a benchmark for maintenance of a water quality standard has not been established. Without such a benchmark to identify potential impacts the success of any monitoring program or measures to mitigate negative impacts will be severely limited.

Additionally the potential for acid sulfate soils and contaminants present within the sediments of Botany Bay to have an impact on the water quality and aquatic ecology of the Bay are significant. Due to the limited testing undertaken for the Environmental Assessment, the impact of the proposal on both of these issues has not been adequately assessed. As a result measures to mitigate the potential impacts of acid sulfate soils or contaminated sediments within the vicinity of the area dredged for the cables have not been identified to an acceptable level.

SCCG recommends that clear benchmarks consistent with the ANZECC Guidelines for maintenance of water quality in relation to sedimentation, impacts of acid sulfate soils and sediment contaminants be identified before approval for this proposal is granted. Additionally, the statement of commitments for this project must require the proponent to engage an independent monitoring service to ensure that the appropriate water quality maintenance strategies are employed and the benchmarks met.

Recommendations:

Clear benchmarks for maintenance of water quality in relation to sedimentation, impacts of acid sulfate soils and sediment contaminants be identified before approval for this proposal is granted.

The statement of commitments must require the proponent to engage an independent monitoring service to ensure that the appropriate water quality maintenance strategies are employed and the benchmarks met.

Coastal Processes

Botany Bay has a complex pattern of currents and sand movement. Dredging to allow the laying of cables has the potential to have a significant impact on the hydrological regime of the Bay resulting in shoreline impacts and edge effects on seagrass communities. Previous developments at Sydney Airport and Port Botany have had a significant and often unpredicted impact on the hydrological regime of the Botany Bay, despite the Environmental Impact Statements and associated modeling for these proposals concluding that they would have no impact. As a result, the cumulative impacts of future developments involving dredging should not be underestimated.

To ensure the necessary pre and post monitoring strategies are in place the SCCG recommends that before and after dredging is completed Energy Australia utilise the various models and past assessments to undertake ongoing monitoring of the wave, tidal currents, sediment transport and beach morphology of the Bay to mitigate any potential negative impacts of the proposal at Silver Beach at Kurnell, Towra Beach, the Georges River mouth and spit areas as well as the Lady Robinsons Beach precinct.

The Local Councils surrounding the Bay, the NSW Department of Planning, Sydney Ports and Sydney Airports Corporation, the Department of Primary Industries and the NSW National Parks Service have invested millions of dollars in restoring and maintaining foreshores Lady Robinsons Beach and Towra Beach. SCCG is greatly concerned after such an investment that the proposed dredging across the Bay will undermine these previous beach restoration projects.

Any adverse impacts on Lady Robinsons Beach caused by the proposed dredging will need to be fully restored by Energy Australia. The SCCG recommends the NSW Department of Planning consider the placement of a bond to ensure the necessary resources are available for any restoration works.

Recommendations:

After dredging is completed Energy Australia undertake ongoing monitoring of the wave, tidal currents, sediment transport and beach morphology of the Bay to mitigate any potential negative impacts of the proposal at Silver Beach at Kurnell, Towra Beach, the Georges River mouth and spit areas as well as Lady Robinsons Beach.

Any adverse impacts of the proposal on Silver Beach at Kurnell, Towra Beach, the Georges River mouth and spit areas as well as Lady Robinsons Beach caused by dredging be fully restored by Energy Australia.

The NSW Department of Planning consider the placement of a bond to ensure the necessary resources are available for any restoration works.

Aquatic Ecology

Botany Bay supports extensive seagrass beds and intertidal mangrove stands which are recognised as playing important roles in estuarine community structure and function. Seagrass and seagrass habitat, particularly *Posidonia australis* have a history of poor recovery after disturbance. For this reason, the SCCG supports the development of a Seagrass Management Plan and requests that Energy Australia develop clear guidelines for protecting existing seagrass beds and mangrove stands.

Instillation of the cable by either mechanical digging of the trench or high pressure water jetting across Botany Bay will involve the removal and degradation of seagrasses. The SCCG supports the development of a seagrass management plan to mitigate and restore the unnecessary degradation of the existing habitat and requests the Energy Australia clearly articulate the methodology in the seagrass management plan to minimise environmental degradation due to the necessity to bury the cables as outlined in the Environmental Assessment. Additionally, the SCCG recommends the seagrass management plan be prepared in accordance with Fish Habitat Protection Pan No 2: Seagrasses as prepared under the *Fisheries Management Act 1994* and peer reviewed by an appropriately qualified expert.

With regard to trenching specifications, specialist equipment would be required to bury the submarine cable in the Bay to a minimum depth of 3.0m below the bay floor in the main shipping channel (where water depths are ≥ 10 metres) and 1.5 metres in the shallow water. The horizontal directional drilling and jetting required to install the cable across Botany Bay will result in the disturbance of sediments and a subsequent increase in the turbidity of the water and smothering of seagrass beds.

The SCCG supports the development of a Water Quality Management program to monitor and outline clear methodology to prevent excessive sedimentation. The SCCG insists that silt curtains are utilised during cable construction across the entire length of the Bay. In addition monitoring devices for storm events should be implemented to ensure appropriate mitigation tools are put in place prior to an increase in turbidity.

Recommendations:

Energy Australia develop clear guidelines for protecting existing seagrass beds and mangrove stands.

The seagrass management plan clearly articulate the methodology to minimise environmental degradation due to dredging.

The seagrass management plan be prepared in accordance with Fish Habitat Protection Pan No 2: Seagrasses as prepared under the *Fisheries Management Act 1994* and peer reviewed by an appropriately qualified expert.

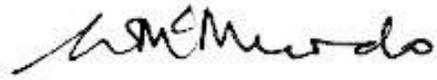
Silt curtains are utilised during cable construction across the entire length of the Bay.

Monitoring devices for storm events be implemented to ensure appropriate mitigation tools are put in place prior to an increase in turbidity.

Conclusion

I trust that the recommendations provided in this submission will receive appropriate attention when assessing the Energy Australia Botany Bay Cable Project Modification Application. The SCCG looks forward to seeing a response to the issues and recommendations raised in this submission. If you wish to clarify any matter in the submission or require further information, please contact Craig Morrison (SCCG Senior Coastal Projects Officer) on 9246 7702 or craig@sydneycoastalcouncils.com.au

Yours sincerely,

A handwritten signature in black ink, appearing to read 'W McMurdo', written in a cursive style.

Clr. Wendy McMurdo
Chairperson