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## SUPPORTING STATEMENT

**A. Justification:**

1. The Commission is requesting Office of Management and Budget (OMB) approval for an extension of this information collection. The Commission has adjusted the total number of respondents/responses, the total annual hourly burden, and the total annual cost to respondents from the previous estimates, based on a reevaluation of the process for determining these various burdens. See item 15 for explanation.

The National Environmental Policy Act (NEPA) of 1969 requires agencies of the Federal Government to evaluate the effects of their actions on the quality of the human environment. To meet its responsibilities under NEPA, the Commission, in the *Second MO&O*, ET Docket No. 93-62, (adopted August 1997) revised RF exposure guidelines for the purpose of evaluating the potential environmental effects of RF radiation from FCC-regulated facilities. These guidelines reflected more recent scientific studies of the biological effects of RF radiation and the use of these guidelines would ensure that the FCC's applicants are evaluating their facilities with the latest standards for RF exposure.

The implementation of the NEPA guidelines increased the burden to respondents in two ways:

- (1) the adoption of more restrictive exposure limits decreased the number of services which might be excluded from routinely performing an environmental evaluation; and
- (2) respondents now have to consider the energy contributions from multiple transmitters when performing an environmental evaluation.

Prior to adoption of the *Second MO&O*, the Commission considered the suggestions of the *Ad Hoc* Association of Parties Concerned about the FCC Health and Safety Rules regarding public access to information associated with the environmental aspects of RF radiation without undue burden on Commission licensees. The Commission requires applicants to submit limited information during the licensing and authorization process. In many services, the Commission simply requires licensees to provide reliable service to specific geographic areas, but does not require licensees to file site-specific information. It does not appear that the FCC's present licensing methods can provide public notification of site-specific information without imposing new and significant additional burden to the Commission's applicants. However, we note that applicants with the greatest potential to exceed the Commission's exposure limits are required to routinely perform an environmental evaluation as part of the licensing and authorization process. We advise concerned members of the public, seeking site-specific information, to contact the Commission for the name and telephone number of the service providers in the concerned party's area. The Commission encourages all service providers to provide site-specific,

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technical information and environmental evaluation documentation upon public request. In addition, we note alternative sources of information may be state and local governments, which may collect some site-specific information as part of the zoning process.

This collection of information is authorized under Sections 4, 302, 303 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 302, 303 and 307.

As noted on the OMB Form 83-I, this information collection affects individual consumers or households. Pertinent information that results from environmental evaluations is typically only collected from applicants for licenses or grants of equipment authorization, not from individuals or households.

The Commission has a System of Records, FCC/WTB-1, "Wireless Services Licensing Records," which covers the personally identifiable information (PII) that individual applicants may include in their submissions for licenses or grants of equipment authorization.<sup>1</sup> At such time as the Commission revises this System of Records Notice (SORN), the Commission will conduct a Privacy Impact Assessment (PIA) and publish the revised SORN in the *Federal Register*. In addition, the Commission will post a copy of both the PIA and the SORN on the FCC's Privacy webpage.

2. The information collected is needed, because the Commission requires applicants to perform an environmental evaluation with respect to radio frequency electromagnetic fields. Applicants are required to consider contributions from other transmitters within the vicinity of their facility in order to assess the cumulative exposure. Accordingly, to correctly determine compliance with the Commission's exposure limits, an applicant must locate, determine ownership, and gather technical information for all contributing transmitters.

Applicants are generally required, as part of the authorization and licensing process, to indicate compliance with the Commission's environmental rules. Supporting information may be requested and reviewed by the Commission's engineers, attorneys, and paraprofessional staff to determine whether the environmental evaluation is sufficiently complete and in accordance with the Commission's Rules.

3. The information collection almost always involves the use of electronic techniques. The Commission estimates that the use of information technology to reduce the burden may be feasible in 99% of cases.

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<sup>1</sup> The system of records notice (SORN) for FCC/WTB-1, "Wireless Services Licensing Records," was published in the Federal Register on April 5, 2006, see 71 FR 17234, 17269. The SORN may also be viewed at <http://www.fcc.gov/omd/privacyact/records-systems.html>

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4. The Commission recognizes the possibility of duplication of effort in the preparation and submission of environmental information and has provided in Section 1.1311(e) that: “An Environmental Assessment (EA) need not be submitted to the Commission if another agency of the Federal Government has assumed responsibility for determining whether the facilities in question will have significant effect on the quality of the human environment and, if it will, for invoking the environmental impact statement process.”

Section 1.1311(d) provides: “to the extent that such information is submitted in another part of the application, it need not be duplicated in an EA, but adequate cross-reference to such information shall be supplied.”

The Commission's rules do not require multiple submissions of the same environmental information for different purposes.

5. In conformance with the Paperwork Reduction Act of 1995, the Commission has limited the information collection requirements to those services, which pose the highest potential for exceeding RF radiation limits. Efforts have been made to categorically exclude facilities, commonly used by smaller businesses and entities, which appear to have little potential for causing exposures in excess of the guidelines. In situations where a service cannot be categorically excluded in its entirety, some transmitters within such a service may be excluded if meeting specific power and antenna height criteria.

In addition, the Commission has minimized environmental evaluation considerations by providing technical documentation and analysis techniques in the form of OET Bulletin 65, *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*. It is estimated that 99% of the affected parties will use this document to determine compliance.

6. If the information were not collected, the Commission could not ensure compliance with the National Environmental Policy Act (NEPA), specifically, to minimize the potential environmental effects of RF radiation from FCC-regulated facilities.

7. Applicants would generally perform an environmental evaluation only when submitting an initial application for authorization or license, modification of the authorization or license, or renewal of the authorization or license. In most situations, we expect that an applicant is only required to indicate compliance with the Commission's environmental rules. However, under 47 CFR §§ 1.1307(c) and (d), the Commission may require the collection of additional information if it determines that a significant environmental effect may exist. Further, if the Commission deems it necessary, it may require applicants previously excluded from performing an

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environmental evaluation to submit environmental information.

8. The Commission solicited the views of industry and the general public by *Federal Register* (76 FR 2380, January 13, 2011). No comments were received in response to the *Federal Register* notification. A copy of the notice is referenced in the submission to the OMB.

9. No payment is made to the respondent.

10. There is a minimal exemption from the Freedom of Information Act, Title 5, U.S.C. 552(b) (4), and FCC Rules 47 CFR § 0.459(d), that is granted for trade secrets, which may be submitted to the Commission as part of the documentation of test results. No other assurances of confidentiality are provided to respondents.

11. No sensitive information is requested. As noted above in Question 1, this information collection may affect individuals or households. Any personally identifiable information that is submitted by individuals is covered by a SORN, WTB-1, "Wireless Services Licensing Records."

12. The Commission estimates that respondents will file approximately **190,905** RF evaluations annually x **0.36 hours (average) burden per response** equals an annual burden of **69,463 hours**. As discussed below, responses are typically required upon initial request for authorization and at intervals of from five to ten years afterward.

Because the number of applications that the Commission receives varies each year, the burden calculated for this submission is less than the previous submission. From time to time, the Commission auctions new licenses, which result in a large number of applications being filed afterward. For the period reviewed in preparing this submission, there were no auctions held and certain program changes (including prohibitions on certain types of applications) resulted in a reduction in the number of applications filed in comparison with the previous submission.

During Fiscal Year 2009-2010, the Commission processed about 462,000 applications. It is estimated that 190,905 of these applications included some type of environmental certification related to RF exposure. Such certification is required only when submitting an initial application for authorization or license, modification of the authorization or license, or renewal of the authorization or license in non-excluded services. Typical license terms are from five to ten years. The vast majority of certifications took the form of a claim of categorical exclusion from routine evaluation, and most of the others were able to certify compliance without filing additional documentation with the FCC. The 2009-2010 licensing and authorization activities (number of forms filed) are typical for the FCC.

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There is considerable variation in the range of hour burden for respondents. The Commission estimates that 180,310 respondents fall under categorical exclusion and will require approximately 5 minutes to make this determination, for a total annual burden of 15,026 hours. In making this determination, the respondent would be required to determine under what rule part an authorization has been granted; many rule parts are themselves entirely categorically excluded. If the respondent finds that an authorization is under a rule part that is not excluded, the respondent may then compare the authorized radiated power level and antenna height with values listed in a table, below which categorical exclusion may also be claimed.

Respondents that are unable to claim categorical exclusion will have to complete worksheets or perform simple calculations described in OET Bulletin No. 65 to determine compliance with the environmental rules concerning RF exposure. It is estimated that 8,864 respondents will fall into this category. The estimated amount of time required for most simple calculations would be one to nine hours, giving a total of about 23,155 hours.

For respondents having commingled RF sources, portable devices, or otherwise having authorizations requiring detailed evaluation by calculation and/or measurement, the amount of time required is estimated to range from four to 40 hours. The total number responses requiring detailed or complex evaluations is estimated to be 1,731, representing 50,017 hours.

**As shown in Table 1, the total number hours required for RF exposure evaluations is estimated to be 69,463.**

Type	Total applications	Not Cat. Excluded	Simple calculation required	Cost per calculation	Hrs	Subtotal cost	Subtotal hours	Detailed analysis or measurement	Cost per analysis	Hrs	Subtotal cost	Subtotal hours	Total cost	Total hours
Satellite	1003	752	376	\$450	3	\$1,692,566	1,128	376	\$1500	6	\$564,288	2,257	\$733,444	3,385
Broadcast	22,660	452	407	\$450	3	\$1,830,900	1,220	45	\$5000	20	\$226,000	904	\$4,030,600	2,124
Experimental	1029	21	16	\$450	3	\$7,400	48	4	\$2500	10	\$10,200	41	\$17,600	91
Portable	30,700	1228	737	\$1250	9	\$9,216,800	6,631	492	\$10000	40	\$4,920,000	19,618	\$15,906,680	26,279
Cellular	26,999	266	239	\$450	3	\$1,079,900	718	27	\$1500	6	\$408,855	160	\$1,475,755	877
Paging	863	86	78	\$450	3	\$34,952	233	9	\$1500	6	\$13,945	52	\$47,897	285
P.C.S.	319	31	28	\$450	3	\$12,637	85	3	\$1500	6	\$4,695	18	\$17,332	103
Broadband	1560	56	110	\$450	3	\$63,280	421	16	\$1500	6	\$23,400	94	\$86,680	515
SMR	32,370	32,37	29,2	\$450	3	\$13,194,85	8,740	324	\$1500	6	\$485,550	1942	\$17,965,335	10,682
Amateur	87,306	43,65	39,29	\$0	1	\$0	39,29	437	\$150	4	\$65,480	1746	\$65,480	56,75
Other	98,472	0	0			\$0	0	0			\$0	0	\$0	0
<b>Total</b>	<b>300,005</b>	<b>10,915</b>	<b>8,864</b>			<b>\$28,833,888</b>	<b>23,155</b>	<b>1,731</b>			<b>\$6,344,432</b>	<b>26,862</b>	<b>\$9,228,320</b>	<b>90,017</b>

Table 1: Cost and time burdens for evaluations performed by applicants that could not claim categorical exclusion

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13. The Commission estimates that respondents will incur an annual cost of \$10,355,260 in collecting the required information.

Assuming a billing rate of \$75 per hour, the total cost burden for determinations of categorical exclusion is ( $\$75 \times 15,026 \text{ hours} =$ ) \$1,126,940. Applications for facilities, which are not categorically excluded, but requiring simple calculations or detailed analysis/measurements, are assumed to require review by persons having more specialized skills at higher billing rates, of \$150 and \$250 per hour, respectively. The Commission has estimated those time requirements and costs as shown in Table 1 (\$9,228,320). Therefore,  $\$9,228,320 + \$1,126,940 =$  \$10,355,260.

Since facilities regulated under Part 97 of the Commission's rules are typically owned by technically knowledgeable members of the public, a lesser cost has been assumed.

In preparing their RF evaluations, we believe that some applicants may consider the following:

- (i) distribution of other antennas with the vicinity of the applicant's facility; and
- (ii) calculating approximately the time necessary to locate other transmitters, identify ownership, obtain technical data, and determine compliance.

Most transmitters are evaluated according to the Commission's limits for electromagnetic fields or power density. However, for portable devices authorized under Part 2 of the Commission's rules, the specific absorption rate (SAR) of RF energy into tissue must be modeled or measured. The Commission estimates that the average cost of an SAR test is approximately \$10,000.

The above time and cost figures are reflected in Table 1.

14. The total annualized costs to the Federal government associated with this information collection is \$125,341. All of the costs are personnel-related.

It is estimated that a GS-855-09, Step 5 electronics engineer (\$28.57 per hour) spends approximately 1 minute considering each of the estimated 180,310 claims of categorical exclusion or routine compliance (requires examining a "yes/no" entry on a form) to determine if an applicant has sufficiently demonstrated compliance. The total annualized cost to the Federal government for these reviews is ( $\$28.57 \times 180,310 \times 1/60 =$ ) \$85,858.

The Commission currently collects and analyzes additional supporting information for approximately 9% of the 10,595 detailed evaluations performed by the respondents, for a total of 953 reviews. Review of

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this information requires a higher grade level engineer and requires more time. For this purpose, it is estimated that a GS-855-12, Step 5, electronics engineer (\$41.43 per hour) spends approximately one hour in reviewing the detailed compliance demonstrations in each of these. The total annualized cost to the Federal government for these reviews is ( $\$41.43 \times 953 =$ ) \$39,483.

The cost to the Federal Government is the sum of the above amounts (\$125,341).

15. The Commission has adjusted the total number of respondents/responses, the total annual hourly burden, and the total annual cost to respondents from the previous estimates, based on a reevaluation of the process for determining these various burdens. The calculated burden associated with evaluating RF exposure was reduced by about half, when compared with the 2007 submission. The 2007 submission included consideration of some land mobile applications, which in fact contain no certification requirements, therefore the total number has been further reduced.

16. The data will not be published for statistical use.

17. The Commission is not requesting a waiver of displaying the OMB expiration date for the reporting requirements contained in rule sections. The Commission does display the OMB Control Number, expiration date and title of each OMB-approved IC in 47 CFR 0.408.

18. There are no exceptions at this time.

**B. Collection of Information Employing Statistical Methods:**

This collection of information does not employ statistical methods.