September 9, 2026

Via Electronic Mail (federalregister@ostp.eop.gov)

Dr. Matthew Wielicki
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Office of Science and Technology Policy
Executive Office of the President
Washington, D.C. 20502

Re: "RFI Response: Proposed Amendment to NCA5" [91 Fed. Reg. 54893]

Dear Dr. Wielicki:

I. Introduction, Interest, and Summary of Positions

American Energy Association ("AEA") respectfully submits this comment in response to the notice of availability for public comment on the Proposed Amendment to the Fifth National Climate Assessment (NCA5), FR Doc. 2026-17289, published August 25, 2026, and signed by Stacy Murphy, Deputy Chief Operations Officer/Security Officer, dated August 20, 2026.[1] Comments are due by 11:59 p.m. Eastern Time on September 9, 2026.

The American Energy Association is a trade organization representing American energy producers, suppliers, and affiliated businesses that support free markets. Our mission is to liberate American energy to advance the human condition. Our members' energy infrastructure decisions, facility siting, capital allocation, insurance underwriting, and other investments should be able to draw on accurate Federal scientific assessments and clearly communicated levels of uncertainty. When such assessments present an implausible future as a central planning feature, it can misdirect policies adopted by federal, state and local governments, inflate risk estimates, and produce real, unrecoverable misallocation of resources across every sector our members serve.

AEA supports the proposed amendment and urges USGCRP to complete it. The amendment correctly diagnoses a fatal flaw in the assessment: the presentation of implausible high-emission scenarios as central planning futures. But a correction that addresses only a portion of the embedded implausible scenarios is neither scientifically coherent nor legally durable. The Global Change Research Act commands the assessment to project "major trends," 15 U.S.C. § 2936(3), and a an implausible scenario cannot describe any major trend.

We support the amendment's Interpretation Guideline 2's point-of-communication requirement and the successor-scenario neutrality principle as its two most durable features. Our specific positions are:

1. SSP3-7.0 must be added to every operative list in the amendment alongside RCP8.5 and SSP5-8.5.
2. RCP6.0/SSP4-6.0 must join the other excluded scenarios. NCA5 pairs RCP6.0 with SSP3-7.0 as a single "High Scenario" tier. Neither are representative of current trends and leaving one while retiring the other is internally inconsistent.
3. RCP4.5/SSP2-4.5 should be retained in the assessment only if the authors affirmatively conclude, on the record, that the scenario falls within a likely projection range; otherwise it should be eliminated.
4. The amendment must extend to derivative products—the LOCA2 and STAR-ESDM downscaled datasets, the NCA5 Atlas, and the Global Change Information System—and to the continuing published misuse of the retired scenarios.

II. The Amendment Rests on the Best Reading of the Global Change Research Act

[1] 91 Fed. Reg. 54893 (Aug. 25, 2026) (FR Doc. 2026-17289).

The Global Change Research Act of 1990, Pub. L. No. 101-606, § 106, 104 Stat. 3096, 3101–02 (codified at 15 U.S.C. § 2936), provides that the assessment shall:[2]

> (1) integrate[], evaluate[], and interpret[] the findings of the Program and discuss[] the scientific uncertainties associated with such findings;
>
> (2) analyze[] the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and
>
> (3) analyze[] current trends in global change, both human-induced and natural, and project[] major trends for the subsequent 25 to 100 years.

The word "major" modifies "trends" and does analytical work. Congress directed the assessment to project the principal expected trajectory of global change, not the full envelope of conceivable outcomes. Congress did not write "projects the range of possible trends" or "projects bounding scenarios." The deliberate choice of "major trends" narrows the statutory mandate to pathways that are both plausible and central.

This reading avoids surplusage. Paragraph (1) independently requires discussion of "the scientific uncertainties." If paragraph (3)'s "major trends" already swept in the full uncertainty envelope—including implausible tails—paragraph (1) would be superfluous. Treating retired high scenarios as "major trends" collapses paragraph (3) into paragraph (1).

Section 2934(b)(1) reinforces the point: the Program Plan must provide "usable information on which to base policy decisions," and 15 U.S.C. § 2931(b) states that the purpose of the program is to "understand, assess, predict, and respond to" global change. An implausible tail scenario presented as an expected planning future is not usable information and does not help policymakers "predict" or "respond to" global change.

NCA5's own interpretive practice confirms the statute's operative force. Appendix 3, Box A3.1 invoked the statutory 100-year mandate to justify retention of high scenarios past 2100, asserting that "very high climate scenarios, such as RCP8.5 and SSP5-8.5, can be useful tools when considering a range of plausible greenhouse gas concentrations past 2100."[3] That is an interpretive choice about what § 2936(3) requires—and, it was the incorrect one. That the WCRP/CMIP and UN have declared those pathways implausible only underscores what should have been clear to the USGCRP for more than a decade.

Under *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024), the Court held that "courts must exercise independent judgment in determining the meaning of statutory provisions" and that "[i]n the business of statutory interpretation, if it is not the best, it is not permissible." An amendment resting on a merely defensible reading is not durable; USGCRP should adopt the best reading now.

As confirmatory support only—the statutory argument does not depend on it—Executive Order 14303, *Restoring Gold Standard Science*, 90 Fed. Reg. 22601 (May 29, 2025), points the same way.[4] Section 4(e) provides that "[h]ighly unlikely and overly precautionary assumptions and scenarios should only be relied upon in agency decision-making where required by law or otherwise pertinent to the agency's action." Section 7(a) channels correction through IQA section 515.[5] The Information Quality Act's objectivity and utility standards—requiring that influential scientific information be accurate, reliable, unbiased, and useful to intended users—reinforce the statutory best reading.

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[2] Global Change Research Act of 1990, Pub. L. No. 101-606, § 106, 104 Stat. 3096, 3101–02 (codified at 15 U.S.C. § 2936).

[3] NCA5, Appendix 3, Box A3.1 (Projecting Climate Impacts Beyond 100 Years Into the Future).

[4] Exec. Order No. 14303, Restoring Gold Standard Science, 90 Fed. Reg. 22601 (May 29, 2025).

[5] Information Quality Act, § 515, Pub. L. No. 106-554, app. C, 114 Stat. 2763A-153 (2000); OMB, Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 Fed. Reg. 8452 (Feb. 22, 2002).

III. The Scientific Record Supports the Determination

The amendment's structural diagnosis is correct. As Proposed Amendment § 3.2 explains, RCP8.5 "was designed as the upper-end forcing pathway," and "[t]he RCPs were defined by radiative forcing targets selected for climate-model experimentation rather than derived from forecasts of the most likely socioeconomic future. Socioeconomic narratives capable of generating those forcing levels were developed subsequently." The scenarios were tools for model experimentation, not predictions.

As the amendment recounts at § 3.1, "ScenarioMIP-CMIP7 states that the high emissions level represented in CMIP6 by SSP5-8.5 have become implausible. It further states that the new CMIP7 high emission scenario is expected to produce forcing below SSP5-8.5, even under assumptions that include rollback of current mitigation policies."[6] The determination does not depend on the continuation of climate policy—CMIP7's high scenario falls below SSP5-8.5 even assuming policy rollback.

The amendment's most durable contribution is its successor-scenario neutrality principle. Proposed Amendment § 2.1 provides that the determination "shall not be interpreted as an endorsement of any successor scenario framework. Future scenarios shall be evaluated according to their plausibility, transparency, empirical grounding, and fitness for purpose, regardless of whether they are legacy scenarios or newly developed pathways." CMIP7's own high scenario should likewise not be presumed policy-relevant merely because it is new.

A conformity point: the Federal Register notice sweeps in SRES A2 and "analogous high-emissions pathways," but the amendment text itself refers principally to RCP8.5, SSP5-8.5, and "equivalent" pathways. USGCRP should conform the amendment text to the notice by naming SRES A2 expressly in the operative provisions.

On observational grounding (§ 3.4): we endorse the principle that "[s]cenario correction should be paired with observational review" and that "[s]cientific statements should begin with observational metrics."[7] However, the amendment offers this discussion only as illustration, citing Christy (2026) as an example of "the type of review that should be used." We recommend converting this discussion into an operative interpretation guideline with minimum criteria for a qualifying comparator: length of observational record, disclosure of any homogenization adjustments, public availability of data and code, and reported sensitivity analysis.

IV. The Correction Must Reach the Entire Retired Tier: SSP3-7.0 and RCP6.0

A. SSP3-7.0. The same ScenarioMIP-CMIP7 action that retired SSP5-8.5 also left SSP3-7.0 behind. Neither pathway has a successor at its forcing level in the CMIP7 scenario set. NCA5 itself classifies SSP3-7.0 as a no-mitigation construct. Table 3 of the *Guide to the Report* pairs RCP6.0 and SSP3-7.0 as the "High Scenario" tier and describes them as reflecting "high CO_2 emissions with limited (RCP6.0) or no (SSP3-7.0) mitigation."[8] These two constructs cannot be a central Federal planning future when such constructs overstate plausible forcing.

B. Concrete harm inside NCA5. SSP3-7.0 drives material statements in the published assessment. Chapter 9 (Coastal Effects) states that global temperatures "are headed for a warming level of about 5.4°F (3°C) by 2100 under the current trajectory, which is consistent with the IPCC AR6 intermediate and high scenarios (SSP2-4.5 and SSP3-7.0)."[9] The Overview frames the 3°C threshold jointly on SSP3-7.0 and SSP5-8.5, stating that "the global warming level … is

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[6] van Vuuren et al., The Scenario Model Intercomparison Project for CMIP7 (ScenarioMIP-CMIP7), 19 Geoscientific Model Dev. 2627 (2026), doi:10.5194/gmd-19-2627-2026 (cited in Proposed Amendment ref. [2]).

[7] Christy, J. R., Declines in Hot and Cold Daily Temperature Extremes in the Conterminous US, 1899–2025, 157 Theoretical & Applied Climatology 309 (2026) (cited in Proposed Amendment ref. [11]).

[8] NCA5, Guide to the Report, Table 3 (Descriptive Terms for Common Climate Scenarios Used in NCA5).

[9] NCA5, ch. 9 (Coastal Effects).

expected to exceed 5.4°F (3°C) under high and very high scenarios (SSP3-7.0 and SSP5-8.5, respectively)."[10] Both statements are now obsolete in the direction of overstatement, and both are exactly the kind of point-of-communication statements that Interpretation Guideline 2 targets.

C. RCP6.0 and other implausible or off-trend scenarios. NCA5 pairs RCP6.0 with SSP3-7.0 as a single "High Scenario" tier in Table 3. Leaving RCP6.0 unaddressed while retiring SSP3-7.0 would make the amendment internally inconsistent on the assessment's own table. RCP6.0 is also a CMIP5-era construct superseded by a nearly identical SSP4-6.0. Both should be excised from the assessment, including any associated point-of-communication statements.

D. Reasoned decision-making. An amendment that reaches SSP5-8.5 but not SSP3-7.0, RCP6.0 and SSP4-6.0 without explanation invites challenge on administrative-law grounds. Under *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 43 (1983), "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *See also County of Los Angeles v. Shalala*, 192 F.3d 1005, 1022 (D.C. Cir. 1999) ("an agency action is arbitrary when the agency offers insufficient reasons for treating similar situations differently"); *Freeman Engineering Assocs. v. FCC*, 103 F.3d 169, 178 (D.C. Cir. 1997) ("an agency may not treat like cases differently"); *Butte County v. Hogen*, 613 F.3d 190, 194 (D.C. Cir. 2010) ("the agency must explain why it decided to act as it did"); *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (an agency changing position must "display awareness that it is changing position" and "show that there are good reasons for the new policy"). We raise this to help USGCRP build a well-reasoned administrative record.

E. Derivative products. SSP3-7.0, RCP6.0, and SSP4-6.0 outputs propagated into the LOCA2 and STAR-ESDM downscaled datasets, the NCA5 Atlas, and the Global Change Information System.[11] The amendment should reach them.

F. The "full damage range" objection. Sensitivity analysis is legitimate, but Interpretation Guideline 5 already answers this objection: "[r]esearch-only technical use of high pathways does not make the resulting impact estimate policy-plausible." The remedy is disclosure and demotion, not suppression. Anything to the contrary would not meet the statutory requirements to project "major trends".

V. RCP4.5 and SSP2-4.5 Should Be Retained Only on an Affirmative Likely Projection

RCP4.5 and/or SSP2-4.5 should be retained in the assessment only if the authors affirmatively conclude, on the record and with stated criteria, that the scenario(s) approximate projected major trends. If the authors cannot make that finding, or if the scenario(s) falls outside the projected trend, its(their) use should be eliminated.

This position rests on the statutory best-reading argument rather than on scenario retirement. Section 2936(3) asks for "major trends." A pathway that the authors cannot affirmatively place within the most likely range is not a major trend; it is an uncertainty-bounding exercise belonging to § 2936(1)'s separate mandate to discuss "scientific uncertainties."

We are candid: RCP4.5/SSP2-4.5 are not retired. NCA5 itself describes the intermediate scenarios as reflecting "reductions in CO_2 emissions from current levels," and its own Traceable Account concedes that "[m]ajor uncertainties remain surrounding the emissions trajectories implied by current policies and the plausibility of worse-than-current-policy emissions outcomes."[12] Chapter 9's sea-level pairing rests on SSP2-4.5 together with SSP3-7.0, so this determination has direct downstream consequences. We ask USGCRP to require that any retention finding be made explicitly and disclosed wherever the scenario is used as a planning premise.

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[10] NCA5, Overview.

[11] NCA5, Appendix 3 (LOCA2 and STAR-ESDM downscaling; NCA5 Atlas; Global Change Information System).

[12] NCA5, ch. 2, Key Message 2.3, Traceable Account (Major Uncertainties and Research Gaps).

VI. The Correction Must Reach Continuing Published Misuse

The problem the amendment addresses is live, not historical. A continuously updated public record maintained as a project of the American Energy Institute—*Continued Misuse, They Knew: The RCP8.5 Record* (https://they-knew.com/misuse)—catalogs studies, reports, and news articles published after the scenarios were retired (or after their flaws were established in the peer-reviewed record) that rely on RCP8.5, SSP5-8.5, or SSP3-7.0 without disclosing their status.[13]

That record's stated standard is instructive: "Use of a retired scenario is not itself the offense. The offense is presenting its outputs as the expected future—with no disclosure that the scenario has been ruled out by the very institutions that created it." That is precisely the standard the amendment adopts in Interpretation Guideline 2.

The record further observes that SSP3-7.0 is "[f]requently substituted for 8.5 in newer studies as the new 'high' scenario"—the substitution risk the amendment must foreclose by naming SSP3-7.0 expressly.

Because the underlying literature keeps growing, a one-time relabeling exercise will not hold. USGCRP should make scenario screening an ongoing obligation and should require, before any NCA5-derived finding is used as a Federal planning premise, confirmation that the supporting literature does not rest on an undisclosed retired pathway, nor rest on any scenario that does not reflect "major trends".

VII. What Not to Include in the Assessment

USGCRP should delete Chapter 32, "Mitigation," in its entirety. The Global Change Research Act directs the assessment to "analyze[] the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity."[14] It does not authorize USGCRP to prescribe emissions-reduction strategies, technology-deployment pathways, or preferred mixes of wind, solar, EVs, hydrogen, or carbon removal. The statute calls for "usable information on which to base policy decisions"—inputs to policymakers, not policy choices by the assessors.[15]

Chapter 32's five key messages—from "Successful Mitigation Means Reaching Net-Zero Emissions" to "Governments, Organizations, and Individuals Can Act to Reduce Emissions"—are overt policy advocacy, not scientific assessment.[16] Chapter 32 itself concedes these outcomes depend on "uncertain technological progress, public acceptance, consumer choice, and future developments in institutions, markets, and policies."[17] Speculating about uncertain future technology development is not analyzing the effects of global change on statutory subjects.

The overreach extends beyond Chapter 32. The Overview and Chapter 5 project renewable-energy capacity and EV battery deployment; Chapter 6 addresses wind and solar siting; regional chapters catalog state, city, Tribal, and local mitigation policies as evidence of "climate action."[18] NCA5 reports that Pittsburgh endorsed the "principles" of the Paris Agreement and committed to carbon neutrality by 2050.[19] The United States is not a party to the Paris Agreement, Pittsburgh has not demonstrated carbon neutrality is achievable at any cost, and cataloging municipal climate pledges is

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[13] Continued Misuse, They Knew: The RCP8.5 Record, https://they-knew.com/misuse (continuously updated catalog of post-retirement studies, reports, and news articles relying on RCP8.5, SSP5-8.5, or SSP3-7.0 without disclosure of the scenarios' status; a project of the American Energy Institute).

[14] 15 U.S.C. § 2936(2).

[15] 15 U.S.C. § 2934(b)(1); *see also* id. § 2934(d)(3); § 2938(b).

[16] NCA5, ch. 32 (Mitigation).

[17] NCA5, ch. 32, Key Message 32.3.

[18] *See, e.g.*, NCA5, Overview; chs. 5, 6; Figures 1.3, 32.21.

[19] NCA5, Box 21.1; Table 1.1.

not analysis of the effects of global change on the subjects Congress enumerated. NCA5 was co-opted as a platform for Paris-aligned policy cheerleading—that is outside the statutory mandate.

To provide another example of a significant misstep in NCA5, please see Appendix 4, Figure A4.1, which presents a "Change in Annual Cooling Degree Days" panel under the heading of "Changes in Temperature." Cooling degree days are an energy-demand planning proxy, not a direct observed temperature series; presenting a demand metric as a temperature indicator blurs scientific observation and policy-planning use.[20] Moreover, the figure is highly misleading, perhaps intentionally so. The graphic shows a fiery red region of the country, implying increased warming; however, the underlying data simply show tens of millions of Americans that decided to relocate to warmer climates over the past 40-50 years. To the extent USGCRP wishes to show that increases in power demand are occurring as a result of massive population growth in warm states, USGCRP must present such data honestly and transparently under 'demographic' not 'temperature' trends.

We would be remiss if we also did not highlight the truly bizarre inclusion in NCA5 of the "Art x Climate gallery". That multiple federal government agencies conceived of and implemented this initiative speaks volumes to the lack of seriousness, competence and focus on a "scientific assessment" requested by Congress. Please, the taxpayers beg of you, no more climate art.

As detailed elsewhere in this comment, the assessment should also exclude from baseline use RCP8.5, SSP5-8.5, SSP3-7.0, RCP6.0, and SRES A2; condition retention of RCP4.5/SSP2-4.5 on an affirmative likely-range finding; and correct derivative products—LOCA2, STAR-ESDM, the NCA5 Atlas, the GCIS, and agency technical support documents carrying those outputs.

USGCRP should stop the policy cheerleading and produce the scientific assessment Congress requires.

VIII. Requested Relief

AEA respectfully requests the following relief, representing the narrowest set of changes supported by the record:

1. Amend the § 2.1 Determination and every operative list to read "RCP8.5, SSP5-8.5, SSP3-7.0, RCP6.0, SSP4-6.0, SRES A2, or equivalent high emissions pathways," and conform the § 2.3 Standard Amendment Language and Interpretation Guidelines 1–5 accordingly.
2. Add a correction subsection addressing SSP3-7.0-dependent material, expressly correcting (a) the Chapter 9 statement pairing SSP3-7.0 with "the current trajectory" for sea-level planning and (b) the Overview framing of the 3°C threshold on SSP3-7.0 and SSP5-8.5.
3. Direct that any retention of RCP4.5 or SSP2-4.5 in the assessment be conditioned on an affirmative, disclosed finding that the scenario falls within the likely projected trends, and that the scenario(s) otherwise be eliminated from the assessment.
4. Convert § 3.4's observational-grounding discussion into an operative interpretation guideline with minimum comparator criteria (length of record, disclosure of homogenization, public availability of data and code, reported sensitivity analysis).
5. Extend the amendment to derivative products—the LOCA2 and STAR-ESDM downscaled datasets, the NCA5 Atlas, the Global Change Information System, and agency technical support documents carrying SSP3-7.0 or RCP6.0/SSP4-6.0 outputs—and make scenario screening an ongoing obligation rather than a one-time correction.
6. Eliminate all discussion and recommendations of speculative technology and policy actions.

[20] NCA5, Appendix 4, Figure A4.1; *see* NCA5 Glossary (defining cooling degree days as departure of average daily temperature from 65°F).

7. Leave “Art x Climate” to the elementary school teachers from Berkeley.

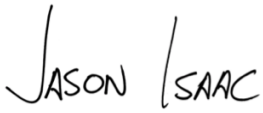
IX. Conclusion and Reservation of Rights

An amendment that reaches the retired tier in full and rests on the best reading of 15 U.S.C. § 2936 will hold. One that stops halfway—covering SSP5-8.5 while leaving SSP3-7.0 and RCP6.0 unaddressed despite identical retirement rationales and identical treatment in the assessment’s own scenario table—will not.

AEA reserves all statutory, procedural, and record-based arguments, including correction under IQA section 515, Pub. L. No. 106-554, app. C, 114 Stat. 2763A-153, and petition under 5 U.S.C. § 553(e).

AEA is prepared to provide further technical or economic material and to participate in any further public process USGCRP may convene.

Respectfully submitted,



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