

Appendix 3 Comments on Quality Standards and Definitions

Individual price-quality path (Transpower) consultation Update paper – November 2010

2.5 Quality Standards

Total Duration of Interruptions	<p>This measure should be renamed "Total Impact of Interruptions" for clarity. Note that the Commission has used this expression in parts of the draft determination.</p> <p>Transpower understands the requirement to report Customer Interruptions in System Minutes, but advises that the use of the term "Duration" of Interruptions is ambiguous and misleading as it is unclear whether it applies to the length of the interruption in clock minutes, or the unserved energy in system-minutes. Transpower discloses "Customer Interruptions in System minutes" for information disclosure but it is not referred to as duration.</p>
Submission on use of 5 year historical period for targets, caps and collars	<p>Transpower notes that its submission (superscript 37) was related to the appropriate historical period (5 or 7 years) to use for calculating parameters for the Total Duration (impact) of Interruptions measure.</p> <p>It is Transpower's understanding that, contrary to the Commission's response, HVAC circuit unavailability (unplanned) will be based on 5 years for the remainder period of RCP1, as per the transition year and the Commission's paper of 28 June 10. (And that this 5 year period applies to the loss of supply event frequency of measures also.)</p> <p>Transpower accepts that for consistency with the transition year the Commission wishes to continue using a 7 year historical period for the remainder period of RCP1.</p> <p>For future regulatory periods it remains Transpower's view that limiting (capping) the value of events included in measures is an appropriate approach for managing the impact of "outlier" events and actually avoids perverse outcomes for customers. In general terms historic data with uncapped outliers results in :</p> <ul style="list-style-type: none">• Parameters that are less representative of normal performance• More permissive (i.e. softer) targets• A wider range between cap and collar values

	<p>While acknowledging concerns that measure would not reflect the impact of interruptions on consumers, that is not the purpose of this measure. In any event:</p> <ul style="list-style-type: none"> • Transpower will be reporting on each event over 1 system minute so the impact on consumers would be acknowledge through this • the limit or caps on outliers could be set sufficiently high so that capped events are still recognised as large events. <p>Transpower also notes that the Commission indicates consistency with administrative assessment is a reason for not applying caps. As noted above, Transpower’s view is that the measures should be developed to suit the intended purpose, as part of a performance incentive regime.</p>
Reporting large events	Transpower recognises the value of providing these reports but notes that reports provided within a short time of the event may be interim only as depending on the event it may take some time to determine the

Draft Determination Paper

Part 2 Defined terms

HVAC	Industry definition is 'High Voltage Alternating Current' and should be used here.
HVAC circuit unavailability (unplanned)	<p>This is the name of the measure for a number of circuits, so singular references should be changed to plural in the first line of the definition:-</p> <p>HVAC circuit unavailability (unplanned) means the percentage of time that HVAC circuits are unavailable, where this is unplanned, and:</p> <p>Need to add in the 'Applies to' section :-</p> <ul style="list-style-type: none"> - HVAC transmission circuits operated as part of Transpower system at voltage equal to or greater than 33 kV. <p>Also don't know if it matters here as it is not technically an exclusion but Individual price-quality path draft reasons paper of 28 June also noted that any period in excess of 7 days would be capped at 7 days</p>
HVDC Bi Pole Availability	<ol style="list-style-type: none"> 1) Transpower has historically recorded and continues to record HVDC outage information to comply with the CIGRE reporting protocol Current reporting of HVDC availability is HVDC Energy Availability as defined in this protocol. 2) The draft definition mentions circuits and this implies just the physical transmission line, whereas the name of the measure indicates HVDC 'poles'. TP's HVDC measures are for HVDC 'poles' and include the converter equipment which form part of the link between the connections to the HVAC system. <p>For consistency with the CIGRE protocol and other published HVDC availability results, the definition for this document should be updated as follows:-</p> <p>HVDC Bi-Pole unavailability (unplanned) means the percentage of the time that the HVDC bi-pole is not 100% available weighted by the unavailable MW capacity, where this is unplanned , and;</p> <p>a) Is calculated as a percentage using:-</p> <hr/>

<p>Interruption</p>	<p>The reference to prescribed voltage electric line seems to be a lines company entity, and introduces an uncertainty in the application to Transpower, because TP has points of connection. The following definition is essentially the definition from the EIP Code Part 1, but modified to reflect that it refers only to supply customers (ie Part 4 does not apply to generators):-</p> <p>Interruption, for the purposes of Part 4, means an interruption in the conveyance of electricity from the grid assets owned by Transpower at a point of connection to the assets owned or operated by a designated transmission customer</p>
<p>Loss of supply event (a) includes</p>	<p>Section a) v) load restrictions</p> <p>Transpower collects and reports interruptions data for interruptions that result in “lights out” loss of supply, but does not collect detailed data for outages that result in load management by reducing controllable load such as hot water heating and irrigation loads. Neither is detailed information held for events that result in the operation of interruptible load as this is the subject of a contractual arrangement with a customer to operate their load in a certain manner.</p> <p>Section a) v) needs to be replaced with:-</p> <p>Load restrictions resulting from unplanned outages on the grid but excluding load reductions achieved completely by the use of controllable load or interruptible load. (see below)</p>
<p>Loss of supply event (b) excludes</p>	<p>Section b) ii) interruptions to electricity generators</p> <p>As written, this implies that interruptions to generators should be included where the impact is more than just the loss of auxiliary load used for internal purposes. The purpose of the measure is to measure performance to end user customers taking supply from the grid, and therefore, this section would be more precise if replaced with:-</p> <p>Section b) ii) interruptions to the auxiliary load used for internal purposes by electricity generators.</p>
<p>Loss of supply event (b) excludes</p>	<p>Further to “(a) includes” above, interruptible load and controllable should be added to the exclusions, viz:-</p> <p>(v) any reduction in load where this is achieved by reducing controllable load such as hot water heating and irrigation loads.</p>

	(vi) any reduction in load as the result of the operation of interruptible load.
Outage	Reference to the Code clause 12.120 is incorrect. Should be 12.130.
Total duration of interruptions	<p>The term “duration of interruptions” when referring to system minutes of unserved energy should be changed throughout all documents to:- “impact of interruptions”</p> <p>The use of the term “Duration” of Interruptions is ambiguous and misleading. It is unclear whether it applies to the length of the interruption in clock minutes, or the unserved energy (energy not supplied) in system-minutes.</p> <p>Transpower consistently uses the duration of an interruption to mean the elapsed time (clock time) between the initiating event and the restoration. Unserved energy (in system minutes) is disclosed as “Customer Interruptions in System minutes” as required for Information Disclosure and as Unserved Energy, Non-supply, “Supply Interruptions in system minutes”, or “impact of interruptions” for other purposes, but never uses ‘duration; to describe this quantity.</p> <p>Note that the Commission has used the term “impact of interruptions” in 4.3 (2) (b) (iii), 4.4 (3) (b) (iii), 5.5 (1) (c) (iv), 5.5 (2) (c) (iv), and that Transpower agrees with this usage.</p> <p>ALSO – please refer to comments on Loss of supply event as all these comments also apply to Total duration (impact) of interruptions</p>

Part 4 Quality standards

4.1 (1) (d)	Should be renamed as “total impact of interruptions”
4.2 (1) (c)	Should be renamed as “total impact of interruptions”
4.3 (2) (b) (i)	Transpower may not be able to provide a definitive reason or reasons within 5 working days as depending on the nature and complexity of the event it may take considerably longer to fully determine this. This information would be updated as necessary in the end of year report. Re-word as “reason or reasons as have been determined at that time”??
4.3 (3) (b) (i)	Comment as for 4.3 (2) (b) (i) above