

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

In the Matter of)
)
Replacement of Part 90 by Part 88)
to Revise the Private Land Mobile)
Radio Services and Modify the Policies) PR Docket No. 92-235
Governing Them)
and)
Examination of Exclusivity and)
Frequency Assignment Policies of the)
Private Land Mobile Radio Services)

To: The Commission

Petition for Reconsideration

Pursuant to Section 1.429 of the Federal Communications Commission's (FCC) Rules, the United Telecom Council (UTC) hereby submits this *Petition for Reconsideration* (*Petition*) of the FCC's *Second Memorandum Opinion and Order*, FCC 99-68, released April 13, 1999, (*Second MO&O*) in this proceeding.¹ UTC is generally pleased with the *Second MO&O* and limits this *Petition* to one aspect of the *Second MO&O*: the FCC's decision not to extend the coordination protection afforded to utilities and pipelines on channels that were previously shared by these entities with a limited number of other users to adjacent channels (channels that are less than 15 kHz removed from these channels). UTC urges the FCC to provide protection from adjacent channel interference, noting that this protection is necessary to protect public safety.

¹The *Second Memorandum Opinion and Order* was published at 64 Fed. Reg. 36258 (July 6, 1999).

Introduction and Background

UTC (formerly UTC, The Telecommunications Association) is the representative on communications matters for the nation's electric, gas, water and steam utilities, and natural gas pipelines. UTC's approximately 1,000 members range in size from large combination electric-gas-water utilities which serve millions of customers, to smaller, rural electric cooperatives and water districts which serve only a few thousand customers each. UTC's members provide electric gas and water service to the majority of US households and businesses and operate in all fifty (50) states and the District of Columbia. UTC also serves as an authorized frequency advisory committee in the Industrial/Business Pool below 512 MHz.

In June 1998, UTC and the American Petroleum Institute (API) jointly filed an *Emergency Request for Limited Licensing Freeze (Emergency Request)* proposing temporary relief to problems relating to the coordination of new industrial radio systems on channels that, previous to the FCC's decision to consolidate the radio services pools, had been shared by the former Power or Petroleum Radio Services with a few other radio services. Noting that instances of interference were occurring on these previously shared channels and that the number of instances was likely to grow, UTC and API urged the FCC to freeze licensing on these channels unless nearby incumbent utility or petroleum licensees or the appropriate frequency advisory committee (UTC or PFCC) concurred with the coordination. In light of the critical nature of the power and petroleum operations and the

dangerous threat posed by interference to these systems, UTC and API urged the FCC to impose a "freeze" on the filing of applications for:

- (1) Any channel that was formerly allocated on a shared basis to the Power (IW) and/or Petroleum (IP) Radio Services; and
- (2) Any channel less than 15 kHz removed from such channels.

The FCC Should Protect Utility and Pipeline Systems from Adjacent Channel Interference

In the *Second MO&O*, the FCC declined to specifically address the UTC/API *Emergency Request*.² However, the FCC did adopt rules to further protect utility and pipeline operations from interference. Based on a request by API for additional protection for channels that were shared by petroleum entities with other industrial users, the FCC modified Section 90.35 to acknowledge the "legitimate safety issue" involved with the licensing of new systems near quasi-public safety systems.³ The FCC expanded coordination protection for utility, petroleum and railroad channels to include frequencies that were either assigned on a primary basis to the Power, Petroleum, Railroad or Automobile Emergency Services (exclusive channels) or that were shared on a primary basis between one of these services and another radio service (shared channels).⁴ Thus, applications for systems operating on either exclusive or shared channels must be coordinated by UTC, API, AAR or AAA.⁵

² *Second MO&O* at ¶13.

³ *Id.* at ¶9.

⁴ *Id.* The FCC also expanded this protection to include exclusive and shared channels used by automobile emergency services and designated AAA as the authorized frequency coordinator for these channels.

⁵ Alternatively, other certified frequency coordinators may coordinate systems on these channels if the coordinator receives written consent from UTC, API, AAR and/or AAA, as appropriate.

However, despite the clear danger to utility and pipeline communications, the FCC refused to provide coordination protection from adjacent channel interference to exclusive or shared channels. The FCC noted that neither UTC nor API cited instances of adjacent channel interference and that it was reluctant to institute this protection without evidence of serious problems that cannot be resolved under the current rules.⁶ UTC acknowledges that no instances of interference by adjacent channel systems were cited in *the Emergency Request*, but strongly disagrees with the FCC's implications that: (1) it must wait until a serious problem occurs before enacting adequate protections; or (2) adjacent channel interference can be resolved under the current rules. Neither of these implications can withstand scrutiny, and in any event, interference from adjacent channel is already commencing.⁷

Adjacent channel interference remains a threat to the safe and reliable operation of utilities and pipelines. While the June *Emergency Request* contained only one example of interference to utility or pipeline operations, the instances of interference have continued to occur, as UTC feared. By December of that year, UTC had already become aware of over seven serious instances of interference threatening utility operations in different areas of the

⁶*Second MO&O* at ¶14.

⁷ UTC has been advised that interference from a narrowband station 7.5 kHz offset from a wideband Power Radio system, operating in the 153 MHz band, prevented the utility dispatcher from communicating with utility mobile units. Due to this interference, a request by the county 9-1-1 operator for an emergency gas disconnect at a fire scene went undispached for more than 40 minutes because the utility's mobile units could not receive messages from the gas dispatcher. The difficulty in identifying the interference source on the adjacent channel resulted in the interference continuing for a number of months.

country.⁸ And for every one instance of interference that UTC is aware and can document, UTC recognizes that there are more instances that go undocumented but which are every bit as destructive to the operations of utility and pipeline systems.

UTC believes that additional examples of adjacent channel interference will soon emerge as more and more applicants seek to operate narrowband systems on the adjacent channels. One reason that examples of this type of interference are not yet widespread is that most applications are for wideband systems operating on the “old” primary channels.⁹ UTC estimates that about 2/3 of the applications it processes today are for wideband systems. However, UTC has seen a substantial increase in the past year in the number of narrowband applications, and expects this increase to continue. As the number of narrowband applications increases, and those authorized systems are constructed, the likelihood of interference to utility and pipeline systems from these new systems will also increase.

UTC strongly urges the FCC to proactively protect against adjacent channel interference. The FCC should not treat its licensing rules as a game of “Russian roulette” and wait to act until a catastrophe has been caused by adjacent channel interference to a utility or pipeline system. As the FCC has correctly recognized, utilities and pipelines are:

⁸ See UTC Comments on Critical Infrastructure Industry Petition for Rulemaking, RM-9405 (filed December 23, 1998).

⁹ Indeed, there is a limited freeze on applications for narrowband channel in the 450-470 MHz band.

“critical, public safety related services”¹⁰ that use radio “to respond to emergencies that could be extremely dangerous to the general public;”¹¹ services whose day-to-day operations provide “little or no margin for error and in emergencies they can take on an almost quasi-public safety function;”¹² and services for which “[a]ny failure in their ability to communicate by radio could have severe consequences on the public welfare.”¹³ Given the FCC’s acknowledgement of the critical nature of utility and pipeline communications, the FCC must not wait until these severe, life-threatening consequences occur before enacting sufficient protections.

UTC also objects to the FCC’s implication that its existing rules could protect against adjacent channel interference. This conclusion has no rational basis. New systems operating within 15 kHz can and will cause interference to existing systems operating on exclusive and shared channels. For all practical purposes, channels that are centered 15 kHz or less from a wideband (e.g., 25-30 kHz) are co-channel because the transmitter signal is entirely within the passband of the wideband system. Moreover, the identification of such users and ability to monitor channel(s) before transmitting will be complicated, if not impossible, due to the fact that the channels are not precisely co-channel. UTC will be helpless to prevent new adjacent systems from being deployed dangerously close to utility and pipeline systems.

¹⁰ *Second Report and Order (SR&O)* at ¶2.

¹¹ *SR&O* at ¶41 (emphasis added).

¹² *Id.* (emphasis added).

¹³ *Id.* (emphasis added).

The FCC has acknowledged the potential for interference from adjacent channel systems in its *Third Memorandum Opinion and Order (Third MO&O)* in this docket.¹⁴ In the *Third MO&O*, the FCC resolved issues relating to trunked operations in the bands below 512 MHz. The FCC confirmed that applicants for trunked operations must obtain concurrence from all existing co-channel and adjacent channel licensees. The FCC specifically rejected a recommendation that the concurrence of adjacent channel licensee be eliminated, citing the potential for interference to adjacent channel operations by trunked systems.¹⁵ Moreover, the FCC granted UTC's request for clarification of the trunking rules with regard to future licensing near trunked systems. The FCC agreed with UTC that a trunked system should be protected against both co-channel and adjacent channel interference.¹⁶

The FCC has thus correctly identified the importance of protections against adjacent channel interference for trunked systems. It would be illogical and contrary to public interest to deny this same protection to those services that the FCC has acknowledged as critical and public safety related.

¹⁴ *Third R&O* (released July 1, 1999).

¹⁵ *Id.* at ¶17. Section 90.187(b)(2)(i) and revised Section 90.187(b)(2)(iii)(A) provide protection from co-channel interference, as well as interference from those adjacent systems operating within 15 kHz or less of a 25 kHz system.

¹⁶ *Id.* at ¶20.

WHEREFORE, THE PREMISES CONSIDERED, UTC urges the Federal Communications Commission to take action in accordance with the views expressed above.

Respectfully submitted,

United Telecom Council

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