Three months of COCT service request data from 01/05/2019 to 31/07/2019 were analysed to identify Service Request (SR) trends applicable for the Electricity department. Table 1 below provides details of the dataset relevant to this study.

Table 1: Service Request Dataset Details

Dataset time period	01/05/2019 to 31/07/2019
Total no. SR	271306
Total no. Electricty SR	88635
Total valid Electricity SR (with location data)	58302
Total invalid Electricity SR (with no location	
data)	30333

There was a total of 88635 service requests for the Electricity department during this three-month period, however it should be noted that 30333 (~34%) of these requests included no location data. From the remaining 58302 remaining service requests that included location data, the following were observed:

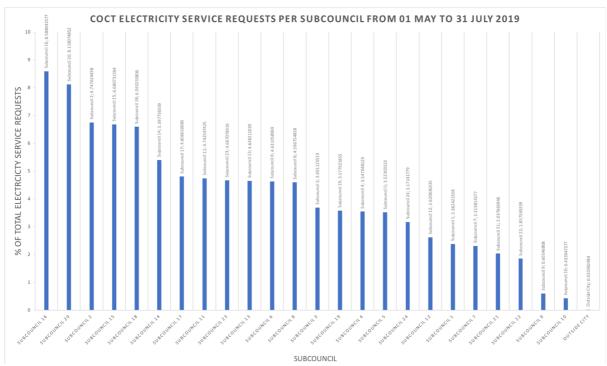


Figure 1: COCT Electricity Service Requests Per Subcouncil

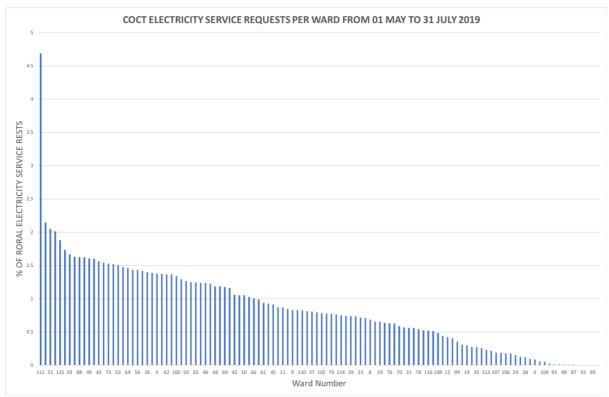


Figure 2: COCT Electricity Service Requests Per Ward Number

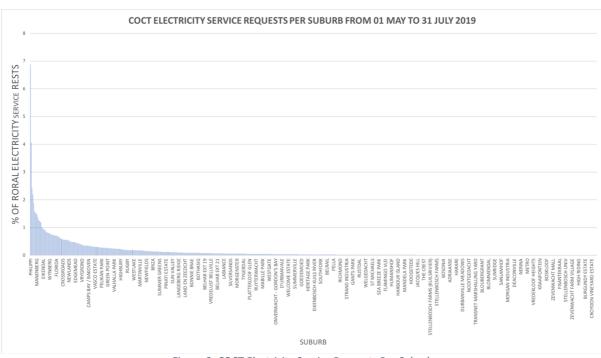


Figure 3: COCT Electricity Service Requests Per Suburb

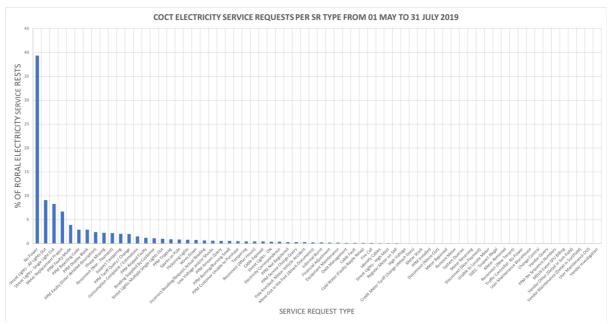


Figure 4: COCT Electricity Service Requests Per Request Type

Figure 1, Figure 2 and Figure 3 shows the percentage of total service requests per subcouncil, ward number and suburb respectively. Figure 4 shows the percentage of total requests per type of service requests.

From the above it can be seen in which areas the Electricity department should focus on in order to reduce the volume of their requests. Subcouncils 16, 20, 2, 15 and 18 are the top 5 subcouncils accounting for ~36% of total service requests seen. It is also shown that ward number 111 accounts for majority of service requests. Out of a total of 703 suburbs within the COCT, the top 5 suburbs which account for ~17% of all service requests are Philippi, Gugulethu, Langa, Bonteheuwel and Belmont Park.

From Figure 4 it is shown that nearly 40% of the total number of service requests are for type "No Power", a further ~17% for "Street Lights Faults" and ~7% for "Meter Replacement" requests. These three types of requests alone account for over 65% of the total number of service requests seen by the Electricity department.

From the foregoing information, it can be concluded that in order for the COCT Electricity department to reduce their volume of requests, focus should be given to Subcouncils 16, 20, 2, 15, and 18, ward number 111 and the Phillipi, Gugulethu, Langa, and Bonteheuwel areas respectively. The type of service requests that the department should concentrate on to reduce the volume of service requests are that for "No Power, Street Light Faults and Meter Replacement's". It is also worth noting that a large portion (~34%) of total service requests for the Electricity department included no location data. Ensuring service requests are created which includes all relevant data would greatly improve upon addressing requests efficiently and effectively.