base stations in accordance with \$\$24.53(b) and (c) of this chapter exceeds the height benchmark (hb_m) .

- (c) Protection for receiving antennas not exceeding the height benchmark. Absent agreement between the two licensees to the contrary, if a transmitting antenna of one BRS/EBS licensee's base station exceeds its applicable height benchmark and such licensee is notified by another BRS/EBS licensee that it is generating an undesired signal level in excess of -107 dBm/5.5 megahertz at the receiver of a co-channel base station that is within its applicable height benchmark, then the licensee of the base station that exceeds its applicable height benchmark shall either limit the undesired signal at the receiver of the protected base station to -107dBm/5.5 megahertz or less or reduce the height of its transmission antenna to no more than the height benchmark. If the interfering base station has been modified to increase the EIRP transmitted in the direction of the protected base station, it shall be deemed to have commenced operations on the date of such modification. Such corrective action shall be completed no later than:
- (i) 24 hours after receiving such notification, if the base station that exceeds its height benchmark commenced operations after the station that is within its applicable height benchmark; or
- (ii) 90 days after receiving such notification, if the base station that exceeds its height commenced operations prior to the station that is within its applicable height benchmark. For purposes of this section, if the interfering base station has been modified to increase the EIRP transmitted in the direction of the victim base station, it shall be deemed to have commenced operations on the date of such modification.
- (d) No Protection from a transmitting antenna not exceeding the height benchmark. The licensee of a base station transmitting antenna less than or equal to its applicable height benchmark shall not be required pursuant to paragraph (c) of this section to limit that antennas undesired signal level to $-107 \mathrm{dBm/5.5}$ megahertz or less at the receiver of any co-channel base station.

- (e) No protection for a receiving-antenna exceeding the height benchmark. The licensee of a base station receive antenna that exceeds its applicable height benchmark shall not be entitled pursuant to paragraph (c) of this section to insist that any co-channel base station limit its undesired signal level to -107dBm/5.5 megahertz or less at the receiver.
- (f) Information exchange. A BRS/EBS licensee shall provide the geographic coordinates, the height above ground level of the center of radiation for each transmit and receive antenna, and the date transmissions commenced for each of the base stations in its GSA within 30 days of receipt of a request from a co-channel BRS/EBS licensee with an operational base station located in a proximate GSA. Information shared pursuant to this section shall not be disclosed to other parties except as required to ensure compliance with this section.

[69 FR 72034, Dec. 10, 2004, as amended at 70 FR 1190, Jan. 6, 2005; 71 FR 35191, June 19, 2006; 73 FR 26041, May 8, 2008]

§ 27.1222 Operations in the 2568–2572 and 2614–2618 bands.

All operations in the 2568-2572 and 2614-2618 MHz bands shall be secondary to adjacent-channel operations. Stations operating in the 2568-2572 and 2614-2618 MHz must not cause interference to licensees in operation in the LBS, MBS, and UBS and must accept any interference from any station operating in the LBS, MBS, and UBS in compliance with the rules established in this subpart. Stations operating in the 2568-2572 and 2614-2618 bands may cause interference to stations in operation in the LBS, MBS, and UBS if the affected licensees consent to such interference.

POLICIES GOVERNING THE TRANSITION OF THE 2500–2690 MHz BAND FOR BRS AND EBS

§ 27.1230 Conversion of the 2500–2690 MHz band.

BRS and EBS licensees in the 2500–2690 MHz band on the pre-transition A-I Channels will be transitioned from the frequencies assigned to them under §27.5(i)(1) to the frequencies assigned to

them under §27.5(i)(2). The transition, which will be undertaken by one or more proponent(s), will occur in the following five phases: initiating the transition process (see §27.1231), planning the transition (see §27.1232), reimbursing transition costs (see §§27.1233 and 27.1237–1239), terminating existing operations in transitioned markets that do not comport with §27.5(i)(2) (see §27.1234), and filing the post-transition notification (see §27.1235). Licensees may also self-transition (see §27.1236).

[71 FR 35191, June 19, 2006]

§27.1231 Initiating the transition.

- (a) Transition areas. Unless paragraph (b) of this section applies, the transition will occur by Basic Trading Area (BTA). BTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38-39, that identifies 487 BTAs based on the 50 States; it also includes the following additional BTA-like areas: American Samoa; Guam; Northern Mariana Islands; Mayaguez/Aguadilla-Ponce, Puerto Rico; San Juan, Puerto Rico: and the United States Virgin Islands, for a total of 493 BTAs. The Mayaguez/Aguadilla-Ponce BTA-like area consists of the following municipios: Adjuntas, Aguada, Aguadilla, Anasco, Arroyo, Cabo Rojo, Coamo, Guanica, Guayama, Guayanilla, Hormigueros, Isabela, Jayuya, Juana Diaz, Lajas, Las Marias, Maricao, Maunabo, Mayaguez, Moca, Patillas, Penuelas, Ponce, Quebradillas, Rincon, Sabana Grande, Salinas, San German, Santa Isabel, Villalba, and Yauco. The San Juan BTA-like area consists of all other municipios in Puerto Rico. The BTA associated with the Gulf of Mexico will not be transitioned.
- (b) Overlapping GSAs. When a Geographic Service Area (GSA) overlaps two or more BTAs:
- (1) The proponents of the adjacent BTAs may agree on how to transition a GSA that overlaps their respective BTAs
- (2) If an agreement has not been reached between or among the proponents of the adjacent BTAs:
- (i) Each proponent must transition all of the facilities associated with the GSA that are inside the GSA and inside

the proponent's BTA if all of the adjacent BTAs are transitioning; or

- (ii) The proponent of the BTA that is transitioning must transition all of the facilities associated with the GSA that are within the GSA but outside the BTA, if the adjacent BTA is not transitioning.
- (c)(1) *Proponent(s)*. The proponent or co-proponent must:
- (i) Be a BRS or EBS licensee or BRS or EBS lessee;
- (ii) Send a Pre-Transition Data Request (see paragraph (d) of this section) and a Transition Notice (see paragraph (e) of this section) to every BRS and EBS licensee in the BTA, using the contact information in the Commission's Universal Licensing System; and
- (iii) Be first to file an Initiation Plan (see paragraph (f) of this section) with the Secretary of the Commission.
- (2) Before filing an Initiation Plan, BRS or EBS licensees or BRS or EBS lessees may agree to be co-proponents. After the Initiation Plan is filed the proponent may accept a co-proponent at its sole discretion.
- (d) Pre-Transition Data Request. The Pre-Transition Data Request must include the potential proponent's full name, postal mailing address, contact person, e-mail address, and phone and fax numbers.
- (1) BRS and EBS licensees that receive a Pre-Transition Data Request must provide the following information to the potential proponent within 45 days of receiving the Pre-Transition Data Request:
- (i) The BRS or EBS licensee's full name, postal mailing address, contact person, e-mail address, and phone and fax number.
- (ii) The location (by street address and by geographic coordinates) of every constructed EBS receive site that, as of the date of receipt of the Pre-Transition Data Request, is entitled to a replacement downconverter (see § 27.1233(a)). The response must:
- (A) Specify whether the downconverting antenna is mounted on a structure attached to the building or on a free-standing structure;
- (B) Specify the approximate height above ground level of the downconverting antenna; and

- (C) Specify, if known, the adjacent channel D/U ratio that can be tolerated by any receiver(s) at the receive site.
- (iii) The location (street address and geographic coordinates) of the main station or booster serving each EBS receive site entitled to protection, including:
- (A) The make and model of the antenna for that main station or booster, along with the radiation pattern if it is not included within the Commission's database:
- (B) The ground elevation, above mean sea level (AMSL), of the building or antenna supporting structure on which the main station or booster transmission antenna is installed:
- (C) The height above ground level (AGL) of the center of radiation of the transmission antenna;
- (D) The orientation of the main lobe of the transmission antenna;
- (E) Any mechanical beamtilt or electrical beamtilt not reflected in the radiation pattern provided or included within the Commission's database;
- (F) The bandwidth of each channel or subchannel, the emission type for each channel or subchannel, and the EIRP measured in the main lobe for each channel or subchannel; and
- (G) The make and model of the receive antenna installed at that site, along with the radiation pattern if it is not included within the Commission's database.
- (iv) The number and identification of EBS video programming or data transmission tracks the EBS licensee is entitled to receive in the MBS and whether the EBS licensee will accept fewer tracks in the MBS (see §27.1233(b)).
- (v) Whether it will seek or has sought a waiver from the Commission as a Multichannel Video Programming Distributor (MVPD).
- (2) BRS and EBS licensees that do not respond to the Pre-Transition Data Request within 45 days of its receipt may not object to the Transition Plan.
- (e) The Transition Notice. The potential proponent(s) must send a Transition Notice to all BRS and EBS licensees in the BTA(s) being transitioned. The potential proponent(s) must include the following information in the Transition Notice:

- (1) The potential proponent(s)'s full name; postal mailing address, contact person, e-mail address, and phone and fax numbers;
- (2) The identification of the BRS and EBS licensees that will be transitioned;
- (3) Copies of the most recent response to the Pre-Transition Data Request for each participant in the process; and
- (4) A certification that the potential proponent(s) has the funds available to pay the reasonably expected costs of the transition based on the information in the Pre-Transition Data Request.
- (f) *Initiation Plan*. To initiate a transition, a potential proponent(s) must submit an Initiation Plan to the Commission at the Office of the Secretary in Washington, DC on or before January 21, 2009.
- (1) An Initiation Plan must contain the following information:
- (i) A list of the BTA(s) that the proponent(s) is transitioning;
- (ii) A list by call sign of all of the BRS and EBS licensees in the BTA(s) that are being transitioned;
- (iii) A "best estimate" of when the transition will be completed;
- (iv) A statement indicating that an agreement has been concluded with the proponent(s) of the adjoining or adjacent BTA(s) when a licensee or licensees in an adjacent or adjoining BTA must be transitioned to avoid interference to licensees in the BTA being transitioned, or in lieu of an agreement, the proponent(s) may provide an alternative means of transitioning the licensees in an adjacent or adjoining BTA;
- (v) A statement indicating that an agreement has been concluded with another proponent(s) on how a BTA will be transitioned when there are two or more proponents seeking to transition the same BTA and they agree to be coproponents before the Initiation Plan is filed, and a statement that identifies the specific portion of the BTA each proponent will be responsible for transitioning; and
- (vi) A certification that the proponent or joint proponents have the funds available to pay the reasonable expected costs of the transition based on the information contained in the

Pre-Transition Data Request (see paragraph (d) of this section).

- (2) A proponent, at its own discretion, may withdraw from transitioning a BTA by notifying the Commission and all affected BRS and EBS licensees in the BTA that it is withdrawing the Initiation Plan.
- (3) A proponent may amend an Initiation Plan after it has been filed with the Commission to correct minor or inadvertent errors.
- (g) MVPD waiver requests. MVPD licensees that seek to opt-out of the transition must seek a waiver within 60 days after the proponent files the Initiation Plan or on or before April 30, 2007, whichever occurs first.

[71 FR 35191, June 19, 2006, as amended at 73 FR 26041, May 8, 2008]

$\S 27.1232$ Planning the transition.

- (a) The Transition Planning Period. The Transition Planning Period is a 90-day period that commences on the day after the proponent(s) files the Initiation Plan with the Commission.
- (b) The Transition plan. The proponent(s) must provide to each BRS and EBS licensee within a BTA, a Transition Plan no later than 30 days prior to the conclusion of the Transition Planning Period.
 - (1) The Transition Plan must:
- (i) Identify the call signs of the stations that are transitioning;
- (ii) Identify the specific channels that each licensee will receive following the transition;
- (iii) Identify the receive sites at which replacement downconverters will be installed (see § 27.1233(a));
- (iv) Identify the video programming and data transmission tracks that will be migrated to the MBS and provide for the MBS channels to be authorized to operate with transmission parameters that are substantially similar to those of the licensee's operation prior to transition (see § 27.1233(b));
- (v) Identify the technical configuration of the MBS facilities;
- (vi) Identify the approximate time line for effectuating the transition, which, unless dispute resolution procedures are used, may not exceed 18 months from the conclusion of the Transition Planning Period;

- (vii) Provide for the establishment of an escrow or other appropriate mechanism for ensuring completion of the transition in accordance with the Transition Plan.
- (2) The Transition Plan may provide for interruptions of EBS transmissions, so long as those interruptions are limited to a period of less than seven days at any reception site. The proponent(s) must coordinate with each EBS licensee to minimize the extent of any disruption.
- (3) The Transition Plan may provide for the shifting of an EBS licensee's program to alternative channels. Such shifting may not be considered an interruption, if the EBS licensee's receive sites are equipped to receive and internally distribute the channel to which the programming is shifted.
- (4) The Transition Plan may provide for the installation of an appropriate filter on an MBS transmitter if the proponent(s) determines that the installation of a filter will mitigate interference from transmissions in the MBS to operations outside the MBS.
- (c) Counterproposals. No later than 10 days before the conclusion of the Transition Planning Period, affected BRS and EBS licensees may submit a counterproposal to the proponent(s) if they believe that the Transition Plan is unreasonable. The proponent(s) may:
- (1) Accept the counterproposal, modify the Transition Plan accordingly, and send the modified Transition Plan to all EBS and BRS licensees in the BTA;
- (2) Invoke dispute resolution procedures for a determination of whether the Transition Plan is reasonable and take no action until a determination of reasonableness is made; or
- (3) Invoke dispute resolution procedures for a determination of whether the Transition Plan is reasonable, but may implement the transition immediately.
- (d) Safe harbors. An offer by a proponent(s) shall be reasonable if it meets one of the following safe harbors:
- (1) Safe harbor No. 1. This safe harbor applies when the default high-power channel assigned to each channel group

is authorized to operate after the transition with the same transmission parameters (coordinates, antenna pattern, height of center radiation, EIRP) as the downstream facilities before the transition. If the proponent(s) does not propose a change in the geographic coordinates of the facilities (other than as necessary to conform the actual location with the Commission's Antenna Survey Branch database), the proponent may also propose the following to the extent consistent with this subpart:

- (i) An increase in the height of the center of radiation of the transmission antenna or a decrease in such height of no more than 8 meters (provided that such change does not result in an increase in antenna support structure lease costs to the EBS licensee and the consent of the owner of the antenna support structure is obtained).
- (ii) A change in the EIRP of the transmission system of up to 1.5 dB in any direction.
- (iii) Digitization, precision frequency offset, or other upgrades to the EBS transmission or reception systems that allow the proponent(s) to invoke more advantageous interference protection requirements applicable to upgraded systems.
- (2) Safe harbor No. 2. This safe harbor applies when an EBS licensee has channel-shifted its single video programming or data transmission track to spectrum licensed to another licensee. Under §27.5(i)(2), that track must be on the high-power channel licensed to the EBS licensee upon completion of the transition. For example, before the transition, an A Group licensee might have shifted its EBS video programming to channel C1. If one of the pretransition A Group channels is licensed with technical parameters substantially similar to those of pre-transition channel C1, the Transition Plan may provide for high-power channel A4 to be licensed with the same technical parameters as the pre-transition channel C1. However, if the pre-transition A Group channels are licensed to operate with technical parameters materially different from those of pre-transition channel C1, the proponent(s) may:
- (i) Arrange a channel swap with the licensee of the C Group so that the A

Group licensee will receive high-power channel C4 (which will automatically be licensed with the same transmission parameters as the pre-transition channel C1) in exchange for channel A4.

- (ii) Arrange for high-power channel A4 to operate with transmission parameters substantially similar to those of the pre-transition channel C1 (see paragraph (d)(1) of this section).
- (3) Safe harbor No. 3. This safe harbor applies when a four-channel group is shared among multiple licensees in a given geographic area. Absent an agreement otherwise, a proponent may:
- (i) Secure a 6 MHz MBS channel for each licensee in exchange for the non-MBS channels assigned to the group. Following the channel swap(s) necessary to secure those additional MBS channels, the Transition Plan can provide for the licensing of the remaining channels in the LBS, UBS, and Guard Bands on a pro rata basis (with channel(s) in each segment being disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment);
- (ii) Provide for pro rata segmentation of the default MBS channel for the group, provided that the proponent commits to provide each of the licensees with the technology necessary for its EBS video programming or data transmissions to be digitized, transmitted and received utilizing the provided bandwidth. The non-MBS channels would be divided among the sharing licensees on a pro rata basis (with channel(s) in each segment being disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment); or
- (iii) Assign the default MBS channel assigned to the channel group to one of the licensees, if that licensee is the only one that elects to migrate video programming or data transmission tracks to the MBS. The remaining spectrum assigned to the group may be allocated among the licensees on a pro rata basis, with the 6 MHz in the MBS counting against that licensee's portion. To the extent necessary, the non-MBS spectrum can be disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment. If the proponent chooses to effectuate a channel swap to

provide more than one channel in the MBS, the remaining channels assigned to the group (after considering that one or more LBS/UBS channels and associated Transition Band channels will have been swapped away to provide the additional MBS channel) can be allocated among the licensees on a pro rata basis (with channel(s) in each segment being disaggregated when and if necessary to provide each with its pro rata share of the spectrum in each segment).

- (4) Safe harbor No. 4. This safe harbor applies when an EBS licensee uses one or more of its channels for studio-to-transmitter links. The proponent may provide for one of the following options:
- (i) The use of the LBS and/or UBS band for the point-to-point transmission of the EBS video or data (through superchannelization of the licensee's contiguous LBS or UBS channels), provided the proponent commits to reture the existing point-to-point equipment to operate on those channels or to replace the existing equipment with new equipment tuned to operate on those channels and the proposal complies with the LBS/UBS technical and interference protection rules;
- (ii) The migration of the EBS programming to the MBS by retuning the existing point-to-point equipment to operate in the MBS or replacing it with equipment tuned to operate in the MBS; or
- (iii) The replacement of the point-topoint link with point-to-point equipment licensed to the EBS licensee in alternative spectrum, so long as the replacement facilities meet the definition of "comparable facilities" set out in §101.75(b) of this chapter.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35192, June 19, 2006]

§ 27.1233 Reimbursement costs of transitioning.

- (a) Replacement downconverters. The proponent(s) must install at every eligible EBS receive site a downconverter designed to minimize the reception of signals from outside the MBS.
- (1) An EBS receive site is eligible to be replaced if:
- (i) A reception system was installed at that site on or before the date the

EBS licensee receives its Pre-Transition Data Request (see § 27.1231(d));

- (ii) The reception system was installed by or at the direction of the EBS licensee;
- (iii) The reception system receives EBS programming under §27.1203(b) and (c) or is located at a cable television system headend and the cable system relays educational or instructional programming for an EBS licensee; and
- (iv) It is within the licensee's 35-mile radius GSA.
- (2) Replacement downconverters must meet the following minimum technical requirements:
- (i) The downconverter's input frequency range (the "in-band frequencies") must be 2572 MHz to 2614 MHz and output frequency range must be 294 MHz to 336 MHz;
- (ii) The downconversion process must not invert frequencies;
- (iii) The nominal gain of the downconverter must be 32 dB, or greater.
- (iv) The downconverter must include filtering prior to the first amplifier that attenuates frequencies below 2500 MHz and above 2705 MHz by at least 25 dB:
- (v) The downconverter must have an out-of-band input 3rd order intercept point (input IP3) of at least +9 dBm, where out-of-band is defined as all frequencies below 2566 MHz and all frequencies above 2620 MHz;
- (vi) The downconverter must have a typical noise figure of no greater than 3.5 dB and a worst case noise figure of no greater than 4.5 dB across all inband frequencies and across its entire intended operating temperature range;
- (vii) The downconverter must not introduce a delta group delay of more than 20 nanoseconds for digital operations or 100 nanoseconds for analog operations over any individual six megahertz MBS channel.
- (b) Migration of Video Programming and Data Transmission Track. (1) The proponent(s) must provide, at its cost, to each EBS licensee that intends to continue downstream high-power, high-site educational video programming or data transmission services, with one

programming track on the MBS channels for each EBS video or data transmission track the licensee is transmitting on a simultaneous basis before the transition.

- (i) To be eligible for migration, a program track must contain EBS programming that complies with §27.1203 (b) and (c).
- (ii) The proponent(s) must pay only the costs of migrating programming tracks being transmitted on December 31, 2002 or within six months prior thereto.
- (2) The proponent(s) must migrate each eligible programming track to spectrum in the MBS that will be licensed to the affected licensee at the conclusion of the transition.
- (3) After the transition, the desiredto-undesired signal level ratio at each of the receive sites securing a replacement downconverter must satisfy the following criteria:
- (i) Cochannel D/U Ratio. (A) When the post-transition desired signal is transmitted using analog modulation, the actual cochannel D/U ratio measured at the output of the reception antenna must be at least the lesser of 45 dB or the actual pre-transmission D/U ratio less 15 dB
- (B) When the post-transition desired signal will be transmitted using digital modulation, the actual cochannel D/U ratio measured at the output of the reception antenna must be at least the lesser of 32 dB or the pre-transition D/U ratio less 1.5 dB.
- (C) Where in implementing the Transition Plan, the proponent(s) deploys precise frequency offset in an analog system, the minimum cochannel D/U ratio is reduced to 38 dB, provided that the transmitters have or are upgraded pursuant to the Transition Plan to have the appropriate "plus," "zero," or "minus" 10,010 Hertz precision frequency offset with a ±3 Hertz (or better) stability.
- (ii) Adjacent Channel D/U Ratio. The actual adjacent channel D/U must equal or exceed the lesser of 0 dB or the actual pre-transmission D/U ratio. However, in the event that the receive site uses receivers or is upgraded by the proponent(s) as part of the Transition Plan to use receivers that can tolerate negative adjacent channel D/U

ratios, the actual adjacent channel D/U ratio at such receive site must equal or exceed -10 dB. Provided that the receive site receiver is not upgraded and cannot tolerate -10 dB, the adjacent channel D/U ratio would be 0dB.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35193, June 19, 2006]

§ 27.1234 Terminating existing operations in transitioned markets.

Licensees may discontinue operations during the transition.

§27.1235 Post-transition notification.

The proponent(s) must certify to the Commission at the Office of the Secretary, Washington, DC, that the Transition Plan has been fully implemented.

- (a) The notification must provide the identification of the licensees that have transitioned to the band plan in §27.5(i)(2) and the specific frequencies on which each licensee is operating.
- (b) For each station in the MBS, the notification must provide the following information:
 - (1) The station coordinates,
- (2) The make and model of each antenna,
- (3) The horizontal and vertical pattern of the antenna;
 - (4) EIRP of the main lobe;
 - (5) Orientation;
- (6) Height of antenna center of radiation:
 - (7) Transmitter output power;
 - (8) All line and combiner losses.
- (c) The proponent(s) must provide copies of the post-transition notice to all parties of the transition.
- (d) A BRS or EBS licensee must file any objection to the post-transition notification within 30 days from the date the post-transition notification is placed on Public Notice.

[69 FR 72034, Dec. 10, 2004, as amended at 71 FR 35193, June 19, 2006]

§27.1236 Self-transitions.

(a) If an Initiation Plan is not filed on or before January 21, 2009 for a BTA, BRS and EBS licensees in that BTA may self-transition by relocating to their default channel locations specified in §27.5(i)(2) and complying with §§27.50(h), 27.53, 27.55 and 27.1221.

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- (b) To self-transition, a BRS or EBS licensee must:
- (1) Notify the Secretary of the Commission on or before April 21, 2009 that it will self-transition (see paragraph (a) of this section);
- (2) Send a Self-Transition Notification (see paragraph (c) of this section) to other BRS and EBS licensees in the BTA where the self-transitioning licensee's GSA geographic center point is located that it is self-transitioning;
- (3) Notify other licensees whose GSAs overlap with the self-transitioning licensee that it is self-transitioning.
- (4) Address interference concerns with other BRS and EBS licensees in the BTA that are also self-transitioning;
- (5) File a modification application with the Commission, and
- (6) Complete the self-transition on or before October 20, 2010.
- (c) Self-Transition Notification. The Self-Transition Notification must include the EBS licensee's full name, postal mailing address, contact person, e-mail address, and phone and fax numbers. A self-transitioning EBS licensee must provide the following information to all BRS and EBS licensees located in the BTA where the self-transitioning licensees GSA geographic center point is located:
- (1) The location (by street address and by geographic coordinates) of every constructed EBS receive site that, as of the date the Self-Transition Notification is sent, is entitled to a replacement downconverter (see § 27.1233(a)). The response must:
- (i) Specify whether the downconverting antenna is mounted on a structure attached to the building or on a free-standing structure;
- (ii) Specify the approximate height above ground level of the downconverting antenna; and
- (iii) Specify, if known, the adjacent channel D/U ratio that can be tolerated by any receiver(s) at the receive site.
- (2) The location (street address and geographic coordinates) of the main station or booster serving each EBS receive site entitled to protection, including:
- (i) The make and model of the antenna for that main station or booster, along with the radiation pattern if it is

- not included within the Commission's database:
- (ii) The ground elevation, above mean sea level (AMSL), of the building or antenna supporting structure on which the main station or booster transmission antenna is installed;
- (iii) The height above ground level (AGL) of the center of radiation of the transmission antenna;
- (iv) The orientation of the main lobe of the transmission antenna:
- (v) Any mechanical beamtilt or electrical beamtilt not reflected in the radiation pattern provided or included within the Commission's database;
- (vi) The bandwidth of each channel or subchannel, the emission type for each channel or subchannel, and the EIRP measured in the main lobe for each channel or subchannel; and
- (vii) The make and model of the receive antenna installed at that site, along with the radiation pattern if it is not included within the Commission's database.
- (3) The number and identification of EBS video programming or data transmission tracks the EBS licensee is entitled to receive in the MBS (see §27.1233(b)).
- $[71~{\rm FR}~35193,~{\rm June}~19,~2006,~{\rm as~amended}~{\rm at}~73~{\rm FR}~26042,~{\rm May}~8,~2008]$

§ 27.1237 Pro rata allocation of transition costs.

- (a) Self-transitions. EBS licensees that self-transition may seek reimbursement for their costs to replace eligible downconverters (see §27.1233(a)) and to migrate video programming and data transmission tracks (see §27.1233(b)) from BRS licensees and lessees, EBS lessees, and commercial EBS licensees in the BTA where the center point of the EBS licensee's GSA is located. In addition, BRS licensees and lessees, EBS lessees, and commercial EBS licensees in the LBS or UBS must reimburse the self-transitioning EBS licensee a pro rata share of the eligible costs of transitioning EBS licensees, based on the formula in paragraph (c) of this section. Eligible costs are listed in § 27.1238.
- (b) Proponent-driven transitions. BRS licensees and lessees, entities that lease EBS spectrum for a commercial purpose, and commercial EBS licensees

§27.1238

must pay their own transition costs. In addition, except for MVPD operators that opt-out of the transition, BRS licensees and lessees, EBS lessees, and commercial EBS licensees in the LBS or UBS must reimburse the proponent a pro rata share of the eligible costs of transitioning EBS licensees, based on the formula in paragraph (c) of this section. Eligible costs are listed in §27.1238.

(c) Formula. The pro rata share shall be based on the following formula:

$$R = \frac{L \times LP}{T \times TP}$$

- (1) R equals the pro rata share;
- (2) L equals the amount of spectrum used by a BRS licensee or lessee or commercial EBS licensee or lessee to provide a commercial service, either directly or through a lease agreement with an EBS or BRS licensee;
- (3) T equals the total amount of spectrum licensed or leased for commercial purposes in the BTA;
- (4) LP equals the population of the geographic service area or BTA served by the BRS licensee or lessee or commercial EBS licensee or lessee based on the data in the 2000 United States Census; and
- (5) TP equals the population of the BTA based on the data in the 2000 United States Census.

[71 FR 35193, June 19, 2006]

§27.1238 Eligible costs.

- (a) The costs listed in paragraphs (b) through (f) of this section are eligible costs.
 - (b) Pre-transition costs:
 - (1) Engineering/Consulting
 - (i) Evaluation of equipment;
 - (ii) RX site identification;
- (iii) EBS Programming plan covering the BTA;
- (iv) Market Analysis (MHz per POP Study);
- (v) RF study (interference analysis); and
- (vi) Transition Plan creation and support:
- (2) Project management (may be sourced external);
 - (3) Filing fees;

- (4) Legal fees;
- (5) Site acquisition fees-contractor; and
 - (6) Arbitrator fee;
- (c) Transmission facility—analog conversion costs:
- (1) Transmitter upgrading or retuning;
 - (2) Combiner re-tuning or new;
- (3) Power divider/circulator adjacent channel combiner hardware;
 - (4) STL/fiber relocation;
- (5) Miscellaneous material costs (including cabling and connectors);
- (6) Contract labor:
- (i) Tower;
- (ii) Building modifications;
- (iii) Electrical/HVAC; and
- (iv) Mechanical
- (7) Engineering:
- (i) Structural; and
- (ii) Pathway Interference Analysis.
- (8) Equipment disposal/shipping
- (9) Program Management (third party or internal costs to manage the BTA conversion); and
 - (10) Travel and Per Diem Cost.
- (d) Transmission facility-digital conversion costs:
 - (1) New transmitter or retuning;
- (2) Digital compression equipment-TX site (including encoders, controller, and software);
 - (3) Combiners-new or retune;
- (4) Power divider/circulator adjacent channel combiner hardware;
- (5) Cabinets, cabling, feedline and connectors;
 - (6) STL—fiber digital upgrade;
- (7) Installation cost due to adding additional broadcast antenna (4 or more digital channels required);
 - (8) Contract labor:
 - (i) Tower;
 - (ii) Building modifications;
- (iii) Electrical/HVAC; and
- (iv) Mechanical.
- (9) Proof of performance testing (may be contracted):
 - (10) Engineering:
 - (i) Structural; and
 - (ii) Path engineering analysis.
 - (11) Equipment disposal/shipping;
 - (12) Training;
- (13) Program management (third party or internal costs to manage BTA conversion);
 - (14) Travel and per diem costs.
- (e) Qualified receive-sites only-modifications (analog and digital):

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- (1) Digital set top boxes;
- (2) Downconverters (with filtering)/ antennas (replacement downconverters):
 - (3) Contract labor:
- (i) Antenna change/DC install (antenna change may be necessary); and
 - (ii) Electrical; and mechanical
- (4) Project management (third party or internal costs to manage the BTA conversion);
- (5) Proof of performance testing (may be contracted);
- (6) Mini headend (cost effective distribution method):
 - (i) Modulators, combiners;
 - (ii) Equipment racks; and
 - (iii) Amplifiers
 - (7) Cable, connectors; and
 - (8) Training.
- (f) $\it Miscellaneous transition fees.$ (1) Filing fees;
 - (2) Arbitrator fee; and
 - (3) Legal fees.

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§27.1239 Reimbursement obligation.

- (a) A proponent may request reimbursement from BRS licensees and lessees, EBS lessees, and commercial EBS licensees in a BTA after the Transition Notification has been filed with the Secretary of the Commission and the proponent has accumulated the documentation to substantiate the full and accurate cost of the transition. A selftransitioning licensee may request reimbursement from BRS licensees and lessees, EBS lessees, and commercial EBS licensees in a BTA where its GSA geographic center point is located after it has completed the self-transition and has filed a modification application with the Commission and has accumulated the documentation to substantiate the full and accurate cost of the transition.
- (b) If a license is assigned, transferred, partitioned, or disaggregated, all parties to the assignment, transfer, disaggregation, or partition are jointly and severally liable for paying the reimbursement obligation until that obligation is paid.

[71 FR 35193, June 19, 2006]

RELOCATION PROCEDURES FOR THE 2150-2160/62 MHz Band

SOURCE: Sections 27.1250 through 27.1255 appear at 71 FR 29840, May 24, 2006, unless otherwise noted.

§ 27.1250 Transition of the 2150–2160/ 62 MHz band from the Broadband Radio Service to the Advanced Wireless Service.

The 2150–2160/62 MHz band has been allocated for use by the Advanced Wireless Service (AWS). The rules in this section provide for a transition period during which AWS licensees may relocate existing Broadband Radio Service (BRS) licensees using these frequencies to their assigned frequencies in the 2496–2690 MHz band or other media.

- (a) AWS licensees and BRS licensees shall engage in mandatory negotiations for the purpose of agreeing to terms under which the BRS licensees would:
- (1) Relocate their operations to other frequency bands or other media; or alternatively
- (2) Accept a sharing arrangement with the AWS licensee that may result in an otherwise impermissible level of interference to the BRS operations.
- (b) If no agreement is reached during the mandatory negotiation period, an AWS licensee may initiate involuntary relocation procedures. Under involuntary relocation, the incumbent is required to relocate, provided that the AWS licensee meets the conditions of § 27.1252.
- (c) Relocation of BRS licensees by AWS licensees will be subject to a three-year mandatory negotiation period. BRS licensees may suspend the running of the three-year negotiation period for up to one year if the BRS licensee cannot be relocated to comparable facilities at the time the AWS licensee seeks entry into the band.

§27.1251 Mandatory Negotiations.

(a) Once mandatory negotiations have begun, a BRS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. Good faith requires each party to provide information to the other that is reasonably necessary to facilitate the relocation process. The BRS licensee is