

January 12, 2015

The Honorable Michael Boots
Chairman – The Council on Environmental Quality
Executive Office of the President
722 Jackson Place
Washington, D.C. 20506

Dear Mr. Boots,

Thank you for the opportunity to comment upon the Council on Environmental Quality’s draft guidance on when and how to consider the effects of greenhouse gas emissions and climate change in their evaluation of all proposed Federal actions (hereafter “DRAFT”). Integrating the consideration of GHGs into NEPA routines is one of the hardest questions NEPA practitioners face today. My comments reflect several years of research into CEQ’s administration of NEPA, some years of practice with NEPA documents and litigation, and a sense that this particular question will have broad implications for NEPA’s future. My comments assume that many action agencies are struggling in earnest to find the best way to integrate GHGs and climate change into their NEPA routines. My comments also assume that NEPA’s principal purposes consist in informing public opinion about the environmental tradeoffs inherent in governance today and in informing the decision-makers who do that governing. Thus, to whatever extent information about an action or “proposal” may be true, interesting, or new, that information is only relevant to NEPA if it can form some basis of reasons for action, either in the public at large or in a decision-maker.

I. CLIMATE CHANGE IN NEPA ANALYSES: ADAPTATION AND MITIGATION

As the DRAFT suggests, there are two distinct types of appearance climate change can make in a NEPA analysis. First, a project’s probable or possible future in a changing

environment must be part of any complete NEPA analysis. Many NEPA analyses are about building bridges, beaches, roads, runways, and the like. Climate change could mean that an airport runway expansion being contemplated by the Federal Aviation Administration, for example, will be at greater risk of destructive flooding. While this focus on “adaptation” is logical as far as it goes, there is reason to believe that very little good information about climate change’s likely modification of local environments is or will be “available” when NEPA analyses come due. Thus, because CEQ’s instructions to federal agencies on implementing Executive Order 13514 more specifically treat agency responsibilities to plan for adaptation, these comments will focus on the DRAFT’s other aspects.

A second kind of appearance of climate change and GHGs in a NEPA analysis is the incremental contribution to climate forcing that may or will result from the subject action. This could be the emissions a project will entail if undertaken. Call these the “direct” emissions of the action. If one is building a large pipeline, for example, it will ordinarily entail the combustion of some quantity of fossil fuels to do so. But there are other, less direct emissions that might factor in as well. Emissions the action will permit or perhaps encourage could conceivably factor into a NEPA analysis. A pipeline to a fossil fuel deposit that might otherwise remain marginally uneconomic, for example, could enable the combustion of those fuels and their emissions such that attributing the marginal emissions to the action agency permitting the pipeline makes sense. Averted emissions—traced to a rejection of the proposal—could count as a reason for rejecting the action, after all. Several precedents and CEQ’s existing regulations support including such “indirect” emissions. *See, e.g., City of Davis v. Coleman*, 521 F.2d 661 (9th Cir. 1975).

The range of emissions from direct to indirect makes any focus on “mitigation” in a NEPA analysis quite difficult. Unfortunately, more specific guidelines and information setting the methodology of emissions counting, climate forcing, and/or project/plan causation are needed than are presently available. This is a void that guidance like that offered in the DRAFT should fill. Part II argues that the DRAFT does not do so.

II. NEPA § 102(2)(C) IS CONCERNED WITH ACTIONS AND CONSEQUENCES

Whether direct or indirect, GHG emissions’ effects in the “human environment” are unfortunately still much more opaque, uncertain, and contingent than the causes that have featured in earlier NEPA interpretations and precedents. This is not to argue that “climate

change” cannot be predicted. Climate change certainly is predictable, to a rough approximation, precisely because it is globally-scaled and measured in the long-term. Demographers can tell us down to the second how often a baby is born on Earth. That doesn’t mean they can tell us where. Climate change’s “effects” are, according to our best current science, more like demography than meteorology. And if, as is often the case, NEPA analyses are already bulging at the seams testing the cognitive limits of even the most conscientious decision-maker, it had better be some kind of factor worth weighing if it’s stuffed into an already crowded analysis. “NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action.” 40 C.F.R. § 1500.1(c).

So of what *significance* is any particular (marginal) increment of GHG emissions? Information of this kind is particularly difficult to come by—some would say impossible with current science—because of how miniscule most identifiable contributions are relative to the overall problem. In 2010 CEQ proposed that federal actions causing “direct emissions of 25,000 metric tons or more of CO₂-equivalent [GHG] emissions on an annual basis” have, somewhere in an “appropriate NEPA analysis,” an estimation of (1) cumulative emissions over the life of the project, (2) alternatives and measures that may reduce emissions, and (3) any “link” between such emissions and climate change.¹ An odd disclaimer in that 2010 proposal that its threshold was meant as a “useful indicator” and not an “absolute standard of insignificant effects”² simply begged the real questions. If the number was no measure of NEPA *significance*, the claim that it was “useful” to NEPA was cryptic at best.³ If the number was not about causation, it is hard to see how such analyses would contribute to “better decisions” as opposed to bigger documents.⁴ And if it was not about better NEPA

¹ See Nancy H. Sutley, Memorandum for Heads of Federal Departments and Agencies: Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions at 1-2 (Feb. 18, 2010) (hereafter “CEQ Climate Change Memo”).

² See CEQ Climate Change Memo, *supra* note 245, at 3 (“CEQ does not propose this reference point as an indicator of a level of GHG emissions that may significantly affect the quality of the human environment, as that term is used by NEPA, but notes that it serves as a minimum standard for reporting emissions under the Clean Air Act.”).

³ NEPA has long prompted action agencies to seek “generic” compliance tools in the hopes of alleviating its analytical and procedural burdens—tools which plaintiffs have routinely attacked. Even before NRC’s dubious attempts in the late 1970s to replace plant-specific analyses with generic, simplifying rules, some had shrewdly warned against it. See Laurence H. Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 HARV. L. REV. 1329, 1372-76 (1971); Laurence H. Tribe, *Ways Not to Think About Plastic Trees: New Foundations for Environmental Law*, 83 YALE L.J. 1315, 1329-32 (1974).

⁴ Cf. 40 C.F.R. § 1500.1(c) (“Ultimately . . . it is not better documents but better decisions that count.”). The 2010 proposal recalled, on this point, the worst case analysis requirement and its eventual frustration of NEPA’s purposes.

decisions, it is hard to see how CEQ had authority even to “recommend” such a threshold as a NEPA norm. CEQ’s evasive proposal on the remote (if any) connections tying individual choices in the present to the globally-scaled, long-run macro-risks of climate disruption illustrates a defining challenge for NEPA’s utility in the coming decades.

Ingenuity, collaboration, and continuous discovery are at least as important to solving for the pivotal unknowns in difficult risk estimates as is following orthodox conventions or potted decision rules.⁵ Unfortunately, CEQ’s recent re-proposal of the 25,000 metric ton threshold as a “reference point” for “disclosure” purposes—but not as a “substitute” for a significance determination⁶—still confuses the role that guidance of this kind can serve with an opportunity to concoct some arbitrary “rule of thumb.” NEPA has long swept in many different kinds of impact in the “human environment” as relevant. What has always served as an absolute minimum for relevance purposes, however, is a “reasonably close causal relationship between a change in the physical environment and the effect at issue.” Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 (1983) (citing WILLIAM PROSSER, LAW OF TORTS (4th ed. 1971)). In other words, without this causal connection, the Supreme Court and the lower federal courts have placed future potential consequences outside of NEPA § 102(2)(C)’s scope. *See, e.g.,* Id. at 774-77; No GWEN Alliance of Lane County, Inc. v. Aldridge, 855 F.2d 1380 (9th Cir. 1988); Glass Packaging Inst. v. Regan, 737 F.2d 1083, 1091-93 (D.C. Cir. 1984).

Of what *causal* significance is the 25,000 ton threshold? If it is of no causal significance, it is hard to understand why “disclosure” should be a NEPA priority. Although there have been some governmental actions recently that exceed a *de minimis* threshold and perhaps even the 25,000 metric tons annually threshold, even they pale in comparison to this problem. That is, even a non *de minimis* (or “significant”) contribution of GHGs is still causally equivocal because of how over-determined dangerous climate disruption seems to be at this point and because of how little we know about the marginal efficacy of any certain further contribution. Science simply cannot predict with any reliability what increment of GHG saturation will or may lead to which (potentially devastating) outcomes. Because of a phenomenon known as the “band saturation effect,” further additions of the same GHG

⁵ *Cf.* Martin L. Weitzman, *Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change*, 5 REV. ENVTL. ECON. & POL’Y 275, 283-85 (showing arbitrariness in the use of a “social cost of carbon” estimate for present emissions given the deep uncertainties about future climate conditions); EPA White Paper, *supra* note 241, at 23-25.

⁶ *See* DRAFT at 19.

beyond a certain concentration have a weaker impact on the radiative forcing than earlier emissions. *See* DAVID ARCHER & STEFAN RAHMSTORF, *THE CLIMATE CRISIS: AN INTRODUCTORY GUIDE TO CLIMATE CHANGE* 22 (2010). Do we really want an agency like the Federal Highway Administration entangling itself in questions like the “band saturation effect”? Would it contribute to better decisions by that agency?

Finally, if agencies should only employ NEPA to consider the consequences of actions over which they have control or authority, *see* Dept. of Transp. v. Public Citizen, 541 U.S. 752, 768 (2004), the question is why go to the trouble of quantifying emissions and, if over 25,000 metric tons annual equivalent, to then “consider” reducing those emissions when the emissions in question are so causally insignificant? At the risk of over generalizing, virtually every NEPA-governed decision by U.S. agencies last year could’ve been set to some “no action” alternative such that, as to NEPA’s relationship to “climate change,” emissions would have been a principal focus and it would not have measurably improved any (good) estimate of our emissions trajectory globally. This is NEPA’s act-consequentialism in its present form: it is poorly fit to a globally-scaled, causally over-determined problem like climate change.

III. BETTER APPROACHES TO NEPA AND CLIMATE CHANGE: TWO OPTIONS

To judge from the full record of its administration, CEQ’s most important prerogative with respect to NEPA is not its ability to publish “guidance” or memos or other interpretative materials construing the 1978 regulations. Indeed, as the federal courts express more and more skepticism about agencies’ power to engage in this form of “self-interpretation,” there are surely diminishing returns in this approach. *See, e.g.*, Matthew C. Stephenson & Miri Pogoriler, *Seminole Rock’s Domain*, 79 *GEO. WASH. L. REV.* 1449, 1459-66 (2011); Talk America, Inc. v. Mich. Bell Tel. Co., 131 S. Ct. 2254, 2265-66 (2011) (Scalia, J., concurring).

In practical effect, CEQ’s strongest prerogative has been its power to identify select judicial precedents construing NEPA and to declare that these precedents constitute the law—that these precedents *require* action agencies to comport themselves with their terms. The sheer volume of NEPA litigation and the resulting reported precedents are what first thrust CEQ into this position in the early 1970s. *See* Jamison E. Colburn, *Administering the*

National Environmental Policy Act, 45 ENVTL. L. RPTR. (forthcoming 2015). It remains CEQ’s best leverage over action agencies to this day.

As FERC and other action agencies have struggled to understand their duties with respect to NEPA and climate change, CEQ’s power to find and publicize the judicial precedents that construe NEPA in this regard are the best means of staking out general parameters within which agencies should address GHG emissions and climate change. Though limited, the opportunities arise from within the case law on the standard of review, cumulative impacts, and alternatives.

A. Alternatives to the Proposal’s Construction of the “Rule of Reason”

The proposal suggests that NEPA’s “rule of reason” is best understood as requiring the quantification and weighing of emissions when/where a proposal involves a truly immense quantity of emissions—25,000 metric tons of CO₂ equivalent annually. In other words, it sets a default, however passively or tentatively. The problem is that this default keeps these factors out of the mainstream of agency decision-making, limiting them to the few truly exceptional agency actions. While the DRAFT rightly notes the available tools for and the difficulties of quantifying emissions and/or their expected marginal costs, it appears to rely on its “proportionality” notion⁷ to exempt that vast majority of NEPA’s target—agency planning and doing—from its purview. This is a fundamentally unsound way to integrate climate change mitigation into “the Federal Government” as a whole.

In the case most credit with having prompted OMB’s “social cost of carbon” estimates, Center for Bio. Diversity v. NHTSA, 538 F.3d 1172 (9th Cir. 2008), the agency was sorting out controls for a significant fraction of global emissions—emissions from new U.S. motor vehicles—and had the authority to be quite stringent. Best estimates were that about 40 million annual metric tons of CO₂ equivalent separated NHTSA’s preferred action from the most stringent, fuel saving standards it might have imposed. NHTSA had estimated the costs of imposing the stringent (but feasible) fuel economy requirements but had not estimated any costs of *not* doing so. The Ninth Circuit found this arbitrary and capricious

⁷ “In addressing GHG emissions, agencies should be guided by the principle that the extent of the analysis should be commensurate with the quantity of projected GHG emissions. This concept of proportionality is grounded in the fundamental purpose of NEPA to concentrate on matters that are truly important to making a decision on the proposed action.” DRAFT at 10 (*citing* 40 C.F.R. § 1500.1(b)).

under 5 U.S.C. § 706(2)(A): monetizing costs on only one side of a ledger looks like biased accounting. *See* 538 F.3d at 1200-02. The court also found NHTSA’s EA/FONSI “inadequate” for failing to evaluate the “incremental impact” the excess emissions “will have on climate change or on the environment more generally” if aggregated with other “past, present, and reasonable foreseeable actions such as other [fuel economy] standards.” *Id.* at 1216.

The best interpretation of CBD v. NHTSA is that review under APA § 706(2)(A) will find agency arbitrariness where any analysis that informs an agency’s choices included the costs of taking a GHG-mitigating approach while ignoring the potential benefits of doing so. (This interpretation of the case leaves out the matter of quantity: NHTSA’s action in the case involved a perhaps peerless volume of projected future emissions.) Couched in these terms, NEPA’s duty is inseparable from agency duties to act on the balance of reasons more generally. CBD v. NHTSA articulates the duty within the highly specialized context of *partial quantification*. That is, if agency analyses involve marginal quantification for the weighing of the factors therein, foregoing the quantification of only certain factors will and should be adjudged “arbitrary” wherever that further, fuller quantification is possible. *See also* New Mexico Cattle Growers Ass’n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1283-85 (10th Cir. 2001); Corrosion Proof Fittings, Inc. v. Environmental Protection Agency, 947 F.2d 1201, 1220-23 (5th Cir. 1991); Van Abbema v. Fornell, 807 F.2d 633, 638-43 (7th Cir. 1986); *cf.* Industrial Union Dept., AFL-CIO v. American Petroleum Inst., 448 U.S. 607, 634-43 (1980) (Stevens, J., for plurality) (finding agency arbitrariness in failure to conclude that the risk benefits being sought were significant relative to the costs of the standard being set).

CEQ could conceivably guide action agencies toward this interpretation of CBD v. NHTSA and arbitrariness in the context of GHG emissions. This has the advantage of foregoing any necessarily artificial threshold and leaving the onus on the agency to tailor its approach to its actions, its available information, and whatever efforts to quantify its decisional factors it might elect to undertake.

A second possible interpretation is of the “cumulative impact” dimension of the 1978 regulations’ definition of “significantly.” CBD v. NHTA’s second holding is relevant here. While § 1508.27’s “definition” has always been more a collection of “considerations” than of parameters or tests, the regulations explain that action agencies, when “scoping” their EISs, “shall consider” cumulative impacts. *See* 40 C.F.R. § 1508.25(c)(3). The rules, in turn,

define “cumulative impact” as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of [who] undertakes such other actions.” *Id.* at § 1508.7. At least two circuits have squarely held that this aggregation principle applies with special force to agencies that engage in permitting on a nationwide scale. *See Kentucky Riverkeeper, Inc. v. Rowlette*, 714 F.3d 402, 408-13 (6th Cir. 2013); *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 893-97 (9th Cir. 2002) (holding that EAs should consider “cumulative impacts” as well as EISs).

Indeed, if “[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time,” 40 C.F.R. § 1508.7, they seem like precisely the kind of “impact” which GHG emissions cause *as an aggregate*. What CEQ has never done in its years of guidance—whether interpretative or technical—is specify the *relevance* of the “incremental impact” of which § 1508.7 speaks. The Ninth Circuit in *CBD v. NHTSA* held that GHG emissions *are* “precisely” the sort of “incremental impact” of which § 1508.7 speaks—without other explanation. *See CBD v. NHTSA*, 538 F.3d at 1172. If that is true, though, *every* action involving the emission of GHGs can, in theory, trigger the need for a “detailed statement” under § 102(2)(C).

Because the Ninth Circuit said no more than it did, this holding represents an opportunity. CEQ could guide action agencies to it as one court’s demand that GHG emissions be considered an increment fitting the descriptions of “cumulative impacts” given in the 1978 regulations’ definition. Whether the opinion reflects the “law” on this point—law from which neither action agencies nor CEQ may deviate—is a harder question. The regional circuits can and often have interpreted the 1978 regulations in ways that widen or deepen their mandates such that action agencies are thereafter “bound” to follow what they require. *See, e.g., National Parks & Conservation Association v. Babbitt*, 241 F.3d 722, 731-32 (9th Cir. 2001) (enforcing Ninth Circuit requirement that if effects of a proposal are “highly uncertain,” then an EIS must be prepared). To read the Ninth Circuit’s opinion as a precedent, however, the precise *relevance* of any given GHG increment—the 1978 rules nowhere state that “cumulative” impacts be weighed at the initial stages determining whether to undertake an EIS—remains at least arguably an open question even within that circuit.

B. Integrating Emissions as a Consideration through § 102(2)(E)

An indirect but perhaps better way of integrating the consideration of GHG emissions and their environmental implications into the median agency's planning and allocations is through the imagining of "alternatives"—not just within §102(2)(C)'s required "detailed statements," but within the meaning of § 102(2)(E)'s duty to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). This could be "alternatives" analysis at wholesale. In 1978, CEQ stated that its regulations would "implement section 102(2)" as a whole. *See* 40 C.F.R. § 1500.1(a). Though never explained in greater depth to my knowledge, this assertion clearly aimed to put Section 102(2)'s several "'action-forcing' provisions" into effect. Experience since suggests that was more ambition than agenda. The proposal that follows would put more of § 102(2) into effect.

The key difference between "alternatives" within a "detailed statement" and "alternatives" of the sort envisioned by § 102(2)(E) is that while the former are necessarily tied to a pending "proposal," the latter may stem from any "unresolved conflict[] concerning alternative uses of available resources." If § 102 contains NEPA's "action-forcing" requirements, this particular subsection has received far too little attention. For this duty to study and develop alternatives to "courses of action" already undertaken could be much broader in scope than simply the causal connections extending outward from some *pending* proposal.

Unquestionably, the atmosphere as a *sink* for GHG emissions is an "available resource" the best use of which is the subject of unresolved conflict. *See, e.g.,* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, FIFTH ASSESSMENT SYNTHESIS REPORT (2014). Were CEQ to recommend to action agencies that they develop "appropriate alternatives" wherever this "use" of the atmosphere-as-sink is on-going or projected, it could help them avoid the pitfalls of analyzing their discrete actions and/or discrete amounts of GHGs as marginal causes of climate change. Courts have often held that § 102(2)(E)'s "alternatives" requirement governs the production of EA/FONSI (which are, by implication, outside the scope of § 102(2)(C)'s "detailed statements")—in line with the CEQ's own reference in 40 C.F.R. § 1508.9(b). *See, e.g., Meister v. U.S. Dept. of Agriculture*, 623 F.3d 363 (6th Cir. 2010); *City of New York v. U.S. Dept. of Transp.*, 715 F.2d 732, 742 n.10 (2d

Cir. 1983). What courts have not yet done is construe the obligation(s) of § 102(2)(E) independent of some pending “proposal” as that notion has evolved from the text of § 102(2)(C). *Cf. Aertsen v. Landrieu*, 637 F.2d 12, 20 (1st Cir. 1980) (tying § 102(2)(E) to “proposals” after holding that it was separate and apart from 102(2)(C)).

Clearly, this part of the statute has force independent of § 102(2)(C), however. *See, e.g., Environmental Defense Fund, Inc. v. Costle*, 657 F.2d 275, 297-98 (D.C. Cir.1981). The absence of judicial precedent leaves the matter open to an executive branch construction thereof. CEQ could guide action agencies in their interpretation of this provision. And clearly CEQ has taken an interest in how GHGs factor into agency thinking more broadly. The President’s “Climate Action Plan” sets goals that are simply unreachable without the substantial and effective contribution of NEPA.

A duty to develop wholesale alternatives to a GHG-intensive policy, program, or societal norm is one that need not embroil an agency in figuring the relative or marginal contributions as caused by discrete actions. *Cf. City of New York*, 715 F.2d at 743 (“The scope of alternatives to be considered is a function of how narrowly or broadly one views the objective of an agency’s proposed action.”). Freeing a GHG analysis from such parameterization may allow agencies to develop plausible economy-wide solutions and plans ahead of having to take their discrete actions, reducing the risk that agency analysis of the risks associated with climate change is regarded by others as casual or insufficient. *Cf. id.* at 751 (reversing lower court for allegedly having “impos[ed] its own choice of risk analysis upon a federal agency”).

The 1978 regulations’ unduly plastic notions of “indirect” and “cumulative” causation, *see* 40 C.F.R. §§ 1508.7, 1508.8, invite litigation over the reach of causal connections (as might the Ninth Circuit’s second holding in *CBD v. NHTSA*). The development and consideration of broad solutions to GHG-intensive policies or programs, on the other hand, could navigate agencies between the rock and hard place of (1) estimating emissions attributable to discrete governmental actions; and (2) deciding which such actions involve enough GHG emissions to merit their quantification and consideration. A mandate to study and develop alternative uses of available natural resources without the corresponding duty to undertake the marginal analysis of causes or consequences redeploys scarce analytical resources to broader-ranging “alternatives.” Instead of asking whether a liquefied

natural gas terminal will contribute significantly to our economy's GHG-intensity, for example, the Federal Energy Regulatory Commission could be devoting its NEPA investments to finding uses of new natural gas supplies as base-load supports for new wind and solar installations—some of which face intermittency challenges by location. *See* Paul L. Joskow, *Comparing the Costs of Intermittent and Dispatchable Electricity Generating Technologies*, 100 AMER. ECON. REV. 238 (2011). Were FERC to use NEPA § 102(2)(E) as a way of rolling out such an “alternatives” analysis, it could cue licensees in their proposals for FERC approvals without taking any “final agency action” within the meaning of 5 U.S.C. § 704 and without deviating from FERC's enabling legislation. Many other permitting agencies face similar circumstances.

Subsections 102(2)(A) and (B) also direct agencies to “insure the integrated use of the natural and social sciences . . . in planning and decisionmaking,” and to “insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking,” respectively. These are two other mandates in Section 102(2) which are untethered to some certain pending proposal. Neither has been acted upon by CEQ rulemaking or Executive Order in NEPA's 45 year history, though. If CEQ were to reorient the DRAFT to direct action agencies to analyze their “course[s] of action” over their relevant pasts, and to propose alternatives grounded in “the integrated use of the natural and social sciences” and the search for ways to quantify the presently unquantified in tradeoff analyses, GHG intensity would likely feature much more prominently in most agencies' priorities. The President's power to “take Care” that the laws be faithfully executed, U.S. Const., Art. II, § 3, enables EOP to order that these portions of NEPA § 102(2) be put into effect to whatever extent is permitted by (other) law.

In short, EOP and CEQ face an opportunity to make climate change a pivot in NEPA history instead of a yet another subsection in the already over-stuffed EISs of the several super-proposals the federal government confronts annually.

IV. CONCLUSION

Whatever the route, CEQ should—as it did in 1978—direct action agencies to fashion their own rules, to the extent permitted by law, which force these considerations into par with the other statutory factors constructing and constraining the agencies' discretionary choices.

NEPA's addition of decisional factors has been fortified within agency operations by this key aspect of the 1978 regulations: agencies are bound by their own rules, regardless of CEQ's authority over them. *See, e.g., United States ex rel. Accardi v. Shaughnessy*, 347 U.S. 260, 265-67 (1954); *Service v. Dulles*, 354 U.S. 363, 383-89 (1957); *Vitarelli v. Seaton*, 359 U.S. 535, 540, 545-46 (1959). Once those rules are made, they bind subsequent agency actors until they are changed. This was the subtle genius of the 1978 regulations and Executive Order 11991. A focused attention to GHG intensity through NEPA "alternatives" analysis could help agencies make broader, longer-term plans for climate change-mitigating actions and programs and agency rules requiring such analyses would be fully binding as law.

Sincerely,

A handwritten signature in black ink that reads "Jamison E. Colburn". The signature is written in a cursive, slightly slanted style.

Jamison E. Colburn
Professor of Law &
Joseph H. Goldstein Scholar
Penn State University