

MEMORANDUM OPINION AND ORDER

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

Adopted: August 2, 1989;

Released: August 15, 1989

By the Commission: Commissioner Dennis issuing a statement.

In re Applications of

CONTINENTAL
SATELLITE
CORPORATION DBS-87-01

ECHOSTAR
SATELLITE
CORPORATION DBS-88-01

DIRECTSAT
CORPORATION DBS-88-02

ORBITAL
BROADCASTING
COMPANY DBS-88-03

TEMPO
SATELLITE,
INC. DBS-88-04

DIRECT BROADCAST
SATELLITE
CORPORATION DBS-88-08

For Construction Permits for New
Direct Broadcast Satellite Systems;

ADVANCED
COMMUNICATIONS
CORPORATION DBS-88-05-MP

UNITED STATES
SATELLITE BROADCASTING
COMPANY, INC. DBS-88-06-MP

HUGHES
COMMUNICATIONS
GALAXY, INC. DBS-88-07-MP

For Modification of Construction Permits for
Direct Broadcast Satellite Systems.

In re Permit of

DOMINION VIDEO
SATELLITE, INC.

Modification of Construction Permit for
Direct Broadcast Satellite System.

1. On February 3, 1988, the Commission issued a Public Notice (Report No. DBS-5A) accepting for filing the applications for Direct Broadcast Satellite ("DBS") systems of Continental Satellite Corporation ("Continental") and EchoStar Satellite Corporation ("Echostar"). A cut-off date of April 8, 1988 was established for the filing of any additional applications to be considered with them. On April 8, 1988, new applications for DBS systems were filed by DIRECTSAT Corporation ("Directsat") and TEMPO Satellite, Inc. ("Tempo").¹ On the same date, Direct Broadcast Satellite Corporation ("DBSCorp"), which had earlier requested an extension of its conditional construction permit, requested consideration as a new applicant in the event its extension request were to be denied. Also on that date, applications for modification of existing DBS construction permits were filed by Advanced Communications Corporation ("Advanced"), United States Satellite Broadcasting Company, Inc. ("USSB"), and by Hughes Communications Galaxy, Inc. ("Hughes"); and Continental modified its pending application.

2. The Association of Maximum Service Telecasters ("AMST") has filed "Comments" opposing each of the subject applications, and the National Black Media Coalition ("NBMC") has filed a petition to deny the applications of Advanced, DBSCorp, Hughes, Orbital, and USSB. In addition, petitions to deny Tempo's application have been filed by Advanced, by the Wireless Cable Association ("Wireless Cable"), and by the National Association for Better Broadcasting and the Telecommunications Research and Action Center ("NABB/TRAC"). The Motion Picture Association of America ("MPAA") filed an untimely and unauthorized pleading opposing Tempo's application. Finally, GTE Spacenet ("GTE") has filed comments in response to the applications of Echostar and Continental, which apply to the other applications as well.

3. On October 19, 1988, the Commission staff directed a letter to all DBS permittees and applicants requesting their comments on the Commission's policy for allocating DBS channels and orbital locations. Responses were submitted by most of the DBS entities, including technical studies by two, and several replies to those responses were also filed.

4. This Order first considers orbital assignments and service areas in light of the advancements in transmission technology and systems for DBS, as well as the increased demand for the DBS orbit/spectrum resource presented by the subject applications. The Order concludes that half-CONUS signals² will be allocated only in east/west pairs, with eastern half-CONUS service permitted only from the four DBS orbital locations furthest east and western half-CONUS service permitted only from the four DBS orbital locations furthest west. (See paragraphs 7, 8, below.) The outstanding authorizations at variance with this allocation policy will be modified to conform. (See paragraphs 12 - 14, below.) Full-CONUS signals will also be authorized from those orbital locations from which such service is feasible and in keeping with United States treaty obligations. (See paragraphs 9, 10, below.) This Order also

considers and denies a request filed by Advanced seeking an allocation at the same orbital location as Hughes to reuse the same channels as Hughes. (See paragraphs 15, 16, below.) This Order then considers the qualifications of each of these applicants and the availability of requested DBS facilities, and disposes of these applications and associated petitions to deny. All of the applications except Tempo's are granted to the extent possible, with all applicants receiving a reservation for a pro-rata share of the orbit/channel allocations available. (See paragraphs 54 - 57, below.) Action on Tempo's application is withheld pending further consideration of its qualifications, with its pro-rata share of the remaining allocations also held in reserve pending the outcome of the further considerations. (See paragraphs 53, 56, below.)

ORBITAL ALLOCATIONS AND SERVICE AREAS

Background

5. The basis for domestic DBS allocation policies is provided by the Region 2 Plan (Appendices 30 and 30(a), ITU Radio Regulations). This Plan provides, in pertinent part, for service to eastern areas of the continental United States from each of four "eastern" orbital locations (61.5°W, 101°W, 110°W, and 119°W) and to western areas from each of four "western" orbital locations (148°W, 157°W, 166°W, and 175°W). The Commission has granted authorizations for proposed systems which are at variance with the Plan; e.g., the operation of two satellites at the same orbital location, with one satellite serving the eastern part of the country and one serving the western part of the country. Such proposals were permitted, to the extent they did not violate the interference parameters established in the Plan, in order to afford permittees the maximum flexibility in designing and implementing their services, both to take advantage of changes in technology and to present the most efficient or effective service from a business perspective.³ Initially, the limited number of applicants and channels requested, coupled with the flexibility of the provisions of the Region 2 Plan, provided significant latitude in defining and characterizing proposals for use of the DBS spectrum/orbit resource and in allocation of that resource. This policy of maximum flexibility in allocations was intended to contribute to the ability of early DBS participants to initiate this new service expeditiously, as well as efficiently or economically.

6. With the applications under consideration in this Order, the demand for channel/orbit allocations far exceeds the available supply. Furthermore, those permittees who were expected to be operational, or nearly operational, by now, have not achieved that goal and have requested, or are in need of, authority to modify their authorizations to permit additional time to implement their systems. Under these circumstances, and in recognition of the rights and equities attendant to the various applicants and permittees at issue in this Order, certain aspects of the allocation policy must be refined in order to assure an equitable and more efficient allocation of the DBS resource among the qualified and competing applicants. As discussed in the following sections, the necessary refinements in the allocation policy will reduce flexibility in some respects, but enhance it in more meaningful respects.

Half - CONUS Service

7. To date, the Commission has authorized DBS operators to transmit complementary half-CONUS signals that, when combined, would provide signal coverage over the entire continental United States.⁴ As noted, the United States has eight orbital locations from which to transmit DBS service in the 12.2 - 12.7 GHz band. Given the transmission and reception technology and equipment available currently and in the foreseeable future, three of the domestic DBS orbital locations, 101°W, 110°W, and 119°W, are suitable for delivering DBS service to any part of the continental United States; one location, 61.5°W, is suitable for service into the eastern United States but only marginally suitable for service into the western United States; and four locations, 148°W, 157°W, 166°W and 175°W, are suitable for DBS service only to the western United States. Thus, while the western United States can be covered from seven or eight of the eight orbital locations, the eastern United States can be covered only from the four "eastern" orbital locations. Consequently, a western orbital location, which can serve only the western United States, can be part of a national system only when used in conjunction with one of the eastern locations serving the eastern United States. As a result, every time an eastern location/channel is allocated, a western location/channel becomes unavailable for use as part of a nationwide system, whether or not that western location/channel is actually utilized to deliver a DBS signal.⁵ In light of this, it is clearly evident that to permit an eastern channel to provide a service that is limited to western half-CONUS utilizes that spectrum/orbit resource less intensely.⁶ The number of potential DBS operators that can be accommodated is correspondingly reduced, as well.

8. As emphasized particularly by Hughes, the Commission is also concerned that DBS service can be implemented in a commercially successful manner. Thus, balanced against the concern for intensive utilization of the orbit/spectrum resource are the economic and operating efficiencies achieved for individual operators, which would correspondingly benefit consumers, by collocating eastern and western half-CONUS channels and satellites at the orbital locations suitable for such operation (101°W, 110°W, and 119°W). Collocating satellites reduces the number of uplink facilities required to transmit to the satellites, simplifies the design of any spare satellite which might be built, and increases the flexibility an operator would enjoy in delivering its service, particularly if a loss of transponder(s) or satellite required reconfiguration of signals. Nevertheless, in light of the current demand for DBS facilities, these benefits are not sufficient to justify the considerable, and possibly critical, reduction in the allocations which could be made to each of the applicants and the corresponding reduction in the number of potential channels of service available to the public, both of which would result from permitting collocation of eastern and western half-CONUS signals. Moreover, many of the benefits claimed for collocated half-CONUS channels will be achievable with the probable introduction of full-CONUS service, as discussed in paragraphs 9, 10, below.⁷ Consequently, orbit/channel allocations will not be made without regard to their effect on the overall availability of remaining allocations suitable for nationwide DBS service, and western half-CONUS service will not be permitted from "eastern" orbital locations.

based on its modification application, and can obtain further additional channels, if it deems it necessary, e.g., by merger or by purchase of another party's permit.²⁰

Duplicate Orbital Assignments

15. Prior to the recent emphasis on full-CONUS channels becoming the common mode of operation, Advanced requested orbit/channel allocations to mirror Hughes' current allocations, proposing to use the same channels as Hughes to serve the opposite half of the U.S. with each channel as Hughes would serve. That is, if Hughes would serve the western U.S. with even channels and the eastern U.S. with odd channels, Advanced would serve the western U.S. with odd channels and eastern U.S. with even channels, while operating from the same orbital location as Hughes. Advanced claimed that this is possible using digital transmission technology, although it would have to give up some service to the central U.S., losing approximately five percent of the U.S. population. It also claimed that if Hughes were to use digital transmission technology as well, no service would be lost. Hughes has strenuously opposed Advanced's request.

16. Advanced's proposal, even if technically sound, would not be possible to effectuate in conjunction with full-CONUS operations, as authorized in this Order. Based on Advanced's modification application and its comments in connection with the orbital allocation issue, it appears that Advanced is more interested in pursuing full-CONUS operations than colocated, mirror-image half-CONUS operations. Consequently, the request will be considered moot and it will be dismissed without prejudice.

DESCRIPTION OF NEW APPLICATIONS

Continental Satellite Corporation

17. Continental is a California corporation incorporated for the purpose of constructing, launching, and operating a DBS system. All of its principals are identified in its application, and Continental is legally qualified to hold a DBS authorization.

18. Continental proposes to launch three satellites, with one serving the eastern half of the continental United States ("half-CONUS") and one serving western half-CONUS with sixteen channels each, and one serving the full continental United States ("full-CONUS") with eight channels. The half-CONUS satellites would operate at 100 watts per channel, for an effective isotropic radiated power ("EIRP") of 51 dBW for all channels on all satellites. The power and signal strength levels for the full-CONUS satellite are not specified. Continental apparently does not intend to serve any areas outside the 48 continental states. (Continental's preferred orbital positions are 61.5°W and 148°W for the half-CONUS satellites and 110°W for the full-CONUS satellite.) Continental's satellites would have 24-for-16 transponder redundancy and full eclipse protection from stored (battery) power. Continental proposes to build one on-ground spare.

19. Continental proposes to program some of its capacity (including "value-oriented, alternative" channels), and to lease some, presumably on a non-common carrier basis. It states that it will actively participate in a variety of research and development projects intended to enhance the quality and amount of video services offered via DBS

systems. Continental projects expenses of \$410 million to build and launch three satellites. NRG Datacom, Inc. expects to raise the necessary funds for Continental through equity issues.

EchoStar Satellite Corporation

20. Echostar is a Colorado corporation incorporated for the purpose, among other more general purposes, of constructing, launching, and operating a DBS system. It is 79% owned by Echosphere Corporation, which it states is one of the largest distributors of home satellite receive equipment in the United States. The remaining stock is owned by two individuals, one of whom is the president of Echosphere. Echostar is legally qualified to hold a DBS authorization.

21. Echostar proposes to launch two satellites, with each serving half-CONUS with sixteen channels at 100 watts each, for an EIRP of at least 51 dBW at edge of coverage. It may also provide spot beam service to unspecified discrete market areas. It expects to be able to provide "limited" full-CONUS service on an emergency basis, if necessary. Echostar apparently does not intend to serve any areas outside the 48 continental states. (Its preferred orbital positions are 61.5°W and 148°W, unless other positions currently held by others become available.) Echostar proposes to build one on-ground spare, and provide six-for-four transponder redundancy. Six channels would be eclipse protected at full power (or more channels at lesser power) by battery.

22. Echostar proposes to program some of its capacity and lease some on a non-common carrier basis. It projects total costs for three satellites, two launches, ground facilities and support and one year marketing and operations to total \$496 million. Echostar's parent, Echosphere, has committed to finance the construction and continued operation. Echosphere enjoys a \$50 million line of credit and will finance the remaining costs with additional debt and with equity offerings. Merrill Lynch and Hanifen, Imhoff, Inc. have indicated their interest in raising the necessary additional funds through equity offerings, and Hanifen has expressed its expectation that the funds can be raised successfully. In addition, Scott Science and Technology, a satellite financing, construction and launch manager, has expressed its expectation that the necessary funds can be raised.

DIRECTSAT Corporation

23. Directsat is 77% owned by SSE Telecom, Inc., a telecommunications company which specializes in satellite technology. The remainder of its stock is held by three individuals. The officers and directors of Directsat and SSE are identified, as well as the shareholders of Directsat and the cognizable shareholders of SSE. Directsat is legally qualified to hold a DBS authorization.

24. Directsat proposes to launch two satellites, with each serving half-CONUS with sixteen channels at 100 watts each, for an EIRP of at least 51 dBW at edge of coverage. Directsat apparently does not intend to serve any areas outside the 48 continental states. (Its preferred orbital positions are 101°W and 148°W.) Directsat proposes to build one on-ground spare, and provide six-for-four transponder redundancy. A battery would power an unspecified number of channels through eclipse periods.

25. Directsat proposes to lease all of its transponder capacity to program packagers and other businesses that would serve individual receive dish owners, as well as to those providing sales, training and other video materials to business and educational organizations. It specifically expects to target cable television program suppliers, public broadcasting station operators, High Definition Television ("HDTV") broadcasters, as well as ancillary "business" service providers. Estimated expenses for construction and launch aggregate to approximately \$320 million for the two-satellite system, with another \$14 million estimated for first year operations. Directsat proposes to finance its operation, without reliance on revenues, with the assistance of PaineWebber Incorporated and Strategic Research, Inc. PaineWebber and Strategic Research have both expressed their interest in raising the required funds, with Strategic Research expressing its opinion, based on experience in supporting other telecommunications ventures, that the financing is feasible and attainable.

TEMPO Satellite, Inc.

26. Tempo is wholly-owned by TEMPO Enterprises, Inc., which is wholly-owned by Tele-Communications, Inc. ("TCI"), a publicly held company engaged primarily in the cable television business, with licenses for a variety of other communications services. The principals of all companies are identified in this or other incorporated applications. Tempo's legal qualifications are further discussed in paragraphs 49 - 53, *infra*.

27. Tempo proposes to launch two satellites, with each serving half-CONUS or full-CONUS with sixteen channels at 100 watts each or eight channels at 200 watts each, for an EIRP of 51 dBW or 48 dBW, depending on configuration. Tempo would also serve Puerto Rico and the Virgin Islands. (Its preferred orbital positions are 110°W for each satellite.) Tempo proposes to build one on-ground spare, and provide six-for-four transponder redundancy. Up to six channels on each satellite will be eclipse protected for service at full power, or more channels will be provided lesser power, by battery.

28. Tempo proposes to operate and program its facilities as a non-common carrier, and to provide half of its channels for "free" and half on a subscription and/or pay-per-view basis. Tempo estimates costs of approximately \$500 million to launch and operate its two-satellite system for one year. Tempo proposes to finance its venture with funds from "operating income, equity contributed by principals, and loans to be secured as required." Also, "the total debt of \$1.3 billion will be supported by starting equity of \$250 million [with] further equity to be raised over a five-year period as required supported by the assets of the corporation." Tempo's parent, TCI, explicitly states its intention to support Tempo's venture.

Direct Broadcast Satellite Corporation

29. DBSCorp has held a construction permit since October 3, 1986. That permit was granted with the condition that DBSCorp begin construction or secure a construction contract within one year of that date.²¹ Unable to meet that requirement, DBSCorp requested an additional year, citing its vigorous efforts, including past involvement in the earlier development of DBS, and a variety of circumstances which it believes now make it more possible to succeed. It contended that an additional year would give it the opportunity to pursue promising new business opportunities. More than one year has elapsed since that

request, during which time the Commission refrained from taking any unnecessary negative action. DBSCorp has not satisfied the due diligence requirement, even belatedly (or made any significant progress of which we are aware), and its subject conditional construction permit will be canceled.

30. During the cut-off period for the subject applications, DBSCorp requested that if its extension request were denied and its permit canceled, it be considered as a new applicant with the current group. Had DBSCorp's extension request been acted upon previously, it could have applied on time in a more routine fashion. Accordingly, its application will now be considered with the current group, and assigned File No. DBS-88-08.²²

31. DBSCorp is a corporation formed for the purpose of providing DBS service, and has no other business activities. Its primary principals are Kansas City Southern Industries, Inc., a company with operations in transportation, financial services, real estate, and broadcasting, and several individuals involved in communications and technologies industries. DBSCorp has previously been found legally qualified; there is no information upon which to reconsider that finding.

32. DBSCorp proposes to launch two satellites, with each serving half-CONUS with sixteen channels at 100 watts each, for an EIRP of 51 dBW at edge of coverage. Its spacecraft will be designed to provide quarter-CONUS service on demand, and it requests authorization to utilize up to four channels for spot beam coverage for regional broadcasts and for increasing EIRP for HDTV. (Its preferred orbital positions are 110°W and 148°W.) DBSCorp does not plan to build a spare satellite. DBSCorp's satellites will provide nine-for-six transponder redundancy, and one third of its channels will be eclipse protected.

33. DBSCorp proposes to lease its transponder capacity on a non-common carrier basis. It lists anticipated expenses totalling \$524 million to put its system into operation. It has entered an agreement with a securities company which states its expectation of raising the necessary funds through a combination of debt and equity placements.

DESCRIPTION OF MODIFICATION APPLICATIONS

Advanced Communications Corporation

34. Advanced is currently authorized to build and operate two satellites, with each serving half-CONUS, including Puerto Rico and the Virgin Islands, with sixteen channels at 125 watts each for an EIRP of "at least" 51 dBW. (In conjunction with this Order, Advanced is allocated the sixteen odd-numbered channels at 110°W and at 148°W.²³ (See n. 42, *infra*.) Advanced has no provision for a spare satellite. Advanced would have six-for-four transponder redundancy, and up to six channels on each satellite will be eclipse protected for service at full power, or more channels will be provided lesser power, by battery.

35. Advanced has modified its proposal, seeking authority to operate each of its thirty-two channels over full-CONUS (from a suitable orbital location). It asserts that this is a minor change. In support of its request, it relates that its satellite builder (GE Astro-Space Division) is "confident that full-CONUS coverage from their Series

5000 spacecraft to receiving antennas two feet in diameter with at least minimum EIRP power levels can be provided." GE Astro later submitted a letter stating that it is capable of providing a DBS system that could provide full-CONUS service at a 51 to 52 dBW signal strength on the ground. Advanced's most recent amendment states that channels will be operated at either 130 or 260 watts, with fewer channels operated if the higher power is used. (Advanced requests an allocation of all thirty-two channels at 110⁰W; sixteen of those channels are being allocated to it pursuant to its earlier application.²⁴)

36. Consistent with the analysis of DBS allocations policy set out in paragraphs 7 - 10, *supra*, this request constitutes a major amendment of Advanced's existing permit. As explained in the earlier discussion, Advanced's proposed change from thirty-two half-CONUS channels to thirty-two full-CONUS channels would double the orbit/channel allocations its system would consume, and it must be considered as a major change. Advanced's current authorization for sixteen pairs of half-CONUS channels is convertible to only sixteen full-CONUS channels as a minor modification. Advanced did not pay the filing fee required for a major amendment in the DBS service, believing its request to be a minor amendment, for which there is no filing fee. As the Commission's DBS allocation policy explained in this Order had not been explicitly stated at the time Advanced filed its amendment, Advanced will not be faulted or penalized for its failure to recognize its modification as a major amendment, and will be permitted to pay its filing fee late, without penalty, within fifteen days of the release date of this Order.

United States Satellite Broadcasting Company, Inc.

37. USSB is currently authorized to build and operate two satellites, with each serving half-CONUS with eight channels at 240 watts each for an EIRP of approximately 54 dBW. (USSB has been allocated eight even channels at 110⁰W for eastern service and at 148⁰W for western service.)

38. USSB now proposes to operate each channel at 260 watts, for half-CONUS signals with an EIRP of approximately 55 dBW at edge of coverage and full-CONUS signals with an EIRP of approximately 52 dBW at edge of coverage. It seeks authority to operate its 110⁰W satellite at full-CONUS until its 148⁰W satellite is placed in operation. USSB will not build a spare satellite. It will have seven-for-four transponder redundancy. It will have 75% eclipse protection, so that six channels of each eight can operate at full power or all eight channels can operate at 75% power. This request constitutes a minor amendment. USSB also states that it may seek reallocation of its 148⁰W satellite to 110⁰W if satellite colocation is permitted by the Commission.²⁵

Hughes Communications Galaxy, Inc.

39. Hughes is currently authorized to build and operate two satellites, with each serving half-CONUS with sixteen channels at 100 watts each for an EIRP of 51 dBW. (Hughes has been allocated all of the channels (thirty-two) at 101⁰W, sixteen for eastern service and sixteen for western service, with full-CONUS operation permitted on an "emergency" basis.) Hughes has no plans for a spare satellite. Hughes does plan full eclipse protection for all channels, and will have a 24-for-16 transponder redundancy.

40. Hughes now seeks authority to operate thirty-two full-CONUS channels on a full-time basis with 180-watt TWTA's, for a claimed EIRP of 52 dBW at edge of coverage. All channels will be eclipse protected by battery backup. It also seeks authority to use 3 MHz of the channel guardbands of each channel to expand each channel from 24 MHz to 27 MHz wide, in order to facilitate transmission of high definition television ("HDTV") signals. In conjunction with this request, it also requests modification of the specific channels assigned to each of its satellites for more efficient channel pairings.²⁶ Hughes' request, as Advanced's, constitutes a major amendment.²⁷

PETITIONS TO DENY

Association of Maximum Service Telecasters

41. AMST opposed all of the applications, contending that no new authorizations should be permitted in the 12.2 - 12.7 GHz band while that spectrum is being considered for terrestrial Advanced Television Service ("ATV"). The allocation of this spectrum for DBS is well-settled, and mere "consideration" of other uses, in the absence of an allocation Rule Making, does not warrant withholding authorizations that are consistent with the allocation. Moreover, the most recent Commission statement regarding "consideration" of this spectrum for ATV is that this spectrum is not suitable for terrestrial ATV use. *Tentative Decision and Further Notice of Inquiry* in MM Docket No. 87-268, 3 FCC Rcd 6520, 6530-31 (1988). Accordingly, AMST's petition will be denied.²⁸

GTE Spacenet

42. GTE has requested that the Commission institute a Rule Making to redefine the distinction between Fixed Satellite Service ("FSS") and DBS service. It asks, alternately, that the Commission uphold the limitations on nonconforming uses²⁹ and analyze the subject applications with those limitations in mind.

43. Applications in any service are always fully scrutinized in all respects, including the propriety of any proposed service. None of the current applicants is proposing service at odds with the provisions for DBS service or the Commission's decision in *United States Satellite Broadcasting Company, Inc.*, 1 FCC Rcd 977, *supra*. Accordingly, it is not appropriate to resolve issues regarding alternate uses here. As stated in n. 12, *supra*, comments are being solicited on the subject of offering additional services from western DBS orbital locations.

National Black Media Coalition

44. NBMC has filed petitions to deny several of the subject applications on the basis that each has failed to meet its Equal Employment Opportunity obligations. NBMC insists that EEO enforcement is especially important for DBS, which is only now putting together a workforce. It further argues that several applicants have deliberately ignored the rule, even after having been apprised by NBMC of the alleged shortcoming, and that this is evidence of intent to discriminate. It contends that because common carriers and cable systems operators, as well as broadcasters, are subject to EEO regulation by the Commission, no DBS applicant should be exempted from compliance by disclaiming any intent to operate as a broadcaster. Each applicant will be discussed below.

45. *DBSCorp*. NBMC points out that DBSCorp submitted no EEO program with its subject application. DBSCorp adamantly disavows an intent to discriminate. It maintains that it is not yet an operational company, that it will make its employment policy explicit and detailed when it enters the marketplace for employees, and that it will comply with all Commission policies in effect at that time.

46. *Advanced, Hughes, and USSB*. NBMC charges that each of these applicants has neglected to list any minority or female organizations from which it will recruit employees, or any minority media in which it will advertise for employees. In addition, Hughes and USSB have not listed minority and female educational institutions from which it will recruit employees. All three applicants respond that they were found qualified when their original permits were issued, and that their EEO compliance should not now be reviewed in conjunction with the modification applications they have filed. Hughes and Advanced contend that the EEO rules for DBS do not apply to them, as they do not intend to operate as broadcasters. Hughes insists that its parent's corporate policy, which was submitted, complies with Commission requirements even without specific recruitment sources, and refers to that parent's long record of compliance with EEO requirements as a government contractor to rebut the charge of discriminatory intent. Advanced points out that no specific facts are alleged indicating intentional discrimination.

47. *Resolution*. The EEO rules for cable systems and common carriers, cited by NBMC, do not apply to the DBS service. The Commission adopted specific EEO rules for the DBS service, and those rules apply only to those DBS entities which would operate as broadcasters.³⁰ Moreover, the Commission's determination to limit the application of EEO rules in the DBS service to DBS broadcasters was affirmed in *Report and Order* in Gen. Docket No. 85-305, 2 FCC Rcd 1001, n. 3 (1987); *aff'd*, *National Association for Better Broadcasting v. FCC*, 849 F.2d 665 (D.C. Cir. 1988). To the extent petitioners disagree with those Rule Making decisions, the proper course would be to file a petition for Rule Making. Under existing rules, however, only DBS operators which will operate as broadcasters are subject to EEO requirements and, in accordance with those rules, EEO requirements will not be extended to other DBS operators in the context of this licensing proceeding. Accordingly, only applicants intending to operate as broadcasters are required to file Model EEO Programs, as provided by the rule. (47 C.F.R. §100.51(c).)³¹

48. For any such applicant uncertain of the ultimate location of many of its facilities, specification of nationwide recruitment sources and media, and any prominent educational institutions will be appropriate, as done by several other applicants. Nationwide recruitment is commonplace, particularly for upper management jobs, and if it is desirable or appropriate for these entities, a nationwide affirmative action effort is equally appropriate, regardless of the ultimate headquarters location. As geographic locations do become more certain, EEO Programs should be further refined when appropriate. Compliance with current EEO provisions is equally important for previously authorized DBS permittees intending to operate as broadcasters, and they will be required to come into compliance with the current rules. Given the previous uncertainty over the pertinence of the EEO provi-

sions, however, no DBS applicant governed by the rule which failed to file a program or whose program did not comply with the exact provisions of the rule will be disqualified or designated for hearing. Rather, the applications which are granted will be conditioned on full compliance with the provisions of Section 100.51(b) of the rules within thirty days of the release of this Order.³²

Petitions Against Tempo

49. Petitions to deny Tempo's application have been filed by the National Association for Better Broadcasting and the Telecommunications Research and Action Center ("NABB/TRAC"), by the Wireless Cable Association ("Wireless Cable"), and by Advanced.³³ In addition, the Mass Media Bureau sent a letter to TCI regarding TCI's applications to acquire three broadcast stations in conjunction with its takeover of TEMPO Enterprises, Inc. (Tempo's former parent),³⁴ requesting further information regarding TCI's conduct in Jefferson City, Missouri, more fully discussed immediately below. TCI's response to that letter and NABB/TRAC's reply to that response are considered with the petitions and related pleadings in this proceeding.

50. Wireless Cable and Advanced assert that TCI's extensive cable system holdings, coupled with its earth station (satellite uplink) facilities and its interests in at least twelve cable programmers, would result in undue concentration of control in the video services marketplace if a DBS system were added to its holdings. They both refer to various public statements by industry participants and observers that the cable industry, and TCI in particular, has deliberately denied programming to its competitors, and that TCI has used its considerable market power and its interests in programming sources to negotiate preferential or exclusive programming contracts, preventing alternate outlets from competing effectively, or at all. Allowing an additional outlet source to TCI would exacerbate the problem, according to these petitioners. They both further maintain that the Commission's policy goal of diversity would be thwarted by granting a DBS permit to Tempo. Advanced cites TCI's conduct in a cable franchise renewal proceeding in Jefferson City, Missouri as evidence of TCI's willingness to abuse a monopoly position. In that case, a \$35.6 million verdict was rendered against TCI on alternate verdict of violation of federal antitrust law and tortious interference with business under Missouri law.³⁵ NABB/TRAC cites the same case as evidence that TCI lacks the requisite character to be a DBS permittee.

51. Tempo responds that the Commission has already decided not to impose a cross-ownership restriction on DBS, and appropriately so. It remarks that all claims of past anticompetitive conduct by cable system operators are anecdotal and hearsay, and contends that any concerns of future abuse are merely speculative. It contends that existing antitrust law and Commission oversight are sufficient to prevent any conduct that is illegal or deleterious to the DBS industry and its customers. It insists that its conduct in Jefferson City, Missouri is outside the scope of Commission purview under its recently stated policy guidelines in *Character Qualifications Policy Statement*, 102 FCC2d 1179 (1986), *recon. denied* 1 FCC Rcd 421 (1986). It also contends that its application for a DBS permit is not encompassed by the *Character Policy*. It finally main-

tains that even if the misconduct in Jefferson City were subject to consideration, it would not cast doubt on Tempo's qualifications to hold a DBS authorization.

52. The prospect of an increase in the concentration of control of video entertainment sources and outlets which would result from TCI's acquisition of a DBS system through Tempo does not warrant denial or designation for hearing of Tempo's application. To the contrary, in fact, Tempo's participation could well accelerate the initiation of DBS service by bringing valuable marketplace experience and presence and possibly enhancing access to programming. As Tempo argues, existing antitrust law and Commission oversight are sufficient to prevent any conduct that is illegal or deleterious to the DBS industry and its customers, or to operators and customers in the other video entertainment distribution industries as well.

53. With regard to Tempo's fitness to be a DBS licensee, however, petitioners have raised potentially serious questions stemming from the misconduct of Tempo's parent, TCI, requiring examination and consideration by the Commission of the facts and circumstances surrounding TCI's conduct in the Jefferson City cable franchise renewal case. The Mass Media Bureau is sending a letter to Tempo requesting additional information concerning that conduct and any additional arguments concerning its relevance to and impact on Tempo's subject application. While this matter is being further considered, is not necessary to delay action on other pending applications which can be granted. Accordingly, the orbit/spectrum resource required to satisfy Tempo's service proposal will be held in reserve,³⁶ pending the result of further inquiry into its qualifications to hold a DBS authorization.

DISPOSITION OF APPLICATIONS

54. Each of the other applicants is fully qualified to hold the DBS authorization it seeks. However, the available allocations are not sufficient to fully satisfy the orbit/spectrum requests of all of the applications. Each of the applicants has an equal right to consideration for the requested facilities. Accordingly, each application seeking new or additional channels should be granted only to the extent that it is possible to award an equal number of general orbit/channel reservations to each applicant. Additionally, in the event the permit of any of these applicants, or of any of the current permittees, is surrendered or canceled, the remaining permittees from this group will have the first right to additional allocations, apportioned equally, up to the number requested in their applications. Specific allocations will be awarded, as always, on a first-come, first-served basis, as each applicant demonstrates due diligence.³⁷

55. This authorization policy permits the continued participation of all of the applicants and also provides for the most prompt disposition of these applications, so that direct construction efforts can begin at the earliest possible time. The prime alternate procedure would be to evaluate comparatively all of the applications to determine which should be granted in their entirety and which should be denied. Creation and utilization of any comparative procedure would likely result in considerable delay and the expenditure of substantial Commission and applicant resources. Moreover, a comparative proceeding could well prove to have been unnecessary. If two of the current or new permittees surrenders or loses its permit,

each of the remaining permittees seeking new or additional channels would then receive for its new or modification application a total of thirty-two new or additional channels. Finally, any comparative procedure adopted and utilized would likely be designed, in significant part, to compare the applicants' actual ability and willingness to construct and operate their systems. The most immediate and concrete demonstration of that willingness and ability, however, will be the timely initiation of construction of satellites, according to the procedures recently clarified.³⁸ The grant of these authorizations, as set out below, will require an actual demonstration of, rather than conjectural argument regarding, the willingness and ability to construct. Any and all of those parties which can and will proceed under these standards will end up with specific allocations. In the event that all of the permittees maintain their permits, and some of them determine that the resulting systems, smaller than requested,³⁹ are not tenable, they are free to seek Commission approval to combine assignments and resources through merger or buyout. Commission consideration of any such combination will include an assessment of its competitive effects and other relevant factors. Accordingly, the public interest will be best served by partial grant of all of the applications, as described below, rather than setting these applications for a comparative proceeding.

56. The eligible cut-off applicants' collective requests would require 240 of the available DBS half-CONUS channel/orbit allocations. However, only 160 half-CONUS orbit/channel allocations are available.⁴⁰ In recognition of the equal rights of these applicants to the available allocations, each of the seven new and modification applicants will be granted an equal number of orbit/channel reservations from the available supply. This will permit the reservation of 22 half-CONUS orbit/channel assignments for each applicant.⁴¹ As previously stated, if the permit of any of these applicants, or of any of the current permittees, is surrendered or canceled, the remaining permittees from this group will have the first right to additional allocations, apportioned equally, up to the number requested in their applications.

57. The conditional construction permits granted herein will authorize the permittees to proceed with the construction of their systems and will be conditioned on each permittee's due diligence in beginning construction, or completing contracting for construction of its satellite(s) within one year, and beginning operation within six years, of the date of release of this Order (47 C.F.R. §10.19(b)). Specific orbital positions and channels will be assigned to each permittee upon its demonstration of due diligence on a first-come, first-served basis, as has been the procedure for past applicants. *DBS Processing Procedures, supra.*

58. All of the permittees are specifically referred to the recent discussion of standards regarding the adequacy of construction contracts in satisfaction of the due diligence requirement, and the subsequent monitoring of construction progress under those contracts. Specifically, due diligence showings must include regular specific construction progress milestones to facilitate monitoring of progress and financial commitment throughout the construction process sufficient to determine whether meaningful levels of advancement have occurred. Also, any changes in the timetable must be reported and explained. *United States Satellite Broadcasting Company, Inc., supra*, 3 FCC Rcd at 6861 (1988).

59. Hughes' request for 27-MHz-wide channels will be denied. The DBS channel designation scheme already has some overlap between channels, relying on cross-polarization to neutralize the negative effect of that amount of overlap. Moreover, the Region 2 Plan for DBS specifies that all odd channels be located at $+0.2^{\circ}$ and all even channels at -0.2° from the nominal orbital position. Thus some channel origination points would be moved by 0.4° . Hughes has not submitted information from which to ascertain the effects, if any, its proposed variant operation would have on other domestic or foreign DBS operations, including possible operations from the same orbital location by another entity. In the absence of a conclusion that there would be no adverse effect, a compelling justification is needed to warrant authorization of such an operation. Hughes' only specific justification, that it would use a wider channel bandwidth to implement HDTV is undercut in its recent biannual progress report, wherein it indirectly indicated that it has not determined the bandwidth or channel configuration it would require for HDTV. It also acknowledged that HDTV is deliverable over a 24-MHz-wide channel at a higher power. Should Hughes wish to continue to pursue this channelization scheme, it should submit a technical analysis and/or a justification for authorizing such an operation.

EXISTING SATELLITE CONSTRUCTION CONTRACTS

60. In the Order clarifying the due diligence standard and modifying the Commission's satellite construction monitoring procedures for DBS, existing permittees were required to update information regarding their existing construction contracts, in conformance with the clarified requirements. *Id.* Advanced requested permission to delay filing pending resolution of the issues affecting the DBS allocation policy, which occurs in this Order. Dominion's submission did not include specific construction milestones, and its payment timetable appears contingent on the issuance of this Order. USSB's submission does not include construction milestones in sufficient number or frequency to permit effective monitoring of its construction progress, and USSB neither specifies that all other provisions are as earlier submitted nor submits changed provisions. Hughes' construction progress line chart lacks sufficient clarity or detail regarding satellite construction. In any event, the specifications in all of those contracts, and the corresponding timetables, may well be affected by the provisions in this Order. Consequently, Dominion, USSB, Hughes, and Advanced will be required to file within sixty days of the release of this Order, updated information regarding their construction contracts and timetables.

61. From the system descriptions in several applications, it appears possible that Hughes and Advanced may have already under contract satellite capacity sufficient to meet their authorizations as modified herein. Those permittees are encouraged to demonstrate at the earliest possible opportunity that they have satisfied the due diligence requirement for the additional facilities granted in this Order, and to request the additional specific allocations they desire. If both parties make such a demonstration, their allocation requests will be considered in the order of their original contracts.⁴²

ORDERING CLAUSES

62. Accordingly, IT IS ORDERED, That the petitions to deny filed by the Association of Maximum Service Telecasters, by the National Black Media Coalition, by the Wireless Cable Association, and by Advanced Communications Corporation ARE DENIED.

63. IT IS FURTHER ORDERED, That action on the petition to deny filed by the National Association for Better Broadcasting and the Telecommunications Research and Action Center IS DEFERRED pending further consideration of the application for DBS facilities filed by TEMPO Satellite, Inc.⁴³

64. IT IS FURTHER ORDERED, That the DBS application of Continental Satellite Corporation IS GRANTED IN PART to provide service from two or more satellites delivering 11 channels to each half of the continental United States, or from one or more satellites delivering 11 channels to the entire continental United States, as described in this Order and its application, File No. DBS-87-01, subject to the following conditions and provisions:

- (a) This grant does not include launch and/or operational authority for any phase of the proposal;
- (b) This grant does not include the assignment of frequencies or orbital positions for any satellite; and
- (c) The applicant must proceed with the construction of its system with due diligence, as defined in Section 100.19 of the Commission's Rules (47 C.F.R. §100.19); and
- (d) The applicant will receive reservations for additional channels, up to the total number of half-CONUS channels necessary to fulfill the proposal in its application, if DBS allocations are surrendered by other permittees or canceled by the Commission.

65. IT IS FURTHER ORDERED, That the DBS application of EchoStar Satellite Corporation IS GRANTED IN PART to provide service from two or more satellites delivering 11 channels to each half of the continental United States, or from one or more satellites delivering 11 channels to the entire continental United States, as described in this Order and its application, File No. DBS-88-01, subject to conditions and provisions (a), (b), (c), and (d) in paragraph 64, above.

66. IT IS FURTHER ORDERED, That the DBS application of DIRECTSAT Corporation IS GRANTED IN PART to provide service from two or more satellites delivering 11 channels to each half of the continental United States, or from one or more satellites delivering 11 channels to the entire continental United States, as described in this Order and its application, File No. DBS-88-02, subject to conditions and provisions (a), (b), (c), and (d) in paragraph 64, above.

67. IT IS FURTHER ORDERED, That the Request for Extension of Time filed by Direct Broadcast Satellite Corporation IS DENIED and its outstanding conditional construction permit IS CANCELLED, and that its pending DBS application IS GRANTED IN PART to provide service from two or more satellites delivering 11 channels to each half of the continental United States, or from one or more satellites delivering 11 channels to the entire continental United States, as described in this Order and its application, File No. DBS-88-08, subject to conditions and

provisions (a), (b), (c), and (d) in paragraph 64, above, and the condition that DBSCorp file within thirty days either an Equal Employment Opportunity Program that 1) sets out the corporation's general policy with respect to EEO and affirms that the corporation has adopted an EEO program; 2) designates the official who will have responsibility for implementing the corporation's program; 3) sets out how the corporation's EEO program will be disseminated to present and future employees; 4) lists specific recruitment sources, including minority and women's organizations, educational institutions and media that the corporation will use to attract qualified minority and female applicants whenever a job opportunity occurs, or an amendment to its application stating clearly whether it intends to operate as a broadcaster on any channel authorized and explaining its intended manner of operation on all channels, consistent with that stated intention.

68. IT IS FURTHER ORDERED, That the application for modification of DBS facilities of Advanced Communications Corporation IS GRANTED IN PART to provide service from additional satellites as required, to deliver 11 additional channels (27 total) to each half of the continental United States or 11 additional channels (27 total) to the entire continental United States, as described in this Order and its applications, File No. DBS-88-05-MP, subject to conditions and provisions (a), (b), (c), and (d) in paragraph 64, above; the condition that Advanced file within fifteen days the required filing fee for a major modification application in the DBS service, as provided in paragraph 36, *supra*; and the condition that Advanced file within thirty days either a list of specific recruitment sources, including minority and women's organizations and specific media which have significant circulation or are of particular interest to minorities and women, that the corporation will use to attract qualified minority and female applicants whenever a job opportunity occurs, or an amendment to its application stating clearly whether it intends to operate as a broadcaster on any channel authorized and explaining its intended manner of operation on all channels, consistent with that stated intention.

69. IT IS FURTHER ORDERED, That the application for modification of DBS facilities of United States Satellite Broadcasting Company, Inc. IS GRANTED to provide service from two satellites each to deliver eight channels to half of the continental United States, with the first satellite launched and operational to deliver eight channels to the entire continental United States until such time as the second satellite is operational, as described in this Order and its application, File No. DBS-88-06-MP, subject to the condition that USSB file within thirty days a list of specific recruitment sources, including minority and women's organizations, educational institutions with significant minority and female enrollments, and media which have significant circulation or are of particular interest to minorities and women that the company will use to attract qualified minority and female applicants whenever a job opportunity occurs.

70. IT IS FURTHER ORDERED, That the application for modification of DBS facilities of Hughes Communications Galaxy, Inc. IS GRANTED IN PART to provide service from additional satellites as required, to deliver 11 additional channels (27 total) to each half of the continental United States or 11 additional channels (27 total) to the entire continental United States, as described in this Order and its applications, File No. DBS-88-07-MP, subject to conditions and provisions (a), (b), (c), and (d) in

paragraph 64, above, and the condition that Hughes file within thirty days either an Equal Employment Opportunity Program, specifically designed for Hughes' DBS operations, that 1) sets out the corporation's general policy with respect to EEO and affirms that the corporation has adopted an EEO program; 2) designates the official who will have responsibility for implementing the corporation's program; 3) sets out how the corporation's EEO program will be disseminated to present and future employees; and, 4) lists specific recruitment sources, including minority and women's organizations, educational institutions and media that the corporation will use to attract qualified minority and female applicants whenever a job opportunity occurs, or an amendment to its application stating clearly whether it intends to operate as a broadcaster on any channel authorized and explaining its intended manner of operation on all channels, consistent with that stated intention.

71. IT IS FURTHER ORDERED, That Dominion Video Satellite, Inc., United States Satellite Broadcasting Company, Inc., Hughes Communications Galaxy, Inc., and Advanced Communications Corporation SHALL SUBMIT, within sixty days of the date of this Order, additional information regarding the status of their satellite construction contracts and timetables, as provided in paragraph 60, above.

72. IT IS FURTHER ORDERED, That Dominion Video Satellite, Inc. SHALL SUBMIT, within twenty days of the release of this Order, its specification of the eight channels it wishes to retain at 119°W and its request for eight channels at a western orbital location.

73. IT IS FURTHER ORDERED, That Hughes Communications Galaxy, Inc. SHALL SUBMIT, within thirty days of the release of this Order, its specification of the sixteen channels it wishes to retain at 101°W and its request for sixteen channels at a western orbital location.

74. IT IS FURTHER ORDERED, That the request of Advanced Communications Corporation for an allocation of all thirty-two channels at 101°W IS DISMISSED without prejudice.

75. IT IS FURTHER ORDERED, That the request of Hughes Communications Galaxy, Inc. for authorization to operate its DBS facilities with channels that are 27 MHz wide IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

FOOTNOTES

¹ Orbital Broadcasting Company also filed an application on that date (DBS-88-03), but voluntarily withdrew the application on June 19, 1989.

² Signals from DBS satellites which cover half of the continental United States are referred to as "half-CONUS" signals; similarly, those which cover the entire continental United States are referred to as "full-CONUS" signals.

³ See, e.g., *Satellite Syndicated Systems, Inc.*, 99 FCC2d 1369, 1378 (1984).

⁴ The Commission has also authorized quarter-CONUS signals, and will continue to do so where such authorization is appropriately requested. However, such delivery is apparently considered obsolete, and there appear to be no present plans to operate in such a mode. Quarter-CONUS signals do not affect the various analyses in this Order, and will not be further mentioned in this Order. The Commission also once authorized a limited number of full-CONUS signals to be operated at high power by the first DBS entity (Satellite Television Corporation), at a time when few DBS applicants existed and few operational standards had been established. *CBS, Inc.*, 99 FCC2d 565, 574 (1984). STC surrendered its DBS permit on February 9, 1988, and the permit was canceled on February 19, 1988; the Commission has made no additional full-CONUS authorizations since that time. The propriety and efficacy of full-CONUS authorizations is further discussed in paragraphs 9, 10, below.

⁵ Such allocations could still be useful for other purposes, as discussed in paragraph 10, below.

⁶ *E.g.*, if two eastern channels are used to provide one eastern half-CONUS and one western half-CONUS signal, two western channels are spent as well, while only one nationwide channel of service is delivered. However, if the same two eastern channels are each used to provide eastern half-CONUS service and two corresponding western channels are used to provide western half-CONUS service, two nationwide channels of service are delivered. The overall impact of such allocations would be considerable. The locations 101°W, 110°W, and 119°W collectively have 96 channels for DBS service (32 channels at each of three locations). If half of those channels were used for eastern half-CONUS service and half for western half-CONUS service, there would be 48 channels of nationwide DBS service provided from those locations. At the same time, three of the four western orbital locations would stand useless for purposes of providing part of a nationwide DBS service, as they would be suitable solely for western service, with only one remaining location available for providing a complementary eastern service (61.5°W). Adding the 32 channels of nationwide DBS service delivered from that remaining east/west pair, a total of 80 channels could be delivered nationwide. However, if western half-CONUS service is prohibited from eastern locations, those three eastern orbital locations, in conjunction with three western locations providing complementary western half-CONUS service, would be parts of systems which could provide 96 nationwide DBS channels. Adding the 32 channels of nationwide DBS service delivered from the remaining east(61.5°W)/west pair, a total of 128 channels could be delivered nationwide.

⁷ Several of the DBS entities supported the proposition adopted here, prohibiting western half-CONUS service from the eastern orbital locations under current circumstances. Those that opposed the proposition appeared to object narrowly to a complete prohibition of all western United States service from an eastern location, which the DBS allocation policy would not do under the provisions stated here. Western service as a component of a full-CONUS signal will be permitted from eastern orbital locations, as further discussed in paragraphs 9, 10, below.

⁸ Hughes submitted a study on January 17, supplemented on January 31, 1989, which will be referred to as the NASA study, and USSB submitted a study on January 17, 1989, which will be referred to as the Telesat study. These studies use computer models to predict the interference levels at the test points established in the Region 2 Plan which would occur from simultaneous full-CONUS transmissions at 101°W, 110°W, and 119°W, and also the additional cumulative effect of operation from 61.5°W. The computer models are derived from those used by the International Frequency Registration Board ("IFRB") in establishing the Region 2 Plan and its parameters. The studies

assume elliptical beams and a full-CONUS boresite power of 56 dBW. Based on these worst case assumptions, interference consequences which are potentially severe enough to require the agreement of another administration for a Plan modification occur at only two or three test points (out of nearly 16,000, according to Hughes' estimate). At several other test points, the interference increases are within the limits which would permit unilateral Plan modification. As stated above, these results are based on worst case assumptions regarding power levels and beam parameters, necessitated by capability limitations of the computer programs of NASA and Telesat. It is likely that when actual systems are modeled as specifically proposed, the threshold criteria for the simpler and more desirable Interim Systems notification procedures may be met without requiring Plan modification or consent from other administrations. In any case, these calculations will be made when final operational plans are established by DBS operators, and any appropriate action can be taken at that time.

⁹ It is arguable whether an adequate full-CONUS signal can be delivered from 61.5°W. It will be left to any operator at that location to make such a determination.

¹⁰ The three orbital locations can provide a total of 96 channels of DBS service nationwide when operated full-CONUS (32 channels at each of three locations). Adding the 32 channels of nationwide service deliverable from 61.5°W paired with channels from a western location (or from 32 full-CONUS channels at 61.5°W), a total of 128 channels of DBS service could be delivered nationwide. This provides for the same number of nationwide channels as if allocations were made for half-CONUS signals only in east/west pairs. (Compare n. 6, *supra*.)

¹¹ Authorization of full-CONUS signals is not a concession to lower power flux density levels. The requirement that power levels be adequate for reception by relatively small and inexpensive receive equipment remains a key ingredient of DBS service. *United States Satellite Broadcasting Company, Inc.*, 1 FCC Rcd 977, 979 (1986); *Satellite Syndicated Systems, Inc.*, *supra* at 1379-84. Full-CONUS signals cover roughly twice as much area as half-CONUS signals, and thus require roughly twice the power input to maintain the same power flux density at points on the ground. *I.e.*, if a half-CONUS channel would require 100 watts to produce a 51 dBW signal; a full-CONUS channel would require roughly 200 watts to produce a 51 dBW signal. Thus two half-CONUS signals and one full-CONUS signal require roughly the same amount of total power to be produced in and delivered from orbit. Consequently, conversion to full-CONUS channels will not reduce appreciably the total amount of power that must be generated and delivered, or the consequent amount of space platform capacity that is required for each nationwide DBS channel. However, the number of discrete satellites could possibly be reduced if satellites can be built sufficiently large to provide the double power capacity required for full-CONUS operations, and one large satellite may be easier and cheaper to design, build, launch and operate than two smaller satellites. Even if double-powered satellites are not available, and two satellites with full-CONUS channels remain necessary to deliver the same service that otherwise would have been delivered from two satellites with half-CONUS channels, there is some efficiency involved in designing and building multiple satellites (possibly including back-up capacity) for operation in similar configurations from the same orbital location. There can be other operational economies as well, of various degrees of significance, such as reduction in terrestrial facilities, and increased flexibility in normal and emergency operations. In any event, as there appears no adverse consequence to the public or other operators, each DBS operator will be permitted to make its own decision as to its mode of signal delivery.

²⁶ One satellite is currently authorized to carry even channels and the other to carry odd channels, in accord with the Region 2 Plan. Hughes now requests that channels 1, 2, 5, 6, 9, 10, 13, 14, 17, 18, 21, 22, 25, 26, 29, and 30 be assigned to one satellite, with the other channels on the other satellite.

²⁷ Although Hughes stated its belief that its proposed modification is a minor amendment, it nonetheless submitted a filing fee with the amendment "should it be necessary."

²⁸ Several parties have challenged AMST's standing. Given the disposition of this matter, the question of standing need not be further addressed.

²⁹ *United States Satellite Broadcasting Co., Inc.*, 1 FCC Rcd 977 (1986), *recon. denied*, 2 FCC Rcd 3642 (1987). This Order provides that DBS licensees may use their DBS facilities for services other than direct-to-home video services on a limited basis under certain circumstances.

³⁰ 47 C.F.R. §100.51 provides in pertinent part: "(a) General policy. Equal opportunity in employment shall be afforded [by] all licensees or permittees of direct broadcast satellite stations licensed as broadcasters to all qualified persons, and no person shall be discriminated against in employment . . ."

³¹ It must be noted that even in the absence of a specific rule requiring particular affirmative action recruitment activities, all DBS operators are governed by federal statutes regarding discrimination in employment practices.

³² From the contested applications, only USSB's intention regarding its ultimate mode of operation is clear. USSB has stated that it is "committed to providing advertiser supported television programming to all residents of the United States. USSB Application at 5. Advanced, in its Opposition to NBMC's petition to deny, states that it will operate on a subscription basis and refers to a statement to that effect in its original application. That original application, however, contemplated a system of a different technical configuration with far fewer channels than the system authorized as a result of this Order. Hughes' opposition pleading similarly states that it has already been authorized to selectively lease its transponders on a non-common carrier basis. Hughes' proposed system has also evolved considerably since that time. DBSC's proposed system has also increased in size since its original system was projected to be operated on a common carrier basis. None of these applicants has made a specific representation which necessarily precludes its operation as a broadcaster on any of its channels of operation which are under consideration in this Order. In the absence of such a representation regarding its intended mode of operation, and an explanation of its intended manner of operation on all channels consistent with that claim, full compliance with the EEO rules will be required.

³³ A reply to Tempo's opposition to the petitions to deny was late-filed by the Motion Picture Association of America ("MPAA"), which had not filed a petition to deny. It will be considered like an informal objection under Section 73.3587 of our rules. (47 C.F.R. §73.3587.) All of the arguments raised are fully encompassed by the petitions to deny considered here, and MPAA's objection will not be further addressed individually.

³⁴ BTC-880120EA, BTCCT-880120KP, and BTCCT-880216KJ for transfer of stations WTPO(AM), Conyers, Georgia, WIHT(TV), Ann Arbor, Michigan, and KGCT-TV, Tulsa, Oklahoma were later withdrawn, and those stations were transferred to another entity.

³⁵ *Central Telecommunications, Inc. v. TCI Cablevision*, 610 F. Supp. 891 (W.D. Mo. 1985), *aff'd*, 800 F.2d 711 (8th Cir. 1986), *cert. denied* 480 U.S. 910 (1987).

³⁶ See paragraphs 54 - 56, below, regarding the pro-rata reduction of all applicants' requests for facilities.

³⁷ The continued interchangeability of DBS allocations is discussed in paragraph 11, *supra*. Specific orbit/channel allocations are made for each permittee upon its submission of a showing that it has satisfied the first part of the due diligence requirement (47 C.F.R. §100.19(b)) by beginning construction or completing contracting for construction of its satellites.

³⁸ *United States Satellite Broadcasting Company, Inc.*, 3 FCC Rcd 6858 (1988).

³⁹ It may be notable that two current permittees have systems comprised of 16 half-CONUS channels.

⁴⁰ There are a total of 256 half-CONUS orbit/channel allocations which can be made from the United States' orbital locations assigned under the Region 2 Plan (eight orbital locations with thirty-two channels each). Two permittees already are assigned or reserved thirty-two channels each and two others are already assigned sixteen channels each, for a total of 96 half-CONUS orbit/channel allocations already assigned, leaving 160 available.

⁴¹ Six individual half-CONUS channels will remain unallocated. In view of the requirement to allocate half-CONUS channels in pairs and the existence of seven applicants, these channels cannot be allocated equitably at this time. They will be allocated if and when additional channels become available for allocation or the number of applicants from this group seeking additional channels under their instant applications is reduced to the point that equitable distribution is possible.

⁴² Advanced's most recent allocation request consistent with the allocation policy, submitted November 18, 1986, has been analyzed and found grantable. Consequently, the Mass Media Bureau will send under separate cover an instrument of authorization allocating to Advanced the odd-numbered channels at 110⁰W and at 148⁰W.

⁴³ Eleven pairs of half-CONUS channels are held in reserve, pending final action on Tempo's application.

**SEPARATE STATEMENT
OF
COMMISSIONER PATRICIA DIAZ DENNIS**

In Re: Applications in the Direct Broadcast Satellite (DBS) Service for Construction Permits for New Systems and for Modification of Construction Permits for Authorized Systems, Filed by the Fifth Round of DBS Applicants, and Petitions to Deny Certain of Those Applications.

I write separately to explain my views on potential concentration of control in DBS.

We have no rules governing agreements between DBS permittees to acquire or merge channel allocations. I agree with my colleagues that it would be premature to adopt them at this stage. Nevertheless, I would be receptive to adopting rules if the DBS industry develops.

Since first authorizing DBS service in 1982, the Commission has purposely imposed the lightest possible regulation. The cost of providing service is extremely high; the prospects for DBS are uncertain. An elaborate regulatory structure would further add to the cost of entering what is still a risky business.

Our DBS policies seek to provide incentives to make the huge capital investments required to introduce service. We allocate channels conditionally, based on a requirement to act diligently in proceeding toward a

lunch. We assign specific channels, on a first-come, first-served basis, only to those applicants that demonstrate they have exercised due diligence.

At this stage, we also permit applicants to combine assignments through merger or buyout, subject to Commission approval. We have declined to adopt rules limiting the number of channels that any one permittee may obtain. We have no experience on which to predict how many channels may be required to make a DBS system economically feasible. It would be premature to adopt a rule providing, for example, that no applicant may accumulate more than 64 half-CONUS channels.

For now, we will review merger or buyout agreements on a case-by-case basis. In reviewing those agreements, we will be guided in part by the effect of the combination on competition in the DBS business and, more generally, in the video programming business.

I remain committed to promoting diversity and competition throughout the mass media. If DBS matures, I would be interested in adopting rules to promote those values. Yet at this point, I would rather take a permissive approach to DBS than devise a perfectly competitive model on paper that may bear no relation to the economic challenges facing the intrepid DBS pioneers.