

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

In the Matter of)	
)	
NATIONAL SCIENCE AND TECHNOLOGY)	
NETWORK, INC.)	
)	
Application for Authorization of a Trunked)	File No. 0000693489
System in the 470-512 MHz Band)	
)	
Application to Modify License for Trunked)	File No. 0002920691
System in the 470-512 MHz Band)	
)	
Informal Objection Filed by Mobile Relay)	File No. 0002919006
Associates)	
)	
Informal Objection Filed by Mobile Relay)	File No. 0002919011
Associates; Joint Request for Dismissal or Denial)	
by Comm Enterprises, LLC, James A. Kay, MS)	
Airwaves, and Mark D. Sobel)	

MEMORANDUM OPINION AND ORDER

Adopted: August 10, 2010

Released: August 10, 2010

By the Commission:

I. INTRODUCTION

1. This item relates to applications seeking authorization to operate trunked radio systems in the 470-512 MHz band in Monte Nido and Glendale, California. National Science and Technology Network, Inc. (NSTN) seeks review of two orders¹ by the Mobility Division (Division) of the Wireless Telecommunications Bureau (Bureau) that concluded that the above-captioned private land mobile radio (PLMR) applications filed by NSTN were defective.² Because the two applications for review raise the

¹ National Science and Technology Network, Inc., *Order on Further Reconsideration*, 24 FCC Rcd 3577 (WTB MD 2009) (*Monte Nido Order*); National Science and Technology Network, Inc., *Order on Reconsideration*, 24 FCC Rcd 4089 (WTB MD 2009) (*Glendale Order*).

² NSTN filed an application for review of the *Monte Nido Order* on April 22, 2009. Application for Review of FCC Order on Further Reconsideration, DA 09-663 Filed by National Science and Technology Network, Inc. (NSTN) (filed Apr. 22, 2009) (Monte Nido AFR). Oppositions were filed by Mobile Relay Associates (MRA), and by Comm Enterprises, LLC, James A. Kay, Jr., MS Airwaves, Inc., and Marc D. Sobel (Joint Petitioners). Opposition to Application for Review (filed May 7, 2009) (MRA Monte Nido Opposition); Opposition to Application for Review (filed May 7, 2009) (Joint Petitioners Monte Nido Opposition). On July 24, 2009, NSTN filed a letter to supplement the record. Letter dated July 24, 2009 from Alan M. Lurya, counsel to NSTN, to Office of the Secretary, Federal Communications Commission (NSTN Letter). MRA filed a response on July 28, 2009. Letter dated July 28, 2009 from David J. Kaufman, counsel to MRA, to Office of the Secretary, Federal Communications Commission. The Division decision referenced in the NSTN Letter is irrelevant to the instant matter, as it pertained to a request to modify a license pursuant to Section 316 of the Communications Act of 1934, as amended, 47 U.S.C. § 316, rather than a timely objection to an application or a timely petition for reconsideration as were filed in this proceeding.

(continued....)

same issues, we will address them together. For the reasons discussed below, we deny the applications for review.

II. BACKGROUND

2. In 1997, the Commission directed the certified frequency coordinators for the PLMR services to reach a consensus on the applicable coordination procedures for the 12.5 kHz “offset” channels in the 470-512 MHz frequency band.³ That consensus is embodied in the Land Mobile Communications Council (LMCC) procedures for evaluating adjacent channel interference in the 470-512 MHz band using the interference criteria of TIA/EIA/TSB-88 (TSB-88).⁴ The LMCC Consensus provides that an application shall not be certified if an incumbent or the applicant has unacceptable interference of more than five percent reduction of the calculated service area reliability.⁵ After LMCC announced the consensus, the Bureau lifted the freeze on 470-512 MHz band 12.5 kHz offset channels that it had imposed until the frequency coordinators developed procedures for coordinating new assignments.⁶

3. NSTN subsequently filed an application for authority to operate a station in Monte Nido on 470-512 MHz band 12.5 kHz offset channels with a 12.5 kHz channel bandwidth.⁷ Mobile Relay Associates (MRA) and James A. Kay, Jr., licensees on 25 kHz channels with center frequencies 12.5 kHz removed from NSTN’s proposed center frequencies, opposed the application.⁸ The Division concluded that no TSB-88 analysis was required because there was no spectral overlap between the existing and proposed channels, and granted the application.⁹ MRA filed a petition for reconsideration, and Comm Enterprises, LLC, James A. Kay, Jr., and MS Airwaves, Inc. jointly requested reconsideration.

4. Shortly after that application was granted, NSTN filed two applications seeking authority to operate in Glendale on 470-512 MHz band 12.5 kHz offset channels with a 12.5 kHz channel bandwidth.¹⁰ MRA opposed the applications, as did Comm Enterprises, LLC, James A. Kay, Jr., MS

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NSTN filed an application for review of the *Glendale Order* on April 30, 2009. Application for Review of Order, DA 09-773, Filed by National Science and Technology Network, Inc. (NSTN) (filed Apr. 30, 2009) (Glendale AFR). MRA and the Joint Petitioners filed separate oppositions. Opposition to Application for Review (filed May 14, 2009); Opposition to Application for Review (filed May 15, 2009).

³ See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services, *Second Report and Order*, PR Docket No. 92-235, 12 FCC Rcd 14307, 14330-31 ¶ 43 (1997).

⁴ See Filing Freeze to be Lifted for Applications under Part 90 for 12.5 kHz Offset Channels in the 421-430 and 470-512 MHz Bands, *Public Notice*, 13 FCC Rcd 5942, 5942 (WTB 1997) (*Bureau Public Notice*) (citing Letter from Larry A. Miller, President, LMCC, to Daniel B. Phythyon, Esq., Acting Chief, Wireless Telecommunications Bureau (Sept. 10, 1997) (LMCC Consensus)). TSB-88 is a technical bulletin describing a methodology for predicting coverage and interference for PLMR stations operating below 512 MHz. In general, TSB-88 methodology is used by frequency coordinators and others to determine channel availability based on predicted contours, *i.e.*, TSB-88 is used to ensure that the predicted interference contour of a proposed station does not impinge on the service contours of other stations. See State of Maryland, *Memorandum Opinion and Order*, 21 FCC Rcd 11939, 11941 ¶ 6 (PSSB 2006).

⁵ See LMCC Consensus, Attachment at 2.

⁶ See *Bureau Public Notice*, 13 FCC Rcd at 5942.

⁷ FCC File No. 0000693489 (filed Dec. 21, 2001).

⁸ Mobile Relay Associates, Inc. Informal Objection (filed Jan. 30, 2002); James A. Kay, Jr. Petition to Dismiss or Deny (filed Oct. 27, 2003).

⁹ See National Science and Technology Network, Inc., *Order*, 22 FCC Rcd 1953, 1954 n.10 (WTB MD 2007).

¹⁰ FCC File Nos. 0002919006 (filed Feb. 20, 2007), 0002919011 (filed Feb. 20, 2007).

Airwaves, Inc., and Marc D. Sobel (Joint Petitioners), on the grounds that the proposed operations did not satisfy the TSB-88 interference criteria.¹¹

5. On reconsideration of the grant of the Monte Nido application, the Division found that there in fact was spectral overlap between the incumbents' 25 kHz channels and NSTN's proposed 12.5 kHz channels, and stated that its prior conclusion to the contrary had been caused by a mathematical error.¹² The Division's engineering staff conducted the required TSB-88 analysis, and independently confirmed the studies submitted by MRA indicating interference exceeding the acceptable five percent reduction of the calculated service area for each frequency requested in the application.¹³ The Division therefore rescinded the grant and dismissed the application.¹⁴ The Division subsequently dismissed NSTN's Glendale applications because they also did not meet the TSB-88 interference criteria.¹⁵

6. NSTN petitioned for reconsideration. The Division affirmed that there is spectral overlap, requiring a TSB-88 analysis, between proposed operations on 12.5 kHz bandwidth channels (with an occupied bandwidth of 11.25 kHz) and existing stations operating on 25 kHz channels (with an occupied bandwidth of 20 kHz) on center frequencies 12.5 kHz removed.¹⁶ It rejected NSTN's assertion that there is no spectral overlap because the applicable emission mask requires the power level to be severely attenuated beyond the range required for communication.¹⁷ It also rejected NSTN's assertion that the Monte Nido license should have been modified only to delete the channels that overlapped channels licensed to MRA, noting that the other requested channels failed to satisfy TSB-88 with respect to other stations.¹⁸ The Division also rejected NSTN's argument that its proposed operations should not be deemed to overlap because Section 90.187(b)(2) of the Commission's Rules¹⁹ affords protection only to stations with center frequencies 7.5 kHz or less removed from a proposed 12.5 kHz station.²⁰

¹¹ Mobile Relay Associates, Inc. Informal Objections (filed June 21, 2007, Oct. 26, 2007); Comm Enterprises, LLC, James A. Kay, Jr., MS Airwaves, Inc., and Marc D. Sobel Joint Request for Dismissal or Denial (filed May 21, 2007).

¹² See National Science and Technology Network, Inc., *Order on Reconsideration*, 22 FCC Rcd 18644, 18646 ¶ 6 (WTB MD 2007).

¹³ *Id.*

¹⁴ *Id.* The Division also dismissed as moot NSTN's second Monte Nido application, FCC File No. 0002920691 (filed Feb. 21, 2007), which sought to modify the license granted pursuant to the first application to increase the maximum authorized power.

¹⁵ See National Science and Technology Network, Inc., *Order*, 23 FCC Rcd 4096, 4097 ¶ 5 (WTB MD 2008).

¹⁶ See *Monte Nido Order*, 24 FCC Rcd at 3578 ¶ 5; *Glendale Order*, 24 FCC Rcd at 4091 ¶ 4. The Division also noted that there would be spectral overlap even if NSTN had proposed operations on 6.25 kHz bandwidth channels (with an occupied bandwidth of 6 kHz) on center frequencies 12.5 kHz removed from 25 kHz bandwidth channels. See *Monte Nido Order*, 24 FCC Rcd at 3578-79 ¶ 5.

¹⁷ See *Monte Nido Order*, 24 FCC Rcd at 3578 ¶ 5. NSTN asserted that 12.5 kHz and 25 kHz channels actually occupy, respectively, 2.5 kHz and 5 kHz rather than 11.25 kHz and 20 kHz, but the Division noted that the necessary bandwidth is reflected in the emission mask, rather than in some smaller number for which NSTN provided no support or authority.

¹⁸ *Id.* at 3578 n.13.

¹⁹ 47 C.F.R. § 90.187(b)(2).

²⁰ See *Monte Nido Order*, 24 FCC Rcd at 3579 ¶ 6; *Glendale Order*, 24 FCC Rcd at 4091 ¶ 4. The Division explained that the Section 90.187(b)(2) definition of "affected licensee" is a separate requirement from TSB-88, and is used for determining whether an applicant will be required to monitor the proposed frequency rather than whether an applicant for a 12.5 kHz offset channel will cause impermissible interference. See *Monte Nido Order*, 24 FCC Rcd at 3579 ¶ 6.

7. After concluding that the NSTN applications overlapped incumbent stations, the Division rejected NSTN's assertions that TSB-88 nonetheless should not be applied. First, the Division concluded that frequency coordinators are required to follow TSB-88 when there is spectral overlap from proposed operations on 12.5 kHz offset channels in the 470-512 MHz frequency band, noting that TSB-88 reflects the standard on which the Commission directed the frequency coordinators to agree.²¹ The Division also concluded that TSB-88 applies to trunked duplex systems, and not, as NSTN asserted, only to simplex operations.²² The Division also disagreed with NSTN's suggestion that the dismissals were not in the public interest, and conflicted with the Commission's rules requiring 25 kHz PLMR licensees to adopt more efficient technology by 2013.²³

III. DISCUSSION

8. We will grant an application for review only if the staff's decision (1) conflicts with statute, regulation, case precedent, or established Commission policy; (2) involves a question of law or policy that has not been previously resolved by the Commission; (3) involves precedent or policy that should be overturned or revised; (4) makes an erroneous finding as to an important or material question of fact; or (5) commits a prejudicial procedural error.²⁴ For the reasons set forth below, we deny the applications for review.

9. NSTN argues that the Monte Nido application was properly granted, and should be reinstated (and the other applications at issue granted) because the Division never explained the mathematical error that led to the grant.²⁵ We disagree. On reconsideration, the Division set forth the calculations underlying its conclusion that there was spectral overlap.²⁶ Moreover, in another matter involving NSTN, we recently affirmed that there is spectral overlap between proposed operations on 12.5 kHz bandwidth channels (with an occupied bandwidth of 11.25 kHz) and existing stations operating on 25 kHz channels (with an occupied bandwidth of 20 kHz) on center frequencies 12.5 kHz removed.²⁷ We also rejected NSTN's assertions²⁸ that the channels should be deemed not to overlap because they actually

²¹ See *Monte Nido Order*, 24 FCC Rcd at 3579 ¶ 7. The Division noted that it was too late for NSTN to challenge the Commission's decision. *Id.*

²² *Id.*; *Glendale Order*, 24 FCC Rcd at 4091 ¶ 4. The Division stated that the three megahertz separation between the base and mobile frequencies in a duplex system does not render TSB-88 inapplicable, because the TSB-88 analysis compares only the base station frequencies of the existing and proposed operations. See *Monte Nido Order on Further Reconsideration*, 24 FCC Rcd at 3579 ¶ 7.

²³ See *Monte Nido Order*, 24 FCC Rcd at 3579 ¶ 8; *Glendale Order*, 24 FCC Rcd at 4091-92 ¶ 4. Instead, the Division noted that the Commission did not intend to disadvantage incumbent licensees still operating on 25 kHz channels, or to reduce their interference protection prior to the migration date. See *Monte Nido Order*, 24 FCC Rcd at 3579-80 ¶ 8.

²⁴ 47 C.F.R. § 1.115(b)(2)(i)-(v).

²⁵ See *Monte Nido AFR* at 6; *Glendale AFR* at 3.

²⁶ See para. 6, *supra*. See *MRA Monte Nido Opposition* at 3 ("NSTN's contention that we need to find out what went wrong the first time is frivolous. The only relevant fact is that the Division ultimately got it right."). NSTN also claims that the Division failed to address its request to amend the application to propose operation on 6.25 kHz bandwidth channels. See *Monte Nido AFR* at 8. This is not correct. As noted above, the Division specifically addressed the request, and concluded that so reducing the proposed channel bandwidth would not eliminate the spectral overlap. See note 16, *supra*.

²⁷ See *National Science and Technology Network, Inc., Memorandum Opinion and Order*, 25 FCC Rcd 549, 550-51 ¶ 4 (2010) (*2010 MO&O*).

²⁸ See *Monte Nido AFR* at 7-8; *Glendale AFR* at 4-5.

occupy some smaller bandwidth,²⁹ or because the incumbents do not fall within the Section 90.187(b)(2) definition of “affected licensee.”³⁰

10. In addition, we reject NSTN’s assertion³¹ that application of TSB-88 to protect existing 25 kHz operations against interference from proposed 12.5 kHz (or narrower) operations conflicts with the PLMR narrowbanding mandate. Nothing in that rulemaking proceeding suggests that the Commission intended to reduce 470-512 MHz band incumbents’ adjacent-channel interference protection in order to encourage them to adopt narrowband technology. The specific measures in our rules to facilitate the narrowbanding migration need not be augmented to accommodate NSTN’s applications.³²

11. With respect to NSTN’s assertion that it should have been permitted to amend the application to reduce the requested power to four watts to bring the proposed operations into compliance with TSB-88, we note that NSTN’s frequency coordinator certified only that NSTN’s operation at that power level would not cause more than five percent reduction of the calculated service area reliability.³³ The LMCC Consensus, however, requires that the applicant will neither cause nor receive more than five percent degradation.³⁴ Therefore, such certification is insufficient to conclude that the TSB-88 requirements are met.³⁵

12. Last, NSTN argues that the Division should not have dismissed the first Monte Nido application with respect to channels that are not adjacent to MRA channels, because MRA lacked standing to object to those channels.³⁶ We note, however, that every channel in the application was adjacent to channels licensed to either MRA or the Joint Petitioners, and that MRA and the Joint Petitioners both objected to the application, and both asserted on reconsideration of the grant that the proposed operations did not satisfy TSB-88.³⁷

²⁹ See 2010 MO&O, 25 FCC Rcd at 550-51 ¶ 4.

³⁰ *Id.* at 551 n.15. Moreover, the 2010 MO&O controverts NSTN’s assertions, see Monte Nido AFR at 9-10; Glendale AFR at 6, that TSB-88 is not a mandatory standard for frequency coordinators, or applies only to simplex operations. See also Amendment of Part 90 of the Commission’s Rules, *Second Report and Order and Second Further Notice of Proposed Rule Making*, WP Docket No. 07-100, 25 FCC Rcd 2479, 2497 ¶ 44 (2010) (seeking comment on whether to codify the TSB-88 requirement in the Commission’s rules in order to reduce confusion).

³¹ See Monte Nido AFR at 6; Glendale AFR at 3-4.

³² See Joint Petitioners Monte Nido Opposition at 2-3.

³³ See Monte Nido AFR at 9 n.5.

³⁴ See LMCC Consensus, Attachment at 2.

³⁵ See MRA Monte Nido Opposition at 5; Joint Petitioners Monte Nido Opposition at 3-4. In any event, our engineering staff’s independent analysis finds that NSTN would incur more than five percent reduction of the calculated service area reliability under that proposal.

³⁶ See Monte Nido AFR at 11.

³⁷ Joint Petitioners assert that their initial objection to the application opposed the proposed operations on the grounds that they did not satisfy TSB-88. See Joint Petitioners Monte Nido Opposition at 1. This is not correct. The petition filed by James A. Kay, Jr., on October 27, 2003 did not expressly or implicitly reference TSB-88. We remind counsel that an attorney may be subjected to appropriate disciplinary action pursuant to Section 1.24 of the Commission’s Rules, 47 C.F.R. § 1.24, for a willful violation of Section 1.52 of the Commission’s Rules, 47 C.F.R. § 1.52, which provides that an attorney’s signature on a pleading constitutes a certificate by him that there is good ground to support it, to the best of his knowledge, information, and belief. See *Glendale Order*, 24 FCC Rcd at 4091 n.23.

IV. CONCLUSION

13. Petitioners have not demonstrated that the Division's decisions on reconsideration contain a material error. We therefore deny the applications for review.

14. Accordingly, IT IS ORDERED pursuant to Sections 4(i) and 5(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 155(c), and Section 1.115 of the Commission's Rules, 47 C.F.R. § 1.115, that the Applications for Review filed by National Science and Technology Network, Inc. on April 22, 2009 and April 30, 2009 ARE DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary