

000075

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

RECEIVED & INSPECTED  
APR 21 2003  
FCC - MAILROOM

In the Matter of the	)	
	)	
Second Periodic Review of the	)	MB Docket No. 03-15
Commission's Rules and Policies	)	
Affecting the Conversion	)	RM 9832
To Digital Television	)	
	)	
Public Interest Obligations of TV	)	MM Docket No. 99-360
Broadcast Licensees	)	
	)	
Children's Television Obligations of	)	MM Docket 00-167
Digital Television Broadcasters	)	
	)	
Standardized and Enhanced Disclosure	)	MM Docket No. 00-168
Requirements for Television Broadcast Licensee	)	
Public Interest Obligations	)	

To: The Commission

**Comments of Siete Grande Television, Inc.**

Siete Grande Television, Inc. ("Siete Grande"), by its attorneys, respectfully submits the following Comments in response to the Commission's Notice of Proposed Rulemaking in the above referenced Second Periodic Review of the Commission's Rules and Policies Affecting Conversion to Digital Television

I

Introduction

1. Siete Grande is the licensee of Station WSTE-TV, Ponce, Puerto Rico. Some seventeen years ago, in order to overcome the obstacles of Puerto Rico's well documented mountainous terrain the Commission authorized WSTE-TV to deploy a multi-site transmission

system consisting of an auxiliary main transmitter and three co-channel booster stations that operate synchronously to produce a single island-wide signal. Since that time WSTE-TV has provided an independent television service to inhabitants across the Commonwealth. In its instant rulemaking, the Commission seeks comments in pars. 99-106 on distributed transmission technologies including the public interest benefits of granting primary status to a distributed transmission system that utilizes separately sited boosters and translators to achieve service area coverage. As the operator of a unique co-channel system that has produced an interference free stable array for more than 17 years to achieve service area coverage that would not otherwise be possible, Siete Grande has gained experience which it believes can be of value to the Commission as it considers adoption of rules to govern distributed transmission facilities for DTV stations. Siete Grande wholly supports granting primary status to distributed transmission systems that meet the criteria set out below.

## II.

### History and Description of Siete Grande's Unitary Analog System

2. In 1985, a WSTE-TV predecessor licensee sought authority to construct an experimental broadcast facility utilizing widely spaced transmitters with circularly polarized antennas at low elevations in front of mountain peaks, all operating simultaneously on the same frequency. The intent of the operation was to enable Station WSTE-TV to bring an independent, local service to large areas of the island previously unable to receive WSTE-TV's signal because of terrain factors. The Commission, in authorizing experimental operation concluded that the *experiment would* provide information useful to an evaluation of methods of overcoming terrain obstructions, and would provide a viewable signal to areas within the Station's licensed contours previously unable to receive the signal by direct means. The multi-transmission system was

specifically developed because Puerto Rico's intervening terrain barriers precluded the signal from the Station's main transmitter from reaching, or even approaching, most of the populated areas on the island of Puerto Rico. WSTE-TV believed that a system of simultaneously transmitting co-channel transmitters could provide greater service to the inhabitants within the authorized footprint of the Station's license than would be possible from a single transmission site which would provide primary coverage to Ponce but be terrain shielded from most of the rest of the island. The Commission authorized WSTE-TV to construct and test on an experimental basis this unique system – a system that to this day has not been replicated in Puerto Rico, the mainland or elsewhere. Ponce Television Corporation, 1 FCC Rcd. 1167 (1986), recon. denied 2 FCC Rcd. 5878 (1987). See also Channel 7. Inc., 4[a?] FCC Rcd. 5258 (1989).

3. WSTE-TV then constructed and tested the multi-site facility, investing millions of dollars into a process that succeeded in establishing an independent island-wide signal — one of just four commercial television stations that cover the island. Significantly, the other stations do not cover the island from one transmitter either. Instead they have obtained satellite waivers or utilize affiliated stations to achieve island-wide coverage. On August 20, 1992, the Commission, after an exhaustive review of thousands of measurements, granted Siete Grande a permanent license to operate the multi-site facility including Siete Grande's request for waiver of the Commission's rules to enable the booster stations to operate with higher than the maximum power permitted for booster stations. The coverage results of the experiment were impressive. See Siete Grande Television. Inc., 7 FCC Rcd. 5299 (1992). In granting the license to operate this integrated multi-transmission facility, the Commission pointedly observed (Siete Grande, supra)

“We believe that the mountainous terrain of Puerto Rico supports use of alternative methods to extend broadcast television

service to as many people as possible. *See also, Channel 7, Puerto Rico*, 58 FCC 2d 1148 at 1151 (1975). The combination of the island's topography and its geographic isolation, places Puerto Rico in a highly unusual position. Its geography significantly obstructs local broadcast signals, and, because of its isolation, it does not receive any broadcast signals from off the island. Nevertheless, that isolation allows broadcasters, such as Siete Grande, the flexibility to utilize innovative means to improve actual coverage without risking cochannel or adjacent-channel interference to others.

“Based on the evidence presented, we find that grant of Siete Grande's applications will serve the public interest. Analysis of the data submitted by Siete Grande in conjunction with the experiment confirms that the four transmitters greatly improve actual reception of channel 7 throughout the island, allowing improved service to approximately 1.3 million people. Grant of the applications will not extend the station's coverage beyond the area which the applicant is already licensed to serve; indeed, grant of the applications will allow Siete Grande substantially to enhance its service to those whom it is already licensed to serve. In addition, operation of the facilities will cause no interference to any cochannel or adjacent-channel station, nor will it preclude the establishment of any new facility which was not already precluded by the currently authorized channel 7 facility.”

“...the combination of the island's topography and its geographic isolation places Puerto Rico in a highly unusual position. The island's topography significantly obstructs local broadcast signals, and limits the ability of television stations in San Juan to provide service to portions of the island for which service would ordinarily be received. Therefore, in order for San Juan stations to reach audiences in the outer portions of the island, they must rely on some type of ownership/overlap combination or alternative engineering solution[s].”

4. Achieving island-wide coverage through means of the multi-site transmission facility has enabled WSTE-TV to provide emergency information and coverage in times of national disasters and hurricanes that routinely visit nature's destructive forces upon the island. The need for such communication facilities has been attested to by the Governor, the Commonwealth Resident Commissioner and Member of Congress, mayors of major cities including San Juan and the community of license, Ponce, and the Civil Defense Administration as television

communication remains the most important and efficient vehicle for information distribution to population areas that are cut off from other forms of mass communication.’ The importance of WSTE-TV’s coverage capability is heightened further in this precarious time of homeland security, terrorism and national defense.

### III.

#### WSTE-TV’S Attempts to Achieve DTV Service Area Replication

5. The four multi-site transmission facilities broadcast as a single system on Channel 7 even though they operate from a separate auxiliary transmitter site in Ponce and three booster locations in San Juan, Mayaguez and Arecibo. This integrated system of synchronous co-channel signals has been operating successfully as a single unitary system on a stable continuing basis since 1986, and has neither caused nor received interference from any television facility during its period of operation. The booster facilities do not expand the Station’s coverage area beyond its predicted Grade B contour. Rather, the boosters enable WSTE-TV to provide service to those areas within the Grade B contour that could not otherwise receive service from a single transmitter location alone. Most significantly, although the Commission licensed three of the transmitters as boosters, which as secondary stations would not be entitled to protection, in terms of the Station’s analog facilities full service protection was afforded to Channel 7 by reason of the surrounding water and the primary status of the Station’s main transmitter license across the island. In short, the distributed transmission system delivering the analog signal—even though through boosters—had de facto primary status since it was fully protected within WSTE-TV’s

---

<sup>1</sup> See *Request for Immediate Action*, filed by Siete Grande Television, Inc., dated February 21, 1992, on File No. BPCT-900531KE AND *Reply Comments* of Siete Grande Television, Inc., dated January 24, 2003 in DA 03-3383.

predicted contour across the island and was not subject to preemption by higher classed primary stations.

6. The grant of WSTE-TV's license predated the development of the Commission's DTV rules. In the FCC's *Sixth Report and Order* the proposed DTV Allocation Table failed to address full signal replication of Channel 7's island-wide coverage area achieved through use of the booster facilities. Siete Grande was assigned a single DTV channel allotment on Channel 66 at its main transmitter site in Ponce. It has filed an application and a request for waiver for that site together with a request to permit the establishment of co-channel DTV facilities at its current booster sites.

7. Siete Grande petitioned the Commission to partially reconsider the *Sixth Report and Order* by taking into account digital service area replication in the context of WSTE-TV's unique licensed facilities including its auxiliary main and three booster stations. Siete Grande observed that obtaining and building out the experimental and permanent authorizations required a multi-million dollar investment risk. The costs included engineering and permits, construction of towers, purchase of transmitters and the construction of an intricate microwave system to connect the various boosters. Not only will the investment encouraged by the Commission be lost if DTV signal replication is not achieved, but from a public interest standpoint, a large number of Puerto Rico's inhabitants would lose over the air reception of Channel 7.

8. In its *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, FCC 98-24, released February 23, 1998 ("Reconsideration Order"), the Commission recognized that "the mountainous terrain characteristics of ... Puerto Rico does provide some terrain shielding of television signals." The Commission added "...we believe that these terrain characteristics should permit broadcasters such as SGI [Siete Grande] to implement future

booster stations if desired. We believe that coverage enhancements through the use of secondary low power stations are best addressed through local engineering solutions rather than as part of the DTV allotment process."

9. Siete Grande followed this instruction with years of effort and further expense. In 1999 Siete Grande filed an application for DTV authorization, requesting a waiver to establish synchronous DTV facilities at its booster sites in order to replicate its existing analog signal and preserve its independent island-wide service. That application is still pending.

10. Following discussions with the staff, in February, 2002, Siete Grande filed an application for a single unitary license to cover all of its multi-site facilities. Such license would have conferred primary station status upon the booster sites by looking beyond the component parts of the signal and treating the entire integrated synchronous co-channel operation as one single array. The unitary license would enable Siete Grande to receive protected status as a primary station at each location so that Siete Grande could replicate its island-wide service with DTV facilities in precisely the same way it provides island-wide analog coverage to its viewers now. The public interest benefits of being able to perpetuate this island-wide coverage have been attested to by numerous public officials. (See par. 4, *supra*.) Moreover, Siete Grande submitted a detailed preclusion study which demonstrated that conferring such primary status would not preclude any core or out of the core stations from finding frequencies of their own were the Commission to allot DTV frequencies to Siete Grande's booster locations.

11. On December 10, 2002, the Commission placed Siete Grande's unitary license application *on* a special public notice to solicit comments from interested parties as to the public interest ramifications of making such a grant. No party opposed the grant and no party in Puerto

---

<sup>2</sup> *Reconsideration Order* ¶ 355.

Rico commented upon the preclusion study or challenged its findings. Two parties, without opposing the merits of the Application, suggested that the Commission defer action on the proposal and instead conduct a rulemaking inquiry into the benefits of unitary licenses. Shortly after the comment period expired, the Commission released its *Second Periodic Review* in this proceeding. On March 28, 2003, the Commission declined this opportunity to address the issues raised by Siete Grande's Application, reasoning that "These very issues are being explored by the Commission in a pending rulemaking proceeding." [and] "to do so could be seen as prejudging the rulemaking." See *Letter to Stuart Shorestein*, dated March 28, 2003, DA 02-3383, p. 2.

#### IV.

##### The Instant Rulemaking Proceeding

12. Siete Grande probably has more experience in operating integrated distributed transmission systems than any station in the country. However, Siete Grande lacks the resources to develop general rules and guidelines that would be applicable to mainland stations where issues of interference are not mooted by Puerto Rico's surrounding sea. Nonetheless, based on the experience of operating a stable array for seventeen years the following parameters appear to be critical to achieving an integrated distributed transmission system that produces a single array.

The transmitters are being operated on the licensed main station's authorized frequency and meet and exceed all requirements for carrier frequency tolerance.

The proposed facilities comply with the RFR guidelines in O.S.T. Bulletin No. 65.

The proposed operating powers do not exceed the power authorized to the licensed main station transmission facility

The proposed grade B coverage is contained entirely within the licensed main station predicted grade B coverage.

- Grant of the proposals would not be a major environmental action.  
**A** preclusion study demonstrates no preclusory effect  
 There will be an absence of interference to or from other existing stations.
- Reliable service will be provided to viewers who are blocked by terrain.

13. These criteria define WSTE-TV's operation. They also parallel in important ways the Commission's rules on cellular technology which relies upon multi-site transmitters to serve a designated service area. One of the foundations upon which the Commission's DTV rules are built is replication of the analog service area. It is unimaginable that after encouraging local engineering solutions to overcome service terrain obstruction, the expenditure of millions of dollars to achieve an engineering miracle, and the public interest benefits that demonstrably enhance service to 1.3 million island inhabitants, that future DTV service would be circumscribed, especially in the absence of preclusion of other signals. Because the allocation rules favor primary service facilities over boosters, every month that goes by carries a risk that WSTE-TV's service area could be impaired, a risk that is exacerbated by the rules governing DTV displacement. Significantly, every station licensed to Ponce has either financially failed or has become a satellite of a San Juan station in order to enhance the coverage area of other island stations to overcome the same terrain obstacles that WSTE-TV faced—and uniquely solved. See *Lin Television Corporation*, FCC 01-207, released July 20, 2001. While DTV construction at the four sites is likely to cost four times that of just one site, such expenditure would be more sensible than investing in a single site where it is questionable whether operating from just one site location alone, the Station could economically survive

14. Siete Grande believes from a conceptual standpoint that granting primary status so as to preserve the signals of those booster stations that form part of a distributed transmission

system if they meet the criteria set forth above is an appropriate public interest goal. Doing so will protect against disruption of service to the public as well as the investment entailed in constructing future DTV booster facilities that will enable island-wide coverage. However, even if the Commission does not adopt general rules granting primary status to DTV booster stations, then the Commission should nonetheless maintain a flexible posture to consider the grant of unitary or other permanent licenses where appropriate such as in Puerto Rico or other waivers of the booster station rules in order to enable existing services within the grade B contour to be maintained and not lost. The public interest requires no less — especially when a loss of such service can so demonstrably harm a population

15. Siete Grande appreciates the attention the Commission has given to this important issue and is pleased to furnish any additional technical information as to the engineering particulars of its operations should that prove helpful in its deliberations on this matter.

Respectfully submitted,

SIETE GRANDE TELEVISION, INC

By:   
—Stuart A. Shorenstein

It's Counsel

Wolf Block Schorr and Solis-Cohen LLP

250 Park Avenue

New York, New York 10177

Tel: 212-986-1116

**Fax:** 212-986-0604

email: sshorenstein@wolfblock.com

Dated: April 18, 2003