



# New Zealand Gazette

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## UNITEDNETWORKS LIMITED

### INFORMATION FOR DISCLOSURE

#### Amendment

PURSUANT TO THE ELECTRICITY (INFORMATION  
DISCLOSURE) REGULATIONS 1999 AND THE  
ELECTRICITY (INFORMATION DISCLOSURE)  
AMENDMENT REGULATIONS 2000 AND 2001

This supplement replaces the following information in the UnitedNetworks Limited Information For Disclosure Pursuant to the Electricity (Information Disclosure) Regulations 1999 and the Electricity (Information Disclosure) Amendment Regulations 2000 and 2001, Issue No. 122, dated Tuesday, 27 August 2002:

Pages 3274 to 3277 – replace with pages 3863-3866

**FORM 5: CERTIFICATION OF PERFORMANCE MEASURES, AND STATISTICS  
DISCLOSED BY LINE OWNERS OTHER THAN TRANSPower**

We, Philip Michael Smith and Daniel Wayne Warnock, directors of UnitedNetworks Limited certify that, having made all reasonable enquiry, to the best of our knowledge, -

- a) The attached information, being the efficiency performance measures, energy delivery efficiency performance measures, statistics, and reliability performance measures in relation to UnitedNetworks Limited, and having been prepared for the purposes of regulations 15, 16, 21, and 22 of the Electricity (Information Disclosure) Regulations 1999, read with Electricity (Information Disclosure) Amendment Regulations 2000, comply with the requirements of those regulations.



Philip Michael Smith



Daniel Wayne Warnock

30 September 2002

30 September 2002

**3.3 ENERGY DELIVERY EFFICIENCY PERFORMANCE MEASURES AND STATISTICS**  
**For the year ended 31 March 2002**

Schedule 1 – PART 4	2002	2001	2000	1999	1998
<b>1 Energy delivery efficiency performance measures</b>					
<b>a Load factor</b>	<b>61.27%</b>	<b>58.88%</b>	<b>58.87%</b>	<b>59.94%</b>	<b>55.70%</b>
<i>a/bc * 100 where</i>					
<i>a = kWh of electricity entering system</i>	7,283,111,083	7,120,433,531	6,864,048,000	6,681,341,709	3,607,989,950
<i>b = maximum demand</i>	1,356,970	1,380,517	1,327,434	1,272,484	657,584
<i>c = total number of hours in financial year</i>	8,760	8,760	8,784	8,760	9,851
<b>b Loss ratio</b>	<b>5.63%</b>	<b>5.34%</b>	<b>4.50%</b>	<b>5.44%</b>	<b>6.20%</b>
<i>a/b * 100 where</i>					
<i>a = losses of electricity in kWh</i>	410,072,575	380,164,078	309,179,016	363,708,921	223,695,377
<i>b = kWh of electricity entering system</i>	7,283,111,083	7,120,433,531	6,864,048,000	6,681,341,709	3,607,989,950
<b>c Capacity utilisation</b>	<b>34.91%</b>	<b>37.25%</b>	<b>35.54%</b>	<b>34.03%</b>	<b>39.63%</b>
<i>a/b * 100 where</i>					
<i>a = maximum demand</i>	1,356,970	1,380,517	1,327,434	1,272,484	657,584
<i>b = transformer capacity (kVA)</i>	3,887,571	3,705,855	3,735,466	3,739,313	1,659,135

**3.3 ENERGY DELIVERY EFFICIENCY PERFORMANCE MEASURES AND STATISTICS (continued)**

Schedule 1 – PART 4	2002	2001	2000	1999	1998
<b>2 Statistics</b>					
<b>a System length – total (kms)</b>	<b>30,021.83</b>	<b>28,846.20</b>	<b>24,910.50</b>	<b>24,218.50</b>	<b>13,289.84</b>
110kV	36.45	36.50	25.00	25.00	25.40
66kV	150.26	156.60	144.00	144.00	143.81
50kV	-	-	-	-	-
33kV	1,282.57	1,308.60	1,436.50	1,365.50	772.57
22kV	-	-	-	-	-
11kV	13,033.49	12,996.40	12,240.00	12,102.50	6,526.15
6.6kV	-	-	-	-	-
3.3kV	-	-	-	-	-
230/400 V	15,519.06	14,348.10	11,065.00	10,581.50	5,821.91
<b>b Circuit length – o/h (kms)</b>	<b>19,339.94</b>	<b>18,549.90</b>	<b>16,876.00</b>	<b>16,696.00</b>	<b>10,124.27</b>
110kV	27.67	27.70	25.00	25.00	25.40
66kV	150.26	156.60	144.00	144.00	143.81
50kV	-	-	-	-	-
33kV	997.86	1,027.30	1,072.00	1,071.50	680.88
22kV	-	-	-	-	-
11kV	9,944.78	9,968.5	9,321.50	9,438.00	5,465.13
6.6kV	-	-	-	-	-
3.3kV	-	-	-	-	-
230/400 V	8,219.37	7,396.80	6,313.50	6,017.50	3,809.05
<b>c Circuit length – u/g (kms)</b>	<b>10,681.89</b>	<b>10,296.30</b>	<b>8,034.50</b>	<b>7,522.50</b>	<b>3,165.57</b>
110kV	8.78	8.80	-	-	-
66kV	-	-	-	-	-
50kV	-	-	-	-	-
33kV	284.71	281.30	364.50	294.00	91.69
22kV	-	-	-	-	-
11kV	3,088.71	3,027.90	2,918.50	2,664.50	1,061.02
6.6kV	-	-	-	-	-
3.3kV	-	-	-	-	-
230/400 V	7,299.70	6,978.30	4,751.50	4,564.00	2,012.86
<b>d Transformer capacity (kVA)</b>	<b>3,887,571</b>	<b>3,705,855</b>	<b>3,735,466</b>	<b>3,739,313</b>	<b>1,659,135</b>
<b>e Maximum demand (kWh)</b>	<b>1,356,970</b>	<b>1,380,517</b>	<b>1,327,434</b>	<b>1,272,484</b>	<b>657,584</b>
<b>f Total electricity entering the system (before losses of electricity) in kWh:</b>					
	7,283,111,083	6,740,269,453*	6,554,868,984*	6,317,632,788*	3,384,294,573*
* Comparatives are for total electricity supplied from the system after losses of electricity in kWh					
<b>g Total amount of electricity (in kWh) supplied from the system, after losses of electricity, during the financial year on behalf of each person that is an electricity generator or an electricity retailer or both:</b>					
On Energy (previously TransAlta)	1,328,877,777	3,576,249,078	4,115,559,838	954,312,486	-
Trustpower	1,490,659,159	1,483,009,486	1,236,430,880	228,008,660	-
First Electric	-	54,445,430	149,231,368	-	-
Empower	-	134,109,341	18,695,939	546,385	-
Meridian	461,355,825	4,759,528	17,146,507	-	-
Mighty River	578,293,427	20,194,008	4,396,398	-	-
Mercury	-	118,160,350	2,218,739	444,189,000	-
Contact	483,471,506	200,851,992	1,311,841	63,091,832	-
Energy Waikato (NGC Wel Energy)	32,119,355	149,552,573	896,525	-	-
Bay of Plenty	-	-	307,593	-	-
Energy Options	-	-	144,289	-	-
Genesis	1,694,727,680	313,613,163	107,161	-	-
Todd Energy	221,562,973	62,935,543	-	-	-
Carter Holt Harvey Pulp & Paper	356,632,518	325,821,080	-	-	-
KCE Retail Ltd	-	50,576,296	-	-	-
Phoenix	-	120,069	-	-	-
NZ Co-op Dairy Group	99,213,310	-	-	-	-
NZ Sugar	14,790,327	-	-	-	-
Energy Online	50,638,387	-	-	-	-
Other	60,696,264	626,035,594	1,317,600,922	4,627,484,425	-
<b>Total (kWh)</b>	<b>6,873,038,508</b>	<b>7,120,433,531<sup>^</sup></b>	<b>6,864,048,000<sup>^</sup></b>	<b>6,317,632,788</b>	-
<sup>^</sup> Comparatives are for the total amount of electricity (in kWh) conveyed through the system, before losses of electricity, on behalf of each person that is an electricity generator or electricity retailer or both.					
<b>h Total number of consumers</b>	<b>505,057</b>	<b>492,387</b>	<b>479,972</b>	<b>469,953</b>	<b>223,765</b>

**3.4 RELIABILITY PERFORMANCE MEASURES**  
**For the year ended 31 March 2002**

<b>Schedule 1 – PART 5</b>								
<b>1-3</b>	<b>Interruptions</b>	<b>Ave Target 2003/07</b>	<b>Target 2003</b>	<b>Actual</b>				
				<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>	<b>1998</b>
	<b>Total</b>			<b>2,229</b>	<b>2,258</b>	<b>2,258</b>	<b>2,421</b>	<b>1,683</b>
	Class A			2	-	1	5	1
	Class B - planned	850	850	971	831	828	1,002	645
	Class C - unplanned	1,100	1,200	1,234	1,421	1,077	1,402	1,032
	Class D			18	6	19	12	5
	Class E			3	-	-	-	-
	Class F			1	-	-	-	-
	Class G			-	-	-	-	-
	Class H			-	-	-	-	-
	Class I			-	-	-	-	-
							<b>Within 3 hrs</b>	<b>Within 24 hrs</b>
<b>4</b>	<b>Proportion of total class C interruptions not restored</b>						<b>29.82%</b>	<b>0.32%</b>
	<i>a/b * 100 where</i>						<i>368</i>	<i>4</i>
	<i>a = no. of interruptions not restored within</i>						<i>1,234</i>	<i>1,234</i>
	<i>b = total number of Class C interruptions</i>							
<b>5</b>	<b>Faults</b>	<b>Ave Target 2003/07</b>	<b>Target 2003</b>	<b>Actual</b>				
				<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>	<b>1998</b>
	<b>Faults per 100 circuit kms</b>			<b>9.50</b>	<b>10.00</b>	<b>8.79</b>	<b>10.47</b>	<b>13.32</b>
	110kV			-	-	-	-	-
	66kV	5.00	5.00	6.00	3.99	6.25	1.47	4.87
	50kV			-	-	-	-	-
	33kV	8.00	8.00	8.40	10.91	6.96	5.49	8.03
	22kV			-	-	-	-	-
	11kV	9.00	9.00	9.71	10.38	9.05	11.14	14.19
	6.6kV			-	-	-	-	-
	3.3kV			-	-	-	-	-
	230/400 V			-	-	-	-	-
<b>6</b>	<b>Faults per 100 circuit kms (underground)</b>			<b>4.20</b>	<b>5.00</b>	<b>5.63</b>	<b>4.73</b>	<b>6.41</b>
	110kV			-	-	-	-	-
	66kV			-	-	-	-	-
	50kV			-	-	-	-	-
	33kV			2.67	5.70	4.66	2.72	2.18
	22kV			-	-	-	-	-
	11kV			4.38	5.01	5.76	4.95	6.78
	6.6kV			-	-	-	-	-
	3.3kV			-	-	-	-	-
	230/400 V			-	-	-	-	-
<b>7</b>	<b>Faults per 100 circuit kms (overhead)</b>			<b>11.23</b>	<b>12.00</b>	<b>9.77</b>	<b>12.06</b>	<b>14.58</b>
	110kV			-	-	-	-	-
	66kV			6.00	3.99	6.25	3.47	4.87
	50kV			-	-	-	-	-
	33kV			10.10	12.35	7.74	6.25	8.81
	22kV			-	-	-	-	-
	11kV			11.45	12.00	10.08	12.88	15.62
	6.6kV			-	-	-	-	-
	3.3kV			-	-	-	-	-
	230/400 V			-	-	-	-	-

**3.4 RELIABILITY PERFORMANCE MEASURES (continued)**

<b>Schedule 1 – PART 5</b>							
	<b>Ave targets</b>	<b>Targets</b>	<b>Actual</b>				
	<b>2003/07</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>	<b>1998</b>
<b>8-11 SAIDI</b>			<b>121.85</b>	<b>130.25</b>	<b>108.88</b>	<b>179.32</b>	<b>171.19</b>
Class A			0.01	-	0.01	6.50	-
Class B - planned	20	20	21.27	15.18	17.18	22.48	28.39
Class C - unplanned	93	96	98.09	107.68	80.98	143.89	134.25
Class D			2.13	7.40	10.71	6.47	8.55
Class E			0.35	-	-	-	-
Class F			-	-	-	-	-
Class G			-	-	-	-	-
Class H			-	-	-	-	-
Class I			-	-	-	-	-
<i>a/b where</i>							
<i>a = sum of interruption duration factors</i>			61,541,348	64,133,932	52,257,815	84,273,989	38,306,330
Class A			7,377	-	6,661	3,052,862	-
Class B	10,500,000	10,300,000	10,740,624	7,472,526	8,244,468	10,562,925	6,352,688
Class C	48,580,000	49,450,000	49,541,419	53,018,462	38,866,409	67,619,428	30,040,451
Class D			1,077,309	3,642,944	5,140,277	3,038,774	1,913,191
Class E			174,386	-	-	-	-
Class F			233	-	-	-	-
Class G			-	-	-	-	-
Class H			-	-	-	-	-
Class I			-	-	-	-	-
<i>b = total consumers</i>	525,000	515,000	505,057	492,387	479,972	469,953	223,765
<b>12-15 SAIFI</b>			<b>2.00</b>	<b>2.03</b>	<b>1.91</b>	<b>2.38</b>	<b>2.90</b>
Class A			-	-	0.01	0.03	-
Class B - planned	0.10	0.10	0.12	0.09	0.11	0.14	0.18
Class C - unplanned	1.62	1.67	1.66	1.80	1.53	1.97	2.37
Class D			0.20	0.14	0.26	0.24	0.35
Class E			0.01	-	-	-	-
Class F			-	-	-	-	-
Class G			-	-	-	-	-
Class H			-	-	-	-	-
Class I			-	-	-	-	-
<i>a/b where</i>							
<i>a = sum of electricity consumers</i>			1,008,822	991,151	918,663	1,117,292	648,919
Class A			467	-	6,661	16,431	-
Class B	52,500	51,500	61,166	43,167	50,470	64,529	40,278
Class C	849,000	860,000	839,061	887,023	735,852	924,582	530,323
Class D			100,562	68,961	125,680	111,750	78,318
Class E			7,565	-	-	-	-
Class F			1	-	-	-	-
Class G			-	-	-	-	-
Class H			-	-	-	-	-
Class I			-	-	-	-	-
<i>b = total consumers</i>	525,000	515,000	505,057	492,387	479,972	469,953	223,765