

Bruce Power Nuclear Unit Deratings
due to Excess Baseload Generation – plus outages
2011 – 2012 (up to Dec 12)
Source of Data – IESO for Turbines / Sygration Charting for Deratings

Unit 5 Deratings DateDurationDepth	Unit 6 Deratings DateDurationDepth	Unit 7 Deratings DateDurationDepth	Unit 8 Deratings DateDurationDepth	Daily Wind Output Max 0-5 hr/ Min 8-13 hr	
2011 - Jan 1 6 hr x 300 MW	2011 – Jan 1 12 hr x 300 MW	2011 – Jan 1 9 hrs x 300 MW		1081 / 966 MW	
Jan 2 6 hr x 300 MW	Jan 2 9 hr x 300 MW			1038 / 623 MW	
	<i>Outage Jan 11–Jan 13 48 hrs x 825 MW</i>				
Jan 18 6 hr x 300 MW		Jan 18 6 hrs x 300 MW		927 / 175 MW	
<i>Outage Feb 4–Feb 6 60 hr x 825 MW</i>			<i>Outage Feb 1–Feb 26 825 MW</i>		
Feb 28 6 hr x 200 MW				538 / 603 MW	
Mar 2 9 hr x 300 MW				1320 / 914 MW	
	Mar 18 6 hr x 300 MW	Mar 18 6 hrs x 250 MW		1284 / 366 MW	
Apr 10 9 hr x 300 MW	Apr 10 9 hrs x 300 MW	Apr 10 4 hrs x 275 MW		511 / 541 MW	
Apr 11 9 hr x 300 MW	Apr 11 3 hrs x 300 MW		Apr 11 3 hrs x 300 MW	1226 / 1219 MW	
Apr 12 12 hr x 300 MW	Apr 12 9 hrs x 300 MW	Apr 12 6 hrs x 300 MW	Apr 12 6 hrs x 300 MW	800 / 414 MW	
Apr 13 9 hr x 300 MW				538 / 101 MW	
Apr 15 6 hr x 300 MW		<i>Outage Apr 15 – Jun 22 825 MW</i>		977 / 950 MW	
	Apr 23 4 hrs x 300 MW			1134 / 965 MW	
	Apr 27 6 hrs x 300 MW			1190 / 419 MW	
Apr 28 6 hr x 300 MW	Apr 28 4 hrs x 300 MW			996 / 653 MW	
Apr 29 3 hr x 300 MW				546 / 315 MW	
May 1 9 hr x 300 MW	May 1 9 hrs x 300 MW			May 1 6 hrs x 300 MW	945 / 912 MW
May 2 3 hr x 300 MW					407 / 180 MW
				May 16 – May 21 120 hours x 225 MW	
May 22 6 hr x 300 MW					258 / 364 MW

May 23 6 hr x 300 MW		<i>Outage Apr 15 – Jun 22 825 MW</i>	<i>Outage May 21-May24 72 hrs x 825 MW</i>	1068 / 1009 MW	
May 24 6 hr x 300 MW	May 24 9 hrs x 300 MW			938 / 132 MW	
	May 25 6 hrs x 300 MW			139 / 222 MW	
May 26 9 hr x 300 MW	May 26 9 hrs x 300 MW			687 / 248 MW	
May 27 6 hr x 300 MW	May 27 9 hrs x 300 MW			518 / 94 MW	
May 28 9 hr x 300 MW	May 28 12 hrs x 300 MW			171 / 70 MW	
May 29 9 hr x 300 MW	May 29 12 hrs x 300 MW			204 / 61 MW	
	May 30 6 hrs x 300 MW			434 / 142 MW	
Jun 2 6 hr x 300 MW	Jun 2 9 hrs x 300 MW			1002 / 340 MW	
	Jun 4 3hrs x 300 MW			416 / 235 MW	
	Jun 6 3 hrs x 300 MW			112 / 42 MW	
	Jun 7 4 hrs x 300 MW			576 / 191 MW	
	Jun 8 12 hrs x 300 MW			633 / 530 MW	
	Jun 9 12 hrs x 300 MW			838 / 204 MW	
Jun 10 9 hr x 300 MW	Jun 10 12 hrs x 300 MW			Jun 10 6 hrs x 300 MW	293 / 58 MW
	Jun 12 3 hrs x 200 MW				344 / 325 MW
Jun 13 3 hr x 200 MW	Jun 13 4 hrs x 300 MW				249 / 233 MW
Jun 18 3 hr x 200 MW	Jun 18 4 hrs x 300 MW				92 / 4 MW
Jun 19 6 hr x 300 MW	Jun 19 4 hrs x 300 MW			Jun 19 3 hrs x 275 MW	505 / 289 MW
	Jun 26 3 hrs x 300 MW				43 / 42 MW
	Jun 29 2 hrs x 200 MW			600 / 387 MW	
	Jul 1 4 hrs x 300 MW			191 / 145 MW	
Jul 2 6 hr x 300 MW				500 / 305 MW	
Jul 3 3 hr x 300 MW				362 / 51 MW	
Jul 5 6 hr x 300 MW				129 / 45 MW	
Jul 9 3 hr x 300 MW		Jul 9 6 hrs x 250 MW		150 / 73 MW	
	<i>Outage Jul 22–Aug 9 825 MW</i>				

		Aug 12 6 hrs x 300 MW		191 / 15 MW	
		Aug 13 4 hrs x 300 MW		133 / 24 MW	
	Aug 22 9 hrs x 225 MW	Aug 22 9 hrs x 100 MW		547 / 200 MW	
	Aug 23 6 hrs x 200 MW			136 / 131 MW	
	Aug 25 6 hrs x 300 MW			493 / 328 MW	
Aug 28 9 hr x 300 MW	Aug 28 9 hrs x 300 MW	Aug 28 12 hrs x 300 MW	Aug 28 6 hrs x 300 MW	697 / 674 MW	
Aug 29 6 hr x 300 MW	Aug 29 9 hrs x 300 MW	Aug 29 9 hrs x 275 MW	<i>Outage</i> <i>Aug 29-Aug 31</i> <i>60 hrs x 825 MW</i>	191 / 30 MW	
		Aug 30 4 hrs x 275 MW		327 / 186 MW	
Sept 15 6 hr x 300 MW				502 / 325 MW	
		Oct 1 9 hrs x 300 MW	Oct 1 9 hrs x 300 MW	986 / 966 MW	
Oct 2 9 hr x 300 MW		Oct 2 12 hrs x 300 MW		784 / 625 MW	
		Oct 3 6 hrs x 300 MW		355 / 176 MW	
Oct 7 12 hr x 100 MW				375 / 81 MW	
		Oct 8 9 hrs x 300 MW		635 / 248 MW	
		Oct 16 6 hrs x 300 MW	Oct 16 6 hrs x 300 MW	1349 / 993 MW	
<i>Outage</i> <i>Oct 15 – Nov 26</i> <i>x 825 MW</i>	Oct 17 4 hrs x 275 MW		Oct 17 6 hrs x 300 MW	1222 / 1222 MW	
		Oct 19 4 hrs x 300 MW		740 / 677 MW	
			Oct 22 12 hrs x 100 MW	146 / 62 MW	
			Nov 3 3 hrs x 300 MW	1035 / 265 MW	
	Nov 5 – Nov 8 600 MW		Nov 5 – Nov 7 48 hrs x 300 MW		
	Nov 8 – Nov 19 300 MW			Nov 12 3 hrs x 300 MW	1109 / 898 MW
				Nov 13 12 hrs x 300 MW	1376 / 1355 MW
				Nov 14 6 hrs x 300 MW	1321 / 485 MW
			Nov 16 6 hrs x 300 MW	905 / 569 MW	
			Nov 25 6 hrs x 300 MW	1416 / 1153 MW	
	Nov 29 4 hrs x 300 MW	Nov 29 6 hrs x 300 MW		780 / 1079 MW	
	Dec 4 9 hrs x 300 MW		Dec 4 6 hrs x 300 MW	1447 / 1355 MW	
		Dec 8 6 hrs x 300 MW		1034 / 875 MW	

		Dec 12 6 hrs x 300 MW		1042 / 155 MW
		Dec 16 6 hrs x 300 MW		1454 / 461 MW
	Dec 17 12 hrs x 100 MW			393 / 123 MW
		Dec 22 4 hrs x 300 MW		433 / 237 MW
		Dec 27 6 hrs x 300 MW		1341 / 357 MW
	2012 – Jan 2 4 hrs x 300 MW	2012 – Jan 2 4 hrs x 300 MW		1602 / 1403 MW
		Jan 6 4 hrs x 300 MW		1195 / 1207 MW
		Jan 13 3 hrs x 300 MW	2012 Outage Jan 13-Mar 5 825 MW	1070 / 1092 MW
		Jan 24 4 hrs x 300 MW		1502 / 1194 MW
2012 – Feb 1 6 hr x 300 MW	Feb 1 9 hrs x 300 MW	Feb 1 9 hrs x 300 MW		1437 / 767 MW
Mar 11 3 hr x 300 MW		Mar 11 12 hrs x 300 MW	Outage Mar 11–Mar 13 48 hrs x 825 MW	1399 / 726 MW
		Mar 14 6 hrs x 300 MW		503 / 296 MW
Mar 15 6 hr x 300 MW	Mar 15 4 hrs x 300 MW	Mar 15 9 hrs x 300 MW		1176 / 745 MW
		Mar 18 12 hrs x 300 MW		774 / 239 MW
Mar 19 6 hr x 300 MW			Mar 19 6 hrs x 300 MW	281 / 129 MW
Mar 20 6 hr x 300 MW		Mar 20 9 hrs x 300 MW	Mar 20 12 hrs x 300 MW	755 / 307 MW
Mar 21 9 hr x 300 MW	Mar 21 6 hrs x 250 MW	Mar 21 9 hrs x 300 MW	Mar 21 12 hrs x 300 MW	667 / 108 MW
Mar 22 6 hr x 300 MW		Mar 22 6 hrs x 300 MW	Mar 22 18 hrs x 300 MW	810 / 76 MW
		Mar 24 6 hrs x 300 MW		1295 / 639 MW
Mar 28 42 hr x 300 MW	Mar 26 – Mar 28 53 hrs x 250 MW	Mar 28 4 hrs x 300 MW	Mar 26-Mar 29 84 hrs x 100 MW	1532 / 1190 MW
		Mar 31 9 hrs x 300 MW	Mar 31 9 hrs x 300 MW	465 / 66 MW
Apr 2 48 hr x 300 MW	Apr 2 – Apr 3 36 hrs x 100 MW			341 / 161 MW
		Apr 4 16 hrs x 300 MW		470 / 326 MW
		Apr 9 6 hrs x 300 MW		1221 / 685 MW
Outage Apr 12–Apr 16 ~ 96 hr x 825 MW				
Apr 22 ~120 hr x 500 MW				582 / 649 MW
		Apr 23 4 hrs x 300 MW		1281 / 1283 MW

	Apr 25 – Apr 26 48 hrs x 250 MW	Apr 25 – Apr 26 24 hrs x 300 MW	Apr 25 24 hrs x 300 MW	588 / 40 MW
Apr 27 ~144 hr x 175 MW	Apr 27 6 hrs x 150 MW	Apr 27 9 hrs x 200 MW	Apr 27-May 2 126 hrs x 425	1092 / 713 MW
		May 2 6 hrs x 300 MW		742 / 380 MW
May 4 12 hr x 300 MW		May 4 15 hrs x 300 MW		414 / 90 MW
		May 9 6 hrs x 300 MW		285 / 90 MW
		May 11 6 hrs x 300 MW		443 / 84 MW
		May 12 6 hrs x 300 MW		831 / 488 MW
May 24 6 hr x 300 MW		May 24 5 hrs x 300 MW	May 24 6 hrs x 300 MW	150 / 98 MW
		<i>Outage May25 – May27 50 hrs x 825 MW</i>		
May 27 3 hr x 300 MW				367 / 311 MW
Jun 1 6 hr x 300 MW		Jun 1 6 hrs x 300 MW	<i>Outage Jun 1 – Jun 18 825 MW</i>	946 / 465 MW
	Jun 10 6 hrs x 300 MW			691 / 68 MW
Jun 14 3 hr x 300 MW	Jun 14 6 hrs x 250 MW	Jun 14 3 hrs x 300 MW		377 / 272 MW
Jun 15 3 hr x 300 MW	Jun 15 16 hrs x 250 MW			1007 / 129 MW
	Jun 24 6 hrs x 300 MW			188 / 184 MW
	Jun 30 9 hrs x 300 MW		Jun 30 3 hrs x 200 MW	698 / 429 MW
	Jul 1 9 hrs x 300 MW	Jul 1 4 hrs x 300 MW	Jul 1 4 hrs x 300 MW	424 / 12 MW
	Jul 2 4 hrs x 300 MW		Jul 2 3 hrs x 250 MW	54 / 24 MW
	Jul 3 4 hrs x 300 MW			468 / 207 MW
		Jul 22 4 hrs x 300 MW		423 / 74 MW
		Jul 25 9 hrs x 300 MW		290 / 135 MW
		Jul 29 3 hrs x 250 MW		261 / 10 MW
Aug 25 3 hr x 300 MW		Aug 25 3 hrs x 300 MW	Aug 25 4 hrs x 300 MW	533 / 58 MW
			Aug 26 4 hrs x 300 MW	757 / 255 MW
		Aug 28-Aug29 24 hrs x 400 MW		354 / 83 MW 292 / 12 MW
			Aug 31 6 hrs x 300 MW	935 / 803 MW
			Sept 10 3 hrs x 200 MW	157 / 98 MW

		Sept 11 4 hrs x 300 MW	Sept 11 9 hrs x 300 MW	434 / 355 MW
			Sept 12 6 hrs x 300 MW	867 / 495 MW
	Sept 15 9 hrs x 100 MW			343 / 134 MW
			Sept 20 9 hrs x 300 MW	1254 / 765 MW
			Sept 21 4 hrs x 300 MW	390 / 188 MW
		Sept 23 6 hrs x 300 MW	Sept 23 12 hrs x 300 MW	591 / 468 MW
			Sept 24 9 hrs x 300 MW	393 / 573 MW
			Oct 1 4 hrs x 300 MW	339 / 116 MW
		Oct 5 6 hrs x 300 MW		1091 / 624 MW
		Oct 10 6 hrs x 250 MW		1384 / 842 MW
		Oct 18 6 hrs x 300 MW		1275 / 1361 MW
Oct 23 3 hr x 300 MW				760 / 521 MW
	Oct 25 6 hrs x 300 MW			810 / 775 MW
		Oct 26 9 hrs x 300 MW	Oct 26 6 hrs x 300 MW	1426 / 614 MW
		Oct 29 6 hrs x 300 MW		1276 / 1310 MW
	Oct 30 6 hrs x 250 MW	Oct 30 9 hrs x 300 MW	Oct 30 9 hrs x 300 MW	1201 / 1243 MW
		Oct 31 9 hrs x 300 MW	Oct 31 6 hrs x 300 MW	850 / 703 MW
Nov 4 3 hr x 300 MW		Nov 4 6 hrs x 250 MW		159 / 85 MW
		Nov 11 6 hrs x 300 MW		1307 / 1330 MW
Nov 23 6 hr x 300 MW	Nov 23 9 hrs x 300 MW	Nov 23 9 hrs x 300 MW		1468 / 1497 MW
		Nov 24 9 hrs x 300 MW		1512 / 1210 MW
	Dec 5 4 hrs x 300 MW	Dec 5 6 hrs x 300 MW	Dec 5 4 hrs x 300 MW	1068 / 733 MW
		Dec 7 12 hrs x 100 MW		673 / 155 MW
		Dec 8 12 hrs x 100 MW		96 / 76 MW

- One or more Bruce B Nuclear Units were derated on 75 days in 2011, and on 72 days in 2012 (not quite over yet). (equivalent to over 2 months each year)
- On more than 40% of the days on each year the minimum power output from wind turbines from 8AM – 1 PM was less than 50% of the maximum output from midnight to 5 AM that resulted in the derating. (highlighted in pink),
- Had wind turbines been derated instead, their output would be significantly less.
- The goal of over 10,000 MW of wind turbines by 2015 will worsen the situation.