Submission to Buildings and Grounds Committee

Project: Natural Draft Dry Cooling Tower, Gatton

Consideration:

The Queensland Geothermal Energy Centre of Excellence has proposed that a Natural Draft Dry Cooling Tower (NDDCT) be located on the southern part of the Gatton Campus. The location of the plant was selected because of the open area that will suit the research objectives, it is far enough away from the Solar Flagships project not to cast any shadows and will not impact the operation of the solar plant or other farming activities at Gatton.

An application for the heritage exemption has been submitted as part of the project requirements and an acoustic assessment has been completed, which has demonstrated that there is no noise impact to any of the residential buildings. There are no other environmental impacts that this project will have on the campus.

The plant testing will be during the day and the building will only be occupied on a casual basis, there is a small communication room and equipment store and a small research desk which all located in the demountable building the closet facilities will be located in the Research Building for the Solar Flagships project.

Gatton Campus Executive and Management support this project and its location on campus.

Description:

The development will include the following elements:

- The project will consist of a 20m high cooling tower, the materials used are a heavy duty PVC fabric that is robust enough to with stand most weather conditions and has a certified lifespan of 20+ years.
- Heat exchangers situated at the base of the tower. The noise assessment has been completed. No noise will be heard from nay residential property.
- There will also be 4 shipping containers containing process heaters
- The demountable building to house a small communications room and equipment for the plant
- The site will be fully fenced
- Provision for 2 car parks

Potential impacts of the development are:

- The size of the tower will have an impact of the campus, but because of the location toward the back of the campus and the location near the Solar Flagships project the impact on the campus as a whole will be minimal.

Funding:

The project is fully funded by State and Federal Government.

Recommendation to Senate:

“that the proposed Natural Draft Dry Cooling Tower be approved for construction in accordance with the drawings presented”.
The University of Queensland

Building & Ground Committee Presentation

Gatton Natural Draft Dry Cooling Tower (NDDCT) Test Facility
Proposed Plan – Weather Station

UQ Gatton NDDC

Wilson Architects

23 May 2014
Sun-study at 07:20AM Winter (22 June)

Sun-study at 07:25AM Winter (22 June)

Sun-study at 07:50AM Winter (22 June)

Sun-study at 12:00PM Winter (22 June)

Sun-study at 2:50PM Winter (22 June)

Sun-study at 3:00PM Winter (22 June)