

04 December 2013

David Ripper Senior Metrology Engineer Australian Energy market Operator Level 22, 530 Collins Street Melbourne VIC 3000

Amendment of RMS Traffic Lights Load Table

Dear David,

Please find attached the revised inventory list of traffic signal equipment which is now updated with the changes which have occurred since publishing the last comprehensive load table.

We would like highlight the following changes:

1 Deletions: Please note the following items of the current load table are no more existing in the system and consequently been removed from the updated inventory list:

10/0	PTF NT3/4
11/0	VC/6
12/0	PTF NT1
15/0	Delta 2
25/8	Single aspect incandescent / 200MM Street Level
25/9	Single aspect incandescent / 300MM Mast Arm
25/10	Single aspect incandescent / 300MM Street Level
25/11	Single aspect incandescent / 200MM Mast Arm
26/8	Two aspect incandescent / 200MM Street Level
26/9	Two aspect incandescent / 300MM Mast Arm
26/10	Two aspect incandescent / 300MM Street Level
26/11	Two aspect incandescent / 200MM Mast Arm
27/8	Three aspect incandescent / 200MM Street Level
27/9	Three aspect incandescent / 300MM Mast Arm
27/10	Three aspect incandescent / 300MM Street Level
27/11	Three aspect incandescent / 200MM Mast Arm
28/8	Four aspect incandescent / 200MM Street Level
28/9	Four aspect incandescent / 300MM Mast Arm
28/10	Four aspect incandescent / 300MM Street Level
28/11	Four aspect incandescent / 200MM Mast Arm
29/8	Walk/D Walk / 200MM Street Level
30/8	Symbolic pedestrian incandescent / 200MM Street Level

58/1	Sarasota 15PT / Shelf Mounted
58/2	Sarasota 15PT / Post mounted with encoder
58/3	Sarasota 15PT / Post mounted without encoder
66/3	AWA LDQ3 / Post mounted without encoder
68/1	Microwave / Shelf Mounted
91/0	Philips int. PD204
92/0	Philips int. PD208
93/0	Philips int. PD212
95/0	Philips int. PD216
166/0	Redflex NK6 Camera System
167/0	Redflex Flash Enclosure

2. Additions: The following items have now been added to the system since publishing the last comprehensive load table and therefore these appear as new items in the attached Inventory List:

ID	Asset_ Items	Kilowatts
46/12	Oval / With Tactile Only	0.0080
217/8	Two aspect QH/Bicycle'200MM Street Level	0.0395
219/8	Three aspect QH/Bicycle'200MM Street Level	0.0395
220/8	Three aspect QH/Bus'200MM Street Level	0.0395
233/0	ATC Controller	0.0694
237/8	Single aspect LED/Other Graphics/'200MM Street Level	0.0033
237/10	Single aspect LED/Other Graphics/'300MM Street Level	0.0039
237/11	Single aspect LED/Other Graphics/'200MM Mast Arm	0.0033
238/8	Two aspect LED/Other Graphics/200MM Street Level	0.0061
238/9	Two aspect LED/Other Graphics/300MM Mast Arm	0.0071
238/10	Two aspect LED/Other Graphics/300MM Street Level	0.0071
238/11	Two aspect LED/Other Graphics/200MM Mast Arm	0.0061
239/9	Three aspect LED/Other Graphics/'300MM Mast Arm	0.0070
239/10	Three aspect LED/Other Graphics/'300MM Street Level	0.0070
239/8	Three aspect LED/Other Graphics/200MM Street Level	0.0062
239/11	Three aspect LED/Other Graphics/'200MM Mast Arm	0.0062
252/0	Alpha UPS	0.0819
256/0	Eclipse EB2 (SML) Controller	0.0415
257/0	School Zone Flashing Signs	0.0015

We are forwarding the following spread sheets and documentation in support of the new power consumption values shown in the attached Inventory List:

- 1. Table 1 LED Table Logical Rules
- 2. Table 2 LED Loading Factors (Normal)
- 3. Table 3 LED Dimmed Loading Factors (New)
- 4. Table 4 LED Dimmed Loading Factors (Old)
- 5. Traffic Light Inventory List 280613
- 6. Load Table Assumptions and Logic
- 7. Test Certificates as follows:

- o VIPAC Test Certificates for the new generation Traffic Signal Lanterns
- VIPAC Test Certificates for UPS
- o AUSGRID Test Certificates for School Zone Flashing Lights
- o TCA Test Certificates dated 22/04/2004 for old Aldridge Traffic Signal Lanterns.
- o T&CA Test Report No. 103081 dated 26/04/2012 for a TC408/12 RTA Aldridge Traffic Controller

The above documents and spread sheets are prepared based on the agreements we reached with you in the meeting held on 21st May 2012 i.e., the logic as explained in the Energetics Report of November 2004, a copy of which was sent to you. As discussed we have left the final column of the Inventory List (Kilowatts Average) to be completed following your advice as to the time cycle for dimming operation to be adopted based on the meteorological data.

Appreciate if we can get your feedback as to how the dimmed power values are taken into account while publishing the revised load table. We would appreciate if a time table is given to us for publishing the revised load table.

Should you require any further information from us please do not hesitate to contact me.

Yours sincerely

Harbans Puria

Project Engineer, Electrical

Sydney Project Services, Sydney region