

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FCC 81-258
29370

In the Matter of)
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)
Amendment of Part 73.293 and Part) BC Docket No.81-352
2.106 of the Commission's Rules)
Concerning Use of the Subsidiary)
Communications Authorization)
for Utility Load Management)

NOTICE OF PROPOSED RULE MAKING

Adopted: May 21, 1981

;Released: June 8, 1981

By the Commission: Chairman Fowler abstaining from voting; Commissioner Jones absent.

1. The Commission has before it a proposed amendment of its FM subcarrier rules under its Subsidiary Communications Authorization (SCA). The proposed change permits the use of a subcarrier signal for utility load management purposes. Signals broadcast on SCA's can trigger switches to turn off certain appliances of utility customers and provide a means for multi-rate metering through the controlled use of two or more watt-hour meter registers. These and similar applications foster a better utilization of the nation's energy resources.

2. The proposed amendment is required because the Commission's FM SCA rules at Section 73.293 limit FM subsidiary service use to the transmission of programs which are of a broadcast nature and transmission of signals which are directly related to the operation of FM stations.

3. In the Commission's Report and Order in Docket No. 12517, released May 9, 1960, 19 RR 1619 (1960), the source of the above rules, we reasoned that allowing FM broadcasters to provide subcarrier services basically unrelated to broadcast operation would not serve the public interest. The reasoning was that (a) expansion of such uses would "tend to foreclose in many communities the future development of FM stereophonic broadcasting," (b) such services "would cause serious and unwarranted financial hardship to many licensees in the Domestic Public Radio Services," (c) such use "would amount to a de facto reallocation of broadcast

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frequencies" to non-broadcast uses. Subsequently in its 1975 Report and Order in Docket No. 20012, 32 RR 2d 11551 (1975), the Commission amended its rules to permit the transmission of visual program material (Section 73.293 (b) of the Rules).

4. In the case of utility load management uses, we now believe it is clearly in the public interest to allow such usage. First, for most FM broadcasters, stereophonic broadcasting is standard procedure and we think it highly unlikely that such broadcasting will be seriously affected by permitting load management uses on SCA's. Second, the more efficient use of spectrum reduces the cost of using our nation's scarce resources and alleviates the demands on other services. Thus, this mining of unused resources creates beneficial effects for society and is more important than the narrow interests of similar types of services. Although this action would allow nonbroadcast use of the spectrum, it would have little or no impact on broadcast use.

5. Since the mid 1970's, conservation of energy has become of extreme importance to our nation. Great amounts of effort and funds are being expended by the government and by private parties toward the improvement of energy utilization in order to decrease the dependence of the United States on foreign fuels. The permission to use subcarrier signals as part of this important effort, as would be the case in its use for Utility Load Management,

appears clearly to warrant altering the Commission's "non-broadcast" SCA rule limitation. 1/

6. A subcarrier signal can currently be used in any of three ways to alleviate demands for particular fuels during peak periods or at times of severe fuel shortages. First, the SCA can be used as a switch to turn off certain users' equipment which consumes a particular fuel. Secondly, the SCA can automatically switch users from one type of equipment to another in order to redistribute fuel demands from one fuel to another. The third alternative is to use the SCA to switch the metering of a particular fuel during certain periods. Such metering changes allow the utility to charge higher rates for a fuel during certain time periods. Thus price pressure can be used as a means of discouraging demands for a particular fuel during heavy use periods or during severe shortage periods. All three of these uses of an SCA serve to further the goal of conserving energy by using it more efficiently. This saving can be substantial. In terms of residential use alone, there are presently about 93 million units (primarily water heaters and air conditioners) capable of being remotely controlled by agreement between the utility and user. The Commission is therefore proposing to amend its rules to include utility load management as a permissible commercial use of SCA. We propose that the existing SCA authorization procedures and technical operating requirements will apply to this extension. We solicit comments on this proposal.

7. While we believe the intended application noted above is a very efficient and beneficial usage of the spectrum, the Commission is also aware its

1/ The Commission is concerned with the overall efficiency of spectrum usage under present permissible SCA uses. The Commission does not wish to see existing spectrum wasted because of over restrictive rules requiring allowable usage. Due to advances in the technical art, it is also conceivable that the present subcarriers in use on an FM channel may ultimately be expanded and offer still more available spectrum. Furthermore, as presently written, our rules proscribe any SCA use while the FM station is not broadcasting and results in an additional nonuse of otherwise available spectrum. In view of these and other dynamic changes affecting SCA capability, we are contemplating, in the near future, a separate proceeding to view overall SCA usage and assess the desirability of expanding the permissible uses of an SCA.

4

permitted use, in effect, does alter the categorical purity of the FM broadcasting spectrum allocation in the Table of Frequency Allocations (§ 2.106 of the Rules). While the present change is only minor, an unlimited number of other such alterations could result in a more complex Table which may have the potential of adversely affecting the Table's administration. This is a factor that the Commission will take into account. The Commission understands how the broad accommodation of services in the Table based on technical feasibility can introduce complexities in the process of spectrum management particularly in the coordination of assignments, and such complexities must be compared to the benefits which derive from the increased spectrum use. We, therefore, are interested in exploring such impacts and ask for comments addressed to this matter.

8. Pursuant to the Regulatory Flexibility Act of 1980, the Commission finds as follows:

I. Reason for action

It appears that the use of SCA subcarrier signals as a Utility Load Management technique could improve the nation's utilization of energy and thus be in the public interest, but is presently prohibited by Commission rule 73.293.

II. The objective

The Commission proposed to exempt Utility Load Management use of the FM subcarrier signal from the "non-broadcast" prohibition of rule 73.293 in order to make this technique available to advance a more efficient utilization of the nation's scarce energy resources.

III. Legal basis

Action as proposed is in furtherance of Section 303 of the Communication Act of 1934, as amended, which charges the Commission to explore new and improved uses of radio.

IV. Description, potential impact and number of small entities affected

The exemption of Utility Load Management from the Commission's "non-broadcast" prohibition could be expected to have a beneficial effect on most parties wishing to use, or receiving use from the technique. The proposed change is permissive, authorizing a use but not requiring it. The rule change would have its direct effect on FM stations (4374 stations as of 12/31/80) by enabling them, if they wish, to rent out subcarrier spectrum to utilities wishing to use it. At present they rent them out only for broadcast-like

5

uses. The next effect would be on these utilities, most of which are small entities (1900 municipal systems, 900 rural electric cooperatives), and then, of course, on their customers. The number of these entities that may be affected, while unknown, is expected to be substantial. However, it is doubtful that this effect will be of any significant nature to the great majority. This is particularly true since the FM subcarrier technique the Commission is considering is only one of a number of methods available to carry out Utility Load Management. Its actual use and the degree of impact in the marketplace and on small entities must await empirical evidence. Nevertheless the Commission felt its potential impact warranted conducting this analysis. Following is a listing by description and potential impact this rule change may have on small entities.

1. Small business, small not-for-profit organizations and small government jurisdictions, in general, may have lower energy costs where they agree to have certain appliances shut off during peak demand periods or at times of severe fuel shortages, and where they redistribute their energy usage to newly available low price periods.

2. Small businesses, small not-for-profit organizations and small government jurisdictions, in general, may have higher energy cost if their energy use remains unchanged during higher cost peak periods where multi-rate metering is put into operations.

3. Any small government jurisdiction which receives revenue by taxing local energy may lose revenue as energy use decreases.

4. Any small business that currently uses FM subcarrier signals for functional music programs or similar commercial purposes may be negatively affected if this new use results in increased competition and higher subcarrier rental prices. It should be noted that the spectrum requirement of Utility Load Management is very small and may not interfere with such uses.

5. Small FM stations that rent out their subcarrier spectrum to utilities for this use would gain additional revenue.

6. Small businesses in the electronics field who participate in the expected increased demand for radio and related equipment required by this Utility Load Management technique should be benefited by the additional business.

6

In summary, the proposed action would be expected to improve efficiency and to have a positive effect on almost all parties affected by it, and to have no known significant deleterious effect on small entities.

- V. Recording, recording keeping and other compliance requirements: None
- VI. Federal rules which overlap, duplicate or conflict with this rule: None
- VII. Any significant alternatives minimizing impact on small entities and consistent with stated objectives.

The Commission's alternative is to maintain the status quo and not authorize SCA use for Utility Load Management. This alternative would not accomplish the beneficial objective sought in this rule making.

9. For the purposes of this non-restricted notice and comment rule making proceeding, members of the public are advised that ex parte contacts are permitted from the time the Commission adopts a Notice of Proposed Rule Making until the time a public notice is issued stating that a substantive disposition of the matter is to be considered at a forthcoming meeting or until a final Order disposing of the matter is adopted by the Commission, whichever is earlier. In general, an ex parte presentation is any written or oral communication (other than formal written comment/pleadings and formal oral arguments) between a person outside the Commission and a Commissioner or a member of the Commission's staff which addresses the merits of the proceeding. Any person who submits a written ex parte presentation must serve a copy of that presentation on the Commission's Secretary for inclusion in the public file. Any person who makes an oral ex parte presentation addressing matters not fully covered in any previously-filed written summary of that presentation; on the day of oral presentation, that written summary must be served on the Commission's Secretary for inclusion in the public file, with a copy to the Commission official receiving the oral presentation. Each ex parte presentation described above must state on its face that the Secretary has been served, and must also state by docket number the proceeding to which it related. See generally, Section 1.1231 of the Commission's Rules, 47 C.F.R. §1.1231.

10. This Notice of Proposed Rule Making is issued pursuant to authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as

amended. Interested parties may file comments on or before July 8, 1981, and reply comments on or before July 23, 1981. All relevant and timely comments filed in response to this Notice will be considered by the Commission. In accordance with the provisions of Section 1.419 of the Commission's Rules, an original and five copies of all comments, replies, briefs and other documents filed in this proceeding shall be furnished the Commission. Further, members of the general public who wish to participate informally in the proceeding may submit one copy of their comments, specifying the docket number in the heading. In reaching its decision, the Commission may take into consideration information and ideas not contained in the comments, provided that such information or a writing indicating the nature and source of such information is placed in the public file, and provided the fact of the Commission's reliance on such information is noted in the Report and Order.

11. All filings made in this proceeding will be available for examination by interested parties during regular business hours in the Commission's Public Reference Room at its headquarters, 1919 M Street, N. W., Washington, D.C.

12. For further information concerning this proceeding, contact Norman Plotkin, Broadcast Bureau, (202) 632-6302.

FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico
Secretary

Attachment: Appendix

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APPENDIX

It is proposed to amend Parts 2 and 73 of Chapter I of Title 47 of the Code of Federal Regulations as follows:

- 1. In Section 2.106, the National Table of Frequency Allocations is revised by adding footnote designator NG128 in column 7 in the band 88-108 MHz, and in the list of footnotes which follow the Table.

§2.106 Table of Frequency Allocations

United States		Federal Communications Commission		
Band (MHz)	Allocation	Band (MHz)	Services	Class of Station
5	6	7	8	9
*	*	*	*	*
88-108 (US23) (US93)	NG	88-108 (NG21) (NG128)	Broadcasting	FM Broadcasting (NG2)
*	*	*	*	*

NG128 In the band 88-108 MHz, FM broadcast licensees or permittees may be granted a Subsidiary Communications Authorization (SCA) to transmit signals intended for utility load management.

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- 2. In Section 73.293, Subsidiary Communications Authorizations is revised by adding the following subsection (a)(3):

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§73.293 Subsidiary Communications Authorizations

(a) An FM broadcast licensee or permittee may apply for a Subsidiary Communications Authorization (SCA) to provide limited types of subsidiary services on multiplex basis. Permissible uses fall within one or more of the following categories:

(1) * * *

(2) * * *

(3) Transmission of signals intended for utility load management.

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