

**Development Review Committee  
September 14, 2009 – 9:00 a.m.  
Old City Hall, 510 Greene Street**



- Item 3i.**      **Variance – 2832 North Roosevelt Blvd (RE 00065380-000000)** – A Variance for height of 105 ft. for a cellular phone tower in the Commercial General (CG) zoning district per Section 122-1149 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida

**VARIANCES ARE QUASI-JUDICIAL HEARINGS AND IT IS  
IMPROPER TO SPEAK TO A PLANNING BOARD AND/OR BOARD  
OF ADJUSTMENT MEMBER ABOUT THE VARIANCE  
OUTSIDE THE HEARING**

***Variance Application***

**City of Key West  
Planning Department**



Please print or type a response to the following:

1. Site Address 2832 N. Roosevelt Blvd. Key West, FL 33040
2. Name of Applicant Trepanier & Associates, Inc.
3. Applicant is: Owner \_\_\_\_\_ Authorized Representative X  
(attached Authorization Form must be completed)
4. Address of Applicant 402 Appelrouth Lane  
Key West, Florida 33040
5. Phone # of Applicant (305) 293-8983 Mobile# \_\_\_\_\_ Fax# (305) 293-8748
6. E-Mail Address sdavis@owentrepanier.com
7. Name of Owner, if different than above Carl M. Herman Revocable Living Trust
8. Address of Owner 1809 Venetia Street  
Key West, Florida 33040
9. Phone Number of Owner (305) 852-8171 Fax# (305) 852-8286
10. Email Address keyswifi@gmail.com
11. Zoning District of Parcel CG RE# 00065380-000000
12. Description of Proposed Construction, Development, and Use  
Wireless Telecommunications Facility

13. Required information: (application will not move forward until all information is provided)

	Required	Existing	Requested
Front Setback			
Side Setback			
Side Setback			
Rear Setback			
Building Coverage			
Open Space Requirements			
Impervious Surface			

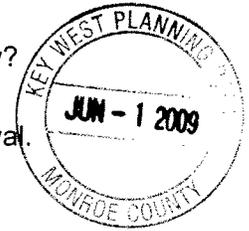
Height                                      40 ft.                                      0 ft.                                      105 ft.

14. Is Subject Property located within the Historic District? Yes \_\_\_\_\_ No X  
 If Yes, indicate date of HARC approval as well as the HARC Approval Number. Attach minutes of the meeting.

Date \_\_\_\_\_ HARC # \_\_\_\_\_

15. Are there any easements, deed restrictions or other encumbrances attached to the subject property? Yes \_\_\_\_\_ No X If Yes, please describe and attach relevant documents. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

16. Will the work be within the dripline (canopy) of any tree on or off the property?  
 YES \_\_\_\_\_ NO X  
 If yes, provide date of landscape approval, and attach a copy of such approval.



**Check List**

*(to be completed by Planning Staff and Applicant at time of submittal)*

Applicant Initials	Staff Initials	The following must be included with this application
S . D .	_____	Copy of the most recent recorded deed showing ownership and a legal description of the subject property
S . D .	_____	Application Fee (to be determined according to fee schedule)
S . D .	_____	Site Plan (existing and proposed) as specified on Variance Application Information Sheet
S . D .	_____	Floor Plans of existing and proposed development (8.5 x 11)
S . D .	_____	Copy of the most recent survey of the subject property
S . D .	_____	Elevation drawings as measured from crown of road
S . D .	_____	Stormwater management plan
S . D .	_____	HARC Approval (if applicable)
S . D .	_____	Notarized Verification Form
S . D .	_____	A PDF or compatible electronic copy of the complete application on a compact disk

**Please note that all architecture or engineering designs must be prepared and sealed by a professional architect or engineer registered in the state pursuant to F.S. chs. 471 and 481, respectively. Two signed and sealed copies will be required at time of submittal.**

## Standards for Considering Variances



Before any variance may be granted, the Planning Board and/or Board of Adjustment must find all of the following requirements are met:

1. Existence of special conditions or circumstances. That special conditions and circumstances exist which are peculiar to the land, structure or building involved and which are not applicable to other land, structures or buildings in the same zoning district.

This wireless telecommunication facility has a special condition in that the antennas need to be higher than the surrounding structures and landscape in order to provide effective coverage in an area. In this case 145 ft. is the effective height.

2. Conditions not created by applicant. That the special conditions and circumstances do not result from the action or negligence of the applicant.

This area of the island has a coverage shadow as demonstrated in the attached documentation. The shadow causes dropped emergency calls as recorded in the attached police records. This area is a high pedestrian/ bicyclist/ vehicular conflict area that results in a high number of emergency calls.

3. Special privileges not conferred. That granting the variance(s) requested will not confer upon the applicant any special privileges denied by the land development regulations to other lands, buildings or structures in the same zoning district.

This height variance does not confer special privileges, it simply allows for the normal wireless telecommunication functionality of of the facility.

4. Hardship conditions exist. That literal interpretation of the provisions of the land development regulations would deprive the applicant of rights commonly enjoyed by other properties in this same zoning district under the terms of this ordinance and would work unnecessary and undue hardship on the applicant.

Hardship conditions exist to both the applicant and the community. If the variance is not granted, the wireless telecommunications operator cannot functionally operate his business in the community; additionally the community will face a hardship through continued dropped calls, which in emergencies can be a life threatening .

5. Only minimum variance(s) granted. That the variance(s) granted is/are the minimum variance(s) that will make possible the reasonable use of the land, building or structure.

145 ft. is the minimum height required to allow the wireless telecommunications facility to function correctly and eliminate the coverage shadow in the area.

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6. Not injurious to the public welfare. That granting of the variance(s) will be in harmony with the general intent and purpose of the land development regulations and that such variances will not be injurious to the area involved or otherwise detrimental to the public interest or welfare.

This wireless facility will bring consistent, reliable service to an area notorious for inadequate service. It will enhance the health, safety and public welfare of the citizens using the area by allowing a fully functioning wireless connection. The location is ideal with regard to compatible uses and life-safety

7. Existing nonconforming uses of other property shall not be considered as the basis for approval. That no other nonconforming use of neighboring lands, structures, or buildings in the same district, and that no other permitted use of lands, structures or buildings in other districts shall be considered grounds for the issuance of a variance.

Nonconformities are not considered as the basis for this request.

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**The Planning Board and/or Board of Adjustment shall make factual findings regarding the following:**

- That the standards established in subsection (a) have been met by the applicant for a variance.
- That the applicant has demonstrated a "good neighbor policy" by contacting or attempting to contact all noticed property owners who have objected to the variance application, and by addressing the objections expressed by these neighbors.





# **Verification Form**

## Verification Form

**Please note, variances are quasi-judicial hearings and it is improper to speak to a Planning Board or Board of Adjustment Member about the variance outside of the hearing.**

This form should be completed by the applicant. Where appropriate, please indicate whether applicant is the owner or a legal representative. If a legal representative, please have the owner(s) complete the following page, "Authorization Form."

I, Trepanier & Associates, Inc., being duly sworn, depose and say  
Name(s) of Applicant(s)

that: I am (check one) the \_\_\_\_\_ Owner  Owner's Legal Representative  
for the property identified as the subject matter of this application:

2832 N. Roosevelt Blvd.

Street Address and Commonly Used Name (if any)

All of the answers to the above questions, drawings, plans and any other attached data which make up this application, are true and correct to the best of my knowledge and belief and that if not true or correct, are grounds for revocation of any action reliant on said information.

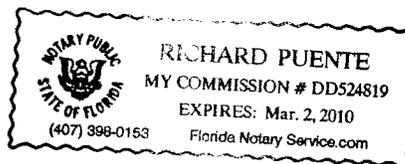
[Signature] \_\_\_\_\_ Signature of Owner/Legal Representative      \_\_\_\_\_ Signature of Joint/Co-owner

Subscribed and sworn to (or affirmed) before me on 5-29-2009 (date) by

Sarah Davis (name). He She is personally known to me or has

presented \_\_\_\_\_ as identification.

Richard Puente  
Notary's Signature and Seal



Richard Puente Name of Acknowledger typed, printed or stamped

Notary Title or Rank DD 524 819 Commission Number (if any)





# **Authorization Form**



### Authorization Form

**Please note, variances are quasi-judicial hearings and it is improper to speak to a Planning Board or Board of Adjustment Member about the variance outside of the hearing.**

Please complete this form if someone other than the owner is representing the property owner in this matter.

I, Rick Richter (Keys Wi-Fi Inc) authorize  
Please Print Name(s) of Owner(s)

Trepanier & Associates, Inc.  
Please Print Name of Representative

to be the representative for this application and act on my/our behalf before the Planning Board.

[Signature]  
Signature of Owner

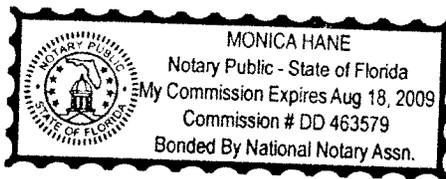
\_\_\_\_\_  
Signature of Joint/Co-owner if applicable

Subscribed and sworn to (or affirmed) before me on May 26, 2009 (date) by

Rick Richter  
Please Print Name of Affiant

She is personally known to me or has presented \_\_\_\_\_ as identification.

Monica Hane  
Notary's Signature and Seal



Monica Hane Name of Acknowledger printed or stamped

Notary Public / State of Florida  
Title or Rank

DD 463579 Commission Number (if any)



# **Warranty Deed**

Return to:  
Name THE CLOSING DEPT.  
Address 3452 DUCK AVENUE  
KEY WEST, FL 33040

Doc# 1532001 08/01/2005 3:36PM  
Filed & Recorded in Official Records of  
MONROE COUNTY DANNY L. KOLHAGE  
08/01/2005 3:36PM  
DEED DOC STAMP CL: FP \$8.76

This Instrument Prepared by DEBBIE CONDELLA  
Address 3412 DUCK AVENUE  
KEY WEST, FL 33040

Doc# 1532001  
Bk# 2137 Pg# 2353

# This Indenture

Wherever used herein the term "party" shall include the heirs, personal representatives, successors and/or assigns of the respective parties hereto. The use of the singular shall include the plural, and the plural the singular. The use of any gender shall include all genders, and, if used, the term "note" shall include all the notes herein described if more than one.

Made this 2nd 15<sup>th</sup> day of October A. D. 2002

**Between,** CARL M HERMAN, a married man,  
whose address is 1809 Venetia Street, Key West, Florida 33040

of the County of Monroe, in the State of Florida, party of the first part, and  
CARL M. HERMAN, Trustee of the CARL M. HERMAN REVOCABLE LIVING TRUST, under Agreement  
dated July 19, 2002,  
whose address is 1809 Venetia Street, Key West, Florida 33040

of the County of Monroe, in the State of Florida, party of the second part,

of the County of Monroe, in the State of Florida, party of the second part,

**Witnesseth,** that the said party of the first part, for and in consideration of the sum of  
TEN AND NO/100 (\$10.00) DOLLARS AND OTHER GOOD AND VALUABLE CONSIDERATION ..... Dollars  
to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained and sold  
to the said party of the second part his heirs and assigns forever, the following described land, situate lying and being in the County of  
Monroe State of Florida, to wit:

LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS SCHEDULE "A".

FULL POWER AND AUTHORITY IS GRANTED BY THIS DEED TO THE TRUSTEE AND ANY SUCCESSOR TRUSTEE  
TO PROTECT, CONSERVE, SELL, LEASE, ENCUMBER OR OTHERWISE TO MANAGE AND DISPOSE OF THE REAL  
PROPERTY DESCRIBED HEREIN, PURSUANT TO FS 689.071.

THE SUCCESSOR TRUSTEE NAMED IN THIS TRUST IS JEAN DORREEN WARD. ALL PERSONS SHALL BE  
ENTITLED TO RELY UPON THE VALIDITY OF ACTIONS BY SUCH SUCCESSOR TRUSTEE, INCLUDING THE SALE  
OR ENCUMBRANCE OF THIS LAND, UPON THE RECORDING OF A CERTIFICATE BY THE SUCCESSOR TRUSTEE,  
EXECUTED UNDER PENALTIES OF PERJURY, IN THE PUBLIC RECORDS OF THIS COUNTY CERTIFYING TO THE  
SUCCESSION.

GRANTOR HEREIN WARRANTS AND REPRESENTS THAT THE LAND CONVEYED BY THIS WARRANTY DEED IS  
NOT HIS HOMESTEAD NOR THE HOMESTEAD OF ANY MEMBER OF HIS FAMILY AS DEFINED BY THE LAWS OF  
THE STATE OF FLORIDA.

THIS DOCUMENT WAS PREPARED WITHOUT BENEFIT OF TITLE SEARCH OR ABSTRACT EXAMINATION AND  
IS BASED SOLELY ON FACTS PROVIDED BY EITHER OF THE PARTIES OR THEIR AGENT.

Property Appraiser's Parcel Identification Number:

And the said party of the first part does hereby fully warrant the title to said land, and will defend the same against the lawful  
claims of all persons whomsoever.

**In Witness Whereof,** the said party of the first part has hereunto set his hand and seal the day and year first above  
written.

**Signed, Sealed and Delivered in Our Presence:**

Witnesses:

Deborah Condezza

Printed Name DEBORAH CONDEZZA

Philip Condezza

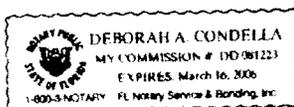
Printed Name PHILIP CONDEZZA

Carl M. Herman L.S.  
CARL M. HERMAN

\_\_\_\_\_ L.S.

State of Florida  
County of Monroe

The foregoing instrument was acknowledged before me this 2nd day of October, 2002,  
by CARL M. HERMAN, who is personally known to me or who has/have produced  
as identification and who did (did not) take an oath.



Deborah A. Condezza  
Signature  
DEBORAH A. CONDEZZA  
Printed Name  
NOTARY PUBLIC



Doc# 1532001  
Bk# 2137 Pg# 2354

Schedule "A"

Legal Description:

Commencing at the southwest corner of Parcel 9 "PLAT OF SURVEY OF LANDS ON ISLAND OF KEY WEST, MONROE COUNTY, FLORIDA AS INDICATED AND DESCRIBED", as recorded in Plat Book 3 at Page 35 of the Public Records of Monroe County, Florida, and the Point of Beginning of the parcel of land being described herein; from the said Point of Beginning, run north 37 deg. 34 min. 20 sec. west for a distance of 600 feet to a point on the southeasterly right of way line (curb line) of Roosevelt Boulevard; thence bear south 52 deg. 25 min. and 40 sec. west along the southeasterly right of way line (curb line) of Roosevelt Boulevard for a distance of 50 feet to a point; thence bear south 37 deg. 34 min. and 20 sec. east for a distance of 600 feet to a point; thence bear north 52 deg. 25 min. and 40 sec. east for a distance of 50 feet back to the Point of Beginning.



C. M. A.

MONROE COUNTY  
OFFICIAL RECORDS

# Survey



# **Aeronautical Study**



Federal Aviation Administration  
 Air Traffic Airspace Branch, ASW-520  
 2601 Meacham Blvd.  
 Fort Worth, TX 76137-0520

Aeronautical Study No.  
 2008-ASO-6025-OE

Issued Date: 01/26/2009

Rick Richter  
 Keys WI-Fi Inc  
 104 Palmetto Ave  
 Tavernier, FL 33070



**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Conch Republic Communications Tower
Location:	Key West, FL
Latitude:	24-33-54.30N NAD 83
Longitude:	81-46-13.54W
Heights:	145 feet above ground level (AGL) 150 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

**See attachment for additional condition(s) or information.**

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/26/2010 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2008-ASO-6025-OE.

**Signature Control No: 603457-107938110**

( DNE )

Robert Alexander  
Specialist

Attachment(s)  
Additional Information  
Frequency Data

**Additional information for ASN 2008-ASO-0025-OE**

No objection provided that your spurious and harmonic emissions are less than the FCC minimum requirement of -10.85dbm by 14db. (Example:  $-10.85\text{dbm} - 14\text{db} = -24.85\text{dbm}$ ). The EYW RTR is about 0.7nm away.

Frequency Data for ASN 2008-ASO-60200E

<b>LOW FREQUENCY</b>	<b>HIGH FREQUENCY</b>	<b>FREQUENCY UNIT</b>	<b>ERP</b>	<b>ERP UNIT</b>
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W

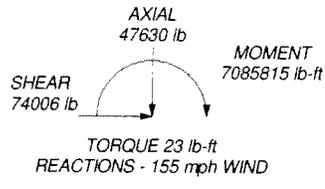
Section	Length (ft)	Number of Sides	Thickness (in)	Lap Splice (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (lb)
1	53.00	18	0.3125	4.47	18.0000	36.0000	A572-65	4773.9
2	53.00	18	0.4375	6.45	33.8573	51.8573	A572-65	10623.4
3	49.92	18	0.4375	6.45	48.7906	65.7453	A572-65	13405.9
								28603.3

145.0 ft

92.0 ft

43.5 ft

0.0 ft



**DESIGNED APPURTENANCE LOADING**

TYPE	ELEVATION	TYPE	ELEVATION
4' Lightning Rod	145	(4) BSA-185065-12	125
(4) BSA-185065-12	145	(4) BSA-185065-12	125
(4) BSA-185065-12	145	(4) BSA-185065-12	125
(4) BSA-185065-12	145	(4) BSA-185065-12	115
3- T-Arms - 5' Standoff x 12' Face Width	145	(4) BSA-185065-12	115
(4) BSA-185065-12	135	3- T-Arms - 5' Standoff x 12' Face Width	115
(4) BSA-185065-12	135	(4) BSA-185065-12	105
(4) BSA-185065-12	135	(4) BSA-185065-12	105
3- T-Arms - 5' Standoff x 12' Face Width	135	(4) BSA-185065-12	105
3- T-Arms - 5' Standoff x 12' Face Width	125	(4) BSA-185065-12	105
		3- T-Arms - 5' Standoff x 12' Face Width	105

**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

**TOWER DESIGN NOTES**

1. Tower designed for Exposure C to the TIA-222-G Standard.
2. Tower designed for a 155 mph basic wind in accordance with the TIA-222-G Standard.
3. Deflections are based upon a 60 mph wind.
4. TOWER RATING: 99.4%

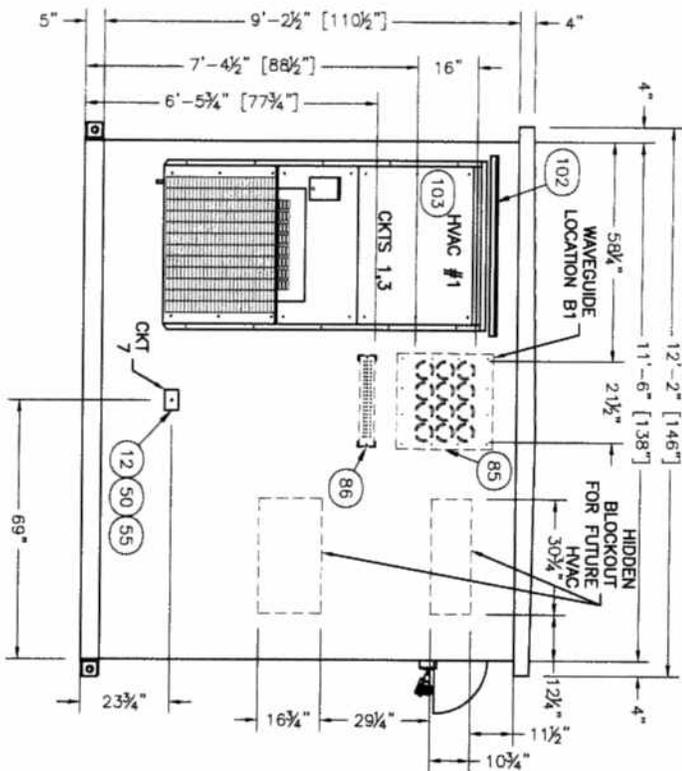
<b>Nello Corporation</b>			
211 W. Washington, Suite 2000 South Bend, IN 46601 Phone: (800) 806-3556 FAX:			
Job:	Project: <b>RFQ21563</b>		
Client: Keys Wi-Fi Inc.	Drawn by: Q2	App'd:	
Code: TIA-222-G	Date: 03/25/09	Scale: NTS	
Path: N:\eri_proposal\21500\21563.en	Dwg No.:	E-1	

# **Elevation**

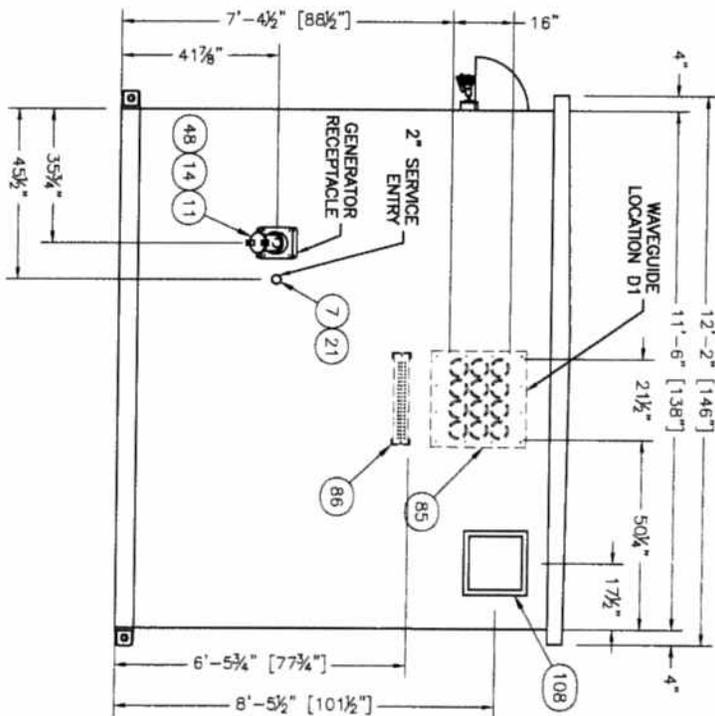




EXTERIOR ELEVATION "B"



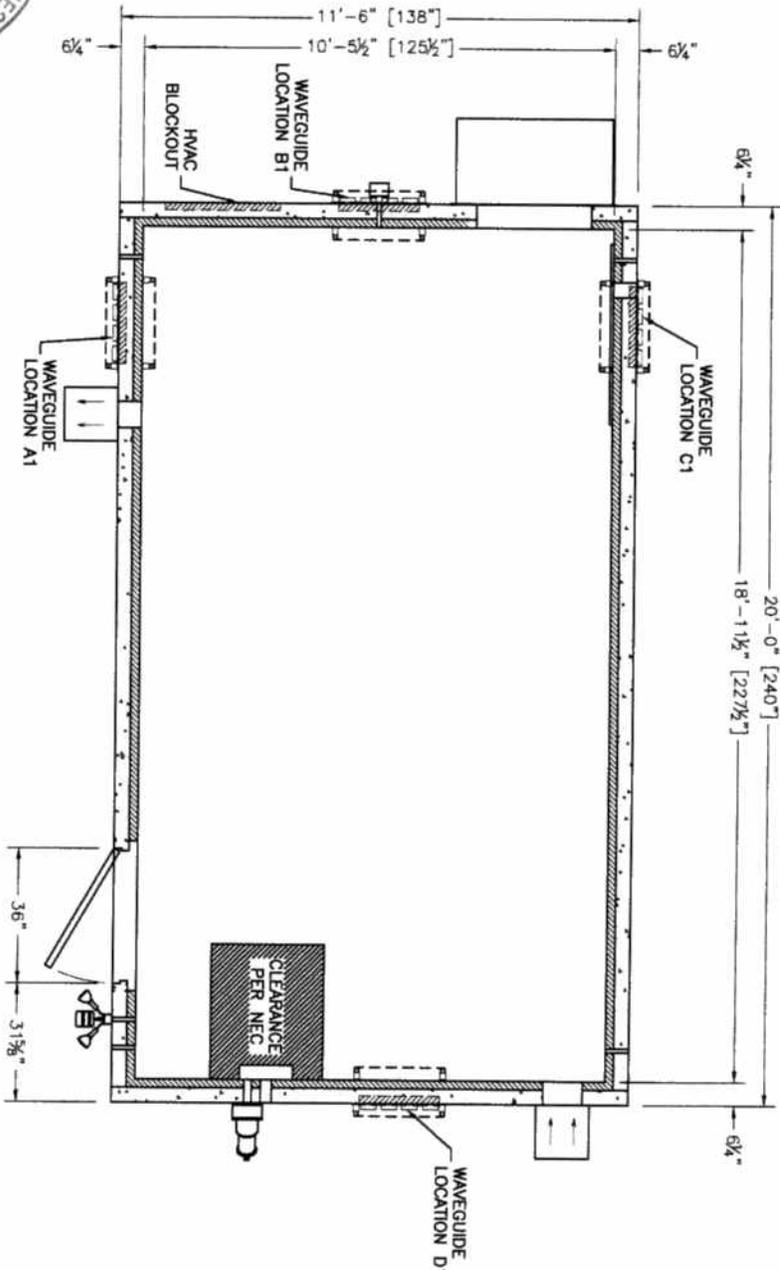
EXTERIOR ELEVATION "D"



		<p>TITLENAME: PROJECT: 11'-6" X 20'-0" CONCRETE SHELTER EXTERIOR ELEVATIONS B &amp; D</p>	<p>CUSTOMER: T-MOBILE</p>	<p>5031 Hazel Jones Road Bossier City, Louisiana 71111 voice: (318) 213-2900 fax: (318) 213-2919 www.cellxion.com</p>	<p>THIS DRAWING IS THE CONFIDENTIAL PROPERTY AND CONTAINS TRADE SECRETS OF CELLXION. ANY REPRODUCTION OR USE OF THESE DRAWINGS OR THE INFORMATION CONTAINED HEREIN FOR ANY REASON OTHER THAN AS SPECIFICALLY AUTHORIZED BY CELLXION IS PROHIBITED. THIS DRAWING HAS BEEN DISTRIBUTED WITH THE UNDERSTANDING THAT ANYONE RECEIVING IT IS TO BE USED ONLY FOR THE PROJECT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESSLY WRITTEN PERMISSION OF CELLXION.</p>
<p>SCALE: 3/8"=1'-0"</p>		<p>TOLERANCE:</p>		<p>DATE: 10/29/07</p>	
<p>DRWN. BY: J. RETVES</p>		<p>DATE: 10/29/07</p>		<p>DATE: 10/29/07</p>	
<p>CHK. BY: L. ORNOZCO</p>		<p>DATE: 10/29/07</p>		<p>DATE: 10/29/07</p>	
<p>ENL. BY:</p>		<p>DATE:</p>		<p>DATE:</p>	
<p>APP. BY: J. ENO</p>		<p>DATE: 10/29/07</p>		<p>DATE:</p>	
<p>SHEET NO. 1-2</p>		<p>DRAWING NO. STMB15</p>		<p>B</p>	

# Site Plan





**FLOOR PLAN**  
230.00 SQ.FT. EXTERIOR AREA  
198.30 SQ.FT. INTERIOR AREA

12/5/2007 4:34:43 PM, gbrinkman, CONFIDENTIAL

<p>THIS DRAWING IS THE CONFIDENTIAL PROPERTY AND CONTAINS TRADE SECRETS OF CELLXION, LLC. ANY USE OF THIS DRAWING FOR ANY INFORMATION CONTAINED HEREIN FOR ANY REASON OTHER THAN AS EXPRESSLY AUTHORIZED BY CELLXION, LLC, IS STRICTLY PROHIBITED. THE DRAWING HAS BEEN DISTRIBUTED WITH THE UNDERSTANDING THAT ANYONE RECEIVING OR OTHERWISE OBTAINING THIS DRAWING SHALL EXPRESSLY NOTIFY OF ITS CONFIDENTIAL NATURE.</p>	
<p><b>Cellxion</b> 5031 Hazel Jones Road Bossier City, Louisiana 71111 voice: (318) 213-2900 fax: (318) 213-2919 www.cellxion.com</p>	
<p>CUSTOMER: T-MOBILE</p>	
<p>PROJECT: 11'-6" X 20'-0" CONCRETE SHELTER FLOOR PLAN</p>	
<p>FILENAME: TM01STM815</p>	<p>TOLERANCE: 1/8" ±</p>
<p>SCALE: 3/8" = 1'-0"</p>	<p>DATE: 10/27/07</p>
<p>DRAWN BY: J. REYNOLDS</p>	<p>DATE: 10/27/07</p>
<p>CHK. BY: L. ORLOTT</p>	<p>DATE: 10/27/07</p>
<p>ENG. BY:</p>	<p>DATE:</p>
<p>APP. BY:</p>	<p>DATE:</p>
<p>SHEET NO. 2-0</p>	<p>DATE: 10/27/07</p>
<p>DRAWING NO.: STM815</p>	<p>B</p>

# **FCC Registration Number Information**



## KEYS WI-FI, INC.

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August 20, 2009

Mr. Rodney Corriveau  
Senior Planner  
City of Key West  
604 Simonton  
Key West, FL 63040

Mr. Corriveau:

This letter is to serve as a statement that Keys Wi-Fi, Inc is a registered entity to conduct business with the FCC. Keys Wi-Fi's FCC Registration Number (FRN) is 0015991391.

Keys Wi-Fi also operates two (2) wireless telecommunications facilities, which are registered and attached.

- 1) 1259156 – Port St Lucie, FL
- 2) 1268378 – Ave Maria, FL

All the best,

Rick Richter  
President

ASR Registration Search

**Registration 1259156**[Map Registration](#)**Registration Detail**

Reg Number	1259156	Status	Constructed
File Number	A0616920	Constructed	12/01/2008
FAA Study	2007-ASO-3203-OE	EMI	No
FAA Issue Date	07/09/2007	NEPA	No

**Antenna Structure**

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

**Location** (in NAD83 Coordinates)

Lat/Long 27-17-04.0 N 080-29-00.3 W 9901 Range Line Road

City, State Port St. Lucie , FL

Center of  
AM Array**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
9.0	59.0
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
68.0	59.0

**Painting and Lighting Specifications**

None

**Owner & Contact Information**

FRN 0015991391 Licensee ID

**Owner**Keys Wi-Fi Inc.  
Attention To: Rick Richter  
104 Palmetto Ave  
Tavernier , FL 33070P: (305)852-8171  
E: keyswifi@gmail.com**Contact**Richter , Rick  
104 Palmetto Ave  
Tavernier , FL 33070P: (305)852-8171  
E: keyswifi@gmail.com**Last Action Status**

Status	Constructed	Received	12/19/2008
Purpose	Notification	Entered	12/19/2008
Mode	Interactive		

**Related Applications**

12/19/2008 A0616920 - Notification (NT)

07/11/2007 A0553901 - New (NE)

Comments

**Comments**

None

Automated Letters

07/15/2008 Construction Reminder, Reference 602793

07/12/2007 Authorization, Reference 571581

CLOSE WINDOW

ASR Registration Search

**Registration 1268378**[Map Registration](#)**Registration Detail**

Reg Number	1268378	Status	Constructed
File Number	A0648244	Constructed	08/04/2009
FAA Study	2009-ASO-967-OE	EMI	No
FAA Issue Date	05/18/2009	NEPA	No

**Antenna Structure**

Structure Type POLE - Any type of Pole

**Location** (in NAD83 Coordinates)

Lat/Long 26-19-19.6 N 081-26-35.1 W SW Corner of Utility Center

City, State Ave Maria , FL

Center of  
AM Array**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
6.1	30.4
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
36.5	30.4

**Painting and Lighting Specifications**

None

**Owner & Contact Information**

FRN 0015991391 Licensee ID

**Owner**Keys Wi-Fi, Inc  
104 Palmetto Avenue  
Tavernier , FL 33070P: (305)852-8171  
E: keyswifi@gmail.com**Contact**Richter , Rick  
104 Palmetto Avenue  
Tavernier , FL 33070P: (305)852-8171  
E: keyswifi@gmail.com**Last Action Status**

Status	Constructed	Received	08/20/2009
Purpose	Notification	Entered	08/20/2009
Mode	Interactive		

**Related Applications**

08/20/2009 A0648244 - Notification (NT)

05/19/2009 A0639269 - New (NE)

Comments

**Comments**

None

Automated Letters

05/20/2009

Authorization, Reference

CLOSE WINDOW

**Coordination Letter Regarding  
Fiber Optics Cable Connection**



## KEYS WI-FI, INC.

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August 20, 2009

Mr. Rodney Corriveau  
Senior Planner  
City of Key West  
604 Simonton  
Key West, FL 63040

Mr. Corriveau:

This letter is to serve as a statement that I spoke (afternoon of August 20, 2009) with Mr. Ortelio Espinosa, Jr. RCDD, Specialist - BICS, Network Operations, Florida of AT&T Southeast, 650 United Street, Key West, Florida 33040. T: 305-296-6428 F: 305-296-9032, and [ortelio.espinosa@att.com](mailto:ortelio.espinosa@att.com).

Mr. Espinosa conveyed to me that the cell tower sites in the Keys are being upgraded from copper lines to fiber, as wireless providers require increased capacity for data transmission. Also, Mr. Espinosa stated that he believed North Roosevelt Blvd was served by underground fiber and that a proposed tower located near Alberton's would have a direct underground fiber connection from the tower site to the AT&T operations center.

All the best,

Rick Richter  
President

**Radio Frequency Safety Report  
Frequently Asked Questions/Answers**

# Radio Frequency Safety



Office of Engineering and  
Technology (OET)

## Frequently asked questions about the safety of radiofrequency (RF) and microwave emissions from transmitters and facilities regulated by the FCC

For further information on these (and other) topics please refer to [OET Bulletin 56](#). You may also contact the FCC's RF Safety Program at [rfsafety@fcc.gov](mailto:rfsafety@fcc.gov) or 1-888-225-5322

### WHAT ARE "RADIOFREQUENCY" AND MICROWAVE RADIATION?

Electromagnetic radiation consists of waves of electric and magnetic energy moving together (*i.e.*, radiating) through space at the speed of light. Taken together, all forms of electromagnetic energy are referred to as the electromagnetic "spectrum."

Radio waves and microwaves emitted by transmitting antennas are one form of electromagnetic energy. They are collectively referred to as "radiofrequency" or "RF" energy or radiation. Note that the term "radiation" does not mean "radioactive."

Often, the terms "electromagnetic field" or "radiofrequency field" may be used to indicate the presence of electromagnetic or RF energy.

The RF waves emanating from an antenna are generated by the movement of electrical charges in the antenna. Electromagnetic waves can be characterized by a wavelength and a frequency. The wavelength is the distance covered by one complete cycle of the electromagnetic wave, while the frequency is the number of electromagnetic waves passing a given point in one second. The frequency of an RF signal is usually expressed in terms of a unit called the "hertz" (abbreviated "Hz").

One Hz equals one cycle per second. One megahertz ("MHz") equals one million cycles per second.

Different forms of electromagnetic energy are categorized by their wavelengths and frequencies. The RF part of the electromagnetic spectrum is generally defined as that part of the spectrum where electromagnetic waves have frequencies in the range of about 3 kilohertz (3 kHz) to 300 gigahertz (300 GHz). Microwaves are a specific category of radio waves that can be loosely defined as radiofrequency energy at frequencies ranging from about 1 GHz upward. ([Back to Index](#))

### WHAT IS NON-IONIZING RADIATION?

"Ionization" is a process by which electrons are stripped from atoms and molecules.

This process can produce molecular changes that can lead to damage in biological tissue, including effects on DNA, the genetic material of living organisms. This process requires interaction with high levels of electromagnetic energy. Those types of electromagnetic radiation with enough energy to ionize biological material include

X-radiation and gamma radiation. Therefore, X-rays and gamma rays are examples of ionizing radiation.

The energy levels associated with RF and microwave radiation, on the other hand, are not great enough to cause the ionization of atoms and molecules, and RF energy is, therefore, is a type of non-ionizing radiation. Other types of non-ionizing radiation include visible and infrared light. Often the term "radiation" is used, colloquially, to imply that ionizing radiation (radioactivity), such as that associated with nuclear power plants, is present. Ionizing radiation should not be confused with the lower-energy, non-ionizing radiation with respect to possible biological effects, since the mechanisms of action are quite different. ([Back to Index](#))

## **HOW IS RADIOFREQUENCY ENERGY USED?**

Probably the most important use for RF energy is in providing telecommunications services. Radio and television broadcasting, cellular telephones, personal communications services (PCS), pagers, cordless telephones, business radio, radio communications for police and fire departments, amateur radio, microwave point-to-point links and satellite communications are just a few of the many telecommunications applications of RF energy. Microwave ovens are an example of a non-communication use of RF energy. Radiofrequency radiation, especially at microwave frequencies, can transfer energy to water molecules. High levels of microwave energy will generate heat in water-rich materials such as most foods.

This efficient absorption of microwave energy via water molecules results in rapid heating throughout an object, thus allowing food to be cooked more quickly in a microwave oven than in a conventional oven. Other important non-communication uses of RF energy include radar and industrial heating and sealing. Radar is a valuable tool used in many applications range from traffic speed enforcement to air traffic control and military surveillance. Industrial heaters and sealers generate intense levels of RF radiation that rapidly heats the material being processed in the same way that a microwave oven cooks food. These devices have many uses in industry, including molding plastic materials, gluing wood products, sealing items such as shoes and pocketbooks, and processing food products. There are also a number of medical applications of RF energy, such as diathermy and magnetic resonance imaging (MRI). ([Back to Index](#))

## **HOW IS RADIOFREQUENCY RADIATION MEASURED?**

An RF electromagnetic wave has both an electric and a magnetic component (electric field and magnetic field), and it is often convenient to express the intensity of the RF environment at a given location in terms of units specific to each component. For example, the unit "volts per meter" (V/m) is used to express the strength of the electric field (electric "field strength"), and the unit "amperes per meter" (A/m) is used to express the strength of the magnetic field (magnetic "field strength").

Another commonly used unit for characterizing the total electromagnetic field is "power density." Power density is most appropriately used when the point of measurement is far enough away from an antenna to be located in the "far-field" zone of the antenna.

Power density is defined as power per unit area. For example, power density is commonly expressed in terms of watts per square meter (W/m<sup>2</sup>), milliwatts per square centimeter (mW/cm<sup>2</sup>), or microwatts per square centimeter (μW/cm<sup>2</sup>). One

mW/cm<sup>2</sup> equals 10 W/m<sup>2</sup>, and 100 μW/cm<sup>2</sup> equal one W/m<sup>2</sup>. With respect to frequencies in the microwave range, power density is usually used to express intensity of exposure.

The quantity used to measure the rate at which RF energy is actually absorbed in a body is called the "Specific Absorption Rate" or "SAR." It is usually expressed in units of watts per kilogram (W/kg) or milliwatts per gram (mW/g). In the case of exposure of the whole body, a standing ungrounded human adult absorbs RF energy at a maximum rate when the frequency of the RF radiation is in the range of about 70 MHz. This means that the "whole-body" SAR is at a maximum under these conditions. Because of this "resonance" phenomenon and consideration of children and grounded adults, RF safety standards are generally most restrictive in the frequency range of about 30 to 300 MHz. For exposure of parts of the body, such as the exposure from hand-held mobile phones, "partial-body" SAR limits are used in the safety standards to control absorption of RF energy (see later questions on mobile phones). ([Back to Index](#))

### **WHAT BIOLOGICAL EFFECTS CAN BE CAUSED BY RF ENERGY?**

Biological effects can result from exposure to RF energy. Biological effects that result from heating of tissue by RF energy are often referred to as "thermal" effects. It has been known for many years that exposure to very high levels of RF radiation can be harmful due to the ability of RF energy to heat biological tissue rapidly. This is the principle by which microwave ovens cook food. Exposure to very high RF intensities can result in heating of biological tissue and an increase in body temperature. Tissue damage in humans could occur during exposure to high RF levels because of the body's inability to cope with or dissipate the excessive heat that could be generated. Two areas of the body, the eyes and the testes, are particularly vulnerable to RF heating because of the relative lack of available blood flow to dissipate the excess heat load.

At relatively low levels of exposure to RF radiation, *i.e.*, levels lower than those that would produce significant heating; the evidence for production of harmful biological effects is ambiguous and unproven. Such effects, if they exist, have been referred to as "non-thermal" effects. A number of reports have appeared in the scientific literature describing the observation of a range of biological effects resulting from exposure to low-levels of RF energy. However, in most cases, further experimental research has been unable to reproduce these effects. Furthermore, since much of the research is not done on whole bodies (*in vivo*), there has been no determination that such effects constitute a human health hazard. It is generally agreed that further research is needed to determine the generality of such effects and their possible relevance, if any, to human health. In the meantime, standards-setting organizations and government agencies continue to monitor the latest experimental findings to confirm their validity and determine whether changes in safety limits are needed to protect human health. ([Back to Index](#))

### **CAN PEOPLE BE EXPOSED TO LEVELS OF RADIOFREQUENCY RADIATION THAT COULD BE HARMFUL?**

Studies have shown that environmental levels of RF energy routinely encountered by the general public are typically far below levels necessary to produce significant heating and increased body temperature. However, there may be situations,

particularly in workplace environments near high-powered RF sources, where the recommended limits for safe exposure of human beings to RF energy could be exceeded. In such cases, restrictive measures or mitigation actions may be necessary to ensure the safe use of RF energy. ([Back to Index](#))

### **CAN RADIOFREQUENCY RADIATION CAUSE CANCER?**

Some studies have also examined the possibility of a link between RF exposure and cancer. Results to date have been inconclusive. While some experimental data have suggested a possible link between exposure and tumor formation in animals exposed under certain specific conditions, the results have not been independently replicated.

Many other studies have failed to find evidence for a link to cancer or any related condition. The Food and Drug Administration has further information on this topic with respect to RF exposure from mobile phones at the following Web site: [www.fda.gov/cellphones/](http://www.fda.gov/cellphones/) . ([Back to Index](#))

### **WHAT RESEARCH IS BEING DONE ON RF BIOLOGICAL EFFECTS?**

For many years, research into the possible biological effects of RF energy has been carried out in laboratories around the world, and such research is continuing. Past research has resulted in a large number of peer-reviewed scientific publications on this topic. For many years the U.S. Government has sponsored research into the biological effects of RF energy. The majority of this work has been funded by the Department of Defense, due in part, to the extensive military interest in using RF equipment such as radar and other relatively high-powered radio transmitters for routine military operations. In addition, some U.S. civilian federal agencies responsible for health and safety, such as the Environmental Protection Agency (EPA) and the U.S. Food and Drug Administration (FDA), have sponsored and conducted research in this area. At the present time, most of the non-military research on biological effects of RF energy in the U.S. is being funded by industry organizations, although relatively more research by government agencies is being carried out overseas, particularly in Europe.

In 1996, the World Health Organization (WHO) established a program called the International EMF Project, which is designed to review the scientific literature concerning biological effects of electromagnetic fields, identify gaps in knowledge about such effects, recommend research needs, and work towards international resolution of health concerns over the use of RF technology. The WHO maintains a Web site that provides extensive information on this project and about RF biological effects and research ([www.who.ch/peh-emf](http://www.who.ch/peh-emf)).

The FDA, the EPA and other federal agencies responsible for public health and safety have worked together and in connection with the WHO to monitor developments and identify research needs related to RF biological effects. More information about this can be obtained at the FDA Web site: [www.fda.gov/cellphones/](http://www.fda.gov/cellphones/). ([Back to Index](#))

### **WHAT LEVELS ARE SAFE FOR EXPOSURE TO RF ENERGY?**

Exposure standards for radiofrequency energy have been developed by various organizations and countries. These standards recommend safe levels of exposure for both the general public and for workers. In the United States, the FCC has adopted and used recognized safety guidelines for evaluating RF environmental exposure

since 1985. Federal health and safety agencies, such as the EPA, FDA, the National Institute for Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA) have also been involved in monitoring and investigating issues related to RF exposure.

The FCC guidelines for human exposure to RF electromagnetic fields were derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). Both the NCRP exposure criteria and the IEEE standard were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The exposure guidelines are based on thresholds for known adverse effects, and they incorporate prudent margins of safety. In adopting the most recent RF exposure guidelines, the FCC consulted with the EPA, FDA, OSHA and NIOSH, and obtained their support for the guidelines that the FCC is using.

Many countries in Europe and elsewhere use exposure guidelines developed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The ICNIRP safety limits are generally similar to those of the NCRP and IEEE, with a few exceptions. For example, ICNIRP recommends somewhat different exposure levels in the lower and upper frequency ranges and for localized exposure due to such devices as hand-held cellular telephones. One of the goals of the WHO EMF Project (see above) is to provide a framework for international harmonization of RF safety standards. The NCRP, IEEE and ICNIRP exposure guidelines identify the same threshold level at which harmful biological effects may occur, and the values for Maximum Permissible Exposure (MPE) recommended for electric and magnetic field strength and power density in both documents are based on this level. The threshold level is a Specific Absorption Rate (SAR) value for the whole body of 4 watts per kilogram (4 W/kg).

In addition, the NCRP, IEEE and ICNIRP guidelines for maximum permissible exposure are different for different transmitting frequencies. This is due to the finding (discussed above) that whole-body human absorption of RF energy varies with the frequency of the RF signal. The most restrictive limits on whole-body exposure are in the frequency range of 30-300 MHz where the human body absorbs RF energy most efficiently when the whole body is exposed. For devices that only expose part of the body, such as mobile phones, different exposure limits are specified (see below).

The exposure limits used by the FCC are expressed in terms of SAR, electric and magnetic field strength and power density for transmitters operating at frequencies from 300 kHz to 100 GHz. The actual values can be found in either of two informational bulletins available at this Web site ([OET Bulletin 56](#) or [OET Bulletin 65](#)), see listing for "OET Safety Bulletins." ([Back to Index](#))

### **WHY HAS THE FCC ADOPTED GUIDELINES FOR RF EXPOSURE?**

The FCC authorizes and licenses devices, transmitters and facilities that generate RF radiation. It has jurisdiction over all transmitting services in the U.S. except those specifically operated by the Federal Government. However, the FCC's primary jurisdiction does not lie in the health and safety area, and it must rely on other agencies and organizations for guidance in these matters.

Under the National Environmental Policy Act of 1969 (NEPA), all Federal agencies are required to implement procedures to make environmental consideration a necessary part of an agency's decision-making process. Therefore, FCC approval and licensing of transmitters and facilities must be evaluated for significant impact on the environment. Human exposure to RF radiation emitted by FCC-regulated transmitters is one of several factors that must be considered in such environmental evaluations. In 1996, the FCC revised its guidelines for RF exposure as a result of a multi-year proceeding and as required by the Telecommunications Act of 1996.

Facilities under the jurisdiction of the FCC having a high potential for creating significant RF exposure to humans, such as radio and television broadcast stations, satellite-earth stations, experimental radio stations and certain cellular, PCS and paging facilities are required to undergo routine evaluation for compliance with RF exposure guidelines whenever an application is submitted to the FCC for construction or modification of a transmitting facility or renewal of a license. Failure to show compliance with the FCC's RF exposure guidelines in the application process could lead to the preparation of a formal Environmental Assessment, possible Environmental Impact Statement and eventual rejection of an application. Technical guidelines for evaluating compliance with the FCC RF safety requirements can be found in the FCC's [OET Bulletin 65](#) (see "OET Safety Bulletins" listing elsewhere at this Web site).

Low-powered, intermittent, or inaccessible RF transmitters and facilities are normally "categorically excluded" from the requirement of routine evaluation for RF exposure. These exclusions are based on calculations and measurement data indicating that such transmitting stations or devices are unlikely to cause exposures in excess of the guidelines under normal conditions of use. The FCC's policies on RF exposure and categorical exclusion can be found in Section 1.1307(b) of the FCC's Rules and Regulations [47 CFR 1.1307(b)]. It should be emphasized, however, that these exclusions are not exclusions from compliance, but, rather, only exclusions from routine evaluation. Transmitters or facilities that are otherwise categorically excluded from evaluation may be required, on a case-by-case basis, to demonstrate compliance when evidence of potential non-compliance of the transmitter or facility is brought to the Commission's attention [see 47 CFR 1.1307(c) and (d)]. ([Back to Index](#))

## **HOW SAFE ARE MOBILE AND PORTABLE PHONES?**

In recent years, publicity, speculation, and concern over claims of possible health effects due to RF emissions from hand-held wireless telephones prompted various research programs to investigate whether there is any risk to users of these devices. There is no scientific evidence to date that proves that wireless phone usage can lead to cancer or a variety of other health effects, including headaches, dizziness or memory loss. However, studies are ongoing and key government agencies, such as the Food and Drug Administration (FDA) continue to monitor the results of the latest scientific research on these topics. Also, as noted above, the World Health Organization has established an ongoing program to monitor research in this area and make recommendations related to the safety of mobile phones.

The FDA, which has primary jurisdiction for investigating mobile phone safety, has stated that it cannot rule out the possibility of risk, but if such a risk exists, "it is probably small." Further, it has stated that, while there is no proof that cellular

telephones can be harmful, concerned individuals can take various precautionary actions, including limiting conversations on hand-held cellular telephones and making greater use of telephones with hands-free kits where there is a greater separation distance between the user and the radiating antenna. The Web site for the FDA's Center for Devices and Radiological Health provides further information on mobile phone safety: [www.fda.gov/cellphones/](http://www.fda.gov/cellphones/).

The Government Accounting Office (GAO) prepared a report of its investigation into safety concerns related to mobile phones. The report concluded that further research is needed to confirm whether mobile phones are completely safe for the user, and the report recommended that the FDA take the lead in monitoring the latest research results.

The FCC's exposure guidelines specify limits for human exposure to RF emissions from hand-held mobile phones in terms of Specific Absorption Rate (SAR), a measure of the rate of absorption of RF energy by the body. The safe limit for a mobile phone user is an SAR of 1.6 watts per kg (1.6 W/kg), averaged over one gram of tissue, and compliance with this limit must be demonstrated before FCC approval is granted for marketing of a phone in the United States. Somewhat less restrictive limits, *e.g.*, 2 W/kg averaged over 10 grams of tissue, are specified by the ICNIRP guidelines used in Europe and most other countries.

Measurements and analysis of SAR in models of the human head have shown that the 1.6 W/kg limit is unlikely to be exceeded under normal conditions of use of cellular and PCS hand-held phones. The same can be said for cordless telephones used in the home. Testing of hand-held phones is normally done under conditions of maximum power usage, thus providing an additional margin of safety, since most phone usage is not at maximum power. Information on SAR levels for many phones is available electronically through the FCC's Web site and database (see next question). ([Back to Index](#))

## **HOW CAN I OBTAIN THE SPECIFIC ABSORPTION RATE (SAR) VALUE FOR MY MOBILE PHONE?**

As explained above, the Specific Absorption Rate, or SAR, is the unit used to determine compliance of cellular and PCS phones with safety limits adopted by the FCC. The SAR is a value that corresponds to the rate at which RF energy absorbed in the head of a user of a wireless handset. The FCC requires mobile phone manufacturers to demonstrate compliance with an SAR level of 1.6 watts per kilogram (averaged over one gram of tissue).

Information on SAR for a specific cell phone model can be obtained for almost all cellular telephones by using the FCC identification (ID) number for that model. The FCC ID number is usually printed somewhere on the case of the phone or device. In many cases, you will have to remove the battery pack to find the number. Once you have the number proceed as follows. Go to the following website: [Equipment Authorization](#). Click on the link for "FCC ID Search". Once you are there you will see instructions for inserting the FCC ID number. Enter the FCC ID number (in two parts as indicated: "Grantee Code" is comprised of the first three characters, the "Equipment Product Code" is the remainder of the FCC ID). Then click on "Start Search." The grant(s) of equipment authorization for this particular ID number should then be available. Click on a check under "Display Grant" and the grant

should appear. Look through the grant for the section on SAR compliance, certification of compliance with FCC rules for RF exposure or similar language. This section should contain the value(s) for typical or maximum SAR for your phone.

For portable phones and devices authorized since June 2, 2000, maximum SAR levels should be noted on the grant of equipment authorization. For phones and devices authorized between about mid-1998 and June 2000, detailed information on SAR levels is typically found in one of the "exhibits" associated with the grant. Therefore, once the grant is accessed in the FCC database, the exhibits can be viewed by clicking on the appropriate entry labeled "View Exhibit." Electronic records for FCC equipment authorization grants were initiated in 1998, so devices manufactured prior to this date may not be included in our electronic database.

Although the FCC database does not list phones by model number, there are certain non-government Web sites such as [www.cnet.com](http://www.cnet.com) that provide information on SAR from specific models of mobile phones. However, the FCC has not reviewed these sites for accuracy and makes no guarantees with respect to them. In addition to these sites, some mobile phone manufacturers make this information available at their own Web sites. Also, phones certified by the Cellular Telecommunications and Internet Association (CTIA) are now required to provide this information to consumers in the instructional materials that come with the phones.

If you want additional consumer information on safety of cell phones and other transmitting devices please consult the information available below at this Web site.

In particular, you may wish to read or download our [OET Bulletin 56](#) (see "OET RF Safety Bulletins" listing) entitled: "Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields." If you have any problems or additional questions you may contact us at: [rf-safety@fcc.gov](mailto:rf-safety@fcc.gov) or you may call: 1-888-225-5322. You may also wish to consult a consumer update on mobile phone safety published by the U.S. Food and Drug Administration (FDA) that can be found at: [www.fda.gov/cellphones/](http://www.fda.gov/cellphones/). ([Back to Index](#))

### **DO "HANDS-FREE" EAR PIECES FOR MOBILE PHONES REDUCE EXPOSURE TO RF EMISSIONS? WHAT ABOUT MOBILE PHONE ACCESSORIES THAT CLAIM TO SHIELD THE HEAD FROM RF RADIATION?**

"Hands-free" kits with ear pieces can be used with cell phones for convenience and comfort. In addition, because the phone, which is the source of the RF emissions, will not be placed against the head, absorption of RF energy in the head will be reduced. Therefore, it is true that use of an ear piece connected to a mobile phone will significantly reduce the rate of energy absorption (or "SAR") in the user's head.

On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb RF energy. Even so, mobile phones marketed in the U.S. are required to meet safety limit requirements regardless of whether they are used against the head or against the body. So either configuration should result in compliance with the safety limit. Note that hands-free devices using "Bluetooth" technology also include a wireless transmitter; however, the Bluetooth transmitter operates at a much lower power than the cell phone.

A number of devices have been marketed that claim to "shield" or otherwise reduce RF absorption in the body of the user. Some of these devices incorporate shielded phone cases, while others involve nothing more than a metallic accessory attached

to the phone. Studies have shown that these devices generally do not work as advertised. In fact, they may actually increase RF absorption in the head due to their potential to interfere with proper operation of the phone, thus forcing it to increase power to compensate. ([Back to Index](#))

### **CAN MOBILE PHONES BE USED SAFELY IN HOSPITALS AND NEAR MEDICAL TELEMETRY EQUIPMENT?**

The FCC does not normally investigate problems of electromagnetic interference from RF transmitters to medical devices. Some hospitals have policies, which limit the use of cell phones, due to concerns that sensitive medical equipment could be affected. The FDA's Center for Devices and Radiological Health (CDRH) has primary jurisdiction for medical device regulation. FDA staff has monitored this potential problem and more information is available from the CDRH Web site: [www.fda.gov/cdrh](http://www.fda.gov/cdrh) . ([Back to Index](#))

### **ARE CELLULAR AND PCS TOWERS AND ANTENNAS SAFE?**

Cellular radio services transmit using frequencies between 824 and 894 megahertz (MHz). Transmitters in the Personal Communications Service (PCS) use frequencies in the range of 1850-1990 MHz. Antennas used for cellular and PCS transmissions are typically located on towers, water tanks or other elevated structures including rooftops and the sides of buildings. The combination of antennas and associated electronic equipment is referred to as a cellular or PCS "base station" or "cell site." Typical heights for free-standing base station towers or structures are 50-200 feet. A cellular base station may utilize several "omni-directional" antennas that look like poles, 10 to 15 feet in length, although these types of antennas are less common in urbanized areas.

In urban and suburban areas, cellular and PCS service providers commonly use "sector" antennas for their base stations. These antennas are rectangular panels, *e.g.*, about 1 by 4 feet in size, typically mounted on a rooftop or other structure, but they are also mounted on towers or poles. Panel antennas are usually arranged in three groups of three each. It is common that not all antennas are used for the transmission of RF energy; some antennas may be receive-only.

At a given cell site, the total RF power that could be radiated by the antennas depends on the number of radio channels (transmitters) installed, the power of each transmitter, and the type of antenna. While it is theoretically possible for cell sites to radiate at very high power levels, the maximum power radiated in any direction usually does not exceed 50 watts.

The RF emissions from cellular or PCS base station antennas are generally directed toward the horizon in a relatively narrow pattern in the vertical plane. In the case of sector (panel) antennas, the pattern is fan-shaped, like a wedge cut from a pie. As with all forms of electromagnetic energy, the power density from the antenna decreases rapidly as one moves away from the antenna. Consequently, ground-level exposures are much less than exposures if one were at the same height and directly in front of the antenna.

Measurements made near typical cellular and PCS installations, especially those with tower-mounted antennas, have shown that ground-level power densities are

thousands of times less than the FCC's limits for safe exposure. This makes it extremely unlikely that a member of the general public could be exposed to RF levels in excess of FCC guidelines due solely to cellular or PCS base station antennas located on towers or monopoles.

When cellular and PCS antennas are mounted at rooftop locations it is possible that a person could encounter RF levels greater than those typically encountered on the ground. However, once again, exposures approaching or exceeding the safety guidelines are only likely to be encountered very close to and directly in front of the antennas. For sector-type antennas, RF levels to rear are usually very low. ([Back to Index](#))

For further information on cellular services go to [http://wireless.fcc.gov/services/index.htm?job=service\\_home&id=cellular](http://wireless.fcc.gov/services/index.htm?job=service_home&id=cellular)

### **ARE CELLULAR AND OTHER RADIO TOWERS LOCATED NEAR HOMES OR SCHOOLS SAFE FOR RESIDENTS AND STUDENTS?**

As discussed above, radiofrequency emissions from antennas used for cellular and PCS transmissions result in exposure levels on the ground that are typically thousands of times below safety limits. These safety limits were adopted by the FCC based on the recommendations of expert organizations and endorsed by agencies of the Federal Government responsible for health and safety. Therefore, there is no reason to believe that such towers could constitute a potential health hazard to nearby residents or students.

Other antennas, such as those used for radio and television broadcast transmissions, use power levels that are generally much higher than those used for cellular and PCS antennas. Therefore, in some cases there could be a potential for higher levels of exposure to persons on the ground. However, all broadcast stations are required to demonstrate compliance with FCC safety guidelines, and ambient exposures to nearby persons from such stations are typically well below FCC safety limits. ([Back to Index](#))

### **ARE EMISSIONS FROM RADIO AND TELEVISION BROADCAST ANTENNAS SAFE?**

Radio and television broadcast stations transmit their signals via RF electromagnetic waves. There are thousands of radio and TV stations on the air in the United States. Broadcast stations transmit at various RF frequencies, depending on the channel, ranging from about 540 kHz for AM radio up to about 800 MHz for UHF television stations. Frequencies for FM radio and VHF television lie in between these two extremes. Broadcast transmitter power levels range from a few watts to more than 100,000 watts. Some of these transmission systems can be a significant source of RF energy in the local environment, so the FCC requires that broadcast stations submit evidence of compliance with FCC RF guidelines.

The amount of RF energy to which the public or workers might be exposed as a result of broadcast antennas depends on several factors, including the type of station, design characteristics of the antenna being used, power transmitted to the antenna, height of the antenna and distance from the antenna. Note that the power normally quoted for FM and TV broadcast transmitters is the "effective radiated

power" or ERP not the actual transmitter power mentioned above. ERP is the transmitter power delivered to the antenna multiplied by the directivity or gain of the antenna. Since high gain antennas direct most of the RF energy toward the horizon and not toward the ground, high ERP transmission systems such as used for UHF-TV broadcast tend to have less ground level field intensity near the station than FM radio broadcast systems with lower ERP and gain values. Also, since energy at some frequencies is absorbed by the human body more readily than at other frequencies, both the frequency of the transmitted signal and its intensity is important.

Calculations can be performed to predict what field intensity levels would exist at various distances from an antenna.

Public access to broadcasting antennas is normally restricted so that individuals cannot be exposed to high-level fields that might exist near antennas.

Measurements made by the FCC, EPA and others have shown that ambient RF radiation levels in inhabited areas near broadcasting facilities are typically well below the exposure levels recommended by current standards and guidelines. There have been a few situations around the country where RF levels in publicly accessible areas have been found to be higher than those recommended in applicable safety standards. As they have been identified, the FCC has required that stations at those facilities promptly bring their combined operations into compliance with our guidelines. Thus, despite the relatively high operating powers of many broadcast stations, such cases are unusual, and members of the general public are unlikely to be exposed to RF levels from broadcast towers that exceed FCC limits

Antenna maintenance workers are occasionally required to climb antenna structures for such purposes as painting, repairs, or lamp replacement. Both the EPA and OSHA have reported that in such cases it is possible for a worker to be exposed to high levels of RF energy if work is performed on an active tower or in areas immediately surrounding a radiating antenna. Therefore, precautions should be taken to ensure that maintenance personnel are not exposed to unsafe RF fields.

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### **HOW SAFE ARE RADIO ANTENNAS USED FOR PAGING AND "TWO-WAY" COMMUNICATIONS? WHAT ABOUT "PUSH-TO-TALK" RADIOS SUCH AS "WALKIE-TALKIES?"**

"Land-mobile" communications include a variety of communications systems, which require the use of portable and mobile RF transmitting sources. These systems operate in several frequency bands between about 30 and 1000 MHz. Radio systems used by the police and fire departments, radio paging services and business radio are a few examples of these communications systems. They have the advantage of providing communications links between various fixed and mobile locations.

There are essentially three types of RF transmitters associated with land-mobile systems: base-station transmitters, vehicle-mounted transmitters, and hand-held transmitters. The antennas and power levels used for these various transmitters are adapted for their specific purpose. For example, a base-station antenna must radiate its signal to a relatively large area, and therefore, its transmitter generally has to use higher power levels than a vehicle-mounted or hand-held radio transmitter. Although base-station antennas usually operate with higher power levels than other types of land-mobile antennas, they are normally inaccessible to the public since they must be mounted at significant heights above ground to provide

for adequate signal coverage. Also, many of these antennas transmit only intermittently. For these reasons, base-station antennas are generally not of concern with regard to possible hazardous exposure of the public to RF radiation.

Studies at rooftop locations have indicated that high-powered paging antennas may increase the potential for exposure to workers or others with access to such sites, *e.g.*, maintenance personnel. This could be a concern especially when multiple transmitters are present. In such cases, restriction of access or other mitigation actions may be necessary.

Transmitting power levels for vehicle-mounted land-mobile antennas are generally less than those used by base-station antennas but higher than those used for hand-held units. Some manufacturers recommend that users and other nearby individuals maintain some minimum distance (*e.g.*, 1 to 2 feet) from a vehicle-mounted antenna during transmission or mount the antenna in such a way as to provide maximum shielding for vehicle occupants. Studies have shown that this is probably a conservative precaution, particularly when the percentage of time an antenna is actually radiating is considered. Unlike cellular telephones, which transmit continuously during a call, two-way radios normally transmit only when the "push-to-talk" button is depressed. This significantly reduces exposure, and there is no evidence that there would be a safety hazard associated with exposure from vehicle-mounted, two-way antennas when the manufacturer's recommendations are followed.

Hand-held "two-way" portable radios such as walkie-talkies are low-powered devices used to transmit and receive messages over relatively short distances. Because of the low power levels used, the intermittency of these transmissions ("push-to-talk"), and due to the fact that these radios are held away from the head, they should not expose users to RF energy in excess of safe limits. Although FCC rules do not require routine documentation of compliance with safety limits for push-to-talk two-way radios as it does for cellular and PCS phones (which transmit continuously during use and which are held against the head), most of these radios are tested and the resulting SAR data are available from the FCC's [Equipment Authorization](#) database. Click on the link for "FCC ID Search <imbed hypertext link>.". ([Back to Index](#))

## **HOW SAFE ARE MICROWAVE AND SATELLITE ANTENNAS?**

Point-to-point microwave antennas transmit and receive microwave signals across relatively short distances (from a few tenths of a mile to 30 miles or more). These antennas are usually circular ("dish") or rectangular in shape and are normally mounted on a supporting tower, rooftop, sides of buildings or on similar structures that provide clear and unobstructed line-of-sight paths between both ends of a transmission path. These antennas have a variety of uses, such as relaying long-distance telephone calls, and serving as links between broadcast studios and transmitting sites.

The RF signals from these antennas travel in a directed beam from a transmitting antenna to the receiving antenna, and dispersion of microwave energy outside of this narrow beam is minimal or insignificant. In addition, these antennas transmit using very low power levels, usually on the order of a few watts or less. Measurements have shown that ground-level power densities due to microwave directional antennas are normally thousands of times or more below recommended safety limits.

Moreover, microwave tower sites are normally inaccessible to the general public. Significant exposures from these antennas could only occur in the unlikely event that an individual were to stand directly in front of and very close to an antenna for a period of time.

Ground-based antennas used for satellite-earth communications typically are parabolic "dish" antennas, some as large as 10 to 30 meters in diameter, that are used to transmit ("uplink") or receive ("downlink") microwave signals to or from satellites in orbit around the earth. These signals allow delivery of a variety of communications services, including television network programming, electronic newsgathering and point-of-sale credit card transactions. Some satellite-earth station antennas are used only to receive RF signals (*i.e.*, like the satellite television antenna used at a residence), and because they do not transmit, RF exposure is not an issue for those antennas.

Since satellite-earth station antennas are directed toward satellites above the earth, transmitted beams point skyward at various angles of inclination, depending on the particular satellite being used. Because of the longer distances involved, power levels used to transmit these signals are relatively large when compared, for example, to those used by the terrestrial microwave point-to-point antennas discussed above. However, as with microwave antennas, the beams used for transmitting earth-to-satellite signals are concentrated and highly directional, similar to the beam from a flashlight. In addition, public access would normally be restricted at uplink sites where exposure levels could approach or exceed safe limits.

Although many satellite-earth stations are "fixed" sites, portable uplink antennas are also used, *e.g.*, for electronic news gathering. These antennas can be deployed in various locations. Therefore, precautions may be necessary, such as temporarily restricting access in the vicinity of the antenna, to avoid exposure to the main transmitted beam. In general, however, it is unlikely that a transmitting earth station antenna would routinely expose members of the public to potentially harmful levels of RF energy. ([Back to Index](#))

## **ARE RF EMISSIONS FROM AMATEUR RADIO STATIONS HARMFUL?**

There are hundreds of thousands of amateur radio operators ("hams") worldwide. Amateur radio operators in the United States are licensed by the FCC. The Amateur Radio Service provides its members with the opportunity to communicate with persons all over the world and to provide valuable public service functions, such as making communications services available during disasters and emergencies. Like all FCC licensees, amateur radio operators are required to comply with the FCC's guidelines for safe human exposure to RF fields. Under the FCC's rules, amateur operators can transmit with power levels of up to 1500 watts. However, most operators use considerably less power than this maximum. Studies by the FCC and others have shown that most amateur radio transmitters would not normally expose persons to RF levels in excess of safety limits. This is primarily due to the relatively low operating powers used by most amateurs, the intermittent transmission characteristics typically used and the relative inaccessibility of most amateur antennas. As long as appropriate distances are maintained from amateur antennas, exposure of nearby persons should be well below safety limits.

To help ensure compliance of amateur radio facilities with RF exposure guidelines, both the FCC and American Radio Relay League (ARRL) have issued publications to assist operators in evaluating compliance for their stations. The FCC's publication (Supplement B to [OET Bulletin 65](#) can be viewed and downloaded elsewhere at this Web site (see "OET RF Safety Bulletins"). ([Back to Index](#))

### **WHAT IS THE FCC'S POLICY ON RADIOFREQUENCY WARNING SIGNS? FOR EXAMPLE, WHEN SHOULD SIGNS BE POSTED, WHERE SHOULD THEY BE LOCATED AND WHAT SHOULD THEY SAY?**

Radiofrequency warning or "alerting" signs should be used to provide information on the presence of RF radiation or to control exposure to RF radiation within a given area. Standard radiofrequency hazard warning signs are commercially available from several vendors. Appropriate signs should incorporate the format recommended by the Institute for Electrical and Electronics Engineers (IEEE) and as specified in the IEEE standard: IEEE C95.2-1999 (Web address: [www.ieee.org](http://www.ieee.org)).

Guidance concerning the placement of signs can be found in IEEE Standard C95.7-2005. When signs are used, meaningful information should be placed on the sign advising affected persons of: (1) the nature of the potential hazard (*i.e.*, high RF fields), (2) how to avoid the potential hazard, and (3) whom to contact for additional information. In some cases, it may be appropriate to also provide instructions to direct individuals as to how to work safely in the RF environment of concern. Signs should be located prominently in areas that will be readily seen by those persons who may have access to an area where high RF fields are present. ([Back to Index](#))

### **CAN IMPLANTED ELECTRONIC CARDIAC PACEMAKERS BE AFFECTED BY NEARBY RF DEVICES SUCH AS MICROWAVE OVENS OR CELLULAR TELEPHONES?**

Over the past several years there has been concern that signals from some RF devices could interfere with the operation of implanted electronic pacemakers and other medical devices. Because pacemakers are electronic devices, they could be susceptible to electromagnetic signals that could cause them to malfunction. Some anecdotal claims of such effects in the past involved emissions from microwave ovens. However, it has never been shown that the RF energy from a properly operating microwave oven is strong enough to cause such interference.

Some studies have shown that mobile phones can interfere with implanted cardiac pacemakers if a phone is used in close proximity (within about 8 inches) of a pacemaker. It appears that such interference is limited to older pacemakers, which may no longer be in use. Nonetheless, to avoid this potential problem, pacemaker patients can avoid placing a phone in a pocket close to the location of their pacemaker or otherwise place the phone near the pacemaker location during phone use. Patients with pacemakers should consult with their physician or the FDA if they believe that they may have a problem related to RF interference. Further information on this is available from the FDA: [www.fda.gov/cdrh](http://www.fda.gov/cdrh) . ([Back to Index](#))

### **DOES THE FCC REGULATE EXPOSURE TO THE ELECTROMAGNETIC RADIATION FROM MICROWAVE OVENS, TELEVISION SETS AND COMPUTER MONITORS?**

The Commission does not regulate exposure to emissions from these devices.

Protecting the public from harmful radiation emissions from these consumer products is the responsibility of the U.S. Food and Drug Administration (FDA).

Inquires should be directed to the FDA's Center for Devices and Radiological Health (CDRH), and, specifically, to the CDRH Office of Compliance at (301) 594-4654.

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## **DOES THE FCC ROUTINELY MONITOR RADIOFREQUENCY RADIATION FROM ANTENNAS?**

The FCC does not have the resources or the personnel to routinely monitor the emissions for all of the thousands of transmitters that are subject to FCC jurisdiction.

However, the FCC does have measurement instrumentation for evaluating RF levels in areas that may be accessible to the public or to workers. If there is evidence of potential non-compliance with FCC exposure guidelines for an FCC-regulated facility, staff from the FCC's Office of Engineering and Technology or the Enforcement Bureau can conduct an investigation, and, if appropriate, perform actual measurements. It should be emphasized that the FCC does not perform RF exposure investigations unless there is a reasonable expectation that the FCC exposure limits may be exceeded. Potential exposure problems should be brought to the FCC's attention by contacting the FCC at: 1-888-225-5322 or by e-mailing: [rfsafety@fcc.gov](mailto:rfsafety@fcc.gov). [\(Back to Index\)](#)

## **DOES THE FCC MAINTAIN A DATABASE THAT INCLUDES INFORMATION ON THE LOCATION AND TECHNICAL PARAMETERS OF ALL OF THE TRANSMITTER SITES IT REGULATES?**

The Commission does not have a comprehensive, transmitter-specific database for all of the services it regulates. The Commission has information for some services such as radio and television broadcast stations, and many larger antenna towers are required to register with the FCC if they meet certain criteria. In those cases, location information is generally specified in terms of degrees, minutes, and seconds of latitude and longitude. In some services, licenses are allowed to utilize additional transmitters or to increase power without notifying the Commission. Other services are licensed by geographic area, such that the Commission has no knowledge concerning the actual number or location of transmitters within that geographic area.

The [FCC General Menu Reports \(GenMen\)](#) search engine unites most of the Commission's licensing databases under a single umbrella. Databases included are the Wireless Telecommunications Bureau's ULS, the Media Bureau's CDBS, COALS (cable data) and BLS, and the International Bureau's IBFS. Entry points or search options in the various databases include frequency, state/county, latitude/longitude, call sign and licensee name.

The FCC also publishes, generally on a weekly basis, bulk extracts of the various Commission licensing databases. Each licensing database has its own unique file structure. These extracts consist of multiple, very large files. [OET maintains an index](#) to these databases.

OET has developed a [Spectrum Utilization Study Software](#) tool-set that can be used to create a Microsoft Access version of the individual exported licensing databases

and then create MapInfo "mid" and "mif" files so that radio assignments can be plotted. This experimental software is used to conduct internal spectrum utilization studies needed in the rulemaking process. While the FCC makes this software available to the public, no technical support is provided.

For further information on the Commission's existing databases, please contact Donald Campbell at [donald.campbell@fcc.gov](mailto:donald.campbell@fcc.gov) or 202-418-2405. ([Back to Index](#))

## **WHICH OTHER FEDERAL AGENCIES HAVE RESPONSIBILITIES RELATED TO POTENTIAL RF HEALTH EFFECTS?**

Certain agencies in the Federal Government have been involved in monitoring, researching or regulating issues related to human exposure to RF radiation. These agencies include the Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the National Telecommunications and Information Administration (NTIA) and the Department of Defense (DOD).

By authority of the Radiation Control for Health and Safety Act of 1968, the Center for Devices and Radiological Health (CDRH) of the FDA develops performance standards for the emission of radiation from electronic products including X-ray equipment, other medical devices, television sets, microwave ovens, laser products and sunlamps. The CDRH established a product performance standard for microwave ovens in 1971 limiting the amount of RF leakage from ovens. However, the CDRH has not adopted performance standards for other RF-emitting products.

The FDA is, however, the lead federal health agency in monitoring the latest research developments and advising other agencies with respect to the safety of RF-emitting products used by the public, such as cellular and PCS phones.

The FDA's microwave oven standard is an emission standard (as opposed to an exposure standard) that allows specific levels of microwave energy leakage (measured at five centimeters from the oven surface). The standard also requires ovens to have two independent interlock systems that prevent the oven from generating microwaves if the latch is released or if the door of the oven is opened.

The FDA has stated that ovens that meet its standards and are used according to the manufacturer's recommendations are safe for consumer and industrial use. More information is available from: [www.fda.gov/cdrh](http://www.fda.gov/cdrh).

The EPA has, in the past, considered developing federal guidelines for public exposure to RF radiation. However, EPA activities related to RF safety and health are presently limited to advisory functions. For example, the EPA chairs an Inter-agency Radiofrequency Working Group, which coordinates RF health-related activities among the various federal agencies with health or regulatory responsibilities in this area.

OSHA is part of the U.S. Department of Labor, and is responsible for protecting workers from exposure to hazardous chemical and physical agents. In 1971, OSHA issued a protection guide for exposure of workers to RF radiation [29 CFR 1910.97].

However, this guide was later ruled to be only advisory and not mandatory. Moreover, it was based on an earlier RF exposure standard that has now been revised. At the present time, OSHA uses the IEEE and/or FCC exposure guidelines

for enforcement purposes under OSHA's "general duty clause" (for more information see: [www.osha.gov/SLTC/radiofrequencyradiation/](http://www.osha.gov/SLTC/radiofrequencyradiation/)).

NIOSH is part of the U.S. Department of Health and Human Services. It conducts research and investigations into issues related to occupational exposure to chemical and physical agents. NIOSH has, in the past, undertaken to develop RF exposure guidelines for workers, but final guidelines were never adopted by the agency. NIOSH conducts safety-related RF studies through its Physical Agents Effects Branch in Cincinnati, Ohio.

The NTIA is part of the U.S. Department of Commerce and is responsible for authorizing Federal Government use of the RF electromagnetic spectrum. Like the FCC, the NTIA also has NEPA responsibilities and has considered adopting guidelines for evaluating RF exposure from U.S. Government transmitters such as radar and military facilities. ([Back to Index](#))

### **CAN LOCAL AND STATE GOVERNMENTAL BODIES ESTABLISH LIMITS FOR RF EXPOSURE?**

In the United States, some local and state jurisdictions have also enacted rules and regulations pertaining to human exposure to RF energy. However, the Telecommunications Act of 1996 contained provisions relating to federal jurisdiction to regulate human exposure to RF emissions from certain transmitting devices. In particular, Section 704 of the Act states that, "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." Further information on FCC policy with respect to facilities siting is available from the FCC's Wireless Telecommunications Bureau (see <http://wireless.fcc.gov/siting/>). ([Back to Index](#))

### **WHERE CAN I OBTAIN MORE INFORMATION ON POTENTIAL HEALTH EFFECTS OF RADIOFREQUENCY ENERGY?**

Although relatively few offices or agencies within the Federal Government routinely deal with the issue of human exposure to RF fields, it is possible to obtain information and assistance on certain topics from the following federal agencies, all of which also have Internet Web sites.

**FDA:** For information about radiation from microwave ovens and other consumer and industrial products contact: Center for Devices and Radiological Health (CDRH), Food and Drug Administration. [<http://www.fda.gov/cdrh/radhealth/>]

**EPA:** The Environmental Protection Agency's Office of Radiation Programs is responsible for monitoring potential health effects due to public exposure to RF fields. Contact: Environmental Protection Agency, Office of Radiation and Indoor Air, Washington, D.C. 20460, (202) 564-9235. [Click on EPA's website: [Frequent Questions on EMF, RF, & Other Nonionizing Radiation](#)]

**OSHA:** The Occupational Safety and Health Administration's (OSHA) Health Response Team has been involved in studies related to occupational exposure to RF radiation. [[http://www.osha.gov/SLTC/radiation\\_nonionizing/index.html](http://www.osha.gov/SLTC/radiation_nonionizing/index.html)]

**NIOSH:** The National Institute for Occupational Safety and Health (NIOSH) conducts research on RF-related safety issues in workplaces and recommends measures to protect worker health. Contact: NIOSH, Engineering and Physical Hazards Branch, Mail Stop R-5, 4676 Columbia Parkway, Cincinnati, Ohio 45226, or phone 1-513-841-4221. Toll-free public inquiries: 1-800-CDC-INFO (1-800-232-4636), or by email: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov). Internet information on workplace RF safety: <http://www.cdc.gov/niosh/topics/emf/#rffieldds>.

**NCI:** The National Cancer Institute, part of the U.S. National Institutes of Health, conducts and supports research, training, health information dissemination, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer. Contact: NCI Public Inquiries Office, 6116 Executive Boulevard, Room 3036A, Bethesda, MD 20892-8322. [<http://www.cancer.gov/cancertopics/factsheet/Risk/cellphones>]

Toll-free number: 1-800-4-CANCER (1-800-422-6237).

**FCC:** Questions regarding potential RF hazards from FCC-regulated transmitters can be directed to the Federal Communications Commission, Consumer & Governmental Affairs Bureau, 445 12th Street, S.W., Washington, D.C. 20554; Phone: 1-888-225-5322; E-mail: [rfsafety@fcc.gov](mailto:rfsafety@fcc.gov); or go to: [www.fcc.gov/oet/rfsafety](http://www.fcc.gov/oet/rfsafety).

In addition to federal government agencies, there are other sources of information regarding RF energy and health effects. Some states and localities maintain non-ionizing radiation programs or, at least, some expertise in this field, usually in a department of public health or environmental control. The following table lists some representative Internet Web sites that provide information on this topic. However, the FCC neither endorses nor verifies the accuracy of any information provided at these sites. They are being provided for information only. ([Back to Index](#))

- **Bioelectromagnetics Society:** <http://www.bioelectromagnetics.org/>
- **EPA's RadTown USA:** <http://www.epa.gov/radtown/basic.html>
- **International Commission on Non-Ionizing Radiation Protection (ICNIRP Europe):** <http://www.icnirp.de/>
- **IEEE Committee on Man & Radiation:** <http://ewh.ieee.org/soc/embs/comar/>
- **Microwave News:** <http://www.microwavenews.com/>
- **National Council on Radiation Protection & Measurements:** <http://www.ncrponline.org/>
- **NJ Dept Radiation Protection:** <http://www.nj.gov/dep/rpp/nrs/index.htm>
- **RFcom (Canada):** <http://www.rfcom.ca/welcome/index.shtml>
- **Wireless Industry (CTIA):** <http://www.ctia.org/>
- **World Health Organization (WHO):** <http://www.who.ch/peh-emf>
- **Germany's EMF Portal:** <http://www.emf-portal.de/>

*For more information on this topic please note:*

[OET Bulletin 56](#): *Questions and Answers About the Biological Effects and Potential Hazards of Radiofrequency Radiation.*

Any questions regarding this subject matter should be addressed to: [The RF Safety Program](#)

**Federal Register**  
**Federal Communications Commission**  
**Nationwide Programmatic Agreement for**  
**Review Under the National Historic**  
**Preservation Act**



# Federal Register

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Tuesday,  
January 4, 2005

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## Part IV

# Federal Communications Commission

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47 CFR Part 1

Nationwide Programmatic Agreement for  
Review Under the National Historic  
Preservation Act; Final Rule

## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Part 1

[WT Docket No. 03-128; FCC 04-222]

#### Nationwide Programmatic Agreement for Review Under the National Historic Preservation Act

AGENCY: Federal Communications Commission.

ACTION: Final rule.

**SUMMARY:** In this document, we adopt revisions to the Federal Communications Commission's ("Commission") rules to implement a Nationwide Programmatic Agreement ("Nationwide Agreement") that will tailor and streamline procedures for review of certain Commission undertakings for communications facilities under section 106 of the National Historic Preservation Act of 1966 ("NHPA"). The Nationwide Agreement will tailor the section 106 review in the communications context in order to improve compliance and streamline the review process for construction of towers and other Commission undertakings, while at the same time advancing and preserving the goal of the NHPA to protect historic properties, including historic properties to which federally recognized Indian tribes, including Alaska Native Villages, and Native Hawaiian Organizations ("NHOs") attach religious and cultural significance.

**DATES:** Effective March 7, 2005.

**FOR FURTHER INFORMATION CONTACT:** Frank Stilwell, Wireless Telecommunications Bureau, (202) 418-1892.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Federal Communications Commission's *Report and Order*, FCC 04-222, adopted September 9, 2004, and released October 5, 2004. The full text of the *Report and Order* is available for public inspection during regular business hours at the FCC Reference Information Center, 445 12th St., SW., Room CY-A257, Washington, DC 20554. The complete text may be purchased from the Commission's duplicating contractor: Qualex International, 445 12th Street, SW., Room CY-B402, Washington, DC 20554, telephone (202) 863-2893, facsimile (202) 863-2898, or via e-mail at [qualexint@aol.com](mailto:qualexint@aol.com).

#### Paperwork Reduction Act

The *Report and Order* contains modified information collection requirements subject to the Paperwork

Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. Public and agency comments are due March 7, 2005. Comments should address the following: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology. A copy of any comments on the information collections contained herein should be submitted to Judith B. Herman, Federal Communications Commission, 445 12th St., SW., Room 1-C804, Washington, DC 20554, or via the Internet to [Judith.B.Herman@fcc.gov](mailto:Judith.B.Herman@fcc.gov), and to Edward C. Springer, OMB Desk Officer, 10236 New Executive Office Building, 724 17th St., NW., Washington, DC 20503, or via the Internet to [Edward.Springer@omb.eop.gov](mailto:Edward.Springer@omb.eop.gov).

In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Pub. L. 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees." In this *Report and Order*, we have assessed the effects of certain policy changes brought about by the Nationwide Agreement that might impose information collection burdens.<sup>1</sup> More specifically, we believe that businesses with fewer than 25 employees will be affected by the Nationwide Agreement in a manner similar to other small entities. Burdens and benefits may be felt more acutely by small businesses due to their reduced ability to spread regulatory costs across a larger number of projects. The Nationwide Agreement does impose reporting, recordkeeping, and other compliance requirements.<sup>2</sup> However, Part III of the Nationwide Agreement, which allows for the construction of

certain telecommunications facilities without the need to submit section 106 materials to the SHPO/THPO, will probably provide the greatest regulatory relief for small businesses, including those with fewer than 25 employees. We believe that the Part III exclusions will be especially helpful for smaller entities including those with fewer than 25 employees who rely more heavily on the prompt, predictable completion of each project to maintain a satisfactory cash flow. Businesses that avail themselves of an exclusion will have some costs. For example, they will have to determine whether a specific project satisfies the criteria for that exclusion and maintain documentation of that determination in their files.

#### Summary of the Report and Order

1. In this *Report and Order*, we adopt revisions to the Federal Communications Commission's ("Commission") rules to implement a Nationwide Programmatic Agreement ("Nationwide Agreement") that will tailor and streamline procedures for review of certain Commission undertakings for communications facilities under section 106 (16 U.S.C. 470f) of the National Historic Preservation Act of 1966 ("NHPA") (16 U.S.C. 470 *et seq.*). On June 9, 2003, we released a *Notice of Proposed Rulemaking* ("NPRM") seeking comment on a draft Nationwide Agreement among the Commission, the Advisory Council on Historic Preservation ("Council") and the National Conference of State Historic Preservation Officers ("Conference"). *See* 68 FR 40876 (July 9, 2003). As discussed below, upon consideration of the record, we have determined that, with certain revisions, the Nationwide Agreement will tailor the section 106 review in the communications context in order to improve compliance and streamline the review process for construction of towers and other Commission undertakings, while at the same time advancing and preserving the goal of the NHPA to protect historic properties, including historic properties to which federally recognized Indian tribes, including Alaska Native Villages, and Native Hawaiian Organizations ("NHOs") attach religious and cultural significance. The Council and Conference have agreed with this determination, and the parties executed the Nationwide Agreement on October 4, 2004. Accordingly, upon the effective date of the rule changes adopted in this *Report and Order*, the provisions of the attached Nationwide Agreement will become binding on affected licensees and applicants of the Commission.

<sup>1</sup> *See* Final Regulatory Flexibility Analysis, *infra*, at paragraphs 137-141.

<sup>2</sup> *Id.*

2. During the late 1990s, coincident with the explosion in tower constructions necessitated by the deployment of wireless mobile service across the country, delays in completing traditional section 106 reviews began to occur. The Commission's licensees and applicants ("Applicants"), State Historic Preservation Officers ("SHPOs") and Commission staff began experiencing ever-growing caseloads and backlogs that, it soon became clear, were posing a threat to the timely deployment of wireless service to customers.

3. Faced with the prospect of even larger numbers of towers to be constructed, the Council formed a working group, consisting of representatives of the Council and Commission, SHPOs, Indian tribes, the communications industry, and historic preservation consultants. Members of the Working Group began meeting on a regular basis, seeking ways of tailoring the section 106 process to the unique situation posed by tower constructions (and the collocation of antennas on towers and other structures). While striving to preserve the goal of the NHPA to protect historic properties (including historic properties of cultural and religious importance to Indian tribes and NHOs), the group explored alternatives for streamlining the section 106 process, when feasible.

4. In November 2001, the Working Group began discussing a Nationwide Agreement, consistent with § 800.14(b) (36 CFR 800.14(b)) of the Council's rules, to modify the historic preservation review process for communications towers and for antenna collocations that were not excluded from section 106 review under the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, executed March 16, 2001 (66 FR 17554, April 2, 2001) ("Collocation Agreement"). The Working Group sought to tailor the NHPA review process to the communications context in several ways that were reflected in the draft Nationwide Agreement. Commission staff also consulted on a government-to-government basis with representatives of federally recognized Indian tribes regarding the potential for provisions of the draft Agreement to significantly and uniquely affect their historic and cultural interests.

5. Although we agree, as discussed below, that certain changes to the document are appropriate, we conclude that signing the Nationwide Agreement advances the public interest. Section 800.14(b) of the Council's rules, promulgated pursuant to the Council's authority under section 214 of the NHPA, anticipates that, after due

deliberation among affected parties, a federal agency, the Council and the Conference may enter into a nationwide programmatic agreement that streamlines the section 106 review process and tailors it to the particular context of the subject matter to which it is applied. Consistent with this provision, the Nationwide Agreement streamlines and tailors the NHPA review process for tower constructions in a variety of ways, including: identifying classes of undertakings that, due to the small likelihood that they will impact historic properties, are excluded from routine section 106 review; developing clear and concise principles governing the initiation of contact with Indian tribes and NHOs as part of the section 106 process; clarifying methods for involving the public in the process; providing definitional and procedural guidance for the identification and evaluation of historic properties, and the assessment of effects on those properties; establishing procedures, including timelines, for SHPO, Tribal Historic Preservation Officer ("THPO") and Commission review; providing procedural guidance for situations where construction occurs prior to compliance with section 106; and prescribing uniform filing documentation.

6. We disagree with arguments that the Nationwide Agreement will obstruct deployment and impede public safety by adding regulatory complexity to the section 106 review process. To the contrary, we find, on balance, that the measures described herein will relieve unnecessary regulatory burdens, and therefore will promote public safety and consumer interests, consistent with our deregulatory initiatives. While the procedures prescribed in the Nationwide Agreement are not free of complexity, on the whole they are less burdensome than the current process under the Council's rules, and neither we nor any commenters have identified substantially simpler solutions that would be consistent with our responsibilities under section 106 of the NHPA.

7. At the same time, we conclude that the Nationwide Agreement will sufficiently protect historic properties. The NHPA and the Council's rules do not require that federal undertakings avoid all impacts on historic properties. Rather, section 106 requires that federal agencies "take into account" the effect of their undertakings on historic properties, which the Council's rules interpret to include, among other things, a "reasonable and good faith effort" to identify historic properties. Moreover,

section 214 of the NHPA (16 U.S.C. 470v) directs the Council to "tak[e] into consideration the magnitude of the exempted undertaking or program and the likelihood of impairment of historic properties." We interpret these provisions to mean that, in formulating exemptions and prescribing processes, the Council and the federal agency need not ensure that every possible effect on a historic property is individually considered in all circumstances, but that they should take into account the likelihood and potential magnitude of effects in categories of situations. Indeed, doing so should advance historic preservation in the long run by enabling all parties to focus their limited resources on the cases where significant damage to historic properties is most likely.

8. Within this framework, we find it significant that both the Council and the Conference, whose principal missions include administering section 106 and protecting historic properties, have agreed to sign the Nationwide Agreement. Like these expert agencies, we conclude, that the procedures and standards set forth in the Nationwide Agreement, while streamlining the process, are sufficient to minimize the likelihood that facilities construction will have unreviewed and unmitigated effects on historic properties, consistent with the NHPA.

9. As a preliminary matter, a number of commenters argue that construction of a communications tower is not a federal undertaking under section 106 of the NHPA. An "undertaking" under the NHPA means "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including \* \* \* those requiring a Federal permit[,] license, or approval" (16 U.S.C. 470w(7)(C)). The Commission's rules currently treat tower construction as an "undertaking" for purposes of the NHPA. Unless and until we revisit this public-interest question and determine that it is appropriate to amend our rules, we believe our existing policies reflect a permissible interpretation of the Commission's authority under the Communications Act.

10. Some commenters argue that we should not adopt the proposed Nationwide Agreement at this time because federally recognized Indian tribes were not sufficiently involved in its negotiation and drafting. Commission recognizes that as an independent agency of the federal government, we have a trust responsibility to and a government-to-government relationship with federally recognized Indian tribes. Accordingly, it

is our stated policy to consult, to the extent practicable, with Tribal governments prior to implementing any regulatory action or policy that will significantly or uniquely affect Tribal governments, their land and resources. See *In the Matter of Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes, Policy Statement*, 16 FCC Rcd 4078, 4080 (2000).

11. We conclude that the actions our staff has undertaken in developing the Nationwide Agreement fulfill the commitment made in the *Tribal Policy Statement*.

12. Our actions in this matter were not limited to inviting written comment from Indian tribes. The Commission invited representatives of Tribal governments to participate in deliberations of the Working Group, and in a series of communications to all federally recognized tribes, Commission staff scoped the issues and specifically invited meaningful consultative discussion. Commission staff also distributed materials and discussed the status of the Nationwide Agreement at several tribal conferences during the period of preparation and negotiation. These initial efforts led to direct substantive discussions between Commission staff and representatives of Tribes.

13. As a result of these consultations, we put out for public comment both the Navajo Nation's proposal for notifying Tribes of otherwise excluded undertakings and the United South and Eastern Tribes, Inc. ("USET") proposal regarding tribal and NHO participation in considering proposed undertakings, and we are adopting aspects of the USET proposal in this *Report and Order*. Our consultation with USET has continued since we released the *NPRM*, and we have also kept other tribal organizations apprised of our work and have invited them and their members to participate. Finally, many Indian tribes and NHOs filed comments in this proceeding, and federally recognized tribes were encouraged to make *ex parte* presentations to members of the Commission staff regarding this rulemaking.

14. We recognize that the execution of the Nationwide Agreement does not end our ongoing government-to-government relationship with federally recognized Tribes. Accordingly, we fully intend to continue regular consultation on a government-to-government basis, consistent with resource constraints, regarding the implementation of the Nationwide Agreement as well as other aspects of our relationship.

15. Section 214 of the NHPA permits the Council to exempt from section 106 review classes of federal undertakings that would be unlikely to impact historic properties. Pursuant to this authority, the draft Nationwide Agreement lists certain types of Commission undertakings that would be exempt from completing the section 106 process under the NHPA.

16. We conclude that categorically excluding from routine section 106 review categories of construction that are unlikely adversely to impact historic properties is appropriate and in the public interest. In addition to facilitating the timely deployment of service, properly drafted exclusions can promote historic preservation both by conserving the Commission's, SHPOs'/THPOs' and the Council's resources to review more important cases, and by providing incentives for applicants to locate facilities in a manner that will render effects on historic properties less likely. As discussed above, the NHPA does not require perfection in evaluating the potential effects of an undertaking in every instance. To the contrary, we believe section 214 contemplates a balancing of the likelihood of significant harm against the burden of reviewing individual undertakings. Moreover, the provisions in the Nationwide Agreement for ceasing construction and notifying the Commission and other interested parties upon discovery of previously unidentified historic properties provides a safeguard in the unusual instances where the availability of an exclusion might otherwise cause an adverse impact to be overlooked.

17. The proposed Nationwide Agreement excludes the "Modification of a tower and any associated excavation that does not involve a collocation and does not substantially increase the size of the existing tower, as defined in the Collocation Agreement." A substantial increase in size, in turn, is defined in the Collocation Agreement by reference to the extent of any increase in the tower's height, the installation of new equipment cabinets or shelters, the extent of any new protrusion from the tower, and excavation outside the current tower site and any access or utility easements. Enhancements to towers that involve collocations and do not result in a substantial increase in size are excluded from review under the Collocation Agreement.

18. We conclude that it is appropriate and necessary to include in the Nationwide Agreement an exclusion for tower enhancements that constitute federal undertakings, do not involve collocations, and do not result in a

substantial increase in size. Many changes to tower sites, such as building a fence around a tower, replacing an air conditioner or electric generator, or planting shrubs on the grounds, are in the nature of service or maintenance and are not federal undertakings. Thus, the Nationwide Agreement provides explicitly that Undertakings do not include maintenance and servicing of equipment. Other changes, however, are federal undertakings because they materially change the nature of the project that originally required section 106 review. Thus, a change is a federal undertaking if it alters an essential federal characteristic of the tower or its antennas. Any other interpretation would permit applicants to avoid section 106 review by initially constructing a non-intrusive tower and then modifying it substantially under the guise of a nonfederal alteration.

19. Because certain changes to towers that do not involve collocations are federal undertakings, we conclude that such enhancements should be excluded from review if they do not involve a substantial increase in size. Under the Collocation Agreement, a change to a tower occurring in conjunction with a collocation that does not result in a substantial increase in size is excluded from section 106 review. In some instances, a tower owner may find it beneficial to make a similar type of enhancement that is not associated with an immediate collocation. Such a change would have the same minimal likelihood of affecting historic properties as if it were accompanied by a collocation. Therefore, it should be excluded from section 106 review under the same standard.

20. Under the Collocation Agreement, collocations on towers constructed after March 16, 2001, are not excluded unless the tower has previously completed the section 106 review process. In drafting the Collocation Agreement, the parties recognized that permitting collocations on pre-existing towers without review, absent substantial evidence of an adverse effect from either the proposed collocation or the underlying tower, would minimize the potential for adverse effects from new construction by creating an incentive to collocate. For towers constructed after the effective date of the Collocation Agreement, by contrast, excluding collocations from review where the underlying tower had not been reviewed might create a perverse incentive for companies to build towers without review in the hope of later attracting collocations. The exclusion for enhancements will similarly apply to all towers constructed on or before March 16, 2001, and to

Collocate on towers after 3/16/01

towers constructed after that date that went through the section 106 process. Otherwise, a party might be able to avoid the limitation in the Collocation Agreement by first altering a tower and then adding an excluded collocation.

21. Similar to the exclusion for enhancements to towers, the draft Nationwide Agreement permits the construction of new towers without NHPA review when the new tower replaces an existing tower and does not involve a substantial increase in size, as defined in the Collocation Agreement. In addition, unlike the exclusion for enhancements, the replacement tower exclusion permits construction and excavation within 30 feet in any direction of the leased or owned property previously surrounding the tower.

22. We adopt the replacement tower exclusion. Similar to collocations, strengthened structures may reduce the need for more towers by housing up to two, four or more additional antennas. Given the limitation of the exclusion to replacements that do not effectuate a substantial increase in size, it is highly unlikely that a replacement tower within the exclusion could have any impact other than on archeological properties. Moreover, the limitation on construction and excavation to within 30 feet of the existing leased or owned property means that only a minimal amount of previously undisturbed ground, if any, would be turned, and that would be very close to the existing construction. Finally, for reasons similar to those discussed with respect to tower enhancements, the replacement tower exclusion will apply to towers constructed after March 16, 2001, only if the original tower completed section 106 review.

23. The draft Nationwide Agreement permits the erection of facilities without NHPA review for a temporary period not to exceed twenty-four months. We adopt the proposed temporary facilities exclusion with one revision. By their nature, temporary facilities usually involve little or no excavation. So long as no excavation will occur on previously undisturbed ground, the risk of damage to archeological or other historic properties from a temporary facility is small. Moreover, temporary facilities are often used in response to exigent circumstances where it is important that they be erected quickly. Taking these considerations together, we conclude that an exclusion for temporary facilities is appropriate where no excavation will occur on previously undisturbed ground. We revise the exclusion, however, so that a temporary facility that requires

excavation other than on previously disturbed ground must complete section 106 review. We further conclude that a period of 24 months is sufficient to accommodate nearly all temporary facilities, and is necessary to ensure that the exclusion cannot be used to avoid section 106 review indefinitely.

24. The draft Nationwide Agreement permits specified construction on certain properties in active industrial, commercial, or government-office use without NHPA review. We adopt a revised version of this proposed exclusion. First, we limit the exclusion to industrial parks, commercial strip malls, or shopping centers that occupy a total land area of 100,000 square feet or more. As noted by several commenters, applying the exclusion to any commercial property as small as 10,000 square feet, as proposed in the NPRM, would create an unacceptable risk of inappropriate development on small commercial properties, such as neighborhood shops, that may be located in or near historic areas. By confining the exclusion to construction in industrial parks, commercial strip malls, or shopping centers that occupy a total land area of 100,000 square feet or more, we effectively ensure that construction subject to the exclusion will occur not only on plots that substantially exceed 10,000 square feet, but on highly developed properties and on ground that, in all likelihood, will have been thoroughly disturbed when the existing structures were constructed. At the same time, these types of properties are among those where wireless telecommunications service is most often needed. Thus, this exclusion combines a low likelihood of significant impact on historic properties with a high potential to satisfy service needs, thereby reducing pressure to site other facilities in potentially more sensitive locations.

25. Second, we limit the exclusion to facilities that are less than 200 feet in overall height. A tower of less than 200 feet is ordinarily unlikely to have significant incremental effects on historic properties within an area that is already highly developed. Furthermore, antenna structures 200 feet or less in height ordinarily do not require notification to the Federal Aviation Administration, and thus are not subject to federal lighting requirements. Thus, to the extent that lighting might have a visual adverse effect on historic properties, any such effect is unlikely from towers 200 feet or less.

26. Third, we require that before applying this exclusion, the applicant must undertake a search of relevant records, and must complete a full

section 106 review under the Nationwide Agreement if it discovers that the property on which it proposes to construct is located within the boundaries of or within 500 feet of a historic property. The draft Nationwide Agreement proposed that the exclusion would not apply if a structure 45 years or older were located within 200 feet of the proposed facility. We conclude, however, that this proposed criterion would be burdensome to apply and is not well tailored to prevent potential effects on nearby historic properties. Thus, rather than turning on the age of nearby properties regardless of their eligibility, the exclusion's applicability should depend on whether the property or a property within 500 feet is, in fact, listed or eligible for listing in the National Register. We conclude that, for towers that otherwise meet the terms of the exclusion, a 500 foot buffer zone will adequately protect historic properties from adverse impacts.

27. Finally, for purposes of this exclusion, we require applicants to complete the process of tribal and NHO participation as specified in section IV of the Nationwide Agreement. We note that historic properties of traditional religious and cultural importance often are not listed in the National Register or other publicly available sources. Thus, in order to provide protection for these types of historic properties similar to that afforded to other historic properties by a search of records, it is necessary to seek information directly from Indian tribes and NHOs. If as a result of this process the applicant or the Commission identifies a historic property that may be affected, the applicant must complete the section 106 process pursuant to the Nationwide Agreement notwithstanding the exclusion.

28. The draft Nationwide Agreement excludes from review many towers proposed for construction in or near utility corridors, and along railways and highways. On review of the record, we conclude that the Nationwide Agreement should not create an exclusion for construction along highways and railroads. As numerous commenters observe, highways and railroads frequently follow pathways that track historic settlement and transportation patterns and, earlier, areas frequented by Indian tribes. We recognize that highways and passenger railways are among the areas where customer demand for wireless service is highest, and thus where the need for new facilities is greatest. Moreover, the existence of these modern intrusions reduces the risk that a new communications facility would impose

an additional adverse effect on historic properties. Nonetheless, given the concentration of historic properties near many highways and railroads, we are persuaded that it is not feasible to draft an exclusion for highways and railroads that would both significantly ease the burdens of the section 106 process and sufficiently protect historic properties.

29. We do, however, adopt a limited exclusion for facilities located in or within 50 feet of a right-of-way designated for communications towers or above-ground utility transmission or distribution lines, where the facility would not constitute a substantial increase in size over existing structures in the right-of-way in the vicinity of the proposed construction. Due to the increasing usage of wireless services and advances in technology, providers of certain types of service are increasingly finding it feasible to utilize antennas mounted on short structures, often 50 feet or less in height, that resemble telephone or utility poles. Where such structures will be located near existing similar poles, we find that the likelihood of an incremental adverse impact on historic properties is minimal. Moreover, it promotes historic preservation to encourage construction of such minimally intrusive facilities rather than larger, potentially more damaging structures.

30. For reasons similar to those discussed above with respect to the industrial and commercial properties exclusion, this exclusion does not apply if the facility would be located within the boundaries of a historic property, and we require applicants to conduct a preliminary search of relevant records for such property. Due to the limited size of the structures permitted under this exclusion and their close similarity to nearby existing structures, however, we do not require research regarding historic properties within 500 feet. Finally, for the same reasons discussed above, application of this exclusion depends on successful completion of the tribal and NHO participation process.

31. Finally, the draft Nationwide Agreement excludes from NHPA review undertakings in geographic areas designated by the SHPO/THPO. We adopt this exclusion as drafted, with only minor clarifying edits. Such a provision, we believe, is consistent with the concept of an exclusion—*i.e.*, to exempt from review undertakings where an impact upon historic properties is unlikely. SHPOs/THPOs are in an excellent position, given their local knowledge and experience, to identify such areas, when permissible under state or tribal law. While we encourage

SHPOs and THPOs to designate areas pursuant to this provision to the extent warranted, we emphasize that doing so is at the SHPO/THPO's discretion.

32. In the *NPRM*, we requested comment on a proposal by the Conference to allow SHPOs/THPOs to "opt out" of the exclusion for construction along utility and transportation corridors in areas where historic properties are likely to be present. We reject the proposed opt-out provision. As drafted, the exclusions from the section 106 process are not dependent on local conditions, but identify circumstances under which construction is unlikely to significantly adversely affect historic properties in any state. At the same time, an opt-out provision would create a patchwork of varying agreements, state-by-state. Moreover, procedural changes, adopted by use of the opt-out provision, would likely occur over a period of time, creating additional burdens and confusion for all parties concerned.

33. We reject arguments that, as a matter of law, the Commission must provide notice to Indian tribes of all excluded undertakings. Section 214 of the NHPA allows for certain undertakings to be "exempted from any or all of the requirements of this Act" and expressly authorizes the Council to promulgate regulations to effectuate such exemption. We read section 214 as authorizing exemptions from the tribal consultation requirement of section 101(d)(6). There is nothing in the NHPA or in the Council's rules expressly requiring any type of notice to tribes for every individual undertaking that is excluded from review pursuant to a programmatic agreement that is signed and executed by the agency and the Council. Given that the Council is the agency authorized to promulgate rules to implement section 214 of the NHPA, the absence of notice provisions both in the Council's rules and in other programmatic agreements supports our conclusion that such provisions are not necessary under the NHPA, the Council's rules, or otherwise. Indeed, consistent with its rules, it is the Council, as evidenced by its signature to this agreement, who approves the proposed exemption "based on the consistency of the exemption with the purposes of the act. \* \* \*"

34. With respect to the specific exclusions in the Nationwide Agreement, we conclude, as discussed above, that tribal and NHO notice and participation are necessary for construction on commercial and industrial properties and in utility rights-of-way notwithstanding the exclusions. This is so because, without

an opportunity for tribes and NHOs to participate, there is a substantial possibility that undertakings within these exclusions could affect properties of traditional cultural and religious importance. For the other exclusions, by contrast, any such possibility is insignificant. Therefore, a notice requirement would contravene the goals of section 214 of the NHPA and the Council's rule on exclusions by adding an unnecessary layer of review and regulation.

35. Finally, the Commission has met its government-to-government responsibility to consult with and its trust responsibility to federally recognized tribes with respect to the exclusions. As explained above, the Commission has engaged in government-to-government consultation with tribes regarding the Nationwide Agreement. Moreover, a proposal to require tribal notice was included in the draft Nationwide Agreement, and received the consideration of the various tribes and tribal organizations that participated in this proceeding. Indeed, after considering the comments of Indian tribes, we have included a tribal participation requirement for the industrial and commercial properties and utility corridor exclusions. We conclude that tribes were afforded an opportunity to consult with respect to this issue and accordingly did so.

36. The draft Nationwide Agreement provides that applicants should retain documentation of their determination that an exclusion applies to an undertaking. We decline to require any regular reporting of instances in which the exclusions are used in addition to such recordkeeping. We find that such mass undifferentiated reporting of constructed facilities would be excessively burdensome and, without more, would contribute little to an understanding of how the exclusions are being applied. We note that as records relevant to compliance with the Commission's rules, a company must produce documentation of its determination of an exclusion's applicability to the Commission upon request. SHPOs/THPOs may also require production of such records to the extent authorized under State or tribal law.

37. As a further safeguard to ensure that the exclusions are applied appropriately, we provide that a determination of exclusion should be made by an authorized individual within the applicant's organization. While the exclusions are drafted so that their application should not require historic preservation expertise, a responsible individual who understands the exclusions and their applicability

needs to ensure that they are applied appropriately. Moreover, because the applicant is responsible for compliance with our rules, this responsible individual should be within the applicant's organization. We advise applicants to retain a record of the authorized individual's review as part of their record of the exclusion's applicability.

38. In the *NPRM*, we sought comment on two alternative sets of provisions governing participation of Indian tribes and NHOs in undertakings off tribal lands. Alternative A was developed by the Working Group. This proposed alternative directs applicants to use reasonable and good faith efforts to identify Indian tribes and NHOs that may attach cultural and religious importance to historic properties that may be affected by an undertaking, and provides guidance on how to perform such identification and on the subsequent process to be followed with Indian tribes and NHOs. Alternative B was proposed by USET during the course of meetings after the Working Group completed its deliberations. Alternative B requires the Commission to consult with potentially affected Indian tribes and NHOs on each proposed undertaking, in accordance with the Council's rules, unless either (1) the Indian tribe or NHO has given the applicant a letter of certification stating that such consultation is unnecessary; or (2) the applicant and the Indian tribe have reached a written agreement, filed with the Commission, regarding conditions under which such certification is unnecessary and the applicant has complied with that agreement. Alternative B encourages parties to use these alternative processes in lieu of government-to-government consultation. This alternative does not, however, provide guidance regarding how applicants should contact and relate to Indian tribes and NHOs, stating that such guidance would be provided in an appendix or by separate publication.

39. Since issuing the *NPRM*, the Commission has continued to work with Indian tribes outside the context of this proceeding to improve the means of tribal and NHO participation in the section 106 process. In particular, the Commission, after consultation with federally recognized tribes, has developed and implemented an electronic Tower Construction Notification System to facilitate identification of and appropriate initial contact with Indian tribes and NHOs that may attach religious and cultural significance to historic properties within the geographic area of a

proposed undertaking. This system permits each Indian tribe and NHO voluntarily to identify in a secure electronic fashion the geographic areas in which historic properties of religious and cultural significance to that Indian tribe or NHO may be located. When an applicant then voluntarily enters into the system the location and other basic information about a proposed construction project, the Commission automatically forwards the information electronically or by mail to participating tribes and NHOs. Finally, Indian tribes and NHOs have the option of responding to applicants through the Tower Construction Notification System. By rationalizing the process of identification and initial contact through the Commission, we believe the Tower Construction Notification System will relieve burdens and provide certainty for tribes and NHOs, applicants, and the Commission alike.

40. Upon consideration of the record, and in light of the developments described above, we adopt procedures for participation of tribes and NHOs that incorporate aspects of both Alternatives A and B with certain modifications. First, we recognize that pursuant to the federal government's unique legal relationship with Indian tribal governments, as well as specific obligations under the NHPA and the Council's and Commission's rules, the Commission has a responsibility to carry out consultation with any federally recognized Indian tribe or any NHO that attaches religious and cultural significance to a historic property that may be affected by a Commission undertaking. As the Commission has previously recognized, the federal government has a historic trust relationship that requires it to adhere to fiduciary standards in dealing with federally recognized tribes. This fiduciary responsibility and duty of consultation rest with the Commission as an agency of the federal government, not with licensees, applicants, or other third parties.

41. At the same time, we cannot fulfill our duty of consultation in a vacuum. Because our applicants possess unique knowledge regarding the facilities that they propose to construct, the Nationwide Agreement that we adopt directs applicants to make reasonable and good faith efforts to identify the Indian tribes and NHOs that may have interests in a geographic area. The Nationwide Agreement further specifies that where an Indian tribe or NHO has voluntarily provided information to the Tower Construction Notification System, reference to that database constitutes a reasonable and good faith

effort at identification. In addition, the Nationwide Agreement provides guidance regarding other means of fulfilling this obligation.

42. The Nationwide Agreement specifies that, after the applicant has identified potentially interested tribes and NHOs, contact should be made at an early stage in the planning process with each such tribe or NHO by either the Commission or the applicant, depending on the expressed wishes of the particular Indian tribe or NHO. The Commission will take steps to ascertain and publicize the contact preferences of all federally recognized Indian tribes and NHOs, both as to who must make the initial tribal contact and by what means, as well as any locations or types of construction projects for which the Indian tribe or NHO does not expect notification. To ensure that communications among parties are in accordance with the reasonable preferences of individual tribes and NHOs, the Commission will also use its best efforts to arrive at agreements regarding best practices with Indian tribes or NHOs, strive for uniformity in such best practices and encourage applicants to follow them. Through these best practices the Commission hopes to facilitate expeditious completion of section 106 review by minimizing misunderstandings among the parties to that process.

43. If there is no preexisting relationship between the applicant and an Indian tribe or NHO, and absent contrary indication from the Indian tribe or NHO, initial contact will be made by the Commission through its electronic Tower Construction Notification System. Where there is such a preexisting relationship the applicant may make the initial contact in the manner that is customary to that relationship or in any manner acceptable to the Indian tribe or NHO. In these circumstances, the applicant shall copy the Commission on any initial contact to the Indian tribe or NHO unless the Indian tribe or NHO has agreed such copying is unnecessary. The Nationwide Agreement specifies that any direct contact with the Indian tribe or NHO shall be made in a sensitive manner that is consistent with the reasonable wishes of the Indian tribe or NHO, including through the Tower Construction Notification System where such means is consistent with the tribe or NHO's preference. Where the tribe or NHO's wishes are not known, the Nationwide Agreement sets forth guidelines regarding respectful address and sufficient information. The text further directs that the applicant afford the tribe or NHO a reasonable

opportunity to respond, ordinarily 30 days, allow additional time to respond as reasonable upon request, and make reasonable efforts to follow up in case the tribe or NHO does not respond to an initial communication.

44. The purpose of the initial contact, whether made by the Commission or the applicant, is to begin the process of ascertaining whether historic properties of religious and cultural significance to an Indian tribe or NHO may be affected by an undertaking, thereby triggering the duty of consultation. Unless the tribe or NHO affirmatively disclaims further interest or has agreed otherwise, this initial contact does not satisfy the applicant's obligation or constitute government-to-government consultation by the Commission. It is our hope and intent that, where direct contacts from an applicant are acceptable to the Indian tribe or NHO, amicable contacts will enable these consulting parties to complete the section 106 process so as to obviate the need for government-to-government consultation in a vast majority of cases. At the same time, because the duty to consult rests with the Commission as a federal government agency, the Nationwide Agreement directs applicants to promptly refer to the Commission any tribal request for government-to-government consultation, and to seek Commission guidance in cases of disagreement or failure to respond. Finally, the Nationwide Agreement substantially adopts provisions from Alternative A regarding inviting Indian tribes and NHOs to become consulting parties in the section 106 process, confidentiality, and the preservation of alternative arrangements.

45. We conclude that the provisions we adopt are consistent with the Commission's fulfillment of its tribal consultation responsibilities under the NHPA and other sources of federal law. The NHPA does not provide for delegation of the tribal consultation responsibility to private entities. The provisions that we adopt, however, do not delegate the Commission's consultation responsibilities but provide for direct contacts with an Indian tribe or NHO by an applicant only in accordance with the expressed wishes of the Indian tribe or NHO. Moreover, the Nationwide Agreement further provides that, where the applicant is unknown to the tribe or NHO, the initial contact will generally be made by the Commission and does not in any circumstance allow applicants and licensees to embark upon and conclude the section 106 process without Commission participation and without tribal or NHO consent.

46. The Nationwide Agreement expressly states that the initial contact between applicants or the Commission and Indian tribes and NHOs is required at "an early stage of the planning process \* \* \* in order to begin the process of ascertaining whether \* \* \* Historic Properties [of religious and cultural significance to them] may be affected." The Nationwide Agreement expresses the ambition that this initial contact will lead to voluntary direct discussions through which applicants and tribes or NHOs will resolve any matters to the tribe or NHO's satisfaction without Commission involvement. However, the Nationwide Agreement makes clear that in the absence of such an agreement, decision-making authority and the duty to consult rest with the Commission. Thus, federally recognized Indian tribes are free, at any point, to request government-to-government consultation with the Commission, and the Commission is accessible and able to engage in government-to-government consultation with any tribe on any undertaking at any time. Moreover, if an applicant and an Indian tribe or NHO disagree regarding whether an undertaking will have an adverse effect on a historic property of religious and cultural significance, or if the tribe or NHO does not respond to the applicant's inquiries, the Nationwide Agreement directs the applicant to seek guidance from the Commission, following which appropriate consultation will occur and only then will the Commission make a decision regarding the proposed undertaking. The Commission only puts the exploratory phase of the process into the hands of those parties with the most intimate knowledge of the proposed undertaking and, subject to the expressed wishes of an Indian tribe or NHO, authorizes them to provide information to, solicit information from, and engage in voluntary discussions with the tribes and NHOs. This is consistent with § 800.2(c)(4) of the Council's rules (36 CFR 800.2(c)(4)), which permits agencies to authorize applicants to initiate section 106 discussions or contacts with consulting parties such as tribes, and is in keeping with applicable federal consultation responsibilities.

47. We reject the argument that the role of applicants in initiating the section 106 process constitutes an illegal delegation. Except where there is a preexisting relationship between a particular tribe or NHO and the applicant or a particular tribe has advised the Commission of its

willingness to be contacted initially by applicants, the first contact concerning a proposed undertaking will generally come from the Commission. In any event, cases relating to Congressional delegations of power to other branches of the federal government are inapposite. Moreover, federal agencies may permit private sector entities to perform delineated governmental functions when clear standards are set forth, guidelines for policymaking are offered, and specific findings are required. This is especially true when the private entity's participation is subject to the government agency's ultimate reviewing authority, which, as described above, is the case here. Similarly, OMB Circular A-76, which addresses functions of government that are non-delegable to the private sector, is not applicable because the Commission is not delegating a governmental function or any decision-making authority, but simply seeking assistance from our licensees and applicants in beginning a process over which the Commission ultimately retains control.

48. For these reasons, we conclude that the Nationwide Agreement, as we adopt it today, does not unlawfully delegate or derogate the Commission's duties of consultation. At the same time, in combination with the other developments described above, the Nationwide Agreement provides substantial assistance and guidance to applicants in carrying out their assigned role. We disagree, however, with commenters who urge us to prescribe more definitive time periods or provide greater finality. Ultimately, the Commission has a government-to-government relationship with and fiduciary responsibility to Indian tribes, as manifested in the duties of consultation under general principles of law and under the specific provisions of the NHPA. Thus, absent the Indian tribe or NHO's agreement, only the Commission can confer finality with respect to tribes or NHOs for an undertaking that is not excluded from section 106 review. Moreover, while ultimately no further consultation is required if an undertaking will not affect a historic property of cultural and religious significance to a tribe or NHO, applicants must work with tribes and NHOs in their efforts to determine whether such eligible properties exist, and must refer to the Commission for finality absent tribal or NHO agreement with their identification efforts. It is our hope, through the guidance in the Nationwide Agreement and through the separate negotiation of voluntary best

practices with Indian tribes and NHOs, to facilitate consensual resolutions that satisfy the needs of all parties swiftly and with a minimum expenditure of resources.

49. Section V of the draft Nationwide Agreement establishes procedures to streamline and tailor the public participation provisions of the Council's rules to fit the communications context. Specifically, this section provides for notice of a proposed undertaking to the relevant local government and the public on or before the date the project is submitted to the SHPO/THPO, recommends means of providing public notice, and specifies the content of these notices. The provision also states that the SHPO/THPO may make available lists of additional interested organizations that should be contacted, and it requires the applicant to consider public comments and provide those comments to the SHPO/THPO. In addition, it sets out procedures for identifying consulting parties and the rights of consulting parties.

50. We adopt the public participation provisions substantially as drafted. The Nationwide Agreement simplifies, by tailoring to the communications context, the process in the Council's existing rules for providing notice, involving the public, identifying consulting parties, and addressing comments received. We conclude that the provisions as drafted achieve the important public participation goals of the Council's rules in a manner that will reduce misunderstandings and relieve burdens on applicants, SHPOs/THPOs and the Commission alike.

51. We reject most of the changes that commenters have proposed to this section. Specifically, we find that there should not be a firm time limit on public comments on a proposed undertaking, but that all comments received prior to completion of the review process should be considered. We further conclude, consistent with common practice, that use of the local zoning process, local newspaper publication, or an equivalent process constitutes sufficient notice of a proposed undertaking in the nature of a communications facility to the general public. Moreover, it is appropriate to permit the SHPO/THPO, as the consulting party most familiar with the local community of interest, to provide by generally available list the names of additional parties that should be contacted in order to further ensure a full opportunity for public participation under the circumstances of each case. In order to preserve applicants' flexibility to pursue the process in the most efficient sequence under the

circumstances of each case, we only require that notice to the local government and the public occur on or before the date materials are submitted to the SHPO/THPO. We also find that adoption of a national confidentiality standard would be infeasible given the SHPOs'/THPOs' need for information and the diversity of laws on this subject in the various states.

52. We do conclude that it is appropriate for the applicant to inform the SHPO/THPO, as part of the Submission Packet, of the identity of designated consulting parties. Accordingly, we add this provision to the Nationwide Agreement and we include a request for the relevant information on the attached forms. We find, however, that it is unnecessary and burdensome for applicants to notify the Commission of each undertaking as part of the public participation process. Finally, we conclude that the criterion encouraging applicants to grant consulting party status to one who has "a demonstrated legal or economic interest in the undertaking, or demonstrated expertise or standing as a representative of local or public interest in historic or cultural resources preservation," is consistent with, and required by, the Council's rules (36 CFR 800.2(c)(5)).

53. Section VI of the draft Nationwide Agreement establishes procedures and standards for identifying historic properties, evaluating their historic significance, and assessing any effect the proposed undertaking may have upon those historic properties. Commenters address five principal subjects in this area, including: (1) The definition of area of potential effects (APE); (2) the means of identifying and evaluating historic properties within the APE for visual effects; (3) the need for archeological surveys; (4) the definition of an adverse effect; and (5) the use of qualified experts.

54. The APE is the area within which an applicant must look for historic properties that may be affected by an undertaking. The draft Nationwide Agreement provides that each undertaking has one APE for direct (physical) effects, consisting of the area of potential ground disturbance and the portion of any historic property that will be destroyed or physically altered by the undertaking, and a second APE for indirect visual effects. The draft further establishes a rebuttable presumption that the latter APE is the area from which the tower will be visible within ½ mile of the proposed tower for a tower that is 200 feet or less in height, ¾ mile for a tower more than 200 feet but no more than 400 feet in height, and

1.5 miles for a taller tower. The applicant and the SHPO/THPO may mutually agree on an alternative to the presumed distance in any case, and disputes regarding whether to use an alternative APE may be submitted to the Commission for resolution.

55. We adopt the APE provisions substantially as drafted, with only technical and clarifying revisions. In doing so, we emphasize that the scaled distances for visual APEs in the Nationwide Agreement are not inflexible mandates but presumptions, subject to variation in specific instances either by mutual agreement or, in cases of dispute, by Commission decision. Thus, while providing a structure to facilitate the determination of the APE in most cases, the Nationwide Agreement ultimately affords case-by-case flexibility. Although some commenters argue that the presumed distances are too small or too large, we are not persuaded that the presumed distances are inappropriate for the typical case, subject to departure where conditions require. We do add a general definition of the APE for visual effects in order to clarify, consistent with the definition of adverse effect, that it refers only to the geographic area in which the undertaking has the potential to introduce visual elements that diminish the setting, including the landscape, of a historic property where setting is a character-defining feature of eligibility.

56. With respect to identification and evaluation of Historic Properties, the Council's rules define a Historic Property, in relevant part, as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. \* \* \*" (36 CFR 800.16 (l)(1)). The Council's rules further provide that properties eligible for inclusion in the National Register include "both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria" (36 CFR 800.16(l)(2)). This definition implements section 106 of the NHPA, which provides that a federal agency shall take into account the effect of any federal undertaking on any property "included or eligible for inclusion in the National Register."

57. We have in the record a letter from the Chairmen of the U.S. House of Representatives Committee on Resources and Subcommittee on National Parks, Recreation and Public Lands to the Chairman of the Council, noting that the Council originally defined properties eligible for inclusion in the National Register under section

106 to include only properties that the Keeper had previously determined to be eligible, and suggesting that the Council consider addressing this definitional issue either in the Nationwide Agreement or in a then-pending Council rulemaking. We determine not to alter the definition of Historic Property used in the draft Nationwide Agreement and the Council's rules. In this regard, we defer to the Council's clearly stated interpretation of its own governing statute, which was recently upheld by the federal court reviewing amendments to the Council's rules. *See National Mining Association v. Slater*, 167 F.Supp.2d 265, 290–292 (D.D.C. 2001), *rev'd in part*, 324 F.3d 752 (2003). We also note that § 800.14 (36 CFR 800.14) of the Council's rules, which authorizes programmatic agreements, discusses alternative procedures to Subpart B of the Council's rules, but the definition of Historic Property is in Subpart C. For all these reasons, we conclude that questions regarding the definition of historic properties are outside the scope of this proceeding and should be addressed, if at all, by the Council.

58. At the same time, we conclude, based on our review of the record, that it is appropriate to narrow and define applicants' obligations with respect to the identification and evaluation of historic properties within the APE for visual effects. Section 106 is silent on the methodology necessary to identify properties "included in or eligible for inclusion in the National Register." Indeed, a federal court has held that the Council's requirement that federal agencies conduct surveys to identify historic properties is not mandated by the plain meaning of section 106. Under the Council's regulations, the agency must make "a reasonable and good faith effort" that takes into account the burdens of evaluation, the nature and extent of potential effects, the magnitude of the undertaking and the degree of federal involvement in the proposed undertaking. Council regulations provide further that this obligation may be met through procedures specified in subpart B of the rules or as modified in a Programmatic Agreement tailored to the agency's specific needs. Here, the record demonstrates that requiring applicants to undertake field surveys for thousands of new communications facilities annually causes considerable delay in the deployment of communications services and imposes a hefty burden on the resources of applicants and SHPO/THPOs alike. Moreover, only those historic properties within the APE for which visual setting or visual elements

are character-defining features of eligibility are potentially subject to visual adverse effects. Of these properties, many will not incur adverse effects from a communications facility, depending on the extent to which the facility is visible from the property and other factors. Taking these considerations together, we conclude that the burdens of conducting field surveys and taking other active measures beyond reviewing defined sets of records to identify historic properties in the APE for visual effects, in the context of the facilities covered by this Nationwide Agreement, are not merited by the small potential benefit to historic preservation.

59. Specifically, the Nationwide Agreement requires that, for most types of historic properties within the APE for visual effects, identification and evaluation efforts are limited to the applicant's review of five sets of records available within the SHPO/THPO's office or in a publicly available source identified by the SHPO/THPO. First, the applicant must identify properties that are actually listed in the National Register. Second, it must identify properties that the Keeper of the National Register has formally determined to be eligible. Third, identification efforts must include properties that the SHPO/THPO is in the process of nominating for the National Register, as certified by the SHPO/THPO. Fourth, identification includes properties that the SHPO/THPO's records identify as having previously been determined eligible by a consensus of the SHPO/THPO and another federal agency or local government representing the Department of Housing and Urban Development. Fifth, identification efforts shall include properties shown in the SHPO/THPO's inventory as having previously been evaluated by the SHPO/THPO and found by it to meet the National Register criteria. Except as described below, an applicant need not identify historic properties within the APE for visual effects that are not in one of these categories, nor need it evaluate the historic significance of such properties.

60. We find, however, that review of records maintained by the SHPO/THPO is insufficient for identification of historic properties of traditional religious and cultural significance to Indian tribes and NHOs. As the Council's rules recognize, Indian tribes and NHOs possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them. Moreover, Indian tribes and NHOs

frequently have confidentiality and privacy concerns about including sites of religious and cultural significance to them in publicly available records. Therefore, we conclude that identification and evaluation of historic properties without the involvement of potentially affected Indian tribes and NHOs would create an unacceptable risk that historic properties of traditional cultural and religious significance to them may be overlooked. Accordingly, as part of the process of Indian tribe and NHO participation pursuant to section IV of the Nationwide Agreement, an applicant or the Commission shall gather information from Indian tribes or NHOs to assist in identifying and evaluating historic properties of traditional cultural and religious significance to them.

61. As part of the Submission Packet to be provided to the SHPO/THPO and consulting parties, the Nationwide Agreement requires the applicant to list the historic properties that it has identified pursuant to the Nationwide Agreement. Upon reviewing this list, the SHPO/THPO may identify other properties already included in its inventory within the APE that it considers eligible for inclusion in the National Register. In this event, the SHPO/THPO may notify the applicant of these additional properties pursuant to section VII.A.4 of the Nationwide Agreement in order for the applicant to assess the potential effects on such properties. We conclude that this process, without imposing additional burdens of identification and evaluation on applicants, provides a safeguard for the SHPO/THPO to identify specific historic properties that may be affected in rare instances where the process provided in the Nationwide Agreement might otherwise cause significantly affected properties to be overlooked.

62. Finally, these limitations on the identification and evaluation process do not apply within the APE for direct effects. The APE for direct effects, because it is limited to the area where the tower will cause ground or physical disturbances, is much smaller than for visual effects. As a result, searches of those areas do not present the potential for delay likely to arise in assessing visual effects. At the same time, the potential magnitude of effects to properties within the APE for direct effects is much greater, in some instances including destruction of the property, and these effects are not readily discoverable other than through careful examination of the site. Therefore, additional identification efforts, potentially including an archeological field survey, may be

required within the APE for direct effects.

63. Upon review of the record, we conclude that an archeological field survey should not be required where archeological resources are unlikely to be affected. Many facilities are placed in locations where the likelihood of affecting archeological resources is remote; for example, on paved ground in a highly developed downtown area. Requiring onsite archeological work in these instances would add substantial delay and cost to facilities deployment to no appreciable benefit.

64. At the same time, we conclude, that the Nationwide Agreement must define with specificity the circumstances under which a field survey is not required. First, no archeological field survey is necessary when the ground on which construction will occur has been previously disturbed. Where the ground has been previously disturbed in the locations and at the depths that are proposed to be excavated in connection with future construction, the likelihood of direct effects to archeological resources ordinarily is remote, whether or not archeological resources may be located at greater depths or in other portions of the project area. Due to differences in the compaction characteristics of soils in different parts of the Nation, however, we require a previous disturbance to at least two feet below the proposed construction depth (excluding footings and other anchoring mechanisms). We find that a two-foot margin is necessary to provide reasonable assurance that archeological resources are unlikely to be affected under any soil conditions. The second circumstance under which no archeological field survey is required is when geomorphological evidence indicates that cultural-resource bearing soils do not occur within the project area, or may occur but at more than two feet below the proposed construction depth. Where a qualified expert has found that such conditions exist, direct effects on archeological resources are inherently unlikely, and accordingly it is ordinarily not reasonable to require further identification efforts.

65. With respect to both of these criteria, the depth of proposed construction to be considered excludes footings and other anchoring mechanisms that may require excavation substantially deeper than the general level at a site. These footings cover very small areas within a project site, usually no more than two to three feet (and often less) in diameter, and may extend 20 to 30 feet deep or more. Under the circumstances, we find that a

field survey in such narrow deep areas is infeasible, and indeed may typically cause more harm than the minimal amount of damage to archeological resources that could occur during construction. Therefore, performing a field survey at the depths reached by footings and other anchoring mechanisms is ordinarily not part of a reasonable and good faith effort to identify historic properties.

66. Finally, similar to the procedure for identifying historic properties that may incur visual effects, we include provisions to ensure the ability of Indian tribes and NHOs to provide information regarding the potential presence of archeological historic properties of religious and cultural significance to them, and we provide a safeguard opportunity for the SHPO/THPO to identify the need for a field survey. Specifically, as part of the tribal and NHO participation process pursuant to section IV of the Nationwide Agreement, the applicant or the Commission must gather information from identified Indian tribes and NHOs to assist in identifying archeological historic properties, including the need for a field survey. In addition, the applicant must substantiate its determination that no archeological field survey is necessary as part of its Submission Packet, and the SHPO/THPO may identify a need for a field survey, notwithstanding the applicability of either of the criteria discussed above, during its review pursuant to section VII.A. We emphasize that an Indian tribe or NHO, or a SHPO/THPO, must provide evidence supporting a high probability of the presence of intact archeological historic properties within the APE for direct effects in order for a field survey to be necessary under these circumstances.

67. Once historic properties have been identified and their historic significance evaluated, the next step in the section 106 process is assessment of whether the proposed undertaking would have an adverse effect on those historic properties. The draft Nationwide Agreement provides that effects shall be evaluated using the Criteria of Adverse Effect set forth in the Council's rules. The draft further provides guidance, consistent with the Council's rules, that a facility will have a visual adverse effect if its visual effect will noticeably diminish the integrity of one or more characteristics qualifying a property for the National Register, and that a facility will not cause a visual adverse effect unless visual setting or elements are character-defining features of eligibility. The provision then provides examples

of historic properties on which visual adverse effects might occur.

68. We adopt with some revisions the provision of the Nationwide Agreement describing visual adverse effects. Although the Council's rule is not entirely clear, it is plain that setting is among the characteristics of a historic property that, when altered and diminished in integrity, may produce an adverse effect. It seems reasonable to us that, under some circumstances, the introduction of a large visual intrusion outside the boundaries of a historic property within the APE may diminish the integrity of setting, including the landscape, on that property in such a way as to alter a characteristic of visual setting or visual elements that qualifies the property for inclusion in the National Register. By contrast, where the features that qualify a property for listing on the National Register are unrelated to its visual setting (for example, its interior design), then a visual intrusion outside the property boundaries will not constitute an adverse effect. Indeed, any other view arguably would be inconsistent with section 106, which directs federal agencies, without limitation, to consider the "effect" of their undertakings on historic properties. More important, the Council has consistently interpreted section 106 and its rules in this manner. We therefore disagree with commenters who suggest that a facility must be located within the boundary of a historic property in order to have a visual adverse effect on that property.

69. We do revise the draft Nationwide Agreement to clarify that a facility may have a visual adverse effect on a historic property only if the historic property is within the APE. In addition, the presence within the APE of a historic property for which visual setting or visual elements are character-defining features of eligibility does not in itself mean that the undertaking will necessarily have an adverse effect on that property, but rather the undertaking must noticeably diminish the integrity of a qualifying characteristic of eligibility. Finally, we delete the examples of types of properties to which visual adverse effects may occur. We conclude that in the context of the clarified definition of visual adverse effect, the addition of examples of representative types of situations where there may be but is not necessarily a visual adverse effect would create an unnecessary risk of confusion.

70. We revise the Nationwide Agreement to require that aspects of identification, evaluation, and assessment be performed by experts who meet the Secretary of the Interior's

qualifications. The NHPA (16 U.S.C. 470b-4(a)) expressly recognizes the importance of using qualified experts in historic preservation reviews. It states that “[a]gency personnel or contractors responsible for historic resources shall meet qualification standards established by the Office of Personnel Management in consultation with the Secretary and appropriate professional societies of the disciplines involved.” We find it consistent with the objectives embodied in the NHPA that where a licensee or applicant, like a contractor, performs portions of the section 106 process that implicate professional expertise in the agency’s stead, it also should use Secretary-qualified experts.

71. The Secretary’s standards generally establish minimum levels of education and/or experience for qualified experts in history, architectural history, archeology, and related fields. The record before us details the errors in the section 106 process, leading to delays, that often occur where qualified experts are not used. This persuades us that the mandatory use of Secretary-qualified experts for identification and evaluation of properties within the APE for direct effects, and for assessment of effects on all historic properties, is critical to provide the level of reliability and trust necessary to support the streamlined procedures and standards established in the Nationwide Agreement. The standards in the Nationwide Agreement for these aspects of historic preservation review are not and by their nature cannot be so objective as to render the use of qualified experts unnecessary. Thus, requiring the use of Secretary-qualified experts for these purposes advances the objectives of section 214 of the NHPA.

72. With respect to the identification of properties within the APE for visual effects, by contrast, the Nationwide Agreement largely reduces the applicant’s obligations to reviewing defined sets of records in the SHPO’s/THPO’s files. We find that specialized training is not necessary to glean from these records whether the properties contained therein have been previously determined or considered eligible for inclusion in the National Register as specified in the Nationwide Agreement. Therefore, while we encourage applicants to use Secretary-qualified experts to identify historic properties within the APE for visual effects, we do not require the use of Secretary-qualified experts for this purpose.

73. Although we encourage and expect that applicants will use experts with relevant experience in the section 106 process and the specific geographic

area, we do not include such a requirement in the Nationwide Agreement. Unlike the Secretary’s standards for general professional qualifications, there are no widely accepted or legally mandated standards for section 106 experience or geographic expertise. Therefore, any requirement along these lines would be either potentially arbitrary or too general to enforce.

74. Section VII of the Nationwide Agreement establishes procedures for SHPO/THPO review of applicants’ determinations and for submission of certain matters to the Commission. Generally, the draft Nationwide Agreement provides that applicants shall submit their determinations to the SHPO/THPO using the prescribed Submission Packet, and that the SHPO/THPO has 30 days to review the submission. If the SHPO/THPO agrees with the applicant’s determination that no historic properties would be affected or does not respond to such a determination within 30 days, the section 106 process is complete and no Commission processing is necessary. If the SHPO/THPO does not respond within 30 days to an applicant’s determination of no adverse effect, the draft establishes a presumption that the SHPO/THPO concurs with the applicant’s determination, requires the applicant to forward the Submission Packet to the Commission, and permits the Commission to establish a time period within which the process will be considered complete unless the Commission notifies the applicant otherwise. Section VII also specifies procedures for resolution in cases of adverse effect, similar to those set forth in the Council’s rules. In addition, the section provides that instances in which the applicant and SHPO/THPO do not agree on an assessment may be submitted to the Commission.

75. We adopt section VII of the Nationwide Agreement substantially as written. With respect to Applicant determinations of no adverse effect, while we expect that SHPOs/THPOs will endeavor in good faith to review such determinations within the time frame specified in the Nationwide Agreement, we conclude that it is appropriate to require a submission to the Commission where the SHPO/THPO fails to do so. By their nature, determinations of no adverse effect ordinarily involve closer and more subjective judgments of whether an adverse effect may occur than do cases where no historic properties are affected. Indeed, this difference is reflected in the generally applicable procedures set forth in the Council’s

rules. Therefore, consistent with the positions taken by the Council and the Conference in negotiating the Nationwide Agreement, it is sound historic preservation policy that where a SHPO/THPO has not reviewed an applicant’s determination of no adverse effect, the federal agency should have the opportunity to do so. In order to avoid undue delay, we conclude that an applicant’s determination of no adverse effect will be final 15 days after electronic submission to the Commission, or 25 days after submission to the Commission by other means, unless the relevant Bureau notifies the applicant otherwise. We find that an additional 10 days is appropriate for hard copy submissions both because non-electronic submissions may take longer to reach the relevant personnel and in order to encourage electronic filing, which saves resources and reduces uncertainty for all parties.

76. We decline to adopt other time limits. While we will endeavor to resolve disputes between SHPOs/THPOs and applicants as quickly as possible, and to facilitate the timely resolution of adverse effects, we conclude that the variety of factual circumstances under which these situations may arise makes it inadvisable to adopt binding time frames. We also find that up to five additional days for SHPOs/THPOs to review comments that are filed toward the end of their review period is reasonable, given that such filings will necessitate additional review only of the new material. In addition, given the variety of factual situations that may arise, we find it appropriate to leave the parties flexibility to determine in each matter whether and when to consider means to achieve conditional findings of no adverse effect. We find no legal support or rationale for the suggestion that the Council must be given an opportunity to review determinations of no historic properties affected and no adverse effect under a programmatic agreement.

77. We do, however, revise and clarify the draft provision for the return and amendment of inadequate submissions. The intent of the requirement that resubmissions occur within 60 days is to permit SHPOs/THPOs to manage their dockets effectively by dismissing stale proceedings. We did not intend to suggest any limitation on the resubmission of a project as a new matter, and we amend the Nationwide Agreement to clarify this point. Additionally, we specify that the resubmission commences a new 30-day review period. While we are aware of

the potential for SHPOs/THPOs to evade the time limit in the Nationwide Agreement through unnecessary returns, we believe the requirement to describe deficiencies will limit this potential, and we conclude that it is unreasonable to permit applicants to benefit from a potentially shorter ultimate review period due to their own initial shortcomings. We intend to monitor any complaints about the application of this provision, and we will not hesitate to request an amendment or other appropriate measures from the other signatories if experience proves it necessary.

78. The draft Nationwide Agreement proposes forms (or templates) that Applicants would be required to use when submitting materials to SHPOs/THPOs. The forms are designed to simplify the submission of section 106 material, clarify for applicants and SHPOs/THPOs what is required, and provide uniformity in submissions nationwide. The draft Nationwide Agreement includes two forms: Form NT for proposed new towers, and Form CO for proposed collocations that are not excluded from section 106 review by either the Collocation Agreement or the Nationwide Agreement.

79. We revise and adopt Form NT and Form CO for submissions to SHPOs and THPOs. In an effort to simplify the forms and make them more user-friendly, we make a number of formal changes in response to the comments. Finally, in order to achieve the benefits of uniformity and simplicity for SHPOs/THPOs as well as applicants, we make use of the forms mandatory for all undertakings that are not excluded from section 106 review. We conclude that the negotiating process as well as the notice and comment in this rulemaking proceeding have provided interested parties with ample opportunities to influence their content and form.

80. We agree with most commenters that the Nationwide Agreement should apply prospectively. The Nationwide Agreement includes not only timelines and procedures, but also standards and forms that help ensure that the timelines and procedures will be reasonable for SHPOs/THPOs and will not compromise historic preservation. Because pending applications may not meet the Nationwide Agreement's standards, and in all likelihood will not use the prescribed forms, to apply it automatically to all pending cases would cause confusion and potentially impose unreasonable burdens on SHPOs/THPOs. We note, however, that should a party wish to take advantage of the provisions in the Nationwide Agreement, it may withdraw its filing

and resubmit under the Nationwide Agreement.

81. In the *NPRM*, we proposed amending § 1.1307(a)(4) of the Commission's rules, which directs that proposed undertakings be evaluated for their effects on historic properties, expressly to require that applicants follow the procedures set forth in the Council's rules, as modified and supplemented by the Nationwide Agreement and the Collocation Agreement. We adopt the change to § 1.1307(a)(4) as proposed. The rule will bring administrative certainty by making it clear that the provisions of the Nationwide Agreement are mandatory and binding upon applicants, and that non-compliance with its procedures will subject a party to potential enforcement action.

#### Final Regulatory Flexibility Analysis

82. As required by the Regulatory Flexibility Act of 1980, as amended ("RFA")<sup>3</sup> an Initial Regulatory Flexibility Analysis ("IRFA") was incorporated in the *Notice of Proposed Rulemaking* ("*NPRM*") for the Nationwide Programmatic Agreement Regarding the section 106 National Historic Preservation Act Review Process ("Nationwide Agreement").<sup>4</sup> The Federal Communications Commission ("Commission" or "FCC") sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. This present Final Regulatory Flexibility Analysis ("FRFA") conforms to the RFA.<sup>5</sup>

#### A. Need for, and Objectives of, Adopted Rules

83. Under Commission rules implementing the National Environmental Policy Act of 1969, as amended ("NEPA"),<sup>6</sup> licensees and other entities that build towers and other communications facilities ("Applicants") are required to assess such proposed facilities to determine whether they may significantly affect the environment under § 1.1307 of the Commission's rules.<sup>7</sup> For example, under § 1.1307(a)(4) of the Commission's rules, those Applicants

<sup>3</sup> See 5 U.S.C. 603. The RFA, see 5 U.S.C. 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>4</sup> See Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, WT Docket No. 03-128, *Notice of Proposed Rulemaking*, 18 FCC Rcd 11,664 (2003) ("*Notice*"); *Errata*, 18 FCC Rcd 12,654 (2003).

<sup>5</sup> See 5 U.S.C. 604.

<sup>6</sup> 42 U.S.C. 4321-4335.

<sup>7</sup> 47 CFR 1.1307.

currently are obliged to use the detailed procedures specified in the rules of the Advisory Council on Historic Preservation ("Council") (36 CFR 800.1 *et seq.*) to determine whether their proposed facilities may affect districts, sites, buildings, structures, or objects significant in American history, architecture, archeology, engineering or culture that are listed or eligible for listing in the National Register of Historic Places ("historic properties").

84. These Council procedures, when combined with the procedures employed by the various State Historic Preservation Officers ("SHPOs") and Tribal Historic Preservation Officers ("THPOs"), and when multiplied by the number of facilities being constructed, created an unnecessarily inefficient review process for Applicants. For example, in the late 1990's, coincident with the vast increase in tower constructions necessitated by the expanded deployment of wireless mobile services, unacceptable delays in completing traditional section 106 reviews under the Council's rules began to occur and continue to be experienced. The Commission therefore, began to explore alleviating such procedural inefficiencies by using the provision in the rules of the Council that allows for the creation of programmatic agreements between the Council and other agencies.<sup>8</sup> Generally speaking, such programmatic agreements are intended to craft specific procedures that more closely reflect the needs and practices of specific federal agencies and the industries they regulate.

85. Under § 800.14(b) of its rules, the Council, Federal agencies, such as the Commission, and the appropriate SHPO or National Conference of State Historic Preservation Officers ("NCSHPO") may negotiate a programmatic agreement to govern the implementation of a particular program when, for example, the effects on historic properties are multi-state or when nonfederal parties are delegated major responsibilities. Accordingly, to streamline and tailor the pre-construction review of towers and other communications facilities under section 106 of the National Historic Preservation Act ("NHPA")<sup>9</sup> and the related Commission and Council rules, the Council, the Commission, and NCSHPO negotiated a programmatic agreement under § 800.14(b) of the Council's rules. Some objectives of the Nationwide Agreement and the related rule revisions are to increase Applicants' awareness of applicable

<sup>8</sup> 36 CFR 600.14(b).

<sup>9</sup> 16 U.S.C. 470f.

laws and rules; to tailor and streamline the current procedures under the rules of the Council and the Commission; and to ensure compliance by Applicants with the Nationwide Agreement and related Commission and Council rules.

86. In this *Report and Order*, the Commission incorporates into its rules the recently agreed upon Nationwide Agreement, which, as discussed below, will streamline and tailor existing procedures under the Commission and Council rules for the review of certain Undertakings for communications facilities under section 106 of the National Historic Preservation Act of 1966 ("NHPA").<sup>10</sup>

87. The Nationwide Agreement clarifies and tailors the obligations<sup>11</sup> of the Applicants to assist the Commission in meeting its responsibilities under NEPA and the NHPA. First, to reduce regulatory burdens (e.g., identifying historic properties, preparing submission packets) on both large and small Applicants, the Nationwide Agreement, in Part III, excludes from routine review under section 106 of the NHPA certain Undertakings that are unlikely to affect historic properties.

88. Second, for those Undertakings that are not addressed by the Part III exclusions and that, therefore, remain subject to review, the draft Agreement specifies standards and procedures that Applicants must follow when completing the section 106 review. For example, for undertakings that remain subject to review, the Agreement sets forth guidelines for tribal participation;<sup>12</sup> procedures for ensuring compliance with the NHPA's public participation requirements;<sup>13</sup> methods for establishing the area of potential effects, identifying and evaluating historic sites, and assessing effects;<sup>14</sup> and procedures for submitting projects to, and for review by, the SHPO or THPO and the Commission.<sup>15</sup> The Nationwide Agreement also includes procedures to be followed when historic properties (e.g., archeological artifacts) are discovered during construction;<sup>16</sup> processes to be followed when facilities are constructed prior to completion of the section 106 process;<sup>17</sup> and provisions for the submission of public comments and objections.<sup>18</sup>

89. In addition, the Nationwide Agreement includes forms which Applicants must use for section 106 submissions to SHPOs, as well as to THPOs that have agreed to accept such forms for projects on tribal lands that are not subject to review by a SHPO.

90. The Commission also amends its rules in order to make clear that the procedures in the Nationwide Agreement will be binding on regulatees, who are subject to its terms, and that non-compliance with these procedures would subject a party to potential Commission enforcement action such as admonishment, forfeiture, or revocation of a license to operate, where appropriate. Specifically, the Commission amends § 1.1307(a)(4) to specify that, in order to ascertain whether a proposed action may affect properties that are listed or eligible for listing in the National Register,<sup>19</sup> an Applicant must follow the procedures set forth in the rules of the Council, as modified and supplemented by the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas and the Nationwide Agreement. Both agreements will be included as appendices in the Code of Federal Regulations.

#### *B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA*

91. The Commission considered the potential impact of its actions on smaller entities throughout the process of negotiating and drafting the Nationwide Agreement. One of its goals has been to make the environmental review process more efficient and standardized so that smaller entities can learn and complete the process more quickly.

92. We received one comment in response to the IRFA. The Eastern Band of Cherokee Indians ("EBCI") opposes any streamlining efforts, whether for large or small businesses, that could have the effect of reducing or eliminating government-to-government consultation between federal agencies and tribes. EBCI also believes that some language in the IRFA should have been

stronger to make clear that an Applicant's obligations under the Nationwide Agreement (e.g., notice, timely submission of necessary documents, and consultation) are mandatory.

93. With respect to the impact of the Nationwide Agreement on government-to-government consultation, we address the concerns of EBCI most specifically in section IV of the Nationwide Agreement. In particular, as explained in section III.C.2. of the *Report and Order*<sup>20</sup> we have taken considerable care in the Nationwide Agreement to fulfill the Commission's duty of government-to-government consultation in all cases that cannot be consensually resolved without such consultation. With regard to the obligations of Applicants to comply with the terms of the Nationwide Agreement, we have revised § 1.1307(a)(4) of our rules to ensure that regulatees understand that compliance with the Nationwide Agreement is mandated. However, the Commission notes that, wherever appropriate, any differential burdens favoring small entities have been preserved by the Nationwide Agreement. Furthermore, the Commission has made a concerted effort to reduce burdens on small entities. That being said, the Commission believes that all entities—large and small—will benefit from compliance with the Nationwide Agreement.

#### *C. Description and Estimate of the Number of Small Entities to Which the Adopted Rules Will Apply*

94. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by proposed rules.<sup>21</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>22</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>23</sup> A "small business concern" is one which:

<sup>10</sup> "Listed" properties are those properties for which an application for inclusion in the National Register of Historic Places ("National Register") has been approved. Under Section 800.16(l)(2) of the regulations of the Advisory Council on Historic Preservation, 36 CFR 600.16(l)(2), the term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Keeper of the National Register in accordance with applicable regulations of the Secretary of the Interior and all other properties that meet the National Register criteria. Information on the characteristics of properties that meet these criteria is available at the National Register Web site: <http://www.cr.nps.gov/nr>.

<sup>20</sup> *Nationwide Agreement Report and Order* at section III.C.2.

<sup>21</sup> 5 U.S.C. 604(a)(3).

<sup>22</sup> 5 U.S.C. 604(6).

<sup>23</sup> 5 U.S.C. 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. 632). Pursuant to 5 U.S.C. 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

<sup>10</sup> See 16 U.S.C. 470 *et seq.*

<sup>11</sup> See 47 CFR 1.1307(a)(4) (directing that proposed undertakings be evaluated for their effects on historic properties).

<sup>12</sup> Nationwide Agreement, Part IV.

<sup>13</sup> Nationwide Agreement, Part V.

<sup>14</sup> Nationwide Agreement, Part VI.

<sup>15</sup> Nationwide Agreement, Part VII.

<sup>16</sup> Nationwide Agreement, Part IX.

<sup>17</sup> Nationwide Agreement, Part X.

<sup>18</sup> Nationwide Agreement, Part XI.

(1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").<sup>24</sup>

95. The *Report and Order* and, accordingly, the Nationwide Agreement, will produce a rule change that will impose requirements on a large number of entities in determining whether facilities that they propose to construct may affect historic properties listed or eligible for listing on the National Register of Historic Places.<sup>25</sup> Due to the number and diversity of Applicants, including small entities that are Commission licensees as well as non-licensee tower companies, we now classify and quantify them in the remainder of this section.

#### Wireless Telecommunications

96. *Cellular Licensees.* The SBA has developed a small business size standard for small businesses in the category "Cellular and Other Wireless Telecommunications."<sup>26</sup> Under that SBA category, a business is small if it has 1,500 or fewer employees.<sup>27</sup> According to the Bureau of the Census, only twelve firms from a total of 1238 cellular and other wireless telecommunications firms operating during 1997 had 1,000 or more employees.<sup>28</sup> Therefore, even if all twelve of these firms were cellular telephone companies with more than 1,500 employees, nearly all cellular carriers were small businesses under the SBA's definition.

97. *220 MHz Radio Service—Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the definition under the SBA rules applicable to "Cellular and Other Wireless Telecommunication"

companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>29</sup> According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.<sup>30</sup> Of this total, 965 firms had 999 or fewer employees, and an additional 12 firms had 1,000 employees or more.<sup>31</sup> If this general ratio continues in 2004 in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard.

98. *220 MHz Radio Service—Phase II Licensees.* The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for defining "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>32</sup> This small business standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>33</sup> A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>34</sup> The SBA has approved these small size standards.<sup>35</sup> Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.<sup>36</sup> In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group ("EAG") Licenses, and 875 Economic Area ("EA") Licenses. Of the 908 licenses

auctioned, 683 were sold.<sup>37</sup> Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.<sup>38</sup>

99. *700 MHz Guard Band Licenses.* In the *700 MHz Guard Band Order*, we adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>39</sup> A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>40</sup> Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.<sup>41</sup> An auction of 52 Major Economic Area ("MEA") licenses commenced on September 6, 2000, and closed on September 21, 2000.<sup>42</sup> Of the 104 licenses auctioned, 96 licenses were sold to 9 bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.<sup>43</sup>

100. *Lower 700 MHz Band Licenses.* We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.<sup>44</sup> We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not

<sup>24</sup> 13 CFR 121.201.

<sup>25</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5, NAICS code 513322 (issued Oct. 2000).

<sup>26</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

<sup>27</sup> Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220–222 MHz Band by the Private Land Mobile Radio Service, FR Docket No. 89–552, *Third Report and Order*, 12 FCC Red 10943, 11088–70, paragraphs 291–295 (1997) (*220 MHz Third Report and Order*).

<sup>28</sup> *Id.* at paragraph 291.

<sup>29</sup> *Id.*

<sup>30</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Alda Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>31</sup> See generally "220 MHz Service Auction Closes," *Public Notice*, 14 FCC Red 605 (WTB 1998).

<sup>32</sup> "FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses after Final Payment is Made," *Public Notice*, 14 FCC Red 1085 (WTB 1999).

<sup>33</sup> "Phase II 220 MHz Service Spectrum Auction Closes," *Public Notice*, 14 FCC Red 11218 (WTB 1999).

<sup>34</sup> See Service Rules for the 746–764 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99–168, *Second Report and Order*, 15 FCC Red 5299–5344, paragraph 108 (2000).

<sup>35</sup> *Id.* at paragraphs 106–108.

<sup>36</sup> *Id.* at paragraphs 106–108.

<sup>37</sup> See generally, "220 MHz Service Auction Closes: Winning Bidders in the Auction of 908 Phase II 220 MHz Service Licenses," *Public Notice*, DA 98–2143 (rel. October 23, 1998).

<sup>38</sup> "700 MHz Guard Bands Auction Closes: Winning Bidders Announced," *Public Notice*, 18 FCC 4590 (WTB 2001).

<sup>39</sup> See Reallocation and Service Rules for the 698–746 MHz Spectrum Band (Television Channels 52–59), GN Docket No. 01–74, *Report and Order*, 17 FCC Red 1022 (2002).

<sup>24</sup> 15 U.S.C. 632.

<sup>25</sup> 47 CFR 1.1307(a)(4).

<sup>26</sup> 13 CFR 121.201, North American Industry Classification System (NAICS code 517212 (Changed from 513322 in October 2002).

<sup>27</sup> *Id.*

<sup>28</sup> U.S. Department of Commerce, U.S. Census Bureau, 1997 Economic Census, Information—Subject Series, Establishment and Firm Size, Table 5—Employment Size of Firms Subject to Federal Income Tax at 64, NAICS code 517212 (October 2000).

exceeding \$40 million for the preceding three years.<sup>45</sup> A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.<sup>46</sup> Additionally, the lower 700 MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area ("MSA/RSA") licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings) commenced on August 27, 2002, and closed on September 18, 2002.<sup>47</sup> Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.

101. *Upper 700 MHz Band Licenses.* The Commission released a Report and Order, authorizing service in the upper 700 MHz band.<sup>48</sup> No auction has been held yet.

102. *Private and Common Carrier Paging.* In the *Paging Third Report and Order*, we developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>49</sup> A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA has approved these size standards.<sup>50</sup> An auction of MEA licenses commenced on February

24, 2000, and closed on March 2, 2000.<sup>51</sup> Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won licenses. At present, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging site-specific licenses. According to the most recent *Trends in Telephone Service*, 471 carriers reported that they were engaged in the provision of either paging and messaging services or other mobile services.<sup>52</sup> Of those, the Commission estimates that 450 are small, under the SBA business size standard specifying that firms are small if they have 1,500 or fewer employees.<sup>53</sup>

103. *Broadband Personal Communications Service.* The Broadband Personal Communications Service ("PCS") spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>54</sup> For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>55</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>56</sup> No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the

Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40% of the 1,479 licenses for Blocks D, E, and F.<sup>57</sup> On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders. Based on this information, we conclude that the number of small broadband PCS licensees includes the 90 winning C Block bidders and the 93 qualifying bidders in the D, E, and F blocks plus the 113 winning bidders in the re-auction, for a total of 296 small entity broadband PCS providers as defined by the SBA small business standards and the Commission's auction rules.

104. *Narrowband PCS.* To date, two auctions of narrowband personal communications services licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less.<sup>58</sup> Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*. A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.<sup>59</sup> A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.<sup>60</sup> The SBA has approved these small business size standards.<sup>61</sup> There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future actions. However, four of the 16 winning bidders in the two

<sup>45</sup> Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, WT Docket No. 96-18, PR Docket No. 93-253, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Red 10030, 10085, paragraph 98 (1999).

<sup>46</sup> *Trends in Telephone Service* at Table 5.3 (rel. Aug. 2001).

<sup>47</sup> *Id.* The SBA size standard is that of Paging, 13 CFR 121.201, NAICS code 517211.

<sup>48</sup> See Amendment of parts 20 and 24 of the Commission's Rules—Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, WT Docket No. 96-59, *Report and Order*, 11 FCC Red 7824, paragraph 57-60 (1998); see also 47 CFR 24.720(b).

<sup>49</sup> See Amendment of parts 20 and 24 of the Commission's Rules—Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Red 7824, paragraph 60 (1998).

<sup>50</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Small Business Administration, dated December 2, 1998.

<sup>51</sup> FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. January 14, 1997).

<sup>52</sup> See Amendment of the Commission's Rules to Establish New Personal Communications Services, *Narrowband PCS, Second Report and Order and Second Further Notice of Proposed Rulemaking*, 15 FCC Red 10456, 10476, paragraph 40 (May 18, 2000).

<sup>53</sup> *Id.* at 15 FCC Red 10476, paragraph 40.

<sup>54</sup> *Id.* at 15 FCC Red 10476, paragraph 40.

<sup>55</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (Dec. 2, 1998).

<sup>45</sup> *Id.* at paragraph 172.

<sup>46</sup> *Id.* at paragraph 172.

<sup>47</sup> See "Lower 700 MHz Band Auction Closes," 17 FCC Red 17272 (2002).

<sup>48</sup> Service Rules for the 746-784 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-188, *Second Memorandum Opinion and Order*, 16 FCC Red 1239 (2001).

<sup>49</sup> *220 MHz Third Report and Order*, 12 FCC Red at 11066-70, paragraphs 291-295, 62 FR 16004 at paragraphs 291-295 (1997).

<sup>50</sup> See Letter from Aida Alvarez, Administrator, Small Business Administration to Thomas Sugrue, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (June 4, 1999).

previous narrowband PCS auctions were small businesses, as that term was defined under the Commission's Rules. The Commission assumes, for purposes of this analysis, that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

105. *900 MHz Specialized Mobile Radio ("SMR")*. In September of 1995, in a rulemaking adopting competitive bidding rules specifically for the 900 MHz SMR service, the Commission established a two-tiered bidding credit scheme for the 900 MHz SMR auction in which we defined two categories of small businesses: (1) An entity that, together with affiliates, has average gross revenues for the three preceding years of \$3 million or less; and (2) an entity that, together with affiliates, has average gross revenues for the three preceding years of \$15 million or less.<sup>62</sup> The SBA has approved these size standards.<sup>63</sup> In Auction Seven, which closed on April 15, 1996, sixty winning bidders for geographic area licenses in the 900 MHz SMR band qualified as small businesses under the \$15 million size standard.

106. *800 MHz SMR*. In the 800 MHz Second Report and Order, we adopted a small business size standard for defining "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>64</sup> This small business standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>65</sup> A "very small business" is defined as an entity that, together with its affiliates and controlling principals,

has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>66</sup> The SBA has approved these small size standards.<sup>67</sup>

107. The auction of the 525 800 MHz SMR geographic area licenses for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Three (3) winning bidders for geographic area licenses for the upper 200 channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard, and seven (7) qualified as very small businesses. Next, the auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven (11) out of a total of 14 winning bidders for geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. Finally, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold in an auction completed on December 5, 2000. Of the 22 winning bidders, 19 claimed "small business" status. Thus, 40 winning bidders for geographic licenses in the 800 MHz SMR band qualified as small businesses.

108. In addition, there are numerous incumbent site-by-site SMR licenses and licensees with extended implementation authorizations on the 800 MHz bands. We do not know how many firms provide 800 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities as defined for the 800 MHz SMR service.

109. *Private Land Mobile Radio*. Private Land Mobile Radio ("PLMR") systems serve an essential role in a range of industrial, business, land transportation, and public safety

activities. These radios are used by companies of all sizes operating in all U.S. business categories. The SBA has not developed a definition of small entity specifically applicable to PLMR licensees due to the vast array of PLMR users. For purposes of this FRFA, we will use the SBA's definition applicable to Cellular and Other Wireless Telecommunications—that is, an entity with no more than 1,500 persons.<sup>68</sup>

110. The Commission is unable at this time to estimate the number of small businesses which could be impacted by the rules. The Commission's 1994 Annual Report on PLMRs<sup>69</sup> indicates that at the end of fiscal year 1994 there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the revised rules in this context could potentially impact every small business in the United States.

111. *Fixed Microwave Services*. Microwave services include common carrier,<sup>70</sup> private-operational fixed,<sup>71</sup> and broadcast auxiliary radio services.<sup>72</sup> At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. For purposes of this FRFA, we will use the SBA's definition applicable to Cellular and Other Wireless Telecommunications—that is, an entity with no more than 1,500 persons.<sup>73</sup> We estimate that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small

<sup>68</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 517212 (changed from 513322 in October 2002).

<sup>69</sup> Federal Communications Commission, 60th Annual Report, Fiscal Year 1994, at paragraph 116.

<sup>70</sup> 47 CFR part 101 (formerly, Part 21 of the Commission's Rules).

<sup>71</sup> Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See 47 CFR parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

<sup>72</sup> Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. See 47 CFR part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

<sup>73</sup> 13 CDR 121.201, North American Industry Classification System (NAICS) code 517212 (changed from 513322 in October 2002).

<sup>62</sup> Amendment of parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, PR Docket No. 89-553, *Second Order on Reconsideration and Seventh Report and Order*, 11 FCC Rcd 2639, 2645-46 (1995) (*900 MHz SMR Rulemaking*); see also 47 CFR 90.614(b).

<sup>63</sup> See Letter to Michele C. Farquhar, Acting Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Philip Lader, Administrator, Small Business Administration (July 24, 1996).

<sup>64</sup> See Amendment of part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Second Report and Order*, FCC 97-223, PR Docket No. 93-144, 12 FCC Rcd 19079, paragraph 141 (1997) (*800 MHz Second Report and Order*); see also 47 CFR 90.912(b).

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> See Letter from Aida Alvarez, Administration, Small Business Administration to Daniel B. Phytton, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Oct. 27, 1997) (Upper 200 channels). See Letter from Aida Alvarez, Administrator, Small Business Administration to Thomas Sugrue, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (Aug. 10, 1999) (applying the size standards approved in SBA's Oct. 27, 1997 letter to the 800 MHz MSR, Lower 60 and 150 General channels).

entities under the SBA definition for radiotelephone (wireless) companies.

112. *Public Safety Radio Services.* Public Safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services.<sup>74</sup> There are a total of approximately 127,540 licensees within these services. Governmental entities<sup>75</sup> as well as private businesses comprise the licensees for these services. All governmental entities with populations of less than 50,000 fall within the definition of a small entity.<sup>76</sup>

113. *Offshore Radiotelephone Service.* This service operates on several UHF TV broadcast channels that are not used for TV broadcasting in the coastal areas of states bordering the Gulf of Mexico.<sup>77</sup> There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.<sup>78</sup> Under that SBA small business size standard, a business is

small if it has 1,500 or fewer employees.<sup>79</sup>

114. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services ("WCS") auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these definitions.<sup>80</sup> The FCC auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as very small business entities, and one that qualified as a small business entity. We conclude that the number of geographic area WCS licensees affected includes these eight entities.

115. *39 GHz Service.* The Commission defined "small entity" for 39 GHz licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>81</sup> An additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These regulations defining "small entity" in the context of 39 GHz auctions have been approved by the SBA.<sup>82</sup> The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and policies adopted herein.

116. *Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Instructional Television Fixed Service.* Multichannel Multipoint Distribution Service ("MMDS") systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service

("ITFS").<sup>83</sup> In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.<sup>84</sup> The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas ("BTA"). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating \$12.5 million or less in annual receipts.<sup>85</sup> According to Census Bureau data for 1997, there were a total of 1,311 firms in this category total that had operated for the entire year.<sup>86</sup> Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.<sup>87</sup> Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

117. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service ("LMDS") is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.<sup>88</sup> The auction of

<sup>83</sup> Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593, paragraph 7 (1995).

<sup>84</sup> 47 CFR 21.981(b)(1).

<sup>85</sup> 13 CFR 121.201, NAICS code 517510 (changed from 513220 in October 2002).

<sup>86</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 513220 (issued October 2000).

<sup>87</sup> In addition, the term "small entity" within the SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

<sup>88</sup> See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the

<sup>74</sup> With the exception of the special emergency service, these services are governed by subpart B of part 90 of the Commission's Rules, 47 CFR 90.15 through 90.27. The police service includes approximately 27,000 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code) and teletype and facsimile (printed material). The fire radio service includes approximately 23,000 licensees comprised of private volunteer or professional fire companies as well as units under governmental control. The local government service is presently comprised of approximately 41,000 licensees that are state, county, or municipal entities that use the radio for official purposes not covered by other public safety services. There are approximately 7,000 licensees within the forestry service which is comprised of licensees from state departments of conservation and private forest organizations who set up communications networks among fire lookout towers and ground crews. The approximately 9,000 state and local governments that are licensed to highway maintenance service provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. The approximately 1,000 licensees in the Emergency Medical Radio Service (EMRS) use the 39 channels allocated to this service for emergency medical service communications related to the delivery of emergency medical treatment. 47 CFR 90.15 through 90.27. The approximately 20,000 licensees in the special emergency service include medical services, rescue organizations, veterinarians, handicapped persons, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities. 47 CFR 90.33 through 90.55.

<sup>75</sup> 47 CFR 1.1162.

<sup>76</sup> 5 U.S.C. 601(5).

<sup>77</sup> This service is governed by subpart I of part 22 of the Commission's Rules. See 47 CFR 22.1001 through 22.1037.

<sup>78</sup> 13 CFR 121.201, NAICS code 513322 (changed to 517212 in October 2002).

<sup>79</sup> Id.

<sup>80</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division from A. Alvarez, Administrator, SBA (December 2, 1998).

<sup>81</sup> See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Band, Report and Order, 12 FCC Rcd 18800 (1997).

<sup>82</sup> See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Alida Alvarez, Administrator, SBA (Feb. 4, 1998).

the 1,030 Local Multipoint Distribution Service licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>89</sup> An additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>90</sup> These regulations defining "small entity" in the context of LMDS auctions have been approved by the SBA.<sup>91</sup> There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 small business winning bidders. Based on this information, we conclude that the number of small LMDS licenses includes the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

**118. 218–219 MHz Service.** The first auction of 218–219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Areas ("MSA"). Of the 594 licenses, 557 were won by 170 entities qualifying as a small business. For that auction, we defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.<sup>92</sup> In the *218–219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in

such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.<sup>93</sup> A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.<sup>94</sup> We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218–219 MHz spectrum. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this FRFA that in future auctions, all of the licenses may be awarded to small businesses.

**119. 24 GHz—Incumbent Licensees.** This rule change may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.<sup>95</sup> According to Census Bureau data for 1997, there were 977 firms in this category that operated for the entire year.<sup>96</sup> Of this total, 965 firms had 999 or fewer employees, and an additional 12 firms had 1,000 employees or more.<sup>97</sup> Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent<sup>98</sup> and TRW, Inc. It is our understanding that Teligent and its related companies have fewer than 1,500 employees, though this may change in the future. TRW is not a small

entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

**120. 24 GHz—Future Licensees.** With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.<sup>99</sup> "Very small business" in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.<sup>100</sup> The SBA has approved these small business size standards.<sup>101</sup> These size standards will apply to the future auction, if held.

**121. Location and Monitoring Service ("LMS").** Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed \$15 million.<sup>102</sup> A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed \$3 million.<sup>103</sup> These definitions have been approved by the SBA.<sup>104</sup> An auction for LMS licenses commenced on February 23, 1999 and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We conclude that the number of LMS licensees affected by this Report and Order includes these four entities. We cannot accurately predict the number of remaining licenses that could be awarded to small

29.5–30.0 GHz Frequency Band, and to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92–297, Second Report and Order, 12 FCC Rcd 12545 (1997).

<sup>89</sup> See Local Multipoint Distribution Service, Second Report and Order, 62 Fed. Reg. 23146 (April 29, 1997).

<sup>90</sup> *Id.*

<sup>91</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau (FCC) from A. Alvarez, Administrator, SBA (January 6, 1998).

<sup>92</sup> Implementation of Section 309(j) of the Communications Act—Competitive Bidding, PP WT Docket No. 93–253, Fourth Report and Order, 59 Fed. Reg. 24947 (May 13, 1994); Amendment of part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218–219 MHz Service, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd. 1497, 1593 (Sept. 10, 1999).

<sup>93</sup> Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218–219 MHz Service, WT Docket No. 98–169, Report and Order and Memorandum Opinion and Order, 64 Fed. Reg. 59656 (November 3, 1999).

<sup>94</sup> *Id.*

<sup>95</sup> 13 CFR 121.201, NAICS code 517212 (changed from 513322 in October 2002).

<sup>96</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5, NAICS code 513322 (issued Oct. 2000).

<sup>97</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

<sup>98</sup> Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 18 GHz band whose license has been modified to require relocation to the 24 GHz band.

<sup>99</sup> Amendments to parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99–327, Report and Order, 15 FCC Rcd 16934, 16987 (2000); see also 47 CFR 101.538(a)(2).

<sup>100</sup> Amendments to parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99–327, Report and Order, 15 FCC Rcd at 16987; see also 47 CFR 101.536(a)(1).

<sup>101</sup> See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

<sup>102</sup> Amendment of part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, Second Report and Order, 13 FCC Rcd 15182 ¶ 20 (1998); see also 47 CFR 90.1103.

<sup>103</sup> *Id.*

<sup>104</sup> See Letter to Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration (Feb. 22, 1999).

entities in future LMS auctions. Media Services (Broadcast & Cable)

122. *Commercial Television Services.* The SBA defines a television broadcasting station that has no more than \$12.0 million in annual receipts as a small business.<sup>105</sup> Television broadcasting stations consist of establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services.<sup>106</sup> Included in this industry are commercial, religious, educational, and other television stations.<sup>107</sup> Also included are establishments primarily engaged in television broadcasting and which produce taped television program materials.<sup>108</sup>

123. There were 1,695 full-service television stations operating in the United States as of December 2001.<sup>109</sup> According to Census Bureau data for 1997, there were 906 Television Broadcasting firms, total, that operated for the entire year.<sup>110</sup> Of this total, 734 firms had annual receipts of \$9,999,999.00 or less and an additional 71 had receipts of \$10 million to \$24,999,999.00.<sup>111</sup> Thus, under this standard, the majority of firms can be considered small.

124. *Commercial Radio Services.* The SBA defines a radio broadcasting station that has no more than \$6 million in annual receipts as a small business.<sup>112</sup> A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.<sup>113</sup> Included in this industry are commercial, religious, educational, and other radio stations.<sup>114</sup> Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included.<sup>115</sup> According to

Census Bureau data for 1997, there were 4,476 Radio Stations (firms), total, that operated for the entire year.<sup>116</sup> Of this total 4,265 had annual receipts of \$4,999,999.00 or less, and an additional 103 firms had receipts of \$5 million to \$9,999,999.00.<sup>117</sup> Thus, under this standard, the great majority of firms can be considered small.

125. *Cable Systems.* The Commission has developed, with SBA's approval, its own definition of small cable system operators. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.<sup>118</sup> Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable companies at the end of 1995.<sup>119</sup> Since then, some of those companies may have grown to serve more than 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators that may be affected by the rules adopted herein.

126. The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate less than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenue in the aggregate exceeds \$250,000,000."<sup>120</sup> The Commission has determined that there are 67,700,000 subscribers in the United States.<sup>121</sup> Therefore, we found that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed \$250 million in the aggregate.<sup>122</sup> Based on available data, we find that the number of cable operators serving 677,000 subscribers or

less totals approximately 1,450.<sup>123</sup> Since we do not request nor collect information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

127. *Auxiliary, Special Broadcast and Other Program Distribution Services.* This service involves a variety of transmitters, generally used to relay broadcast programming to the public (through translator and booster stations) or within the program distribution chain (from a remote news gathering unit back to the station). The Commission has not developed a definition of small entities applicable to broadcast auxiliary licensees. The applicable definitions of small entities are those, noted previously, under the SBA rules applicable to radio broadcasting stations and television broadcasting stations. The SBA defines a television broadcasting station that has no more than \$12.0 million in annual receipts as a small business,<sup>124</sup> and it defines a radio broadcasting station that has no more than \$6 million in annual receipts as a small business.<sup>125</sup>

128. The Commission estimates that there are approximately 3,600 translators and boosters. The Commission does not collect financial information on any broadcast facility, and the Department of Commerce does not collect financial information on these auxiliary broadcast facilities. We believe that most, if not all, of these auxiliary facilities could be classified as small businesses by themselves. We also recognize that most commercial translators and boosters are owned by a parent station which, in some cases, would be covered by the revenue definition of small business entity discussed above. These stations would likely have annual revenues that exceed the SBA maximum to be designated as a small business (either \$6 million for a radio station or \$12 million for a TV station). Furthermore, they do not meet the Small Business Act's definition of a "small business concern" because they are not independently owned and operated.

129. *Satellite Services.* The Commission has not developed a small

<sup>105</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 515120.

<sup>106</sup> Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities, Establishment and Firm Size, Series UC92-S-1, Appendix A-9 (1995).

<sup>107</sup> *Id.*, see Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, at 13 CFR 121.201, North American Industry Classification System (NAICS) code 515120.

<sup>108</sup> 1992 Census Series UC92-S-1, at Appendix A-9.

<sup>109</sup> FCC News Release, Broadcast Station Totals as of December 31, 2001 (released May 21, 2002).

<sup>110</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 515120.

<sup>111</sup> *Id.* The census data do not provide a more precise estimate.

<sup>112</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 515120.

<sup>113</sup> 1992 Census, Series UC92-S-1, at Appendix A-9.

<sup>114</sup> *Id.*

<sup>115</sup> *Id.*

<sup>116</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 515112.

<sup>117</sup> *Id.* The census data do not provide a more precise estimate.

<sup>118</sup> 47 CFR 67.901(3). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation, Sixth Report and Order and Eleventh Order on Reconsideration*, 10 FCC Rcd 6393 (1995), 13 CFR 121.201, North American Industry Classification System (NAICS) code 515210.

<sup>119</sup> Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

<sup>120</sup> 47 U.S.C. 543(m)(2).

<sup>121</sup> FCC Announces New Subscriber Count for the Definition of Small Cable Operator, *Public Notice*, DA 01-158 (January 24, 2001).

<sup>122</sup> 47 CFR 76.1403(b).

<sup>123</sup> Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1995 (based on figures for Dec. 30, 1995).

<sup>124</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 515120.

<sup>125</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 515112.

business size standard applicable to licensees in the international services. However, the SBA has developed a small business size standard for Satellite Telecommunications, which consists of all such firms having \$12.5 million or less in annual receipts.<sup>126</sup> According to Census Bureau data for 1997, in this category there was a total of 324 firms that operated for the entire year.<sup>127</sup> Of this total, 273 firms had annual receipts of under \$10 million, and an additional twenty-four firms had receipts of \$10 million to \$24,999,999.<sup>128</sup> Thus, under this size standard, the majority of firms can be considered small.

130. *International Broadcast Stations.* Commission records show that there are approximately 19 international high frequency broadcast station authorizations. We do not request nor collect annual revenue information, and are unable to estimate the number of international high frequency broadcast stations that would constitute small businesses under the SBA definition.

131. *Fixed Satellite Transmit/Receive Earth Stations.* There are approximately 4,303 earth station authorizations, a portion of which are Fixed Satellite Transmit/Receive Earth Stations. We do not request nor collect annual revenue information, and are unable to estimate the number of the earth stations that would constitute small businesses under the SBA definition.

132. *Fixed Satellite Very Small Aperture Terminal ("VSAT") Systems.* These stations operate on a primary basis, and frequency coordination with terrestrial microwave systems is not required. Thus, a single "blanket" application may be filed for a specified number of small antennas and one or more hub stations. There are 485 current VSAT System authorizations. We do not request nor collect annual revenue information, and are unable to estimate the number of VSAT systems that would constitute small businesses under the SBA definition.

133. *Mobile Satellite Stations.* There are 21 licensees. On February 10, 2003, the Commission released a *Report and Order and Notice of Proposed Rulemaking* allowing licensees in the Mobile Satellite Services to use their spectrum for Ancillary Terrestrial Communications ("ATC").<sup>129</sup> Licensees

may construct towers to provide ATC service. We do not request nor collect annual revenue information, and are unable to estimate the number of mobile satellite earth stations that would constitute small businesses under the SBA definition.

134. *Radio Determination Satellite Earth Stations.* There are four licensees. We do not request nor collect annual revenue information, and are unable to estimate the number of radio determination satellite earth stations that would constitute small businesses under the SBA definition.

135. *Digital Audio Radio Services ("DARS").* Commission records show that there are 2 Digital Audio Radio Services authorizations. We do not request nor collect annual revenue information, and, therefore, we cannot estimate the number of small businesses under the SBA definition.

136. *Non-Licensee Tower Owners.* The Commission's rules require that any entity proposing to construct an antenna structure over 200 feet or within the glide slope of an airport must register the antenna structure with the Commission on FCC Form 854.<sup>130</sup> For this and other reasons, non-licensee tower owners may be subject to the requirements adopted in the *Report and Order* and the Nationwide Agreement. As of August 2004, approximately 96,778 towers were included in the Antenna Structure Registration database. This includes both towers registered to licensees and towers registered to non-licensee tower owners. The Commission does not keep information from which we can easily determine how many of these towers are registered to non-licensees or how many non-licensees have registered towers.<sup>131</sup> Moreover, the SBA has not developed a size standard for small businesses in the category "Tower Owners." Therefore, we are unable to estimate the number of non-licensee tower owners that are small entities. We assume, however, that nearly all non-licensee tower companies are small businesses under the SBA's definition for cellular and other wireless telecommunications services.<sup>132</sup>

#### *D. Description of Reporting, Recordkeeping, and Other Compliance Requirements*

137. The Nationwide Agreement includes several compliance requirements, including recordkeeping and reporting requirements, applicable to regulatees. Under the Commission's rules, as they existed before the adoption of the *Report and Order*, applicants were required to determine whether their construction of "facilities may affect districts, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or eligible for listing, in the National Register of Historic Places," consistent with the rules of the Council.<sup>133</sup> The Nationwide Agreement modifies and more clearly specifies the means by which applicants should make that determination.

138. Specific requirements that the Nationwide Agreement imposes on Applicants include making them determine whether an exclusion applies to their proposed construction project, thereby obviating the need to submit section 106 materials to the SHPO/THPO.<sup>134</sup> Accordingly, applicants should maintain records to verify the applicability of any exclusion should questions arise about the project after construction has started or has been completed.<sup>135</sup>

139. The Nationwide Agreement also requires that applicants follow specific steps to identify and initiate contact with Indian tribes and Native Hawaiian Organizations that may attach religious and cultural significance to potentially affected historic properties. These steps ensure that tribes and NHOs will be contacted in a respectful manner that conforms to their reasonable preferences and that offers them a full opportunity to participate in the process. These steps also ensure that Indian tribes' requests for government-to-government consultation, as well as cases of tribal or NHO disagreement or non-response, will be referred to the Commission. They also provide for confidentiality of private or sensitive information.<sup>136</sup>

140. The Nationwide Agreement establishes required procedures for seeking local government and public participation; for considering public comments before forwarding them to the SHPO/THPO; and for identifying

<sup>126</sup> 13 CFR 121.201, NAICS code 517410 (changed from 513340 in October 2002).

<sup>127</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 513340 (Issued October 2000).

<sup>128</sup> *Id.*

<sup>129</sup> In the Matter of Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the

1.6/2.4 GHz Bands, *Report and Order and Notice of Proposed Rulemaking*, 18 FCC Rcd. 11,030 (2003).

<sup>130</sup> 47 CFR 17.4(a), 17.7(a).

<sup>131</sup> We note, however, that approximately 13,000 towers are registered to 10 cellular carriers with 1,000 or more employees.

<sup>132</sup> 13 CFR 121.201, North American Industry Classification System (NAICS) code 517212. Under this category, a business is small if it has 1,500 or fewer employees.

<sup>133</sup> See 47 CFR 1.1307(e)(4) and Note.

<sup>134</sup> Nationwide Agreement, Part III. As will be discussed below, the addition of exclusions, on balance, greatly reduces the overall burdens on the Applicant.

<sup>135</sup> *Id.*

<sup>136</sup> *Id.*, Part IV.

consulting parties.<sup>137</sup> In addition, the Nationwide Agreement establishes standards for applicants to apply in defining the area of potential effects ("APE") for both direct and visual effects; in identifying and evaluating the significance of Historic Properties within the APE; and in assessing the effects of the Undertaking on Historic Properties.<sup>138</sup> Once identification, evaluation, and assessment are complete, the Nationwide Agreement requires Applicants to provide the SHPO/THPO and consulting parties with a Submission Packet that conforms to a standardized set of instructions, which require specific information about the Applicant, the project, and its review.<sup>139</sup>

141. The Nationwide Agreement also establishes procedures for Applicants to follow after receiving certain responses from the SHPO/THPO. For example, if the SHPO/THPO disagrees with the Applicant's finding of "no Historic Properties affected," the Applicant is to engage in further discussions with the SHPO/THPO to resolve any disagreement, and, if that effort fails, the Applicant may submit the matter to the Commission for its effect determination. Additionally, the Nationwide Agreement provides procedures for developing Memoranda of Agreement to mitigate adverse effects (e.g., painting a facility a specific color to reduce its visibility).<sup>140</sup> Finally, the Nationwide Agreement prescribes procedures for Applicants to follow in the event of inadvertent or post-review discoveries (e.g., buried properties of archeological significance),<sup>141</sup> and delineates potential measures that the Commission may require Applicants to take in response to a complaint alleging construction prior to compliance with section 106 (e.g., providing the Applicant with a copy of the complaint and requesting a written response within a reasonable time).<sup>142</sup>

#### *E. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered*

142. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables

that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>143</sup>

143. As noted in section D, *supra*, under the Commission's rules, as they existed before the adoption of the *Report and Order*, applicants were required to perform historic preservation review in accordance with the rules of the Commission and the Council.<sup>144</sup> The Commission considered the potential impact of its rules on smaller entities throughout the process of negotiating and drafting the Nationwide Agreement. One of the Commission's goals has been to make its environmental review process more efficient and standardized so that entities with smaller staffs can learn and complete the process more quickly. The *NPRM* sought comment on the draft Nationwide Agreement, generally, including issues related to its potential economic impact on small entities, but we received no comments on this topic. Despite having received no comments with reference to issues that might affect small entities, the Commission continues to assess various options to relieve potential burdens on small entities.

144. The alternative of exempting small entities from the requirements proposed in the *NPRM* and draft Nationwide Agreement was not possible. The NHPA requires that *all* Federal Undertakings be evaluated for their potential effects on districts, sites, buildings, structures or objects, which are significant in American history, architecture, archeology, engineering or culture, and which are listed, or are eligible for listing, in the National Register of Historic Places. Neither the NHPA nor the Council's rules contemplates any exemption from review depending on the size or resources of the non-federal entity which initiates the undertaking. The direct impact of the requirements proposed in the draft Nationwide Agreement will be the same on all entities. Therefore, no special or extra burden will be placed on small entities.

145. Under the Nationwide Agreement burdens on small entities will be reduced in significant ways. First, the exclusions listed in Part III provide regulatory relief for those who

intend to construct facilities that fall within the criteria listed therein (e.g., certain types of facilities to be located within 50 feet of the outer boundary of certain types of rights-of-way).<sup>145</sup> The availability of exclusions for certain categories of projects, whereby those that qualify are exempted from section 106 review, offers a great reduction in burdens for some Applicants including many smaller entities. While a determination must be made as to whether the exclusion applies, in those instances in which the project is excluded from section 106 review, only record-keeping is required, thereby relieving the Applicant of any responsibility for identifying and assessing possible adverse effects on listed or eligible properties.

146. Additionally, the Commission recognizes that smaller entities do not have the economies of scale needed to sustain large environmental compliance staffs. Consequently, smaller entities will be unlikely to maintain in-house expertise on all facets of the review process needed for compliance with the rules of the Commission and the Council. Therefore, such firms will benefit more, relative to large entities, from the Part III exclusions. The exclusions allow smaller entities to forgo the costs associated with conducting the section 106 analysis of properties within the relevant Area of Potential Effects. Even though many entities contract out much section 106 work to historic preservation specialists, there are per project costs associated with the process of hiring a contractor, overseeing its work, and submitting the materials produced by the contractor to the SHPO that decrease as an entity is able to do this routinely and move up its learning curve by building more facilities. Similarly, the per unit cost for large entities declines as the cost of an in-house environmental compliance staff is spread over a greater number of units constructed. Furthermore, the cost charged by a historic preservation specialist to prepare a section 106 report will be determined by the complexity of the project, not by the size of the entity contracting for the historic preservation analysis. Consequently, in some instances, smaller entities will pay more for such work as a proportion of revenues than will the large firms. Smaller entities may also be injured proportionally more by delays in the section 106 process since more of their cash flow is tied up in each telecommunications facility being built. Thus, in assessing the general impact of section 106 exclusions the Commission

<sup>137</sup> *Id.*, Part V.

<sup>138</sup> *Id.*, Part VI.

<sup>139</sup> *Id.*, Part VII.A.1.

<sup>140</sup> *Id.*, sections VII.B.3, VII.C.2, VII.C.3, VII.C.6, and VII.D.

<sup>141</sup> *Id.*, Part IX.

<sup>142</sup> *Id.*, section X.C.

<sup>143</sup> 5 U.S.C. 603(c)(1)-(4).

<sup>144</sup> See 47 CFR 1.1307(a)(4) and Note.

<sup>145</sup> Nationwide Agreement, Part III.

believes that the Nationwide Agreement's Part III exclusions will reduce costs for small entities to a proportionally greater extent than they will for large entities.

147. Furthermore, the availability of the Part III exclusions will likely encourage the wireless infrastructure industry to direct its projects so that the projects fall within the scope of the Part III exclusions. Consequently, smaller entities may reap a competitive advantage precisely because they may be able to avoid having large in-house compliance staffs and will be able to price their services more cheaply.

148. Burdens on small entities will also be reduced because the Commission and Council have clarified the steps that need to be taken to perform the requisite section 106 review. For example, in those instances in which a Part III exclusion does not apply, Applicants will now submit a standardized submission packet to the SHPO/THPO that initiates the section 106 review. Previously, the absence of a standardized submission packet made it difficult for small entities that were unfamiliar with the process to quickly learn what was required for a proper submission. However, the submission packet's standardized instructions, either for new towers or collocations, will facilitate preparation of high-quality submissions on the first effort by firms that may not be large enough to employ an environmental or historic preservation staff. The standards set forth in Part VI will add predictability to the process,<sup>146</sup> and the procedures and the time frames for review in Part VII will reduce the likelihood of either uncertainty or suspension of projects.<sup>147</sup> Thus, the new submission packets will prevent the need for costly and time-consuming delays and resubmissions which may be especially burdensome for small entities who, with fewer ongoing projects generating revenue, cannot afford long delays in the review process.

149. We note that Applicants, whether large or small entities, routinely retain consultants to perform many of the steps associated with section 106 reviews. Consistent with the objectives of the NHPA, the Nationwide Agreement requires the use of professionals who meet the Secretary of the Interior's standards for tasks that implicate professional expertise.<sup>148</sup> We

anticipate that the use of consultants to provide this expertise will continue to be prevalent under the Nationwide Agreement. Applicants will typically comply with the professional qualification requirements in the Nationwide Agreement by using consultants to perform specialized tasks due to their relative cost effectiveness and efficiency in completing section 106 reviews. We believe that the rules adopted herein will not impose any requirements on small entities that would make the use of consultants more burdensome than is currently the case. Indeed, by clarifying that certain tasks in the section 106 process do not require professional expertise, the Nationwide Agreement may, as described above, relieve burdens in this area to a relatively greater extent for small entities than for large.

150. In some instances, the Nationwide Agreement may impose specific burdens on all Applicants, including small entities. For example, standardized submission packets will now be submitted to the SHPO or THPO. However, we believe these burdens are the minimum necessary to accomplish the Nationwide Agreement's purpose. Thus, the Commission, after discussion with the members of the Telecommunications Working Group and after reviewing the record, believes that the forms include the minimum information necessary for appropriate review by a SHPO, THPO, or the Commission. Similarly, the provisions for tribal and public participation (Parts IV and V) are intended to embody the least burdensome procedures that will afford these parties a complete and legally sufficient opportunity to participate in the process.<sup>149</sup>

151. The new document submission and historic preservation review processes which constitute a core feature in the Nationwide Agreement are set forth in Part VII. These procedures have also been developed with the goal of reducing the burden of procedural uncertainty by delineating straightforward, repeatable processes for assessing the potential effects of proposed facilities on historic properties.

152. Any burdens imposed by the Nationwide Agreement will be more than outweighed by the benefits that will accrue to small entities from its provisions. The Commission has drafted the Nationwide Agreement with a commitment to reducing burdens on

expertise required to identify historic properties within the APE for visual effects).

<sup>149</sup> Nationwide Agreement, Part IV; Nationwide Agreement, Part V.

small entities. In closing, the Commission believes that the Nationwide Agreement conscientiously alleviates burdens on small entities in the ways discussed above.

#### F. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules

153. None. The Nationwide Agreement will modify and supplement the procedures set forth in the rules of the Council,<sup>150</sup> as expressly contemplated in those rules.<sup>151</sup>

#### G. Congressional Review Act

154. The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.<sup>152</sup> In addition, the Commission will send a copy of the *Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*. See 5 U.S.C. 604(b).

155. The Commission finds that the rule change contained in this *Report and Order* will not present a significant economic burden to small entities.

#### Ordering Clauses

156. Pursuant to sections 1, 4(i), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 303(r), 309(j), it is ordered that this *Report and Order* and the policies set forth herein are adopted and that part 1 of the Commission's rules, 47 CFR part 1 is amended, effective March 7, 2005. FCC Forms 620 and 621 contain information collections that have not been approved by the Office of Management and Budget. The Commission will publish a document in the *Federal Register* announcing the approval of these forms.

157. *It is ordered* that the Commission's Consumer Information Bureau, Reference Information Center, *shall send* a copy of the *Report and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

158. *It is further ordered* that the Commission *shall send* a copy of this *Report and Order* to Congress and the General Accounting Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

<sup>150</sup> 38 CFR Part 800.

<sup>151</sup> 38 CFR 800.14(b).

<sup>152</sup> See 5 U.S.C. 801(a)(1)(A).

<sup>146</sup> Nationwide Agreement, Part VI.

<sup>147</sup> Nationwide Agreement, Part VII.

<sup>148</sup> Nationwide Agreement, sections VI.D.1.e, VI.D.2.b, VI.E.5; compare *id.*, Part III (no professional expertise required to invoke exclusions), section VI.D.1.d (no professional

**List of Subjects in 47 CFR Part 1**

Practice and procedure.

Federal Communications Commission.

Marlene H. Dortch,  
Secretary.**Final Rules**

■ For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Part 1 as follows:

**PART 1—PRACTICE AND PROCEDURE**

■ 1. The authority citation for part 1 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309, and 325(e).

■ 2. Section 1.1307 is amended by revising paragraph (a)(4) and removing the note to paragraph (a)(4) to read as follows:

**§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.**

(a) \* \* \*

(4) Facilities that may affect districts, sites, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places. (See 16 U.S.C. 470w(5); 36 CFR part 60 and 800.) To ascertain whether a proposed action may affect properties that are listed or eligible for listing in the National Register of Historic Places, an applicant shall follow the procedures set forth in the rules of the Advisory Council on Historic Preservation, 36 CFR part 800, as modified and supplemented by the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, Appendix B to Part 1 of this Chapter, and the Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, Appendix C to Part 1 of this Chapter.

\* \* \* \* \*

■ 3. Appendix B to Part 1 is added to read as follows:

**Appendix B to Part 1—Nationwide Programmatic Agreement for the Collocation of Wireless Antennas**

Nationwide Programmatic Agreement for the Collocation of Wireless Antennas

Executed by the Federal Communications Commission, the National Conference of State Historic Preservation Officers and the Advisory Council on Historic Preservation

Whereas, the Federal Communications Commission (FCC) establishes rules and

procedures for the licensing of wireless communications facilities in the United States and its Possessions and Territories; and,

Whereas, the FCC has largely deregulated the review of applications for the construction of individual wireless communications facilities and, under this framework, applicants are required to prepare an Environmental Assessment (EA) in cases where the applicant determines that the proposed facility falls within one of certain environmental categories described in the FCC's rules (47 CFR 1.1307), including situations which may affect historical sites listed or eligible for listing in the National Register of Historic Places ("National Register"); and,

Whereas, Section 106 of the National Historic Preservation Act (16 U.S.C. 470 *et seq.*) ("the Act") requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation (Council) a reasonable opportunity to comment; and,

Whereas, Section 800.14(b) of the Council's regulations, "Protection of Historic Properties" (36 CFR 800.14(b)), allows for programmatic agreements to streamline and tailor the Section 106 review process to particular federal programs; and,

Whereas, in August 2000, the Council established a Telecommunications Working Group to provide a forum for the FCC, industry representatives, State Historic Preservation Officers (SHPOs) and Tribal Historic Preservation Officers (THPOs), and the Council to discuss improved coordination of Section 106 compliance regarding wireless communications projects affecting historic properties; and,

Whereas, the FCC, the Council and the Working Group have developed this Collocation Programmatic Agreement in accordance with 36 CFR 800.14(b) to address the Section 106 review process as it applies to the collocation of antennas (collocation being defined in Stipulation I.A below); and,

Whereas, the FCC encourages collocation of antennas where technically and economically feasible, in order to reduce the need for new tower construction; and,

Whereas, the parties hereto agree that the effects on historic properties of collocations of antennas on towers, buildings and structures are likely to be minimal and not adverse, and that in the cases where an adverse effect might occur, the procedures provided and referred to herein are proper and sufficient, consistent with Section 106, to assure that the FCC will take such effects into account; and

Whereas, the execution of this Nationwide Collocation Programmatic Agreement will streamline the Section 106 review of collocation proposals and thereby reduce the need for the construction of new towers, thereby reducing potential effects on historic properties that would otherwise result from the construction of those unnecessary new towers; and,

Whereas, the FCC and the Council have agreed that these measures should be incorporated into a Nationwide Programmatic Agreement to better manage

the Section 106 consultation process and streamline reviews for collocation of antennas; and,

Whereas, since collocations reduce both the need for new tower construction and the potential for adverse effects on historic properties, the parties hereto agree that the terms of this Agreement should be interpreted and implemented wherever possible in ways that encourage collocation; and

Whereas, the parties hereto agree that the procedures described in this Agreement are, with regard to collocations as defined herein, a proper substitute for the FCC's compliance with the Council's rules, in accordance and consistent with Section 106 of the National Historic Preservation Act and its implementing regulations found at 36 CFR part 800; and

Whereas, the FCC has consulted with the National Conference of State Historic Preservation Officers (NCSHPO) and requested the President of NCSHPO to sign this Nationwide Collocation Programmatic Agreement in accordance with 36 CFR Section 800.14(b)(2)(iii); and,

Whereas, the FCC sought comment from Indian tribes and Native Hawaiian Organizations regarding the terms of this Nationwide Programmatic Agreement by letters of January 11, 2001 and February 6, 2001; and,

Whereas, the terms of this Programmatic Agreement do not apply on "tribal lands" as defined under Section 800.18(x) of the Council's regulations, 36 CFR 800.18(x) ("Tribal lands means all lands within the exterior boundaries of any Indian reservation and all dependent Indian communities."); and,

Whereas, the terms of this Programmatic Agreement do not preclude Indian tribes or Native Hawaiian Organizations from consulting directly with the FCC or its licensees, tower companies and applicants for antenna licenses when collocation activities off tribal lands may affect historic properties of religious and cultural significance to Indian tribes or Native Hawaiian organizations; and,

Whereas, the execution and implementation of this Nationwide Collocation Programmatic Agreement will not preclude members of the public from filing complaints with the FCC or the Council regarding adverse effects on historic properties from any existing tower or any activity covered under the terms of this Programmatic Agreement.

Now therefore, the FCC, the Council, and NCSHPO agree that the FCC will meet its Section 106 compliance responsibilities for the collocation of antennas as follows.

**Stipulations**

The FCC, in coordination with licensees, tower companies and applicants for antenna licenses, will ensure that the following measures are carried out.

**I. Definitions**

For purposes of this Nationwide Programmatic Agreement, the following definitions apply.

A. "Collocation" means the mounting or installation of an antenna on an existing

tower, building or structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

B. "Tower" is any structure built for the sole or primary purpose of supporting FCC-licensed antennas and their associated facilities.

C. "Substantial increase in the size of the tower" means:

(1) The mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or

(2) The mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or

(3) The mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or

(4) The mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

## II. Applicability

A. This Nationwide Collocation Programmatic Agreement applies only to the collocation of antennas as defined in Stipulation I.A, above.

B. This Nationwide Collocation Programmatic Agreement does not cover any Section 106 responsibilities that federal agencies other than the FCC may have with regard to the collocation of antennas.

## III. Collocation of Antennas on Towers Constructed on or Before March 16, 2001

A. An antenna may be mounted on an existing tower constructed on or before March 16, 2001 without such collocation being reviewed under the consultation process set forth under Subpart B of 36 CFR Part 800, unless:

1. The mounting of the antenna will result in a substantial increase in the size of the tower as defined in Stipulation I.C, above; or

2. The tower has been determined by the FCC to have an effect on one or more historic properties, unless such effect has been found to be not adverse through a no adverse effect finding, or if found to be adverse or potentially adverse, has been resolved, such as through a conditional no adverse effect determination, a Memorandum of Agreement, a programmatic agreement, or

otherwise in compliance with Section 106 and Subpart B of 36 CFR Part 800; or

3. The tower is the subject of a pending environmental review or related proceeding before the FCC involving compliance with Section 108 of the National Historic Preservation Act; or

4. The collocation licensee or the owner of the tower has received written or electronic notification that the FCC is in receipt of a complaint from a member of the public, a SHPO or the Council, that the collocation has an adverse effect on one or more historic properties. Any such complaint must be in writing and supported by substantial evidence describing how the effect from the collocation is adverse to the attributes that qualify any affected historic property for eligibility or potential eligibility for the National Register.

## IV. Collocation of Antennas on Towers Constructed After March 16, 2001

A. An antenna may be mounted on an existing tower constructed after March 16, 2001 without such collocation being reviewed under the consultation process set forth under Subpart B of 36 CFR Part 800, unless:

1. The Section 106 review process for the tower set forth in 36 CFR Part 800 and any associated environmental reviews required by the FCC have not been completed; or

2. The mounting of the new antenna will result in a substantial increase in the size of the tower as defined in Stipulation I.C, above; or

3. The tower as built or proposed has been determined by the FCC to have an effect on one or more historic properties, unless such effect has been found to be not adverse through a no adverse effect finding, or if found to be adverse or potentially adverse, has been resolved, such as through a conditional no adverse effect determination, a Memorandum of Agreement, a programmatic agreement, or otherwise in compliance with Section 106 and Subpart B of 36 CFR Part 800; or

4. The collocation licensee or the owner of the tower has received written or electronic notification that the FCC is in receipt of a complaint from a member of the public, a SHPO or the Council, that the collocation has an adverse effect on one or more historic properties. Any such complaint must be in writing and supported by substantial evidence describing how the effect from the collocation is adverse to the attributes that qualify any affected historic property for eligibility or potential eligibility for the National Register.

## V. Collocation of Antennas on Buildings and Non-Tower Structures Outside of Historic Districts

A. An antenna may be mounted on a building or non-tower structure without such collocation being reviewed under the consultation process set forth under Subpart B of 36 CFR Part 800, unless:

1. The building or structure is over 45 years old;<sup>1</sup> or

<sup>1</sup> Suitable methods for determining the age of a building include, but are not limited to: (1)

2. The building or structure is inside the boundary of a historic district, or if the antenna is visible from the ground level of the historic district, the building or structure is within 250 feet of the boundary of the historic district; or

3. The building or non-tower structure is a designated National Historic Landmark, or listed in or eligible for listing in the National Register of Historic Places based upon the review of the licensee, tower company or applicant for an antenna license; or

4. The collocation licensee or the owner of the tower has received written or electronic notification that the FCC is in receipt of a complaint from a member of the public, a SHPO or the Council, that the collocation has an adverse effect on one or more historic properties. Any such complaint must be in writing and supported by substantial evidence describing how the effect from the collocation is adverse to the attributes that qualify any affected historic property for eligibility or potential eligibility for the National Register.

B. Subsequent to the collocation of an antenna, should the SHPO/THPO or Council determine that the collocation of the antenna or its associated equipment installed under the terms of Stipulation V has resulted in an adverse effect on historic properties, the SHPO/THPO or Council may notify the FCC accordingly. The FCC shall comply with the requirements of Section 106 and 36 CFR Part 800 for this particular collocation.

## VI. Reservation of Rights

Neither execution of this Agreement, nor implementation of or compliance with any term herein shall operate in any way as a waiver by any party hereto, or by any person or entity complying herewith or affected hereby, of a right to assert in any court of law any claim, argument or defense regarding the validity or interpretation of any provision of the National Historic Preservation Act (16 U.S.C. 470 *et seq.*) or its implementing regulations contained in 36 CFR Part 800.

## VII. Monitoring

A. FCC licensees shall retain records of the placement of all licensed antennas, including collocations subject to this Nationwide Programmatic Agreement, consistent with FCC rules and procedures.

B. The Council will forward to the FCC and the relevant SHPO any written objections it receives from members of the public regarding a collocation activity or general compliance with the provisions of this Nationwide Programmatic Agreement within thirty (30) days following receipt of the written objection. The FCC will forward a copy of the written objection to the appropriate licensee or tower owner.

## VIII. Amendments

If any signatory to this Nationwide Collocation Programmatic Agreement believes that this Agreement should be amended, that signatory may at any time propose amendments, whereupon the

obtaining the opinion of a consultant who meets the Secretary of Interior's Professional Qualifications Standards (36 CFR Part 61) or (2) consulting public records.

signatories will consult to consider the amendments. This agreement may be amended only upon the written concurrence of the signatories.

#### IX. Termination

A. If the FCC determines that it cannot implement the terms of this Nationwide Collocation Programmatic Agreement, or if the FCC, NCSHPO or the Council determines that the Programmatic Agreement is not being properly implemented by the parties to this Programmatic Agreement, the FCC, NCSHPO or the Council may propose to the other signatories that the Programmatic Agreement be terminated.

B. The party proposing to terminate the Programmatic Agreement shall notify the other signatories in writing, explaining the reasons for the proposed termination and the particulars of the asserted improper implementation. Such party also shall afford the other signatories a reasonable period of time of no less than thirty (30) days to consult and remedy the problems resulting in improper implementation. Upon receipt of such notice, the parties shall consult with each other and notify and consult with other entities that are either involved in such implementation or that would be substantially affected by termination of this Agreement, and seek alternatives to termination. Should the consultation fail to produce within the original remedy period or any extension, a reasonable alternative to termination, a resolution of the stated problems, or convincing evidence of substantial implementation of this Agreement in accordance with its terms, this Programmatic Agreement shall be terminated thirty days after notice of termination is served on all parties and published in the Federal Register.

C. In the event that the Programmatic Agreement is terminated, the FCC shall advise its licensees and tower construction companies of the termination and of the need to comply with any applicable Section 106 requirements on a case-by-case basis for collocation activities.

#### X. Annual Meeting of the Signatories

The signatories to this Nationwide Collocation Programmatic Agreement will meet on or about September 10, 2001, and on or about September 10 in each subsequent year, to discuss the effectiveness of this Agreement, including any issues related to improper implementation, and to discuss any potential amendments that would improve the effectiveness of this Agreement.

#### XI. Duration of the Programmatic Agreement

This Programmatic Agreement for collocation shall remain in force unless the Programmatic Agreement is terminated or superseded by a comprehensive Programmatic Agreement for wireless communications antennas.

Execution of this Nationwide Programmatic Agreement by the FCC, NCSHPO and the Council, and implementation of its terms, evidence that the FCC has afforded the Council an opportunity to comment on the collocation as described herein of antennas covered under the FCC's rules, and that the FCC has taken

into account the effects of these collocations on historic properties in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800. Federal Communications Commission

Date: \_\_\_\_\_  
Advisory Council on Historic Preservation

Date: \_\_\_\_\_  
National Conference of State Historic Preservation Officers

Date: \_\_\_\_\_

■ 4. Appendix C to Part 1 is added to read as follows:

#### Appendix C to Part 1—Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process

Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission

Executed by the Federal Communications Commission, the National Conference of State Historic Preservation Officers and the Advisory Council on Historic Preservation September 2004

#### Introduction

Whereas, Section 106 of the National Historic Preservation Act of 1966, as amended ("NHPA") (codified at 16 U.S.C. 470f), requires federal agencies to take into account the effects of certain of their Undertakings on Historic Properties (see Section II, below), included in or eligible for inclusion in the National Register of Historic Places ("National Register"), and to afford the Advisory Council on Historic Preservation ("Council") a reasonable opportunity to comment with regard to such Undertakings; and

Whereas, under the authority granted by Congress in the Communications Act of 1934, as amended (47 U.S.C. 151 *et seq.*), the Federal Communications Commission ("Commission") establishes rules and procedures for the licensing of non-federal government communications services, and the registration of certain antenna structures in the United States and its Possessions and Territories; and

Whereas, Congress and the Commission have deregulated or streamlined the application process regarding the construction of individual Facilities in many of the Commission's licensed services; and

Whereas, under the framework established in the Commission's environmental rules, 47 CFR 1.1301-1.1319, Commission licensees and applicants for authorizations and antenna structure registrations are required to prepare, and the Commission is required to independently review and approve, a pre-construction Environmental Assessment ("EA") in cases where a proposed tower or antenna may significantly affect the environment, including situations where a

proposed tower or antenna may affect Historic Properties that are either listed in or eligible for listing in the National Register, including properties of religious and cultural importance to an Indian tribe or Native Hawaiian organization ("NHO") that meet the National Register criteria; and

Whereas, the Council has adopted rules implementing Section 106 of the NHPA (codified at 36 CFR Part 800) and setting forth the process, called the "Section 106 process," for complying with the NHPA; and

Whereas, pursuant to the Commission's rules and the terms of this Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission ("Nationwide Agreement"), Applicants (see Section II.A.2) have been authorized, consistent with the terms of the memorandum from the Council to the Commission, titled "Delegation of Authority for the Section 106 Review of Telecommunications Projects," dated September 21, 2000, to initiate, coordinate, and assist the Commission with compliance with many aspects of the Section 106 review process for their Facilities; and

Whereas, in August 2000, the Council established a Telecommunications Working Group (the "Working Group") to provide a forum for the Commission, the Council, the National Conference of State Historic Preservation Officers ("Conference"), individual State Historic Preservation Officers ("SHPOs"), Tribal Historic Preservation Officers ("THPOs"), other tribal representatives, communications industry representatives, and other interested members of the public to discuss improved Section 106 compliance and to develop methods of streamlining the Section 106 review process; and

Whereas, Section 214 of the NHPA (16 U.S.C. 470v) authorizes the Council to promulgate regulations implementing exclusions from Section 106 review, and Section 800.14(b) of the Council's regulations (36 CFR 800.14(b)) allows for programmatic agreements to streamline and tailor the Section 106 review process to particular federal programs, if they are consistent with the Council's regulations; and

Whereas, the Commission, the Council, and the Conference executed on March 16, 2001, the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (the "Collocation Agreement"), in order to streamline review for the collocation of antennas on existing towers and other structures and thereby reduce the need for the construction of new towers (Attachment 1 to this Nationwide Agreement); and

Whereas, the Council, the Conference, and the Commission now agree it is desirable to further streamline and tailor the Section 106 review process for Facilities that are not excluded from Section 106 review under the Collocation Agreement while protecting Historic Properties that are either listed in or eligible for listing in the National Register; and

Whereas, the Working Group agrees that a nationwide programmatic agreement is a desirable and effective way to further streamline and tailor the Section 106 review process as it applies to Facilities; and

Whereas, this Nationwide Agreement will, upon its execution by the Council, the Conference, and the Commission, constitute a substitute for the Council's rules with respect to certain Commission Undertakings; and

Whereas, the Commission sought public comment on a draft of this Nationwide Agreement through a Notice of Proposed Rulemaking released on June 9, 2003;

Whereas, the Commission has actively sought and received participation and comment from Indian tribes and NHOs regarding this Nationwide Agreement; and

Whereas, the Commission has consulted with federally recognized Indian tribes regarding this Nationwide Agreement (see Report and Order, FCC 04-222, at ¶ 31); and

Whereas, this Nationwide Agreement provides for appropriate public notification and participation in connection with the Section 106 process; and

Whereas, Section 101(d)(6) of the NHPA provides that federal agencies "shall consult with any Indian tribe or Native Hawaiian organization" that attaches religious and cultural significance to properties of traditional religious and cultural importance that may be determined to be eligible for inclusion in the National Register and that might be affected by a federal undertaking (16 U.S.C. 470a(d)(6)); and

Whereas, the Commission has adopted a "Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes" dated June 23, 2000, pursuant to which the Commission: recognizes the unique legal relationship that exists between the federal government and Indian tribal governments, as reflected in the Constitution of the United States, treaties, federal statutes, Executive orders, and numerous court decisions; affirms the federal trust relationship with Indian tribes, and recognizes that this historic trust relationship requires the federal government to adhere to certain fiduciary standards in its dealings with Indian tribes; commits to working with Indian tribes on a government-to-government basis consistent with the principles of tribal self-governance; commits, in accordance with the federal government's trust responsibility, and to the extent practicable, to consult with tribal governments prior to implementing any regulatory action or policy that will significantly or uniquely affect tribal governments, their land and resources; strives to develop working relationships with tribal governments, and will endeavor to identify innovative mechanisms to facilitate tribal consultations in the Commission's regulatory processes; and endeavors to streamline its administrative process and procedures to remove undue burdens that its decisions and actions place on Indian tribes; and

Whereas, the Commission does not delegate under this Programmatic Agreement any portion of its responsibilities to Indian tribes and NHOs, including its obligation to consult under Section 101(d)(6) of the NHPA; and

Whereas, the terms of this Nationwide Agreement are consistent with and do not attempt to abrogate the rights of Indian tribes or NHOs to consult directly with the

Commission regarding the construction of Facilities; and

Whereas, the execution and implementation of this Nationwide Agreement will not preclude Indian tribes or NHOs, SHPO/THPOs, local governments, or members of the public from filing complaints with the Commission or the Council regarding effects on Historic Properties from any Facility or any activity covered under the terms of the Nationwide Agreement; and

Whereas, Indian tribes and NHOs may request Council involvement in Section 106 cases that present issues of concern to Indian tribes or NHOs (see 36 CFR Part 800, Appendix A, Section (c)(4)); and

Whereas, the Commission, after consulting with federally recognized Indian tribes, has developed an electronic Tower Construction Notification System through which Indian tribes and NHOs may voluntarily identify the geographic areas in which Historic Properties to which they attach religious and cultural significance may be located, Applicants may ascertain which participating Indian tribes and NHOs have identified such an interest in the geographic area in which they propose to construct Facilities, and Applicants may voluntarily provide electronic notification of proposed Facilities construction for the Commission to forward to participating Indian tribes, NHOs, and SHPOs/THPOs; and

Whereas, the Council, the Conference and the Commission recognize that Applicants' use of qualified professionals experienced with the NHPA and Section 106 can streamline the review process and minimize potential delays; and

Whereas, the Commission has created a position and hired a cultural resources professional to assist with the Section 106 process; and

Whereas, upon execution of this Nationwide Agreement, the Council may still provide advisory comments to the Commission regarding the coordination of Section 106 reviews; notify the Commission of concerns raised by consulting parties and the public regarding an Undertaking; and participate in the resolution of adverse effects for complex, controversial, or other non-routine projects;

Now Therefore, in consideration of the above provisions and of the covenants and agreements contained herein, the Council, the Conference and the Commission (the "Parties") agree as follows:

#### I. Applicability and Scope of This Nationwide Agreement

A. This Nationwide Agreement (1) Excludes from Section 106 review certain Undertakings involving the construction and modification of Facilities, and (2) streamlines and tailors the Section 106 review process for other Undertakings involving the construction and modification of Facilities. An illustrative list of Commission activities in relation to which Undertakings covered by this Agreement may occur is provided as Attachment 2 to this Agreement.

B. This Nationwide Agreement applies only to federal Undertakings as determined by the Commission ("Undertakings"). The Commission has sole authority to determine what activities undertaken by the

Commission or its Applicants constitute Undertakings within the meaning of the NHPA. Nothing in this Agreement shall preclude the Commission from revisiting or affect the existing ability of any person to challenge any prior determination of what does or does not constitute an Undertaking. Maintenance and servicing of Towers, Antennas, and associated equipment are not deemed to be Undertakings subject to Section 106 review.

C. This Agreement does not apply to Antenna Collocations that are exempt from Section 106 review under the Collocation Agreement (see Attachment 1). Pursuant to the terms of the Collocation Agreement, such Collocations shall not be subject to the Section 106 review process and shall not be submitted to the SHPO/THPO for review. This Agreement does apply to collocations that are not exempt from Section 106 review under the Collocation Agreement.

D. This Agreement does not apply on "tribal lands" as defined under Section 600.16(x) of the Council's regulations, 36 CFR § 800.16(x) ("Tribal lands means all lands within the exterior boundaries of any Indian reservation and all dependent Indian communities."). This Nationwide Agreement, however, will apply on tribal lands should a tribe, pursuant to appropriate tribal procedures and upon reasonable notice to the Council, Commission, and appropriate SHPO/THPO, elect to adopt the provisions of this Nationwide Agreement. Where a tribe that has assumed SHPO functions pursuant to Section 101(d)(2) of the NHPA (16 U.S.C. 470(d)(2)) has agreed to application of this Nationwide Agreement on tribal lands, the term SHPO/THPO denotes the Tribal Historic Preservation Officer with respect to review of proposed Undertakings on those tribal lands. Where a tribe that has not assumed SHPO functions has agreed to application of this Nationwide Agreement on tribal lands, the tribe may notify the Commission of the tribe's intention to perform the duties of a SHPO/THPO, as defined in this Nationwide Agreement, for proposed Undertakings on its tribal lands, and in such instances the term SHPO/THPO denotes both the State Historic Preservation Officer and the tribe's authorized representative. In all other instances, the term SHPO/THPO denotes the State Historic Preservation Officer.

E. This Nationwide Agreement governs only review of Undertakings under Section 106 of the NHPA. Applicants completing the Section 106 review process under the terms of this Nationwide Agreement may not initiate construction without completing any environmental review that is otherwise required for effects other than historic preservation under the Commission's rules (See 47 CFR 1.1301-1.1319). Completion of the Section 106 review process under this Nationwide Agreement satisfies an Applicant's obligations under the Commission's rules with respect to Historic Properties, except for Undertakings that have been determined to have an adverse effect on Historic Properties and that therefore require preparation and filing of an Environmental Assessment (See 47 CFR 1.1307(a)(4)).

F. This Nationwide Agreement does not govern any Section 106 responsibilities that

agencies other than the Commission may have with respect to those agencies' federal Undertakings.

## II. Definitions

A. The following terms are used in this Nationwide Agreement as defined below:

1. **Antenna.** An apparatus designed for the purpose of emitting radio frequency ("RF") radiation, to be operated or operating from a fixed location pursuant to Commission authorization, for the transmission of writing, signs, signals, data, images, pictures, and sounds of all kinds, including the transmitting device and any on-site equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with that antenna and added to a Tower, structure, or building as part of the original installation of the antenna. For most services, an Antenna will be mounted on or in, and is distinct from, a supporting structure such as a Tower, structure or building. However, in the case of AM broadcast stations, the entire Tower or group of Towers constitutes the Antenna for that station. For purposes of this Nationwide Agreement, the term Antenna does not include unintentional radiators, mobile stations, or devices authorized under Part 15 of the Commission's rules.

2. **Applicant.** A Commission licensee, permittee, or registration holder, or an applicant or prospective applicant for a wireless or broadcast license, authorization or antenna structure registration, and the duly authorized agents, employees, and contractors of any such person or entity.

3. **Area of Potential Effects ("APE").** The geographic area or areas within which an Undertaking may directly or indirectly cause alterations in the character or use of Historic Properties, if any such properties exist.

4. **Collocation.** The mounting or installation of an Antenna on an existing Tower, building, or structure for the purpose of transmitting radio frequency signals for telecommunications or broadcast purposes.

5. **Effect.** An alteration to the characteristics of a Historic Property qualifying it for inclusion in or eligibility for the National Register.

6. **Experimental Authorization.** An authorization issued to conduct experimentation utilizing radio waves for gathering scientific or technical operation data directed toward the improvement or extension of an established service and not intended for reception and use by the general public. "Experimental Authorization" does not include an "Experimental Broadcast Station" authorized under Part 74 of the Commission's rules.

7. **Facility.** A Tower or an Antenna. The term Facility may also refer to a Tower and its associated Antenna(s).

8. **Field Survey.** A research strategy that utilizes one or more visits to the area where construction is proposed as a means of identifying Historic Properties.

9. **Historic Property.** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The

term includes properties of traditional religious and cultural importance to an Indian tribe or NHO that meet the National Register criteria.

10. **National Register.** The National Register of Historic Places, maintained by the Secretary of the Interior's office of the Keeper of the National Register.

11. **SHPO/THPO Inventory.** A set of records of previously gathered information, authorized by state or tribal law, on the absence, presence and significance of historic and archaeological resources within the state or tribal land.

12. **Special Temporary Authorization.** Authorization granted to a permittee or licensee to allow the operation of a station for a limited period at a specified variance from the terms of the station's permanent authorization or requirements of the Commission's rules applicable to the particular class or type of station.

13. **Submission Packet.** The document to be submitted initially to the SHPO/THPO to facilitate review of the Applicant's findings and any determinations with regard to the potential impact of the proposed Undertaking on Historic Properties in the APE. There are two Submission Packets: (a) The New Tower Submission Packet (FCC Form 620) (See Attachment 3) and (b) The Collocation Submission Packet (FCC Form 621) (See Attachment 4). Any documents required to be submitted along with a Form are part of the Submission Packet.

14. **Tower.** Any structure built for the sole or primary purpose of supporting Commission-licensed or authorized Antennas, including the on-site fencing, equipment, switches, wiring, cabling, power sources, shelters, or cabinets associated with that Tower but not installed as part of an Antenna as defined herein.

B. All other terms not defined above or elsewhere in this Nationwide Agreement shall have the same meaning as set forth in the Council's rules section on Definitions (36 CFR 800.16) or the Commission's rules (47 CFR Chapter I).

C. For the calculation of time periods under this Agreement, "days" mean "calendar days." Any time period specified in the Agreement that ends on a weekend or a Federal or State holiday is extended until the close of the following business day.

D. Written communications include communications by e-mail or facsimile.

## III. Undertakings Excluded From Section 106 Review

Undertakings that fall within the provisions listed in the following sections III.A. through III.F. are excluded from Section 106 review by the SHPO/THPO, the Commission, and the Council, and, accordingly, shall not be submitted to the SHPO/THPO for review. The determination that an exclusion applies to an Undertaking should be made by an authorized individual within the Applicant's organization, and Applicants should retain documentation of their determination that an exclusion applies. Concerns regarding the application of these exclusions from Section 106 review may be presented to and considered by the Commission pursuant to Section XI.

A. Enhancement of a tower and any associated excavation that does not involve a collocation and does not substantially increase the size of the existing tower, as defined in the Collocation Agreement. For towers constructed after March 16, 2001, this exclusion applies only if the tower has completed the Section 106 review process and any associated environmental reviews required by the Commission.

B. Construction of a replacement for an existing communications tower and any associated excavation that does not substantially increase the size of the existing tower under elements 1-3 of the definition as defined in the Collocation Agreement (see Attachment 1 to this Agreement, Stipulation 1.c.1-3) and that does not expand the boundaries of the leased or owned property surrounding the tower by more than 30 feet in any direction or involve excavation outside these expanded boundaries or outside any existing access or utility easement related to the site. For towers constructed after March 16, 2001, this exclusion applies only if the tower has completed the Section 106 review process and any associated environmental reviews required by the Commission's rules.

C. Construction of any temporary communications Tower, Antenna structure, or related Facility that involves no excavation or where all areas to be excavated will be located in areas described in Section VI.D.2.c.1 below, including but not limited to the following:

1. A Tower or Antenna authorized by the Commission for a temporary period, such as any Facility authorized by a Commission grant of Special Temporary Authority ("STA") or emergency authorization;

2. A call on wheels (COW) transmission Facility;

3. A broadcast auxiliary services truck, TV pickup station, remote pickup broadcast station (e.g., electronic newsgathering vehicle) authorized under Part 74 or temporary fixed or transportable earth station in the fixed satellite service (e.g., satellite newsgathering vehicle) authorized under Part 25;

4. A temporary ballast mount Tower;

5. Any Facility authorized by a Commission grant of an experimental authorization.

For purposes of this Section III.C, the term "temporary" means "for no more than twenty-four months duration except in the case of those Facilities associated with national security."

D. Construction of a Facility less than 200 feet in overall height above ground level in an existing industrial park,<sup>1</sup> commercial strip mall,<sup>2</sup> or shopping center<sup>3</sup> that occupies a

<sup>1</sup> A tract of land that is planned, developed, and operated as an integrated facility for a number of individual industrial uses, with consideration to transportation facilities, circulation, parking, utility needs, aesthetics and compatibility.

<sup>2</sup> A structure or grouping of structures, housing retail business, set back far enough from the street to permit parking spaces to be placed between the building entrances and the public right of way.

<sup>3</sup> A group of commercial establishments planned, constructed, and managed as a total entity, with customer and employee parking provided on-site,

total land area of 100,000 square feet or more, provided that the industrial park, strip mall, or shopping center is not located within the boundaries of or within 500 feet of a Historic Property, as identified by the Applicant after a preliminary search of relevant records. Proposed Facilities within this exclusion must complete the process of participation of Indian tribes and NHOs pursuant to Section IV of this Agreement. If as a result of this process the Applicant or the Commission identifies a Historic Property that may be affected, the Applicant must complete the Section 106 review process pursuant to this Agreement notwithstanding the exclusion.

E. Construction of a Facility in or within 50 feet of the outer boundary of a right-of-way designated by a Federal, State, local, or Tribal government for the location of communications Towers or above-ground utility transmission or distribution lines and associated structures and equipment and in active use for such purposes, provided:

1. The proposed Facility would not constitute a substantial increase in size, under elements 1-3 of the definition in the Collocation Agreement, over existing structures located in the right-of-way within the vicinity of the proposed Facility, and;
2. The proposed Facility would not be located within the boundaries of a Historic Property, as identified by the Applicant after a preliminary search of relevant records.

Proposed Facilities within this exclusion must complete the process of participation of Indian tribes and NHOs pursuant to Section IV of this Agreement. If as a result of this process the Applicant or the Commission identifies a Historic Property that may be affected, the Applicant must complete the Section 106 review process pursuant to this Agreement notwithstanding the exclusion.

F. Construction of a Facility in any area previously designated by the SHPO/THPO at its discretion, following consultation with appropriate Indian tribes and NHOs, as having limited potential to affect Historic Properties. Such designation shall be documented by the SHPO/THPO and made available for public review.

#### IV. Participation of Indian Tribes and Native Hawaiian Organizations in Undertakings Off Tribal Lands

A. The Commission recognizes its responsibility to carry out consultation with any Indian tribe or NHO that attaches religious and cultural significance to a Historic Property if the property may be affected by a Commission undertaking. This responsibility is founded in Sections 101(d)(6)(a-b) and 106 of the NHPA (16 U.S.C. 470a(d)(6)(a-b) and 470f), the regulations of the Council (36 CFR Part 800), the Commission's environmental regulations (47 CFR 1.1301-1.1319), and the unique legal relationship that exists between the federal government and Indian Tribal governments, as reflected in the Constitution of the United States, treaties, federal statutes, Executive orders, and numerous court decisions. This historic trust relationship requires the federal

provision for goods delivery separated from customer access, aesthetic considerations and protection from the elements, and landscaping and signage in accordance with an approved plan.

government to adhere to certain fiduciary standards in its dealings with Indian Tribes. (Commission Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes).

B. As an initial step to enable the Commission to fulfill its duty of consultation, Applicants shall use reasonable and good faith efforts to identify any Indian tribe or NHO that may attach religious and cultural significance to Historic Properties that may be affected by an Undertaking. Applicants should be aware that frequently, Historic Properties of religious and cultural significance to Indian tribes and NHOs are located on ancestral, aboriginal, or ceded lands of such tribes and organizations and Applicants should take this into account when complying with their responsibilities. Where an Indian tribe or NHO has voluntarily provided information to the Commission's Tower Construction Notification System regarding the geographic areas in which Historic Properties of religious and cultural significance to that Indian tribe or NHO may be located, reference to the Tower Construction Notification System shall constitute a reasonable and good faith effort at identification with respect to that Indian tribe or NHO. In addition, such reasonable and good faith efforts may include, but are not limited to, seeking relevant information from the relevant SHPO/THPO, Indian tribes, state agencies, the U.S. Bureau of Indian Affairs ("BIA"), or, where applicable, any federal agency with land holdings within the state (e.g., the U.S. Bureau of Land Management). Although these agencies can provide useful information in identifying potentially affected Indian tribes, contacting BIA, the SHPO or other federal and state agencies is not a substitute for seeking information directly from Indian tribes that may attach religious and cultural significance to a potentially affected Historic Property, as described below.

C. After the Applicant has identified Indian tribes and NHOs that may attach religious and cultural significance to potentially affected Historic Properties, the Commission has the responsibility, and the Commission imposes on the Applicant the obligation, to ensure that contact is made at an early stage in the planning process with such Indian tribes and NHOs in order to begin the process of ascertaining whether such Historic Properties may be affected. This initial contact shall be made by the Commission or the Applicant, in accordance with the wishes of the Indian tribe or NHO. This contact shall constitute only an initial effort to contact the Indian tribe or NHO, and does not in itself fully satisfy the Applicant's obligations or substitute for government-to-government consultation unless the Indian tribe or NHO affirmatively disclaims further interest or the Indian tribe or NHO has otherwise agreed that such contact is sufficient. Depending on the preference of the Indian tribe or NHO, the means of initial contact may include, without limitation:

1. Electronic notification through the Commission's Tower Construction Notification System;
2. Written communication from the Commission at the request of the Applicant;

3. Written, e-mail, or telephonic notification directly from the Applicant to the Indian tribe or NHO;

4. Any other means that the Indian Tribe or NHO has informed the Commission are acceptable, including through the adoption of best practices pursuant to Section IV.J, below; or

5. Any other means to which an Indian tribe or NHO and an Applicant have agreed pursuant to Section IV.K, below.

D. The Commission will use its best efforts to ascertain the preferences of each Indian tribe and NHO for initial contact, and to make these preferences available to Applicants in a readily accessible format. In addition, the Commission will use its best efforts to ascertain, and to make available to Applicants, any locations or types of construction projects, within the broad geographic areas in which Historic Properties of religious and cultural significance to an Indian tribe or NHO may be located, for which the Indian tribe or NHO does not expect notification. To the extent they are comfortable doing so, the Commission encourages Indian tribes and NHOs to accept the Tower Construction Notification System as an efficient and thorough means of making initial contact.

E. In the absence of any contrary indication of an Indian tribe's or NHO's preference, where an Applicant does not have a pre-existing relationship with an Indian tribe or NHO, initial contact with the Indian tribe or NHO shall be made through the Commission. Unless the Indian tribe or NHO has indicated otherwise, the Commission may make this initial contact through the Tower Construction Notification System. An Applicant that has a pre-existing relationship with an Indian tribe or NHO shall make initial contact in the manner that is customary to that relationship or in such other manner as may be accepted by the Indian tribe or NHO. An Applicant shall copy the Commission on any initial written or electronic direct contact with an Indian tribe or NHO, unless the Indian tribe or NHO has agreed through a best practices agreement or otherwise that such copying is not necessary.

F. Applicants' direct contacts with Indian tribes and NHOs, where accepted by the Indian tribe or NHO, shall be made in a sensitive manner that is consistent with the reasonable wishes of the Indian tribe or NHO, where such wishes are known or can be reasonably ascertained. In general, unless an Indian tribe or NHO has provided guidance to the contrary, Applicants shall follow the following guidelines:

1. All communications with Indian tribes shall be respectful of tribal sovereignty;
2. Communications shall be directed to the appropriate representative designated or identified by the tribal government or other governing body;
3. Applicants shall provide all information reasonably necessary for the Indian tribe or NHO to evaluate whether Historic Properties of religious and cultural significance may be affected. The parties recognize that it may be neither feasible nor desirable to provide complete information about the project at the time of initial contact, particularly when

initial contact is made early in the process. Unless the Indian tribe or NHO affirmatively disclaims interest, however, it shall be provided with complete information within the earliest reasonable time frame;

4. The Applicant must ensure that Indian tribes and NHOs have a reasonable opportunity to respond to all communications. Ordinarily, 30 days from the time the relevant tribal or NHO representative may reasonably be expected to have received an inquiry shall be considered a reasonable time. Should a tribe or NHO request additional time to respond, the Applicant shall afford additional time as reasonable under the circumstances. However, where initial contact is made automatically through the Tower Construction Notification System, and where an Indian tribe or NHO has stated that it is not interested in reviewing proposed construction of certain types or in certain locations, the Applicant need not await a response to contact regarding proposed construction meeting that description;

5. Applicants should not assume that failure to respond to a single communication establishes that an Indian tribe or NHO is not interested in participating, but should make a reasonable effort to follow up.

G. The purposes of communications between the Applicant and Indian tribes or NHOs are: (1) To ascertain whether Historic Properties of religious and cultural significance to the Indian tribe or NHO may be affected by the undertaking and consultation is therefore necessary, and (2) where possible, with the concurrence of the Indian tribe or NHO, to reach an agreement on the presence or absence of effects that may obviate the need for consultation. Accordingly, the Applicant shall promptly refer to the Commission any request from a federally recognized Indian tribe for government-to-government consultation. The Commission will then carry out government-to-government consultation with the Indian tribe. Applicants shall also seek guidance from the Commission in the event of any substantive or procedural disagreement with an Indian tribe or NHO, or if the Indian tribe or NHO does not respond to the Applicant's inquiries. Applicants are strongly advised to seek guidance from the Commission in cases of doubt.

H. If an Indian tribe or NHO indicates that a Historic Property of religious and cultural significance to it may be affected, the Applicant shall invite the commenting tribe or organization to become a consulting party. If the Indian tribe or NHO agrees to become a consulting party, it shall be afforded that status and shall be provided with all of the information, copies of submissions, and other prerogatives of a consulting party as provided for in 36 CFR 800.2.

I. Information regarding Historic Properties to which Indian tribes or NHOs attach religious and cultural significance may be highly confidential, private, and sensitive. If an Indian tribe or NHO requests confidentiality from the Applicant, the Applicant shall honor this request and shall, in turn, request confidential treatment of such materials or information in accordance with the Commission's rules and Section 304

of the NHPA (16 U.S.C. 470w-3(a)) in the event they are submitted to the Commission. The Commission shall provide such confidential treatment consistent with its rules and applicable federal laws. Although the Commission will strive to protect the privacy interests of all parties, the Commission cannot guarantee its own ability or the ability of Applicants to protect confidential, private, and sensitive information from disclosure under all circumstances.

J. In order to promote efficiency, minimize misunderstandings, and ensure that communications among the parties are made in accordance with each Indian tribe or NHO's reasonable preferences, the Commission will use its best efforts to arrive at agreements regarding best practices with Indian tribes and NHOs and their representatives. Such best practices may include means of making initial contacts with Indian tribes and NHOs as well as guidelines for subsequent discussions between Applicants and Indian tribes or NHOs in fulfillment of the requirements of the Section 106 process. To the extent possible, the Commission will strive to achieve consistency among best practice agreements with Indian tribes and NHOs. Where best practices exist, the Commission encourages Applicants to follow those best practices.

K. Nothing in this Section shall be construed to prohibit or limit Applicants and Indian tribes or NHOs from entering into or continuing pre-existing arrangements or agreements governing their contacts, provided such arrangements or agreements are otherwise consistent with federal law and no modification is made in the roles of other parties to the process under this Nationwide Agreement without their consent. Documentation of such alternative arrangements or agreements should be filed with the Commission.

#### V. Public Participation and Consulting Parties

A. On or before the date an Applicant submits the appropriate Submission Packet to the SHPO/THPO, as prescribed by Section VII, below, the Applicant shall provide the local government that has primary land use jurisdiction over the site of the planned Undertaking with written notification of the planned Undertaking.

B. On or before the date an Applicant submits the appropriate Submission Packet to the SHPO/THPO, as prescribed by Section VII, below, the Applicant shall provide written notice to the public of the planned Undertaking. Such notice may be accomplished (1) through the public notification provisions of the relevant local zoning or local historic preservation process for the proposed Facility; or (2) by publication in a local newspaper of general circulation. In the alternative, an Applicant may use other appropriate means of providing public notice, including seeking the assistance of the local government.

C. The written notice to the local government and to the public shall include: (1) The location of the proposed Facility including its street address; (2) a description

of the proposed Facility including its height and type of structure; (3) instruction on how to submit comments regarding potential effects on Historic Properties; and (4) the name, address, and telephone number of a contact person.

D. A SHPO/THPO may make available lists of other groups, including Indian tribes, NHOs and organizations of Indian tribes or NHOs, which should be provided notice for Undertakings to be located in particular areas.

E. If the Applicant receives a comment regarding potentially affected Historic Properties, the Applicant shall consider the comment and either include it in the initial submission to the SHPO/THPO, or, if the initial submission has already been made, immediately forward the comment to the SHPO/THPO for review. An Applicant need not submit to the SHPO/THPO any comment that does not substantially relate to potentially affected Historic Properties.

F. The relevant SHPO/THPO, Indian tribes and NHOs that attach religious and cultural significance to Historic Properties that may be affected, and the local government are entitled to be consulting parties in the Section 106 review of an Undertaking. The Council may enter the Section 106 process for a given Undertaking, on Commission invitation or on its own decision, in accordance with 36 CFR Part 800, Appendix A. An Applicant shall consider all written requests of other individuals and organizations to participate as consulting parties and determine which should be consulting parties. An Applicant is encouraged to grant such status to individuals or organizations with a demonstrated legal or economic interest in the Undertaking, or demonstrated expertise or standing as a representative of local or public interest in historic or cultural resources preservation. Any such individual or organization denied consulting party status may petition the Commission for review of such denial. Applicants may seek assistance from the Commission in identifying and involving consulting parties. All entities granted consulting party status shall be identified to the SHPO/THPO as part of the Submission Packet.

G. Consulting parties are entitled to: (1) Receive notices, copies of submission packets, correspondence and other documents provided to the SHPO/THPO in a Section 106 review; and (2) be provided an opportunity to have their views expressed and taken into account by the Applicant, the SHPO/THPO and, where appropriate, by the Commission.

#### VI. Identification, Evaluation, and Assessment of Effects

A. In preparing the Submission Packet for the SHPO/THPO and consulting parties pursuant to Section VII of this Nationwide Agreement and Attachments 3 and 4, the Applicant shall: (1) Define the area of potential effects (APE); (2) identify Historic Properties within the APE; (3) evaluate the historic significance of identified properties as appropriate; and (4) assess the effects of the Undertaking on Historic Properties. The standards and procedures described below

shall be applied by the Applicant in preparing the Submission Packet, by the SHPO/THPO in reviewing the Submission Packet, and where appropriate, by the Commission in making findings.

B. Exclusion of Specific Geographic Areas from Review.

The SHPO/THPO, consistent with relevant State or tribal procedures, may specify geographic areas in which no review is required for direct effects on archeological resources or no review is required for visual effects.

C. Area of Potential Effects.

1. The term "Area of Potential Effects" is defined in Section II.A.3 of this Nationwide Agreement. For purposes of this Nationwide Agreement, the APE for direct effects and the APE for visual effects are further defined and are to be established as described below.

2. The APE for direct effects is limited to the area of potential ground disturbance and any property, or any portion thereof, that will be physically altered or destroyed by the Undertaking.

3. The APE for visual effects is the geographic area in which the Undertaking has the potential to introduce visual elements that diminish or alter the setting, including the landscape, where the setting is a character-defining feature of a Historic Property that makes it eligible for listing on the National Register.

4. Unless otherwise established through consultation with the SHPO/THPO, the presumed APE for visual effects for construction of new Facilities is the area from which the Tower will be visible:

a. Within a half mile from the tower site if the proposed Tower is 200 feet or less in overall height;

b. Within  $\frac{3}{4}$  of a mile from the tower site if the proposed Tower is more than 200 but no more than 400 feet in overall height; or

c. Within 1  $\frac{1}{2}$  miles from the proposed tower site if the proposed Tower is more than 400 feet in overall height.

5. In the event the Applicant determines, or the SHPO/THPO recommends, that an alternative APE for visual effects is necessary, the Applicant and the SHPO/THPO may mutually agree to an alternative APE.

6. If the Applicant and the SHPO/THPO, after using good faith efforts, cannot reach an agreement on the use of an alternative APE, either the Applicant or the SHPO/THPO may submit the issue to the Commission for resolution. The Commission shall make its determination concerning an alternative APE within a reasonable time.

D. Identification and Evaluation of Historic Properties.

1. Identification and Evaluation of Historic Properties Within the APE for Visual Effects.

a. Except to identify Historic Properties of religious and cultural significance to Indian tribes and NHOs, Applicants shall identify Historic Properties within the APE for visual effects by reviewing the following records. Applicants are required to review such records only to the extent they are available at the offices of the SHPO/THPO or can be found in publicly available sources identified by the SHPO/THPO. With respect to these properties, Applicants are not required to

undertake a Field Survey or other measures other than reviewing these records in order to identify Historic Properties:

i. Properties listed in the National Register;

ii. Properties formally determined eligible for listing by the Keeper of the National Register;

iii. Properties that the SHPO/THPO certifies are in the process of being nominated to the National Register;

iv. Properties previously determined eligible as part of a consensus determination of eligibility between the SHPO/THPO and a Federal Agency or local government representing the Department of Housing and Urban Development (HUD); and

v. Properties listed in the SHPO/THPO Inventory that the SHPO/THPO has previously evaluated and found to meet the National Register criteria, and that are identified accordingly in the SHPO/THPO inventory.

b. At an early stage in the planning process and in accordance with Section IV of this Nationwide Agreement, the Commission or the Applicant, as appropriate, shall gather information from Indian tribes or NHOs identified pursuant to Section IV.B to assist in identifying Historic Properties of religious and cultural significance to them within the APE for visual effects. Such information gathering may include a Field Survey where appropriate.

c. Based on the sources listed above and public comment received pursuant to Section V of this Nationwide Agreement, the Applicant shall include in its Submission Packet a list of properties it has identified as apparent Historic Properties within the APE for visual effects.

i. During the review period described in Section VII.A, the SHPO/THPO may identify additional properties included in the SHPO/THPO Inventory and located within the APE that the SHPO/THPO considers eligible for listing on the National Register, and notify the Applicant pursuant to Section VII.A.4.

ii. The SHPO/THPO may also advise the Applicant that previously identified properties on the list no longer qualify for inclusion in the National Register.

d. Applicants are encouraged at their discretion to use the services of professionals who meet the Secretary of the Interior's Professional Qualification Standards when identifying Historic Properties within the APE for visual effects.

e. Applicants are not required to evaluate the historic significance of properties identified pursuant to Section VI.D.1.a., but may rely on the previous evaluation of these properties. Applicants may, at their discretion, evaluate whether such properties are no longer eligible for inclusion in the National Register and recommend to the SHPO/THPO their removal from consideration. Any such evaluation shall be performed by a professional who meets the Secretary of the Interior's Professional Qualification Standards.

2. Identification and Evaluation of Historic Properties Within the APE for Direct Effects.

a. In addition to the properties identified pursuant to Section VI.D.1, Applicants shall make a reasonable good faith effort to identify other above ground and

archeological Historic Properties, including buildings, structures, and historic districts, that lie within the APE for direct effects.

Such reasonable and good faith efforts may include a Field Survey where appropriate.

h. Identification and evaluation of Historic Properties within the APE for direct effects, including any finding that an archeological Field Survey is not required, shall be undertaken by a professional who meets the Secretary of the Interior's Professional Qualification Standards. Identification and evaluation relating to archeological resources shall be performed by a professional who meets the Secretary of the Interior's Professional Qualification Standards in archeology.

c. Except as provided below, the Applicant need not undertake a Field Survey for archeological resources where:

i. the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least 2 feet as documented in the Applicant's siting analysis; or

ii. geomorphological evidence indicates that cultural resource-bearing soils do not occur within the project area or may occur but at depths that exceed 2 feet below the proposed construction depth.

d. At an early stage in the planning process and in accordance with Section IV of this Nationwide Agreement, the Commission or the Applicant, as appropriate, shall gather information from Indian tribes or NHOs identified pursuant to Section IV.B to assist in identifying archeological Historic Properties of religious and cultural significance to them within the APE for direct effects. If an Indian tribe or NHO provides evidence that supports a high probability of the presence of intact archeological Historic Properties within the APE for direct effects, the Applicant shall conduct an archeological Field Survey notwithstanding Section VI.D.2.c.

e. Where the Applicant pursuant to Sections VI.D.2.c and VI.D.2.d finds that no archeological Field Survey is necessary, it shall include in its Submission Packet a report substantiating this finding. During the review period described in Section VII.A, the SHPO/THPO may, based on evidence that supports a high probability of the presence of intact archeological Historic Properties within the APE for direct effects, notify the Applicant that the Submission Packet is inadequate without an archeological Field Survey pursuant to Section VII.A.4.

f. The Applicant shall conduct an archeological Field Survey within the APE for direct effects if neither of the conditions in Section VI.D.2.c applies, or if required pursuant to Section VI.D.2.d or e. The Field Survey shall be conducted in consultation with the SHPO/THPO and consulting Indian tribes or NHOs.

g. The Applicant, in consultation with the SHPO/THPO and appropriate Indian tribes or NHOs, shall apply the National Register criteria (36 CFR Part 63) to properties identified within the APE for direct effects that have not previously been evaluated for National Register eligibility, with the exception of those identified pursuant to Section VI.D.1.a.

3. Dispute Resolution. Where there is a disagreement regarding the identification or eligibility of a property, and after attempting in good faith to resolve the issue the Applicant and the SHPO/THPO continue to disagree, the Applicant or the SHPO/THPO may submit the issue to the Commission. The Commission shall handle such submissions in accordance with 36 CFR 800.4(c)(2).

#### E. Assessment of Effects

1. Applicants shall assess effects of the Undertaking on Historic Properties using the Criteria of Adverse Effect (36 CFR 800.5(a)(1)).

2. In determining whether Historic Properties in the APE may be adversely affected by the Undertaking, the Applicant should consider factors such as the topography, vegetation, known presence of Historic Properties, and existing land use.

3. An Undertaking will have a visual adverse effect on a Historic Property if the visual effect from the Facility will noticeably diminish the integrity of one or more of the characteristics qualifying the property for inclusion in or eligibility for the National Register. Construction of a Facility will not cause a visual adverse effect except where visual setting or visual elements are character-defining features of eligibility of a Historic Property located within the APE.

4. For collocations not excluded from review by the Collocation Agreement or this Agreement, the assessment of effects will consider only effects from the newly added or modified Facilities and not effects from the existing Tower or Antenna.

5. Assessment pursuant to this Agreement shall be performed by professionals who meet the Secretary of the Interior's Professional Qualification Standards.

## VII. Procedures

### A. Use of the Submission Packet

1. For each Undertaking within the scope of this Nationwide Agreement, the Applicant shall initially determine whether there are no Historic Properties affected, no adverse effect on Historic Properties, or an adverse effect on Historic Properties. The Applicant shall prepare a Submission Packet and submit it to the SHPO/THPO and to all consulting parties, including any Indian tribe or NHO that is participating as a consulting party.

2. The SHPO/THPO shall have 30 days from receipt of the requisite documentation to review the Submission Packet.

3. If the SHPO/THPO receives a comment or objection, in accordance with Section V.E, more than 25 but less than 31 days following its receipt of the initial submission, the SHPO/THPO shall have five calendar days to consider such comment or objection before the Section 106 process is complete or the matter may be submitted to the Commission.

4. If the SHPO/THPO determines the Applicant's Submission Packet is inadequate, or if the SHPO/THPO identifies additional Historic Properties within the APE, the SHPO/THPO will immediately notify the Applicant and describe any deficiencies. The SHPO/THPO may close its file without prejudice if the Applicant does not resubmit an amended Submission Packet within 60 days following the Applicant's receipt of the returned Submission Packet. Resubmission of

the Submission Packet to the SHPO/THPO commences a new 30 day period for review.

### B. Determinations of No Historic Properties Affected

1. If the SHPO/THPO concurs in writing with the Applicant's determination of no Historic Properties affected, it is deemed that no Historic Properties exist within the APE or the Undertaking will have no effect on any Historic Properties located within the APE. The Section 106 process is then complete, and the Applicant may proceed with the project, unless further processing for reasons other than Section 106 is required.

2. If the SHPO/THPO does not provide written notice to the Applicant that it agrees or disagrees with the Applicant's determination of no Historic Properties affected within 30 days following receipt of a complete Submission Packet, it is deemed that no Historic Properties exist within the APE or the Undertaking will have no effect on Historic Properties. The Section 106 process is then complete and the Applicant may proceed with the project, unless further processing for reasons other than Section 106 is required.

3. If the SHPO/THPO provides written notice within 30 days following receipt of the Submission Packet that it disagrees with the Applicant's determination of no Historic Properties affected, it should provide a short and concise explanation of exactly how the criteria of eligibility and/or criteria of Adverse Effect would apply. The Applicant and the SHPO/THPO should engage in further discussions and make a reasonable and good faith effort to resolve their disagreement.

4. If the SHPO/THPO and Applicant do not resolve their disagreement, the Applicant may at any time choose to submit the matter, together with all relevant documents, to the Commission, advising the SHPO/THPO accordingly.

### C. Determinations of No Adverse Effect

1. If the SHPO/THPO concurs in writing with the Applicant's determination of no adverse effect, the Facility is deemed to have no adverse effect on Historic Properties. The Section 106 process is then complete and the Applicant may proceed with the project, unless further processing for reasons other than Section 106 is required.

2. If the SHPO/THPO does not provide written notice to the Applicant that it agrees or disagrees with the Applicant's determination of no adverse effect within thirty days following its receipt of a complete Submission Packet, the SHPO/THPO is presumed to have concurred with the Applicant's determination. The Applicant shall, pursuant to procedures to be promulgated by the Commission, forward a copy of its Submission Packet to the Commission, together with all correspondence with the SHPO/THPO and any comments or objections received from the public, and advise the SHPO/THPO accordingly. The Section 106 process shall then be complete unless the Commission notifies the Applicant otherwise within 15 days after the Commission receives the Submission Packet and accompanying

material electronically or 25 days after the Commission receives this material by other means.

3. If the SHPO/THPO provides written notice within 30 days following receipt of the Submission Packet that it disagrees with the Applicant's determination of no adverse effect, it should provide a short and concise explanation of the Historic Properties it believes to be affected and exactly how the criteria of Adverse Effect would apply. The Applicant and the SHPO/THPO should engage in further discussions and make a reasonable and good faith effort to resolve their disagreement.

4. If the SHPO/THPO and Applicant do not resolve their dispute, the Applicant may at any time choose to submit the matter, together with all relevant documents, to the Commission, advising the SHPO/THPO accordingly.

5. Whenever the Applicant or the Commission concludes, or a SHPO/THPO advises, that a proposed project will have an adverse effect on a Historic Property, after applying the criteria of Adverse Effect, the Applicant and the SHPO/THPO are encouraged to investigate measures that would avoid the adverse effect and permit a conditional "No Adverse Effect" determination.

6. If the Applicant and SHPO/THPO mutually agree upon conditions that will result in no adverse effect, the Applicant shall advise the SHPO/THPO in writing that it will comply with the conditions. The Applicant can then make a determination of no adverse effect subject to its implementation of the conditions. The Undertaking is then deemed conditionally to have no adverse effect on Historic Properties, and the Applicant may proceed with the project subject to compliance with those conditions. Where the Commission has previously been involved in the matter, the Applicant shall notify the Commission of this resolution.

### D. Determinations of Adverse Effect

1. If the Applicant determines at any stage in the process that an Undertaking would have an adverse effect on Historic Properties within the APE(s), or if the Commission so finds, the Applicant shall submit to the SHPO/THPO a plan designed to avoid, minimize, or mitigate the adverse effect.

2. The Applicant shall forward a copy of its submission with its mitigation plan and the entire record to the Council and the Commission. Within fifteen days following receipt of the Applicant's submission, the Council shall indicate whether it intends to participate in the negotiation of a Memorandum of Agreement by notifying both the Applicant and the Commission.

3. Where the Undertaking would have an adverse effect on a National Historic Landmark, the Commission shall request the Council to participate in consultation and shall invite participation by the Secretary of the Interior.

4. The Applicant, SHPO/THPO, and consulting parties shall negotiate a Memorandum of Agreement that shall be sent to the Commission for review and execution.

5. If the parties are unable to agree upon mitigation measures, they shall submit the

matter to the Commission, which shall coordinate additional actions in accordance with the Council's rules, including 36 CFR 800.6(b)(1)(v) and 800.7.

#### E. Retention of Information

The SHPO/THPO shall, subject to applicable state or tribal laws and regulations, and in accordance with its rules and procedures governing historic property records, retain the information in the Submission Packet pertaining to the location and National Register eligibility of Historic Properties and make such information available to Federal agencies and Applicants in other Section 106 reviews, where disclosure is not prevented by the confidentiality standards in 36 CFR 800.11(c).

#### F. Removal of Obsolete Towers

Applicants that construct new Towers under the terms of this Nationwide Agreement adjacent to or within the boundaries of a Historic Property are encouraged to disassemble such Towers should they become obsolete or remain vacant for a year or more.

#### VIII. Emergency Situations

Unless the Commission deems it necessary to issue an emergency authorization in accordance with its rules, or the Undertaking is otherwise excluded from Section 106 review pursuant to the Collocation Agreement or Section III of this Agreement, the procedures in this Agreement shall apply.

#### IX. Inadvertent or Post-Review Discoveries

A. In the event that an Applicant discovers a previously unidentified site within the APE that may be a Historic Property that would be affected by an Undertaking, the Applicant shall promptly notify the Commission, the SHPO/THPO and any potentially affected Indian tribe or NHO, and within a reasonable time shall submit to the Commission, the SHPO/THPO and any potentially affected Indian tribe or NHO, a written report evaluating the property's eligibility for inclusion in the National Register. The Applicant shall seek the input of any potentially affected Indian tribe or NHO in preparing this report. If found during construction, construction must cease until evaluation has been completed.

B. If the Applicant and SHPO/THPO concur that the discovered resource is eligible for listing in the National Register, the Applicant will consult with the SHPO/THPO, and Indian tribes or NHOs as appropriate, to evaluate measures that will avoid, minimize, or mitigate adverse effects. Upon agreement regarding such measures, the Applicant shall implement them and notify the Commission of its action.

C. If the Applicant and SHPO/THPO cannot reach agreement regarding the eligibility of a property, the matter will be referred to the Commission for review in accordance with Section VI.D.3. If the Applicant and the SHPO/THPO cannot reach agreement on measures to avoid, minimize, or mitigate adverse effects, the matter shall be referred to the Commission for appropriate action.

D. If the Applicant discovers any human or burial remains during implementation of an Undertaking, the Applicant shall cease work immediately, notify the SHPO/THPO and Commission, and adhere to applicable State and Federal laws regarding the treatment of human or burial remains.

#### X. Construction Prior to Compliance With Section 106

A. The terms of Section 110(k) of the National Historic Preservation Act (16 U.S.C. 470h-2(k)) ("Section 110(k)") apply to Undertakings covered by this Agreement. Any SHPO/THPO, potentially affected Indian tribe or NHO, the Council, or a member of the public may submit a complaint to the Commission alleging that a facility has been constructed or partially constructed after the effective date of this Agreement in violation of Section 110(k). Any such complaint must be in writing and supported by substantial evidence specifically describing how Section 110(k) has been violated. Upon receipt of such complaint the Commission will assume responsibility for investigating the applicability of Section 110(k) in accordance with the provisions herein.

B. If upon its initial review, the Commission concludes that a complaint on its face demonstrates a probable violation of Section 110(k), the Commission will immediately notify and provide the relevant Applicant with copies of the Complaint and order that all construction of a new tower or installation of any new collocations immediately cease and remain suspended pending the Commission's resolution of the complaint.

C. Within 15 days of receipt, the Commission will review the complaint and take appropriate action, which the Commission may determine, and which may include the following:

1. Dismiss the complaint without further action if the complaint does not establish a probable violation of Section 110(k) even if the allegations are taken as true;
2. Provide the Applicant with a copy of the complaint and request a written response within a reasonable time;
3. Request from the Applicant a background report which documents the history and chronology of the planning and construction of the Facility;
4. Request from the Applicant a summary of the steps taken to comply with the requirements of Section 106 as set forth in this Nationwide Agreement, particularly the application of the Criteria of Adverse Effect;
5. Request from the Applicant copies of any documents regarding the planning or construction of the Facility, including correspondence, memoranda, and agreements;
6. If the Facility was constructed prior to full compliance with the requirements of Section 106, request from the Applicant an explanation for such failure, and possible measures that can be taken to mitigate any resulting adverse effects on Historic Properties.

D. If the Commission concludes that there is a probable violation of Section 110(k) (*i.e.*, that "with intent to avoid the requirements of Section 106, [an Applicant] has

intentionally significantly adversely affected a Historic Property"), the Commission shall notify the Applicant and forward a copy of the documentation set forth in Section X.C. to the Council and, as appropriate, the SHPO/THPO and other consulting parties, along with the Commission's opinion regarding the probable violation of Section 110(k). The Commission will consider the views of the consulting parties in determining a resolution, which may include negotiating a Memorandum of Agreement (MOA) that will resolve any adverse effects. The Commission, SHPO/THPO, Council, and Applicant shall sign the MOA to evidence acceptance of the mitigation plan and conclusion of the Section 106 review process.

E. Nothing in Section X or any other provision of this Agreement shall preclude the Commission from continuing or instituting enforcement proceedings under the Communications Act and its rules against an Applicant that has constructed a Facility prior to completing required review under this Agreement. Sanctions for violations of the Commission's rules may include any sanctions allowed under the Communications Act and the Commission's rules.

F. The Commission shall provide copies of all concluding reports or orders for all Section 110(k) investigations conducted by the Commission to the original complainant, the Applicant, the relevant local government, and other consulting parties.

G. Facilities that are excluded from Section 106 review pursuant to the Collocation Agreement or Section III of this Agreement are not subject to review under this provision. Any parties who allege that such Facilities have violated Section 110(k) should notify the Commission in accordance with the provisions of Section XI, Public Comments and Objections.

#### XI. Public Comments and Objections

Any member of the public may notify the Commission of concerns it has regarding the application of this Nationwide Agreement within a State or with regard to the review of individual Undertakings covered or excluded under the terms of this Agreement. Comments related to telecommunications activities shall be directed to the Wireless Telecommunications Bureau and those related to broadcast facilities to the Media Bureau. The Commission will consider public comments and following consultation with the SHPO/THPO, potentially affected Indian tribes and NHOs, or Council, where appropriate, take appropriate actions. The Commission shall notify the objector of the outcome of its actions.

#### XII. Amendments

The signatories may propose modifications or other amendments to this Nationwide Agreement. Any amendment to this Agreement shall be subject to appropriate public notice and comment and shall be signed by the Commission, the Council, and the Conference.

#### XIII. Termination

A. Any signatory to this Nationwide Agreement may request termination by written notice to the other parties. Within

sixty (60) days following receipt of a written request for termination from a signatory, all other signatories shall discuss the basis for the termination request and seek agreement on amendments or other actions that would avoid termination.

B. In the event that this Agreement is terminated, the Commission and all Applicants shall comply with the requirements of 36 CFR Part 800.

**XIV. Annual Review**

The signatories to this Nationwide Agreement will meet annually on or about the anniversary of the effective date of the Agreement to discuss the effectiveness of this Agreement, including any issues related to improper implementation, and to discuss any potential amendments that would improve the effectiveness of this Agreement.

**XV. Reservation of Rights**

Neither execution of this Agreement, nor implementation of or compliance with any term herein, shall operate in any way as a waiver by any party hereto, or by any person or entity complying herewith or affected hereby, of a right to assert in any court of law any claim, argument or defense regarding the validity or interpretation of any provision of the NHPA or its implementing regulations contained in 36 CFR Part 600.

**XVI. Severability**

If any section, subsection, paragraph, sentence, clause or phrase in this Agreement is, for any reason, held to be unconstitutional or invalid or ineffective, such decision shall not affect the validity or effectiveness of the remaining portions of this Agreement.

*In witness whereof*, the Parties have caused this Agreement to be executed by their respective authorized officers as of the day and year first written above.  
Federal Communications Commission

\_\_\_\_\_  
Chairman  
Date \_\_\_\_\_  
Advisory Council on Historic Preservation

\_\_\_\_\_  
Chairman  
Date \_\_\_\_\_  
National Conference of State Historic Preservation Officers

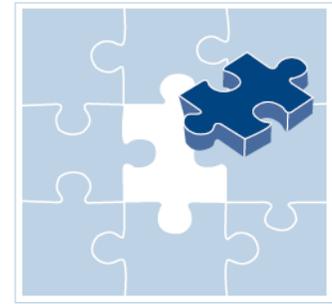
\_\_\_\_\_  
Date \_\_\_\_\_

[FR Doc. 05-5 Filed 1-3-05; 6:45 am]  
BILLING CODE 6712-01-P

# **Essential Public Service Memorandum**

# MEMORANDUM

TREPANIER



& ASSOCIATES INC  
LAND USE PLANNING  
DEVELOPMENT CONSULTANTS

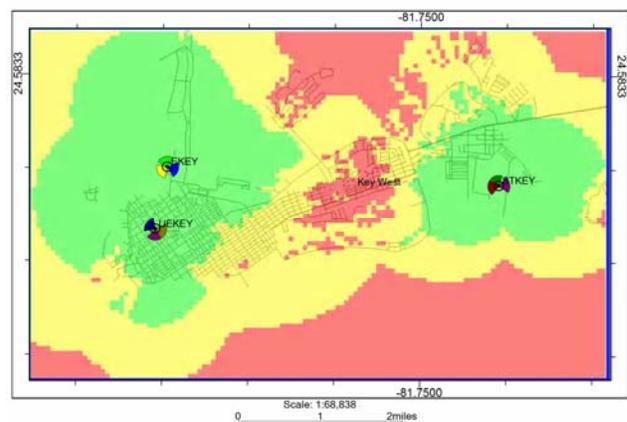
**Date:** 07/23/2009  
**To:** Mr. Rodney Corriveau, AICP, Senior Planner III  
**From:** Owen Trepanier  
**CC:** Mr. Rick Richter  
**Re:** **2832 N. Roosevelt Blvd.  
Essential Public Service**

Wireless telecommunications have come into wide-spread use and have been rapidly replacing land line telephones as the essential public communication service over the last 20 years. Currently 89% of American adults own a cell phone, with 20% of American adults using the cell phone exclusively as their primary phone service<sup>1</sup>. The Florida Public Service Commission estimates 1.2 million households in Florida rely exclusively on wireless telecommunications and the Commission reports more than 15 million cell phones are currently in service within the state.

Emergency service personnel, police, boaters, fishermen, and everyday people have come to rely on cell phone service to deal with day to day activities as well as emergency situations. Cell phone service often makes the difference in a life or death emergency issue.

We have also learned in several recent hurricane events that wireless communication is often the only working communication available during and immediately following the storm event. Traditional phone lines are interrupted by wind, rain, fallen trees, and sail boat masts around channels and bridges.

Currently in Key West, we have excellent cell phone service in Old Town and Stock Island, but new town does not enjoy the same level of coverage. A "coverage shadow" exists in the New Town area as depicted in this proprietary coverage map provided by AT&T.



The coverage map shows areas around Old Town and Stock Island have excellent indoor-outdoor coverage; while much of New Town has poor indoor and inadequate outdoor coverage.

The coverage shadow coincides with several important intersections including the Home Depot - Overseas Market intersection, N. Roosevelt - Kennedy Drive intersection, and Kennedy Drive - Flagler intersection. All of these intersections handle a very large capacity and unfortunately

<sup>1</sup> August 8<sup>th</sup>, 2008 Florida Public Service Commission *2007 Telecommunications Report*

experience heavy traffic and emergency calls to police dispatch.

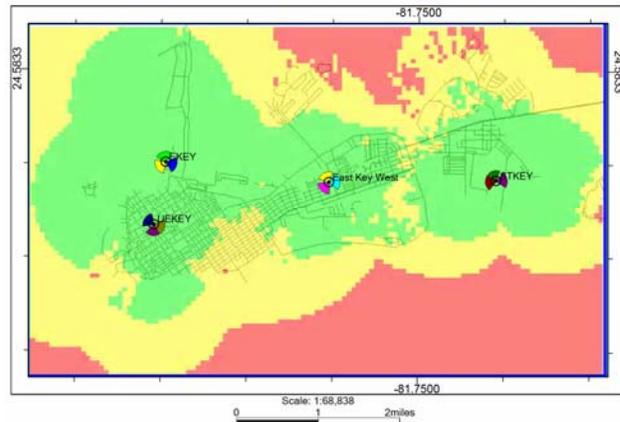
The volume of calls to police dispatch in the area of Winn Dixie alone is staggering. At the area of the intersection of Overseas Market over the past four and half years there were approximately 460 emergency calls to police dispatch, 39 of which were auto vs. bike/ scooter/ pedestrian conflicts.

The following map shows wireless tower locations throughout the City. The cause of the coverage shadow is clearly demonstrated. There are no towers in the New Town area except for the Sheriff's tower on Sigsbee, which is already at capacity and can not handle the collocation of private wireless providers<sup>2</sup>.



The lack of adequate wireless communication infrastructure in New Town places residents at risk during emergency situations and also simply creates annoying and unnecessary everyday interruptions.

Filling this coverage shadow with a facility that can accommodate up to 5 providers<sup>3</sup> in addition to AT&T will enhance not only people's everyday lives, but will enhance the island's essential public infrastructure making emergency situations safer and everyday life easier.



The proposed site has been carefully chosen to provide maximum coverage in New Town while remaining compatible with the surrounding land uses. The proposed site has appropriate zoning, is surrounded by other compatible heavy commercial/ light industrial uses and is not immediately adjacent to any residential neighborhood or public right of way.

<sup>2</sup> According to Ms. Laura White, Monroe County Emergency Communications Administrator.

<sup>3</sup> Providers include commercial, non-commercial, cellular, radio, government, law enforcement and others

**Letters of Support for Proposed Wireless  
Telecommunications Facility**



RE: Documentation in support of need for new AT&T site at or near the location of Keys Wi-Fi's proposed tower at 2832 N. Roosevelt Blvd. in Key West, FL.

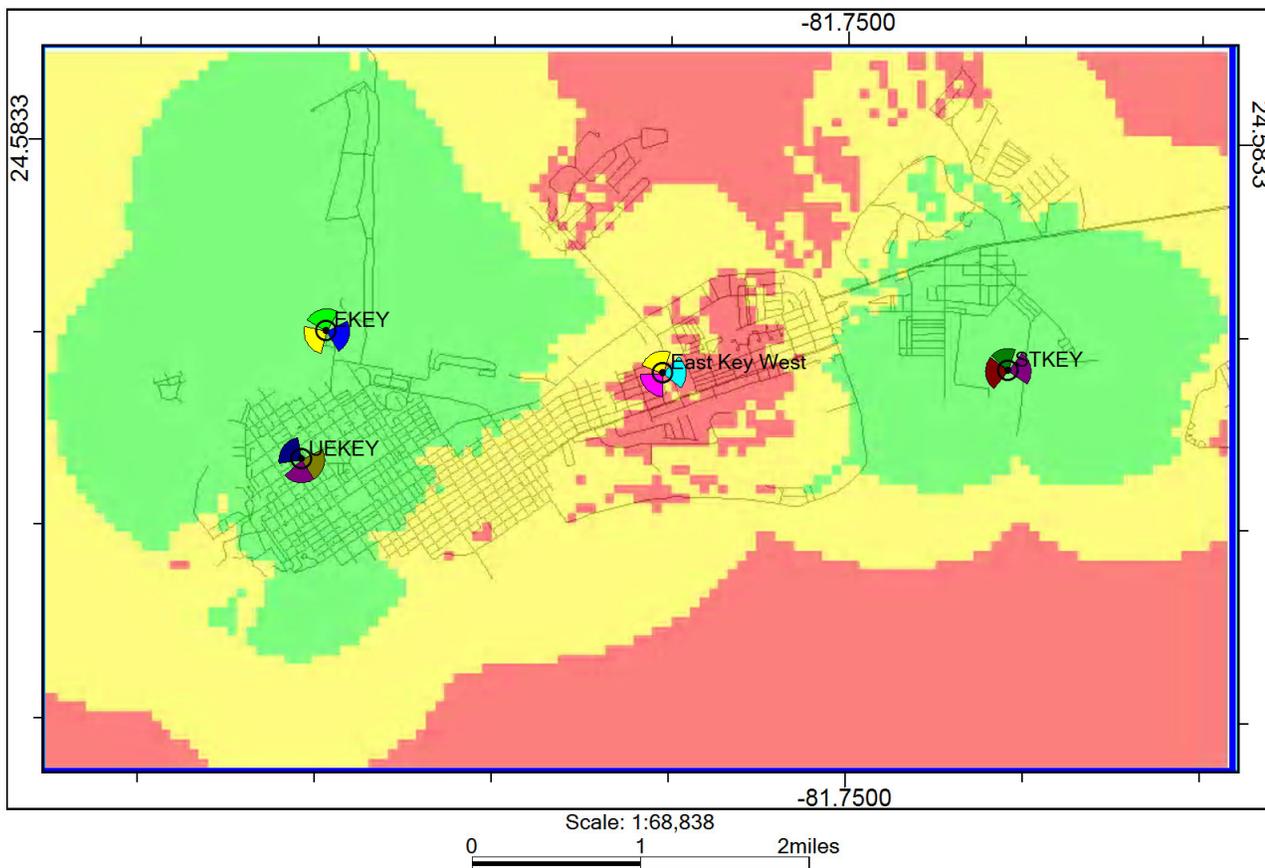
### Summary

AT&T has an existing and ongoing need for a new facility in the eastern half of the city of Key West to improve coverage and service experience for our customers in the vicinity. The proposed tower at 2832 N. Roosevelt Blvd. is in the correct location and of sufficient height to meet AT&T's needs in the area. The proposed tower at 145' is the optimum height for AT&T's antennas to both meet our coverage objectives in the eastern half of Key West and control overlap with our surrounding sites. Lowering the height of the tower increases the probability that AT&T will require additional sites to properly serve our customers in the eastern half of the city.

Below are two maps showing AT&T's current coverage on the island and a simulation of the coverage provided by the proposed tower.

### Existing coverage:

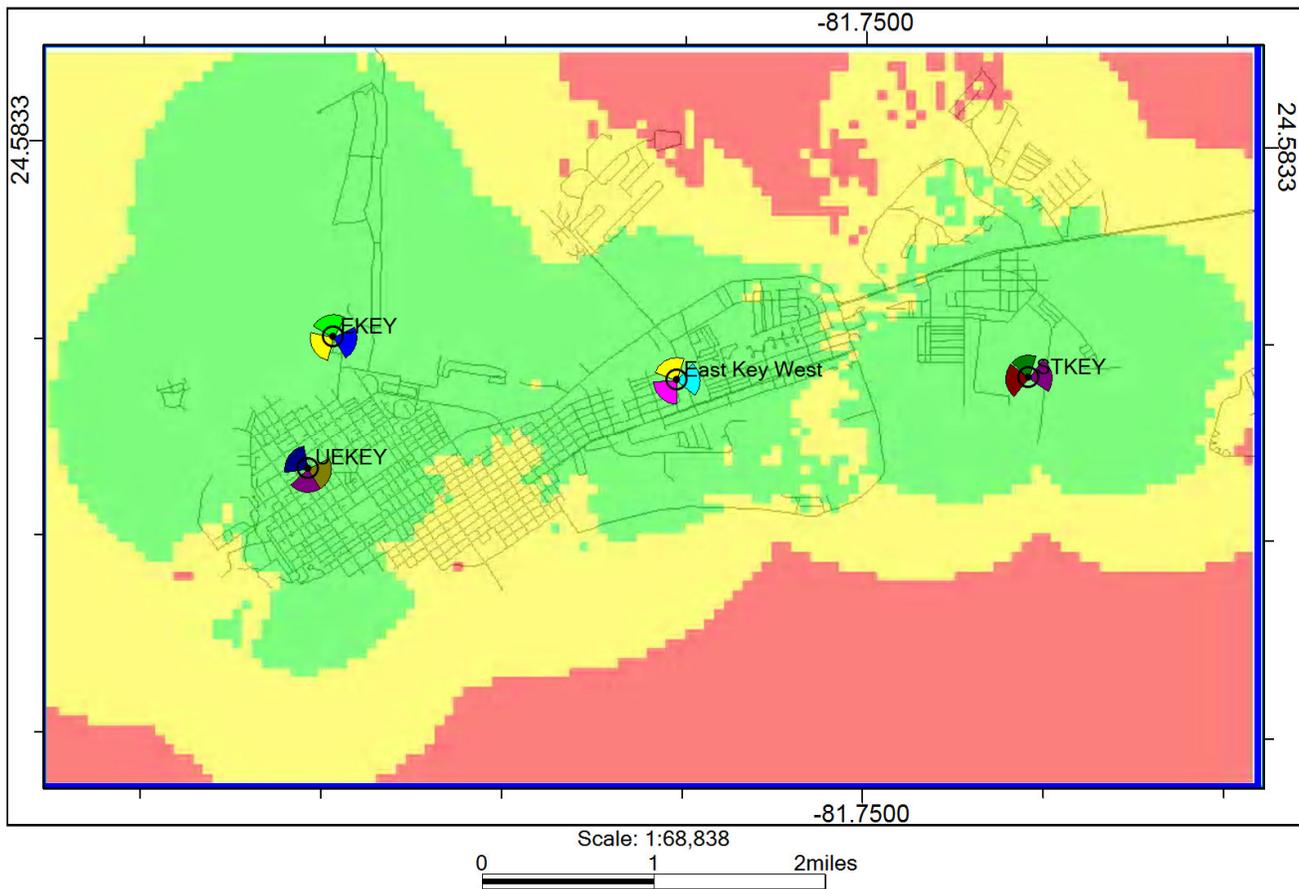
- Green = good outdoor and indoor service
- Yellow = useable outdoor, marginal indoor service
- Red = marginal outdoor, poor to no indoor service





**Coverage with proposed site:**

Green = good outdoor and indoor service  
Yellow = useable outdoor, marginal indoor service  
Red = marginal outdoor, poor to no indoor service



Sincerely,

Maiko Llanes, PE  
RF Design Engineer  
AT&T Mobility



Aug 26, 2009

Key's Wi-Fi Inc  
C/O Rick Richter  
104 Palmetto Avenue  
Tavernier, FL 33070

**RE: Proposed Tower Collocation – Key's Wi-Fi Inc – 2832 N Roosevelt Blvd, Key West, FL 33040 – Verizon Wireless Site ID 62327.**

Dear Rick,

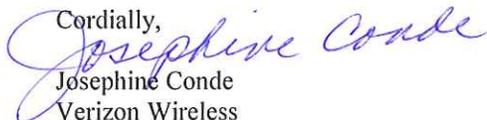
Thank you for informing Verizon Wireless of the proposed tower that Key's Wi-Fi is planning to construct at the above referenced property

Verizon Wireless has determined that it has a need for additional coverage and/or capacity that could be served by a collocation on the proposed communications tower. I will be contacting you to discuss your proposed site in more detail and to obtain periodic updates as to your progress to obtain final zoning approval.

Verizon Wireless will consider entering into a collocation agreement with Key's Wi-Fi Inc to collocate on the proposed tower to the extent that Key's Wi-Fi Inc obtains all necessary governmental approvals, and assuming that the parties can come to terms on a collocation agreement with terms and conditions acceptable to Verizon Wireless.

This letter is not a commitment by Verizon Wireless to enter into a collocation agreement, and this letter should not be relied upon by Key's Wi-Fi Inc in that regard. A binding agreement for the lease of any tower space from Key's Wi-Fi Inc shall not exist until a final, definitive, and fully negotiated collocation agreement has been fully executed and delivered. Further, it is understood by all parties that Verizon Wireless reserves its rights to simultaneously negotiate with other landlords for sites in the immediate geographical area in which the above described proposed communications tower is to be located, or to choose not to negotiate for any site, and there is no assurance whatsoever that Verizon Wireless will conclude a deal for the above described proposed communications tower unless and until a collocation agreement is fully executed and delivered.

Cordially,

A handwritten signature in blue ink that reads "Josephine Conde".

Josephine Conde  
Verizon Wireless  
Real Estate and Construction Manager  
777 Yamato Road, Suite 600  
Boca Raton, FL 33431  
561 995 5553

**Sprint**



Together with NEXTEL

**Sprint Nextel**

4710 Eisenhower Blvd Bldg D

Tampa, FL 33634

Office: (813) 806-4013 Fax: (813) 806-4170

**Clarence "Bud" Leist**

**Project Manager for Sprint Nextel**

August 25, 2009

Keys Wi-Fi, Inc.  
Mr. Rick Richter  
104 Palmetto Avenue  
Tavernier, FL 33070

RE: Co-location Opportunities / East Key West North Roosevelt Monopole Tower

Mr. Richter:

This letter is to express Sprint - Nextel's interest in evaluating co-location opportunities on the proposed structure reference above, contingent on all jurisdictional approvals. Sprint-Nextel does have a current need for service improvement in the area. With the growth in the area, Sprint-Nextel fully expects that if this tower is built Sprint-Nextel will be a future co-locator.

Please keep me informed as to the zoning status and expected approval dates.

Sincerely,

Clarence F Leist

A handwritten signature in black ink, appearing to read "Clarence F Leist".

Project Manger Miami/SWFL

**City of Key West**  
**Wireless Telecommunications Facilities**

# CITY OF KEY WEST WIRELESS TELECOMMUNICATIONS FACILITIES



166' MCOBOCC/US NAVY



FKCC TOWER



151' MONROE COUNTY TOWER



161' TELCOM SYSTEMS TOWER



167' BEACH TV TOWER



157' SEATTLE STREAMING RADIO



215' CINGULAR WIRELESS TOWER

PROPOSED TOWER



201' FREEMAN TOWER



80' CITY OF KEY WEST



151' WIRELESS CO.



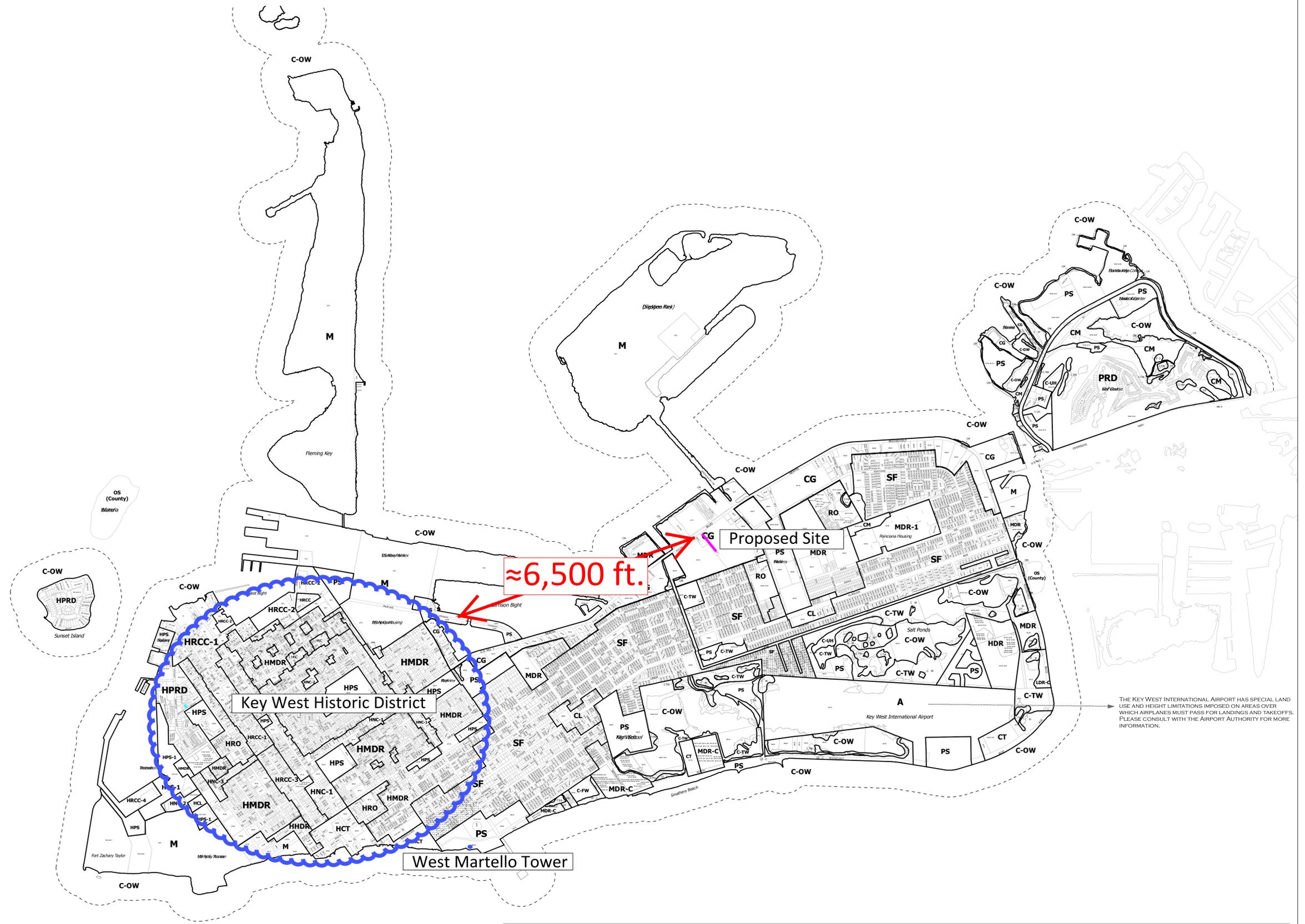
FAA NDB



131' KEY WEST CHEMICAL & PAPER SUPPLY

**Proximity to the City of Key West  
Historic District**

# Proximity to the City of Key West Historic District



THE KEY WEST INTERNATIONAL AIRPORT HAS SPECIAL LAND USE AND HEIGHT LIMITATIONS IMPOSED ON AREAS OVER WHICH AIRPLANES MUST PASS FOR LANDINGS AND TAKEOFFS. PLEASE CONSULT WITH THE AIRPORT AUTHORITY FOR MORE INFORMATION.

## OFFICIAL ZONING MAP OF THE CITY OF KEY WEST, FLORIDA

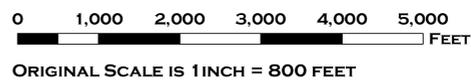
### LEGEND

<b>A</b> Airport	<b>HHDR</b> Historic High Density Residential	<b>MDR</b> Medium Density Residential
<b>C-FW</b> Conservation- Freshwater Wetlands	<b>HMDR</b> Historic Medium Density Residential	<b>MDR-1</b> Medium Density Residential 1
<b>C-OW</b> Conservation- Outstanding Wetlands of the State	<b>HNC (1 - 3)</b> Historic Neighborhood Commercial 1 - 3	<b>MDR-C</b> Coastal Medium Density Residential
<b>C-TW</b> Conservation- Tidal Wetlands of the State	<b>HPRD</b> Historic Planned Redevelopment and Development District	<b>PRD</b> Planned Redevelopment and Development District
<b>C-UH</b> Conservation- Upland Hammock	<b>HPS</b> Historic Public and Semi-public Services	<b>PS</b> Public Services
<b>CG</b> General Commercial	<b>HPS (1 &amp; 2)</b> Historic Public and Semi-public Services 1 & 2	<b>RO</b> Residential / Office
<b>CL</b> Limited Commercial	<b>HRCC</b> Historic Residential Commercial Core	<b>SF</b> Single Family
<b>CM</b> Conservation- Mangrove	<b>HRCC (1 - 4)</b> Historic Residential Commercial Core 1-4	<b>SF Special</b> SF Special Ordinances 122-236 and 122-238
<b>CT</b> Salt Pond Commercial Tourist	<b>HRO</b> Historic Residential / Office	
<b>HCL</b> Historic Limited Commercial	<b>LDR-C</b> Coastal Low Density Residential	
<b>HCT</b> Historic Commercial Tourist	<b>M</b> Military	
<b>HDR</b> High Density Residential		

Zoning delineations based on Future Land Use Map (FLUM).  
 Original map created by D. Sullins Stewart with the City of Key West Planning Department dated 1993.  
 1996 Revisions provided by the City of Key West Planning Department.  
 FLUM adopted as zoning map by ordinance 97-10, July 3, 1997.  
 2004 Revisions provided by the City of Key West Planning Department based on ordinances 99-18, 00-14, and 03-04.  
 Base map provided by the Monroe County Property Appraiser.  
 Parcel map updated on: June 24, 2004  
 Plot prepared on: December 14, 2004

**ATTESTED:**  
 See Key West City Clerk's Office for Official Version

<b>TY SYMROSKI, CITY PLANNER</b>	<b>DATE</b>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____



**Photo Simulation of Proposed Tower at  
Wireless Telecommunications Facility**

## **Photo Simulation Creator Information**

**Created by:** RF Awareness

Advanced Frequency Engineering (AFE) began serving the wireless community in January, 1997, and in the interim has formed strong bonds between wireless carriers, site acquisition companies, local county planning and zoning boards, and various telecommunications tower companies.

Initially, AFE's main focus was on consulting, design, and all aspects of RF safety and awareness from safety surveys to safety training and workshops on RF emissions from telecommunication towers. Recently there has become a great demand for highly trained RF engineering experts in generating new tower site locations along with site design and zoning hearing testimony.

AFE has filled this void in support of our clients' changing needs. With the explosion in wireless telecommunications, AFE has addressed these key areas of expertise and has actively participated in expanding the wireless "footprints" for keyplayers in the wireless industry.

Our focus on serving wireless companies has expanded to include broadcast tower owners and wireless carriers. Our clients include small to large enterprises, government and public institutions and facilities, tower owners and wireless service providers.

Our tenure in the wireless telecommunications and broadcast industries has provided AFE national recognition thereby quickly making us one of the leaders in RF engineering. Our experience and diverse scope of services position us well to add value in a booming industry.

Dana Dulabone @ RF Awareness

<http://www.rfawareness.com/index.html>

813-495-0038

[info@rfawareness.com](mailto:info@rfawareness.com)

## Ball Park Site

Photo Simulation  
Tower Height - 145'  
Distance = 0.24 Miles

PROPOSED  
MONOPOLE



**Photo Spot 2**  
Photo Simulation  
Tower Height - 145'  
Distance = 0.15 Miles

**PROPOSED  
MONOPOLE**



## Office Max Site

Photo Simulation

Tower Height - 145'

Distance = 0.14 Miles

PROPOSED  
MONOPOLE



## Flagler / Kennedy Site

Photo Simulation  
Tower Height - 145'  
Distance = 0.41 Miles

PROPOSED  
MONOPOLE



# **Coastal Florida Fall Radius**



**N E L L O**  
CORPORATION

211 W. Washington St.  
Suite 2000  
South Bend, IN 46601

Phone: 574-288-3632  
Fax: 574-288-5860  
www.nelloinc.com

August 24, 2009

Rick Richter  
Keys Wi-Fi Inc.  
104 Palmetto Avenue  
Tavernier, FL 33070

Re: NTP 145'  
Coastal Florida (Fall Radius), Monroe County, FL  
Request for quote 23933

Mr. Richter:

This is regarding your inquiry about the expected performance of your NTP 145' tapered pole quoted by Nello Corporation for a site in Monroe County, Florida.

Our towers are designed to meet or exceed industry standards defined by TIA/EIA-222-G, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures" (EIA Standard). It is our opinion that the possibility of a tower collapse is very unlikely. The tower is designed using extreme wind and ice conditions. In fact, wind speeds specified by the EIA Standard are 50-year wind speeds. That is, they have only a 2% statistical chance of occurring in any given year. Furthermore, the tower is designed with extra factors of safety so that it would not be near a failure point even if the wind conditions were at their maximum design level.

This tower has been designed using the following wind conditions: a 155-mph 3-second-gust wind speed with no ice. The EIA Standard specifies 150 mph as the wind speed required for Monroe County, Florida. The "3-second-gust wind speed" refers to a wind measured at 33 feet above the ground. Equations in the EIA Standard take into account that the wind speed escalates with the increasing height of the tower. A wind speed of 155 mph would effectively become a wind speed of 191 mph at an elevation of 145 feet above ground level.

Although we cannot guarantee exactly how a tower would fall if it were to fail, the most likely mode of failure will be a buckling failure of one of the sections due to excessive compression loading. The section with the highest compressive stress ratio is located at the 92' – 145' level. Given that the tower section with the highest stress ratio will most likely fail first, the proposed tower would fail at the 92' level with the top 53' of the tower collapsing. Depending on the conditions at the time of failure and the stress levels in structural members below the 92' level, the top 53' of the tower would likely fall within a 25' fall radius.

If you have any other questions or concerns regarding our designs, please contact me by phone at 574-288-3632.

Sincerely,

Dan Ianello, PE  
President

# **Generator Sound Emissions**

KEYS WI-FI, INC.

**MEMORANDUM**

To: Mr. Rodney Corriveau  
Cc: Mr. Owen Trepanier  
From: Rick Richter

RE: Generator Sound Emissions

For the 2832 North Roosevelt Wireless Telecommunications Facility, all generator power will be limited to LP / Natural Gas, which has lower sound emissions and less environmental risks. A standard generator for a cell site would be a 60Kw, LP or gas powered unit, which emits approximately 69 dB's at 23 feet.(1)

The following tables were taken from a division of Accoustics.com. The tables can help us determine the increased amount of sound emissions from multiple units as well as the decreased amount of sound emissions utilizing distance, barrier walls, and sound reducing / weather proofing enclosures for the generators.

*More than one generator*

Obviously, the more generators in operation at one time, the louder the noise level. However, the noise level increase is not arithmetic and might not be as loud as you think. The following table demonstrates the noise level increase for multiple generators (assumes each generator is the same type and produces the same noise level):

Number of Generators	Noise Level Increase	Perception
1	-	-
2	+ 3 dB	"just perceptible"
4	+ 6 dB	"clearly noticeable"
10	+ 10 dB	"twice as loud"

Taking into account the distance involved from the generators (below table 2). The proposed site offers substantial natural distance for sound buffering on the North / South Axis.

*Distance*

Every time the distance from the generator is doubled, the noise level is reduced by 6 dB. (A 6 decibel reduction is defined as "clearly noticeable".) Note: You must double the total distance, not the original distance, to achieve additional 6 dB reductions. For example:

Distance from Generator	Noise Level Reduction
20 feet	-
40 feet	- 6 dB
80 feet	- 12 dB
160 feet	- 18 dB
320 feet	- 24 dB

Note: The 20' was selected as an arbitrary starting distance.

The East / West axis of the proposed site is quite a bit shorter than the North / South Axis, thus lacking the same benefits of sound reduction through natural distance separation. Fortunately, barrier walls form an excellent sound insulation buffer.

*Barrier Walls*

Barrier walls (of sufficient height & material) can substantially reduce the generator noise. To be effective, a barrier wall must at least block the line-of-sight from the source to the receiver. The wall must also be of solid construction, such as concrete block. ("Solid construction" does not necessarily imply that the cells be solid grouted. It implies that the wall should not have openings or penetrations.)

Finally, both shopping centers are currently equipped with diesel back up power generating capabilities. Of note, the Winn-Dixie shopping center's unit, a Cummins Diesel Generator with 3600 gallon capacity is less than 300 feet from the closet residential dwelling. At the time of this memorandum, decibel emission levels are still be awaited by Cummins South on this unit.



*Winn-Dixie 3600 gal diesel generator*

Conclusion:

The 2832 North Roosevelt proposed wireless telecommunications site selection mitigates sound emissions created by emergency, back up power generators. Techniques include:

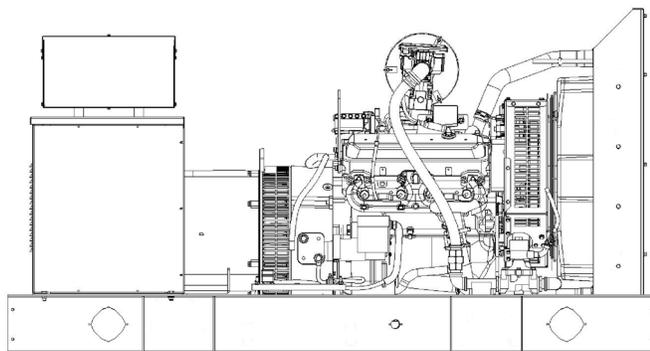
- ▶ Natural distance from the residential area
- ▶ Existing concrete barrier walls by nearby heavy commercial users
- ▶ Use of lower emission LP / Natural Gas models
- ▶ Siting in an area of larger units, which will “mask” smaller, LP units.

**(1) Based on Kohler 60 Kw LP design with sound and weather enclosures, or equivalent.**



**Ratings Range**

		<b>60 Hz</b>
<b>Standby:</b>	<b>kW</b>	49-64
	<b>kVA</b>	49-80



**Standard Features**

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- The 60 Hz generator set engine is certified by the Environmental Protection Agency (EPA) to conform to Tier 1 stationary spark-ignited emissions regulations.
- A one-year limited warranty covers all systems and components. Two-, five-, and ten-year extended warranties are also available.
- Alternator features:
  - The unique Fast-Response™ II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
  - Controllers are available for all applications. See controller features inside.
  - The electronic, isochronous governor incorporates an integrated drive-by-wire throttle body actuator delivering precise frequency regulation.

**Generator Set Ratings**

Alternator	Voltage	Ph	Hz	Natural Gas 130° C Rise Standby Rating		LP Gas 130° C Rise Standby Rating	
				kW/kVA	Amps	kW/kVA	Amps
4P8	120/208	3	60	60/75	208	60/75	208
	127/220	3	60	60/75	197	61/76	200
	120/240	3	60	60/75	180	60/75	180
	120/240	1	60	49/49	204	49/49	204
	139/240	3	60	60/75	180	62/78	186
	220/380	3	60	55/69	104	55/69	104
	277/480	3	60	60/75	90	62/78	93
347/600	3	60	60/75	72	62/78	75	
4S7	120/208	3	60	60/75	208	63/79	219
	127/220	3	60	60/75	197	64/80	210
	120/240	3	60	60/75	180	63/79	189
	120/240	1	60	57/57	238	59/59	246
	139/240	3	60	60/75	180	64/80	192
	220/380	3	60	60/75	114	63/79	120
	277/480	3	60	60/75	90	64/80	96
347/600	3	60	60/75	72	64/80	77	
4Q10	120/240	1	60	55/55	229	55/55	229
4V9	120/240	1	60	60/60	250	60/60	250

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. **Standby Ratings:** Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. **Prime Power Ratings:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (TIB-101) on ratings guidelines for the complete ratings definitions. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. **GENERAL GUIDELINES FOR DERATION: Altitude:** Derate 1.3% per 100 m (328 ft.) elevation above 200 m (656 ft.). **Temperature:** Derate 3.0% per 10° C (18° F) temperature above 25° C (77° F). Dual fuel engines are optimized to run on the primary fuel (natural gas) and, as a result, the LPG ratings may not be attained. For dual fuel engines, use the natural gas ratings for both the primary and secondary fuels.

# Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet
Leads: quantity, type	
4P8, 4S7	12, Reconnectable
4Q10, 4V9	4, 110-120/220-240
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	
Permanent magnet (PM) alternator	±2% Average
550 controller (with 0.5% drift due to temperature variation)	3-Phase Sensing, ±0.25%
Unbalanced load capability	100% of Rated Standby Current
One-step load acceptance	100% of Rating
Peak motor starting kVA:	(35% dip for voltages below)
480 V      4P8 (12 lead)	210
480 V      4S7 (12 lead)	270
240 V      4Q10 (4 lead)	155
240 V      4V9 (4 lead)	246

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and drip-proof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.
- Fast-Response™ II brushless alternator with brushless exciter for excellent load response.

## Application Data

### Engine

Engine Specifications	
Manufacturer	General Motors
Engine: model, type	Industrial Powertrain Vortec 5.7 L, 4-Cycle Natural Aspiration
Cylinder arrangement	V-8
Displacement, L (cu. in.)	5.7 (350)
Bore and stroke, mm (in.)	101.6 x 88.4 (4.00 x 3.48)
Compression ratio	9.1:1
Piston speed, m/min. (ft./min.)	318 (1044)
Main bearings: quantity, type	5, M400 Copper Lead
Rated rpm	1800
Max. power at rated rpm, kW (HP)	78.3 (105)
Cylinder head material	Cast Iron
Piston type and material	High Silicon Aluminum
Crankshaft material	Nodular Iron
Valve (exhaust) material	Forged Steel
Governor type	Electronic
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.5%
Frequency	Field-Convertible
Air cleaner type, all models	Dry

### Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust flow at rated kW, m <sup>3</sup> /min. (cfm)	16.4 (580)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	649 (1200)
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)
Exhaust outlet size at engine hookup, mm (in.)	76 (3.0) OD

### Engine Electrical

Engine Electrical System	
Ignition system	Electronic
Battery charging alternator:	
Ground (negative/positive)	Negative
Volts (DC)	12
Ampere rating	70
Starter motor rated voltage (DC)	12
Battery, recommended cold cranking amps (CCA):	
Qty., rating for -18°C (0°F)	One, 630
Battery voltage (DC)	12

### Fuel

Fuel System	
Fuel type	LP Gas or Natural Gas
Fuel supply line inlet	1 NPTF
Natural gas/LPG fuel supply pressure, measured at the generator set fuel inlet downstream of any fuel system equipment accessories, kPa (in. H <sub>2</sub> O)	1.74-2.74 (7-11)

Fuel Composition Limits *	Nat. Gas	LP Gas
Methane, % by volume	90 min.	—
Ethane, % by volume	4.0 max.	—
Propane, % by volume	1.0 max.	85 min.
Propene, % by volume	0.1 max.	5.0 max.
C <sub>4</sub> and higher, % by volume	0.3 max.	2.5 max.
Sulfur, ppm mass	25 max.	
Lower heating value, kJ/m <sup>3</sup> (Btu/ft <sup>3</sup> ), min.	26.6 (890)	67.5 (2260)

\* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

# Application Data

## Lubrication

Lubricating System	
Type	Full Pressure
Oil pan capacity, L (qt.)	4.7 (5.0)
Oil pan capacity with filter, L (qt.)	6.2 (6.5)
Oil filter: quantity, type	1, Cartridge

## Cooling

Radiator System	
Ambient temperature, °C (°F) *	50 (122)
Engine jacket water capacity, L (gal.)	6.8 (1.8)
Radiator system capacity, including engine, L (gal.)	20.8 (5.5)
Engine jacket water flow, Lpm (gpm)	117.3 (31)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	54.8 (3120)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	533 (21)
Fan, kWm (HP)	4.5 (6.0)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H <sub>2</sub> O)	0.125 (0.5)

\* Enclosure with enclosed silencer reduces ambient temperature capability by 5°C (9°F).

## Operation Requirements

Air Requirements	
Radiator-cooled cooling air, m <sup>3</sup> /min. (scfm)‡	170 (6000)
Combustion air, m <sup>3</sup> /min. (cfm)	5.2 (185)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	30.9 (1760)
Alternator, kW (Btu/min.)	7.7 (440)

‡ Air density = 1.20 kg/m<sup>3</sup> (0.075 lbm/ft<sup>3</sup>)

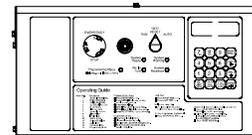
Fuel Consumption§	
Natural Gas, m <sup>3</sup> /hr. (cfh) at % load	Standby Rating
100%	22.4 (.790)
75%	19.4 (685)
50%	14.7 (520)
25%	9.9 (350)
LP Gas, m <sup>3</sup> /hr. (cfh) at % load	Standby Rating
100%	9.3 (330)
75%	7.1 (250)
50%	5.4 (190)
25%	3.8 (135)

§ Fuel consumption is based on 1015 Btu/standard cu. ft. natural gas.

LP vapor conversion factors:

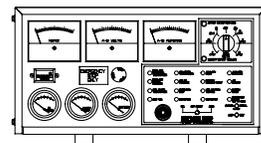
8.58 ft.<sup>3</sup> = 1 lb.  
0.535 m<sup>3</sup> = 1 kg.  
36.39 ft.<sup>3</sup> = 1 gal.

## Controllers



### Decision-Maker® 550 Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Alternator safeguard circuit protection. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to G6-46 for additional controller features and accessories.



### Decision-Maker® 3+, 16-Light Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Microprocessor logic, AC meters, and engine gauge features. 12- or 24-volt engine electrical system capability. Remote start, prime power, and remote annunciation options. Refer to G6-30 for additional controller features and accessories.

## Additional Standard Features

- Alternator Protection (standard with 550 controller)
- Battery Rack and Cables
- Electronic, Isochronous Governor
- Gas Fuel System (includes fuel mixer, secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop
- Oil Drain Extension
- Operation and Installation Literature

## Available Options

### Approvals and Listings

- CSA Approval
- UL 2200 Listing

### Enclosed Unit

- Sound Enclosure (with enclosed critical silencer)
- Weather Enclosure (with enclosed critical silencer)

### Open Unit

- Exhaust Silencer, Critical (kits: PA-324468, PA-352663)
- Flexible Exhaust Connector, Stainless Steel

### Fuel System

- Flexible Fuel Line (required when the generator set skid is spring mounted)
- Gas Filter
- Secondary Gas Solenoid Valve

### Controller (550 and 16-Light)

- Common Failure Relay
- Communication Products and PC Software (550 controller only)
- Customer Connection
- Dry Contact (isolated alarm)
- Engine Prealarm Sender
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel
- Remote Emergency Stop
- Remote Mounting Cable
- Run Relay

### Cooling System

- Block Heater [recommended for ambient temperatures below 10°C (50°F)]

### Electrical System

- Alternator Strip Heater
- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater
- Line Circuit Breaker (NEMA1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)
- Safeguard Breaker (available with 16-light controller)

### Miscellaneous

- Air Cleaner Restrictor Indicator
- Engine Fluids (oil and coolant) Added
- Rated Power Factor Testing
- Rodent Guards

### Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

### Warranty

- 2-Year Basic
- 2-Year Prime
- 5-Year Basic
- 5-Year Comprehensive

### Other Options

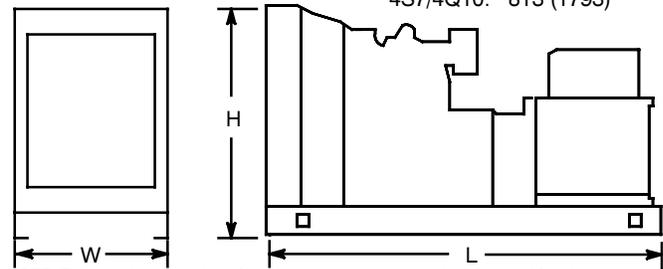
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## Dimensions and Weights

Overall Size, L x W x H, mm (in.) :

4P8/4V9:	Wide Skid	2200 x 1040 x 1172 (86.6 x 40.9 x 46.1)
	Narrow Skid	2200 x 865 x 1172 (86.6 x 34.0 x 46.1)
4S7/4Q10:	Wide Skid	2200 x 1040 x 1211 (86.6 x 40.9 x 47.7)
	Narrow Skid	2200 x 865 x 1211 (86.6 x 34.0 x 47.7)

Weight (radiator model), wet, kg (lb.): 4P8/4V9: 755 (1665)  
 4S7/4Q10: 813 (1793)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

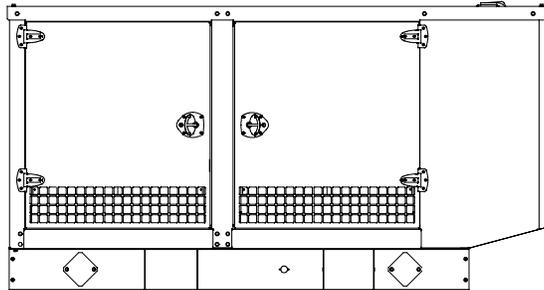
**DISTRIBUTED BY:**



Applicable to the following:  
**40-150REZG**

**Weather Enclosure Standard Features**

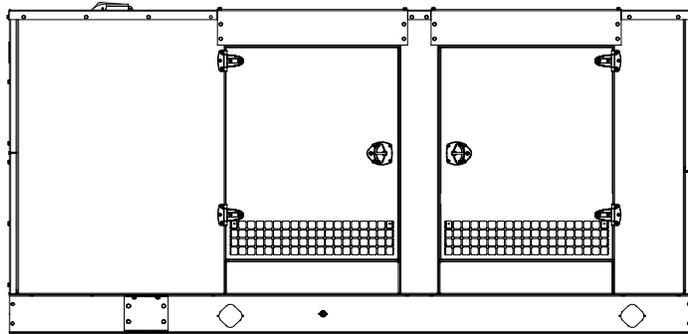
- Internal-mounted critical silencer and flexible exhaust connector.
- Lift base-mounted, steel construction with hinged doors.
- Fade-, scratch-, and corrosion-resistant Kohler® cream beige powder-baked finish.
- Lockable, flush-mounted door latches.
- Vertical air inlet and outlet hoods with 90 degree angles to redirect air and reduce noise.
- High wind bracing, 241 kph (150 mph).



**40-60 kW Enclosure**

**Sound Enclosure Standard Features**

- Includes all of the weather enclosure features with the addition of acoustic insulation material.
- Lift base-mounted, steel or aluminum construction with hinged doors. Aluminum enclosures are recommended for high humidity and/or high salt/ coastal regions.
- Acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption.
- Sound attenuated enclosure that uses up to 25 mm (1 in.) of acoustic insulation, acoustic-lined air inlet hoods, and acoustic-lined air discharge hood.



**80-150 kW Enclosure**

**Weather and Sound Enclosure Specifications**

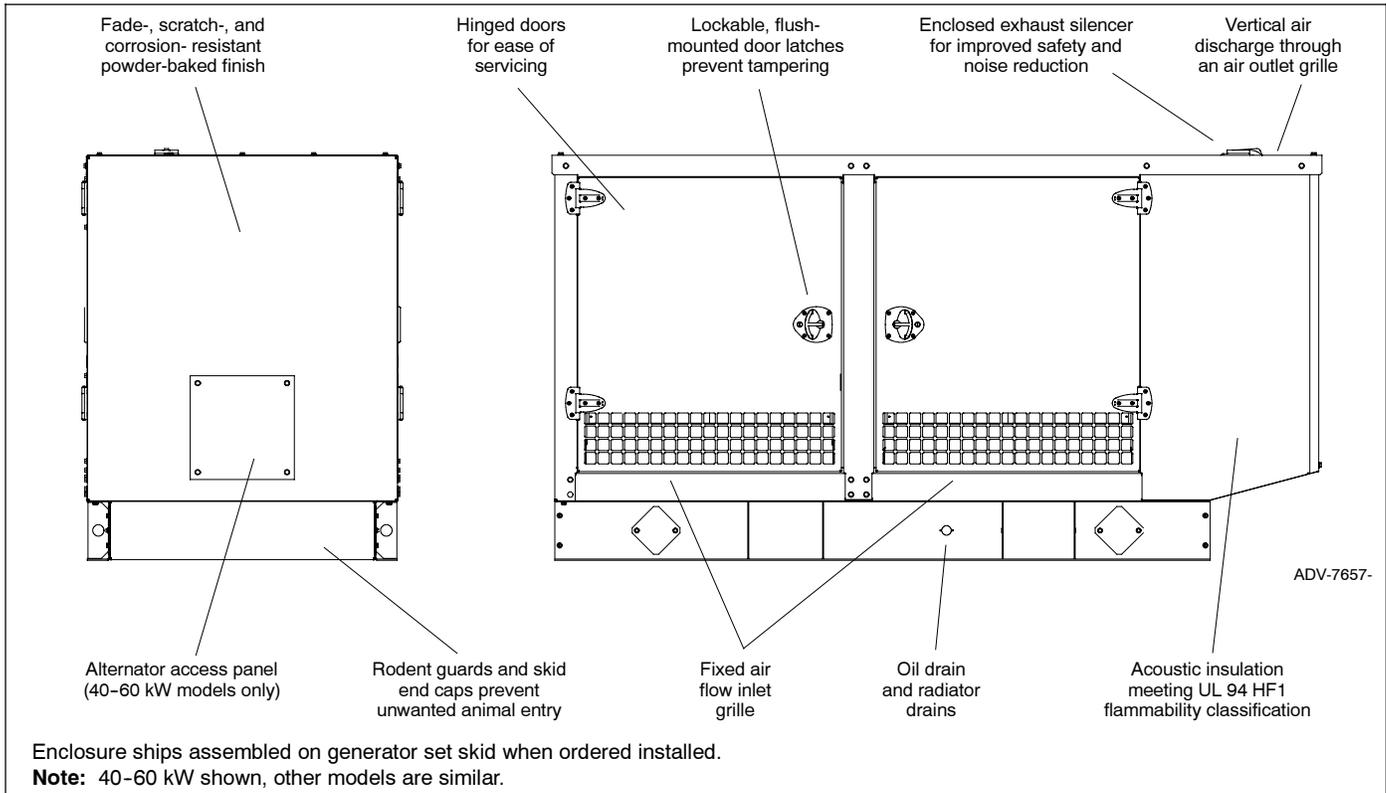
Model	Max. Dimensions, mm (in.)			Weight, kg (lb.) †			Sound Enclosure, Sound Pressure at 7 m (23 ft.), dB(A)
	Length	Width	Height	Steel Weather Enclosure	Steel Sound Enclosure	Aluminum Sound Enclosure	
40REZG	2565(101.0)	1078 (20.6)	1364 (53.7)	795 (1753)	800 (1764)	708 (1561)	69
45REZG				899 (1982)	904 (1993)	812 (1790)	69
50REZG				994 (2191)	999 (2202)	907 (2000)	68
60REZG				1118 (2465)	1123 (2476)	1031 (2273)	69
80REZG	3500(137.8)	1156 (45.5)	1697 (66.8)	1513 (3336)	1523 (3358)	1337 (2948)	70
100REZG				1634 (3602)	1645 (3627)	1444 (3183)	71
125REZG				1662 (3664)	1673 (3688)	1469 (3239)	71
150REZG				1843 (4063)	1855 (4090)	1628 (3589)	74

**Note:** Refer to the respective ADV drawings for details.

† Weight includes the generator set (wet), enclosure, and silencer.

The generator set weight represents using the largest alternator option.

## Weather and Sound Enclosure



### Enclosure Features

- Available in steel (14 gauge) formed panel, solid construction. Preassembled package offering corrosion resistant, dent resilient structure mounting directly to lift base or fuel tank.
- Powder-baked paint. Superior finish, durability, and appearance.
- Internal critical exhaust silencer offering maximum component life and operator safety.
- Interchangeable modular panel construction. Allows complete serviceability or replacement without compromising enclosure design.
- Cooling/combustion air intake with a horizontal air inlet. Sized for maximum cooling airflow.
- Service access. Multi-personnel doors for easy access to generator set control and servicing of the oil fill and battery.

- Cooling air discharge. Weather protective design featuring a vertical air discharge outlet grille. Redirects cooling air up and above enclosures to reduce noise ambient.

### Additional Sound Enclosure Features

- Available in steel (14 gauge) or aluminum 3.2 mm (0.125 in.) formed panel, solid construction.
- Attenuated design. Acoustic insulation UL 94 HF1 listed for flame resistance offering up to 25 mm (1 in.) mechanically restrained acoustic insulation.
- Cooling air discharge. The sound enclosures include acoustic insulation with urethane film.

**DISTRIBUTED BY:**

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® generator set distributor for availability.

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# **FCC Transmission, Reception and Frequency License Requirements**



## KEYS WI-FI, INC.

---

August 24, 2009

Mr. Rodney Corriveau  
Senior Planner  
City of Key West  
604 Simonton  
Key West, FL 63040

Mr. Corriveau:

This letter is to serve as a statement that the proposed tower (2832 North Roosevelt Boulevard), including reception and transmission functions, will not interfere with the customary transmission or reception of radio, television or similar services as well as other wireless services enjoyed by adjacent residential and nonresidential properties. Further, all future users shall be only allowed to use equipment of the type and frequency that will not interfere with customary transmission or reception of the above listed modes, and all users will be limited to FCC licensed providers and subject to all FCC transmission, reception, and frequency license requirements.

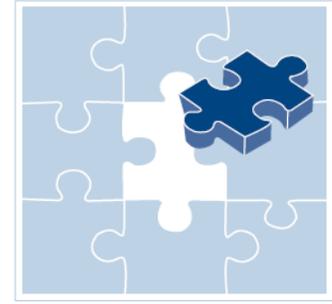
Sincerely,

Rick Richter  
President

# **Wireless Communication Facility – Collocation Opportunities Memorandum**

# MEMORANDUM

TREPANIER

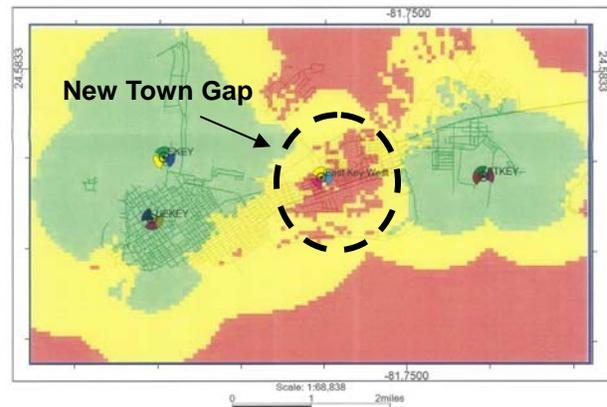


& ASSOCIATES INC  
LAND USE PLANNING  
DEVELOPMENT CONSULTANTS

**Date:** 08/23/2009  
**To:** Mr. Corriveau, AICP, Senior Planner III  
**From:** Owen Trepanier  
**CC:** Mr. Richter  
**Re:** **2832 N. Roosevelt Blvd.  
Wireless Communication Facility - Collocation Opportunities**

The following is a summary of Keys WI-FI, Inc.'s study of locations and collocation opportunities to eliminate the existing New Town Wireless Coverage Gap.

Keys WI-FI, Inc. seeks to solve the existing cellular telephone coverage gap that exists in New Town. The New Town Gap extends east-west from the Triangle to 5th St. and north-south from N. Roosevelt Blvd. to S. Roosevelt Blvd.. The New Town Gap encompasses an area of approximately two square miles. Most AT&T users experience low-quality coverage outdoors and little to no indoor coverage within the gap. Verizon, Sprint, and Nextel users will also experience significant service improvements with the elimination of this coverage gap.



Currently the gap results in irritating service interruptions at best and at worst poses a significant risk to life-safety. The Key West Police Department searched their emergency calls, at the request of Trepanier & Associates, for the intersection at Winn Dixie driveway and N. Roosevelt as a sample of the volume of calls at one intersection within the gap. The records reveal, at this one location alone, approximately 460 emergency calls were made to the KWPD during the last 4 1/2 years. Additionally, and not surprisingly, the records also included reports of dropped and lost calls.

Keys WI-FI, Inc. began its siting analysis by identifying all towers in and around Key West in the hopes of finding a collocation opportunity to avoid the expensive undertaking of creating new infrastructure. The following map of existing towers resulted. As depicted by the map, there is only one existing tower within any proximity of the gap; the Monroe County Sheriff's Office Tower located on Sigsbee. Collocation is not possible at Sigsbee because the tower is currently at capacity and cannot

accommodate additional wireless infrastructure<sup>1</sup>. The Sheriff's Office also relayed to us that they get regular inquiries from wireless service providers seeking to collocate on that tower, and that they understand there is great need in the area for coverage but their wireless infrastructure (on the Sigsbee tower) is already at capacity.



Keys WI-FI exhausted the attempts to collocate and then attempted to locate the facility on property owned by the Key West Housing Authority. A presentation was made to the Housing Authority Board on 01/12/09. The following month the Board decided the best long-term housing strategy was to keep the property available for redevelopment in the future and avoid the encumbrance of a long-term lease.

A proposal was made to the Monroe County School district, to locate the facility at the near the Poinciana School and the Kennedy Ball Field Complex. Keys WI-FI's attempts were deferred pending an RFP process for long-term leases of public property. No such RFP has since been issued and nor is one currently proposed for the future.

Finally, Keys WI-FI considered City Owned land near Little Hamaca Park. Unfortunately, the height requirements of the facility, the park's proximity to the runway, and catastrophic failure considerations negate the viability of this location.

The Herman site, at 2832 N. Roosevelt Blvd., was determined to be the most suitable location because of zoning and compatibility characteristics:

- The site is centrally located within the New Town Gap;

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<sup>1</sup> Please see attached

- Public/ Private utilities are an allowable use in the General Commercial zoning district;
- The site light industrial/ heavy commercial in nature;
- The adjacent surrounding land use are similar in nature;
- The site has a significant setback from N. Roosevelt Boulevard (approximately 550 feet) and any other public right of way;
- The site has a significant separation from any residential use; and
- The site can be secured and screened to mitigate visual impacts.

Finally, it is important to understand that this tower will not only eliminate the New Town Gap, but it will expand the City's existing wireless infrastructure. This facility will have the capacity to allow approximately five to six FCC licensed service providers, and other wireless providers such as FM radio communications, pagers, and wi-max.

# **Memorandum for Neighborhood Map**

# MEMORANDUM

TREPANIER

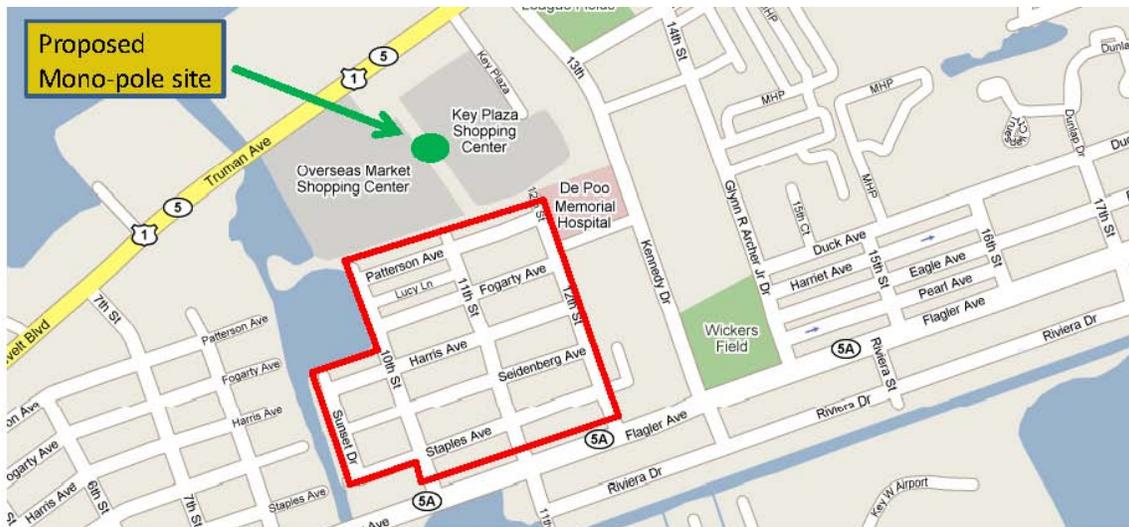


& ASSOCIATES INC  
LAND USE PLANNING  
DEVELOPMENT CONSULTANTS

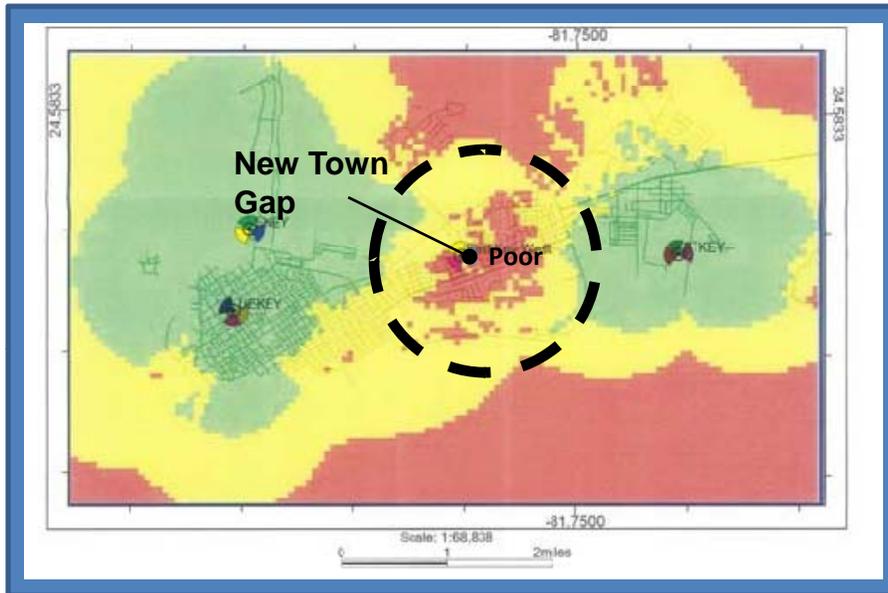
**Date:** 09/04/2009  
**To:** Mr. Rodney Corriveau, Key West Planning Dept.  
**From:** Mehdi Benkhatar  
**CC:** Rick Richter, Owen Trepanier  
**Re:** **Neighborhood Map of 2832 N. Roosevelt Blvd. Project**

The map shown below outlines the area where Neighborhood Meeting flyers have been distributed in anticipation of the September 8, 2009 event. As part of the “good neighbor” policy, Trepanier & Associates believes that it would be beneficial to receive questions and comments from residents most likely affected by this project.

This area is composed of single-family residential units and is bounded to the north by the Overseas Market and Key Plaza shopping centers. Please contact me at (305) 293-8983 if you would like to ask any questions or share concerns.



# Neighborhood Meeting

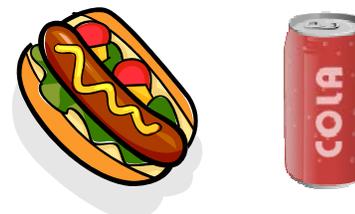


If you can't attend, please don't hesitate to call or stop by  
**Trepanier & Associates, Inc.** at  
**402 Appelrouth Lane, 293-8983.**  
We can also come to you with information, explain what is proposed and incorporate your ideas and suggestions.

## Do you have bad cell phone coverage?

If you do, it's likely due to the "New Town Gap". The entire island has excellent cell phone coverage, except for this area of New Town.

Keys WI-FI, AT&T, Verizon, Sprint, & Nextel would like to close the New Town Gap with new wireless infrastructure. A 145' mono-pole built to withstand hurricane force winds located behind the "Tunnel" will eliminate the New Town Gap. We'd like to share the plans and hear your thoughts. **Please join us!**



**Refreshments will be served!**  
**September 8<sup>th</sup>, 2009 5:30 PM to 7:30 PM**  
**2832 North Roosevelt Boulevard**  
Behind the Tunnel Car Wash