

# TAHE HVCN Unders and Overs – Explanatory Note

<b>Subject</b>	Rationale for HVCN Unders and Overs Being Coal Focussed
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## Undertaking and Background

The NSW Rail Access Undertaking (**Undertaking**) description of the purpose of the Unders and Overs Account is “to manage average deviations around the maximum rate of return”, where the maximum rate of return is determined by the Independent Pricing and Regulatory Tribunal (**IPART**) and is used to calculate the full economic cost of the TAHE Hunter Valley Coal Network (**HVCN**). This full economic cost is the ceiling cost of the HVCN.

In the economic regulation of assets providing third party access (such as the HVCN), the purpose of establishing a regulated return is to allow a return to the regulated asset which covers its cost of capital, while preventing returns above this cost. Therefore, revenue above the full economic cost (which includes a regulated return) provides a return above the cost of capital. These excess returns should be returned to the access seekers who paid revenues more than the full economic costs (which include the regulated rate of return).

The Undertaking establishes a mechanism to return these excess returns to the access seekers who paid revenues more than full economic costs. Thus, the Undertaking<sup>1</sup> requires TAHE to keep an account for Access Seekers and groups of Access Seekers who could potentially breach the Ceiling Test, where the Ceiling Test is:

*For any Access Seeker, or group of Access Seekers, Access revenue must not exceed the Full Economic Costs of the Sectors which are required on a stand alone basis for the Access Seeker or group of Access Seekers.*

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<sup>1</sup> Schedule 3 Clause 4(b).

Thus 4(a) and 4(b) of the Undertaking require TAHE to keep an account for the access seekers or groups of access seekers who contribute to TAHE exceeding its allowed return, where the purpose of this account is to manage deviations around the allowed rate of return.

The necessary step is then to determine which access seekers or groups of access seekers on the TAHE HVCN are driving the excess return.

## IPART Decisions and Data

IPART indicated in its Final Decision in 2014-15 that it assessed both the group of coal access seekers and the group non-coal access seekers, with excess revenue being greater for the second group as the revenue added by general freight was greater than the cost added by general freight<sup>2</sup>. The Final Decision then states:

*For this reason, we have included non-coal freight revenue and costs associated with the non-coal freight transport on its HVCN in assessing compliance with the Undertaking.*

Presumably, this combined group is used as the Undertaking requires that TAHE to keep an account for groups of Access Seekers who could potentially breach the Ceiling Test and as the general freight marginal revenue is greater than the marginal costs this means that the combined group is more likely to breach the ceiling test than either the coal or general freight group and should be considered the group for which the unders and overs account is being kept.

Thus, on the TAHE HVCN, since 2014-15 full economic cost has calculated been calculated for three groups of access seekers:

- » coal access seekers
- » general freight access seekers
- » combined coal and general freight access seekers (noting that the full economic cost for this group is not the summed full economic costs for the coal and general freight access seekers).

This data on the full economic costs and revenue from these groups of access seekers has been reported to, and assessed by, IPART via the Undertaking compliance reporting process. The table below shows the figures as reported in the IPART final decisions and shows that in some years that while coal and general freight do not separately breach the ceiling test, they do breach the ceiling test as a combined group.

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<sup>2</sup> i.e the marginal revenue of freight is greater than the marginal cost of freight. This means that the revenue from General freight covers its marginal cost and makes a contribution to inframarginal cost (largely the fixed cost of the assets).

**Table – HVCN Coal, General Freight and Combined Revenue, Costs and Recovery<sup>3</sup>**

	Coal Rev	Coal FEC	Coal Recovery	Freight Rev	Freight FEC	Freight Recovery	Comb. Rev	Comb. FEC	Comb. Recovery
	\$000	\$000		\$000	\$000		\$000	\$000	
<b>2013-14</b>	5,509	5,011	110%	1,597	5,757	28%	7,107	5,757	123%
<b>2014-15</b>	4,945	5,058	98%	1,376	5,836	24%	6,321	5,836	108%
<b>2015-16</b>	4,805	5,989	80%	1,575	6,150	26%	6,380	6,449	99%
<b>2016-17</b>	4,304	6,128	70%	1,734	6,299	28%	6,038	6,636	91%
<b>2017-18</b>	6,931	6,437	108%	1,825	6,493	28%	8,756	6,963	126%
<b>2018-19</b>	6,739	6,464	104%	1,851	6,449	29%	8,590	6,893	125%
<b>2019-20</b>	6,655	6,585	101%	1,645	6,542	25%	8,300	6,997	119%
<b>2020-21</b>	3,220	6,471	50%	1,521	6,583	23%	4,741	6,896	69%
<b>2021-22</b>	4,123	6,914	60%	1,717	6,957	25%	5,840	7,324	80%
<b>2022-23</b>	7,214	7,451	97%	1,838	7,322	25%	9,051	7,883	115%

This data shows that while full economic cost is similar for coal and general freight<sup>4</sup>, the revenues are significantly different. Coal revenue is:

- » more than double general freight revenue, with this higher revenue driven by the higher price levels applied to coal
- » more volatile than general freight revenue.<sup>5</sup>

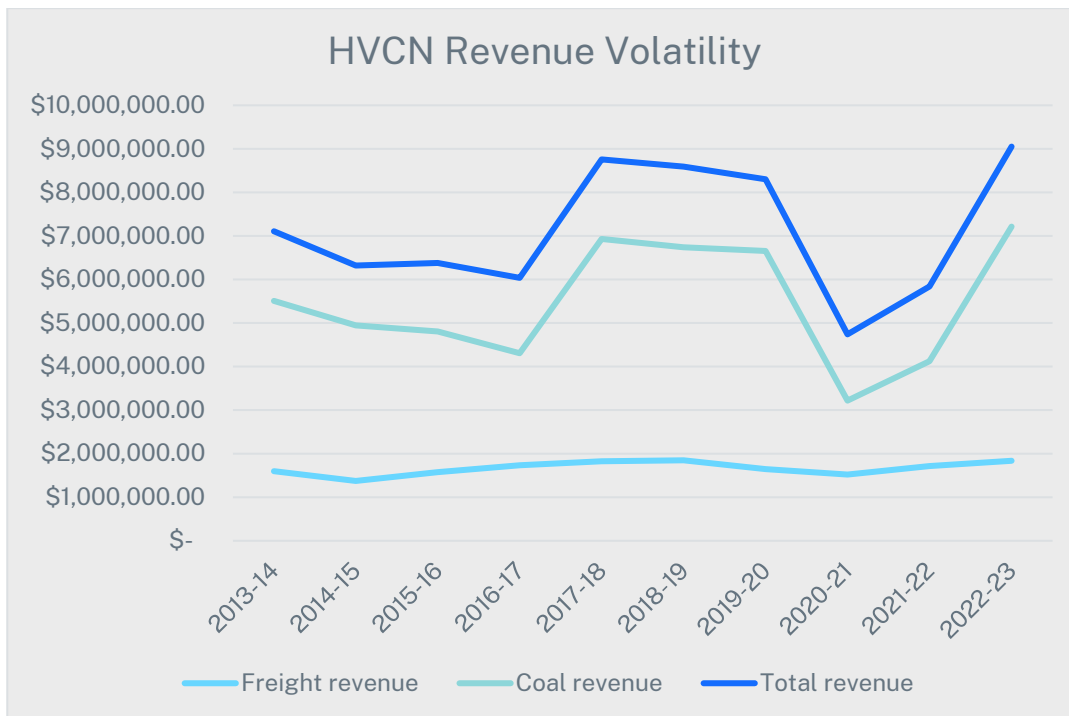
The chart below shows the difference in the size and volatility of coal and general freight revenue on the HVCN.

<sup>3</sup> Note figures in this table are sourced from IPART HVCN Final Decisions. The 2013-14 and 2014-15 FEC cost figures are derived from data in the Decisions. In addition the 2021-22 tax adjustment is attributed to coal not general freight.

<sup>4</sup> The costs are assessed for a stand-alone coal network and a stand-alone general freight network.

<sup>5</sup> The standard variation of the coal revenue is \$1.3 million whereas the standard variation of the general freight revenue is 0.1 million. This indicates that the variations in the revenue are driven by coal revenues rather than general freight revenues.

**Graph – HVCN Revenue 2013- 14 to 2022-23**



The table and graphs above show that, relative to general freight, coal revenue is volatile year on year and is often over the full economic cost (i.e., coal recovery is over 100%). For example, coal revenue has been in a range of 50% to 110% of full economic cost, recognising that the lower end of this range has been driven by an access price reduction in 2020-21. Similarly, the table shows general freight revenue as being more stable being between 23% and 29% of full economic cost for general freight.

The table also shows that the combined cost recovery is driven by coal cost recovery.

It should also be recognised that it is revenue variability rather than cost variability that drives over-recovery.

## Analysis and conclusion

TAHE recognises that the Undertaking requires we keep an account for Access Seekers and groups of Access Seekers who could potentially breach the Ceiling Test.<sup>6</sup> However, by combining groups of Access Seekers some sub-groups of Access Seekers (such as general freight Access Seekers) are being exposed to the unders and overs account policy even though this sub-group will not drive either the annual over recovery or under recovery of revenue.

The data above shows that:

- » coal freight revenues have often breached their individually calculated full economic cost; and

<sup>6</sup> Schedule 3 Clause 4(b) of the Undertaking.

- » both the size and volatility of coal freight revenues on the HVCN are greater than the size and volatility of general freight revenues on the HVCN.

The total size and higher volatility of these coal revenues has led to TAHE (or its predecessors) exceeding its allowed return. That is, it is coal freight that drives the deviations around the allowed rate of return, and which drives over recovery.

It is therefore reasonable that coal freight access seekers should be the target of price changes to clear both historical and future unders and overs account balances.

By contrast, prices for general freight access seekers have not been at levels to create revenue to come close to breaching their individually calculated full economic cost. This is unlikely to change in the near future.

It is, therefore, reasonable to conclude that general freight could not potentially breach the ceiling test. Given that conclusion, general freight access seekers should not be subject to pricing adjustments within TAHE's HVCN unders and overs account policy.