Horizon Networks Energy Distribution trading
as Horizon Networks Networks

52 Commerce Street, Whakatāne 3120
PO Box 281, Whakatāne 3158
T +64 7 306 2900 F +64 7 306 2907
www.Horizon Networksnetworks.nz

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Dane Gunnell
Manager, Price-Quality regulation
P O Box 2351
Wellington 6140

By email: regulation.branch@comcom.govt.nz

Dear Dane

Submission on the Default Price-Quality Paths for Electricity Distribution Businesses from 1 April 2020 – Draft Decision

1. Introduction

1. Horizon Energy Distribution Limited ("Horizon") welcomes the opportunity to provide feedback to the Commerce Commission ("Commission") on the default price-quality paths for non-exempt electricity distribution businesses from 1 April 2020, draft decision ("DPP3 paper").

2. Horizon has concerns regarding the process outlined by the Commission on page 33 in the steps taken by the Commission post the Issues paper submissions given the significant changes that have now been published in the DPP3 paper. The early provision of working models to assess the quality standard changes would have been extremely helpful in gaining an understanding of the likely impact of the changes proposed.

3. Horizon support the submissions provided by the Electricity Networks Association ("ENA") and agree with the ENA submission apart from Horizon's preference to remain supportive of a three out of five-year rule for quality standards as this timeframe aligns more practically to the "no material deterioration in reliability" principle, where in our view deterioration relates to the underlying asset performance.

4. Horizon notes the Commission's comment on page 195, clause B189 regarding the pending purchase of transmission assets in the year ending 31 March 2019. Horizon confirm that the purchase of the Te Kaha assets was completed on 2 July 2018 and the necessary disclosures relating to current and future capex and opex is contained with the 2019-2029 Asset Management Plan. A separate section (6) is included in this submission to address the key implications of this purchase for Horizon in the DPP3 period.

2. Submission Summary

5. The DPP3 paper includes significant changes from the DPP2 framework with 28 major changes and 13 new measures. The ENA submission addresses the key changes within the DPP3 paper and refers to the concern ENA members have regarding the revenue allowances systematically under-compensating members for their expected costs over the DPP3 period. In addition, the other key concern is the significant changes in the quality standards and reliability incentive regime. With this emphasis Horizon's submission will focus on key areas that are specific to Horizon with each area having the potential to incur additional costs during the DPP3 period.

6. Horizon's current opex and capex forecasting adopted in the working models as part of the DPP3 paper currently excludes the recent acquisition by Horizon of the Te Kaha transmission asset which is addressed in paragraph 3.1. Horizon would support a specific information gathering request to provide forecast opex

relating to the purchased transmission assets if this would assist the Commission in attributing specific opex allowances for these newly acquired assets.

7. The IRIS modelling undertaken by Horizon for the DPP3 period indicates an asymmetric risk due to the increase in actual opex when the transmission assets that have been purchased, this is an inequitable outcome as it currently is proposed refer paragraph 3.2

8. The current reference period outage information for Horizon will require adjustment to reflect the change in assets purchased refer paragraph 3.3.

9. Horizon is concerned due to a lack of consensus, the Commission has proposed significant changes to the quality standards that in Horizon's view will add complexity and cost and when treated as a package do not achieve the Commissions principle of "no material deterioration in quality standards" refer clause 4.1. Horizon does not support the one-year breach criteria as this will impose additional costs to what has been stated as being a low cost regime.

10. Horizon supports the separation of unplanned and planned interruptions with the reference period being updated to the most recent ten and five years respectively. Horizon supports the annual standard set being 1 standard deviation above the normalised historical average SAIDI and SAIFI but with a +5% limit on the change in the standards from DPP2.

11. The "statistical" normalisation method proposed in the DPP3 paper also appears to generate a higher level of false positives than the current regime and Horizon provides some context to this statement in paragraph 4.3.

12. Horizon has provided an analysis in paragraph 4.4 that has been prepared by the network team that supports that a breach position by itself does not imply material deterioration in reliability.

13. Horizon management support the pooling proposal of the innovation allowance as outlined in clause 5.

14. Horizon support in principle the introduction of the enforcement guidelines but add a note of caution that having experienced two separate investigations for price and quality non -compliance, Horizon consider it is important to convey the practical issues including the time and cost to a business should a non-compliance occur. The quantum of information required needs to be balanced with the burden of costs to provide, which should link to clear criteria and guidelines for Distributors. It is also equally important that time periods to provide information are realistic and achievable without imposing undue costs and in respect to the Commission's response time this should also be transparent. Refer paragraph 6.1.

3. Transmission Assets Acquisition

3.1. Opex and Capex Forecasting

15. As noted in section B189 the Commission states "we will engage directly with Horizon Energy about the implications of this purchase for their DPP, with the benefit of their 2019 AMP allowances". Horizon note that two scenarios were included in the 2018 AMP with and without the acquisition of Te Kaha.

16. Horizon confirms that the 2019 AMP forecasts include opex and capex allowances relating to the Te Kaha transmission assets and the purchase on 2 July 2018 is also reflected in the following schedules of the 2019 Information Disclosure Reports -
    - Schedule 4 (ii)assets acquired from a regulated supplier
    - Schedule 6a(i) and 7(ii) system growth
    - Schedule 6b(i) operational expenditure
    - Schedule 9a,9b, Asset register and age profile
    - Schedule 9e circuit length 50kV & 66kV (66 km overhead circuit length)

3.2. IRIS Impact

17. Horizon note the comment by the Commission in E67 to "*seek views on whether we should neutralise the impact of the opex IRIS adjustments for distributors who have purchased transmission assets*".

18. Horizon supports the Commission's suggestion to neutralise the impact of the opex IRIS adjustments for Distributors who have purchased transmission assets. There will otherwise be an asymmetric risk due to the increase in actual opex compared to forecast opex, where transmission assets have been purchased after the setting of the base year.

19. Horizon would support a specific information gathering request to provide forecast opex relating to the purchased transmission assets, if this would assist the Commission in attributing specific opex allowances for these newly acquired assets.

3.3. Restatement of Quality standards

20. Horizon is including the reference period outage information relating to the purchased transmission assets as part of the Section 53ZD(1)e and 53ZD(1)(f) request dated 28 June 2019, on the understanding this will result in a restatement of quality standards for the DPP3 period.

4. Quality standards and incentives

4.1. Principles based approach

21. Horizon note the Commission's comments in clause 7.18 regarding submissions to the Issues paper and the fact that stakeholders do not agree on which quality measures should be implemented for DPP3. Reference is made to the ENA QoS Working group input and the submission that was put forward by the ENA.

22. Horizon acknowledge that each Distributor can at times have varying views on outcomes from working groups which can lead to alternative viewpoints in submissions that the Commission receive. The magnitude of the changes being proposed by the Commission is stated as being "*whilst substantial it is proportionate to the importance of the issue and the scale of change in the industry as a whole*".

23. Horizon are concerned due to a lack of a consensus the Commission has proposed significant changes that add complexity and cost, and when treated as a package do not achieve the Commission's principle of "no material deterioration in quality standards".

24. Horizon has taken a principles-based approach to reviewing the proposed changes to the quality standards regime, rather than cherry-picking elements which appear to favour Horizon's network. The principles Horizon have applied can be summarised as follows -

    - Are the changes consistent with "no material deterioration"– it is Horizon's view deterioration relates to the underlying asset performance as opposed to High Impact Low Probability events.
    - Does the normalisation process increase the risk of false-positives.
    - Does the regime represent a sufficient improvement in outcome to offset the increased complexity.
    - Does the regime introduce perverse or unintended outcomes.
    - Does the regime reflect underlying asset deterioration processes and performance.

25. Horizon supports the separation of unplanned and planned interruptions with the reference period being updated to the most recent ten and five years respectively. Horizon supports the annual standard set being 1 standard deviation above the normalised historical average SAIDI and SAIFI but with a +5% limit on the change in the standards from DPP2.

4.2. Unplanned interruption standard

26. Horizon supported some alignment to the DPP framework and submitted a three out of five rule which was based on promoting an alignment to the DPP regulatory period but also with the lens of a "no material deterioration in reliability" as being the underlying principle for the quality standards framework.

27. Horizon see this timeframe as being appropriate to reduce the risk Distributors over invest to mitigate infrequent events and false-positives as there is a clear history of under-performance before instigating enforcement action. It also provides Distributors an appropriate signal to implement improvements as there is a longer timeframe before non-conformances with the quality standard are cleared.

28. Horizon understands the Commission prefers less time between an occurrence of non-conformance and the Distributor review, however Horizon suggests this is adequately addressed by the increased reporting requirements proposed.

29. Horizon note that ENA's submission to retain 1.5 standard deviations and the 2 out of 3 rule would achieve a similar outcome to Horizon's submission and if the Commission preferred to retain a shorter time period for assessment, and although less reflective of underlying deterioration trends, Horizon would be supportive of this approach also.

30. Horizon does not support an annual process for assessing unplanned outages and considers the shift to a one-year assessment implies material deterioration can happen quickly as opposed to over a long period which is counter-intuitive in that an asset strength weakens over a period of 50+ years.

31. In addition, failure mode curves for assets increase near the end of life but there is no large discontinuity. Hence by definition a sudden change in SAIDI year on year without a worsening trend prior to it must be the result of extra loading (or external forces) on the asset as opposed to deterioration.

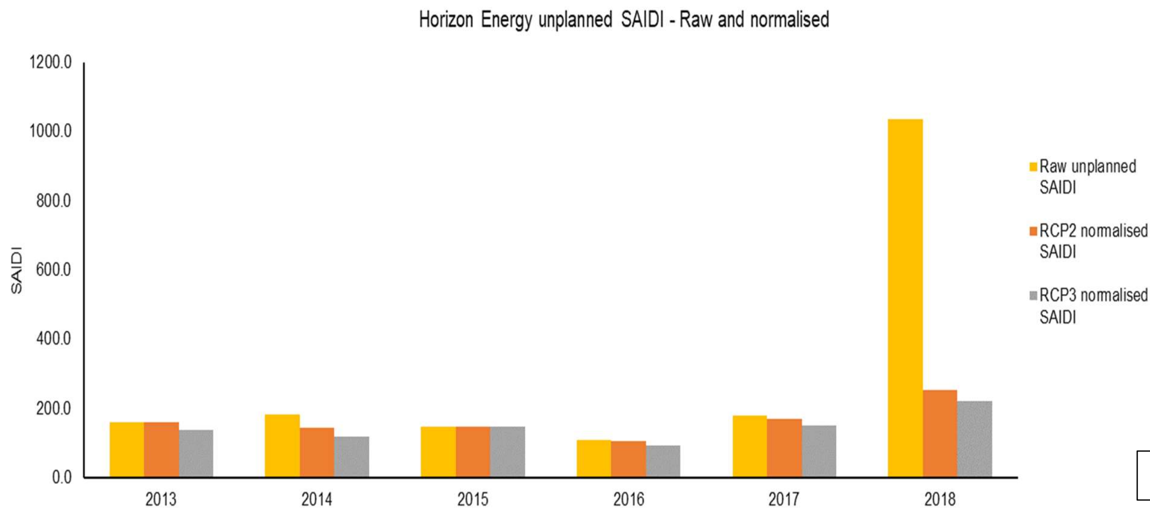
32. The Commission states that "*under the two out of three-year rule "significantly high levels of unreliability over a year were not considered to be contravention on their own*". This suggests that the Commission has landed on what is considered a high level of reliability which was not captured by the DPP2 regime.

33. Horizon would not encourage the Commission to seek to introduce a one-year breach criteria as this will impose additional cost to what has been stated as being a low-cost regime. The ongoing investigation into Horizon's 2018 breach of the quality standards has cost the business more than $200,000 to date.

4.3. Normalisation comparison DPP2 vs DPP3

34. The "statistical" normalisation method proposed also appears to generate a higher level of false positives than the current regime.

35. With reference to the ENA's comparative analysis, for Horizon, only 2015 matches between DPP2 and DPP3 normalisation methods. It is unclear as to why the DPP3 unplanned method normalises in 2013 and 2016. Years in which there were no Major Events on the Network and suggests a number of false-positives are being identified and normalised. Not only is this not reflective of the underlying Network performance but will require increased disclosure and costs associated with managing these non-events – which are likely only to be attributable to statistical co-incidence.



Source PWC

36. A simple comparison of the normalisation methods under DPP2 and DPP3 is presented below where the standard deviation of SAIDI and SAIFI over the time series is used (rather than the percentage of each quantity normalized) to infer whether the DPP3 method is an improvement over the DPP2 method. One may expect that because more normalisation occurs with the DPP3 method that this will result in less variability in performance outcomes under DPP3 for all Distributors, however this is not evident with a random mix of Distributors having higher variability under the proposed method. This outcome of the proposed approach does not appear to correlate to those Distributors who exceeded their quality limits in DPP2 either and represents both large and small Distributors. It is unclear to Horizon why the proposed normalization process would suggest these businesses actually had more variability in their performance than the previous framework?

Table B4 – Comparison of the standard deviation in SAIDI performance after normalising unplanned SAIDI using RCP2 and RCP3 methods w here RCP3 deviations are greater than RCP2

EDB	SAIDI											Standard deviation in SAIDI 2009 – 2018 FY	
Years	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average (2009-2018)	RCP2 Method	RCP3 Method
Alpine Energy	108	104	139	99	110	197	91	145	97	85	**118**	33.9	32.8
Aurora Energy	59	58	87	85	53	71	88	120	85	114	**82**	22.6	17.6
Centralines	121	65	102	74	41	64	70	38	54	89	**72**	26.1	19.2
EA Networks	110	87	94	99	94	136	113	90	83	101	**101**	15.6	13.3
Eastland Network	186	244	254	297	213	257	228	180	228	211	**230**	35.1	34.8
Electricity Invercargill	26	27	29	23	11	15	25	20	9	23	**21**	7.0	5.9
Horizon Energy	117	120	143	150	159	142	147	106	168	252	**150**	40.5	36.2
Nelson Electricity	13	10	4	3	12	8	10	5	6	5	**8**	3.6	4.5
Network Tasman	87	85	122	104	90	77	85	84	97	85	**92**	13.0	11.6
Orion	40	40	116	139	77	108	96	79	68	65	**83**	32.1	25.0
OtagoNet	106	153	130	147	112	173	204	176	160	126	**149**	30.8	29.1
Powerco	155	148	188	182	120	173	170	151	178	167	**163**	20.2	20.5
The Lines Company	188	165	194	208	115	188	153	163	193	210	**178**	29.2	29.9
Top Energy	571	400	419	425	257	419	446	395	400	405	**414**	75.6	78.5
Unison Networks	77	61	85	100	56	76	71	61	96	106	**79**	17.5	16.3
Vector	95	67	93	79	74	117	136	110	144	184	**110**	36.5	36.9
Wellington Electricity	34	39	30	41	36	54	34	28	47	45	**39**	8.2	7.5

Source PWC 25th June 2019

Table B6 – Comparison of the standard deviation in SAIFI performance after normalising unplanned SAIFI using RCP2 and RCP3 methods where RCP3 deviations are greater than RCP2

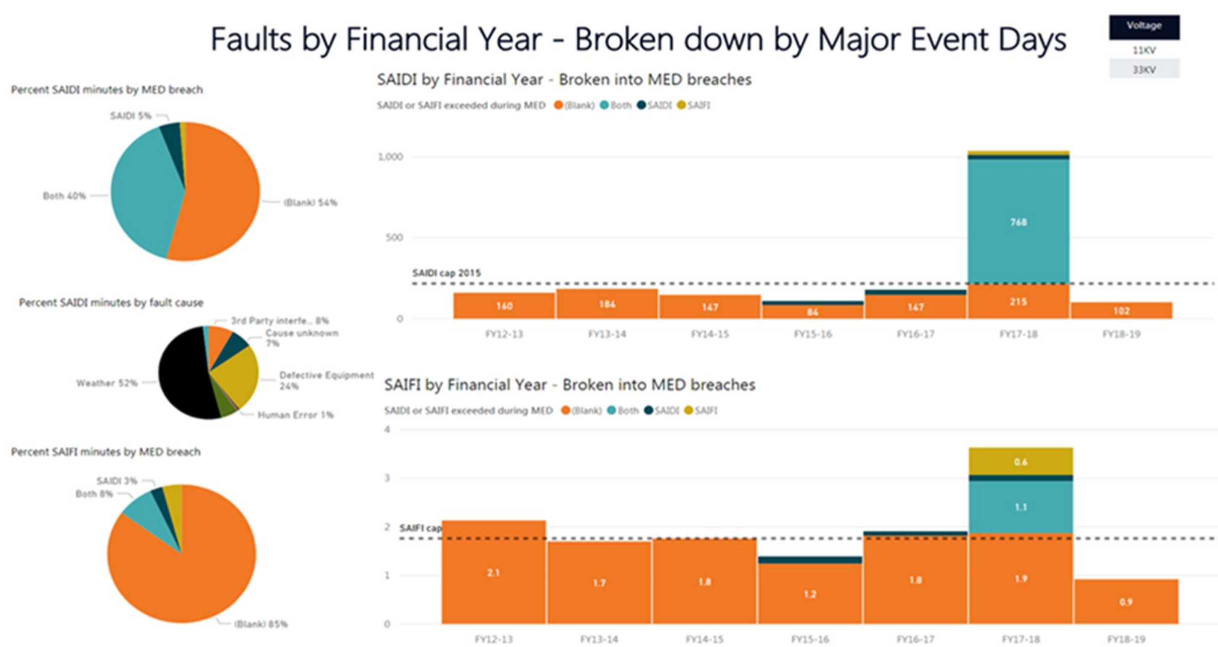
EDB	SAIDI											Standard deviation in SAIFI 2009 – 2018 FY	
Years	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Average (2009-2018)**	**RCP2 Method**	**RCP3 Method**
Alpine Energy	1.16	1.23	1.36	1.00	1.10	1.61	0.86	1.05	0.92	0.89	**1.12**	0.23	0.23
Aurora Energy	1.16	1.23	1.35	1.47	0.84	1.08	1.21	1.68	1.23	2.07	**1.33**	0.34	0.28
Centralines	3.70	1.90	4.00	2.94	1.95	2.54	2.13	1.26	1.52	1.97	**2.39**	0.90	0.80
EA Networks	1.43	1.21	1.25	1.27	1.34	1.62	1.59	1.14	1.15	1.41	**1.34**	0.17	0.18
Eastland Network	3.03	3.29	3.18	3.32	3.27	2.92	3.88	2.56	3.11	3.12	**3.17**	0.34	0.41
Electricity Invercargill	0.71	0.76	0.70	0.68	0.31	0.49	0.70	0.56	0.26	0.45	**0.56**	0.18	0.15
Horizon Energy	2.02	1.99	1.92	2.03	2.12	1.65	1.93	1.74	2.05	2.84	**2.03**	0.32	0.30
Nelson Electricity	0.18	0.18	0.04	0.09	0.16	0.11	0.15	0.08	0.07	0.07	**0.11**	0.05	0.06
Network Tasman	1.16	1.12	1.41	1.06	1.02	1.02	1.01	1.10	1.08	0.82	**1.08**	0.15	0.17
Orion	0.52	0.49	1.17	1.83	0.92	1.17	1.04	1.01	0.73	0.86	**0.97**	0.38	0.29
OtagoNet	2.05	2.49	1.77	1.88	1.63	2.37	2.68	2.56	2.00	2.22	**2.17**	0.36	0.31
Powerco	2.11	2.12	2.26	2.32	1.70	2.11	1.96	1.78	2.17	1.89	**2.04**	0.20	0.20
The Lines Company	3.57	2.17	3.13	3.36	1.85	3.13	3.06	3.33	3.08	3.60	**3.03**	0.57	0.64
Top Energy	8.36	4.23	4.82	6.56	4.11	5.04	4.82	5.39	4.79	4.63	**5.27**	1.28	1.21
Unison Networks	1.77	1.39	1.51	2.09	1.22	1.40	2.38	2.48	3.07	3.50	**2.08**	0.77	0.23
Vector	1.38	1.06	1.12	1.07	0.88	1.30	1.38	1.10	1.68	1.95	**1.29**	0.32	0.32
Wellington Electricity	0.52	0.54	0.52	0.64	0.54	0.75	0.55	0.50	0.69	0.64	**0.59**	0.09	0.07

Source PWC 25th June 2019

37. The proposed DPP3 method appears to normalise in benign years which is creating a biased and uncertain view of performance as there has been no “major external event” that requires normalising. This does not appear to be a durable or robust approach to normalization. The ENA QoS workgroup’s recommendations were to retain the IEEE method, but refine slightly by allowing for major events to roll across calendar days.

4.4. Material Deterioration

38. Horizon are somewhat puzzled by the Commission’s stated logic that normalisation is not intended to completely mitigate the external events and would add that the Commission must also recognise by the same token that a breach position then by itself does not imply “material deterioration in reliability” as supported by the following Horizon analysis;



Source Horizon Network Reporting Tool

5. Innovation Fund

39. The concept of the proposed allowance for innovation is welcomed but Horizon management support the pooling proposal and administrating this as a central innovation fund from which all distributors and their customers could benefit. The learnings from any project that is approved under this fund will have a greater impact across the wider country customer base if managed centrally.

6. Enforcement Guidelines

6.1. Concise information requirements

40. Horizon note the Commission's comments in L6.4 which states "*universal support for 'automatic compliance reporting' following a quality contravention, which for some distributors, was linked to enforcement guidelines*".

41. As Horizon has experienced two separate investigations a price path and a quality non -compliance, management consider it is important to convey the practical issues including the time and cost to a business should a non-compliance occur.

42. The quantum of information that was required to supply the Commission under the Section 53ZD(d) and 53ZD(e) of the Commerce Act equated to 475 reports/papers plus a cost in excess of $200,000 of internal resources deployed to focus on the request.

43. Therefore Horizon do not agree with the Commission's comments in the reasons paper L51 where the '*Commission states the cost to distributors of this standing request will be negligible given it is information that we would usually request anyway*'.

6.2. Clarification of criteria being applied to assess breaches

44. Horizon would support information requirements if the outcome will remove some of the uncertainty, introduce some transparency and clarify the criteria that is being used to assess breaches. Table L4 whilst providing some guidance to areas of focus there is no time period stated for the information requirements. Noting the Commission's view "that it would be information usually requested anyway". Horizon's experience was that a high volume of data was requested and it is unclear as to whether the Commission was able to review in entirety.

6.3. Clear timeline for Commission to review and respond

45. Horizon consider that it would be useful to understand expected timing as Horizon was provided with a very concise date initially to provide a wide suite of information which was challenging given other annual compliance priorities namely setting annual tariffs and preparing the annual AMP plan. At the time of writing this submission Horizon have yet to receive the Commission's draft report on the 2018 quality breach. A clear timeline of the steps from the Commission for reviewing and responding would also be welcomed by Horizon.

46. Please do not hesitate to contact the writer should you have any questions regarding this submission.

Yours faithfully

Nigel Hoare
Regulatory Manager
+64 7 306 2972