

Cl#	Clause	Proposed Cl#	Description of Change	Objective	Alternatives	Benefits	Costs
1	This is the policy statement referred to in clause 8.8 and 8.9 of the Code and sets out the policies and means that are considered appropriate for the system operator to observe in complying with the principal performance obligations (PPOs) subject always to the obligation of the system operator to act as a reasonable and prudent system operator and to therefore depart from the policy statement if so required.		Remove reference to Code clauses as many clauses in the Code refer to the Policy Statement	Clarity	Status quo	Clarity	None
4	The policies to be adopted in respect of avoiding the cascade failure PPO are set out in:		Reworded to reflect changes to wording of PPOs in the Code following the 19 May 2016 amendment	Clarity	Status quo	Clarity	None
5.1.1	Sets the overall objective for maintaining frequency reserves for contingent events and extended contingent events.		Remove reference to "frequency" reserves to avoid confusion	Clarity	Status quo	Clarity	None
7	The policies to be adopted in respect of the other PPOs (clause 7.2(1)(c) of the Code) are described in the Security Policy section on Management of Quality.		Remove reference to specific Code clauses following 19 May 2016 amendment	Clarity	Status quo	Clarity	None
11.6	Taking action available under the Code as reasonably requested by any person to identify the cause of harmonic levels, voltage flicker or, voltage imbalance standards not being met		Reworded to reflect changes to wording of PPOs in the Code following the 19 May 2016 amendment	Clarity	Status quo	Clarity	None
12	Identifying potential credible events (each an 'event') on the power system as a result of asset failure that may result in cascade failure. At the date of this policy statement the system operator has identified the following credible events that may result in cascade failure, due to these events causing quality and/or power flow outcomes exceeding asset capability:		The system operator's policy for categorising interconnecting transformers and busbars has changed. Categorisation is now on the basis of a quantified risk assessment. The risk assessment methodology and results are intended to be published on the Transpower website.	Improving the system operator's risk management by moving away from general application of rules to managing risk on a cost basis.	Status quo	If the risk of loss of specific assets are able to be assessed lower, then there is less cost to the market in mitigating potential outcomes.	Minor costs in performing the risk analysis.
12.1.7	If, during the term of this policy statement, the system operator identifies a further or other credible event then, subject to operational requirements and as soon as reasonably practicable, the system operator shall: • advise such further credible event to all participants; • invite participants to comment on such credible event; and • consider participants' comments prior to it implementing mitigation measures for such credible event.		Replace "shall" with "must"	Maintain Policy Statement to the drafting standard.	Status quo	Clarity	None
12.2	Assessing each event, or category of events, to estimate the likely risks based on the potential impact on the power system (including on achievement of the PPOs), if the event or category of events occurs. Consequence assessment has taken and must take into consideration mitigating factors such as: •AUFLS. •The provision of levels of reserves, where justified for mitigation of other events. •The provision of constraints on dispatch, where justified for mitigation of other events. •The probability of occurrence based on historical frequency of asset failure or other credible reliability information, provided that where the system operator has limited historical or other information for specific assets, it must consider generic information available to it regarding failure of that type of asset. •The estimated costs and benefits of identified risk management. •The feasibility and availability of other potential mitigation measures.		Remove "where justified for mitigation of other events " (where other events is defined according to clause 12.4)	Updated for clarity. Instantaneous reserve and dispatch constraints are mitigants for contingent events as well as other events.	Status quo	Clarity	None
12.4	Categorising, at the date of this policy statement the following credible events:		Reword reference to the system operator's website to reflect that the specific system operator website no longer exists	Clarity	None	Clarity	None
	ibid		Remove reference to busbars being classified as extended contingent events, as new risk assessment processes may result in different classification	Clarity	None	Clarity	None
	ibid	12.4.1	Introduce busbar classification methodology and policy to make available the methodology and results on the Transpower website	Improve transparency of the busbar risk classification process	Status quo	Improved transparency	Minor (administrative)

	ibid	12.4.2	Introduce the requirement to invite comment from industry prior to making any changes to the methodology referred to in clause 12.4.1	Improve transparency of the busbar risk classification process	None	Improved transparency	Minor (administrative)
13.1	In addition to the annual review of the policy statement in accordance with clauses 8.11 and 8.12 of the Code, review the identification, assessment and assignment of potential credible events in clause 12 not less than once in each period of five years. The most recent review was concluded in 2014.		Reword to remove Code references and recognise most recent contingent event review was 2014.	Clarity	None	Clarity	None
14	In determining and applying the methodology in clause 13, the system operator must, where appropriate, apply risk management principles consistent with the Australia and New Zealand risk management standard AS/NZS 4360 or such recognised standard as is adopted in replacement or modification of AS/NZS 4360.		Reference updated risk management standard	To reflect current operational practice	None	Clarity	None
17	The quality levels the system operator plans to achieve for contingent events and extended contingent events are set out below. The ability to achieve the quality levels is entirely dependent on sufficient assets and ancillary services being made available to the system operator		Add "and the accuracy of the stated capabilities of those assets and ancillary services."	Highlighting, for clarity, that the system operator makes decisions around how to maintain its quality standards relying on the stated capacities of the resources available to it	Status quo	Clarity	None
25	The system operator must, using the process set out below in clauses 26 to 29, develop security constraints for each trading period with the intent of assisting the system operator to		25.2 - Insert "or stability event" recognising that a stability event may cause a threat to stability limits; Insert new subclause 25.4, recognising that the system operator may develop security constraints to assist with maintaining voltage within the range set out in clause 8.22 of the Code.	Clearly reflecting operational practice	Status quo	Clarity	None
27A	The system operator may use either automated or non-automated processes to develop the security constraints under clause 27. Circumstances under which non-automated processes will be used include (but are not limited to) circumstances where the automated system cannot accurately model a protection scheme or where multiple branches are required to be modelled in the constraint.		Reworded for clarity. The cited examples were not accurate representations of where manual constraints were used	Clarity	Status quo	Clarity	None
28	The security constraints which are developed under clause 27 shall be those which arise as a consequence of either or both the transmission capability limits and the power system stability limits being equal to or greater than the applicable constraint percentage threshold .		Updated wording to clarify that only security constraints generated by automatic processes are subject to the constraint percentage threshold	Clarity	Status quo	Clarity	None
30.1	Publish to participants on the system operator website:		Removed reference to system operator website	To reflect current operational practice	Status quo	Clarity	None
30.1AA	Where practicable, occur four weeks prior to the date on which such limits or security constraints are intended to be first used, where the system operator identifies an outage or security constraint that could be of significant interest to participants .		For clarity, removed references to stability limits as these are incorporated into security constraints	Clarity	Status quo	Clarity	None
30.1A	If a change to a power system stability limit or security constraint of one of the types described in clause 30.1 is made within two weeks before it is intended to be first used...		For clarity, removed references to stability limits as these are incorporated into security constraints, removed reference to system operator website	Clarity	Status quo	Clarity	None
30.1B	Correctly apply power system stability limits and security constraints regardless of whether or not the published information on the system operator website about the power system stability limits or security constraints is complete or up to date.		For clarity, removed references to stability limits as these are incorporated into security constraints, removed reference to system operator website	Clarity	Status quo	Clarity	None
30.2	Notify the information system service provider for publication through the information system when a security constraint other than a frequency keeping constraint has been applied to SPD for use in—		Reworded to exclude "general" market node constraints from the publication requirement, reflecting current practice. Removed reference to information system in line 2016 Code Review Programme	Clarity	Status quo	Clarity	None
30.4	Provide to the information system service provider for publication through the information system in respect of each security constraint notified pursuant to clause 30.2: ...		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None
30.4A	For the purposes of clauses 30.2 and 30.4, a constraint is only required to be notified and published if its calculated flow is equal to or greater than the applicable constraint publication threshold.		Revoked as redundant	Clarity	Status quo	Clarity	None

30B	The system operator must advise a set of generation scenarios that it will use to develop indicative security constraints under clause 30C, and may amend the generation scenarios from time to time. The system operator will place any amendments on Transpower's website and at the same time notify participants of these amendments.	Removed reference to system operator website	To reflect current operational practice	Status quo	Clarity	None
30E	The system operator must publish indicative security constraints developed under clause 30C to participants on the Planned Outage Co-ordination Process website. The information published must include a summary of the limits or security constraint design, such summary to be reasonably sufficient for participants to assess the effect of the security constraint .	Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None
33B	For the purposes of the event charge calculation pursuant to clause 8.64 of the Code, the system operator will use the methodology published through the system operator website	Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None
34	The system operator contracts with an ancillary service agent to provide frequency keeping and manage frequency time error within the limits required in clauses 7.2(1)(b)(v) and (vi) of the Code. The procurement of this service is described in the procurement plan .	Change reference to Code clauses following 19 May 2016 amendment	Clarity	Status quo	Clarity	None
36	The system operator must aim to dispatch over frequency reserves when necessary to maintain the frequency within the upper limits of clauses 7.2(1)(b)(iii) and 7.2(2) of the Code (so that the frequency does not exceed 52Hz in the North Island and 55 Hz in the South Island) for contingent and extended contingent events. In determining the quantity of over frequency reserves to be dispatched in the South Island, the system operator must take into account the actual amount of South Island demand, the HVDC link transfer northwards, and the number and capacity of the units able to be dispatched for over frequency reserves at the time.	Change references to Code clauses following 19 May 2016 amendment, and clarify criteria for over-frequency reserve arming	Clarity	Status quo	Clarity	None
37	The system operator must monitor the rate of occurrence of frequency fluctuations and report this to the Authority as required by clause 7.2E of the Code	Revoked as redundant (clause 7.2E of the Code describes the system operator's obligation)	Clarity	Status quo	Clarity	None
38	The system operator may recommend changes to the procurement plan , policy statement or Code, or take other action available to it under the Code, with the intent to correct a significant negative trend regarding the rate of momentary fluctuations	Reworded (use of 'momentary fluctuations') following 19 May 2016 amendment	Clarity	Status quo	Clarity	None
48	Where the system operator is made aware of any problem in relation to clause 7.2(1)(c) of the Code and where, in the system operator's opinion, the problem is not likely to cause cascade failure, the system operator must:	Change reference to Code clauses following 19 May 2016 amendment	Clarity	Status quo	Clarity	None
49	The system operator must assess any problem in relation to clause 7.2(1)(c) of the Code to ascertain whether that problem may lead to cascade failure. If the problem could lead to cascade failure the system operator must seek to identify the cause of the problem and, if any problem remains unaddressed:	Change reference to Code clauses following 19 May 2016 amendment	Clarity	Status quo	Clarity	None
52	In establishing and facilitating such a forum, the system operator must:	Reworded for clarity	Clarity	Status quo	Clarity	None
63	Where the system operator has identified a situation requiring the use of the controls in this Emergency Planning section of the Security Policy prior to two hours before the start of the relevant trading period , the system operator must issue a Warning Notice	Changed timeframe for declaring a grid emergency from two hours before real time to one hour before, reflecting change in gate closure period.	Consistency with Code obligations for revising bids and offers	None	Consistency with Code	Minor (administrative)
64	Where the system operator has identified a situation requiring the use of the controls under this Emergency Planning section of the Security Policy within two hours prior to the start of the relevant trading period or during the relevant trading period , the system operator must issue a Grid Emergency Notice	Changed timeframe for declaring a grid emergency from two hours before real time to one hour before, reflecting change in gate closure period.	Consistency with Code obligations for revising bids and offers	None	Consistency with Code	Minor (administrative)
67	Formal notices issued in writing must be sent to all participants that, in the system operator's view, may be able to assist in the mitigation of the grid emergency or will have a significant interest in the occurrence and nature of the grid emergency. All formal notices issued in writing must be shown on the system operator's website as soon as reasonably practicable after being first sent to participants	Reword reference to the system operator's website to reflect that the specific system operator website no longer exists	To reflect current operational practice	None	Clarity	None
74	Demand Shedding (table)	Changed timeframe for declaring a grid emergency from two hours before real time to one hour before, reflecting change in gate closure period.	Consistency with Code obligations for revising bids and offers	None	Consistency with Code	Minor (administrative)
88	Each price-responsive schedule and non-response schedule must, in addition to complying with the requirements of Schedule 13.3 of the Code, include:	Updated wording to include clause 13.58A as the clause detailing inputs to the non-response and price-responsive schedules	Consistency with Code obligations	None	Consistency with Code	None

92A	Once the system operator has completed a week-ahead dispatch schedule, the system operator must provide to the information system service provider, for publication through the information system, prices for electricity determined by the system operator from the week-ahead dispatch schedule for:		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None
93A	The system operator must notify the information system service provider for publication through the information system when it has applied a constraint to the dispatch schedule to directly constrain generation or instantaneous reserve (excluding frequency keeping constraints). The notification must include...		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme, and consistency with current practice	Clarity	Status quo	Clarity	None
96.2	Whenever the system operator identifies a breach or a suspected breach of the Code by the system operator , investigate the incident to determine:		Reworded for clarity	Clarity	Status quo	Clarity	None
98.7	Where the system operator has information that is not information it is required to keep confidential and on which it has relied in determining, under clause 98.5 not to rely on the accuracy of an asset owner asset capability statement it must notify such information to the relevant asset owner as soon as reasonably practicable.		Reworded for clarity	Clarity	Status quo	Clarity	None
	(new clause) The system operator will make available on the its website a list of granted dispensations and equivalence arrangements, such list to include the asset and clause of the Code to which each dispensation and equivalence arrangement relates.	99A	Transpower as the system operator will publish on its website a list of granted dispensations and equivalence arrangements	Increased transparency around the dispensation and equivalence arrangement processes	Status quo - continuing to not disclose granted dispensations and equivalence arrangements	Transparency for market participants	Minor (administrative)
102	The system operator must publish on its website a form of urgent change notice which may be used by an asset owner to inform the system operator of an urgent or temporary change in asset capability where clause 2(6)(b) of Technical Code A of Schedule 8.3 of the Code does not apply. An urgent or temporary change in asset capability is a change where the asset owner ...		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme, and consistency with current practice	Clarity	Status quo	Clarity	None
108	The system operator has identified a number of areas where asset performance can have a significant impact on the system operator's ability to comply with the PPOs. These include: 108.2 Generator asset capability: - Voltage - Frequency		Inserted other areas where asset performance can impact on the system operator's ability to comply with the PPOs, including (108.2) generator fault ride-through capability, and (108.4) embedded generator frequency response and fault ride-through capabilities	Clarifying areas where asset performance can affect the system operator's ability to comply with the PPOs	Status quo	Clarity	None
	(new clause) For the purpose of carrying out an assessment of fault ride through compliance under clause 8.25A of the Code, the system operator must make available on its website a summary of the assumptions used in the assessment.	114A	Introducing the assumptions with which assessments of fault ride-through compliance will be made	Clarifying the system operator's practices in implementing new Code provisions related to fault ride-through	None	Clarity	Minor (administrative)
	(new clause) [duplicates clause 118 for grid owners in the South Island]	117A	Clarifies AUFLS requirements relate to the grid owner in the South Island	Clarity	Status quo	Clarity	None
119.2	Display a 'Connection and Dispatch Guide' on the system operator's website to describe the studies undertaken by the system operator at different stages of commissioning and the timeframes for assessment required by the system operator at different stages of commissioning. ...		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme, and consistency with current practice	Clarity	Status quo	Clarity	None
128.2	An explanatory guide to assist asset owners to implement the requirements for asset testing in clauses 2(6) to (8) and 8(2) of Technical Code A of Schedule 8.3 of the Code and testing after modification and commissioning . Such explanatory guide must:		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme, and consistency with current practice	Clarity	Status quo	Clarity	None
154	The system operator maintains operational review processes that capture issues for which possible change to the policy statement may be desirable. Such matters are logged for consideration during the annual review of the policy statement . The matters logged include issues raised with the system operator by participants and the Authority		Updated wording to reflect policy statement reviews occur biannually	Clarity	Status quo	Clarity	None
162	[Constraint percentage definition]		Revoked as no longer used	Clarity	Status quo	Clarity	None
162A	[Constraint percentage threshold definition]		Updated wording for definition clarity	Clarity	Status quo	Clarity	None
162B	[Constraint publication threshold definition]		Updated wording for definition clarity	Clarity	Status quo	Clarity	None
178	[Security constraint definition]		Reworded for clarity and avoiding redundancy	Clarity	Status quo	Clarity	None
181A	[Standby residual shortfall threshold definition]		Reworded reflecting changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None
	(new definition) WITS	190	Meaning the wholesale information trading system, consistent with changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None
	(new definition) WITS manager	191	Meaning the market operation service provider who provides WITS, consistent with changes to definitions for "publish" and "information system" proposed in the 2016 Code Review Programme	Clarity	Status quo	Clarity	None