

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of )
MINNESOTA POWER INC. ) FCC File No. 0000898197
Request for Waiver of Sections 101.141(a)(3) )
and 101.147 of the Commission's Rules for )
Microwave Industrial/Business Pool Station )
WEG480, Salol, Minnesota )

ORDER

Adopted: June 9, 2003;

Released: June 11, 2003

By the Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau:

1. Introduction. We have before us a request1 by Minnesota Power Inc. (Minnesota Power) for a waiver of Section 101.141(a)(3) of the Commission's Rules2 to permit it to install a microwave transmitter that does not meet the Commission's minimum payload capacity requirements. Minnesota Power also requests a waiver of the paired frequency requirement of Section 101.147 of the Commission's Rules3 for the paired frequency requirement of the hop associated with the radio transmission path between its transmitter and the receiver in Canada.4 For the reasons set forth below, we grant the waiver request.

2. Background. Minnesota Power is engaged in the generation, transmission, and distribution of electricity in the states of Minnesota and Wisconsin.5 It uses its FCC microwave authorizations to coordinate safely and efficiently the control, monitoring, and repair of its generation, transmission, and distribution facilities, including communications with work crews responding to service requests, power outages, and related troubles.6 Minnesota Power operates a portion of its microwave system along a 500 kilovolt power transmission line between its Forbes Substation (north of Duluth, Minnesota) and the Canadian border.7 This power transmission line and microwave system continues into Canada to a substation in Whitemouth Lake, Manitoba, operated by Manitoba Hydro.8 This microwave system transports power line control channels along this major transmission line that supplies Canadian hydroelectric power to much of Minnesota.9 Minnesota Power and Manitoba Hydro are in the

1 Minnesota Power Inc. Request for Waiver (filed May 23, 2002) (Waiver Request).

2 47 C.F.R. § 101.141(a)(3).

3 47 C.F.R. § 101.147.

4 Waiver Request at 2.

5 Waiver Request at 1.

6 Id.

7 Id.

8 Id.

9 Id.

process of upgrading this entire system to a 6 GHz digital microwave operation.<sup>10</sup>

3. Section 101.147(a)(3) of the Commission's Rules sets forth the minimum capacity and loading requirements for microwave transmitters employing modulation techniques and operating below 19.7 GHz that are applied for, authorized, and placed in service after June 1, 1997.<sup>11</sup> Pursuant to Section 101.141(a)(3), for equipment using a nominal channel bandwidth of between five and ten megahertz, the minimum payload capacity is 44.7 Mbits/s (megabits per second), which typically can accommodate 672 voice circuits.<sup>12</sup> Manitoba Hydro's receiver at Whitemouth Lake is incompatible with a transmitter that meets the minimum payload capacity set forth in Section 101.141(a)(3).<sup>13</sup> Consequently, Minnesota Power requests a waiver of the rule in order to operate a 7.5 megahertz link with a data rate of 24.7 Mbits/s, to allow successful operation of this cross-border path.

4. Industry Canada has licensed the Whitemouth Lake station to transmit on frequency 6455 MHz, which, under the Canadian channel plan, is paired with frequency 6795 MHz.<sup>14</sup> Under the channel plan in our rules, however, frequency 6455 MHz is paired with frequency 6505 MHz,<sup>15</sup> and frequency 6795 MHz is paired with frequency 6635 MHz.<sup>16</sup> Minnesota Power therefore also requests a waiver of the frequency pairings in Section 101.147 in order to transmit on frequency 6795 MHz and receive on frequency 6455 MHz.<sup>17</sup>

5. *Discussion.* We may grant a request for waiver when (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and a grant of the requested waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.<sup>18</sup> Under the circumstances presented, we conclude that grant of the waiver request is warranted.

6. The underlying purpose of Section 101.141(a)(3) is to promote efficient frequency use.<sup>19</sup> We have granted waivers of Section 101.141(a)(3) in cases where the licensee serves a sparsely populated and remote area that is unlikely to become further developed and experience greater frequency demands, and other unusual circumstances weigh in favor of granting the waiver.<sup>20</sup> We conclude that the Minnesota-Manitoba border region is a region where the overall spectrum use in the area is extremely

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<sup>10</sup> *Id.* at 2.

<sup>11</sup> 47 C.F.R. § 101.141(a)(3).

<sup>12</sup> Waiver Request at 2.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> 47 C.F.R. § 101.147(j)(2).

<sup>16</sup> 47 C.F.R. § 101.141(j)(7).

<sup>17</sup> Waiver Request at 2.

<sup>18</sup> *See* 47 C.F.R. § 1.925(b)(3)(i)-(ii).

<sup>19</sup> Reorganization and Revision of Parts 1, 2, 21, and 94 of the Rules to Establish a New Part 101 Governing Terrestrial Microwave Fixed Radio Services, *Report and Order*, WT Docket No. 94-148, 11 FCC Rcd 13449, 13476 ¶ 77 (1996).

<sup>20</sup> *See, e.g.*, Kentucky Power Company d/b/a American Electric Power, *Order*, 17 FCC Rcd 453, 455 ¶ 6 (WTB PSPWD 2002) (operation in remote area, and transmitter purchased before efficiency standards were adopted); Wilderness Valley Telephone Company, *Order*, 15 FCC Rcd 11751, 11752 ¶ 6 (WTB PSPWD 2000) (operation in remote area, and no model of compliant transmitter would withstand the weather conditions at the proposed site).

light. In addition, the need for Minnesota Power's system to interoperate with Manitoba Hydro's system weighs in favor of granting the waiver. We conclude that the underlying purpose of the rule will not be detrimentally affected by allowing the use of a non-compliant transmitter in this particular instance. Therefore, we will grant the requested waiver of Section 101.141(a)(3).

7. Channel plans generally also are intended to maximize spectrum efficiency.<sup>21</sup> Consequently, we conclude for similar reasons that waiver of the frequency pairings in Section 101.147 also is warranted in this instance.

8. *Conclusion.* For the reasons discussed above, we grant Minnesota Power's request for waiver of Sections 101.141(a)(3) and 101.147. The underlying purpose of the rules would not be served by application to the instant case, because the cross-border link is in a remote area that is unlikely to become further developed and experience greater frequency demands. Moreover, grant is in the public interest, because it will facilitate the safe and efficient production and transmission of electric power to Minnesota Power's customers.

9. Accordingly, IT IS ORDERED that pursuant to Section 4(i) of the Communications Act of 1934, 47 U.S.C. § 154(i), Sections 1.925, 101.141(a)(3), and 101.147 of the Commission's Rules, 47 C.F.R. §§ 1.925, 101.141(a)(3), and 101.147, the requests for waiver filed by Minnesota Power, Inc., on May 23, 2002, IS GRANTED, and application FCC File No. 0000898197 SHALL BE REFERRED to the Public Safety and Private Wireless Division, Licensing and Technical Analysis Branch, for processing consistent with this *Order*.

10. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. § 0.131, 0.331

FEDERAL COMMUNICATIONS COMMISSION

D'wana R. Terry  
Chief, Public Safety and Private Wireless Division  
Wireless Telecommunications Bureau

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<sup>21</sup> See, e.g., Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, *Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order*, ET Docket No. 00-258, 18 FCC Rcd 2223, 2255 ¶ 70 (2003); Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band (5.9 GHz Band), *Notice of Proposed Rulemaking and Order*, WT Docket No. 01-90, 17 FCC Rcd 23136, 23159 ¶ 35 (2002).