

Information Document

Wind Power Management

ID # 2011-005R



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1 Purpose

The purpose of this Information Document is to provide example calculations of how the wind power limit pro rata share described in subsection 3.3(8) of OPP 515 will be applied to each non exempt wind aggregated generating facility.

2 Example Calculations

(a) The example calculations are as in subsections (b) and (c) below, based on the following Table 1:

Table 1

Illustration of Wind Power Limit Prorata Share Calculations

For Wind Aggregated Generating Facilities

| Example Wind Aggregated Generating Facility | Current Facility Wind Production in a Wind Monitoring Interval (MW) | Facility Potential (MW) | Non applicability of Wind Power Pro Rata Share Limit to Facility | Wind Power Limit (MW) |
|---|--|---------------------------------------|--|-----------------------|
| A | 20 | N/A | YES | N/A |
| B | 20 | N/A | YES | N/A |
| C | 10 | N/A | YES | N/A |
| D | 10 | N/A | YES | N/A |
| E | 10 | N/A | YES | N/A |
| F | 10 | N/A | YES | N/A |
| G | 10 | N/A | YES | N/A |
| H | 60 | 65 | NO | 74 |
| I | 70 | 70 | NO | 85 |
| J | 50 | 55 | NO | 62 |
| K | 40 | 40 | NO | 49 |
| L | 40 | 45 | NO | 50 |
| M | 40 | 50 | NO | 51 |
| | Total 390 MW for all Wind Aggregated Gen. Facilities in Alberta | Total Alberta Potential 325 MW | | |

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(b) As further illustration, if the AESO calculates the Alberta system wind power limit to be **460 MW** for the next wind monitoring interval as referenced in subsection 3.3(5) of OPP 515, then the pro rata share for wind aggregated generating facility “**H**” in the above Table 1 would be: $65/325 \times (460 - 390) = 14$ MW. “**H**” could then ramp up to $60 \text{ MW} + 14 \text{ MW} = 74$ MW in the next wind monitoring interval, assuming no other system constraints.

(c) Wind aggregated generating facilities “**A**” through “**G**” are exempt from the wind power management provisions of subsection 3.3(5). They will not receive a wind power limit pro rata share and are not required to provide their potential MW. For reference, the exempted facilities are listed in subsection 3.3 (1) of OPP 515.

Revision History

| Version | Effective Date | Description of Changes |
|---------|----------------|------------------------|
| 1.0 | | |