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D.C. Circuit Decision Represents Setback to Next-Generation Network Deployment Efforts

by

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I. Introduction

Last week the D.C. Circuit invalidated an important Federal Communications Commission order. No, not the Restoring Internet Freedom Order, which has been pending since February and has kept telecom nerds like me glued to the court’s website every Tuesday and Friday morning. In United Keetoowah Band of Cherokee Indians in Oklahoma v. Federal Communications Commission, the court vacated portions of the Commission's Accelerating Wireless Broadband Deployment Order governing 5G deployment.1 The court found that the Commission’s decision to exempt small cell deployment from the environmental and historic preservation review processes that accompany larger tower deployments was arbitrary and capricious.2 This doctrine is designed to assure that orders are supported by “reasoned decisionmaking,” a low bar that (it seems to me) the 66-page Order should have cleared. The decision also represents a setback to the Commission’s ongoing efforts to promote 5G deployment.

II. The 5G Deployment Order

The challenged Accelerating Wireless Broadband Deployment Order exempted small cell construction from the historic and environmental review processes that attach to certain federal
projects. The National Historic Preservation Act (NHPA) requires certain review procedures for federal “undertakings,” while the National Environmental Policy Act (NEPA) applies to any “major Federal action.” 3 Facially, these acts do not apply directly to most private wireless infrastructure projects. With rare exceptions, the Commission does not require construction permits prior to building individual wireless facilities, meaning such projects are not federal “undertakings” or “actions” triggering review. 4

But the Court has recognized a “limited approval authority” allowing the Commission to require such review indirectly, through the Title III licensing process. 5 Although a provider can construct a wireless facility without federal approval, it cannot operate a wireless network without a spectrum license, which the Commission issues based on the public interest. Historically, the Commission has required licensees to undertake NHPA and NEPA review of construction projects as a condition of receiving a spectrum license, although it has also created a long list of exceptions and exclusions for deployments unlikely to have cultural or environmental effects. 6 The Order in question effectively added a small cell exemption to that list by exempting such deployments from its limited approval authority if they involve antennas less than three cubic feet in volume and associated equipment less than 28 cubic feet in volume, and are mounted on towers no taller than 50 feet or 110 percent of the height of adjacent structures. 7

The Commission created this exemption because, in its judgment, the costs of this review outweighed the benefits and were likely to delay 5G deployment. Unlike traditional wireless facilities, small cells are, well, small – the Commission describes them as “pizza-box sized, lower-powered antennas,” the bulk of which are likely to be installed on pre-existing structures. 8 Therefore, small cells are much less likely to raise environmental or historical preservation concerns than macro towers that provide 3G and 4G connectivity, which can reach up to 300 feet high. 9 At the same time, 5G deployment will require between 10 and 100 times more antenna locations than previous generation networks. 10 The record showed that 29 percent or more of wireless deployment costs were due to NEPA and NHPA review when required. Based on these findings, the Commission concluded that mechanically applying existing review obligations to small cell deployment would impose unnecessary costs and interfere with the Commission’s statutory obligation to support “the development and rapid deployment of new technologies…without administrative or judicial delays” and “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans…by…remov[ing] barriers to infrastructure investment.” 11

III. The Court Decision

Opponents challenged the Commission’s Order as arbitrary and capricious under the Administrative Procedure Act (sometimes called the “hard look” doctrine). “To survive arbitrary and capricious review, an agency action must be the product of reasoned decisionmaking.” 12 This test is “fundamentally deferential”: 13 the Supreme Court has explained that “[t]he scope of review… is narrow and a court is not to substitute its judgment for that of the agency.” 14 Rather, the court’s job is to assure that the agency “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” 15 A decision is arbitrary or capricious if it “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 product of agency expertise.” Nonetheless, the court will “uphold a decision of less
than ideal clarity if the agency’s path may reasonably be discerned.”

Here, the Commission’s logic was clear. Its limited review authority is a function of its Title III
obligations to grant spectrum licenses in the public interest. The existing historic and
environmental review policies were last modified in an era of 3G and 4G macro towers, large
arrays of antennas that rise several hundred feet into the air several miles apart. Those policies
should not apply the same way to 5G small cells, which bear little resemblance to these
behemoths. As the Commission explained in its brief, small cells are more like backyard satellite
dishes or roof-mounted home television antennas, which are not subject to federal review. Given
the smaller footprint of small cells, the large cost that these reviews can impose on deployment,
and the fact that small cell deployment will exceed macro tower deployment by an order of
magnitude, the Commission determined that the public interest calculation did not warrant
similar review obligations. The rules governing deployment of 50,000 200-foot macro towers
should be different than those governing deployment of 800,000 pizza-box-sized antennas.
Applying old rules to new technology imposes regulatory compliance costs that undercut the
Commission’s responsibility “to promote the rapid development and deployment of new
technologies.”

The court recognized this explanation but found that the agency did not adequately consider
three factors. First, while small cells are much smaller in size than macro towers, they will be
much larger in number, and though most will be collocated on existing facilities, 5G deployment
will still involve perhaps 160,000 new facilities, which could be up to 50 feet high (or more in
areas where adjacent facilities are taller) and therefore would likely have some impact on the
environment and on historic preservation. Second, many small cell deployments will fall under
existing exclusions, which reduces the agency’s estimated regulatory burden. And finally, the
agency gave little attention to the benefits of environmental and historical preservation review
and failed to consider the alternatives of retaining or streamlining the review rather than
eliminating it.

Of course, there is no clear, bright line about how “hard” an agency has to look at a problem to
satisfy “hard look” review. And that means reasonable minds can differ about whether particular
agency decisions are sufficiently justified. But my sense is that the court gave the Commission
less credit than it was due.

First, the agency was not blind to the fact that 5G deployment would involve significant new
construction. Quite the contrary: the fact that NEPA/NHPA review costs would be multiplied by
potentially hundreds of thousands of new deployments was a key factor in its cost-benefit
calculation. Significantly, the Commission recognized, in paragraph 77, that to the extent that
particular small cell deployments will raise local concerns, “nothing we do in this order
precludes any review conducted by other authorities – such as state or local authorities – insofar
as they have review processes encompassing small wireless facility deployments.” And, of
course, this local review could address both harms from new construction as well as the potential
cumulative harm of densification. Consistent with basic federalism principles, the Commission
endorsed this local review as a gap-filler: “The existence of state and local review procedures,
adopted and implemented by regulators with more intimate knowledge of local geography and history, reduces the likelihood that small wireless facilities will be deployed in ways that will have adverse environmental and historic preservation effects.” 23 The Court never addresses this rationale, or the value of state and local review, in its decision.

Second, the Commission’s estimates of review costs does take into account the likelihood that many, likely most, small cell deployments already fall under an exemption. To justify its cost calculations, the Commission cited a report prepared by Accenture Strategy, prepared for CTIA, which showed that “29 percent of wireless deployment costs are related to NHPA/NEPA regulations when reviews are required.” 24 Although the emphasis is mine, the italicized portion shows the Commission recognizes not all small cell deployments would require review. The Accenture report, in turn, relied on historic data to estimate that only 28 percent of new small cell deployments would require review. 25 The Order cites this report to support its claim that NEPA/NHPA costs would rise to $241 million in 2018. 26 And Commissioner Carr’s concurring statement cited this study to show that the Order would save $1.56 billion in review costs through 2026. 27 While the Court called out the Commission’s admittedly loose language at times – such as complaining about the “mechanical application” of review to “each of these small deployments,” 28 the financial figures cited in the Order do reflect the likelihood that most deployments are already exempt from review.

Finally, the Order did consider the record evidence supporting the benefits of NEPA/NHPA review. As the court noted, the Commission acknowledged those commenters who supported review and noted that these comments were either general, anecdotal, or at most showed a very small impact. The Texas Historical Commission, for example, showed 0.25 percent of projects were found to have adverse effects since 2014, which corresponds with Verizon’s representation that 0.3 percent of Tribal review requests resulted in an adverse finding, and the Association for American Railroads’ representation that 99.6 percent of deployments pose no risk to historic, tribal, or environmental interests. 29 While the court cites Michigan v. EPA to find the Commission did not engage in reasoned decisionmaking, that case was distinguishable. In that case, the agency explicitly “gave cost no thought at all, because it considered cost irrelevant” to its decision. 30 Here, the agency recognized comments favoring the benefits of review but found them outweighed by the costs.

The court correctly notes that the Order does not take into account the number of adverse effects that are mitigated by the review process or deterred by the existence of federal review. But it appears there is no record evidence to quantify this benefit. Even assuming that successful mitigation/deterrence is ten times the total number of adverse findings, that would mean 3.3 percent of all cases raise some concern, which would not undermine the Commission’s findings that the benefits of review are de minimis. Furthermore, the Commission explained, “even if...the aggregated effects of small wireless facility deployment rendered the benefits of review more than de minimis, we nonetheless determine that those benefits would be outweighed by the detrimental effects of the roll-out of advanced wireless service.” 31 Given the record evidence that such costs could reach $1.56 billion by 2026, and in light of the Commission’s acknowledgement that state and local review remain available to address residual concerns, this conclusion does not seem arbitrary and capricious.
IV. Conclusion

The decision was not all bad news for the Commission. The court affirmed other parts of the Order, including recognition that upfront fees charged by some tribes for initial historic review determinations are voluntary in nature, and a revised shot clock for tribes to respond to notifications made through the Tower Construction Notification System. And, of course, the Commission has the option to adopt a new rulemaking that addresses the deficiencies identified by the court (though this would not address petitioners’ claims that NEPA and NHPA require review, a question the court declined to answer).

Nonetheless, the re-imposition of environmental and historic review deals a blow to the Commission’s ongoing efforts to promote 5G deployment. The Accelerating Wireless Broadband Deployment Order was a key part of a larger package of initiatives designed to secure America’s leadership in the upcoming wireless revolution. The court’s decision will increase costs and slow the pace of next-generation wireless deployment at a time when all five Commissioners recognize that the country is at risk of falling behind.

With so much at stake, it is surprising that the court invalidated the agency’s common-sense recognition that a regulatory regime designed to mitigate the impact of tall, low-density towers could impede construction of high-density small cell networks. Of course, robust judicial review is an essential component of agency decisionmaking. As I noted above, reasonable minds may differ regarding whether an agency adequately explained its thinking. After all, one can always imagine some argument that the Commission did not adequately address. And in an era of thousands of electronic comments, it’s also not hard to find such arguments hidden somewhere in the record. But arbitrary and capricious review is meant to test the adequacy of the agency’s explanation. Here, it seems, the court understood the agency’s rationale; it just was not convinced by it.

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2 Id. at 4.
4 See United Keetoowah Band at *9.
5 In re Amendment of Envtl. Rules, 5 FCC Rcd. 2942 (1990); United Keetoowah Band at *10.
6 United Keetoowah Band at *11-12. The parties disputed whether this review is required by the statutes or imposed at the Commission’s discretion pursuant to its Title III authority. The Court did not reach this issue.
7 47 C.F.R. § 1.1312(b); United Keetoowah Band at *15. It is worth noting, as the Court does, that the Order’s exemption is somewhat different procedurally than the programmatic agreements and categorical exclusions by
which the Commission has recognized previous exceptions to its review authority. *United Keetoowah Band* at *14-15.

8 *United Keetoowah Band* at *18.


10 Id. ¶ 64.

11 Id. ¶62; see 47 U.S.C. §§ 151, 309(j)(3)(A), (D); id. § 1302(a).


13 Id. at 75.


15 Id.

16 Id.

17 Id.

18 *United Keetoowah Band* at *19.

19 Id. at *25 (“The Commission fails to explain why the categorical exclusions and programmatic agreements in place did not already minimize unnecessary costs while preserving review for deployments with greater potential cultural and environmental impacts.”).

20 Id. at *25-26.

21 See *Order* ¶ 64.

22 Id. ¶ 77.

23 Id.

24 Id. ¶ 40 (emphasis added).


26 *Order* ¶ 69.

27 *Order*, Statement of Commissioner Brendan Carr.

28 *Order* ¶ 65.

29 Id. ¶ 79.


31 *Order* ¶ 79.