

THE  STAR

MODIFICATION 13  
ELECTRICAL  
INFRASTRUCTURE  
REPORT  
ADDENDUM



# 1. PURPOSE OF ADDENDUM REPORT

The purpose of this electrical addendum report is to provide an update on the final power supply solution by Webb Australia for The Star precinct for the SWIS (Site Wide Infrastructure Services) projects and power requirements to MOD 14 and MOD 13 projects staged over the 5+ year period.

Webb Australia Group has been engaged by The Star since Sept 2017 to provide practical and executable HV and LV upgrade solutions that can be delivered within the required time frame to enable MOD 14 and MOD 13.5 projects to progress and be commissioned to The Star's project plan.

Note: MOD 13.5 projects is an internal description of MOD 13 projects excluding the Ritz-Carlton Tower project. The projects include the Level 5 Sky Terrace, Astral Spas, Level 00 Restaurant Street and other f & b works.

In addition to the planning for MOD 14 and MOD 13.5 projects, one eye has been kept on the Ritz-Carlton power requirements such that future connection for this development to the AUSGRID Network is already at concept plan stage. AUSGRID were advised and have already factored in the power requirements of the MOD 13 development (principally the Ritz-Carlton Tower).

# 2. AUSGRID UPGRADE

The outcome of investigation work by WEBB was that a new application to AUSGRID was made in January 2018 (Appendix A of Electrical Infrastructure Report).

The revised potential total power requirement for The Star is as follows:

The Star Existing Maximum Demand is approximately	11.2 MVA
The Latest MOD 14 / MOD 13.5 requires an additional	5.3 MVA
Potentially MOD 13 will require 4 to 5MVA	4 MVA (Subject to final design)

<b>Revised Potential Total Site Requirement</b>	<b>20.5 MVA to 21.5MVA</b>
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The information provided in Webb Australia's application advised AUSGRID of the potential overall requirement for up to 20MVA.

The current application for connection to AUSGRID is specifically for MOD 14 / MOD 13.5 requirements with a projection in relation to the Ritz-Carlton tower.

Although the final overall site demand design will need to reflect final building requirements, this can be adjusted in due course once the MOD 13 power maximum demand figures are determined and a new separate application for connection is submitted for MOD 13.

Webb Australia have designed the high voltage power modifications around the perimeter of The Star to free up capacity on the AUSGRID network to allow for the above noted power loadings; this was carried out as a "Level 3 ASP" design package which has been certified by AUSGRID, tendered by The Star, and will be implemented over the next 6 – 9 months. By 3<sup>rd</sup> quarter 2019, MOD 14 and MOD 3.5 projects will have power supply available.

After the planning approval of MOD 13 (expected to be 2<sup>nd</sup> quarter, 2019) the final application to AUSGRID will be lodged for the MOD 13 power arrangements. A final "Level 3 ASP" design package will be established to encompass the substations within the tower and the associated street cabling from the AUSGRID zone substation at Pyrmont Street. The implementation of the cabling and substation work will be completed well before the completion of the tower.

Based on the positive progress with AUSGRID, The Star has decided to not proceed with the alternative capstone trigeneration for MOD 13.

Space planning for substations on Level 4 mezzanine with opening/access to Jones Bay Road has now been incorporated into the Preferred Project scheme. The feeder cable from the AUSGRID Pyrmont Street zone substation with the associated internal substations plus the AUSGRID power upgrade works, to be completed by late 2019 (mentioned above), will provide sufficient power for the MOD 13 projects.