OUT20/12632

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NSW Department of Planning, Industry and Environment

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Dear Mr Canon

Tilbuster Solar Farm (SSD 9619)
Environmental Impact Statement

I refer to your email of 15 October 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter. DPIE Water and NRAR require further information on:

- The location of the harvestable rights dams and a re-calculation of the Maximum Harvestable Rights based on the size of the continuous land holding
- The proponent's ability to obtain Water Access Licences to account for water taken from the Commissioners Waters Water Source and the Dura Water Source prior to the take of water occurring, and
- compliance with water sharing plan rules. The proponent should demonstrate secure supply of water for the project, including contingency measures for when unregulated river supply may be reduced or unavailable.

Detailed explanation and recommendations are provided in **Attachment A**.

Any further referrals to DPIE – NRAR & Water can be sent by email to:

landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

E Rogers

Liz Rogers
Manager, Assessments
Water – Knowledge Division
4 December 2020

ATTACHMENT A

Advice to DPIE - Planning & Assessment regarding the Tilbuster Solar Farm (SSD 9619) EIS

DPIE – Water and the Natural Resources Access Regulator (NRAR) provide the following advice and recommendations.

1.0 Harvestable Rights

1.1 Explanation

The assessment states the site has a harvestable right of 6.61 ML. They mention eight of eleven dams will be removed (the number of dams within the proposal area continues to change throughout the EIS). Remaining dams may be expanded to retain harvestable rights volumes.

The location of harvestable rights dams to be retained or potentially enlarged are not identified. Confirmation is needed that all harvestable rights dams to be retained or enlarged are located on 1st or 2nd order watercourses in accordance with the *Water Management Act 2000* Order under Section 54. Water used from dams that are located on 3rd order or above watercourses must be licenced via a Water Access Licence.

The Harvestable Rights calculation must be calculated based on the size of continuous land holding. The continuous landholding is multiplied by the relevant HR Multiplier. The project will need to re-calculate the Maximum Harvestable Rights for the site by identifying the continuous land holding and using the WaterNSW Maximum Harvestable Rights Calculator - https://www.waternsw.com.au/customer-service/water-licensing/blr/harvestable-rights-dams/maximum-harvestable-right-calculator

Extract from EIS that has incorrectly calculated Maximum Harvestable Rights:

The average annual runoff is about 5% dependent on the year, the timing, intensity and duration of rainfall events. Based on 5% runoff, approximately 66.1 ML is generated by the development footprint over the construction period on average. ***The harvestable right is 10% of runoff. Based on 10% of 66.1 ML, the harvestable right is approximately 6.61 ML****. This represents 66% of the total water required for the construction phase. The indicative layout for solar farm infrastructure requires approximately eight of the 11 existing dams within the proposal footprint to be filled in prior to construction**. The dams to be filled in would be dewatered, and the water would be used for construction or transferred to another dam onsite. The remaining dams may be cleaned or enlarged as required to retain the overall harvestable right volume for the proposal site. During construction, grey construction water will be stored and treated in temporary sediment basins. This grey water will be beneficially reused onsite and displace proposal demand for clean and potable water*

1.2 Recommendation

Prior to approval

- The proponent should confirm that all harvestable rights dams to be retained or enlarged are located on 1st or 2nd order watercourses in accordance with the *Water Management Act 2000* Order under Section 54. A Water Access Licence (WAL) must be obtained to account for all water captured in dams that are located on 3rd order or above watercourses, and for all take that exceeds Maximum Harvestable Rights.

- Recalculate the Maximum Harvestable Rights calculation using the above mentioned method.

2.0 Water Access Licence

2.1 Explanation

Water from Gara River

The proposal includes the option to draw water from Gara River located 16km away. The proposal would install a standpipe and draw water from the river and truck to site.

The Water Licencing System indicates 1,065 unit shares of unregulated water from the Gara River Water Source are allocated to eight WALs. There are two WALs allocated to Local Water Utilities for a total share of 6,902. Under the Water Sharing Plan (WSP) there is only 1,412 unit shares in the Gara River Water Source available. The project could potentially obtain a WAL given the available 347 unit shares within this water source.

Commissioners River

The proposal includes the option to draw water from 'Commissioners Water Source', located 16km south east of the proposal and truck water to site.

Unregulated water has been distributed under 45 WALs with a total of 2,247 unit shares allocated. There are ten Specific Purpose WALs with 46 unit shares. Under the WSP there is only 2,166 unit shares available in the Commissioners Waters Water Source. Therefore, the water source is currently over allocated.

The proposal will need to obtain water from existing WAL holders. Advice from the proponent should include confirmation water could be obtained from existing WAL holders with water entitlements, with a commitment from them to make the necessary entitlement available when required. If it is identified inadequate entitlement is available, the proponent will need to demonstrate this can be acquired on the water market.

2.2 Recommendations

Prior to approval

- The proponent should provide details of how the WALs will be obtained, including trade agreements from existing WAL holders.

Post approval

- A Water Access Licence must be obtained to account for water taken from the Commissioners Waters Water Source and the Dura Water Source prior to the take of water occurring.

3.0 Water Sharing Plan Rules

3.1 Explanation

The water proposed to be extracted from the unregulated river WSP can be variable and there is a risk the project would not have a secure water supply. The water source is part of an unregulated system and despite the entitlements, the extraction is subject to the available flow and the flow rules in place at any point in time.

3.2 Recommendation

Prior to approval

- Water take from Dura River and Commissioners Waters must comply with local water sharing plan flow and cease to pump rules. The proponent should demonstrate secure supply of water for the project, including contingency measures for when unregulated river supply may be reduced or unavailable.

4.0 Design and Post Project Management

4.2 Recommendation

Post Approval

- All eleven (11) watercourse crossings should be designed in accordance with the NRAR Guidelines for Riparian Corridors on waterfront land https://www.industry.nsw.gov.au/__data/assets/pdf_file/0003/160464/licensing_approvals_controlled_activities_riparian_corridors.pdf

- The Biodiversity Management Plan (BMP) should include management and rehabilitation of riparian vegetation along the required vegetated riparian corridors (VRZ) for each watercourse to be retained and protected at the site. The rehabilitation of VRZs would assist in limiting scour impacts as a result of increased flow to watercourses within riparian buffer areas.

- The development includes the removal or covering of 1st and 2nd order watercourses as a result of solar panel installation. Post-development planning should include an options assessment for post-development riparian treatment, including the re-establishment of 1st and 2nd order watercourses and their VRZs.

- The water supply work proposed in the form of a standpipe beside either Dura River or Commissioners Waters, will need to obtain landholders consent at the standpipes location.