Environmental Law, Eleventh Circuit Survey

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Environmental Law

by Travis M. Trimble

In 2013, the United States Court of Appeals for the Eleventh Circuit rejected a challenge to the Navy's Undersea Warfare Training Range (Range) off the coast of Jacksonville, Florida, based on potential impacts the Range could have to the endangered North Atlantic Right Whale and other endangered species. The court held that the Navy and the National Marine Fisheries Service (NMFS) had met their obligations under the National Environmental Policy Act of 1969 (NEPA) as amended and the Endangered Species Act of 1973 (ESA) as amended thus far in the project. The court also decided two cases under the Clean Air Act (CAA) as amended. In one case, the court upheld a revision to Alabama's State Implementation Plan allowing sources of air pollution to deviate from the standard limit for opacity, which the Environmental Protection Agency (EPA) had approved in 2008 but then disapproved in 2011; the court held the agency's 2011 disapproval of the change was unauthorized and the 2008 approval was a permissible construction of the relevant provisions of the Act. In another case, the court held that the government's expert testimony, purporting to show that equipment and process upgrades undertaken by Alabama Power Company to reduce downtime at three of its coal-fired power plants resulted in a significant increase in emissions, should have been ruled to be reliable and admissible over a challenge under Daubert v. Merrell.

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1. For an analysis of environmental law during the prior survey period, see Travis M. Trimble, Environmental Law, Eleventh Circuit Survey, 64 MERCER L. REV. 909 (2013).
2. Defenders of Wildlife v. U.S. Dep't of the Navy, 733 F.3d 1106, 1125 (11th Cir. 2013).
5. Defenders of Wildlife, 733 F.3d at 1125.
7. See infra notes 11 and 90 and accompanying text.
Dow Pharmaceuticals, Inc., even though the plants were “cycling” plants and did not operate continuously at full capacity.10

I. NATIONAL ENVIRONMENTAL POLICY ACT/ENDANGERED SPECIES ACT

In Defenders of Wildlife v. United States Department of the Navy,11 the Eleventh Circuit held that the Navy did not violate NEPA when it authorized construction of a Range without also authorizing the subsequent operation of the Range at the same time.12 The court also held that the NMFS did not violate ESA by issuing a biological opinion on the impact to listed species of the Range without including an incidental take statement related to the Navy’s operation of the Range, even though the opinion concluded that operation would likely adversely affect listed species, including the North Atlantic Right Whale.13

In 1996, the Navy announced its intention to build such a range in the Atlantic Ocean. The proposed range would consist of undersea, fiber-optic telecommunications cables and up to 300 nodes over a 500-square-mile area. The nodes transmit and receive acoustic signals from ships and submarines operating in the range. The Navy originally considered and evaluated several sites off the Atlantic coast in 2005, and three years later, it issued a revised draft Environmental Impact Statement (EIS), proposing to build the Range fifty nautical miles off Jacksonville, Florida. The Navy chose this location because of extensive operations it already had in the area that would provide support for the Range.14

Among the environmental concerns the Navy considered in its final EIS, issued in 2009, was the impact the Range would have on the North Atlantic Right Whale, of which only 300 to 400 remain, and whose only known calving grounds is located within the Range. The EIS addressed the project in two phases: the construction of the Range, which was to begin in 2009 and last into 2014; and the operation of the Range, which would commence sometime between 2018 and 2023. The EIS concluded that the impact of construction on the whale would be minimal. The EIS also concluded that operation of the Range would not increase ship traffic in the area over pre-existing levels (because the Navy already

11. 733 F.3d 1106 (11th Cir. 2013).
12. Id. at 1125.
13. Id. at 1118-19.
14. Id. at 1109-10.
conducted anti-submarine warfare training in the area). The EIS itself was not challenged in this case.\footnote{To fulfill its obligation under the ESA, the Navy also consulted with the NMFS concerning potential threats to endangered species posed by the Range, including the whale and sea turtle. In 2009, after consultation with the Navy, the NMFS issued a biological opinion concluding that the construction of the Range would not adversely affect listed species, and that operation of the Range would likely adversely affect listed species, including the whale and the sea turtle, but would not jeopardize their continued existence. However, the NMFS did not issue an incidental take permit for the whale as part of its biological opinion at that time because an incidental take authorization for the whale would only be effective for five years, and one issued in 2009 would expire before operations began. The opinion stated that the NMFS would issue a new opinion including an incidental take statement for Range operation at that time.}{15}

Based on its final NIS and the NMFS's biological opinion, on July 31, 2009, the Navy issued a Record of Decision (ROD) announcing that it

\footnote{15. \textit{Id.} at 1110-11.}{16. \textit{Id.} at 1113. The NMFS is responsible for administering the ESA as to endangered or threatened marine species. \textit{Id.} at 1111. The ESA prohibits the "taking" of any endangered species, which includes harm to the animal itself, and also prohibits destruction of critical habitat. \textit{Id.} at 1111-12. The ESA directs federal agencies to ensure that their actions are not likely to jeopardize the continued existence of, or destroy the critical habitat of, any listed species. 16 U.S.C. § 1536(a)(2). Part of this obligation includes consultation with the agency administering the ESA to determine whether harm to any listed species is likely. \textit{Id.} Consultation is a two-phase process: the agency proposing an action first prepares a biological assessment to determine whether an action "may affect" a listed species. \textit{Defenders of Wildlife}, 733 F.3d at 1112. If so, the acting agency must enter formal consultation with the expert agency, which then issues a biological opinion discussing in detail potential adverse effects the proposed action will have on listed species, stating whether the proposed action "is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat," and if so, what steps the acting agency must take to mitigate those effects. \textit{Id.} (quoting 50 C.F.R. § 402.14(g)(4) (2014)). Further, if, in its biological opinion, the expert agency determines that the proposed action will not jeopardize listed species but that the action may result in some incidental taking of such species, the opinion must include a statement detailing the extent of the incidental taking and reasonable measures the acting agency must take to mitigate the incidental taking (known as an "incidental take statement"). \textit{Id.} After an incidental take statement is issued, any take caused by the federal action in compliance with the statement is lawful. \textit{Id.} Relevant to listed marine species, the Marine Mammal Protection Act of 1972 (MMPA), 16 U.S.C. §§ 1361-62, 1371-89, 1401-17, 1421-23h (2012), allows incidental taking of small numbers of listed species during periods of not more than five consecutive years. \textit{Id.} at 1112-13; see also 16 U.S.C. § 1371(a)(5). Thus, an incidental take statement for listed marine species is effective for five years after it is issued. \textit{Defenders of Wildlife}, 733 F.3d at 1112-1113.}
would construct the Range at the Jacksonville site. The ROD stated that it applied to construction only, and that the Navy was deferring authorization of operation of the Range until it could determine more accurately when operation would begin, at which time it would seek an incidental take statement applying to operation.17

Defenders of Wildlife and other conservation groups (the plaintiffs) filed suit in 2010, claiming that the Navy's ROD authorizing construction of the Range and the NMFS's biological opinion did not comply with the NEPA and the ESA and were thus arbitrary and capricious.18 The gist of the plaintiffs' challenge arose from the bifurcated nature of the project and approvals for it: the plaintiffs claimed among other things that the Navy violated the NEPA by issuing a ROD for construction of the Range without issuing a ROD for operation; that NMFS violated the ESA by issuing a biological opinion that failed to address in sufficient detail potential adverse impacts on listed species of operation of the Range; and that the NMFS's biological opinion violated the ESA by failing to include an incidental take statement related to operation. The United States District Court for the Southern District of Georgia granted summary judgment to the Navy and NMFS on these issues.19

The Eleventh Circuit affirmed.20 As to the Navy's ROD authorizing construction of the Range but not its operation, the court noted that while NEPA does require that an agency address related actions in a single EIS so as not to segment a project and thereby potentially prejudice environmental impact decisions about future stages of the project based on past expenditures, nothing in NEPA prohibits an agency from authorizing a project in stages.21 The Navy had prepared an EIS that considered both construction and operation of the Range, which fulfilled its NEPA obligation, and the court held it was not prevented by NEPA from issuing a ROD authorizing construction

17. Defenders of Wildlife, 733 F.3d at 1113-14.
18. Id. at 1114.
[An agency action may be found arbitrary and capricious: “where the agency has 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 product of agency expertise.”] Id. at 1115 (quoting Miccosukee Tribe of Indians v. United States, 566 F.3d 1257, 1264 (11th Cir. 2009)).
19. Id. at 1115.
20. Id. at 1125.
21. Id. at 1117.
without also authorizing operation at the same time. While a NEPA regulation related to RODs does prohibit an agency from taking any action before issuance of a ROD that would limit the choice of reasonable alternatives in the ROD, the court noted that as to construction of the Range, the Navy had issued the ROD before entering into a contract for construction, and thus did not violate the regulation. Further, the court noted that nothing in the record suggested that the Navy did not plan to consider alternatives for operations in the Range in order to minimize impacts on the whale or other listed species.

Next, the court held that the NMFS's biological opinion did address in detail the potential impact on listed species of the operation of the Range, and the court noted that the opinion concluded that while construction would not affect listed species, operation of the Range would likely adversely affect the North Atlantic Right Whale, although it would not jeopardize its existence. The court rejected the plaintiffs' argument that the NMFS's analysis of the Range's operation was not unique to the Range and therefore not "meaningful" because it relied on the results of NMFS's prior analyses of the impact on listed species of the Navy's anti-submarine training activities in a larger area off Jacksonville that would include the Range. The court concluded that the agency's reliance on its past opinions did not undermine its opinion regarding the impact of the Range on the whale and other listed species because the previous analyses "also clearly considered the specific types of training proposed for the [Range]." The court also pointed out that any potential impacts of the operation of the Range that the NMFS could not take into account due to lack of information at the time of its opinion, would be analyzed again when the Navy and the agency conferred for the subsequent biological opinion just prior to commencement of operations. The court declined to adopt the position of courts in the Ninth Circuit that a biological opinion must be "coextensive in scope" with the entire project to satisfy the ESA. The court noted that nothing in the ESA required such a rule.

22. Id.
23. Id.
24. Id.
25. Id. at 1122-23.
26. Id. at 1119.
27. Id.
28. Id. at 1120-21.
29. Id. at 1121.
30. Id.
operation of the Range based on all information available to it at the time of the opinion.\(^{31}\)

Finally, the court held that the NMFS's issuance of the biological opinion concluding that operation of the Range would likely adversely impact the whale, without also issuing an incidental take statement that would authorize incidental harm but also presumably require mitigation, was not arbitrary and capricious.\(^{32}\) As to the whale, an incidental take statement would be authorized under the MMPA and would last only five years, and thus expire well before operation of the Range could begin.\(^ {33}\) Therefore, the court concluded that it was reasonable for the Navy and NMFS to agree to defer the incidental take statement until they entered consultation for a biological opinion prior to commencing operation.\(^ {34}\) In part, the plaintiffs argued that because of the lack of an incidental take statement in the 2009 biological opinion, the Navy was not obligated to reinitiate consultation at all, because an incidental take statement must include a "trigger" requiring further consultation if the acting agency's actions result in a take greater than that authorized by the statement.\(^ {35}\) The court noted, however, that the 2009 biological opinion addressed this problem by requiring the Navy to reinitiate consultation if even a single take occurred.\(^ {36}\) "Thus the current lack of an incidental take statement means that the trigger for reinitiating consultation is set to its strictest setting, not that there is no trigger."\(^ {37}\)

The court also addressed the plaintiffs' argument that, as to sea turtles, which are not mammals and thus do not fall within the provisions of the MMPA, there was no five-year limit on an incidental take authorization and thus no rationale for allowing the NMFS not to include an incidental take statement in the 2009 opinion.\(^ {38}\) The court concluded that it was neither arbitrary nor capricious for the agency to leave out the statement, given that the Navy had already committed to reinitiating consultation prior to the operation phase of the Range that would result in a new biological opinion that would cover the sea turtle.\(^ {39}\) Because the NMFS concluded that no take was likely during the construction phase and that operation of the Range would not

\(^ {31}\) Id.

\(^ {32}\) Id. at 1123.

\(^ {33}\) Id.

\(^ {34}\) Id.

\(^ {35}\) Id. at 1124.

\(^ {36}\) Id.

\(^ {37}\) Id.

\(^ {38}\) Id.

\(^ {39}\) Id.
proceed without a new biological opinion, no adverse effect on the turtle would occur before the agency issued another biological opinion, which could include an incidental take statement.\textsuperscript{40}

\section*{II. CLEAN AIR ACT}

In \textit{Alabama Environmental Council v. Environmental Protection Agency},\textsuperscript{41} the Eleventh Circuit held that the EPA's disapproval in 2011 of Alabama's revisions to its Clean Air Act State Implementation Plan (SIP), which the EPA had previously approved in 2008, was unauthorized, because the EPA failed to identify any error it made in connection with the 2008 approval, which was a required determination under § 110(k)(6) of the CAA\textsuperscript{42} allowing for such a disapproval.\textsuperscript{43} The court also held that the EPA did not have inherent authority to reconsider the 2008 approval because such authority only exists in the absence of specific statutory procedures for such reconsideration, which existed under the CAA in this case.\textsuperscript{44} Finally, the court held that the EPA's initial 2008 approval of the SIP revisions was valid, because the EPA concluded in 2008 that the revisions would not interfere with other requirements under the CAA.\textsuperscript{45}

The CAA establishes a two-part scheme for controlling air pollution: first, the EPA identifies air pollutants and formulates standards applicable to each (the National Ambient Air Quality Standards, or NAAQS), and second, each state develops a SIP to ensure that the standards are met within the state.\textsuperscript{46} Under this system, "so long as, the ultimate effect of a State's choice of emission limitations is compliance with the [NAAQS], the State is at liberty to adopt whatever mix of emission limitations it deems best suited to its particular situation."\textsuperscript{47} The EPA must approve a state's initial SIP, but once approved, it cannot be unilaterally modified by either the state or the EPA.\textsuperscript{48} Once approved, a SIP can be modified in a cooperative process between the state and the EPA that can be initiated in three ways: first, the state may voluntarily initiate the revision process under CAA § 110(a)(1);\textsuperscript{49}

\begin{thebibliography}{99}
\bibitem{40} \textit{Id.} at 1124-25.
\bibitem{41} 711 F.3d 1277 (11th Cir. 2013).
\bibitem{43} \textit{Ala. Envtl. Council}, 711 F.3d at 1290.
\bibitem{44} \textit{Id.}
\bibitem{45} \textit{Id.} at 1293.
\bibitem{46} \textit{Id.} at 1280; \textit{see also} 42 U.S.C. §§ 7409-10.
\bibitem{48} \textit{Id.}
\bibitem{49} 42 U.S.C. § 7410(a)(1).
\end{thebibliography}
second, the EPA can require a state to revise a SIP that the EPA determines to be “substantially inadequate” to attain or maintain the NAAQS and submit the revisions for EPA approval under CAA § 110(k)(5).\(^{50}\) and third, if the EPA determines that it took some action in connection with a SIP in error, it may revise the action pursuant to CAA § 110(k)(6).\(^{51}\) Under CAA § 110(l), the EPA “shall not approve a [SIP revision] if the revision would interfere with any applicable requirement” of the CAA.\(^{52}\)

The issue in this case involved Alabama’s SIP limitations on opacity, that is, the measure of light blocked by an air emission. Opacity in turn is a measure of particulate emissions, a pollutant under the CAA. Alabama’s SIP restricts opacity in emissions to 20%, with exceptions. Under one relevant exception, a source’s emissions may block up to 40% of light during one six-minute period every hour.\(^{53}\)

In 2003, Alabama proposed to revise its SIP to broaden this exception to allow sources with continuous opacity monitoring to produce emissions with up to 100% opacity up to 2% of the time during any quarter that they are otherwise subject to the 20% limit. Alabama submitted this proposed revision to the EPA for approval. The EPA subsequently required Alabama to make certain changes to the revision to ensure that emissions allowed under the exception would not exceed the overall emissions during the relevant time period that were allowed by existing law. Alabama made the changes sought by the EPA, and the EPA approved the SIP revisions in 2008.\(^ {54}\) The EPA found that the proposed revisions “would not increase the allowable average opacity levels.”\(^ {55}\) Thus, the requirement of CAA § 110(l) that the revisions not

\(^{50}\) 42 U.S.C. § 7410(k)(5).

\(^{51}\) 42 U.S.C. § 7410(k)(6). Section 110(k)(6) states:

Whenever the Administrator determines that the Administrator’s action approving, disapproving, or promulgating any plan or plan revision (or part thereof), area designation, redesignation, classification, or reclassification was in error, the Administrator may in the same manner as the approval, disapproval, or promulgation revise such action as appropriate without requiring any further submission from the State. Such determination and the basis thereof shall be provided to the State and public.

\(^{52}\) Id.

\(^{53}\) CAA § 110(1), 42 U.S.C. § 7410(l); Ala. Envtl. Council, 711 F.3d at 1281.

\(^{54}\) Ala. Envtl. Council, 711 F.3d at 1282.

\(^{55}\) Id. at 1282-83.

interfere with applicable requirements under the CAA was satisfied, and
the EPA found that it lacked the data necessary to determine what
impact, if any, the revisions might have on particulate emissions. The
plaintiffs’ group requested that the EPA reconsider its decision, which
was denied.56

In December 2008, the plaintiffs’ group filed a petition in the Eleventh
Circuit challenging the 2008 approval and subsequently filed its second
request for reconsideration with the EPA. The EPA’s new regional
administrator granted the request and in the court case sought a
voluntary remand to the agency for reconsideration of its 2008 approval,
which the court granted.57

In April 2011, the EPA published a final rule disapproving Alabama’s
SIP revisions, stating there was “a sufficient likelihood that [revisions]
could allow increased mass emissions over what would have been
allowed under the previously approved SIP rule.”58 The EPA also
stated that it “no longer accepted ‘that the average daily opacity limit is
an appropriate or effective tool for evaluating the impact’ of the revision
on particulate matter emissions.”59 In particular, the 2011 disapproval
notice set out four reasons why opacity did not necessarily correlate to
particulate emissions, including that “one may act independently of the
other.”60

Alabama Power Company then challenged the 2011 disapproval in an
Eleventh Circuit petition, which was consolidated with the plaintiffs’
pending challenge to the 2008 approval, in which Alabama Power and
others had also intervened in support of the 2008 approval. Thus, before
the court were both the EPA’s approval of Alabama’s SIP revisions in
2008 and the EPA’s subsequent disapproval of those revisions in
2011.61 The EPA asserted that it had authority subsequently to
disapprove the SIP revisions on three grounds: (1) CAA § 110(k)(6),
allowing the agency to reverse its previous action if it found the previous
action was “in error,”62 (2) its inherent authority to reconsider its

56. Id. at 1283-84 (majority opinion).
57. Id.
58. Id. at 1285 (quoting Approval and Promulgation of Implementation Plans: Alabama:
Final Disapproval of Revisions to the Visible Emissions Rule, 76 Fed. Reg. 18870, 18876
52)).
60. Id. at 1296 (Molloy, J., concurring in part and dissenting in part) (quoting Alabama:
Proposed Approval).
61. Id.
62. Id. The EPA did not invoke CAA § 110(k)(5) as a basis for its 2011 disapproval; the
court noted that it could not do so because it had never found that the SIP, including the
decisions; and (3) the court's order remanding the 2008 revisions to the EPA in the plaintiffs' initial challenge to the EPA's 2008 approval of the revisions.\(^{63}\)

The Eleventh Circuit held that the 2011 disapproval of the SIP revisions was not authorized by law and upheld the 2008 approval.\(^{64}\) First, the court held that the EPA's 2011 disapproval was not authorized by CAA § 110(k)(6) because the EPA did not make a determination that the action it was disapproving—that is, its 2008 approval of the revisions—was done in error.\(^{65}\) The court held that the “plain language of the statute” requires that the EPA determine that it made an error in reaching its prior decision in order to invoke its authority under the statute to revise the prior decision, and went on to conclude that the EPA “has been unable to point to a determination of the error committed in the 2008 approval.”\(^{66}\) The court noted that the agency needs to make an “explicit,” “clearly articulated,” and “affirmative” error determination in its notice of intent to revise an earlier decision in order to invoke its authority under CAA § 110(k)(6), stating that the court would not “speculate” on or “be compelled to guess at” the precise error the agency relied on.\(^{67}\)

Second, the court rejected the EPA's argument that it had inherent authority to revise an earlier decision, holding that such authority does not exist where Congress has provided a specific mechanism to make such a determination, as it had in CAA § 110(k)(6).\(^{68}\) The court noted

2008 revisions, was “substantially inadequate” to maintain NAAQS. 711 F.3d at 1290 (majority opinion).

63. 711 F.3d at 1286-87.
64. Id.
65. Id. at 1287.
66. Id.
67. Id. at 1287-88, 1290. The dissenting judge, comparing language in the 2008 approval with that in the 2011 disapproval, noted that in 2008 the EPA determined that the revisions would not affect any applicable attainment requirement under the CAA, a finding it was required to make under CAA § 110(l), while in its 2011 disapproval the EPA noted that because of information showing the possible lack of correlation between opacity and particulate matter, it was no longer certain whether this was the case. \textit{Ala. Envtl. Council}, 711 F.3d at 1296 (Molloy, J., concurring in part and dissenting in part). The dissent argued that because the CAA required the EPA "to ensure that the proposed revision will not interfere" with applicable attainment requirements, the EPA's expressed uncertainty in the 2011 disapproval was tantamount to a determination that its 2008 decision was made in error. \textit{Id.} The dissent acknowledged that the EPA's 2011 notice of disapproval "does not use the specific words 'error' or 'correction.'" \textit{Id.} "And it does not provide an easy descriptor of the error or expressly invoke [CAA] § 110(k)(6). But, just as the majority does not require the EPA to intone 'magic words,' [see \textit{Ala. Envtl. Council}, 711 F.3d at 1290] there is no reason why such omissions should doom the agency's action." \textit{Id.}
68. \textit{Ala. Envtl. Council}, 711 F.3d at 1290 (majority opinion).
that it had previously held that an agency did have such inherent authority to revise its decisions but only in the circumstance where Congress has not provided for such a procedure.\(^6\)

Third, the court held that its order remanding the EPA's 2008 approval of the SIP revisions to the agency for further consideration did not provide independent authorization for the EPA to disapprove its 2008 approval.\(^7\)

Next, the court turned to the plaintiffs' challenge to the 2008 approval of Alabama's SIP revisions.\(^8\) The EPA did not defend the 2008 approval in the present lawsuit, but Alabama Power, as intervenor, did.\(^9\) The court upheld the 2008 approval of the revisions.\(^10\) The court noted that under the standard of review applicable to an agency's interpretation of a statute dictated by *Chevron U.S.A. v. Natural Resources Defense Council, Inc.*,\(^11\) where the statute is ambiguous, the court is required to defer to the agency's decision if it is based on a permissible construction of the statute.\(^12\) The court concluded first that the CAA "does not directly speak to how a determination of interference is to be made," and second, given that conclusion, the court concluded that the EPA's finding in 2008 that the SIP revisions would not interfere with attainment requirements under the CAA was a "permissible" interpretation of "interference" under CAA § 110(l).\(^13\) The court noted that the EPA had concluded in the 2008 approval that approval of revisions was permitted under CAA § 110(l) "unless the agency finds it will make air quality worse" and that the revisions "would not interfere with either annual or 24-hour particulate matter NAAQS,"\(^14\) even though it had also concluded that it could not determine what impact, if any, the revisions would have on particulate matter emissions.\(^15\) The court held that the EPA's interpretation of CAA § 110(l) was permissible.\(^16\) Ironically, the court stated that the EPA's 2011 interpretation of the statute, in concluding that it could no longer say

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69. Id. (citing Gun S., Inc. v. Brady, 877 F.2d 858 (11th Cir. 1989)).
70. Id. at 1291-92.
71. Id. at 1292.
72. Id.
73. Id. at 1293.
75. Ala. Envtl. Council, 711 F.3d at 1292.
76. Id. at 1292-93 (quoting Ky. Res. Council, Inc. v. EPA, 467 F.3d 986, 995 (2006) (internal quotation marks omitted)).
77. Id. at 1293 (quoting Ky. Res. Council, Inc., 467 F.3d at 995).
78. Id.
79. Id. at 1284, 1293.
80. Id. at 1293.
with certainty that the revisions would not interfere with maintaining NAAQS, was also a permissible interpretation and that the court would "pass no judgment" on it. The court noted that there can be more than one permissible interpretation, and that it would defer to an agency's interpretation even if the favored interpretation represented "a dramatic shift in EPA policy."

The court's choice of the EPA's 2008 approval over the 2011 disapproval based on Chevron deference is interesting because in most circumstances the agency's interpretation at issue represents the agency's then-current position. For example, in Friends of the Everglades v. South Florida Water Management District, cited by the Eleventh Circuit in support of its decision favoring the 2008 approval, the South Florida Water Management District was sued over its failure to obtain a permit under the Clean Water Act (CWA) for moving water containing pollutants from canals it managed into Lake Okeechobee, an activity that, at least arguably, required a permit under the CWA. Between the decision of the United States District Court for the Southern District of Florida requiring the agency to obtain a permit and the Eleventh Circuit's review of that decision on appeal, the EPA promulgated a new regulation specifically excepting such activity from the permit requirement. The Eleventh Circuit deferred to the new rule, despite much persuasive authority against it, as a permissible interpretation of an ambiguous provision of the CWA. Although the EPA's regulation at issue in Friends of the Everglades seems to defy common sense, the court's decision can at least be understood as deference to the agency's current position on the issue. In Alabama Environmental Council, in contrast, the court prefers the agency's older interpretation (which perhaps not coincidently dates from the same political era as the agency interpretation it favored in Friends of the Everglades) over the agency's most recent interpretation despite indicating that both interpretations are, or at least could be, permissible. Of course, the easy answer here is that once the court had held that the EPA's 2011 disapproval was unauthorized, it technically was not before the court as an alternative permissible interpretation of CAA § 110(l), and thus the court took pains

81. Id.
82. Id. (quoting Friends of Everglades v. S. Fla. Water Mgmt. Dist., 570 F.3d 1210, 1219 (11th Cir. 2009)).
83. 570 F.3d 1210 (11th Cir. 2009).
85. Friends of the Everglades, 570 F.3d at 1210.
86. Id. at 1213, 1218.
87. Id. at 1228.
88. 711 F.3d at 1294.
to "pass no judgment" on it from that standpoint. Still, the 2011 disapproval provides a fairly clear indication that the EPA no longer believes it made the correct decision in approving Alabama's SIP revisions in 2008, and an argument could be made that that interpretation, even if not in a form the court considers acceptable, is entitled to deference.

In *United States v. Alabama Power Co.*, a long-running dispute between Alabama Power and the EPA (referred to in the case as the "government") over modifications Alabama Power made to three of its coal-fired power plants between 1985 and 1997, the Eleventh Circuit held that the government's expert testimony as to the effect of the modifications on emissions from the plants was admissible as part of the government's case to show that the modifications were "major modifications" under the CAA. The court reversed the decision of the United States District Court for the Northern District of Alabama, which had excluded the testimony as the result of a challenge under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*

The case concerned three units in Alabama Power's system and whether the modifications that Alabama Power made to the plants constituted "major modification[s]" under the CAA, if so, Alabama Power would have been required to obtain performance review and permits before making the modifications, which it did not do. At one of its units, Alabama Power changed the method of air flow within the plant. At the two other units, Alabama Power replaced boiler components. The purpose of each of these modifications was to reduce the amount of time that the units were inoperative due to equipment breakdowns. As the court noted, the less time a unit is inoperative, the more time it is available to operate, and thus the more emissions it can produce.

89. *See id. at 1293.*
90. 730 F.3d 1278 (11th Cir. 2013).
91. *Id. at 1285.*
92. *Id. at 1282; see also Daubert, 509 U.S. at 579.*
93. *Ala. Power Co.,* 730 F.3d at 1281. Operators of new major sources of air pollution constructed after 1977, and any existing major source undergoing a "major modification," must obtain pre-construction permits under the CAA that place limits on pollutants they emit. *Id.* A "major modification" to a source comprises physical or operational changes to the source that result in a "significant net emissions increase" from the source. *Id.* (quoting 40 C.F.R. § 52.21(b)(2)(i) (2014)). "Routine maintenance, repair and replacement" activities are not modifications. 40 C.F.R. § 52.21(b)(2)(iii)(a) (2014).
94. *Ala. Power Co.,* 730 F.3d at 1281.
95. *Id. at 1281-82.*
The type of units involved in the case are known as cycling units—that is, their function within the power generation system is to come online and generate power during regular periods of higher power usage in the system.\textsuperscript{96} Cycling units are “operated on a regular or fairly regular basis, but not continuously,” unlike so-called baseload units, which operate continuously at full capacity.\textsuperscript{97}

In its case before the district court, the government proposed to introduce the testimony of its experts, a power plant reliability engineer, Robert Koppe, and an environmental permitting engineer, Dr. Ranajit Sahu, to show that at the time it undertook the respective work on each of its plants, Alabama Power reasonably should have expected that the modifications would result in significant net increases of regulated emissions at the plants and thus should have applied for permits prior to making the modifications. The experts’ studies (hereinafter the Koppe-Sahu model), which were based in part on studies conducted by Alabama Power itself of the expected effect on availability and power generation of the modifications, purported to show that at the time Alabama Power undertook the modifications at each of the plants in question, Alabama Power knew or expected that as a result of the modifications the plants would be available to operate for a greater period than prior to the modifications, and, crucially, that Alabama Power would actually operate the plants during the newly available time.\textsuperscript{98} As a result of the increased operation, the plants’ increased emissions would include a “significant net increase” of sulfur dioxide and nitrogen oxide, regulated pollutants under the CAA.\textsuperscript{99}

In the Daubert challenge, the district court concluded that the Koppe-Sahu model was unreliable when applied to cycling plants, such as the ones at issue in the case, and excluded the testimony, because the experts’ “presumption that an increase in a facility’s annual capacity will result in a proportionately equal increase in its output is only valid if the facility is operated virtually continuously at the highest level of output possible”—in other words, as in a baseload plant.\textsuperscript{100} The district court relied on and applied the reasoning from United States v. Cinergy Corp.,\textsuperscript{101} where the Seventh Circuit reached the same conclu-

\textsuperscript{97} Ala. Power Co., 730 F.3d at 1285 (quoting United States v. Cinergy Corp., 623 F.3d 455, 459 (7th Cir. 2010)).
\textsuperscript{98} Id. at 1280-83.
\textsuperscript{99} Id. at 1284.
\textsuperscript{100} Id. (quoting Ala. Power Co., 773 F. Supp. 2d at 1258).
\textsuperscript{101} 623 F.3d 455 (7th Cir. 2010).
sion about similar expert testimony applied to cycling units. The gist of the court's reasoning was that with a cycling plant (that is, one whose output is increased and decreased according to fluctuating demand on the power grid but does not run continuously at full capacity) there can be no presumption that an increase in the time a plant is available to be operated would necessarily result in an increase in the time the plant is actually operated.

The Eleventh Circuit disagreed, concluding that the Koppe-Sahu model could be used to estimate emissions from cycling units. The court held that the district court abused its discretion in excluding the experts' testimony. The court noted that in Cinergy Corp., the Seventh Circuit held that testimony similar to the Koppe-Sahu model was unreliable for a cycling plant "without expert testimony to support an estimate of actual emissions caused by the modifications." The court then noted that in Cinergy Corp., the government's expert testimony was insufficient to show increased actual emissions from the plants at issue; in contrast, in the present case, the court concluded that Koppe and Sahu "submitted ample evidence" to support a conclusion about actual emissions from the plants following the modifications.

In particular, the court noted, Koppe had testified at the Daubert hearing that in his opinion, the Koppe-Sahu model could be applied to a cycling unit if three conditions were met:

1. that the unit, assuming the modification provides additional hours of unit availability, will actually use the additional available hours;
2. that the unit will not spend more time in reserve shutdown in the future than it did in the past; and
3. that the output factor for the unit will not decrease.

The district court had not rejected the applicability of these factors per se, but instead concluded that there was no evidence that these were met because the government had only demonstrated that the factors were met at the plants at issue "by the ipse dixit of the expert[s]." The Eleventh Circuit concluded that the district court's conclusion as to the lack of supporting evidence was clearly erroneous. In its

103. Id. at 1285.
104. Id. at 1288.
105. Id. at 1284.
106. Id. at 1286 (emphasis omitted) (quoting Cinergy Corp., 623 F.3d at 460).
107. Id.
108. Id.
110. Id. at 1285-86.
opinion, the court included excerpts from Koppe's testimony at the Daubert hearing that according to the court, demonstrated factual support for the experts' conclusion that each of the factors were met at each plant.\footnote{Id. at 1286-88.}