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Appendix A and B to “Irrigator Tariff Analysis”

November 2015

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Appendix A: Network versus non-network: Queensland case study

This appendix analyses the network versus non-network components of irrigation charges in Queensland, using a large Queensland irrigator (403 MWh per annum) as a case study. The three possible network and retail Tariff options available to this irrigator are examined.

The first combination examined is the retail Tariff 44 and network Tariff EDST1 (Demand Small). The annual bill is shown in Figure 1 and the average price in Figure 2.

Figure 1. QLD Irrigator 403 MWh p.a. annual bill (Tariff 44, Ergon EDST1)

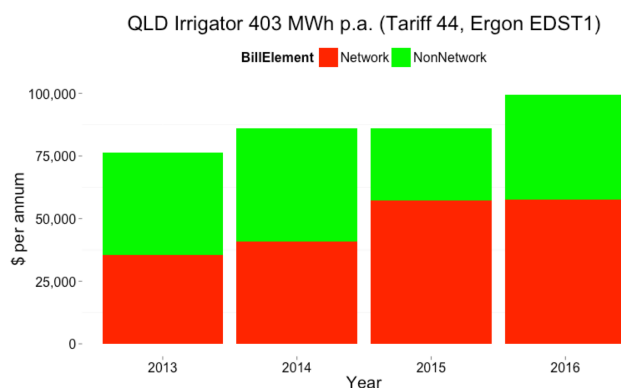
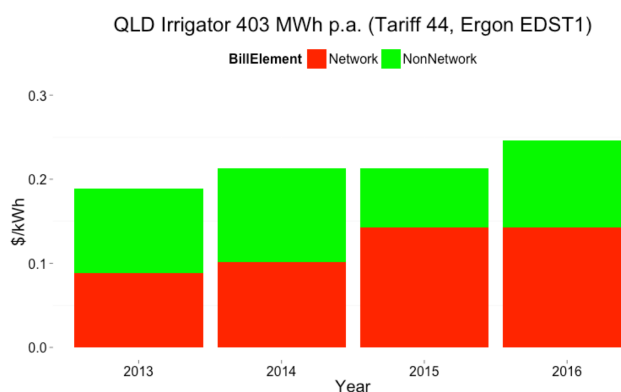


Figure 2. QLD Irrigator 403 MWh p.a. average price (Tariff 44, Ergon EDST1)



The network proportion of the total bill is more than 50% for the most recent financial years 2015 and 2016.

The outcomes for the 403 MWh p.a. irrigator if they chose Tariff 45 and the corresponding EDMT1 network Tariff. The annual bill is shown in Figure 3 and the average price in Figure 4.

Figure 3. QLD Irrigator 403 MWh p.a. annual bill (Tariff 45, Ergon EDMT1)

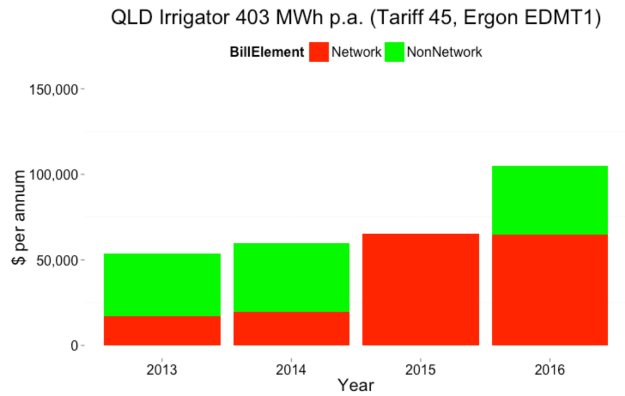
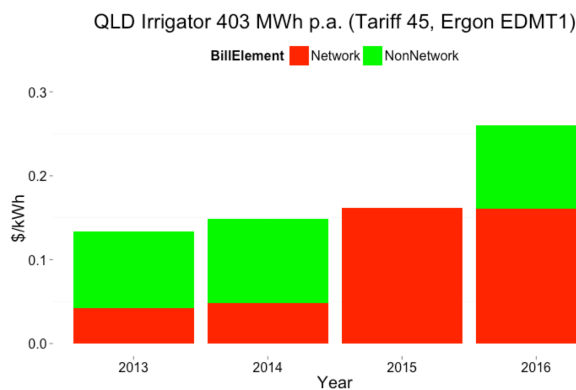


Figure 4. QLD Irrigator 403 MWh p.a. average price (Tariff 45, Ergon EDMT1)



In the 2015 financial year, the non-network (green) component is removed from these two charts. This is because the network component is greater than the retail bill, resulting in a negative non-network component.

Lastly, the Tariff 46 retail Tariff and corresponding network Tariff EDLT1 is shown. The annual bill is shown in Figure 5 and the average price in Figure 6.

Figure 5. QLD Irrigator 403 MWh p.a. annual bill (Tariff 46, Ergon EDLT1)

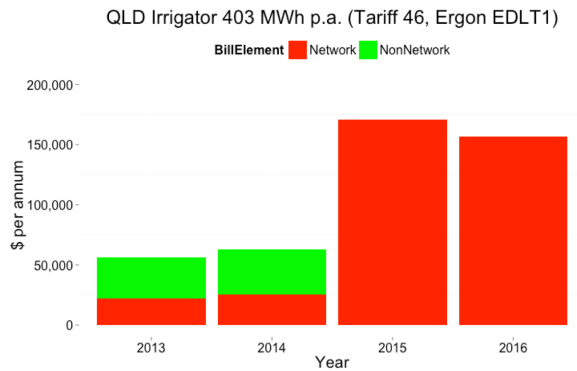
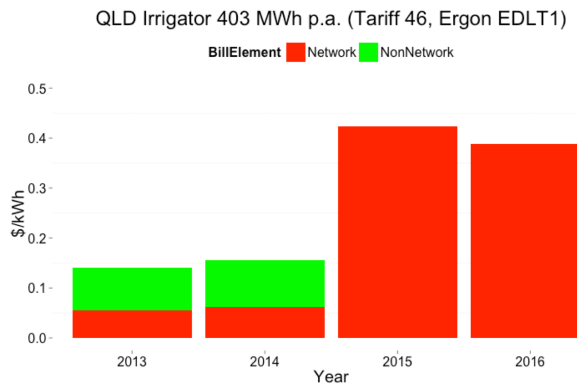


Figure 6. QLD Irrigator 403 MWh p.a. average price (Tariff 46, Ergon EDLT1)



Similar to the Tariff 45 / EDLT1 combination, the network bill is greater than the retail bill, resulting in negative non-network elements, this time for both financial years 2015 and 2016. The rest of this appendix examines this in more detail.

The derived non-network outcomes for the large 403 MWh p.a. Queensland irrigator across the three Tariff combinations are shown (the derivation of the non-network charge is obtained by subtracting the network element from the total bill). Firstly the Tariff 44 / EDST1 combination is shown, the annual bill breakdown by bill element is shown in Figure 7 and the average price in Figure 8.

Figure 7. QLD Irrigator 403 MWh p.a. annual bill (Tariff 44, Ergon EDST1)

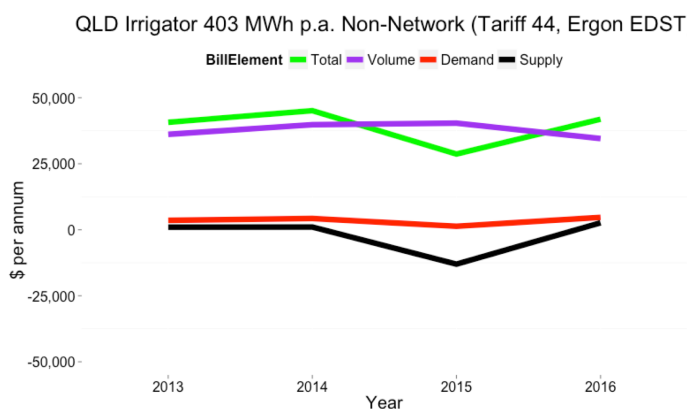
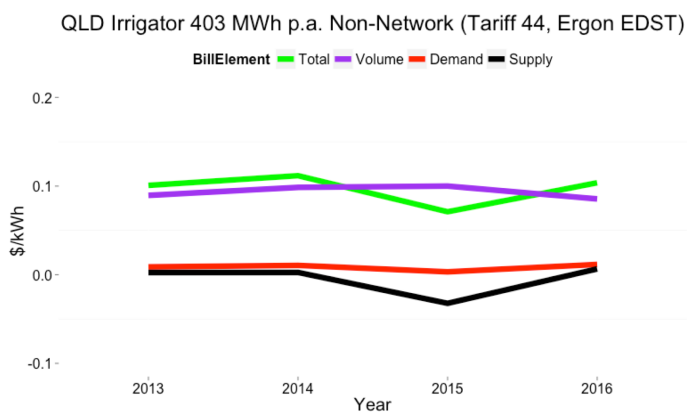


Figure 8. QLD Irrigator 403 MWh p.a. average price (Tariff 44, Ergon EDST1)



While the total non-network bill is positive for this combination, the supply charge from the network Tariff is greater than the retail Tariff 44.

Next, the Tariff 45 / EDMT1 combination is examined, the annual bill is shown in Figure 9 and the average price in Figure 10.

Figure 9. QLD Irrigator 403 MWh p.a. annual bill (Tariff 45, Ergon EDMT1)

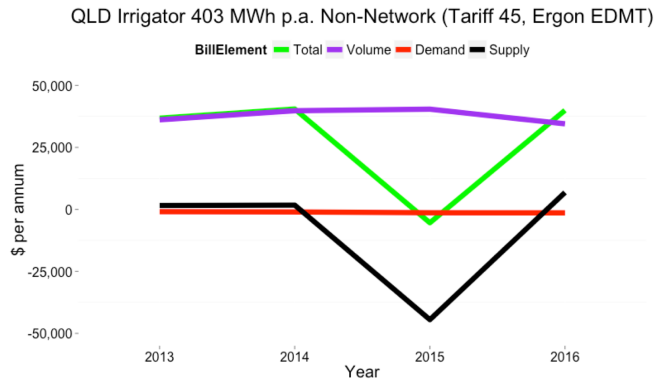
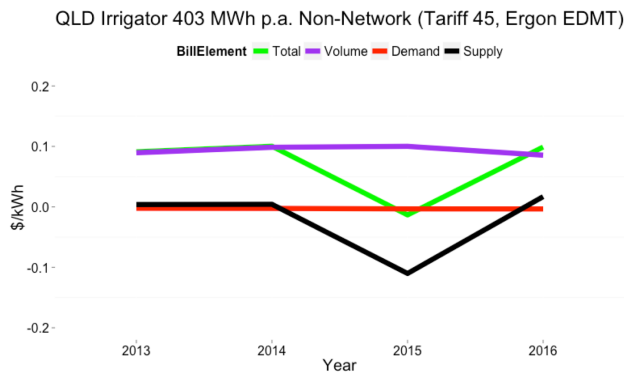


Figure 10. QLD Irrigator 403 MWh p.a. annual bill (Tariff 45, Ergon EDMT1)



In 2015, as noted earlier the total non-network element is negative, since the network Tariff is higher than the total bill under Tariff 45.

Lastly the Tariff 46 / EDLT1 combination is examined- annual bill in Figure 11 and the average price in Figure 12.

Figure 11. QLD Irrigator 403 MWh p.a. annual bill (Tariff 46, Ergon EDLT1)

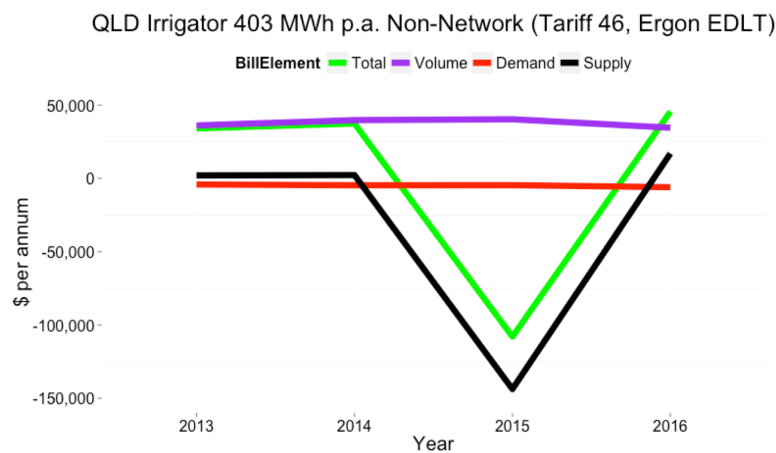
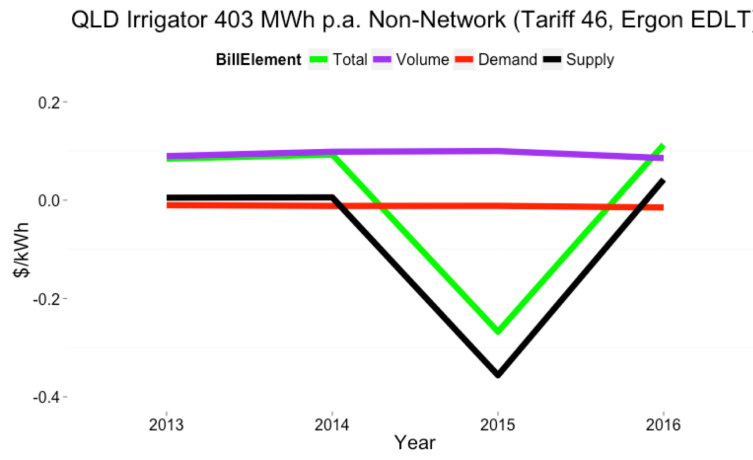


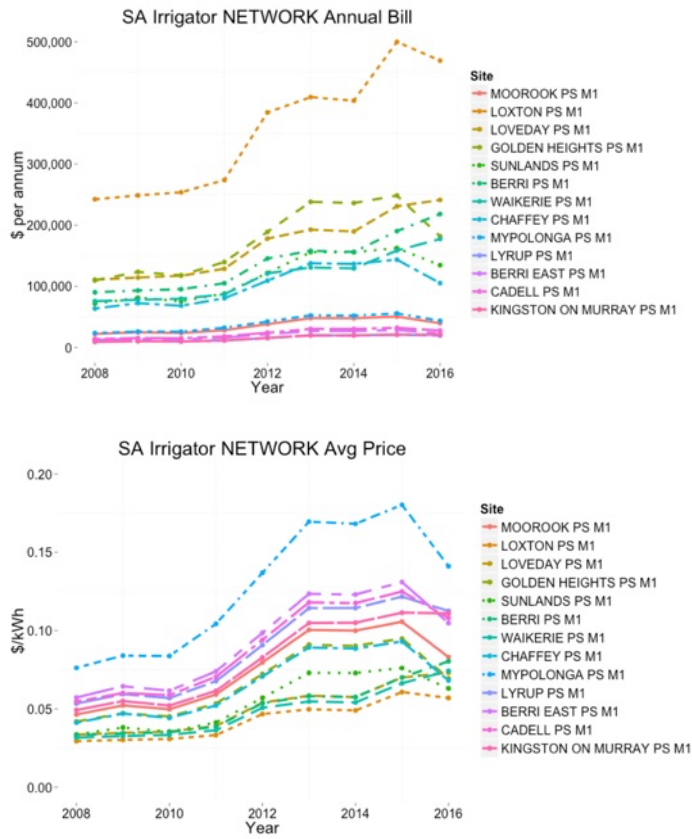
Figure 12. QLD Irrigator 403 MWh p.a. annual bill (Tariff 46, Ergon EDLT1)



Appendix B – Analysis of irrigator demand data

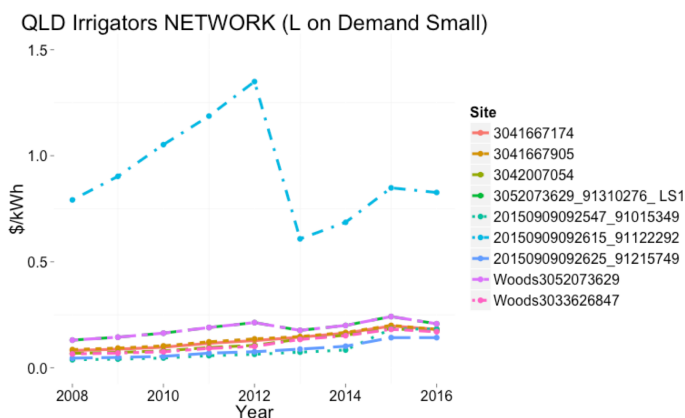
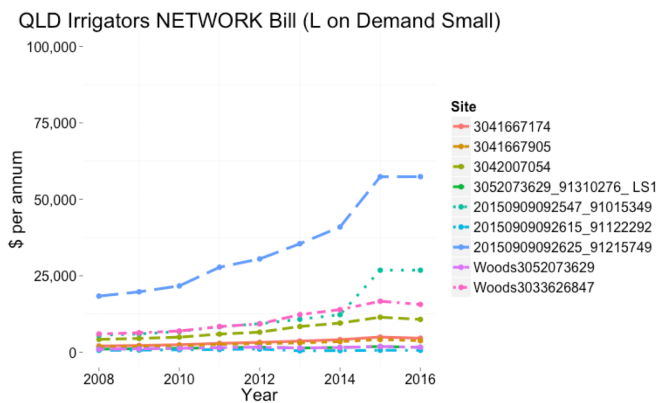
1.1 South Australia

The results for each irrigator assigned to their applicable network tariffs – LV Agreed Demand and HV Agreed Demand.



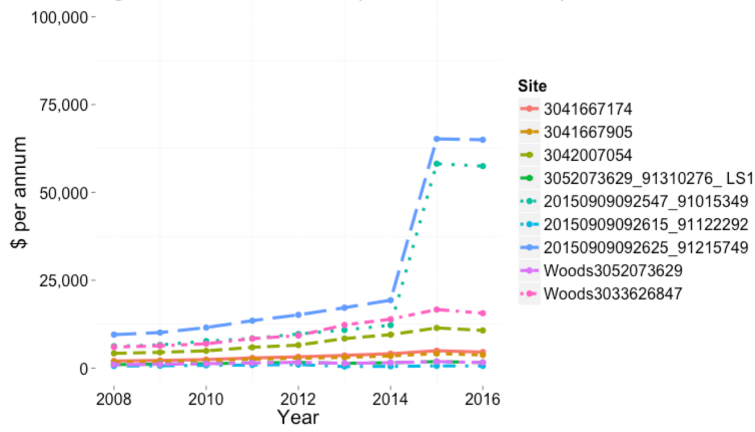
1.2 Queensland

We show the results for all Queensland irrigators whose half-hourly demand profiles we received were greater than 12 months. For the small users (<100 MWh p.a.), the applicable network demand is the EBIBT IBT Business Tariff. For the large users (indicated by the letter “L” on the title), we analysed the outcomes if the irrigators decided to leave their retail Tariff 62 to a demand-based retail Tariff (44, 45 or 46) and analysed the corresponding network Tariff (Tariff 44 for “Demand Small”, Tariff 45 for “Demand Medium” and Tariff 46 for “Demand Large”). We firstly show the network bill outcomes if the large irrigator is on “Demand Small” network Tariff with the small users on EBIBT IBT Business Tariff.

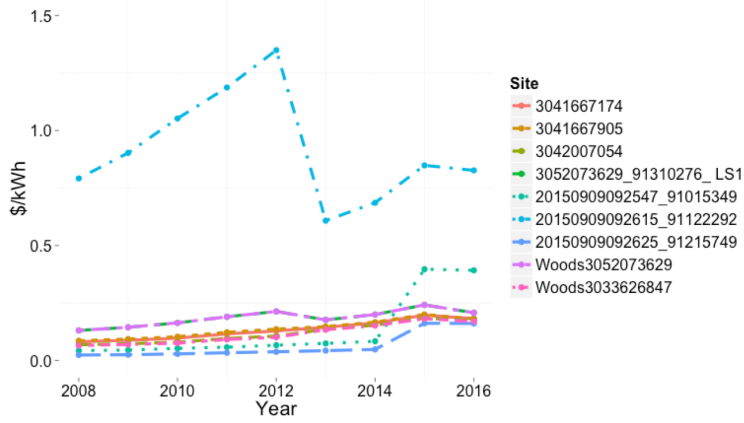


The results if the large users on “Demand Medium” Ergon network Tariff.

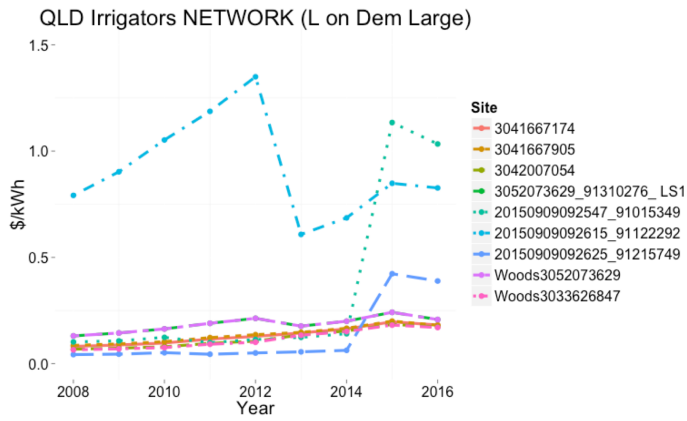
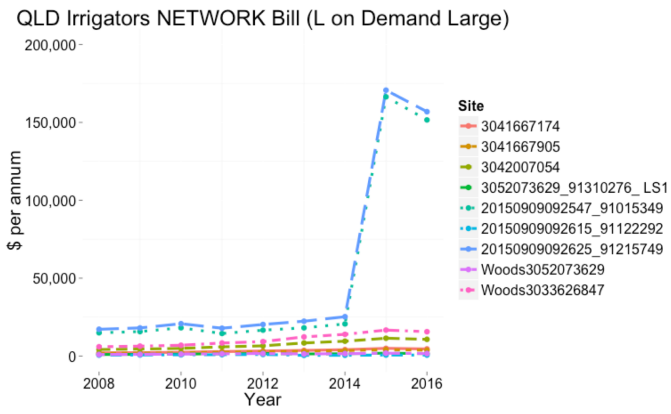
QLD Irrigators NETWORK Bill (L on Demand Med)



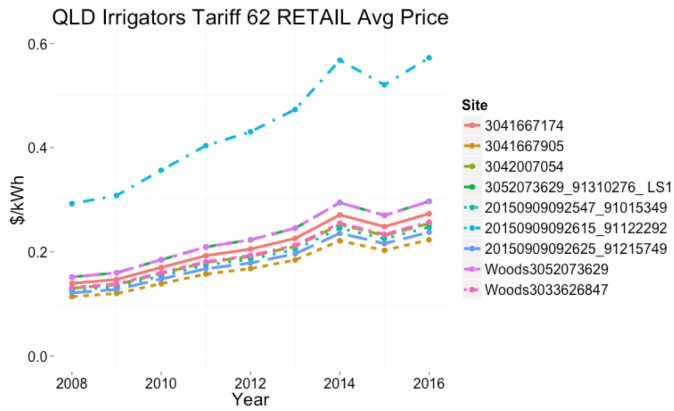
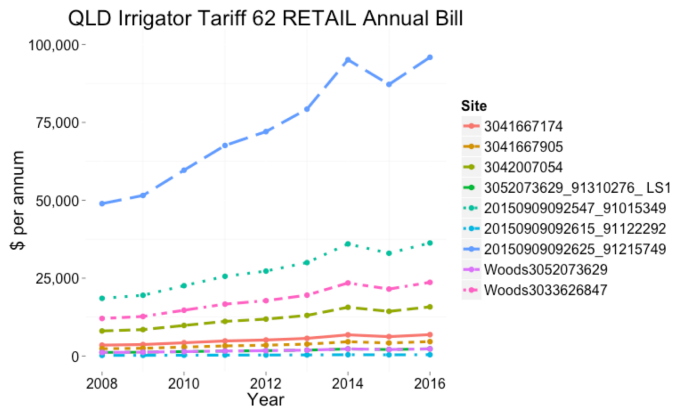
QLD Irrigators NETWORK (L on Demand Med)



The results if the large users on the “Demand Large” Ergon network Tariff.

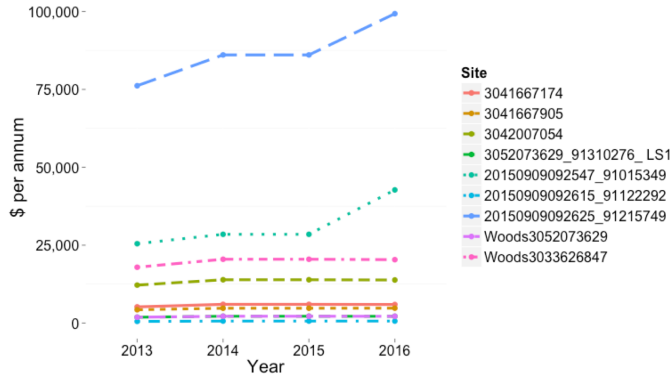


The results for irrigators if they are all on Tariff 62.

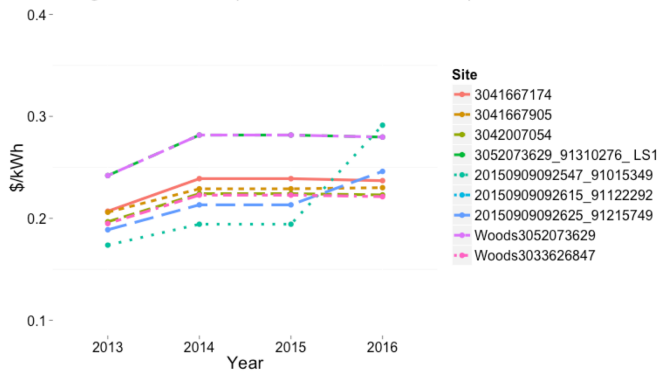


The results for the small (S) irrigators are on Tariff 22 and large (L) irrigators on Tariff 44.

QLD Irrigators RETAIL Bill (S - Tariff 22, L - Tariff 44)

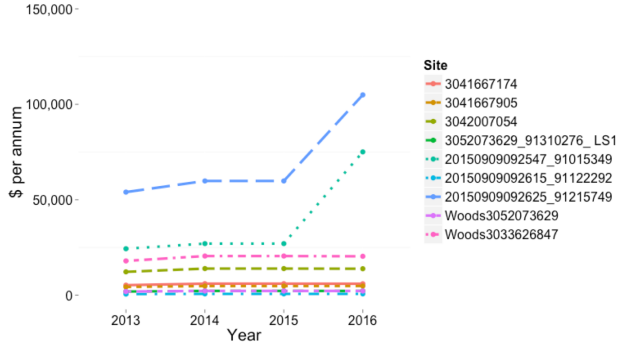


QLD Irrigators RETAIL (S - Tariff 22, L - Tariff 44)

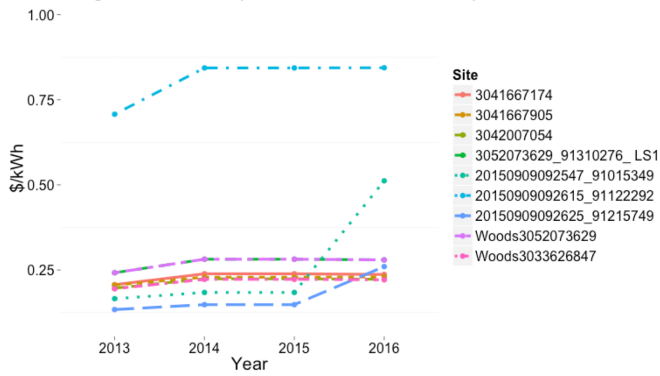


The results for the small (S) irrigators are on Tariff 22 and large (L) irrigators on Tariff 45.

QLD Irrigators RETAIL Bill (S - Tariff 22, L - Tariff 45)

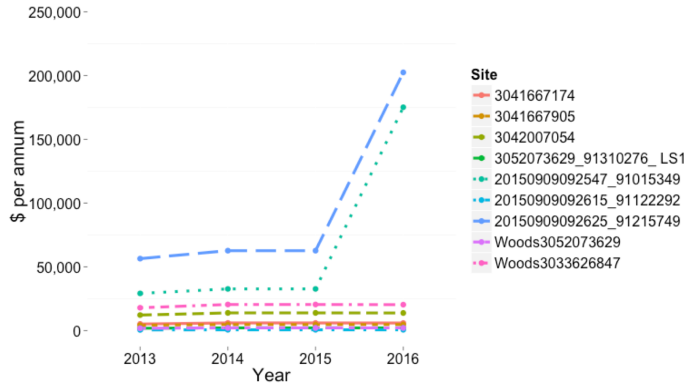


QLD Irrigators RETAIL (S - Tariff 22, L - Tariff 45)



The results for the small (S) irrigators are on Tariff 22 and large (L) irrigators on Tariff 46
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QLD Irrigators RETAIL Bill (S - Tariff 22, L - Tariff 46)



QLD Irrigators RETAIL (S - Tariff 22, L - Tariff 46)

