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**205 F. 3d 82 – Cellular Phone Taskforce v. Federal Communication**

205 F.3d 82 (2nd Cir. 2000)

CELLULAR PHONE TASKFORCE, et al., Petitioners (請願者・原告),  
CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION, NATIONAL ASSOCIATION OF  
BROADCASTERS, ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC., ELECTROMAGNETIC  
ENERGY ASSOCIATION, and AT&T WIRELESS SERVICES, INC., Intervenors,

v.

FEDERAL COMMUNICATIONS COMMISSION and UNITED STATES OF AMERICA, Respondents.

Docket Nos. 97-4328(L); 98-4003(Con); 98-4005(Con); 98-4025(Con); 98-4122(Con).

August Term 1998

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT

Argued April 5, 1999

Decided: February 18, 2000

Petitioners appeal from two final orders of the Federal Communications Commission ("FCC"): (1) Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, 11 F.C.C. Rcd. 15123 (1996); and (2) Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934, 12 F.C.C. Rcd. 13494 (1997). By these orders, the FCC promulgated guidelines for health and safety standards of radio frequency radiation, established streamlined procedures for meeting requirements under the National Environmental Policy Act for FCC licensees in compliance with the guidelines and retained for the FCC exclusive ability to regulate the relevant radio facility operations.

Affirmed(確認する).

JAMES R. HOBSON, Esq., Donelan, Cleary, Wood & Maser, P.C., Washington, DC, (Mark F. Wilson, Esq., The Communications Workers of America, Washington, DC, on the brief), for Ad-Hoc Association, The Communications Workers of America, AFL-CIO, CLC and CWA Local 7810, Petitioners,

JOHN E. SCHULZ, Esq., San Rafael, CA, for Cellular Phone Taskforce, Petitioners, JOEL MARCUS, Counsel, Federal Communications Commission, Washington, DC, (Joel I. Klein, Assistant Attorney General, Catherine G. O'Sullivan, Andrea Limmer, United States Attorneys, Christopher J. Wright, General Counsel, Daniel M. Armstrong, Associate General Counsel, C. Grey Pash, Jr., Counsel for the FCC, Washington, DC, on the brief), for Respondents,

HOWARD J. SYMONS, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Washington, DC, (Bruce D. Sokler, Esq., Sara F. Seidman, Michelle M. Mundt, on the brief; Douglas I. Brandon, Esq., AT&T Wireless Services, Inc., Michael F. Altschul, Cellular Telecommunications Industry Association, Washington, DC), for AT&T Wireless Services, Inc., and Cellular Telecommunications Industry Association, Intervenors, John I. Stewart, Jr., Esq. and William D. Wallace, Esq., Crowell & Moring, LLP, Washington, D.C., submitted a brief for

Electromagnetic Energy Association, National Association of Broadcasters, and Association for Maximum Service Television, Inc., Intervenors,  
Peter James Clines, Esq., New York, NY, submitted a brief for Gabriel Seymour, First Selectman, Town of Canaan, Connecticut, et al., Amici Curiae on behalf of Petitioners.  
Before: WALKER, NEWMAN, and SACK, Circuit Judges.  
JOHN M. WALKER, Circuit Judge:

Petitioners Cellular Phone Taskforce (“CPT”) and Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Radio Frequency Health and Safety Rules (“AHA”), joined by numerous other individuals and groups, appeal from two final opinions and orders in which the Federal Communications Commission (the “FCC”) promulgated guidelines for health and safety standards of radio frequency (“RF”) radiation, established streamlined procedures for meeting requirements under the National Environmental Policy Act for FCC licensees that are in compliance with the guidelines, and retained the exclusive ability to regulate the relevant radio facility operations.

See Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, 11 F.C.C. Rcd. 15123 (1996) (“First Order”); Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934, 12 F.C.C. Rcd. 13494 (1997) (“Second Order”). Affirmed.

## BACKGROUND

In 1985, after seeking consensus among participating experts and after public notice and comment, the FCC adopted guidelines for human exposure to RF radiation from FCC-regulated transmitters and facilities. The guidelines were required by the National Environmental Policy Act (“NEPA”), 42 U.S.C. 4321 et seq., and the Council on Environmental Quality (“CEQ”) regulations promulgated thereunder, see 40 C.F.R. 1500.1 et seq. In promulgating its rules, the FCC adopted the guidelines issued in 1982 by the American National Standards Institute (“ANSI”), a recognized standard-setting organization. See Biological Effects of Radiofrequency Radiation, 100 F.C.C.2d 543 (1985).

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In November 1992, ANSI issued a more restrictive health standard for RF exposure<sup>1</sup> than its 1982 standard. The new ANSI standard prompted the FCC to propose updating its existing guidelines. See Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, 8 F.C.C. Rcd. 2849 (1993). In the 1993 proposal that was sent out for notice and comment, the FCC noted that the 1992 ANSI standard was less restrictive than two other standards: those issued by the congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”), and those proposed by the International Radiation Protection Association.

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During the comment period, the FCC received submissions from, inter alia, the Environmental Protection Agency (“EPA”), the Food and Drug Administration (“FDA”), the Occupational Safety and Health Administration (“OSHA”), and the National Institute for Occupational Safety and Health (“NIOSH”). Ultimately, the FCC adopted guidelines that combined the NCRP standard with the ANSI standard (the “Guidelines”).

These Guidelines -- part of the First Order that petitioners challenge in this case -- mostly incorporate the maximum permitted exposure ("MPE") limits suggested by the NCRP, together with certain other features of the ANSI standard. In particular, the FCC accepted ANSI's suggestion to exempt certain classes of facilities from having to file routine Environmental Assessments ("EAs") setting forth their compliance with the MPE limits in the Guidelines. The exempt category consists of tower-mounted telecommunications antennae 10 meters or higher above ground and rooftop antennae emitting less than 1000 watts of power. The FCC elected to exempt such facilities after determining that they pose no risk of exposing humans to RF radiation in excess of MPE levels.

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Several parties filed petitions for reconsideration of the FCC's First Order. Some sought slightly stricter standards, and others sought to persuade the FCC to adopt the more restrictive ANSI standard wholesale. The FCC granted the petition for rehearing but declined to adopt an unmodified ANSI standard or to tighten its own guidelines, except in minor respects.

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While the FCC was considering the proposed guidelines, Congress passed the Telecommunications [Act of 1996](#), Pub. L. No. 104-104, 110 Stat. 56 (the "Act"), several provisions of which affected the FCC's ongoing proceedings. In particular, the Act preempted state and local governments from regulating the placement, construction or modification of personal wireless service facilities on the basis of the health effects of RF radiation where the facilities would operate within levels determined by the FCC to be safe. See 47 U.S.C. 332(c)(7)(B)(iv). In the Second Order that is at issue in this case, the FCC announced, inter alia, a rule that prohibited state and local governments from regulating any personal wireless service facilities based upon perceived health risks posed by RF emissions as long as the facilities conformed to the FCC Guidelines regarding such emissions.

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Petitioners' appeal raises a plethora of claims that can be grouped into five categories: [Petitioner Cellular Phone Taskforce \("CPT"\)](#) argues (1) that the Guidelines violate the Americans with Disabilities Act and the Rehabilitation Act; and both petitioners argue that (2) the FCC was arbitrary and capricious in enacting the Guidelines in violation of the Administrative Procedure Act, specifically 5 U.S.C. 706(2)(A); (3) the FCC violated NEPA by failing to prepare an environmental impact statement; (4) the FCC exceeded its powers when it prohibited state and local governments from regulating the operation of personal wireless service facilities that conformed to the FCC's RF standards; and (5) the same prohibition, found at 47 U.S.C. 332(c)(7)(B)(iv), is unconstitutional both on its face and as applied. We will consider each group of claims in turn.

DISCUSSION

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#### I. Americans With Disabilities Act and Rehabilitation Act Claims

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Petitioner CPT's claims that the Guidelines violate the Americans with Disabilities Act ("ADA"), see 42 U.S.C. 12101 et seq., and Rehabilitation Act, 29 U.S.C. 701 et seq., were not the subject of a final order by the FCC. While they were raised before a staff member, the Chief of the Office of Engineering and Technology, they were

not presented to the Commission. Decisions of agency staff are not directly appealable final orders. Our review is limited to final orders of the FCC pursuant to 47 U.S.C. 402(a) and 28 U.S.C. 2342(a). See *American Broad. Cos. v. FCC*, [682 F.2d 25](#), 30 (2d Cir. 1982); see also 47 U.S.C. 155(c)(7) (“The filing of an application for review under this subsection shall be a condition precedent to judicial review of any order, decision, report, or action made or taken pursuant to a delegation under paragraph (1) of this subsection.”); *International Telecard Assoc. v. FCC*, [166 F.3d 387](#), 387–88 (D.C. Cir. 1999) (per curiam).

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While we have said that the foregoing exhaustion requirement is not inflexible, we generally do not permit petitioners to raise an issue for the first time on appeal without giving the Commission an opportunity to address it, particularly where the issue is a novel one. See *National Black Media Coalition v. FCC*, [791 F.2d 1016](#), 1021 (2d Cir. 1986). The novelty of the claim raised here, that the Guidelines impermissibly discriminate against handicapped persons in violation of the ADA and the Rehabilitation Act, makes initial Commission determination both necessary and appropriate. We therefore dismiss that part of the appeal relating to petitioner CPT’s ADA and Rehabilitation Act claims.

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The remaining claims were the subject of a final order by the Commission and thus are properly before us.

## II. The Administrative Procedure Act Claims

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Petitioners claim that the FCC in adopting the Guidelines violated the Administrative Procedure Act (“APA”), 5 U.S.C. 500 et seq., when it arbitrarily and capriciously (1) failed adequately to consider the evidence of harmful effects from non-thermal levels of radiation; (2) ignored expert recommendations that would restrict the regulatory regime; (3) ignored critical factors bearing upon MPE levels; and (4) failed to account for the cumulative effects of radiation in creating categorical exemptions for certain facilities from routine environmental assessment. We disagree.

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We may reverse an agency decision and informal rulemaking only if it was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. 706(2)(A); see, e.g., *National Black Media Coalition v. FCC*, [822 F.2d 277](#), 280 (2d Cir. 1987). An agency’s factual findings must be supported by substantial evidence which “has been construed to mean less than a preponderance, but more than a scintilla.” *Cellular Tel. Co. v. Town of Oyster Bay*, [166 F.3d 490](#), 494 (2d Cir. 1999). “It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Universal Camera Corp. v. NLRB*, [340 U.S. 474](#), 477 (1951) (internal quotation marks omitted). “The reviewing court must take into account contradictory evidence in the record, but the possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency’s finding from being supported by substantial evidence.” *American Textile Mfr. Inst., Inc. v. Donovan*, [452 U.S. 490](#), 523 (1981) (internal citations and quotation marks omitted). When an agency makes a decision in the face of disputed technical facts, “[a] court must be reluctant to reverse results supported by . . . a weight of considered and carefully articulated expert opinion.” *Federal Power Comm’n v. Florida Power & Light Co.*, [404 U.S. 453](#), 463 (1972). In evaluating agency reasoning, we must be satisfied that the agency examined the relevant data and established a “rational connection between the facts

found and the choice made.” *Motor Vehicle Mfrs. Ass’n v. State Farm Auto. Ins. Co.*, [463 U.S. 29](#), 43 (1983) (internal quotation marks omitted). The agency’s action should only be set aside where it

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relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the products of expertise.

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Id. With these general principles in mind, we turn to petitioners’ specific claims under the APA.

#### A. Non-Thermal Effects of Radiation

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The parties do not dispute that RF radiation at excessive levels has thermal effects and that the ANSI and NCRP standards and thus the Guidelines are premised on such effects. Petitioners claim that the Guidelines are arbitrary and capricious because they fail to account for non-thermal effects of RF radiation. In support of their claim, petitioners argue that (1) neither the ANSI nor the NCRP sufficiently considered evidence of non-thermal effects and it was therefore arbitrary and capricious for the FCC to rely on the ANSI and NCRP standards; (2) the FCC did not fulfill its duty independently to evaluate new evidence filed during the reconsideration round; (3) the FCC failed to elicit expert testimony during the reconsideration round; and (4) the FCC’s decision not to lower the MPE levels below the maximum permitted thermal levels failed to account for the scientific uncertainty surrounding RF harm. These arguments are unavailing.

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In basing its guidelines on a combination of the ANSI and the NCRP standards, the FCC stated that:

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[The] guidelines are based on recommendations of expert organizations and federal agencies with responsibilities for health and safety. It would be impracticable for us to independently evaluate the significance of studies purporting to show biological effects, determine if such effects constitute a safety hazard, and th[en] adopt stricter standards than those advocated by federal health and safety agencies. This is especially true for such controversial issues as non-thermal effects and whether certain individuals might be “hypersensitive” or “electrosensitive.”

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Second Order, 12 F.C.C. Rcd. 13494 at 31. This decision was not arbitrary and capricious. In promulgating their standards, both the ANSI and the NCRP considered non-thermal effects. The ANSI found that “no reliable scientific data exist indicating that [n]onthermal . . . exposure may be meaningfully related to human health” and concluded that its exposure standard “should be safe for all.” The NCRP found that the existence of non-thermal effects “is clouded by a host of conflicting reports and opinions.” In the face of conflicting evidence at the frontiers of science, courts’ deference to expert determinations should be at its greatest. See *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, Inc.*, [462 U.S. 87](#), 103 (1983). All of the expert agencies consulted were aware of the FCC’s reliance on the ANSI and NCRP standards. Each had been advised of such evidence of non-thermal health effects as may have existed and still found the FCC’s approach to be satisfactory.

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Under those circumstances it was reasonable for the FCC to continue to rely on the ANSI and NCRP standards absent new evidence indicating that the fundamental scientific understanding underlying the ANSI and NCRP standards was no longer valid. At most, the newly submitted evidence established that the existence of non-thermal effects is "controversial," and that room for disagreement exists among experts in the field. After examining the evidence, the FCC was justified in continuing to rely on the ANSI and NCRP standards.

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Furthermore, the FCC satisfied itself that there was a mechanism in place for accommodating changes in scientific knowledge. It found that both the ANSI and the NCRP had "committees that are working on revisions of their respective exposure guidelines," and that "ongoing research in a number of areas may ultimately result in changes in the fundamental understandings upon which [the ANSI] and the NCRP [standards] are based," and that it would "consider amending [its] rules at any appropriate time if these groups conclude that such action is desirable." Because the new evidence consisted of publicly available scientific papers, the FCC could reasonably expect it to be considered by the ANSI and the NCRP standing committees that were working on revising their standards.

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Moreover, it was not arbitrary and capricious for the FCC to conclude that it need not supply the new evidence to the other federal agencies with expertise in the area. It could reasonably expect those agencies to keep abreast of scientific developments in carrying out their missions. For instance, the EPA had participated not only in the hearings and comments leading to the promulgation of the Guidelines, but also had been on the verge of releasing its own draft guidelines pertaining to the health effects of RF radiation in 1996. It was fully reasonable for the FCC to expect the agency with primacy in evaluating environmental impacts to monitor all relevant scientific input into the FCC's reconsideration, particularly because the EPA had been assigned the lead role in RF radiation health effects since 1970. See 42 U.S.C. 2021(h). Because the newly submitted material consisted of publicly available scientific articles of the type monitored by the EPA and other agencies and such material was insufficient to invalidate the assumptions underlying the Guidelines, it was not arbitrary and capricious for the FCC to conclude that further consultation with the expert agencies was unnecessary.

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Petitioners criticize the FCC for not adopting the NCRP's recommendations for stricter standards in situations of exposure to deep modulated extremely low frequency ("ELF") carrying waves. The NCRP had recommended that the exposure criteria in such situations be the same for occupational exposures as for the general population in order to provide for an additional safety margin. It was not arbitrary and capricious for the FCC to reject the NCRP recommendation. The scientific data were inconclusive on the dangers presented by such radiation, and thus did not mandate a determination different from that reached by the FCC. The NCRP itself had concluded that the existence of modulation effects was unclear. The EPA had recommended that "[w]hile studies continue to be published describing biological responses to nonthermal ELF-modulated RF radiation, the effects information is not yet sufficient to be used as a basis for exposure criteria to protect the public against adverse human health effects." ANSI had likewise found that "no reliable scientific data exist indicating that . . . modulation-specific [disease-related conditions] of exposure may be meaningfully related to human health."

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Also unavailing is petitioners' argument that the FCC is required to apply the principle against uncertainties as adopted by the Nuclear Regulatory Commission to limit radiation to levels "as low as is reasonably achievable." See, e.g., Nuclear Regulatory Commission, 10 C.F.R. 20.1003, 20.1101(b),(d); Department of Energy, 10 C.F.R. 835.2(a)(2).

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The argument that the FCC should create greater safety margins in its guidelines to account for uncertain data is a policy question, not a legal one. As a policy matter, an agency confronted with scientific uncertainty has some leeway to resolve that uncertainty by means of more regulation or less. Compare, e.g., *American Textile Mfrs. Inst. v. Donovan*, [452 U.S. 490](#), 528 (1981) (approving more stringent regulation when agency "could not obtain the more detailed confidential industry data it thought essential to further precision"), with, e.g., *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, [463 U.S. 29](#), 51 (1983) ("[A]n agency reasonably may decline to issue a safety standard if it is uncertain about its efficacy"). See also *Center for Auto Safety v. Federal Highway Admin.*, [956 F.2d 309](#), 316 (D.C. Cir. 1992). The FCC concluded that requiring exposure to be kept as low as reasonably achievable in the face of scientific uncertainty would be inconsistent with its mandate to "balance between the need to protect the public and workers from exposure to potentially harmful RF electromagnetic fields and the requirement that industry be allowed to provide telecommunications services to the public in the most efficient and practical manner possible." This policy conclusion is neither irrational, arbitrary nor capricious and we decline to disturb it.

#### B. Other Expert Recommendations

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Petitioners argue that the Commission arbitrarily ignored or failed to follow expert recommendations that would tighten the standard. Specifically they fault the FCC for (1) adopting a two-tiered MPE level system allowing for higher exposure in "occupational/controlled" situations than in "general population/uncontrolled" situations despite expressions of concern with these definitions by EPA, NIOSH and OSHA; (2) refusing to adopt ANSI's recommendations on induced and contact currents; (3) ignoring the FDA's request that the FCC consider interference with medical devices; and (4) rejecting NISOH's objection to undocumented self-certification of compliance by license applicants. We disagree.

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The record shows that the FCC did not ignore any of these substantial comments, but instead provided a reasoned response to each. The FCC found that applying the general-population limits to all situations "would impose significant and unnecessary economic and technical burdens for which adequate justification has not been presented." The FCC elected instead to clarify the differentiation between occupational and general population circumstances. It was not arbitrary and capricious to do so.

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With respect to induced contact currents, the FCC concluded that "[b]ecause of the many possible types and configurations of metallic objects that may be near a transmitter," it would be impracticable to demonstrate compliance. And "in view of the continuing questions and difficulties relating to evaluation of induced and contact currents, especially with regard to measurements . . . we see no practical way to require compliance"

with any limits suggested by the parties. However, the FCC “recognize[d] the desirability for limits to be adopted in the future,” and promised to “monitor the issues raised . . . [and] revisit this issue” as measuring technology improves. An agency is permitted to consider costs and benefits as well as enforcement issues when establishing rules and regulations. See *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 54. The FCC reached a reasoned conclusion to a difficult problem, and was not arbitrary or capricious.

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The FCC also did not ignore the FDA’s request for rules dealing with interference with medical devices. The object of the rulemaking was to address biological effects of RF radiation. The FDA acknowledged that interference with medical devices was outside the scope of current rulemaking by “encourag[ing]” the FCC “to continue to work with [the FDA] to address separately this issue.” The FCC was justified in limiting its current rules in this way because “agencies . . . need not deal in one fell swoop with the entire breadth of a novel development; instead, reform may take place one step at a time, addressing itself to the phase of the problem which seems most acute to the regulatory mind.” *National Ass’n of Broadcasters v. FCC*, [740 F.2d 1190](#), 1207 (D.C. Cir. 1984) (quotation marks, citation and alteration omitted).

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As for NIOSH’s objections to undocumented self-certification of compliance, it was entirely within the FCC’s discretion not to require operators to submit the type of information that would be provided in an EA. Cf. *Black Citizens for a Fair Media v. FCC*, [719 F.2d 407](#), 411–12 (D.C. Cir. 1983) (permitting the FCC discretion to determine what information to request in renewal applications for a broadcast license). “Ample sanctions exist for false statements . . . and licensees are well aware of their duty . . . to be scrupulous in providing complete and meaningful information.” *Bilingual Bicultural Coalition on Mass Media, Inc. v. FCC*, [595 F.2d 621](#), 635 (D.C. Cir. 1978) (quotation marks and citation omitted). The FCC’s conclusion that its existing rules concerning licensee certification “have worked adequately in the past and should be continued” was therefore not arbitrary and capricious.

### C. Maximum Permitted Exposure Levels

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In addition to arguing that the MPE levels do not account for non-thermal effects, petitioners argue that the MPE levels are arbitrary and capricious because (1) the exposure levels to hands and wrists were increased without explanation; (2) in setting the MPE level for the general public at one-fifth of the occupational MPE level, the NCRP did not consider individual vulnerabilities among members of the public; and (3) the key assumption pertaining to average exposure time used in establishing the occupational MPEs was fatally flawed because experts within the ANSI standard-setting body disagreed on its validity. These are unavailing arguments.

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The increased exposure levels to hands and feet were, in fact, explained by the ANSI: “Considerations that mitigate these higher permitted local [MPE levels] include relatively high surface-to-volume ratios for these parts of the body, the common experience of relatively large temperature excursions of these parts that normally occur without apparent adverse effects, and the lack of critical function when compared to vital organs.”

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In establishing the general population MPE level, the NCRP based the lowered MPE level, and thus the increased safety-margin above and beyond the occupational level, on the differences between the two groups. It pointed to the presence among the public of "debilitated or otherwise potentially vulnerable individuals for whom there is presently inadequate knowledge to set firm standards," and the greater risk of harm to the general population due to its higher numbers. The one-fifth level was considered adequate to accommodate these factors, and petitioners have presented no evidence that would render the NCRP's conclusion arbitrary and capricious.

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Finally, petitioners challenge the FCC's reliance on experts' divergent assumptions regarding average exposure time. As long as all of the evidence has been considered, as was the case here, a factual finding that is supported by more than a scintilla of evidence is not arbitrary and capricious simply because there is conflicting evidence. See *American Textile Mfr. Inst.*, 452 U.S. at 523.

#### D. Categorical Exclusions

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The Commission concluded that tower-mounted antennae placed more than 10 meters above ground and rooftop antennae transmitting at less than 1000 watts would "offer little or no potential for exposure in excess of the specified guidelines" and that it would not be cost-effective to require routine environmental evaluation of such facilities. First Order, 11 F.C.C. Rcd. at 86. Petitioners argue that these categorical exemptions from having to file routine EAs are arbitrary and capricious because (1) there may be situations where radiation from such facilities can lead to overexposure behind walls in nearby buildings; and (2) the categorical exemptions ignore constructive interference stemming from multiple antennas or reflections from conductive surfaces, creating "hot spots" where RF radiation levels exceed MPE levels. Missing from the exemption rules, petitioners argue, are rules for when an owner must consider other nearby sources of radiation and rules establishing a public database to facilitate public monitoring. We disagree.

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In establishing the categorical exemptions, the Commission conducted a worst-case analysis that considered the effects of multiple antennas mounted on a single tower, and determined that radiation levels in publicly available areas will be many times below MPE levels. The Commission also ensured that combined exposure from multiple towers would be considered by license applicants by charging them with the responsibility of ensuring that their facilities would comply with the MPE rules anywhere their emissions are at least 5% of MPE levels. The FCC's approach was rational. Agencies are permitted to promulgate rules based on cost/benefit analysis. See *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 54. In light of the low probability of excluded facilities violating MPE levels, it was reasonable to conclude that there was no need for increased compliance monitoring devices such as a central database. Moreover, the licensees are still responsible for compliance, and an interested person can petition the FCC for review of a site believed to violate the MPE levels. See 47 C.F.R. 1.1307(c).

#### III. The NEPA Claims

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Both the National Environmental Policy Act ("NEPA"), 42 U.S.C. 4321 et seq., and regulations promulgated thereunder by the Council on Environmental Quality ("CEQ"), generally require agencies subject to NEPA that are about to commit resources in a federally significant action, including rulemaking, to consider the

environmental effects of their actions by preparing either an Environmental Impact Statement (“EIS”), or an Environmental Assessment (“EA”) followed by a finding of no significant impact (“FONSI”) or an EIS as appropriate. See *City of New York v. Slater*, [145 F.3d 568](#), 571 (2d Cir. 1998) (per curiam). In promulgating its standards, the FCC admittedly did not complete either a formal EIS or an EA. Petitioners argue that the FCC was required to prepare an EIS in conjunction with its rulemaking. We disagree.

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“[W]here an agency is engaged primarily in an examination of environmental questions, where substantive and procedural standards ensure full and adequate consideration of environmental issues, then formal compliance with NEPA is not necessary, but functional compliance is sufficient.” *Environmental Defense Fund v. EPA*, [489 F.2d 1247](#), 1257 (D.C. Cir. 1973).

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The procedures followed by the FCC in the instant rulemaking satisfy the functional compliance test. In considering the environmental impact of its guidelines, the FCC “consult[ed] with and obtain[ed] the comments of any Federal agency which has jurisdiction by law or special expertise with respect to [the] environmental impact involved.” 42 U.S.C. 4332. Both the FCC’s First Order and Second Order functionally satisfy the CEQ’s requirements for an EA<sup>2</sup> and a FONSI<sup>3</sup> both in form and substance. The FCC considered the environmental impact of its rulemaking, including cumulative effects of radiation from multiple towers. And as discussed above, the findings that radiation at MPE levels would be safe and that some RF facilities could be categorically excluded from routine evaluation (findings akin to a FONSI) were not arbitrary or capricious. Thus, no EIS was required. See *Friends of the Ompompanoosuc v. FERC*, [968 F.2d 1549](#), 1556 (2d Cir. 1992).

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We also reject petitioners’ argument that by not considering RF interference with medical devices, the FCC has failed to take the required hard look at the environmental consequences of its actions in violation of NEPA.

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NEPA only requires agencies to consider environmental effects, i.e., alterations to the environment that have a proximate effect on human health. See *Metropolitan Edison Co. v. People Against Nuclear Energy*, [460 U.S. 766](#), 774 (1983) (psychological harm resulting from fear that relatives may be subjected to radiation too removed to be environmental harm). Assuming arguendo that RF radiation may in certain circumstances interfere with some medical devices in such a way that human health is proximately affected, thereby rendering interference with medical devices a cognizable environmental harm, the FCC still was not required to consider those environmental effects at this time. Only when individual RF facilities are constructed and operated will the circumstances arise with sufficient specificity to permit meaningful evaluation. As long as all the significant potential environmental impacts are considered in a combination of general and site-specific assessments at the time the facilities are constructed, the requirements of NEPA and the CEQ have been satisfied. Cf. *Environmental Coalition of Ojai v. Brown*, [72 F.3d 1411](#), 1418 (9th Cir. 1995) (government preparing site-specific EAs did not have to revisit health effects of RF radiation from radar installation considered on a programmatic level).

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IV. The FCC’s Preemption of Certain State Regulation

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As noted earlier, while the rulemaking process was underway, Congress passed the Telecommunications Act of 1996, providing, *inter alia*, that

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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.

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47 U.S.C. 332(c)(7)(B)(iv).

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The FCC, as part of its rulemaking, issued a comparable interpretive ruling preempting state and local governments from regulating, based on RF emissions, the operation of personal wireless service facilities that are in compliance with the FCC regulations concerning such emissions. Petitioners claim that the FCC's interpretation is contrary to plain congressional intent. In support of their argument, petitioners point to the deliberate absence of the word "operation" from the statutory language as evidenced by earlier drafts containing the word.

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It is now "well settled that we review deferentially an agency's construction of the statute that it is charged with administering." *Linea Area Nacional de Chile S.A. v. Meissner*, [65 F.3d 1034](#), 1039 (2d Cir. 1995) (citing *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, [467 U.S. 837](#), 843 n.11, 844 (1984)). We must defer to an agency's reasonable interpretation where the statute is silent or ambiguous with respect to a particular issue. See *Chevron*, 467 U.S. at 84243; *Fulani v. FCC*, [49 F.3d 904](#), 910 (2d Cir. 1995). However, "[i]f the statutory language is clear, both the agency and the court must defer to Congress's intent." *Linea Area Nacional*, 65 F.3d at 1039; see *Chevron*, 467 U.S. at 482.

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The FCC has broad preemption authority under the Telecommunications Act. See *City of New York v. FCC*, [486 U.S. 57](#), 63–64 (1988); *Capital Cities Cable, Inc. v. Crisp*, [467 U.S. 691](#), 698–700 (1984). Congress has circumscribed this authority somewhat, removing from the FCC the power to "limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction and modification of personal wireless service facilities." 47 U.S.C. 332(c)(7)(A) (emphasis added). States and local governments, therefore, retain these powers subject to explicit limitations described in subsection (B). Appellants argue that the absence of the word "operation" from subsection (B)(iv) preserves for the states the right to regulate operations of wireless service facilities as well. Subsection (A) does not, however, preserve their authority to regulate such facilities' operations. Therefore, the absence of the word "operation" from the subsequent limitation on their authority under subsection (B)(iv) does not grant such power.

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Section 332(c)(7)(B)(iv) does not amount to clear congressional intent to permit state and local governments to regulate the operation of such facilities. The FCC's interpretation is therefore entitled to deference and, because the FCC's interpretation is reasonable, we are bound to accept it.

## V. Constitutional Challenges

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Finally, we reject petitioners' argument(主張) that 47 U.S.C. 332(c)(7)(B)(iv) facially and as applied violates the Tenth Amendment. The statute does not commandeer local authorities to administer a federal program in violation of the federalism principles embodied in the Tenth Amendment and set forth in *New York v. United States*, [505 U.S. 144](#) (1992) and *Printz v. United States*, [521 U.S. 898](#) (1997). State and local governments are not required to approve or prohibit anything. The only onus placed on state and local governments exercising their local power is that they may not regulate personal wireless service facilities that conform to the FCC Guidelines on the basis of environmental effects of RF radiation. "[W]here Congress has the authority to regulate private activity under the Commerce Clause, we have recognized Congress' power to offer States the choice of regulating that activity according to federal standards or having state law pre-empted by federal regulation." *New York*, 505 U.S. at 167; see *City of New York v. United States*, [179 F.3d 29](#), 35 (2d Cir. 1999). We have no doubt that Congress may preempt state and local governments from regulating the operation and construction of a national telecommunications infrastructure, including construction and operation of personal wireless communications facilities. See *City of New York*, 486 U.S. at 63-64; *Capital Cities Cable, Inc. v. Crisp*, 467 U.S. at 698-700. The statute therefore does not violate the Tenth Amendment either facially or as applied. We have considered petitioners' remaining constitutional arguments and find them to be without merit.

## Conclusion

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The FCC orders are affirmed with costs to be borne by petitioners.

## Notes:

[1](#)

This standard was originally developed by the Institute of Electrical and Electronic Engineering ("IEEE"), and a subgroup within the IEEE monitors the continued validity of the standard. For convenience, we will not discuss how the responsibilities are divided between ANSI and IEEE, but refer to both as ANSI throughout this opinion.

[2](#)

"Environmental Assessment":

(a) Means a concise public document for which a federal agency is responsible that serves to: (1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. (2) Aid an agency's compliance with the Act when no environmental impact statement is necessary. (3) Facilitate preparation of a statement when one is necessary. (b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

40 C.F.R. 1508.9.

[3](#)

"Finding of No Significant Impact" means a document by

a Federal agency briefly presenting the reasons why an action . . . will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it.  
40 C.F.R. 1508.13.