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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 90 of the Commision's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service	)	**PR Docket No. 89-552**
	)	
Implementation of Sections 3(n) and 332 of the Communications Act	)	**GN Docket No. 93-252**
	)	
Regulatory Treatment of Mobile Services	)	
	)	
Implementation of Section 309(j) of the Communications Act Competitive Bidding	)	**PP Docket No. 93-253**

To: The Commission

COMMENTS OF THE SHELL OFFSHORE SERVICES COMPANY

Shell Offshore Services Company ("SOSCo"), pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission ("FCC" or "Commission"), by its attorneys, respectfully submits these Comments in response to the Commission's Public Notice that requested comment on procedural rules for the Phase II 220 MHz Service spectrum reauction scheduled to commence on June 8, 1999.[1]

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[1] Public Notice, DA 98-2386, Report No. AUC-99-24-A (Auction No. 24), released November 24, 1998.

I. BACKGROUND

1. SOSCo is a subsidiary of Shell Offshore, Inc. Shell Offshore, Inc. is the largest producer of petroleum and natural gas in the Gulf of Mexico. On August 28, 1996, the Commission granted SOSCo authority to construct and operate a new 6 GHz, broadband, digital, common carrier microwave network in the Gulf of Mexico.[2/] SOSCo's common carrier microwave network is expected to serve as the principal telecommunications infrastructure for much of the petroleum and natural gas industries in the Gulf of Mexico.

2. SOSCo acquired fourteen licenses in the Commission's first Phase II 220 MHz Service auction. The licenses SOSCo obtained authorize it to serve several Gulf Coast Economic Areas generally stretching from Port Arthur, Texas to Mobile, Alabama.[3/] SOSCo is desirous of securing additional Phase II 220 MHz licenses to serve the adjacent Gulf of Mexico. Obtaining authority to use 220 MHz frequencies in the Gulf of Mexico is crucial to SOSCo's overall plans for the development and deployment of a

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[2/] *See Shell Offshore Services Company; Applications for Authority to Operate Common Carrier Digital Microwave Stations in the 5925-6425 MHz and 6525-6875 MHz Frequency Bands*, DA 96-1458, released August 29, 1996.

[3/] SOSCo won licenses to serve the following Gulf Coast Economic Areas: EA80 (Mobile, AL); EA82 (Biloxi-Gulfport-Pascagoula, MS); EA83 (New Orleans, LA-MS); EA84 (Baton Rouge, LA-MS); EA85 (Lafayette, LA); EA86 (Lake Charles, LA); and EA87 (Beaumont-Port Arthur, TX). *See*, Public Notice, Report No. AUC-18-F (Auction No. 18), DA 98-2143, released October 23, 1998.

two-way mobile radio (dispatch) communications network to serve petroleum and natural gas exploration and production industry in the Gulf of Mexico, as well as the supporting infrastructure operated from multiple onshore sites located throughout the Gulf Coast region.

3. Although the Commission did not include the Gulf of Mexico in Attachment A to its Public Notice of May 29, 1998,[4] it did list the Gulf of Mexico as Economic Area (EA) Number BEA 176 in its Bidder Information Package.[5] However, it is omitted from subsequent notices. Accordingly, while it appears that the Commission may have intended at one point to include the Gulf of Mexico in the action, it apparently overlooked its inclusion in subsequent notices. SOSCo urges the Commission to correct this procedural oversight in its next Public Notice for Auction No. 24.

II. THE COMMISSION SHOULD ESTABLISH THE GULF OF MEXICO AS A GEOGRAPHICALLY-DEFINED SERVICE AREA TO BE LICENSED THROUGH COMPETITIVE BIDDING

4. The Commission should designate the Gulf of Mexico as the seventh Economic Area Grouping (EAG) and as a single Economic Area (EA). The sparsity of

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[4] Auction of the Phase II 220 MHz Service Licenses (DA 98-1010); May 29, 1998.

[5] FCC Auction; The Phase II 220 MHz Service Auction Nationwide Economic Area, and Economic Area Group Licenses; September 15, 1998.

population in the Gulf of Mexico makes it inappropriate to divide the area into multiple EAs. Further, it is extremely costly for telecommunications service providers to lease tower space in the Gulf of Mexico and to maintain equipment in the Gulf of Mexico's harsh environment. Therefore, only by licensing the Gulf of Mexico as a single EAG and EA will Phase II 220 MHz service providers be able to offer affordable service to a sufficient number of users to justify the large scale investment in site rentals and equipment needed to serve the Gulf of Mexico. Thus, under this proposed licensing scheme, there would be a total of ten 220 MHz licenses granted in the Gulf of Mexico: 5 licenses of 15 channel pairs each, and 5 licenses of 10 channel pairs each.

III. PHASE II 220 MHz LICENSES AUTHORIZED TO SERVE THE GULF OF MEXICO SHOULD BE HELD TO THE SAME INTERFERENCE CRITERIA AS ANY OTHER PHASE II LICENSEE

5. Licensees operating in the Gulf of Mexico should be subject to the same interference criteria as any other Phase II licensee. In the past, some have unconvincingly argued that licensees operating in the Gulf of Mexico are somehow different from land-based licensees. They have attempted to mislead the Commission into thinking that radio propagation characteristics over water make the Gulf of Mexico an inappropriate area in which to license commercial spectrum. The fact that propagation over water is better than propagation over rough terrain is not, of itself, a reason for not treating the Gulf of Mexico as a separate EAG and EA (hereinafter referred to collectively as EAs) for the

Phase II 220 MHz reauction. Indeed, some existing adjacent EAs, as defined in the Commission's auction rules, have over-the-water and flat terrain characteristics similar to the Gulf of Mexico. For example, EA 64 (Chicago) is approximately 97 km from EA 65 (Lake Michigan from Benton Harbor/St. Joseph, Michigan). According to the rules, Phase II licensees in EA 65 who choose to locate their base stations within 120 km of base stations of co-channel Phase I licensees in EA 64 will be required to provide 10 dB protection to the predicted 38 dBuV/m service contours of the co-channel Phase I base stations.

6. Propagation conditions similar to the EA 64/EA 65 example exist for adjacent EAs separated by flat terrain (e.g., EA 137 (Lubbock, TX)/EA 138 (Amarillo, TX)) or large bodies of water (e.g., EA 62 (Grand Rapids-Muskegon-Holland, MI)/EA 63 (Milwaukee-Racine, WI); EA 56 (Toledo, OH)/EA 57 (Detroit-Ann Arbor-Flint, MI); and EA 55 (Cleveland-Akron, OH)/EA 57 (Detroit-Ann Arbor-Flint, MI)). The Commission's protection rules, based on reliable interference-free radio communications, regardless of EA-specific propagation characteristics, should not discriminate one EA from another but, rather, should protect the geographic boundaries of each EA based on the established field strength (i.e., 38 dBu). All licensees operating in EAs with "favorable propagation" characteristics, regardless of whether they are over water or flat

land, will be required to construct their systems so as to satisfy the maximum field strength at the EA boundary.[6]

7. Protection of service areas for geographically-defined radio licenses is of paramount importance. SOSCo concurs with the general premise that co-channel radio facilities in adjacent EAs should provide mutual protection based on established interference criteria, and that Phase II licensees should protect Phase I facilities according to the Commission's rules. However, considering radiofrequency propagation factors alone, there appears to be no rationale for excluding the Gulf of Mexico as an equivalent EA relative to the Commission's auction rules.

8. Indeed, the Commission has recently licensed the Gulf of Mexico as a geographically-defined service area for the WCS, without establishing interference criteria different from that imposed on other WCS licensees.[7] By licensing the Gulf of Mexico as a distinct WCS service area, without imposing different interference criteria,

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[6] In order to comply with the maximum field strength, some licensees may use directional antennas "aimed" away from the EA boundary, while others may use lower transmit power or lower antennas for base stations located near the EA boundary. These same interference mitigating techniques are available for radio facilities located in the Gulf of Mexico.

[7] *See, Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service*, Report and Order, FCC 97-50, 12 FCC Rcd 10785, released February 19, 1997.

the Commission implicitly recognized that a licensee operating in the Gulf of Mexico is no different from a licensee operating in other areas of the United States.

IV. ALLOCATING AND LICENSING THE 220 MHz BAND IN THE GULF OF MEXICO WILL SERVE THE PUBLIC INTEREST

9. The Gulf of Mexico is one of the primary petroleum and natural gas production areas in the United States. The amount of money being invested by the petroleum industry in the Gulf of Mexico for exploration and drilling programs has increased significantly in recent years. This increase is primarily attributable to the development and deployment of new deepwater drilling and production capabilities in areas located beyond the outer continental shelf. The resurgence of exploration and production activity in the Gulf of Mexico, quite naturally, has been accompanied by an increase in the demand for reliable voice, data, and video telecommunications services.

10. Providers of telecommunications services in the Gulf of Mexico, however, have been unable to meet the growing demand for this level of telecommunications services because the spectrum normally used to provide those services is not available for licensing in the Gulf of Mexico. For instance, the Gulf of Mexico was excluded from the PCS, LMDS, MDS, 900 MHz and 800 MHz auctions. In fact, the Gulf of Mexico would also have been omitted from the WCS auction had SOSCo not successfully persuaded the Commission to make it an auctionable service area. Not surprisingly, the Gulf of Mexico

was one of the most sought after markets in the WCS auction. At least seven parties actively bid on the Gulf of Mexico; and, in contrast to some markets where little or no revenue was generated, the Gulf of Mexico produced $826,000 for the U.S. Treasury.

11. There is no reason, procedurally or otherwise, why the Gulf of Mexico should be excluded from the upcoming 220 MHz Service reauction. There are carriers currently interested in securing spectrum to provide commercial wireless services, and there is a growing market in need of additional commercial wireless services. It is difficult to understand why the Commission would not use the upcoming 220 MHz Service reauction to help alleviate the anemic level of commercial wireless spectrum available for use in the Gulf of Mexico. Not only is the additional spectrum critical for the protection of life and property in the deep waters of the Gulf of Mexico, it can make a significant contribution to the overall production of energy sources in this offshore area.

12. Moreover, it bears noting that certain telecommunications requirements unique to the Gulf of Mexico cannot be reliably and economically met using existing spectrum allocations, such as UHF, 800 MHz and 900 MHz. For instance, the narrowband technology of 220 MHz equipment and the superior propagation characteristics of 220 MHz spectrum will enable licensees to provide more cost effective, reliable and spectrum efficient wireless communications services to and between remote oil exploration and production sites throughout the Gulf of Mexico than is currently

available with the use of other frequency bands. Further, because many deepwater production platforms cost over $1 billion to construct and typically house over 100 people at any given time, the lack of adequate spectrum capable of providing reliable commercial mobile service to these platforms has become a major concern in the petroleum and natural gas industries.

13. In light of the foregoing, SOSCo strongly urges the Commission to include the Gulf of Mexico in the upcoming 220 MHz Service reauction. Such a decision clearly would be in the public interest because this band could promptly be used to meet the growing need for commercial wireless services.

V. LAND-BASED 220 MHz LICENSEES ABUTTING THE GULF OF MEXICO HAVE A LIMITED SERVICE AREA IN WHICH TO SERVE THE GULF OF MEXICO

14. In the WCS auction, the Commission held that:

> [L]and-based license regions abutting the Gulf of Mexico will extend to the limit of the territorial waters of the United States in the Gulf, which is the maritime zone that extends approximately twelve nautical miles from the U.S. baseline. Beyond that line of demarcation, we will create the Gulf of Mexico REAG and MEA, which will extend from that line outward to the broadest geographic limits consistent with international agreements . . . . The limits and coordination of signal strengths at the boundaries of the service areas meeting in the Gulf region will be the same as those that will apply for all service areas.

The same geographic service area delineation should be adopted *vis-a-vis* land-based and water-based 220 MHz licensees.[8] Specifically, the service area of a Phase II 220 MHz Service licensee authorized to serve the Gulf of Mexico should begin approximately twelve nautical miles from the U.S. baseline and extend from that line outward to the broadest geographic limits consistent with international agreements.

WHEREFORE, THE PREMISES CONSIDERED, Shell Offshore Services Company respectfully urges the Federal Communications Commission to include the Gulf of Mexico in the upcoming spectrum reauction ordered for awarding licenses for use of the spectrum in the band 220-222 MHz.

Respectfully submitted,

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Dated: December 16, 1998

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[8] Id. at ¶ 59.

CERTIFICATE OF SERVICE

I, Patt Meyer, a secretary in the law firm of Keller and Heckman LLP, do hereby certify that a copy of the foregoing COMMENTS OF THE SHELL OFFSHORE SERVICES COMPANY has been served this 16th day of December, 1998 by hand delivery to the following:

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