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23 July 2010

Economic Regulatory Authority
Level 6, Governor Stirling Tower
197 St George Terrace
PERTH WA 6000

By Email: publicsubmissions@erawa.com.au

Attention: Assistant Director Access

Dear Sirs,

TPI's FLOOR AND CEILING ACCESS COST MODEL

1. The North West Iron Ore Alliance (**NWIOA**) has undertaken a preliminary review of the proposed Floor and Ceiling Access Cost Model (**Cost Model**) submitted to the Economic Regulation Authority (**ERA**) by The Pilbara Infrastructure Limited (**TPI**) on 2 July 2010.

2. Our review reveals that TPI's Cost Model does not comply with the Costing Principles approved by the ERA.

3. As you are aware, clause 46 of the Railways (Access) Code 2000 (**Code**) provides that the relevant Costing Principles are to be applied and followed by the railway owner in the determination of the costs referred to in clause 7 (floor prices) and clause 8 (ceiling prices) of Schedule 4 of the Code.

4. NWIOA therefore believes that the ERA should require TPI to resubmit a cost model that is compliant with the principles approved under clause 46 of the Code.

5. As a practical matter, NWIOA wishes to emphasise that it is impossible to fully assess the Cost Model in its current form as it contains insufficient information to demonstrate how input values used in the Cost Model were derived. Furthermore, the Cost Model suffers from computational/formulaic errors or omissions such that the Cost Model generates results which are actually incorrect.

6. In order to undertake a more comprehensive analysis of the Cost Model and prepare a more detailed submission to the ERA, NWIOA would require the provision of further information. In particular, the key information sought by NWIOA relates to the asset valuations (GRVs), the operating costs and their allocation and the calculation of Gross Tonne Kilometres (**GTKs**).

7. Accordingly, at this initial stage, NWIOA's observations are limited to the key issues and do not necessarily address all the potential issues associated with the Cost Model. NWIOA's initial observations are set out below:

Cost Model Pricing

8. The Cost Model produced by KPMG provides a ceiling cost of $5.77 per net tonne of iron ore delivered if railed the entire length of the line from Cloudbreak to Port Hedland. By applying the Costing Principles to the data input assumptions (including calculating GTK's), it is possible to calculate a comparable ARTC type access charge as follows using the Model Data Inputs:

- A flagfall cost of $33.02 per Train Km (including all signaling, overhead and support costs that should be applied per train no.)

- A variable 000'GTK rate of $13.44 (including track maintenance and the rail capital costs applied per GTK)

9. Access charges at this level would appear to be very high. However, at this stage, there is insufficient data supporting the inputs to accurately assess whether the costs are efficient and reasonable. However, it is certainly the case that the costs that are generated by the TPI Cost Model are significantly higher than other rail access charges in Australia. By way of example, NWIOA notes that the ARTC lines in the Hunter Valley, NSW has access charges that vary between $4.00-5.00 per Train Km Flagfall and $3.00-3.50 in variable costs per GTK. The costs generated are also higher than would be expected with respect to the concept of "efficient costs" under the Costing Principles.

Cost Model Framework and Calculations

10. The structure of the Cost Model suggests that it is setup for more than one segment/route and more than one user. However, NWIOA suggests that the Cost Model would not function properly in a situation where a user were to require transportation over more than one segment or there were more than a single user. Given that only one segment is currently employed in the Cost Model, the complete functionality of the Cost Model is incapable of being tested. This is unfortunate, as the incomplete nature of the Cost Model means that some modelling errors may not be revealed. In order for the Cost Model to be approved, NWIOA submits that the Cost Model should be reworked so that either:

    - it does work effectively in all scenarios; or

    - the implied functionality is removed.

11. The Floor and Ceiling Prices have been quoted as $5.07 and $5.77 respectively. However, these figures in themselves are meaningless as the Cost Model does not specify the units of measurement against which these prices are quoted. NWIOA's consultant's analysis of the spreadsheets has indicated that the units appear to correlate to $ per net tonne. NWIOA submits that this is not the usual quantum quoted for Ceiling Prices in the rail industry and its use is potentially misleading. Therefore we request that the Ceiling Price be expressed in the correct units i.e. total $ value and also the $ per GTK rate.

12. Further, the ERA approved TPI's Costing Principles on the basis that railway infrastructure management costs are to be allocated by GTKs. It is a matter of some concern to NWIOA that no costs have been allocated by GTKs and, in fact no GTK calculations have been made. Therefore, NWIOA requests that a calculation of GTKs be made and that the appropriate operating costs be allocated by GTKs.

13. Following on the previous point, NWIOA has observed that there are many errors on the "Rail Expenses" sheet in the Cost Model. Given that there is currently only one segment and one user, the errors have not affected final values. However, as soon as new users are introduced, the Cost Model will become incorrect. The most glaring error arises from the fact that allocation formulas are all track km even though some should be GTKs. NWIOA requests that the "Rail Expenses" sheet be rectified.

14. NWIOA also submits that the annuity calculation on the "Rail Assets" sheet is incorrect. The calculation should be made in the same fashion as that undertaken for WestNet Rail. The annuity calculation is an Excel function and NWIOA's consultant's understanding is that the calculation should be applied in the following way (as done for WNR):

Annuity = PMT (WACC, economic life, GRV,0,1) * (1+wacc/2)

However, it appears that TPI applied the calculation as follows:

Annuity = PMT (WACC, economic life,-GRV,0,0).

15. As a result, the annuity (and hence the Ceiling Price) is inflated by approximately 7% in the TPI Cost Model. NWIOA submits that the correct formula should be used and a recalculation of the Ceiling Price be made.

Data Inputs

16. Most of the base data used in the Cost Model is simply entered as a number (i.e. there is no supporting data or background information as to how these figures were determined). NWIOA requires further information supporting these numbers in order to be able to provide any comment on their suitability. In particular, the following supporting information would be necessary:

(a) **"Data" sheet of the TPI spreadsheet**: Further information on all "Rail Operating Costs" values and allocation methods. Please note that currently zero costs have been allocated to "Rail Operations" which are to be allocated by GTKs.

(b) **"Rail Assets" sheet of the TPI spreadsheet**: Further information is required regarding the GRV values for the various assets.

(c) **"Data" sheet of the TPI spreadsheet:** Further information is required in relation to what the "Rail Capital Expenditure" projects are in order to ascertain whether or not they are to be considered in the Ceiling Price.

Specifically, within the 'Rail Operations Costs' data inputs we have the following comments:

(d) **Track Maintenance Cost Allocator:** The track maintenance expenditure is allocated in the Cost Model per train. This assumes that any third party train carrying ore will have the same maintenance impact and therefore be of the same configuration as the FMG trains. Within the Costing Principles, the track maintenance cost allocator is defined as per GTKs. The Cost Model does not calculate GTKs and has not used it as a cost allocator. NWIOA submits that this should be rectified.

(e) **Track Maintenance Cost Input:** The Cost Model defines a single per annum input for track maintenance in the order of $36million per annum. The Costing Principles requires an efficient maintenance cost. At this top level it cannot be demonstrated how this cost is efficient. We therefore suggest that ERA should request that TPI provide a breakdown of the activities and components into labour, plant and material costs.

(f) **Signalling Cost Input:** The Cost Model defines a single per annum input for signalling maintenance in the order of $4.8 million per annum. The Costing Principles requires an efficient maintenance cost. At the current top level, it is not possible to demonstrate how this cost is efficient, therefore, NWIOA request a breakdown of the relevant activities and components into labour, plant and material costs.

(g) **Support and Overhead Cost Input:** The Cost Model defines a single per annum input for Support and Overheads in the order of $17 million per annum. Again, the Costing Principles requires an efficient maintenance cost. At the current top level, it is not possible to demonstrate how this cost is efficient, therefore, NWIOA request a breakdown of the relevant activities and components into labour, plant and material costs.

(h) **Support and Overhead Cost Allocator:** Within the TPI Costing Principles, the track maintenance cost allocator is defined as per Train Number. Within the Cost Model track maintenance cost allocator is defined as a direct cost and is not dependent on the Train Numbers. NWIOA submits that the direct costs should be made proportional to the train numbers in order to be consistent with the Costing Principles.

Assets not Related to the Infrastructure

17. Section 3.1 of the TPI Costing Principles states:

> "...The Costing Principles apply to all of the railway infrastructure owned by TPI that is defined as railway infrastructure under Part 1 of the Code, including
>
> - railway track, associated track structures, over and under track structures, supports (including supports for equipment or items associated with the use of a railway;
> - tunnels and bridges;
> - train control systems, signalling systems and communications systems;
> - associated plant machinery and equipment..."

and further

> "...*Assets which support, operating functions will be included in the operating cost or overhead cost calculations as appropriate. Assets included in this category are motor vehicles, computers, printers, facsimile machines, photocopiers, system hardware and software, mobile and fixed communications, office furniture and equipment. The cost of these assets will be calculated on a net basis*..."

18. The Cost Model incorporates a listing of nominated assets within the "Rail Assets" worksheet which is used to derive annualised "Annuity Costs" which are in turn allocated to the calculated floor and ceiling costs. The complete worksheet contents are listed below in Appendix A.

19. However, NWIOA submits that the Assets listed are, in some cases, not considered to conform with the principles outlined in the Costing Principles while, in other cases, the nature of the item appears to preclude it being used as a depreciated asset subjected to wear and tear, maintenance or eventual renewal. NWIOA has the following comments and queries regarding this section of the Cost Model:

(a) The Gross Replacement Value (GRV) of a number of assets is considered to warrant review to understand the costs associated with a number of high cost items (i.e. the GRV of the 'CB to PH Railway Line' of $196 million, considering that the earthworks, bridges, sleepers, ballast, drainage are all costed separately this item appears to be very high by an order of magnitude of 10 if only the cost of the rail is considered – Therefore NWIOA seeks more detailed costing regarding this item).

(b) A number of the assets as described in the Cost Model do not seem to be part of what can be considered 'below rail costs'.

20. The following table includes a draft set of the assets NWIOA's consultants have determined may not be considered appropriate for inclusion in the below rail costs. NWIOA seeks responses to the questions set out below which relate to specific assets. It would inform analysis of the Cost Model if it could be shown how the items listed in Table 1 overleaf do contribute to the "below rail" component of TPI costs.

Table 1 – Assets requiring explanation of purpose.

Asset ID	Asset Name	Questions
48	Amtech Transponder Tag AT5113	Where are the tags located within the infrastructure?
1290	Port Leaky Feeder in TUL Tunne	This item appears to relate to ore loading/unloading facilities. Is this the case?
2044	Trackmobile	This type of vehicle is typically used to move rail vehicles within a repair facility or workshop area. What is it used for at TPI?
2019	Supply of Portable Office and	What is the purpose of the portable office?
2020	Gantry and Shotblast Equipment	Is the gantry and shotblast equipment used for track maintenance?
2022	Traction Alternator	This item appears to be haulage related rather than for infrastructure maintenance. Is this the case?
2023	7FDL Engine & Alternator Lift	This item appears to be related to locomotive workshop attention rather than for infrastructure maintenance. Is this the case?
308	Lube Oil Dispensing Stations	These items appear to be related to locomotive provisioning rather than for infrastructure maintenance. Is this the case?
309	Lube Oil Storage inc 20KL Tank	
310	Lube oil Unloading System	
N/A	Ancillary and Support Plant	This asset has no distinguishable ID. What does it comprise? How does it relate to infrastructure maintenance?
373	MFG Single Axle Drop Table	This item appears to be related to locomotive workshop attention rather than for infrastructure maintenance. Is this the case?
1535	Tesco Tool Cart T24303	This item appears to be used in the maintenance of locomotive engines. Is this the case?
1573	Under Floor Wheel Lathe Type U	This item appears to be related to locomotive workshop attention rather than for infrastructure maintenance. Is this the case?
1705	IOCP Fleet Development Project	This item appears to be related to rolling stock rather than for infrastructure maintenance. Is this the case?
1715	Lockers - 305W Elitebuild	Are the lockers used for infrastructure maintenance activities?
10, 11, 256, 257, 258, 306, 307, 1334, 1380, 1381, 1772	Workshop and Yard Facilities	This item comprises 11 separate asset IDs. Are the workshop facilities covered by these items only used for infrastructure maintenance?

21. The combined GRV of the assets in is $40,309,686 or more than 3.5% of the total $1,131,126,251 listed as the GRV of rail assets

Unmaintainable/Replaceable Assets

22. The assets listed in Table 2 below appear to be related to development, implementation or improvement activities and as such do not appear likely to either require replacement or ongoing maintenance activities.

Table 2 Unmaintainable/Replaceable Assets

Asset ID	Asset Name
2073	Pre-Prod Dev - Rail Infrastructure
2017	Implement Train Controls in FM
1705	IOCP Fleet Development Project

23. These items are listed as having a GRV of $24,147,030 or more than 2.1% of the total Rail Asset GRV.

Ceiling and Floor Pricing

It appears that the assets set out below have been removed from the ceiling price in the calculation of the floor price. NWIOA therefore requests that TPI provides an explanation as to the rationale behind removing these assets from the floor price calculation.

Asset ID	Asset Name	Comment
24	50W UHF Base Station Communica	$860,044
33/35	Comms Towers	$139,019
48	Amtech Transponder Tag AT5113	$88,518
1359-1372	Radio Base Stations	$9,085
1734	Port Hedland Air Monitoring Pr	$181,467
2044	Trackmobile	$416,969
2032	Capitalised Rail Spares	$1,937
2016	Relay Train Control	$513,485
2017	Implement Train Controls in FM	$643,678
2018	Supply of Test and Monitoring	$9,534
2019	Supply of Portable Office and	$750,594
2024	Occupational Hygiene Monitoring	$33,748
	Total	**$14,480,014**

24. In addition, NWIOA has calculated that approximately 28% of rail operating costs have been removed from the ceiling price used to produce the floor price calculation. This represents a data input assumption. However, no rationale for the reduction has been provided by TPI and NWIOA therefore submits that the ERA should request an appropriate explanation.

25. An allocation of Asymmetric Risk costs has been included in the "Rail Assets Calculation" sheet and no rationale has been provided for this amount and we are seeking an explanation of the rationale risk and the quantum.

Comparative Pricing

26. The ERA final determination of Floor and Ceiling costs for WestNet Rail 2009-2010 determined that the cost of rail (excluding flash-butt welding costs) should be as listed under in Table 3.

Table 3 WestNet Rail Prices ($/tonne)[1]

Rail Weight	2006 Authority-determined prices ($/tonne)	2008 WNR-proposed prices	2008 PwC/Maunsell-recommended prices ($/tonne)
60kg/m	1440	1400	1400
51 kg/m	1440	1500	1400
41 kg/m	1440	1600	1400

27. On the basis that the TPI railway is nominally 253 kilometres in length (excluding the lengths of crossing loops and sidings), the GRV of the "railway line" is given by TPI as $196,368,238 or $ 717,893.35 per kilometre. No information is apparent as what constitutes "railway line". Without access to complete track data and assuming the total of sidings, crossing loops, loadout/unloading facilities,

[1] Final Determination on WestNet Rail's Proposed Floor and Ceiling Costs for 2009-10, p19.

workshops and all other usable track equates to 15% of the main line track, this would give a total requirement for rails to be approximately 629,128 metres length or, at 67Kg/m, 42,151 tonnes of rail. At $1400 per tonne, this would equate to a GRV for rail of $59,012,225.16 or $215,740 per kilometre (based on 253 kilometres of main line). We are therefore seeking more detailed costing regarding this item (or perhaps this $502,153 per km difference).

28. In addition, it could be possible to add the cost of welding, transport, installation, 'jewellery' and fastenings and surfacing works associated with re-railing. None of these costs are apparent.

Conclusion

29. It is apparent that the Cost Model submitted by TPI is not currently compliant with the Costing Principles approved by the ERA. The Cost Model in its current form also excludes significant data which is required in order to undertake a thorough analysis of the consequences flowing from the Cost Model. NWIOA therefore submits that the ERA should require TPI to resubmit its Cost Model so that it conforms with the Costing Principles and clause 46 of the Code. In addition, the ERA should also request that TPI provide the further supporting data and other information and corrections identified in this submission.

30. Once this better and further information has been provided, NWIOA submits that it will be better placed to provide a more thorough analysis of the proposed Cost Model.

31. Should you have any queries, please do not hesitate to contact Catherine Pinchin on (08) 9389 3021.

Yours faithfully,

A.T. CONSIDINE
CHIEF EXECUTIVE OFFICER

Annexure A

Nominated Assets

Asset ID	Asset Name	Leased/ Owned	GRV	Annuity Allocated to Segment	Economic Life	Annuity
24	50W UHF Base Station Communica	Owned	$ 860,044	All	20	$132,332.23
33/35	Comms Towers	Owned	$ 139,019	All	20	$21,390.42
48	Amtech Transponder Tag AT5113	Owned	$ 88,519	All	29	$12,959.96
58	Ballast Superlift	Owned	$ 21,160,991	Equal Split	29	$3,098,160.32
89	BHP Overpass	Owned	$ 29,386,043	Cloudbreak to Port Dumper	50	$4,216,230.86
99	CB to PH Rail Access Road	Owned	$ 3,989,014	Equal Split	10	$774,621.70
100	CB to PH Rail Ballast	Owned	$ 44,189,113	Equal Split	25	$6,563,027.34
1792-1816	Ballast	Owned	$ 7,159,142	Equal Split	25	$1,063,285.55
101	CB to PH Rail Earth Works	Owned	$ 561,933,697	Equal Split	100	$80,525,221.79
102	CB to PH Railway Line	Owned	$ 196,368,238	Equal Split	25	$29,164,878.31
102.01-102.11	Curves < 400'	Owned	$ 7,472,669	Cloudbreak to Port Dumper	6	$1,939,049.17
102.12-102.22	Curves 400><800'	Owned	$ 13,252,947	Cloudbreak to Port Dumper	50	$1,901,497.42
102.23	CB to PH Rock Armour	Owned	$ 2,213,062	Equal Split	50	$317,524.21
1277	PH to CB Railway Sleepers	Owned	$ 55,637,300	Equal Split	50	$7,982,691.11
1290	Port Leaky Feeder in TUL Tunne	Owned	$ 180,587	Cloudbreak to Port Dumper	20	$27,786.28
1359-1372	Radio Base Stations	Owned	$ 9,419,015	All	20	$1,449,273.08
1373	Rail Culverts	Owned	$ 808,697	Equal Split	29	$118,400.57
1374	Rail Signals and Communication	Owned	$ 63,145,951	All	20	$9,716,061.01
1455	Signals for HBI Crossing	Owned	$ 324,259	Cloudbreak to Port Dumper	20	$49,892.65
1629	Water Bores along Rail Line	Owned	$ 7,676,541	Equal Split	29	$1,123,914.98
1632	Wayside Signals	Owned	$ 558,623	Equal Split	20	$85,953.44
10, 512, 913, 026, 327, 500, 000, 000	Bridges	Owned	$ 33,715,337	Cloudbreak to Port Dumper	50	$4,837,386.35
2041	Ore Car Tracking System	Owned	$ 174,721	Equal Split	29	$25,580.67
1734	Port Hedland Air Monitoring Pr	Owned	$ 181,468	All	29	$26,568.51
2044	Trackmobile	Owned	$ 416,970	All	29	$61,048.14
2032	Capitalised Rail Spares	Owned	$ 1,423,937	All	29	$208,477.25
2073	Pre-Prod Dev - Rail Infrastruc	Owned	$ 22,991,160	Cloudbreak to Port Dumper	29	$3,366,113.47
1765	Rail Turnouts CB to Port	Owned	$ 882,401	Equal Split	20	$135,772.16
2016	Relay Train Control	Owned	$ 513,485	All	20	$79,008.31
2017	Implement Train Controls in FM	Owned	$ 643,678	All	20	$99,040.69
2018	Supply of Test and Monitoring	Owned	$ 9,535	All	29	$1,396.00

2019	Supply of Portable Office and	Owned	$ 750,595	All	29	$109,893.87
2020	Gantry and Shotblast Equipment	Owned	$ 394,463	Cloudbreak to Port Dumper	29	$57,752.88
2021	Sealed Roadways	Owned	$ 3,540,125	Cloudbreak to Port Dumper	10	$687,452.63
2022	Traction Alternator	Owned	$ 2,249,112	Cloudbreak to Port Dumper	29	$329,290.38
2023	7FDL Engine & Alternator Lifti	Owned	$ 226,781	Cloudbreak to Port Dumper	29	$33,202.85
2024	Occupational Hygeine Monitoring	Owned	$ 33,749	All	29	$4,941.14
305	Light Vehicles refuelling stat	Owned	$ 396,163	Cloudbreak to Port Dumper	29	$58,001.77
308	Lube Oil Dispensing Stations	Owned	$ 19,448	Cloudbreak to Port Dumper	29	$2,847.31
309	Lube Oil Storage inc 20KL Tank	Owned	$ 53,171	Cloudbreak to Port Dumper	29	$7,784.68
310	Lube oil Unloading System	Owned	$ 41,390	Cloudbreak to Port Dumper	29	$6,059.93
N/A	Ancillary and Support Plant	Owned	$ 937,749	Cloudbreak to Port Dumper	5	$275,320.51
373	MFG Single Axle Drop Table	Owned	$ 446,916	Cloudbreak to Port Dumper	29	$65,432.49
1535	Tesco Tool Cart T24303	Owned	$ 117,059	Cloudbreak to Port Dumper	29	$17,138.45
1573	Under Floor Wheel Lathe Type U	Owned	$ 3,541,075	Cloudbreak to Port Dumper	29	$518,445.41
1705	IOCP Fleet Development Project	Owned	$ 512,192	Equal Split	29	$74,989.47
1715	Lockers - 305W Elitebuild	Owned	$ 842	Cloudbreak to Port Dumper	29	$123.31
10, 11, 256, 257, 258, 306, 307, 1334, 1380, 1381, 1772	Workshop and Yard Facilities	Owned	$ 30,949,258	Cloudbreak to Port Dumper	29	$4,528,199.40