

**Western Power Privatisation
Impact Analysis**

October 2016

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ORION Consulting Network

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List of Acronyms

(\$'000)	Thousands
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
ASUWA	Australian Services Union Western Australia
ASX	Australian Stock Exchange
bn	Billions
CNP	Competitive Neutrality Payment
ETUWA	Electrical Trades Union Western Australia
GOC	Government Owned Corporations
HP	Horizon Power
m	Millions
NCP	National Competition Policy
RAB	Regulated Asset Base
TEF	Tariff Equalisation Fund
WA	Western Australia
WATC	Western Australian Treasury Corporation
WP	Western Power

1 Introduction

1.1 Background

This report was commissioned by the Electrical Trades Union Western Australia (ETUWA) and the Australian Services Union Western Australia (ASUWA) to provide an objective economic analysis of the Tariff Equalisation Fund and some of the associated impacts of privatising Western Power.

Orion has previously undertaken similar analysis in other states.

This report and the related analysis is based on official Western Australia Government publications, corporate financial statements and other published literature relevant to the analysis. Wherever possible, the calculations presented have been supported with source references to publicly available material or explanatory notes to provide full transparency of the analysis. Where data has not been available, we have taken a conservative approach in estimating the financial impacts to ensure that our report is as objective and accurate as possible.

1.2 Context

There is ongoing discussion nationally and within Western Australia (WA) as to whether the State Government will or should privatise its electricity assets to pay down government debt and/or “recycle” funds into new infrastructure. Privatisation could be in the form of asset sales or sale of long-term leases. It is assumed that only the electricity assets will be sold or long-term leased, and that the proceeds of such transactions would firstly be utilised to pay out the current debt held within the electricity business.

The Western Australian Government has launched an Electricity Market review which is being undertaken in two phases, with the first phase finalised. Following the recommendations from phase 1, phase 2 was launched in April 2015, and has four work streams:

1. Network Regulation;
2. Market Competition;
3. Institutional Arrangements; and
4. Wholesale Electricity Market Improvements.

The work streams include changes to the regulatory regime, and various forms of privatisation.

The proposed reforms will have an impact on the employment conditions of Electrical Trades Union Western Australia and Australian Services Union Western Australia members, and any potential privatisation will have a budgetary impact on the state finances.

The WA government recently announced to examine full or partial privatisation through lease or sale. ETUWA and ASUWA are therefore seeking economic modelling in form of a valuation of the price of the Western Power (WP) network in the current market as well as the impact on returns to government (e.g. increases/decreases to dividends, tax equivalencies etc.) of privatisation of WP.

The state-owned electricity sector has complex financial arrangements and are subject to the national competition policy, requiring them to pay dividends and tax equivalents to the state budget. Much of the state's debt is within these GOC's, and the debt is therefore currently serviced from electricity revenue. Western Power is responsible for the transmission and distribution of electricity in the more urbanised areas of Perth and the south-west corner of Western Australia, while Horizon Power manages all parts of the supply chain (generation, distribution and retail) urban distributor. Both are owned by the Western Australian Government.

The vast remoteness of the Horizon Power network means that significant infrastructure is required to service customers, resulting in a higher cost per connection than the urban networks.

2015-16	Western Power¹	Horizon Power²
Approximate cost per connection	\$966	\$9,305

Figure 1 – Cost per connection

To ensure price parity for the more remote Horizon Power customers, contributions are made from Western Power to the Tariff Equalisation Fund. These funds are then released to Horizon Power (in accordance with the determination by the WA Treasurer) to reduce the required revenue raised through residential and small business tariffs, thereby ensuring that residential and small business customers of Horizon Power are charged the same tariff as they would in the Western Power network.

This report focuses solely on potential privatisation of Western Power electricity assets.

¹ Western Power Statement of Corporate Intent 2016/17, page 19 table 1,

²(Total Expenses/customers), Financial Report 2015-16 page 2 and Horizon Power Annual Report 2016/17, page 2

2 Tariff Equalisation Fund

2.1 Outline

The purpose of the Tariff Equalisation Fund (TEF) is to ensure that all residential and small business customers in Western Australia are charged the same electricity tariffs.

If WP did not make the payments to the TEF, the State Government would have to make the payment as a Community Service Obligation (CSO) from general revenue if they wanted to keep rural residential and small business tariffs in line with the urban. The contribution to the TEF by WP is therefore benefiting the State Government as they do not currently have to use money from general revenue to fund the payment. Because the CSO essentially is paid directly from WP to HP, the equalisation of tariffs will not be able to continue if WP was under private ownership unless the continuation of the payments were regulated through legislation or the State Government funded the CSO from general revenue.

A large share of Horizon Power's revenue (2015/16: 29%) originates from the Tariff Equalisation Fund, without which HP would have incurred a significant loss before income tax equivalent (\$90m) for the 2016 Financial Year (FY). HP is therefore very reliant on the TEF revenue stream to remain financially sustainable.

	FY2016
HP Tariff Equalisation Fund Revenue ³	\$141,000,000
HP profit before income tax equivalent	\$51,485,000
Implied loss without TEF, before income tax eq.	-\$89,515,000
Horizon Power Customers ⁴	47,168
TEF subsidy per customer	\$2,989

Figure 2 – Tariff Equalisation Fund

Horizon Power received \$141m in Tariff Equalisation Contribution from the TEF during FY2016 (FY2015: \$136m) and reported having 47,168 customers at the end of FY2016. The TEF payment received therefore represents around \$2,989 per customer serviced by the HP network.

	FY2016
Total power purchased/generated (kWh) ⁵	1,020,161,400
'Cost to Supply Unit Cost (cents/kWh) ⁶ (variable operating cost)	27.9
Total unit cost (cent/kWh)	43.0
Revenue per kWh generated/purchased (cents/kWh)	48.1

Figure 3 – Cost and revenue per kWh

Total power purchased and generated by Horizon Power during FY2016 amounted to just over 1bn kWh. The cost of supplying the electricity was reported to be 27.9 cents/kWh. From our analysis it would appear this figure on relates to variable operating costs incurred and does not include the capital related costs of depreciation or finance costs. When including depreciation and finance cost for FY2016, the total unit cost is approximately 43.0 cents/kWh. The total revenue collected by HP equates to around 48.1 cents/kWh.

³ Horizon Power Financial Report 2015/16, p.12

⁴ Horizon Power Annual Report 2015/16, p.4

⁵ Horizon Power Annual Report 2015/16, p.18

⁶ Horizon Power Annual Report 2015/16, p.14

2.2 TEF discontinuation

If Western Power is privatised and the TEF contributions were to be discontinued, it would result in HP having to raise additional revenue from customers equivalent to the shortfall in TEF revenue or a direct subsidy to be paid from the State Government to HP.

In 2016, the TEF payment of \$141m equated to a subsidy of roughly 13.8 cents per kWh purchased and generated by HP.

	FY2016
Revenue without TEF, per kWh generated/purchased (cents/kWh)	34.2
+ Implied required revenue increase per kWh purchased/generated (cents/kWh)	13.8
= Total Revenue per kWh generated/purchased (cents/kWh)	48.1
Revenue increase requirement	40.4%

Figure 4 – TEF removal with current profit target

A discontinuation of the TEF would likely result in HP having to recover the lost revenue from its customers by increasing its retail prices. Our calculations show that, all else being equal, discontinuing the TEF revenue stream to HP will mean an increase in required tariff revenue of around 13.8 cents/kWh, an increase of 40.4% compared with the current revenue collected through tariffs. Such an increase would maintain their current HP profit level. It should be noted that historically HP has retained all profits as retained earnings rather than paying dividends to the State. These retained earnings are used to fund some of the capital program and thereby reducing the amount which needs to be borrowed.

2.3 No Profit or TEF

Horizon Power reported a profit before income tax equivalent of \$51.5m. Assuming a zero profit and no TEF revenue, the increase in revenue required is around \$90m for 2016. This is roughly similar to the planned savings outlined by Horizon Power in their Statement of Corporate Intent 15/16, which estimates a reduction in the required subsidy by \$100m per annum by 2017/18, up from current \$67.8m savings⁷.

	FY2016
Tariff Equalisation Fund Revenue	\$141,000,000
Profit before income tax equivalent	\$51,485,000
Zero profit, Implied required additional revenue	\$89,515,000
Revenue without TEF (cent/kWh)	34.2
+ Additional revenue required for break-even per kWh purchased/generated (cents/kWh)	8.77
= Break-even revenue (cents/kWh)	43.0
Break-even unit cost increase	25.6%

Figure 5 – TEF removal with reduced revenue requirement

To ensure a break-even situation where no TEF revenue is received by HP, an additional revenue of around \$90m would be required (2016 figures). To achieve this, an increase of around 8.77 cents per kWh generated or purchased would be required. This represents an increase of 25.6% compared to the current revenue collected.

⁷ Statement of Corporate Intent 15/16, Hoizon Power, p.4

The revenue required to be raised by Horizon Power from a household with a consumption of 6,000 kWh per year would therefore increase from \$2,052 to \$2,580 if TEF was discontinued and a zero profit approach was adopted. The majority of the increase in required revenue would presumably be recovered directly from the customer through increases to the consumption charge (tariffs), while a portion would be spread across a broader base through increases to access charges for all customer groups.

The annual surpluses generated by Horizon Power are largely retained within the organisation as retained earnings. If the annual profits are reduced in the future, HP will have to use borrowings as the main funding mechanism for capital expenditure, resulting in increasing interest cost and an increased incentive to reduce ongoing asset maintenance and replacements.

2.4 Conclusion

Privatisation of Western Power could have a significant impact on the financial sustainability of Horizon Power unless the Tariff Equalisation Fund contributions are legislated to also be met by the new owner of Western Power, or the State Government chooses to fund the revenue shortfall out of general revenue.

Based on the 2015/16 financial statements, privatisation of Western Power and the discontinuation of the TEF revenue stream would result in an increase in the revenue requirement of Horizon Power of between 25.6% and 40.4%. This increase in revenue requirement would have to be funded either by significant increases in Horizon Power's tariffs, the new owners of Western Power or the State Government.