



Federal Communications Commission
Washington, D.C. 20554

DA 08-946

April 23, 2008

Thomas R. Gibbon
Bell, Boyd & Lloyd, LLP
1615 L Street, NW
Suite 1200
Washington, DC 20036

Re: Call Sign E080060
File No. SES-LIC-20080306-00245
File No. SES-AMD-20080312-00287

Call Sign E080064
File No. SES-LIC-20080313-00303

Dear Mr. Gibbon:

On March 6, 2008, March 12, 2008, and March 13, 2008, NHK Japan Broadcasting Corporation (NHK) filed the above-captioned applications seeking licenses to operate two temporary-fixed earth stations in the 12.25-12.75/14.0-14.5 GHz frequency bands in the fixed-satellite service (FSS).

Section 25.112 of the Commission's rules, 47 C.F.R. § 25.112, requires the Commission to return, as unacceptable for filing, any earth station application that is not substantially complete, contains internal inconsistencies, or does not substantially comply with the Commission's rules. NHK's applications contain several omissions that render each of them unacceptable and subject to dismissal. The deficiencies are as follows:

The U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, limits use of the 12.25-12.7 GHz band to the Broadcast Satellite Service (BSS). Further, the U.S. Table limits FSS use of the 12.7-12.75 GHz band to Earth-to-space transmissions only. In its applications, NHK states it will operate the proposed FSS earth station in the United States, U.S. territories and possessions, as well as affiliated commonwealths. It also indicates that the earth station will receive in the 12.25-12.7 GHz band. However, NHK did not request a waiver of the Table of Frequency Allocations to permit it to provide non-conforming FSS in the 12.2-12.7 GHz portion of the band allocated for BSS in any of its applications. In addition, NHK did not request a waiver of the Table to permit it to receive space-to-Earth transmissions in the 12.7-12.75 GHz portion of the band allocated for FSS Earth-to-space transmissions. Consequently, those portions of NHK's applications requesting authority to operate in the 12.25-12.75 GHz band are defective.

In addition, the applications are defective in other respects. First, in its application for Call Sign E080064, NHK did not specify the antenna gain in response to item E42 of Schedule B for operations in the 12.25-12.75 GHz band. Without this information, the application is incomplete.

Second, NHK's application for earth station Call Sign E080064 lists ALSAT-designated satellites among the earth stations' intended points of communication. Earth station applicants may request authority to communicate with ALSAT-designated satellites only when the proposed earth station's operations are two-degree compliant and will operate in the 3700-4200 MHz, 5925-6425 MHz, 11.7-12.2 GHz, or 14.0-14.5 GHz frequency bands. Earth station Call Sign E080060 is not, however, two-degree compliant. Specifically, in response to item E49 of Schedule B for this earth station, NHK lists 33.72, 35.49, 35.74, 35.74, 38.76, 38.76, 39.36, 35.76, 35.76, and 36.36 dBW/4kHz as the maximum equivalent isotropic radiated power (e.i.r.p.) density per carrier for emissions 26M9G7W, 17M9G7W, 16M9D7W, 16M9G7W, 8M43D7W, 8M43G7W, 7M34G7W, 8M43D7W, 8M43G7W, and 7M34G7W, respectively. Based on this information, and by subtracting the antenna gain (47.2 dBi listed in response to item E41 of Schedule B) from the e.i.r.p. density, we calculate the power density at the input of the antenna flange as -13.48, -11.71, -11.46, -11.46, -8.44, -8.44, -7.84, -11.44, -11.44, and -10.84 dBW/4kHz, respectively. This value exceeds the -14.0 dBW/4kHz power density limit for two-degree compliant earth stations contained in Section 25.212(c) of the Commission's rules, 47 C.F.R. § 25.212(c). Thus, NHK cannot use an ALSAT designation for these emissions and must specifically list all satellites that the earth station intends to communicate with when using these emissions.

Third, Section 25.220(e)(1) of the Commission's rules, 47 C.F.R. § 25.220(e)(1), requires earth station applicants proposing to operate at power density levels that exceed the limits in Section 25.212(c) to submit a certification from the specified satellite operator. This certification must state that the target operator has coordinated the non-compliant operations with all potentially affected satellite operators within 6° orbital separation from its satellite and that the operations will not violate any existing coordination agreements.¹ NHK lists the Japanese-licensed Superbird-B2 and JCSAT-1B satellites as intended points of communication for earth station Call Sign E080060. NHK does not, however, provide the required certifications from those satellite operators regarding the earth station's proposed non-compliant operations.

Fourth, Section 25.137(b) of the Commission's rules, 47 C.F.R. § 25.137(b), states that applications for earth stations seeking to access non-U.S.-licensed satellites, such as Superbird-B2 and JCSAT-1B, must include the same technical information regarding the satellite as applicants for U.S. licensed satellites.² NHK does not provide any technical information for either satellite in its applications. Superbird-B2's technical specifications were previously submitted to the Commission in another application,³ and the satellite was authorized to provide service in the

¹ Amendment of the Commission's Regulatory Policies to Allow Non-U.S.-Licensed Space Stations to Provide Domestic and International Services in the United States, First Order on Reconsideration, IB Docket No. 96-111, 15 FCC Rcd 7207-7210 n.19.

² See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, *Report and Order*, IB Docket No. 96-111, 12 FCC Rcd 24094, 24175 (para. 189) (1997); Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, IB Docket No. 02-34, 18 FCC Rcd 10760, 10872-73 (paras. 299-302) (2003).

³ See IBFS File No. SAT-PPL-20051101-00208.

United States after review of those specifications. Thus, NHK need not provide any additional technical information for Superbird-B2. The information currently on file for JCSAT-1B,⁴ however, was submitted before information filing requirements for non-U.S.-licensed earth stations were codified and does not include all currently required information. It does not include, for example, the interference analysis required by Section 25.140(b)(2) of the Commission's rules, 47 C.F.R. § 25.140(b)(2), to demonstrate that the satellite system is two-degree compliant. It also does not include the polarization information specified in Section 25.210(i) of the rules, 47 C.F.R. § 25.210(i), to demonstrate that space station antenna provides a cross-polarization isolation of at least 30 dB within its primary coverage area. Further, it does not include a description of the types of services to be provided, including transmission characteristics and link performance analysis, required by Section 25.114(d)(4) of the Commission's rules, 47 C.F.R. § 25.114(d)(4). In any refiling requesting access to the JCSAT-1B satellite, NHK should include all technical information for that satellite required by Part 25.

Finally, Sections 2.201 and 2.202 of the Commission's rules, 47 C.F.R. § 2.201 and 2.202, require applicants to format emission designators with seven characters according to their classification and their bandwidth. In response to item E47 of Schedule B for both earth stations, NHK lists "All Typ" and "All Type" for emissions in the 12.25-12.75 GHz band.

Accordingly, pursuant to Section 25.112(a)(1) of the Commission's rules, 47 C.F.R. § 25.112(a)(1), and Section 0.261 of the Commission's rules on delegations of authority, 47 C.F.R. § 0.261, we dismiss the applications without prejudice to refiling.⁵

Sincerely,

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Chief, Systems Analysis Branch
Satellite Division
International Bureau

⁴ See IBFS File No. SES-LIC-20010904-01637.

⁵ If NHK refiles an application identical to the one dismissed, with the exception of supplying the corrected information, it need not pay an application fee. See 47 C.F.R. § 1.1109(d).