

WT 11-124

Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 01/05/2011 at 17:45:12  
 File Number: 0003602351

FCC 601  
 Main Form

FCC Application for Radio Service Authorization:  
 Wireless Telecommunications Bureau  
 Public Safety and Homeland Security Bureau

Approved by OMB  
 3060 - 0798

See instructions for  
 public burden estimate

1) Radio Service Code: <b>NN</b>	1a) Existing Radio Service Code:
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General Information

2) (Select only one) ( <b>AM</b> ) <b>NE</b> - New <b>RO</b> - Renewal Only <b>AU</b> - Administrative Update <b>NT</b> - Required Notifications <b>MD</b> - Modification <b>RM</b> - Renewal/Modification <b>WD</b> - Withdrawal of Application <b>EX</b> - Requests for Extension of Time <b>AM</b> - Amendment <b>CA</b> - Cancellation of License <b>DU</b> - Duplicate License <b>RL</b> - Registered Location/Link	
3a) If this application is for a <u>D</u> evelopmental License, <u>D</u> emonstration License, or a <u>S</u> pecial Temporary Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter ' <u>N</u> ' (Not Applicable).	( <b>N</b> ) <u>D</u> <u>M</u> <u>S</u> <u>N/A</u>
3b) If this application is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. Refer to Rule 1.915 for an explanation of situations considered to be an emergency.	( ) <u>Yes</u> <u>No</u>
4) If this application is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.	File Number <b>0003602351</b>
5) If this application is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate License, or Administrative Update, enter the call sign of the existing FCC license. If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license.	Call Sign <b>WQHV404</b>
6) If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).	MM      DD /
7) Is this application "major" as defined in §1.929 of the Commission's Rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's Rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).	( ) <u>Yes</u> <u>No</u>
8) Are attachments (other than associated schedules) being filed with this application?	( <b>Y</b> ) <u>Yes</u> <u>No</u>

Fees, Waivers, and Exemptions

9) Is the Applicant exempt from FCC application fees?	( <b>N</b> ) <u>Yes</u> <u>No</u>
10) Is the Applicant exempt from FCC regulatory fees?	( <b>N</b> ) <u>Yes</u> <u>No</u>
11a) Does this application include a request for a Waiver of the Commission's Rule(s)? If 'Yes', attach an exhibit providing rule number(s) and explaining circumstances.	( <b>N</b> ) <u>Yes</u> <u>No</u>
11b) If 11a is 'Y', enter the number of rule sections involved.	Number of Rule Section(s):
12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?	( <b>N</b> ) <u>Yes</u> <u>No</u>

**Applicant Information**

13) FCC Registration Number (FRN): <b>0003194933</b>			
14) Applicant/Licensee Legal Entity Type: (Select One) <input type="checkbox"/> Individual <input type="checkbox"/> Unincorporated Association <input type="checkbox"/> Trust <input type="checkbox"/> Government Entity <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Limited Liability Company <input type="checkbox"/> General Partnership <input type="checkbox"/> Limited Partnership <input type="checkbox"/> Limited Liability Partnership <input type="checkbox"/> Consortium <input type="checkbox"/> Other: _____			
15) If the Licensee name is being updated, is the update a result from the sale (or transfer of control) of the license(s) to another party and for which proper Commission approval has not been received or proper notification not provided?			( ) Yes <u>No</u>
16) First Name (if individual):	MI:	Last Name:	Suffix:
17) Legal Entity Name (if other than individual): <b>Chevron USA Inc.</b>			
18) Attention To: <b>Telecom</b>			
19) P.O. Box:	And/Or	20) Street Address: <b>1001 G Street, NW, Suite 500 West</b>	
21) City: <b>Washington</b>	22) State: <b>DC</b>	23) Zip Code: <b>20001</b>	
24) Telephone Number: <b>(202)434-4100</b>		25) FAX: <b>(202)434-4646</b>	
26) E-Mail Address: <b>telecomlicensing@khlaw.com</b>			

**27) Demographics (Optional):**

<b>Race:</b> <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black or African-American <input type="checkbox"/> Native Hawaiian or Other Pacific Islander <input type="checkbox"/> White	<b>Ethnicity:</b> <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino	<b>Gender:</b> <input type="checkbox"/> Male <input type="checkbox"/> Female
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**Real Party in Interest**

28) Name of Real Party in Interest of Applicant (if different from Applicant):	29) FCC Registration Number (FRN) of Real Party in Interest:
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**Contact Information (if different from the Applicant)** **Check here if same as Applicant.**

30) First Name:	MI:	Last Name:	Suffix:
31) Company Name: <b>Keller and Heckman LLP</b>			
32) Attention To: <b>Telecom</b>			
33) P.O. Box:	And /Or	34) Street Address: <b>1001 G Street, NW, Suite 500 West</b>	
35) City: <b>Washington</b>	36) State: <b>DC</b>	37) Zip Code: <b>20001</b>	
38) Telephone Number: <b>(202)434-4100</b>		39) FAX: <b>(202)434-4646</b>	
40) E-Mail Address: <b>telecomlicensing@khlaw.com</b>			

**Regulatory Status**

41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply):

 Common Carrier  Non-Common Carrier  Private, internal communications  Broadcast Services  Band Manager**Type of Radio Service**

42) This filing is for authorization to provide the following type(s) of radio service (choose all that apply):

 Fixed  Mobile  Radiolocation  Satellite (sound)  Broadcast Services

43) Does the Applicant propose to provide service interconnected to the public telephone network?

 N  Yes  No**Alien Ownership Questions (If any answer is 'Y', provide an attachment explaining the circumstances)**

44) Is the Applicant a foreign government or the representative of any foreign government?

 N  Yes  No

45) Is the Applicant an alien or the representative of an alien?

 N  Yes  No

46) Is the Applicant a corporation organized under the laws of any foreign government?

 N  Yes  No

47) Is the Applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

 N  Yes  No

48a) Is the Applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

 N  Yes  No

48b) If the answer to 48a is 'Y', has the Applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

 Yes  No

If the answer to 48b is 'Y', include in the exhibit required by Item 48a the citation(s) of the applicable declaratory ruling(s) by DA/FCC number of the FCC Record citation, if available, release date, and any other identifying information.

If the answer to 48b is 'N', attach to this filing a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act. It is not necessary to file a request for a foreign ownership ruling if the Applicant includes in the exhibit required by Item 48a a showing that the requested license(s) is exempt from the provisions of Section 310(b)(4).

**Basic Qualification Questions**

49) Has the Applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

 N  Yes  No

50) Has the Applicant or any party to this application, or any party directly or indirectly controlling the Applicant, ever been convicted of a felony by any state or federal court?

 N  Yes  No

51) Has any court finally adjudged the Applicant or any party directly or indirectly controlling the Applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

 N  Yes  No

If the answer to any of 49-51 is 'Y', attach an exhibit explaining the circumstances.

**Aeronautical Advisory Station (Unicom) Certification**52)  I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.**Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership**

53a) Will the requested facilities be used to provide multichannel video programming service?

 Yes  No

53b) If the answer to question 53a is 'Y', does the Applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

 Yes  No**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the Applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.**Broadband Radio Service and Educational Broadband Service (Part 27)**

54) (For EBS only) Does the Applicant comply with the programming requirements contained in Section 27.1203 of the Commission's Rules?

 Yes  No**Note:** If the answer to item 54 is 'N', attach an exhibit explaining how the Applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the Applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules?

 Yes  No**Note:** If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

**General Certification Statements**

1)	The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.
2)	The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules.* *If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
3)	The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.
4)	The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
5)	The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this application, or (3) is not required to file ownership data under the Commission's rules.
6)	The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
7)	The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested license(s).
8)	The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency.

**Signature**

56) Typed or Printed Name of Party Authorized to Sign

First Name: <b>Farkhanda</b>	MI:	Last Name: <b>Khan</b>	Suffix:
57) Title: <b>Network Products Manager</b>			
Signature: <b>Farkhanda Khan</b>			58) Date: <b>01/05/2011</b>
<b>FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.</b>			
Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.			
<b>WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).</b>			

Market Name and Channel Block Information:

Market Name:	Nationwide
Channel Block:	3650 - 3700 MHz

Attachment(s):

Type	Description	Date Entered
O	<u>Updated Request for Rule Waiver</u>	01/05/2011
O	<u>Diagram A</u>	01/05/2011

## UPDATED REQUEST FOR WAIVER

Chevron U.S.A. Inc. (“Chevron”), pursuant to Section 1.925<sup>1</sup> of the Rules and Regulations of the Federal Communications Commission (“FCC” or “Commission”), respectfully requests a waiver of Section 90.1321<sup>2</sup> of the Commission’s rules to permit operation of 3.65 GHz band subscriber or “terminal” units in the offshore Federal and State waters of the Gulf of Mexico and Alaska, with equivalent isotropically radiated power (“EIRP”) limits in excess of those permitted under the rules as described herein. Chevron also requests a waiver to allow offshore terminal units at temporary fixed locations to operate under the registration of their associated “master” station without independent ULS registration.

### Background

Chevron is a subsidiary of Chevron Corporation, which is one of the world’s largest energy companies with oil and natural gas exploration, production, pipeline transportation, refining, and marketing activities worldwide. Chevron Corporation has extensive offshore exploration and production activities and is one of the largest producers in the Gulf of Mexico with almost 700 total offshore structures and 3,000 employees and contractors working in the Gulf. Chevron Corporation is the largest leaseholder on the Gulf of Mexico Outer Continental Shelf.

Access to continuous, reliable communications in the harsh offshore environment is critical to safe and effective oil and natural gas exploration and production. To support its operations, Chevron operates an extensive offshore communications system.

On June 7, 2007, the Commission released a Memorandum Opinion and Order (“MO&O”) adopting rules for operations in the 3.65 GHz band (3650-3700 MHz).<sup>3</sup> The MO&O upheld a previous decision to establish non-exclusive licensing in the 3.65 GHz band, creating a “hybrid” licensed/unlicensed approach. New stations are required to register in a common database, and all equipment must employ a “contention-based” protocol designed to avoid interference. Licensees must work together to resolve interference, without rights for “first-in-time” operations.

As part of its plan for the 3.65 GHz band, the Commission adopted certain power limits, in part, “to ensure efficient and expeditious use of the band by adopting power limits that would allow multiple 3650 MHz licensees to operate within reasonable

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<sup>1</sup> 47 C.F.R. § 1.925.

<sup>2</sup> 47 C.F.R. § 90.1321.

<sup>3</sup> See Wireless Operations in the 3650-3700 MHz Band, *Memorandum Opinion and Order*, 22 FCC Rcd 10421 (2007).

proximity of each other without unacceptable interference.”<sup>4</sup> These power limits restrict base and fixed stations to 25 watts/25 MHz EIRP. In addition, “peak EIRP power density shall not exceed 1 Watt in any one-megahertz slice of spectrum.”<sup>5</sup>

Chevron currently is authorized under call sign WQHV404 to provide service in the 3.65 GHz band. This band is central to Chevron’s communications plans for the Gulf of Mexico and other offshore exploration areas. Chevron’s current 3.65 GHz operations entail the use of 5 MHz channels on both the downlink (base to terminal) and uplink (terminal to base) paths in a point-to-multipoint configuration. Transmitter output power from the base station is set between 20-23 dBm and Chevron employs directional antennas providing an additional 14-17 dBi of gain for a total EIRP of 37 dBm on the downlink path. This is equivalent to 5 W/5 MHz, which is the maximum allowable under Section 90.1321 of the Commission’s rules. Furthermore, these base stations employ Space Time Coding (STC) and other techniques to enhance the system gain on the downlink path. This coupled with the use of high-gain, narrow beam terminal unit antennas provide adequate performance between facilities on the downlink path while remaining within the FCC EIRP limits.

However, on the uplink paths, the added antenna gain on the terminal units which is of benefit to the downlink path must be associated with a 1:1 reduction in the terminal unit’s output power in order to meet the power limitations under Section 90.1321 of the Commission’s rules. The result is a highly unbalanced link, as the terminal unit’s EIRP is insufficient on the uplink path to provide reliable service between Chevron’s offshore base station and other offshore terminal facilities.

Chevron utilizes directional antennas on the terminal side that have a gain of up to 27 dBi. Chevron’s terminal unit transmitters are capable of operating at 20 dBm; thus the transmitter power must be reduced an additional 10 dB over that which is available when the 27 dBi antennas are employed, in order to meet the power limitations under Section 90.1321 of the Commission’s rules. Chevron requests authority from the Commission to make use of that additional antenna gain to balance the uplink and downlink paths and thus employ an additional 10 dBm of transmit EIRP for its terminal units. The net result is a maximum total EIRP of 47 dBm within a 5 MHz channel. The limitations of this additional 10 dBm would apply to operations conducted pursuant to the granted waiver, including those within the 12 mile buffer coastal area under 47 CFR § 27.6(a) (2), and other offshore area limits which are under FCC jurisdiction, such as the Gulf of Mexico Economic Area (EA).

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<sup>4</sup> *Id* at ¶ 42.

<sup>5</sup> 47 C.F.R. § 90.1321.

### Request for Waiver

The Commission may grant a request for waiver if it is shown that:

- (i) The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; *or*
- (ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.<sup>6</sup>

Chevron submits that both factors are satisfied here.

#### *EIRP Limits*

The stated purpose of the 3.65 GHz EIRP limit is “to ensure efficient and expeditious use of the band”.<sup>7</sup> This goal will not be served and will be frustrated as it applies to Chevron’s use of the 3.65 GHz band in offshore areas such as Alaska and the Gulf of Mexico. The Commission previously concluded that the adopted power levels “are adequate to support commercially viable services.”<sup>8</sup> To the contrary, the EIRP restrictions contained in the Commission’s rules limit Chevron’s ability to serve certain locations due to distance. Unlike onshore operations, infrastructure offshore is available at specific, limited locations and there often is little or no flexibility regarding the geographic placement of equipment. While often feasible on land, construction of a new communications tower to bridge the gap between two distant locations is not an option offshore where equipment must be mounted on existing structures whose location is based on geological factors associated with energy production. Absent grant of the waiver, Chevron will be very limited in its ability to provide coverage to current and future offshore locations in a reliable manner.

The other stated purpose of the EIRP limitation is to simplify the distance separation criteria used to provide protection to Fixed Satellite Service (“FSS”) earth stations. The FCC’s rules provide that base and fixed stations may not be located within 150 km of any grandfathered satellite earth station operating in the 3650-3700 MHz band. Chevron’s current operations at this time will not impact these distance separation requirements inasmuch as there are no FSS earth stations located in either Alaska or the Gulf of Mexico and the nearest land-based FSS earth station is more than 400 kilometers

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<sup>6</sup> 47 C.F.R. § 1.925(b)(3) (emphasis added). See also WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969); Thomas Radio v. FCC, 716 F.2d 921 (D.C. Cir. 1983).

<sup>7</sup> *MO&O* at ¶ 42.

<sup>8</sup> *MO&O* at ¶ 43.

removed from Chevron's entire Gulf of Mexico operations.<sup>9</sup> Furthermore, for other fixed facilities that may arise in new offshore exploration areas, Chevron will in addition to the limits set forth above, not locate a transmitter within offshore areas subject to FCC jurisdiction, that operate at the higher proposed output power and are located in a direction that is within the 10 dB beamwidth of the transmitting antennas main beam at a distance of no less than 265 kilometers away from these facilities. This will afford the same level of interference protection based on field intensity.

The rules also require that base and fixed stations may not be located within 80 km of three Federal Government radiolocation facilities. Two of these facilities are located near the Gulf of Mexico, one in Pascagoula, MS (30° 22' N, 88° 29' W), and one in Pensacola, FL (30° 21' 28" N, 87° 16' 26" W). Chevron will in addition to the 80 km limit set forth above, not locate a transmitter within offshore areas subject to FCC jurisdiction, that operate at the higher proposed output power and are located in a direction that is within the 10 dB beamwidth of the transmitting antennas main beam at a distance of no less than 145 kilometers away from these facilities. This will afford the same level of interference protection based on field intensity.

Chevron notes that grant of waiver will further the public interest by enabling Chevron to operate its offshore communications system in an effective manner to provide enhanced coverage and facilitate safety, security, and environmental compliance. This includes remote operations as required during evacuation from Hurricanes and Typhoons. If this waiver request were to be denied, Chevron would be faced with less than optimal communications capabilities.

Chevron also submits that application of the rule in this instance would be inequitable, unduly burdensome and contrary to the public interest, and Chevron has no reasonable alternative. Although Chevron acquired 30 MHz of spectrum in the recent 700 MHz band auction (Auction No. 73),<sup>10</sup> the Commission's rules provide for a buffer zone of 12 nautical miles between shore and the border of the Gulf of Mexico Geographic Service Area, preventing Chevron from servicing many of its platforms with this spectrum.<sup>11</sup> The Part 15 license-exempt bands frequently are too congested in these areas for mission-critical uses. Due to allocated channel sizes, the Part 101 900 MHz band is suitable only for narrowband point-to-point and point-to-multipoint systems and does not meet Chevron's throughput requirements. Above 900 MHz, options are limited, as the FCC has re-allocated much of the spectrum around 2 GHz to wireless service

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<sup>9</sup> The nearest FSS earth station is located at Desoto, TX (32°37'48.00"N 96°50'32.00"W, call sign KA306). Chevron notes that operations in the Gulf are limited to the Western and Central planning zones, the eastern most boundary of which is at approximately 88° Latitude, and do not extend into the eastern Gulf of Mexico. Thus, Chevron's operations will not impact earth stations located in proximity to the eastern Gulf, such as those located in south Florida.

<sup>10</sup> Call signs WQIZ 525, WQIZ 526, WQIZ 527.

<sup>11</sup> 47 C.F.R. § 27.5.

providers. The next highest band with a substantial amount of available spectrum is found at 6 GHz. However, this band is used to provide point-to-point applications by several providers and is often inadequate for use in marine environments such as the Gulf for multipoint applications.<sup>12</sup> The 3.65 GHz band represents Chevron's only reasonable alternative.

Chevron notes that the Commission previously rejected requests to permit power levels in excess of those provided for in the current rules.<sup>13</sup> In doing so, the Commission noted that the parties requesting increased power "did not argue that the rules' power limits will prevent deployment in the band or make a viable service impracticable."<sup>14</sup> This is the precise justification that Chevron submits here in the context of the Gulf of Mexico and offshore waters of Alaska. Absent the requested power, 3.65 GHz deployment in the Gulf and other offshore exploration areas will be significantly impeded as demonstrated above.

In addition, the Commission noted that previous parties requesting increased power levels merely asked the Commission to "give greater weight to considerations of transmission strength (and range) than to interference avoidance."<sup>15</sup> Chevron is not arguing here that considerations of transmission strength should trump interference avoidance. In fact, it is commonly accepted that increased antenna gains with narrowed beamwidths help limit interference in both point-to-point and point-to-multipoint environments. Also, Chevron has demonstrated that FSS earth station and radiolocation facilities will be afforded protection under its proposed operations.

In addition, intra-service interference to other platforms that may wish to deploy 3.65 GHz facilities will not be a concern. Such interference is unlikely given Chevron's proposed use of directional antennas and the fact that physical assets in an offshore environment are located at easily identifiable points. Unlike on land, other 3.65 GHz band operators physically cannot "pop up in the middle" of Chevron's 3.65 GHz operations due to federal and state leasing of exploration rights and the limited availability of offshore infrastructure such as telecommunications backhaul. In the unlikely event that interference does result, Chevron will work with other licensees on mitigation as required by the Commission's rules.

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<sup>12</sup> See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Et al., *Third Order On Reconsideration And Sixth Memorandum Opinion And Order And Fourth Memorandum Opinion And Order And Second Further Notice Of Proposed Rulemaking And Declaratory Ruling*, Dkt. No. 02-68, FCC 08-83 at para. 125 (Rel. March 20, 2008)

<sup>13</sup> *MO&O* at ¶ 43.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

### *Temporary Fixed Stations*

All operations in the 3.65 GHz band must be conducted pursuant to license. Once an entity has obtained a 3.65 GHz band license, which is issued on a nationwide basis, the FCC requires the registration of fixed and base stations prior to commencing operations.<sup>16</sup>

To register a site, a licensee must provide specific technical details, including whether the equipment uses a restricted or unrestricted protocol, the FCC Equipment Identification number (FCC ID number), the base or fixed station's location (latitude and longitude), and other technical parameters including power and antenna height. Licensees are not authorized to operate the station until the application for registration has been "Accepted" by the FCC and the nationwide license is updated on the FCC's Universal Licensing System ("ULS").<sup>17</sup>

Mobile and portable stations are not required to be registered in ULS but may operate only if they can positively receive and decode an enabling signal transmitted by a registered base station and are limited to significantly less power than fixed transmitters.<sup>18</sup>

The Commission does not appear to have directly addressed the use of temporary fixed "remote" units operated in connection with a fixed "master" transmitter. In 1999, Motorola filed comments requesting that the FCC permit "nomadic" operations in the 3.65 GHz band.<sup>19</sup> Motorola defined nomadic as differing from traditional mobile operations in that transmissions do not generally occur when the radio is in rapid, high-speed motion. Motorola's brief justification stated that the advantage of wireless operations is that they enable applications without devices tethered to a landline.<sup>20</sup>

In 2000, the FCC released a Report and Order denying Motorola's request.<sup>21</sup> The Commission went on to state, however, that "[t]o the extent that Motorola can

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<sup>16</sup> 2005 Report and Order at ¶ 32.

<sup>17</sup> Wireless Telecommunications Bureau Announces Start Date for Licensing and Registration Process for the 3650-3700 MHz Band, News Release, DA No. 07-4605, Dkt No. 05-96 (2007).

<sup>18</sup> 2005 Report and Order at ¶ 51.

<sup>19</sup> See Amendment of the Commission's Rules With Regard to the 3650-3700 MHz Government Transfer Band, *Motorola Comments*, ET Docket No. 98-237 (Feb. 16, 1999).

<sup>20</sup> *Id.*

<sup>21</sup> See Amendment of the Commission's Rules With Regard to the 3650-3700 MHz Government Transfer Band, *First Report and Order and Second Notice of Proposed Rule Making*, 15 FCC Rcd 20488 ¶ 18 (2000).

provide a detailed demonstration that its proposed "nomadic" operations are consistent with our policies in this band and fall within the Commission's definition of temporary fixed operations, they will be permitted to operate."<sup>22</sup> In effect, the FCC acknowledged that units meeting the definition of temporary fixed fell under the classification of the fixed service and were not considered to be mobile (which was not authorized at that time) for purposes of authorized operations in the 3.65 GHz band.

Section 90.1307 of the Commission's rules, however, presumably requires the registration of temporary fixed units in the ULS database prior to operation (or requires that such units meet the requirements of mobile unit operation). In practice, this means that for a licensee to be able to operate a temporary fixed unit it must register in the FCC's ULS database each location at which that unit operates. In addition, operations must conform to the ULS registration in all other respects including antenna height, equipment type, azimuth, etc.

Chevron's 3.65 GHz band operations include the use of terminal units on vessels, such as lift/jack-up boats, operating from temporary fixed locations to communicate with a registered, fixed base location on an offshore platform.<sup>23</sup> These units serve mission-critical functions for Chevron's offshore operations, including use in hurricane recovery efforts.

Due to the transient nature of these operations, Chevron is concerned by the significant administrative expense, delay and inconvenience associated with maintaining and updating the Commission database with specific geographic coordinates and technical information for each temporary fixed unit. Temporary fixed terminal units are in place for varying lengths of time – weeks or months. Due to the number of temporary fixed units potentially in operation in the Gulf at any one time, registration of each temporary site would require frequent, repetitive, registration filings.

Chevron requests waiver to permit operation of temporary fixed terminal transmitters under the registration of an associated master station, without independent registration of the temporary fixed site. Chevron proposes to indicate on each fixed master station registration the number of temporary fixed units associated with that station. In addition, Chevron will limit temporary fixed units to communications only with an associated master station, not with other temporary fixed units. Temporary fixed units will not operate while in motion. The distance from the master station that temporary fixed units could operate would necessarily be limited by the usable contour of the registered fixed site.

Grant of the requested waiver will relieve Chevron of the unduly burdensome and time-consuming responsibility of defining the geographic coordinates for each remote unit and preparing and filing numerous applications for modification of its authority each

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<sup>22</sup> *Id.*

<sup>23</sup> Attached is a diagram depicting the use of offshore terminal units.

time it needs to add or relocate a terminal unit. The Commission would also be faced with a greater burden of processing the Forms 601 filed by Chevron for each additional unit. Absent grant of the requested rule waiver, the addition of the units in this system has the potential to generate a considerable number of registration filings over the life of the facilities. In essence, Chevron is seeking to modify the license of its system to operate in the same manner as 900 MHz multiple address systems. The Commission has granted waivers based on similar circumstances in other Part 90 bands.<sup>24</sup>

Accordingly, Chevron submits that grant of this requested waiver will serve the public interest by conserving both its own resources and those of the Commission.

Chevron urges the Commission to promptly grant this Request for Waiver to allow the company to make full use of directional antennas on terminal units by authorizing an additional 10 dB of EIRP from the use of highly directional antennas for fixed and operate temporary fixed terminal units within the 3.65 GHz band.

\* \* \*

This will confirm that no party to this application is subject to the denial of Federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

Should the Commission require additional information, it is asked to contact Gregory E. Kunkle, Keller and Heckman LLP, 1001 G Street NW, Washington, DC 20001; 202-434-4178; e-mail: kunkle@khlaw.com.

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<sup>24</sup> See e.g., FCC ULS File Number 0004122023

**DIAGRAM A**

