

Pacific National Submission to the QCA in Relation to the Proposed Aurizon Network System Operating Parameters and Baseline Capacity Assessment

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1. Introduction

Pacific National welcomes the opportunity to make a submission to the Queensland Competition Authority (QCA) in relation to Aurizon Network's proposed System Operating Parameters (SOP) and Baseline Capacity Assessment Report (BCAR).

Pacific National has previously provided comments to Aurizon Network on earlier iterations of the SOP and BCAR documents.

Pacific National supports the establishment of a baseline capacity assessment process supported by a set of system operating parameters. This capacity assessment process will promote increased confidence in Aurizon Network system capacity, planning and operation. In particular it will promote confidence that there is sufficient capacity to deliver the train service entitlements Aurizon Network has contracted with access holders. The assessed baseline capacity should, at a minimum, meet the capacity that Aurizon Network is contractually obliged to meet. Where the baseline capacity assessment results in a capacity deficit, Pacific National believes that Aurizon Network has an obligation to rectify the capacity deficit, (as Aurizon Network is best placed to address any capacity deficit as it controls the manner in which rail infrastructure capacity is planned and allocated to users).

This submission is public.

2. Pacific National Comment on the SOP

Pacific National has numerous concerns in relation to the proposed SOP. These are outlined below.

General Comment on the SOP

Pacific National is concerned that the proposed SOP is overly theoretical and does not reflect how the Central Queensland Coal Network currently operates in practice. (For example the SOP applies single assumptions across all rail operations). In particular, the static framework of the proposed SOP does not reflect the dynamic nature of the network. This is important as this static approach will compromise any expansion analysis and operational analysis based on the SOP.

Pacific National is also concerned that the proposed SOP does not appear to take into account other elements of the coal supply chain (such as port capacity and mine loading capability) even

though these elements and interfaces with these elements will impact on system operations. These coal supply chain elements and interfaces need to be taken into account in the SOP.

In addition Pacific National believes that the SOP should contain additional information including:

- cycle time assumptions for each system; and
- sufficient information to allow independent validation of SOP assumptions. This information is important as the SOP contains the assumptions underpinning the BCAR. These assumptions should be able to be independently validated so that parties have confidence in the BCAR.

Specific Comment on Sections of the SOP

1.3.3 System Capacity Assessment – The proposed SOP states that in order to achieve a robust assessment of system capacity significant data is required to be provided by all elements of the supply chain.

Pacific National believes that the data requirements for the system capacity assessment must be defined in advance (ideally in the SOP or a similar document). The data requirements must be limited to the data required to develop the system capacity assessment and BCAR. The data provided must be protected by strong confidentiality and ring fencing provisions.

Pacific National is seeking that the SOP explicitly define the data requirements and explicitly refer to the protections that will be placed on third party data.

1.4 Capacity Assessment – Pacific National believes that the “Committed Capacity” presented in the diagram in the proposed SOP section 1.4 is overstated. Pacific National understands that the diagram is based on an assumption that the Train Service Entitlements (TSEs) are based on 360 days of availability but in reality the network is not available for 360 days due to maintenance possessions.

Pacific National is seeking that the SOP and BCAR be based on realistic assumptions relating to system availability and possessions.

2.2 SRTs - Pacific National understands that the SRTs provided in Appendix 1 of the proposed SOP have been used as an input into the capacity assessment. Pacific National notes that the SRTs in Appendix 1 of the proposed SOP differ from the SRTs included in individual access

agreements¹. Pacific National is concerned that the modelling of capacity is based on a single set of SRTs but that these SRTs may not reflect the SRTs contained in individual access agreements. This may result in the over-estimating or under-estimating of the system capacity available.

Pacific National is seeking that the SRTs used in the SOP be consistent with SRTs used in individual access agreements. If this is not possible then impact of the use of different SRTs on system capacity should be made explicit in the capacity assessment.

In addition to the above concern, section 2.2.1 of the proposed SOP outlines start and stop allowances for different Aurizon Network systems. The stop allowance (mins) for diesel operations in the Moura system is indicated as “0”. Pacific National queries if this number is correct, particularly given that all the other numbers in the table are positive integers.

2.5 Yards – This section of the proposed SOP references an “operator appendix”. Pacific National notes that there is no “operator appendix” attached to the proposed SOP and is seeking clarification on the nature of the “operator appendix”. (Pacific National recognises that an “operator appendix” may be provided to individual operators on a confidential basis, hence its removal from the public document package. If this is the case Pacific National is seeking that it be provided with the Pacific National operator appendix).

2.6 Interfaces – The proposed SOP states that the capacity assessment does not take into account constraints to the operations outside the Central Queensland Coal Network interface points. This raises concerns that the proposed SOP is not consistent with the access undertaking. Section 7A.4.1 b) iii) B) of the access undertaking states that the baseline capacity assessment must include consideration of interfaces between rail infrastructure and other elements of the supply chain.

Pacific National is strongly seeking that the SOP and the BCAR include consideration of interfaces between rail infrastructure and other elements of the supply chain.

4.5 Availability – The availability diagrams under this section of the proposed SOP are difficult to interpret in their current format. Pacific National believes that the available capacity (and what the available capacity represents) is not clear in these diagrams. Pacific National believes that supplying the spreadsheets that underpin these diagrams to stakeholders may assist in addressing this concern regarding interpretation.

¹ Pacific National understands that there may also be differences between the SRTs in different access agreements

4.6 Possession Protocols – The proposed SOP refers to an internal management processes by which Aurizon Network determines the quantum, duration and timing of possessions. Pacific National believes that there should be a degree of regulatory oversight of these procedures in order to ensure they are consistent with the access undertaking, particularly Schedule G (Network Management Principles) of the access undertaking. Pacific National believes that these procedures could be included in the scope of the QCA's regulatory audit of Aurizon Network.

5.3.1 Fleet Size – The proposed SOP states that in order to ensure that all demand is met the quantum of the rolling stock modelled may differ from the rolling stock operated in each system. Pacific National is concerned that the modelling of rolling stock differs from reality. This will result in the individual characteristics of operators and rolling stock (such as performance, consist size, wagon size, operating mode etc.) not being considered in the modelling.

Pacific National is concerned that the modelling of capacity based on assumed rolling stock may not reflect the capability of actual rolling stock. This may in turn result in the over-estimating or under-estimating of the system capacity available.

Pacific National is seeking that the rolling stock used in the SOP modelling be consistent with the actual rolling stock being used. If this is not possible then impact of the using different rolling stock assumptions on system capacity should be made explicit in the capacity assessment.

5.3.2 Payloads – The proposed SOP states payloads differ but it does not outline what payload has been assumed in the modelling. Pacific National believes that the modelling should be based on the payloads specified for each network system in Schedule F (Reference Tariff) of the access undertaking.

6.2 Temporary Speed Restrictions – The proposed SOP states that a historical period of temporary speed restriction data is selected to represent track speed restrictions. (The time period used is 1 Feb 2014 to 31 Jan 2015). Pacific National believes that Aurizon Network should explain why this particular period was selected, and other periods should be selected to test the appropriateness of this period. Pacific National is concerned that an unrepresentative temporary speed restriction data sample may skew the capacity results.

Aurizon Network should clarify if the graphic shown on the proposed SOP (page 40) reflects ECP or pneumatic braking trains, or whether the graphic is intended to be broadly representational (given the lack of numerical data Pacific National assumes that the graphic is intended to be broadly representational).

Aurizon Network should also clarify how, in relation to Table 14, the number of temporary speed restrictions is known for future months out to mid 2018.

In addition the proposed SOP (section 6.2) states that “Day of Operation” losses are being developed by Aurizon Network and that Aurizon Network assumes that these “Day of Operation” losses will incorporate part of the impact of speed restrictions. While “Day of Operation” losses may incorporate part of the impact of speed restrictions there are many other factors contributing to “Day of Operation” losses, such as weather, train crewing and operational issues at ports and mines. These factors have the potential to obscure the impact of temporary speed restrictions in “Day of Operation” losses. Pacific National believes that following the development of the “Day of Operation” losses Aurizon Network should clarify how the “Day of Operation” losses and temporary speed restrictions impact on each other.

Pacific National believes that the SOP should re-examine “Day of Operation” losses following the finalisation of Aurizon Network’s modelling in order to ensure the capacity assessment reflects reality

6.3 Day of Operation Losses – the proposed SOP states that to reflect day of operation losses the model randomly applies cancellation to 10% of empty train services scheduled to depart the origin. Pacific National believes that this 10% cancellation rate may be too conservative and should be supported with data.

3. Pacific National Comment on the BCAR

Pacific National has numerous concerns in relation to the proposed BCAR. These are outlined below.

General Comment on the BCAR

Pacific National welcomes the BCAR but believes that the provision of more detailed information in the BCAR would assist users to assessing existing and potential capacity opportunities in more detail. In particular Pacific National believes that the numerical data which underpins the charts in the BCAR (such as the demand profile and waterfall analysis) should be provided to participants. In particular Pacific National believes that the following information should be provided:

- further detail of the capacity losses arising from “Losses” and “Maintenance and Renewals” as shown in the BCAR system waterfall charts;

- the time period that each waterfall chart represents. (Pacific National assumes that the charts represent the two year forecast of capacity for each system); and
- further detail on the demand profile chart. Pacific National believes that the demand profile information should be available by month.

Pacific National believes that the baseline capacity assessment should extend beyond the two year period currently contained in the BCAR. Operational decisions relating to rail infrastructure and rolling stock often have longer time frames than two years² so extending BCAR beyond two years would assist in this decision making. Pacific National believes extending the BCAR to four or five years would be sufficient. (If the capacity assessments are intended to be flat beyond the two year time horizon then this should be made explicit in the BCAR). Pacific National recognises that extending the time frame of the capacity assessment will result in later year's capacity assessments being more uncertain.

Pacific National notes that the System Monthly Variance chart for each of the Aurizon Network coal systems shows a fall in the available train service entitlements in February each year. Pacific National is seeking that Aurizon Network confirm that this fall in the available train service entitlements is a function of the number of days in the month.

In addition to the above issues Pacific national believes that the BCAR should also contain information in relation to:

- where queues and bottlenecks (if any) are forming;
- the daily range of variation in the results for each system; and
- information regarding daily capacity peaks and whether these peaks are met.

Pacific National previously requested that Aurizon Network provide information relating to capacity assessments on branch lines. Pacific National welcomes the fact that the BCAR now contains information on branch line capacity assessments.

Specific Comment on Sections of the BCAR

Newlands and GAPE System (page 7) – the key operational information outlined for the other Aurizon network rail systems includes a maximum train speed; however the key operational information for the Newlands and GAPE System does not include a maximum train speed. Pacific national believes that this section should include a maximum train speed for this system.

² Investment decisions for mines, ports, rail infrastructure and rolling stock often have very long time horizons; often beyond twenty years. Pacific National is not proposing capacity assessments should be extended to these very long time horizons.

System monthly variance – Goonyella (page 14) – Pacific National notes that in August, September and October 2018 there appears to be a possibility that the target train service entitlements will not be met. If this is the case then Pacific National believes that Aurizon Network should consider shifting some maintenance to July and / or December to ensure that the target train service entitlements be met.

4. Conclusion

Pacific National supports the establishment of a baseline capacity assessment process supported by a set of system operating parameters as this will promote increased confidence in Aurizon Network system capacity, planning and operation.

Pacific National is concerned that the proposed set of system operating parameters does not reflect how network currently operates in practice. In particular the system operating parameters:

- are not based on assumptions that reflect operating realities;
- do not reflect the dynamic nature of the network; and
- do not take into account interfaces in the coal supply chain.

Pacific National believes that the baseline capacity assessment should:

- extend beyond the two year period currently contained in the BCAR;
- contain information relating to queues and bottlenecks and daily variations and peaks

In addition Pacific National believes that the provision of more detailed information in the SOP and BCAR would assist users to assessing existing and potential capacity opportunities in more detail.