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Re: Comments on Proposed Partial Approval and Partial Disapproval of Air Quality Implementation Plans; Hawaii; Regional Haze State Implementation Plan for the Second Implementation Period, 91 Fed. Reg. 7204 (February 17, 2026) [Docket No. EPA-R09-OAR-2025-0152]

Dear Mr. Dorantes,

The National Parks Conservation Association (NPCA), Earthjustice, Natural Resources Defense Council (NRDC), Center for Biological Diversity (CBD), Coalition to Protect America's National Parks (CPANP), Environmental Defense Fund (EDF), Clean Air Task Force (CATF), and Sierra Club (collectively, the Conservation Groups) submit the following comments on the Environmental Protection Agency's (EPA) proposal to partially approve and partially disapprove[1] Hawai'i's 2024 Regional Haze State Implementation Plan (SIP) for the

[1] 91 Fed. Reg. 7204 (Feb. 17, 2026).

second planning period (2024 SIP).[2] NPCA and CPANP submitted public comments to Hawai‘i on the State's initial second planning period SIP submitted to EPA in 2022,[3] which the State subsequently withdrew and replaced with the 2024 SIP. NPCA also testified during the State's April 2023 public hearing in support of the 2024 SIP.[4] The Conservation Groups also attach to these comments and incorporate by reference an expert report on EPA's proposal prepared by Victoria Stamper (Stamper Report).[5]

The Conservation Groups are active nationwide in advocating for strong air quality requirements to protect our national parks and wilderness areas. These groups have long participated in Regional Haze SIP comment periods, rulemakings, and litigation across the country to ensure that states and EPA satisfy their obligations under the Clean Air Act and the Regional Haze Rule (RHR). The Conservation Groups' thousands of members who live in Hawai‘i use and enjoy Class I areas in the state that are impacted by Hawai‘i's sources of haze-forming pollution.

Hawai‘i initially submitted a second planning period SIP to EPA in 2022. The State identified cost-effective measures that it determined were necessary to make reasonable progress for each of the Hawaiian Electric Company (HECO) power plants selected in the SIP, including: (1) selective catalytic reduction (SCR), combustion controls, and switch to ultra-low sulfur diesel (ULSD) for the Kanoelehua-Hill Generating Station (Hill) boilers 5 and 6; (2) switch to ULSD for the Puna Generating Station (Puna) boiler; (3) SCR, combustion controls, and switch to ULSD for the Kahului Generating Station (Kahului) boilers K-1 through K-4; and (4) fuel ignition timing retard (FITR) for diesel engine generators M1 through M3 and SCR for diesel engine generator M7 at the Maalaea Generating Station (Maalaea). However, after the State requested that HECO submit permit applications to incorporate the selected measures into facility permits so the measures could be incorporated into the SIP, HECO, of its own accord, asked for and agreed to enforceable retirement deadlines for units at three of the power plants—the Hill, Kahului, and Maalaea plants—in order to avoid having to install cost-effective controls.

Based on HECO's proposed retirement commitments, Hawai'i withdrew its 2022 SIP and revised its Four-Factor Analyses and control determinations in the 2024 SIP. First, HECO committed to enforceable retirement deadlines for units at Hill and Kahului in order to avoid conducting revised Four-Factor Analyses and having to install controls that the State determined were necessary to make reasonable progress. HECO, thus, requested that the State incorporate federally enforceable retirement deadlines into the SIP for both plants. Second, HECO

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[2] Hawaii State Dep't of Health, Regional Haze State Implementation Plan, Revision 1: Second Planning Period (Aug. 2, 2024) [hereinafter "2024 SIP"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_3, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003.

[3] 2024 SIP, App. X, Public Comments Received DOH-CAB Responses and Final Permit Amendments: August 12, 2022 RH-SIP Submittal: 2024 RH-SIP, Revision 1 Submittal, at 27-480 [hereinafter "App. X"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_27, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003.

[4] *Id.* at 647-48.

[5] Victoria Stamper, Comments on the EPA's February 17, 2026 Proposed Action on the State of Hawai'i's Regional Haze Plan for the Second Implementation Period Regarding Three Facilities: The Kanoelehua-Hill Generating Station, the Kahului Generating Station, and the Maalaea Generating Station (Apr. 16, 2026) (attached as Exs. 1-1a). Ms. Stamper is a technical expert with years of experience analyzing regional haze SIPs and Four-Factor Analyses.

committed to staggered retirement deadlines for engines at Maalaea to shorten the remaining useful life of those engines in revised Four-Factor Analyses such that controls would exceed Hawai‘i’s cost-effectiveness threshold. As a result, Hawai‘i determined in the 2024 SIP that: (1) FITR for engines M1 and M3; and (2) either retirement by December 31, 2032, for engines M10 and M11 and retirement by December 31, 2037, for engines M7, M12, and M13 *or* installation of SCR on those five engines by December 31, 2027, are necessary to make reasonable progress. Third, the State revised the Four-Factor Analysis for Puna based on additional cost information provided by HECO and determined that switching the plant’s boiler to ULSD is necessary to make reasonable progress. HECO did not commit to an enforceable retirement deadline for the Puna boiler, so the State did not incorporate a retirement deadline for that facility into the SIP. Fourth, the Mauna Loa Macadamia Nut Corporation agreed to a federally enforceable retirement deadline of December 31, 2026, for its main boiler. In response to comments from the National Park Service (NPS), Hawai‘i incorporated that retirement date into the SIP. As Hawai‘i noted throughout the 2024 SIP and appendices, the State closely consulted with EPA throughout the three-year process of developing both the 2022 and 2024 SIPs.

After Hawai‘i submitted the revised 2024 SIP to EPA, HECO sent EPA a letter in August 2025 alleging that retiring the power plant units by the SIP deadlines could raise grid reliability concerns. However, beyond HECO’s bare claims and speculative “concerns,” the limited documentation HECO cites does not support its assertions. Still, in its proposal, EPA asserts that, based on HECO’s August 2025 letter, the retirement deadlines in the 2024 SIP are now “forced” or “unconsented” and Hawai‘i should have provided necessary assurances that approval of the SIP retirement deadlines would not result in an uncompensated taking in violation of Federal or State law. Although EPA’s basis for partially disapproving the Hawai‘i SIP only potentially pertains to two of the five facilities selected in the 2024 SIP, EPA proposes to disapprove the entire long-term strategy, including the State’s control determinations for the other three facilities for which the SIP does not include any allegedly “forced” or “unconsented” requirements that units must shutdown. EPA also proposes to disapprove Hawai‘i’s reasonable progress goals and Federal Land Manager (FLM) consultation. EPA’s proposal to partially disapprove the 2024 SIP is not supported by the record before the agency, and, thus, is arbitrary, capricious, and unlawful for a number of reasons:

- Contrary to EPA’s claims, the retirement deadlines for units at Hill, Kahului, and Maalaea are not “forced” or “unconsented.” Rather, the record before the agency establishes that HECO requested that Hawai‘i incorporate retirements for these facilities into the SIP to avoid installing reasonable and cost-effective controls. Moreover, the SIP provides the *option* for HECO to *either* shutdown diesel engines at Maalaea by the agreed to deadlines *or* install SCR. Nothing in the SIP forces HECO to shutdown the Maalaea engines if HECO does not want to do so. HECO’s August 2025 letter does not demonstrate that these retirements are now forced. Thus, EPA’s “necessary assurances” rationale cannot support partial disapproval of the 2024 SIP.
- EPA misinterprets the “necessary assurances” provision under section 110 of the Clean Air Act, and the agency’s application of that provision to Hawai‘i’s 2024 SIP is arbitrary and capricious. EPA’s interpretation would absurdly require states to provide assurances for any law with which the SIP could potentially, at some unknown point in the future, conflict. Moreover, it is entirely unworkable for states to provide the kind of assurances EPA requires here, as takings issues are highly fact-specific. EPA is also incorrect that

the 2024 SIP presents any potential takings issues, as the retirement deadlines in the SIP are not forced, HECO's claims on grid reliability are entirely premature and speculative, and the takings case law EPA cites does not apply to Hawai'i's SIP. In any event, if the 2024 SIP does violate Federal or State law at some point in the future, the Clean Air Act has existing mechanisms EPA can use to address that violation if and when it arises.

- The Clean Air Act allows states to incorporate federally enforceable retirement deadlines into SIPs as SIP measures under both section 110 and section 169A, including on a timeframe that the owner/operator may not prefer. Thus, EPA's interpretation of these statutory provisions is contrary to the plain language of the Act. In any event, whether the Act allows states to include retirement deadlines on a timeframe not agreed to by the owner/operator is not an issue here. The retirement deadlines in the SIP were proposed and agreed to by HECO itself, and HECO's newly-made claims regarding grid reliability are speculative. If, at the time of the retirement deadlines, there is evidence demonstrating that retirement of the HECO units would actually cause grid reliability issues, the Act has multiple existing mechanisms that EPA and the State can use to address the retirements.
- By asserting that the retirement deadlines in the 2024 SIP are now "forced," EPA opens a massive loophole in the Act's requirements, allowing facilities to entirely evade compliance with the Regional Haze Program. Indeed, because the "necessary assurances" provision applies to any SIP developed under the statute, EPA's proposal here would eviscerate all of the Act's SIP Programs, such as the National Ambient Air Quality Standards (NAAQS) Program.
- EPA's proposal abandons the agency's long-standing guidance on how states must address source retirements in regional haze SIPs to comply with the Clean Air Act and the RHR. Yet, EPA fails to acknowledge or adequately explain its change in position.
- Although EPA cites to other SIP actions in which the agency partially or fully disapproved SIPs for Colorado and California, nothing in the agency's proposal here explains how those other SIP actions are relevant or inform EPA's analysis of the Hawai'i 2024 SIP. To the extent EPA relies on these other actions to support its proposal here, EPA fails to provide adequate notice of its rationale for partially disapproving the 2024 SIP.
- Contrary to HECO's claims in the August 2025 letter, if the facilities do not retire by the deadlines included in the 2024 SIP, they must install cost-effective controls that satisfy the four statutory factors, and so, would be necessary to make reasonable progress in the second planning period.
- Although EPA does not rely on alleged uncertainties in Hawai'i's calculation of the uniform rate of progress (URP) and reasonable progress goals to support its proposed partial disapproval of the 2024 SIP, the agency's assertions about the impact of volcano emissions and anthropogenic emissions on visibility conditions at Class I areas are arbitrary and capricious.

To comply with the requirements of the Clean Air Act and RHR, EPA must correct the errors discussed in these comments, withdraw its proposal to partially approve and partially disapprove Hawai'i's SIP, and approve the State's 2024 SIP.

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I. The Clean Air Act's Regional Haze Program.

To improve air quality in our most treasured landscapes, Congress enacted the Clean Air Act's Regional Haze Program, establishing "as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution."[6] In order to protect the "intrinsic beauty and historical and archeological treasures"[7] found in national parks, wilderness areas, and other "Class I" areas, the Regional Haze Program sets a national regulatory floor and requires states to design and implement programs to curb haze-causing emissions within their jurisdictions. To meet Congress's natural visibility goal, EPA issued the RHR, which requires states to make "reasonable progress" toward eliminating human-caused visibility impairment at each Class I area.[8]

Together, the Clean Air Act and RHR establish an iterative process that requires states to prepare and submit Regional Haze SIPs every ten years to further reduce visibility-impairing pollution at each Class I area.[9] The RHR sets out a planning sequence that states must follow when developing their SIPs.[10] States first calculate baseline, current, and natural visibility conditions, as well as the URP for each Class I area within their borders, which is the amount of progress that would ensure that natural visibility conditions are achieved if kept constant each year.[11] This calculation shows a straight-line "glidepath" between baseline visibility conditions and natural visibility conditions. Second, states develop their long-term strategies for addressing regional haze pollution.[12] Third, they develop reasonable progress goals and then compare those goals to the URP to track the amount of progress that will be made at each Class I area by the end of the planning period based on the controls included in the long-term strategy.[13] Finally, states adopt monitoring strategies and other provisions to ensure compliance with their SIPs.[14]

A. Long-Term Strategy

In developing its long-term strategy, a state must consider its anthropogenic sources of visibility impairment and evaluate different emission reduction strategies to control haze-forming emissions from those sources. In selecting sources for reasonable progress analyses, a state should consider "major and minor stationary sources or groups of sources, mobile sources and area sources."[15] The state's reasonable progress analyses (a.k.a., Four-Factor Analyses) for selected sources, which form the basis for the state's long-term strategy, must address the four factors identified in the Clean Air Act and RHR: (1) the cost of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of

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[6] 42 U.S.C. § 7491(a)(1).
[7] H.R. Rep. No. 95-294, at 203-04 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1282.
[8] 40 C.F.R. §§ 51.308(d)(1)-(3), (f)(2)-(3).
[9] *Id.* § 51.308(f).
[10] 82 Fed. Reg. 3078, 3091 (Jan. 10, 2017).
[11] 40 C.F.R. § 51.308(f)(1).
[12] *Id.* § 51.308(f)(2).
[13] *Id.* § 51.308(f)(3).
[14] *Id.* § 51.308(f)(6); 82 Fed. Reg. at 3091.
[15] 40 C.F.R. § 51.308(f)(2)(i).

compliance; and (4) the remaining useful life of the source.[16] Notably, neither the statute nor the RHR lists visibility improvement or visibility conditions as a fifth factor in the definition of "reasonable progress." The state "must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy."[17]

In addition to Four-Factor analyses for selected sources, states must also consider five additional factors in developing their long-term strategies: (1) emission reductions due to ongoing air pollution control programs; (2) measures to mitigate pollution from construction activities; (3) source retirement and replacement schedules; (4) smoke management techniques for agricultural and forestry management purposes; and (5) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy.[18] States must further document the technical basis for the SIP, including monitoring data, modeling, cost, and emission information, and the baseline emission inventory upon which its strategies are based.[19]

A state's long-term strategy must contain "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal."[20] The emission limits and other measures included in a state's long-term strategy must be sufficient to achieve reasonable progress for the Class I areas affected by the state's emissions.[21] A state cannot exclude sources from a Four-Factor analysis or reject controls identified in an analysis because Class I areas impacted by in-state sources are projected to be at or below their respective URP glidepaths. EPA has made clear that the URP is not a "safe harbor."[22] Rather, the rate of progress that is achieved by the implementation of all reasonable controls as determined by a review of the four statutory factors "is, by definition, a reasonable rate of progress."[23]

B. Reasonable Progress Goals

In addition to long-term strategies, states must also establish in their SIPs reasonable progress goals, expressed in deciviews, that provide for progress toward the natural visibility goal for all in-state Class I areas.[24] The reasonable progress goals must reflect the visibility conditions that will be achieved at the end of the implementation period as a result of the enforceable measures included in a state's long-term strategy.[25]

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[16] 42 U.S.C. § 7491(g)(1); 40 C.F.R. § 51.308(f)(2)(i).
[17] 40 C.F.R. § 51.308(f)(2)(i).
[18] *Id.* § 51.308(f)(2)(iv).
[19] *Id.* § 51.308(f)(2)(iii).
[20] 42 U.S.C. § 7491(b)(2); 40 C.F.R. § 51.308(f)(2)(i).
[21] 40 C.F.R. §§ 51.308(d)(3), (f)(2).
[22] 82 Fed. Reg. at 3093.
[23] *Id.*
[24] 40 C.F.R. § 51.308(f)(3)(i).
[25] *Id.*

Reasonable progress goals must provide for progress on the most impaired days and no degradation on the clearest days by the end of the planning period.[26] If a reasonable progress goal for a Class I area reflects a slower rate of improvement than the relevant URP glidepath at the end of the planning period, the state must provide a technically "robust demonstration" that there are no other available control measures that should be included in the SIP.[27]

C. Federal Land Manager Consultation

The Clean Air Act and RHR further require states to consult with FLMs on their Regional Haze SIPs. For FLM consultation, states must provide FLMs with an opportunity to consult in person and at a point early enough in the SIP development process that states "can meaningfully" consider information and recommendations provided by FLMs in making decisions on their long-term strategies.[28] States must consult with FLMs on (1) their assessment of visibility impairment in impacted Class I areas and (2) their recommendations on the development and implementation of strategies to address such impairment.[29] In order for the public and EPA to assess whether states have satisfied their consultation requirements, states must also document the timing and content of their consultation with FLMs, including a description of how states addressed any comments provided by FLMs.[30] Finally, states must provide "procedures for continuing consultation" with FLMs to address any substantive changes to their SIPs or to address any revisions, amendments, or supplements thereto.[31] The FLM consultation process is not a mere box-checking exercise. Rather, it is a mandatory, iterative, and substantive process, requiring states to meaningfully consider and incorporate into their SIPs the FLMs' recommendations and to ensure the public has an opportunity to review and comment on those efforts.

D. EPA's Review of Regional Haze SIPs

The Clean Air Act's Regional Haze Program requires states to develop Regional Haze SIPs that clean up the air in our national parks and wilderness areas. However, EPA must determine if a state's SIP complies with the requirements of the Clean Air Act and RHR and can approve, disapprove, or partially approve and partially disapprove of a SIP or a SIP revision.[32] Although EPA's review of SIP submissions is substantive, and not merely ministerial,[33] EPA

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[26] *Id.*

[27] *Id.* § 51.308(f)(3)(ii).

[28] *Id.* § 51.308(i)(2); *see also* 42 U.S.C. § 7491(d).

[29] 40 C.F.R. § 51.308(i)(2).

[30] *Id.* §§ 51.308(i)(2)-(4).

[31] *Id.* § 51.308(i)(4).

[32] 42 U.S.C. §§ 7410(k)(3)-(4), 7491.

[33] *Arizona ex rel. Darwin v. EPA*, 815 F.3d 519, 525, 532 (9th Cir. 2016); *see also Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, 485-86 (2004); *see also North Dakota v. EPA*, 730 F.3d 750, 761 (8th Cir. 2013); *see also Nat'l Parks Conservation Ass'n v. U.S. Dep't of the Interior*, 794 F. Supp. 2d 39, 41 (D.D.C. 2011) ("EPA must require these SIPs to include 'such emission limits, schedules of compliance, and other measures as may be necessary to make reasonable progress.'").

may only disapprove of SIPs or portions of SIPs that fail to meet the requirements of the Clean Air Act and the RHR.[34]

EPA actions on regional haze plans under the Clean Air Act cannot be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" and cannot be "in excess of" EPA's authority under the Act.[35] EPA's actions on SIPs are subject to the requirements of the Administrative Procedure Act (APA).[36] For any EPA actions under the Clean Air Act that are not subject to the APA, courts apply the "arbitrary and capricious" standard under the Clean Air Act the same way as that under the APA.[37] Agency action is 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."[38] Thus, EPA "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.'"[39]

II. Reducing Haze Pollution from Hawai'i Facilities Will Improve Visibility in Class I Areas and Result in Economic, Public Health, and Environmental Benefits.

Hawai'i is home to two Class I areas: Hawai'i Volcanoes National Park and Haleakalā National Park. These iconic parks provide habitat for a range of wildlife species, including threatened and endangered species. In fact, Haleakalā National Park is home to more endangered and threatened species than any other park in the U.S.[40] They also preserve some of the most inspiring and critical landscapes in the country. Hawai'i Volcanoes National Park is a designated International Biosphere Reserve and UNESCO World Heritage Site.[41]

Because these areas are designated as "Class I" under the Clean Air Act, their air quality is entitled to the highest level of protection. Yet, these areas are still affected by numerous

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[34] *Arizona ex rel. Darwin*, 815 F.3d at 531; *North Dakota*, 730 F.3d at 760-62; *Oklahoma v. EPA*, 723 F.3d 1201, 1207-10 (10th Cir. 2013).

[35] 42 U.S.C. §§ 7607(d)(9)(A), (C).

[36] *See id.* § 7607(d) (listing EPA actions that are considered rulemakings under the Clean Air Act but excluding EPA actions approving or disapproving SIPs in full or in part); *see Bahr v. EPA*, 836 F.3d 1218, 1229 (9th Cir. 2016) ("In reviewing a challenge to the EPA's approval of a SIP under § 7607(b)(1), we apply 'the general standard of review for agency actions set forth in the [APA].'").

[37] *Nat'l Ass'n of Clean Air Agencies v. EPA*, 489 F.3d 1221, 1228 (D.C. Cir. 2007).

[38] *Motor Vehicle Mfrs. Ass'n of the U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) ("*State Farm*").

[39] *Id.* (quoting *Burlington Truck Lines v. U.S.*, 371 U.S. 156, 168 (1962)).

[40] Rebecca Latson, *Invasive Species and Endangered Endemics at Haleakalā National Park*, NAT'L PARKS TRAVELER (July 14, 2025, 8:05 AM), https://www.nationalparkstraveler.org/park/subpage/invasive-species-and-endangered-endemics-haleakala-national-park (attached as Ex. 2).

[41] Nat'l Park Serv., *Hawai'i Volcanoes National Park: Hawai'i* (last visited Mar. 4, 2026), https://www.nps.gov/havo/index.htm (attached as Ex. 3).

sources of pollution in Hawai‘i that negatively impact their air quality and viewsheds.[42] Today, iconic wilderness areas and national parks are marred by air pollution that diminishes long range scenic views and robs visitors of their connection to and appreciation of large landscapes. Moreover, for Hawai‘i’s Class I areas, visibility is a key aspect of cultural practice and ability to relate to place. Clear views across landscapes and between wao (traditional land divisions extending from mountain to sea) are essential to ‘ike (knowledge and understanding rooted in place) and kilo (careful, culturally grounded observation of the natural environment). They ground ‘ike kūpuna (ancestral knowledge passed down through generations), which depends on an unbroken connection to land, ocean, and sky. When air pollution obscures these relationships, it degrades not only scenic resources but also living cultural systems tied to ‘ike Hawai‘i. Much of the air pollution that harms the viewsheds and cultural importance of these Class I areas stems from power plant and other industrial facility emissions of sulfur dioxide (SO_2) and nitrogen oxides (NOx), which react in the atmosphere to form “haze” pollution many miles downwind of the sources.

The state’s Class I parks are also an important component of Hawai‘i’s economy. Class I parks draw hundreds of thousands of visitors from around the world each year, providing a boon to local communities and recreation businesses.[43] In 2023, outdoor recreation activities in Hawai‘i contributed $6.9 billion in value to the state’s economy, making up 6.3% of the state’s gross domestic product and supporting over 49,000 jobs.[44] Additionally, NPS reported that over 1.4 million people visited Hawai‘i Volcanoes National Park and over 700,000 people visited Haleakalā National Park in 2024.[45] Recreation visits to these parks brought in more than $400 million and $56 million in visitor spending and supported more than 3,000 and 400 jobs, respectively.[46] However, when the air at a Class I area and other public lands is polluted, visitation can drop by eight percent, harming local economies.[47] Air quality directly affects public use and enjoyment of our national parks. As a result, a strong regional haze plan for Hawai‘i is necessary to improve visibility at Class I areas and other public lands in the state to protect this critical contributor to local and state economies.

Additionally, reducing air pollution through Hawai‘i’s regional haze SIP would improve public health, particularly for communities surrounding the State’s various sources of air pollution. The same pollutants that mar scenic views at national parks and wilderness areas also cause adverse public health impacts. For example, NOx pollution is a precursor to ground-level ozone, which is associated with respiratory diseases, asthma attacks, and decreased lung

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[42] Nat’l Parks Conservation Ass’n, *Regional Haze Interactive Map* (last visited Apr. 7, 2026), https://experience.arcgis.com/experience/46dd650b65284b64bf38ccba0e90af8b/?org=npca [hereinafter “NPCA Haze Map”].

[43] Nat’l Park Serv. 2024 National Park Visitor Spending Effects (Sept. 2025), https://www.nps.gov/subjects/socialscience/vse.htm [hereinafter “2024 Visitor Spending Report”] (attached as Ex. 4).

[44] Bureau of Econ. Analysis, Outdoor Recreation Satellite Account (ORSA): 2023—Hawai‘i (2024), https://apps.bea.gov/data/special-topics/orsa/summary-sheets/ORSA%20-%20Hawaii.pdf (attached as Ex. 5).

[45] 2024 Visitor Spending Report at 27.

[46] *Id.*

[47] *See* David Keiser *et al.*, *Air Pollution and Visitation at U.S. National Parks*, 4 SCI. ADVANCES 3-6 (July 18, 2018), https://www.science.org/doi/10.1126/sciadv.aat1613 (attached as Ex. 6).

function.[48] NOx reacts with ammonia, moisture, and other compounds to form particulates that can cause and worsen respiratory diseases, aggravate heart disease, and lead to premature death.[49] Similarly, SO_2 worsens asthma symptoms, leads to increased hospital visits, and can form particulates that aggravate respiratory and heart diseases and cause premature death.[50] Particulate matter (PM) can penetrate deep into the lungs and cause a host of health problems, such as aggravated asthma, decreased lung function, and heart attacks.[51] NOx and SO_2 emissions also harm terrestrial and aquatic plants and animals through acid rain and nitrogen deposition, which in turn causes ecosystem changes, like eutrophication of mountain lakes.[52]

III. EPA's Claim that the State Failed to Provide Assurances that "Forced" Retirements Would Not Violate State or Federal Law Is Factually and Legally Erroneous.

An extensive record of communications between the State and HECO establishes that HECO proposed to retire units at Hill, Kahului, and Maalaea and requested that Hawai'i incorporate those retirements as federally enforceable SIP measures in order to avoid installing reasonable and cost-effective controls. Thus, EPA cannot reasonably assert that these retirement deadlines are "forced." In HECO's August 2025 letter backtracking on the retirements that HECO itself proposed and agreed to, the utility raises "grid reliability" concerns, suggesting that it may not be able to retire units at the plants by the SIP deadlines. HECO's vague and speculative assertions, which EPA merely repeats in its proposal without any independent inquiry or consideration, do not support any conclusion that the deadlines are now "forced." As a result, Hawai'i was not required to provide "necessary assurances" in the 2024 SIP that HECO's requested retirement deadlines for units at Hill, Kahului, and Maalaea would not result in an unconstitutional taking.

A. The Record Establishes that HECO Requested that the State Incorporate Enforceable Retirement Deadlines Into the SIP.

The only rationale EPA provides for disapproving any portion of Hawai'i's 2024 SIP is the State's alleged failure to provide "necessary assurances" under section 110(a)(2)(E)(i) of the Clean Air Act.[53] But this rationale is based on a key erroneous premise—EPA incorrectly

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[48] Env't Prot. Agency, *Health Effects of Ozone Pollution* (last updated Feb. 24, 2026), https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution (attached as Ex. 7).

[49] Env't Prot. Agency, *Basic Information About NO_2* (last updated July 10, 2025), https://www.epa.gov/no2-pollution/basic-information-about-no2#:~:text=Nitrogen%20Dioxide%20(NO2)%20is,larger%20group%20of%20nitrogen%20oxides (attached as Ex. 8); Env't Prot. Agency, *Health and Environmental Effects of Particulate Matter (PM)* (last updated May 23, 2025), https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm [hereinafter "EPA PM Health and Environmental Effects"] (attached as Ex. 9).

[50] Env't Prot. Agency, *Sulfur Dioxide Basics* (last updated Jan. 2, 2026), https://www.epa.gov/so2-pollution/sulfur-dioxide-basics (attached as Ex. 10); EPA PM Health and Environmental Effects.

[51] EPA PM Health and Environmental Effects.

[52] Nat'l Parks Conservation Ass'n, Polluted Parks: How Air Pollution and Climate Change Continue to Harm America's National Parks at 8-9 (2024), https://www.npca.org/reports/air-climate-report (attached as Ex. 11); EPA PM Health and Environmental Effects; Env't Prot. Agency, *Ecosystem Effects of Ozone Pollution* (last updated Sept. 30, 2025), https://www.epa.gov/ground-level-ozone-pollution/ecosystem-effects-ozone-pollution (attached as Ex. 12).

[53] 91 Fed. Reg. at 7217-19.

asserts that the retirement deadlines in the SIP are "forced" and "unconsented."[54] However, an extensive record of communications between the State and HECO shows that these retirement deadlines were voluntary and that HECO itself requested that the State incorporate the deadlines for Hill, Kahului, and Maalaea into the SIP to avoid having to install controls the State had determined were reasonable, cost-effective, and necessary to make reasonable progress. As a result, EPA's proposal to disapprove the 2024 SIP based on the State's purported failure to provide necessary assurances is arbitrary, capricious, and unlawful.

1. Puna Generating Station and Mauna Loa Macadamia Nut Corporation

As an initial matter, EPA's rationale for partially disapproving the 2024 SIP does not apply to either Puna or the Mauna Loa Macadamia Nut Corporation. The 2024 SIP does not include a retirement deadline for any units at Puna.[55] Although the 2024 SIP does include a retirement deadline for the Mauna Loa Macadamia Nut Corporation boiler,[56] nothing in the record indicates that the facility has changed its position on including that retirement in the SIP as a federally enforceable measure. Indeed, the only piece of record evidence EPA points to in support of its necessary assurances rationale for disapproval is HECO's August 2025 letter.[57] But the Mauna Loa Macadamia Nut Corporation is not owned or operated by HECO, so HECO's August 2025 letter does not apply to the Macadamia Nut Corporation.

EPA, thus, fails to provide any explanation, let alone an adequate one, for disapproving Hawai'i's long-term strategy measures for Puna or the Mauna Loa Macadamia Nut Corporation.[58] Similarly, EPA does not explain anywhere in the proposal why it does not or cannot partially approve Hawai'i's long-term strategy as to these facilities as provided under Clean Air Act section 110(k)(3).[59]

2. Kanoelehua-Hill and Kahului Generating Stations

EPA's assertion that the retirement deadlines for the Hill and Kahului boilers are "forced" is belied by the record. On the contrary, the extensive record of communications between the State and HECO in the 2024 SIP clearly demonstrates that HECO voluntarily requested that the State incorporate retirement deadlines for the Hill and Kahului boilers into the SIP in order to avoid having to conduct Four-Factor Analyses or install reasonable and cost-

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[54] *Id.* at 7217.

[55] 2024 SIP at 97, tbl.6.6-1 (providing that a fuel switch to ULSD for the Puna boiler is necessary to make reasonable progress).

[56] *Id.*

[57] 91 Fed. Reg. at 7217 (citing Letter from Karin Kimura, Env't Div. Dir., Hawaiian Elec. Co., to Josh F.W. Cook, Region 9 Reg'l Admin., U.S. Env't Prot. Agency (Aug. 29, 2025) [hereinafter "HECO August 2025 Letter"], Docket No. EPA-R09-OAR-2025-0152-0004_attachment_3, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0004.

[58] *State Farm*, 463 U.S. at 43; *Cboe Futures Exch., LLC v. SEC*, 77 F.4th 971, 977 (D.C. Cir. 2023) (holding that the agency "failed adequately to explain its rationale and failed to consider an important aspect of the problem" and that "those deficiencies require vacatur").

[59] 42 U.S.C. § 7410(k)(3) (providing that "the Administrator may approve the plan revision in part and disapprove the plan revision in part").

effective controls that the State had determined were necessary to make reasonable progress for each facility.

Based on initial Four-Factor Analyses conducted in 2020, Hawai‘i determined that multiple controls were necessary to make reasonable progress for the Hill and Kahului boilers. In March 2020, HECO provided Four-Factor Analyses for both facilities, asserting that the State should not require either facility to adopt new emission reduction measures during the second planning period.[60] After consulting with EPA on HECO's Four-Factor Analyses and based on EPA's feedback to the State, Hawai‘i requested that HECO correct multiple flaws in its Four-Factor Analyses that artificially inflated the cost of the controls analyzed.[61] However, HECO refused to make all the requested amendments to its analyses.[62] The State, thus, revised the Hill and Kahului Four-Factor Analyses, in accordance with EPA's feedback, to correct those errors.[63] Based on its revised analyses, Hawai‘i determined that the following measures were readily available and cost-effective,[64] and so, were necessary to make reasonable progress for the Hill and Kahului boilers:

- For Hill boilers 5 and 6, a switch to ULSD; installation of low NOx burners (LNB), flue gas recirculation (FGR), and overfire air (OFA) as NOx combustion controls; and installation of SCR.
- For Kahului boilers K-1 through K-4, a switch to ULSD; installation of LNB, FGR, and OFA as NOx combustion controls; and installation of SCR.[65]

Hawai‘i, thus, directed HECO in May 2021 letters to submit applications to modify the Hill and Kahului permits to incorporate these regional haze measures into the facility permits so that the amended permit conditions could be incorporated as federally enforceable SIP measures.[66] However, in response to State's May 2021 letter, HECO provided significant new cost information for the first time, notwithstanding that HECO and the State had already been analyzing controls for Hill and Kahului for more than a year.[67]

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[60] 2024 SIP, App. G, Regional Haze Four-Factor Analysis: Hawaiian Electric Company, Inc.: Kanoelehua-Hill Generating Station at 2-60 [hereinafter "Kanoelehua-Hill Four-Factor Analyses"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_10, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003; 2024 SIP, App. I, Regional Haze Four-Factor Analysis: Maui Electric Company, Ltd.: Kahului Generating Station at 2-61 [hereinafter "Kahului Four-Factor Analyses"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_12, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003.

[61] Kanoelehua-Hill Four-Factor Analyses at 62-65; Kahului Four-Factor Analyses at 63-67.

[62] Kanoelehua-Hill Four-Factor Analyses at 67-76; Kahului Four-Factor Analyses at 69-79.

[63] Kanoelehua-Hill Four-Factor Analyses at 144-82; Kahului Four-Factor Analyses at 148-68.

[64] 2024 SIP at 77-78, 79-80, 83-85.

[65] *Id.* at 86, tbls.6.3-1 to 6.3-2; 2024 SIP, App. P, Regional Haze Consultation, Draft Permits, Draft Permit Application Reviews, and Draft Technical Support Documents, at 45, 48 [hereinafter "App. P"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_19, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003.

[66] App. P at 45, 48.

[67] *Id.* at 50-86; 2024 SIP at 87 ("Hawaiian Electric responded with new information that was not provided in Hawaiian Electric's four-factor analyses for these facilities.").

After additional back and forth between the State and HECO on the new cost information, HECO proposed during an October 7, 2021, meeting with the State to commit to federally enforceable retirement deadlines for the Hill and Kahului boilers.[68] Hawai‘i noted in a November 9, 2021, letter to HECO that "Hawaiian Electric has agreed to a federally enforceable air permit condition requiring the shutdown of these units by December 31, 2027."[69] As a result, the State explained that Four-Factor Analyses were no longer necessary for the boilers and the facilities did not need to install cost-effective controls, in accordance with EPA guidance.[70]

Records of additional communications between HECO and the State confirm HECO voluntarily opted to retire the Hill and Kahului boilers to avoid conducting Four-Factor Analyses and installing controls that would otherwise be necessary to make reasonable progress for those facilities. In July and August 2021 letters, HECO requested that the State extend the retirement deadlines for the Hill and Kahului boilers by one year to December 31, 2028.[71] In response, the State noted that, during the October 7, 2021, meeting, HECO proposed enforceable permit conditions to permanently shutdown the Hill and Kahului boilers by December 31, 2027, explaining that "Hawaiian Electric was *provided the option* to either shut down the boilers, or implement the controls selected [in the 2022 SIP]" and that "Hawaiian Electric *chose* to shut down the boilers."[72] In additional communications with the State on extending the boiler retirement deadlines to 2028, HECO also noted that it "*agreed to* include in its revised Covered Source Permits (CSPs) control measures for certain units as well as the shutdown of several boilers at two of its generating facilities *in lieu of* air pollution control measures."[73] Thus, after agreeing with the State to extend the Hill and Kahului retirement deadlines to the end of 2028, HECO submitted applications to the State to modify its permits to incorporate December 31, 2028, retirement deadlines for the facilities' boilers.[74]

3. Maalaea Power Plant

As with the Hill and Kahului boilers, EPA's assertion that the retirement deadlines for the Maalaea engines are "forced" is belied by the record.

First, the 2024 SIP explicitly states that shutdown of the Maalaea engines is *optional*. As set forth in the SIP, HECO has the choice to either install SCR on engines M7, M10, M11, M12, and M13 by December 31, 2027, or shutdown (1) engines M10 and M11 by December 31, 2032, and (2) engines M7, M12, and M13 by December 31, 2037.[75] Thus, under the terms of the 2024 SIP, HECO can opt to install SCR and continue operating the Maalaea engines instead of shutting down if it so chooses. As HECO explained in its March 6, 2023, letter to the State requesting that Hawai‘i include a retirement deadline for Maalaea engine M7, incorporating

[68] App. P at 93 (explaining that during the October 7, 2021, meeting, Hawai‘i and HECO "were in agreement with permanently retiring the boilers at both Kahului and Kanoelehua-Hill Generating Stations by December 31, 2027").
[69] *Id.*
[70] *Id.* at 93, 96.
[71] *Id.* at 133-35.
[72] *Id.* at 137 (emphasis added).
[73] *Id.* at 140 (emphasis added).
[74] *Id.* at 149-223; App. X at 735-70.
[75] 2024 SIP at 94, 97, tbl.6.6-2.

retirement deadlines into the SIP with alternative compliance options to install SCR rather than shutdown meets "the goals of the RHR rule" and "Hawaiian Electric will have additional flexibility to continue to operate [the Maalaea engines] if it appears to be required."[76] Thus, EPA cannot reasonably claim that the SIP "forces" the facility to retire those engines. Once again, EPA both fails to provide any explanation for disapproving the long-term strategy measures for Maalaea and fails to explain why it does not or cannot partially approve the long-term strategy as to this facility under Clean Air Act section 110(k)(3).[77]

Second, the record of communications between HECO and the State over the three years Hawai'i was developing the 2022 and 2024 SIPs shows that HECO voluntarily requested that the State incorporate alternative staggered retirement deadlines for the Maalaea engines into the SIP to shorten the remaining useful life for those engines such that controls would not be cost-effective. In April 2020, HECO provided a Four-Factor Analysis for Maalaea, asserting that the State should not require the facility to adopt new emission reductions during the second planning period.[78] Again, after consulting with EPA, Hawai'i requested that HECO correct multiple flaws in its Four-Factor Analysis that artificially inflated the cost of the controls analyzed.[79] After HECO, again, refused to make all the requested amendments to its analyses,[80] the State revised the Maalaea Four-Factor Analysis to correct those errors in accordance with EPA's feedback.[81] Based on its revised analyses, Hawai'i determined that the following measures were readily available and cost-effective,[82] and so, were necessary to make reasonable progress for the Maalaea engines:

- FITR for engines M1, M2, and M3; and
- SCR for engine M7.[83]

HECO provided additional cost information in multiple letters to the State, continuing to assert that the State should not require any new controls on the Maalaea engines in the second planning period.[84] Yet, after the State revised HECO's updated cost analyses to comply with EPA's guidance, as well as the requirements of the Act and the RHR, the State continued to determine that FITR and SCR were reasonable and cost-effective controls for the Maalaea engines.[85]

HECO, then, voluntarily proposed staggered retirement deadlines for engines M7 and M10 through M13. In a January 20, 2023, letter, HECO proposed retirement deadlines for engines M10 through M13, explaining that, incorporating federally enforceable retirement

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[76] App. P at 235.

[77] *State Farm*, 463 U.S. at 43; *Cboe Futures Exch., LLC*, 77 F.4th at 977; 42 U.S.C. § 7410(k)(3).

[78] 2024 SIP, App. J, Regional Haze Four-Factor Analysis: Maui Electric Light Company, Ltd.: Maalaea Generating Station at 2-61 [hereinafter "Maalaea Four-Factor Analyses"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_13, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003.

[79] *Id.* at 63-66.

[80] *Id.* at 68-76.

[81] *Id.* at 139-56.

[82] 2024 SIP at 76-77, 81-85.

[83] *Id.* at 86, tbl.6.3-2; App. P at 46-47.

[84] App. P at 50-91.

[85] *Id.* at 94, 97, 124-28.

deadlines into the SIP would shorten the remaining useful life of the engines to five and ten years, such that the controls analyzed would exceed the State's cost-effectiveness threshold.[86] As HECO stated, "[t]he cost effectiveness for M10 – M13[] exceed[s] the threshold in part because the Company is committing to staggered shutdowns for those units in 2032 (for M10 and M11) and 2037 (for M12 and M13)."[87] HECO further stated that "[t]he shutdown of units M10 – M13 without the requirement to include SCR are also a significant cost savings to Maui customers."[88] Later, in a March 6, 2023, letter, HECO also voluntarily proposed to retire engine M7 to shorten the remaining useful life for that engine to ten years, such that the controls analyzed would exceed Hawai'i's cost-effectiveness threshold.[89] Based on HECO's requests to incorporate shutdown dates for various engines in the SIP but also provide an alternative compliance option, Hawai'i determined that the following measures were necessary to make reasonable progress for Maalaea: (1) FITR for engines M1 and M3; and (2) shutdown of engines M7 and M10 through M13 by HECO's agreed upon dates or installation of SCR on those engines by the end of 2027.[90] To incorporate these agreed upon measures for Maalaea into the SIP, HECO submitted an application to modify the Maalaea permit to include the engine retirement deadlines and alternative options to install controls in the facility permit.[91]

Thus, the extensive record of back-and-forth communications between the State and HECO over the three years in which the State developed the 2022 and 2024 SIPs establishes that the retirement deadlines for Hill, Kahului, and Maalaea were voluntary and requested by HECO itself. There is no rational connection between the record before the agency and EPA's assertion that the retirement deadlines for these facilities are "forced" or "unconsented."[92]

B. HECO's Vague and Speculative Claims of Potential "Grid Reliability" Concerns Do Not Make the SIP Retirement Deadlines "Forced."

In its August 2025 letter, HECO argues that it should be excused from complying with its own proposed retirement deadlines for Hill, Kahului, and Maalaea, raising "grid reliability" concerns with retiring units by the SIP deadlines. HECO's speculative reliability claims do not justify it reneging on these requirements, and "grid reliability" is not a valid factor in reasonable progress determinations under the law in any event. HECO also incorrectly claims that new or additional controls on Hill, Kahului, Maalaea, and Puna are not needed to improve visibility impairment at Hawai'i's Class I areas. As EPA has repeatedly explained, the URP is not a safe

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[86] *Id.* at 224-29.

[87] *Id.* at 226; *id.* at 227 (stating that HECO was "willing to accept amendments" to the Maalaea permit "to incorporate enforceable shutdowns, provided the DOH finds that based on the provided cost-effective tables SCR should not be required for the short remaining useful life of these units.").

[88] *Id.* at 227; *id.* at 225 ("These proposed shutdown dates impact the cost effectiveness of SCR and ultimately provide an overall benefit to the Regional Haze program while affording electric grid reliability for Hawaiian Electric and its customers on the island of Maui.").

[89] *Id.* at 234-37.

[90] 2024 SIP at 97, tbl.6.6-2.

[91] App. P at 410-90; App. X at 651-733 (final issued permit amendment for Maalaea).

[92] *State Farm*, 463 U.S. at 43 (providing that agencies "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'").

harbor from compliance with the Act's regional haze requirements, and states cannot treat visibility as a fifth factor in their Four-Factor Analyses.

1. HECO's Conjectural Concerns Ignore Its Own Responsibilities to Comply with State Laws and Directives to Modernize Its Grid.

HECO's August 2025 letter provides no basis for backtracking on HECO's commitments or undoing Hawai'i's SIP. In its proposal, EPA merely parrots statements from HECO's August 2025 letter to support its "necessary assurances" rationale, without independently assessing any of HECO's claims. However, HECO's speculative concerns as to its future ability to fulfill its agreement with Hawai'i to retire these plants do not justify it preemptively reneging on its commitments. Moreover, HECO ignores that it bears the responsibility to take the necessary steps, under the oversight and coordination of the state Public Utilities Commission (PUC), to meet its obligations to maintain reliability while modernizing its grid as mandated by state law.

In its August 2025 letter, HECO vaguely signals "[r]eliability [c]hallenges [a]round the SIP [r]equirements" and raises "concerns" that "the proposed dates of these unit retirements *may* not allow for enough time to successfully procure and place in service replacement projects needed to maintain grid reliability and integrity."[93] But HECO never states that it will not or cannot maintain reliability because of the retirements. Nowhere in its letter does HECO claim any impossibility, infeasibility, or undue hardship in an attempt to excuse it from meeting its commitments and obligations.[94] On the contrary, HECO merely suggests that it wishes "to maintain *flexibility*" in the face of its concerns of "*potential* negative impacts."[95]

HECO cites to its adequacy of supply reports submitted to the PUC as support for its assertion that the retirements "will create higher probability of energy reserve margin shortfalls that increase risk to reliability."[96] Review of these reports, however, reveals how any information they contain is pro forma and cursory at best, and no less speculative than the statements in HECO's August 2025 letter.[97] Moreover, directly to the point of HECO's request to EPA and EPA's proposed partial disapproval, nowhere in HECO's most recent supply reports from 2026, published *after* it sent the August 2025 letter, does HECO suggest that any plant retirements should be canceled or delayed, or mention any intention to change its plans for these plants along these lines. Rather, HECO's 2026 reports maintain that: "Kahului Power Plant generating units are to be retired by the end of 2028"[98]; "Puna Steam cannot operate on intermediate fuel oil past August 10, 2026, and is planned for an ultra-low sulfur diesel

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[93] HECO August 2025 Letter at 1-2 (emphasis added).

[94] Indeed, HECO is well-familiar with such concepts and principles in its extensive contractual dealings in its business.

[95] HECO August 2025 Letter at 1 (emphasis added).

[96] *Id.* at 3 & n.5.

[97] *See* Hawaiian Elec. Co., Inc., Adequacy of Supply Report (Jan. 30, 2026) [hereinafter "HECO 2026 Supply Report"] (attached as Ex. 13); Hawaiian Elec. Light Co., Inc., Adequacy of Supply Report (Jan. 30, 2026) [hereinafter "HELCO 2026 Supply Report"] (attached as Ex. 14); Maui Elec. Co., Ltd., Adequacy of Supply Report (Jan. 30, 2026) [hereinafter "MECO 2026 Supply Report"] (attached as Ex. 15).

[98] MECO 2026 Supply Report at 7.

conversion project," with a return to service date "estimated to be December 1, 2027"; and "Hill 5 and 6 will be removed by December 31, 2028."[99]

Of course, to meet its bottom-line obligation to serve, the utility cannot just idly declare concerns with its adequacy of supply, but must inform the PUC how it will respond, then follow through with action. HECO's adequacy of supply reports thus include a specific section dedicated to "Mitigation." Here, HECO's discussions of mitigation include a handful of paragraphs covering less than half a page in each of its reports, which hardly reflects a level of crisis or urgency on HECO's part that would justify it revoking its retirement plans. And, indeed, as discussed below, HECO's proposed mitigation measures include no mention or suggestion of such a move.

For mitigation measures on Maui, HECO "recognizes a need to implement various measures on Maui to allow for the retirement of Kahului Power Plant. . . . As a result, [it] has taken a portfolio approach, considering a variety of mitigation measures including procurement of additional generating resources," as well as adjustment of its maintenance schedules and calls for customer demand curtailment.[100] HECO also concludes that "[t]he anticipated installation of Stage 3 [Request for Proposals] projects is expected to increase available margin."[101] "With the addition of planned generation and storage resource additions including Stage 3 projects, the shortfalls in 2029 and 2030 are anticipated to be satisfied."[102]

For mitigation measures on Hawai'i Island, HECO similarly recognizes the need to "continue using a portfolio approach to meet its obligation to serve. This includes increased renewable energy, energy storage, and other potential options, both supply side and customer programs."[103] Its "[m]easures to minimize risk include[] prioritization of maintenance."[104] In addition, "[t]he planned repower of Puna Steam on ultra-low sulfur diesel can be used to support capacity," and "[i]ncreased output from [Puna Geothermal (PGV)] will also increase margin."[105] For Hawai'i Island as well, "[t]he anticipated installation of Stage 3 RFP projects in 2030 is expected to increase available margin."[106] "Any generation provided by independent power producers and the anticipated Stage 3 projects will increase energy reserves."[107]

In its August 2025 letter, HECO refers to "challenges" in canceled or delayed projects, as well as "macro-level economic changes" that "have or may result[] in" such impacts.[108] For Maui, HECO imagines that it "may be difficult to meet" its goals for providing replacement capacity, so delaying its retirements would reduce reliability risks "should there be any delays

[99] HELCO 2026 Supply Report at 6.
[100] MECO 2026 Supply Report at 9-10.
[101] *Id.* at 10.
[102] *Id.* at 8.
[103] HELCO 2026 Supply Report at 9.
[104] *Id.*
[105] *Id.*
[106] *Id.*
[107] *Id.*
[108] HECO August 2025 Letter at 2.

with these projects."[109] Similarly for Hawai'i Island, HECO proposes delays because the additional projects it is pursuing "are not expected to be online until 2030."[110] First, HECO's concerns about canceled and delayed projects overlooks that it shares in the responsibility for these outcomes as the key, common party in the process of negotiating the contracts and facilitating interconnection to HECO's grids.[111] Second, HECO's August 2025 letter predates its latest 2026 adequacy of supply reports, which specify HECO's proposed mitigation measures, yet do not include any suggested delay of the retirements. And most fundamentally, HECO ignores that it bears the responsibility to demonstrate the necessary commitment and urgency and to take the necessary action to address any purported reliability concerns.

HECO is a regulated utility under the purview of the Hawai'i PUC, which is the agency primarily responsible for overseeing and enforcing the utility's various legal obligations, including maintaining reliability and modernizing its grid by moving from fossil fuels to clean energy. These obligations are established and defined under state law, including the mandate to achieve 100 percent renewable energy by 2045.[112] Thus, if HECO has "concerns" about "challenges" and "potential negative impacts" to its ability to meet these obligations, it must engage with the PUC to raise such concerns. Yet, as discussed above and further elaborated below, HECO's submissions to the PUC do not match the level of concern or proposed response that HECO has contrarily suggested to EPA. HECO's attempt to rescind its retirement commitments is thus premature and misdirected. HECO, again, has not claimed any impossibility, infeasibility, or hardship, and it could not credibly do so given its contrary representations before the PUC.

As a fundamental part of its obligations as a regulated utility, HECO must engage in a formal, ongoing process of "integrated grid planning" to coordinate all supply- and demand-side energy resources on its grid to meet projected needs and comply with requirements such as the 100 percent renewable law.[113] These plans are developed with stakeholder engagement and submitted to the PUC for its review. For at least the past decade, HECO's plans, which the PUC has reviewed and accepted, have provided for the retirement of the Hill and Kahului plants under similar (or even earlier) timeframes as the dates presently incorporated in Hawai'i's SIP. Starting in *2016*, HECO's PUC-accepted plan provided for the retirement of the Kahului plant in

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[109] *Id.* at 3.
[110] *Id.*
[111] *See In re Pub. Utils. Comm'n*, Dkt. No. 2021-0024, Order No. 37624, at 3-4 (Feb. 11, 2021) (criticizing the "pervasive" problems and "lack of transparency" with HECO's interconnection processes, which "are causing unnecessary delays and increasing project costs" and "has resulted in the potential for a significant setback to renewable energy development in this State") [hereinafter "PUC Order No. 37624"] (attached as Ex. 16).
[112] *See* Haw. Rev. Stat. § 269-92(a)(6); *see also id.* § 269-145.5(b) (mandating that the PUC "balance technical, economic, environmental, and cultural considerations associated with modernization of the electric grid," based on various principles including but not limited to: "[e]nabling a diverse portfolio of renewable energy resources," and "[m]aintaining or enhancing grid reliability and safety through modernization of the State's electric grids").
[113] *See*, *e.g.*, Hawaiian Elec., Integrated Grid Plan: A Pathway to a Clean Energy Future (May 2023) [hereinafter "HECO 2023 IGP"], Docket No. EPA-R09-OAR-2025-0152-0004_attachment_2, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0004.

2024—two years ago—and for the retirement of the Hill 5 and 6 units in 2027 and 2030 respectively.[114]

HECO's latest PUC-accepted 2023 Integrated Grid Plan (which EPA also included in its docket but did not discuss in the proposal), expressly provides for the Maui grid that the Kahului plant and Maalaea M10-M13 units will be retired by 2027, and the Maalaea M1-M9 units by 2030: "This is largely due to the lack of replacement parts for maintenance."[115] The 2023 plan likewise provides for the retirement of Hill 5 and 6 on Hawai'i Island by 2027.[116] As to reliability on Maui, "*[t]he results show that, in 2030, the resource plan developed by [the model] should meet our reliability target*" for Maui.[117] Similarly, as to Hawai'i Island, "[t]he planned Hawai'i Island system in 2030 is expected to meet the Base scenario system load assuming the planned deactivations through 2030. . . . *Even if the Stage 3 procurement doesn't meet its target procurement, the 2030 Hawai'i Island system is expected to meet our reliability targets under the Base scenario*."[118] The latest annual update to HECO's plan similarly maintains that these units will retire by 2028.[119] The 2023 plan recognizes how the plants slated for retirement are well-advanced in age—ranging from around 50 years old to over 70 years old—and also include units that are obsolete because of lack of parts.[120]

Thus, HECO has planned and promised for a decade to retire these plants and provide the new resources needed to maintain reliability. And its latest accepted plans and updates still stand by these retirement commitments. Further, while HECO has not suggested any changes to these plans, the PUC has indicated that it would not take any proposed backsliding lightly. In its order accepting HECO's latest plan, for example, the PUC emphasized that "the State's need to address climate change has become even more urgent. This demands that the Commission, [HECO], and other entities engage in robust planning efforts to accomplish ambitious renewable energy and decarbonization goals."[121] In the upcoming round of planning, which is now underway, HECO must "develop ambitious plans to meet renewable energy and decarbonization goals as soon as possible."[122] HECO also "must show that it is on the path to meeting the State's renewable goals with safe, reliable generation that dramatically reduces customer exposure to fuel price volatility" and "*must also be ready and willing to speed up the pace of doing so*."[123] The PUC made clear its "inten[t] to *take an active role* in the next round of [integrated grid planning] to ensure this."[124]

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[114] *In re Pub. Utils. Comm'n*, Dkt. No. 2014-0183, Hawaiian Electric Companies' PSIPs Update Report at 4-12, 4-17 (Dec. 23, 2016) (attached as Ex. 17).
[115] HECO 2023 IGP at 173, 256.
[116] *Id.* at 159, 256.
[117] *Id.* at 174 (emphasis added).
[118] *Id.* at 159 (emphasis added).
[119] *See* Hawaiian Elec., Integrated Grid Plan: Action Plan Annual Update at 31, 34 (2025) (attached as Ex. 18).
[120] HECO 2023 IGP at 256-59.
[121] *In re Pub. Utils. Comm'n*, Dkt. No. 2018–0165, Order No. 41022, at 35 (Sept. 6, 2024) (attached as Ex. 19).
[122] *Id.* at 37.
[123] *Id.* at 46 (emphasis added).
[124] *Id.* (emphasis added).

Moreover, the PUC subsequently granted HECO's request to accelerate the depreciation and amortization rates for its generation plants, which is an accounting treatment that increases the rate of recovery of plant investment costs so that full recovery is completed by an earlier date. In proposing these accelerated depreciation rates, HECO told the PUC that it "took into account the *proposed retirement plan for its steam units as described in [its] Integrated Grid Plan ("IGP"), which reflect shortening remaining service lives* to eight years."[125] The PUC observed that "[t]hese . . . early retirement dates for steam generation units, which run on fossil fuel, [are] in line with State energy policy goals of decarbonization and transitioning to renewable energy" and are "expected to result in a number of customer benefits, including reduction in greenhouse gas emissions, less exposure to volatile fossil fuel costs (which are expected to result in more affordable electrical energy), and increased energy resilience (i.e., reduced reliance on imported fossil fuels to generate electrical energy)."[126] The PUC recognized that "statutory and policy decisions have impacted the expected life of certain generation assets (i.e., the decision to accelerate the transition away from fossil fuels)"; thus, accelerated deprecation "ensures that recovery of the utility's investment in those assets will occur during that asset's service life and avoid the concerns" of "stranded costs" for the utility.[127] In sum, not only has the PUC agreed with HECO's plans to retire its plants, it further granted HECO's request for special financial accommodations specifically in recognition and return for those commitments.

This fuller history and context demonstrate how the retirements in Hawai‘i's SIP are neither "forced" nor "contrary to law," as EPA claims, but rather have been proposed and planned by HECO in compliance with state legal mandates and regulatory directives from the Hawai‘i PUC. In particular, the PUC's grant of HECO's request for accelerated depreciation rates of its retired plants directly belies EPA's claim and proposed reasoning that the retirements could result in any "taking," since the PUC's approval is specifically intended and designed to allow the full recovery of the utility's investments in light of the plants' shortened expected service lives.

In conclusion, HECO's claims in its August 2025 letter are vague and speculative and do not support that any alleged reliability "concerns" justify disapproving its commitments in the Hawai‘i SIP to retire its plants. HECO has not raised these concerns with the Hawai‘i PUC, which—like the State in fashioning the Hawai‘i SIP—has relied on HECO's own plans and proposals and has legitimate expectations that HECO can and will comply. Indeed, this would not be the first time that the PUC would have been called to ensure compliance with a plant closure deadline. HECO also raised reliability concerns with the planned closure of the AES coal plant on O‘ahu in 2022, including similar challenges with project delays and supply chain issues during COVID. The PUC initiated a process to "elicit the best solutions to ensure a cost-effective retirement of the AES Plant . . . that maintains system reliability" and directed HECO on the necessary steps, including (1) tracking progress on resource procurements with monthly status reports; (2) implementing near-term improvements to HECO's interconnection process;

[125] *In re Hawaiian Elec. Co., Inc., et al.*, Dkt. No. 2024-0199, Decision & Order No. 41909, at 11 (Sept. 2, 2025) (attached as Ex. 20).
[126] *Id.* at 22-23.
[127] *Id.* at 23-24.

and (3) reviewing transition plans for plant retirements with independent analysis.[128] Now, HECO's 2026 adequacy of supply reports for O'ahu show no reliability issues for the projected horizon.[129] This actual experience highlights how HECO's concerns directed to EPA miss the mark and ultimately ignore HECO's own responsibility to take the necessary actions to follow through on its long-standing retirement commitments, which in no way are "forced" or "contrary to law" as EPA claims.

2. HECO Ignores EPA's Long-Standing Position that Grid Reliability Is Not Part of the Four-Factor Analysis.

HECO suggests in its August 2025 letter that the State and EPA should consider grid reliability issues in their assessment of measures necessary to make reasonable progress.[130] The Clean Air Act requires that SIPs include the emission limits and other measures that are necessary to make reasonable progress.[131] The Act also defines "reasonable progress" to be the four statutory factors: (1) the costs of compliance, (2) the time necessary for compliance, (3) the energy and non-air quality environmental impacts of compliance, and (4) the remaining useful life of any existing source.[132] None of these factors includes "grid reliability."

EPA's long-standing first and second planning period guidance demonstrates that the "energy and non-air quality environmental impacts" factor does not include system-wide energy demand and grid reliability impacts. That factor must be considered under both Best Available Retrofit Technology (BART) and reasonable progress requirements.[133] In EPA's BART Guidelines, the agency provided extensive direction on how states should interpret "energy impacts"—namely, to assess the energy requirements of operating potential pollution control technologies.[134] EPA reinforced how it interpreted this factor for purposes of reasonable progress in the first planning period in its 2007 Reasonable Progress Guidance, stating that "[i]n assessing energy impacts, you may want to consider whether the energy requirements associated with a control technology result in energy penalties. For example, controls on diesel engines may decrease the engine's fuel efficiency, leading to an increase in diesel fuel consumption."[135] In the second planning period, EPA reaffirmed this interpretation in its 2019 Guidance, stating that "the energy and non-air environmental impacts [] generally involve[] assessing the impacts of a control measure on the energy consumed by a source."[136] For the "energy impacts" component of this factor, EPA stated that "[w]e recommend that states focus their analysis on *direct energy consumption at the source* rather than indirect energy inputs needed to produce raw

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[128] PUC Order No. 37624 at 4-5, 12-13.

[129] HECO 2026 Supply Report at 8.

[130] HECO August 2025 Letter at 1-4.

[131] 42 U.S.C. § 7491(b)(2).

[132] *Id.* § 7491(g)(1).

[133] *Id.* §§ 7491(g)(1), (g)(2); 40 C.F.R. §§ 51.308(e)(1)(ii)(A), (f)(2)(i).

[134] 40 C.F.R. Part 51 Appendix Y, § IV(D)(4)(h).

[135] Env't Prot. Agency, Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program at 5-2 (June 1, 2007) (attached as Ex. 21).

[136] Memorandum from Peter Tsirigotis, Dir., Env't Prot. Agency, to Reg'l Air Dirs., Regions 1-10 at 33 (Aug. 20, 2019), https://www.epa.gov/sites/default/files/2019-08/documents/8-20-2019_-_regional_haze_guidance_final_guidance.pdf [hereinafter "2019 Guidance"] (attached as Ex. 22).

materials for the construction of control equipment."[137] Thus, EPA has consistently and exclusively interpreted the "energy and non-air quality environmental impacts" factor as warranting a comparison of the energy requirements between potential control measures, and not any consideration of potential impacts on system-wide energy demand or electric grid reliability.

Indeed, EPA has explicitly explained in comments on state SIPs that grid reliability is not part of the "energy and non-air quality environmental impacts" factor. For instance, in comments on Colorado's second planning period SIP, EPA noted that it is inappropriate to consider grid reliability as part of a Four-Factor Analysis. EPA highlighted that Colorado referenced the need to "maintain[] grid reliability" and "meet[] demand" when electric generating units (EGUs) retire.[138] In response, EPA stated that "the rationale for the control determination chosen should be based on the four-factor analysis and not rely on *other factors such as grid reliability*, future demand, etc."[139] EPA's reference here to "grid reliability" as an "other factor" that is not one of the four statutory factors makes clear that EPA has not interpreted the "energy and non-air quality environmental impacts" factor to incorporate grid reliability.

Moreover, EPA has proposed to disapprove SIPs where states inappropriately considered non-statutory factors, like grid reliability, to reject emission reduction measures. In its proposal to partially disapprove Wyoming's second planning period SIP, which EPA later finalized,[140] EPA explained that Wyoming inappropriately relied on claims about grid instability to justify its determination that no additional controls were necessary for any of its in-state sources. In its SIP, Wyoming claimed that, if it required any sources to install additional controls, such a requirement would "impose economic hardships on sources" and "could force energy producers out of the market," thereby causing, among other things, "grid instability."[141] EPA rejected these justifications, explaining that "Wyoming's reasons are not supported by the [Clean Air Act] and the RHR and provide another basis for our proposed disapproval of Wyoming's long-term strategy."[142] EPA explained that, under the Clean Air Act, Congress directed states to determine the measures necessary to make reasonable progress "through consideration of the four statutory factors" and that Wyoming "cannot overcome Congress's express mandate by relying on an unsupported policy position that any additional control costs will cause unwarranted economic harm."[143]

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[137] *Id.* (emphasis added).

[138] Env't Prot. Agency, Comments on Draft Colorado Revised Regional Haze State Implementation Plan for the Second Implementation Period at 2 (Nov. 2, 2021), Docket No. EPA-R08-OAR-2024-0607-0011_attachment_16, https://www.regulations.gov/document/EPA-R08-OAR-2024-0607-0011 (attached as Ex. 23).

[139] *Id.*

[140] 89 Fed. Reg. 95121 (Dec. 2, 2024). Although EPA granted Petitions for Reconsideration of its final partial disapproval of Wyoming's SIP, the agency did not state that it granted Petitions based on the agency's determination with regard to Wyoming's reliance on "grid instability" in the SIP. *See, e.g.*, Letter from Cyrus Western, Region 8 Reg'l Admin., U.S. Env't Prot. Agency, to Todd Parfitt, Dir., Wy. Dep't of Env't Quality (April 30, 2025) (attached as Ex. 24); Letter from Cyrus Western, Region 8 Reg'l Admin., U.S. Env't Prot. Agency, to Emily Schilling, Partner, Holland and Hart, LLP (Apr. 30, 2025) (attached as Ex. 25).

[141] 89 Fed. Reg. 63030, 63066 (Aug. 1, 2024).

[142] *Id.* at 63065.

[143] *Id.* at 63066.

As a result, EPA explains in the proposal that it is *not* disapproving any part of Hawai‘i’s 2024 SIP based on an assertion that the State failed to consider grid reliability in the SIP.[144] Contrary to HECO’s suggestions in its August 2025 letter, Hawai‘i properly determined the measures necessary to make reasonable progress, including HECO’s own requests and agreements that the State incorporate enforceable retirement deadlines for its Maui and Hawai‘i plants into the SIP.

3. Contrary to HECO’s Claims, the URP Is Not a Safe Harbor, and Visibility Is Not a Fifth Factor.

In its August 2025 letter, HECO further incorrectly claims that no new or additional measures are necessary for any Hawai‘i facilities to make reasonable progress in the second planning period.[145] HECO asserts that “[v]isibility data, modeling, and emissions trends support a conclusion that the two Class I areas in Hawai‘i . . . are below the [URP] or ‘glidepath’ for the second planning period.”[146] HECO also states that, because of the impact of volcano emissions on visibility impairment, “the retirements and controls required by the SIP will have minimal impact on visibility” at Hawai‘i’s Class I areas.[147] HECO misunderstands the Clean Air Act and RHR in at least four ways.

First, by asserting that the Hawai‘i parks will actually be below the URP in 2028 and that, as a result, no additional measures are needed to make reasonable progress, HECO effectively argues that EPA and Hawai‘i should treat the URP as a safe harbor from the requirements of the Clean Air Act and the RHR. However, over the last 26 years since EPA first promulgated the 1999 RHR, the agency has repeatedly explained that treating the URP as a safe harbor violates the Clean Air Act. EPA has explained that the 1999 RHR did not allow states to treat the URP as a safe harbor, stating that reading the 1999 RHR preamble to allow states to do so “would lead to a nonsensical result” because, among other things, it “would . . . read the statutory four-factor analysis out of the regional haze rule.”[148] In the 2017 RHR revision preamble, EPA confirmed its long-standing interpretation of the role of the URP, explaining that:

> [t]reating the URP as a safe harbor would be inconsistent with the statutory requirement that states assess the potential to make further reasonable progress towards the natural visibility goal in every implementation period. Even if a state

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[144] 91 Fed. Reg. at 7218 (stating that any alleged failure to consider grid reliability “is not a basis for disapproval in this instance”). To the extent EPA asserts that Hawai‘i must consider grid reliability in Four-Factor Analyses in later SIP actions, the Conservation Groups will fully address EPA’s assertion in those later actions. Notably, however, EPA arbitrarily contradicts its own long-standing position and still existing guidance on that issue without providing any explanation for its change in position. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (explaining that agencies cannot change positions “sub silentio,” cannot “simply disregard rules that are still on the books,” and must show there are “good reasons” for the change in position).

[145] HECO August 2025 Letter at 4.

[146] *Id.*

[147] *Id.* at 8.

[148] Env’t Prot. Agency, Responses to Comments on Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule (81 FR 26942, May 4, 2016) at 169 (Dec. 2016) [hereinafter “2017 RHR RTC”], Docket No. EPA-R09-OAR-2025-0152-0004_attachment_1, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0004.

> is currently on or below the URP, there may be sources contributing to visibility impairment for which it would be reasonable to apply additional control measures in light of the four factors. . . . It would bypass the four statutory factors and undermine the fundamental structure and purpose of the reasonable progress analysis to treat the URP as a safe harbor, or as a rigid requirement.[149]

Thus, EPA explained that "states may not subsequently reject control measures that they have already determined are reasonable" because Class I areas are below the URP.[150] Rather, the rate of progress that is achieved by the implementation of all reasonable controls as determined by a review of the four statutory factors "is, by definition, a reasonable rate of progress."[151] Indeed, in its response to comments on the 2017 RHR revision, EPA devoted an entire section to explaining that the URP is not a safe harbor.[152]

EPA repeated that the Act's requirements prohibit using the URP as a safe harbor in its guidance and memoranda for this second planning period. In its 2019 Guidance, EPA stated that the RHR does not "establish[] the URP glidepath as the amount of visibility improvement that constitutes 'reasonable progress.'"[153] Similarly, in its 2021 Clarification Memo, EPA again devoted an entire section to explaining that the "Uniform Rate of Progress is Not a 'Safe Harbor.'"[154] In that memo, EPA explained that "conclud[ing] that additional controls, including potentially cost-effective and otherwise reasonable controls, are not needed because all of the Class I areas in the state . . . are below their [URPs]," as HECO does in its August 2025 letter, is treating the URP as a safe harbor.[155] The agency further explained that, because the URP is merely "a planning metric used to gauge the amount of progress made thus far and the amount left to make," the URP "cannot answer the question of whether the amount of progress made in any particular implementation period is 'reasonable progress.'"[156] At every opportunity since promulgating the original 1999 RHR, EPA has reaffirmed, reiterated, and repeated that relying on the URP to avoid adopting reasonable controls based on an analysis of the four statutory factors violates the Clean Air Act.

Second, in claiming that additional measures on Hawai'i sources would have allegedly "minimal" impact on visibility impairment, HECO requests that Hawai'i and EPA improperly

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[149] 82 Fed. Reg. at 3099-100; *see also* 2017 RHR RTC at 165-66 (stating that "the glidepath was not established by Congress and the EPA never intended it as the goal of the regional haze program" and, while some commenters claimed that treating the URP as a safe harbor would provide regulatory certainty, EPA "[did] not believe it should be achieved by bypassing the statutory analysis and relieving states of the requirement to consider the four factors for a reasonably chosen set of sources even when the RPGs without additional controls would be on or below the glidepath").

[150] 82 Fed. Reg. at 3093.

[151] *Id.*

[152] 2017 RHR RTC at 161-70.

[153] 2019 Guidance at 49.

[154] Memorandum from Peter Tsirigotis, Dir., Env't Prot. Agency, to Reg'l Air Dirs., Regions 1-10, at 15-16 (July 8, 2021) [hereinafter "2021 Clarification Memo"], https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf (attached as Ex. 26).

[155] *Id.*

[156] *Id.*

treat visibility as a fifth factor in the statutory Four-Factor Analysis process. As EPA explained in the 2021 Clarification Memo, where states reject reasonable controls based on assertions about visibility conditions, they are improperly treating visibility as a fifth factor in violation of the Clean Air Act and the RHR.[157] In establishing the haze program, Congress set forth four, and only four, factors for determining what is needed to make reasonable progress in section 169A(g)(1).[158] Section 169A(g)(2) defining BART, on the other hand, explicitly includes visibility as one of the five statutory factors states must consider in their BART analyses.[159] "Congress acts intentionally and purposely when it includes particular language in one section of a statute but omits it in another."[160] Because Congress intentionally omitted any reference to visibility in the definition of reasonable progress, it is clear that states may not reject controls based on assertions about visibility conditions at Class I areas. Courts have repeatedly explained that "[i]t is axiomatic that the statutory definition of the term excludes unstated meanings of that term."[161] To insert visibility as an unnamed fifth factor contradicts the plain language of the Act.

Additionally, section 169A does not contain any exemptions from the Act's reasonable progress requirements, including in cases where affected Class I areas are projected to be below the URP. This is, again, in stark contrast to section 169A(c), which contains explicit exemptions from BART that are based on visibility conditions.[162] That Congress did not provide for similar, or any, exemptions from reasonable progress shows that Congress did not intend any exemptions such as HECO proposes here.[163] Rather, under the Act, a state must develop a "long-term strategy" to "make reasonable progress towards meeting the national goal" of preventing and remedying anthropogenic visibility impairment for all in-state Class I areas.[164] In other words, states and EPA account for visibility impacts in determining which Class I areas are affected by in-state pollution sources and in selecting the sources that contribute to impairment at those Class I areas, but not in determining what emission reduction measures are necessary to make reasonable progress for selected sources.[165]

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[157] *Id.* at 13.

[158] 42 U.S.C. § 7491(g)(1).

[159] *Id.* § 7491(g)(2).

[160] *Intel Corp. Inv. Pol'y Comm. v. Sulyma*, 589 U.S. 178, 186 (2020) (internal citation omitted); *see also Russello v. United States*, 464 U.S. 16, 23 (1983) ("[When] Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion."); *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 509 (2014) (explaining that practical difficulties in implementation or administrative efficiency do not justify departure from the Act's plain text; courts "must presume that a legislature says in a statute what it means and means in a statute what it says there."); *State Farm*, 463 U.S. at 43 (explaining that it is arbitrary and capricious for agencies to "rel[y] on factors which Congress has not intended").

[161] *Meese v. Keene*, 481 U.S. 465, 484 (1987) (citing *Colautti v. Franklin*, 439 U.S. 379, 392 & n.10 (1979)); *see also United States v. Olson*, 856 F.3d 1216, 1223 (9th Cir. 2017).

[162] 42 U.S.C. § 7491(c).

[163] *Intel Corp. Inv. Pol'y Comm.*, 589 U.S. at 186; *Russello*, 464 U.S. at 23; *EME Homer City Generation, L.P.*, 572 U.S. at 509; *State Farm*, 463 U.S. at 43.

[164] 42 U.S.C. § 7491(b)(2).

[165] Moreover, HECO's claim that additional measures would have minimal impact on visibility impairment at Hawai'i's parks is belied by readily available information, as discussed in detail below. *See infra* section VIII.A.

Third, the information HECO relies on to claim that EPA's future year 2028 modeling likely overestimates impairment at Hawai'i's Class I areas does not support its assertion. HECO argues that EPA's method to adjust volcano emissions in its future year 2028 modeling did not fully screen out volcano emissions.[166] As explained in detail below, whether or not the modeling fully screened out volcano emissions is irrelevant, as readily available information shows that anthropogenic sources contribute to impairment, and reducing haze-forming emissions from in-state sources would improve visibility conditions.[167] HECO also points to EPA's discussions about how Texas's modeling for Salt Creek Wilderness Area conservatively overestimated impairment at that Class I area, apparently suggesting that EPA's zero-out modeling for Hawai'i was also conservative.[168] But HECO makes a nonsensical causal leap that, because one model was conservative, a completely different model developed by a different agency using different inputs and methods to address different Class I areas was also conservative. Moreover, HECO incorrectly asserts that the EPA zero-out modeling only zeroed out "all mainland U.S. anthropogenic emissions."[169] EPA's 2028 Hawai'i modeling Technical Support Document explains that the agency zeroed out all U.S. anthropogenic emissions, inherently including emissions from Hawai'i's in-state sources.[170] Thus, if the modeling underestimated the contribution of zeroed-out sources to impairment at Hawai'i's Class I areas, as HECO claims,[171] that would mean the modeling underestimated the contribution of Hawai'i sources as well. If anything, then, HECO shows only that Hawai'i must address the contribution of its in-state sources, including the HECO plants, by conducting Four-Factor Analyses and requiring them to install reasonable and cost-effective controls.

Finally, HECO claims that the Hawai'i Class I areas are below the URP for the second planning period because monitored visibility conditions in 2019 for both Hawai'i parks was below the URP and Hawai'i reduced emissions from its sources between 2005 and 2017.[172] However, the fact that monitored conditions were below the URP in 2019 does not mean conditions will be below the URP nine years later in 2028. Over time, additional sources will come online, or the emissions from existing sources will change. Thus, states and EPA conduct modeling to project the likely visibility conditions at a Class I area in 2028. As shown in the SIP, the second planning period modeling projects that visibility conditions at both Hawai'i Class I areas will be above the URP in 2028.[173] Additionally, EPA has made clear that states cannot avoid requiring sources to install reasonable controls "merely because there have been

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[166] HECO August 2025 Letter at 4.

[167] *See infra* section VIII.A.

[168] HECO August 2025 Letter at 4-5 (citing EPA proposal on Texas's second planning period SIP, 90 Fed. Reg. 22166, 22192-93 (May 23, 2025)).

[169] *Id.* at 4.

[170] Env't Prot. Agency, Technical Support Document for EPA's Updated 2028 Regional Haze Modeling for Hawaii, Virgin Islands, and Alaska at 26 (Aug. 2021), [hereinafter "EPA 2028 Modeling TSD"], Docket No. EPA-R09-OAR-2025-0152-0002_attachment_11, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0002 (noting that the zero out model runs for Hawai'i provided "the 2028 RPG for the sensitivity simulation where *all U.S. emissions* were zeroed-out"); *id.* at 29 (explaining that, for the zero-out model run, "U.S. anthropogenic sources were any point, mobile, or area source located in the U.S. or territories").

[171] *See* HECO August 2025 Letter at 4 (claiming that zero-out model run "may still underestimate the total contribution from 'zeroed-out' sources").

[172] *Id.* at 5-8.

[173] 2024 SIP at 127-34.

emission reductions since the first planning period owing to other ongoing air pollution control programs or merely because visibility is otherwise projected to improve at Class I areas."[174] HECO also ignores that the Trump administration is pursuing widespread deregulation, rolling back or weakening many of the rules and regulations that have resulted in the emission reductions that HECO relies on to assert that Hawai'i's Class I areas will be below the URP.[175] Thus, while sulfate and nitrate emissions have decreased in recent years, the administration's deregulatory actions will impact whether those trends continue.

IV. EPA Incorrectly Interprets Clean Air Act Sections 110 and 169A and Opens a Massive Loophole in the Act's SIP Programs.

EPA proposes interpretations of Clean Air Act sections 110 and 169A that are neither supported by the text and context of the Act, nor by relevant caselaw. For the reasons described below, EPA's proposed interpretations do not reflect the best reading of the statute and are arbitrary and capricious. Furthermore, EPA's proposed interpretations set a dangerous and unworkable precedent that severely undermines the Clean Air Act's SIP programs. EPA must withdraw its fatally flawed proposal, and approve Hawai'i's SIP as meeting the applicable requirements of the Clean Air Act.

A. EPA's Interpretation and Application of the Clean Air Act's "Necessary Assurances" Provision to Hawai'i's SIP Is Contrary to Law, Arbitrary, and Capricious.

EPA incorrectly asserts that Hawai'i was required to provide "necessary assurances" after HECO submitted its August 2025 letter to the agency raising vague and speculative "concerns"[176] that the utility may not be able to retire the Hill, Kahului, and Maalaea units by the SIP deadlines.[177] Hawai'i finalized and submitted its SIP to EPA on August 2, 2024.[178] Thus, EPA asserts that Hawai'i was required to provide necessary assurances over a year *after* the State had already submitted its SIP.

EPA claims that the best reading of Clean Air Act section 110(a)(2)(E)(i) is that EPA may not approve a SIP revision if there is a *risk* that EPA's approval could result in a violation of federal or state law and the state has not provided necessary assurances that there will be no such violation.[179] EPA's interpretation is that this provision is forward-looking to any number of possibilities, requiring a State to forecast and prognosticate whether federal or state law *might* be violated in the course of implementing a SIP revision based on future and unknown circumstances without any evidence that such a scenario would be plausible or possible.

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[174] 2021 Clarification Memo at 13.

[175] *See, e.g.*, Press Release, Env't Prot. Agency, EPA Launches Biggest Deregulatory Action in U.S. History (Mar. 12, 2025), https://www.epa.gov/newsreleases/epa-launches-biggest-deregulatory-action-us-history (attached as Ex. 27).

[176] *See supra* section III.B.1.

[177] 91 Fed. Reg. at 7217.

[178] *Id.* at 7204.

[179] *Id.* at 7217 (asserting that "EPA may not approve a SIP revision that *risks* violating federal or state law in the course of implementation and for which the state has not provided necessary assurances that there will be no such violation" (emphasis added)).

Nothing in the text or context of section 110(a)(2)(E)(i) supports that this is the best reading of the Act. As further explained below, EPA's proposed interpretation of section 110(a)(2)(E)(i), and proposed partial disapproval of Hawai'i's SIP based on this interpretation, are contrary to law and otherwise arbitrary and capricious.

The text of Clean Air Act section 110(a)(2)(E)(i) itself does not support EPA's proposed action. That section requires necessary assurances that a State "*is* not prohibited by any provision of Federal or State law" from carrying out a provision of the SIP.[180] As the Supreme Court has held, "Congress' use of a verb tense is significant in construing statutes."[181] Congress's use of the simple present tense in this component of Clean Air Act 110(a)(2)(E)(i) clearly indicates that the Act requires necessary assurances that no Federal or State law *is* actively prohibiting the State from implementing the associated SIP submission. For example, if a State chooses to include an emission limitation of 100 tons per year (tpy) on a cotton candy factory as part of its SIP, but there is a State law prohibiting cotton candy factories from being regulated without the State first consulting with the state candy council, then the State could be required to provide necessary assurances to EPA that it has performed the consultation and that the inclusion of the emission limitation "*is* not prohibited by any Federal or State law."

EPA's proposed interpretation of Clean Air Act 110(a)(2)(E)(i) arbitrarily ignores and perverts Congress's deliberate choice of verb tense. EPA proposes to find that its approval of "unconsented" source closures *could* violate the Takings Clause and *possibly* comparable State law.[182] EPA's regulatory takings analysis is entirely premised on what "could" occur if EPA approves the closures.[183] However, Clean Air Act section 110(a)(2)(E)(i) does not require the State to project what might happen under any and all federal and state laws, without any evidence that potential violations would actually occur. The Act does not say the State must provide necessary assurances that federal or state law "could" or "may" prohibit the State from implementing the SIP. Congress has clearly prescribed in the Clean Air Act when it wanted potential or anticipated consequences to be accounted for, distinct from known consequences.[184] The present tense use of "is not prohibited" demonstrates that the best reading of this provision is that there is a current existence, condition, or identity of a federal or state law that actively prohibits implementation of the SIP. In other words, section 110(a)(2)(E)(i) does not require states to guess at every future hypothetical scenario that could arise and could possibly result in a violation of federal or state law. Therefore, EPA cannot disapprove Hawai'i's SIP on the basis that it has not provided necessary assurances that the State "might be" prohibited by state or federal law in implementing the source closures.

EPA's proposed interpretation of Clean Air Act section 110(a)(2)(E)(i) to require a State to account for future, potential violations of the Takings Clause is further undermined by Congress's use of the future tense elsewhere in that same provision. States are required to

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[180] 42 U.S.C. § 7410(a)(2)(E)(i) (emphasis added).

[181] *United States v. Wilson*, 503 U.S. 329, 333 (1992).

[182] 91 Fed. Reg. at 7217.

[183] *Id*.

[184] *See, e.g.*, 42 U.S.C. § 7409(b)(2) (requiring EPA to set the secondary NAAQS at a level requisite to protect public welfare from known or anticipated adverse affects); *id.* § 7412(b)(2) (requiring EPA to list hazardous substances which are known to be, or may reasonably be anticipated to be, specified kinds of toxic).

provide necessary assurances that they "will have" adequate personnel, funding, and authority to carry out the SIP. The use of future perfect tense accounts for the fact that, after a state develops its SIP, EPA must review the SIP. As a result, some amount of time will pass between when the SIP is finalized and when it is approved and implemented, and states must have adequate personnel and funding at the future implementation point. Additionally, this provision captures the reality that some Clean Air Act requirements for SIPs are not implemented immediately.[185] It is therefore reasonable for a State to demonstrate, and for EPA to assess the sufficiency of such demonstration, that it will have adequate personnel and funding in the future to carry out future SIP obligations. A State can feasibly hire personnel and secure funding in time to implement a future SIP obligation. By contrast, a State cannot feasibly be expected to get a law changed in time to implement such future obligation. Therefore, it makes sense that Congress chose to require a showing by a state submitting a SIP revision that it "is" not currently prohibited by law from implementing such SIP.

Indeed, it would be impossible for states to provide the necessary assurances EPA claims they should here. Takings analyses are inherently fact and circumstance specific, as even EPA recognizes in the proposal.[186] States cannot analyze whether a Takings Clause violation might arise from a provision in a SIP in the hypothetical and in advance of those circumstances actually arising. Additionally, the case law that EPA cites on takings violations is generally inapplicable here. First, there is only a violation of the Takings Clause if there is a taking without just compensation,[187] and, as discussed above, the Hawai'i PUC has already provided HECO compensation for the retirement of the units in the SIP via accelerated depreciation.[188] Second, nothing here involves (1) any actual physical appropriation of property,[189] (2) the transfer of property to the government,[190] or (3) circumstances where "*no* productive or economically beneficial use of land is permitted."[191] Although EPA references the multi-factor test in *Penn Central Transportation Company v. New York City* for analyzing partial regulatory takings,[192] the agency provides no explanation for how application of those factors would demonstrate a takings issue. Third, the generic case law on per se and partial regulatory takings that EPA relies on does not apply in the context of utility regulation.[193]

In fact, at the time Hawai'i submitted its SIP to EPA, there were no possible takings issues about which the State should have provided necessary assurances. As explained in detail above, HECO itself proposed to retire units at Hill, Kahului, and Maalaea to avoid having to conduct Four-Factor Analyses or install reasonable and cost-effective controls that the State had

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[185] For example, under Clean Air Act section 172(c)(9), nonattainment SIPs must include contingency measures that are implemented only after a triggering event has occurred. 42 U.S.C. § 7502(c)(9).

[186] 91 Fed. Reg. at 7217 (acknowledging that "the application of the Takings Clause is necessarily fact-specific").

[187] U.S. CONST. amend. V.

[188] *See supra* section III.B.1.

[189] *Cedar Point Nursery v. Hassid*, 594 U.S. 139, 149 (2021).

[190] *Horne v. Dep't of Agric.*, 576 U.S. 350, 361 (2015).

[191] *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1017 (1992).

[192] 438 U.S. 104, 123-24 (1978).

[193] *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 302-11 (1989) (recognizing that the "partly public, partly private status of utility property creates its own set of questions" under takings law in the public utility regulation context, where a broad and flexible "[]just" and "[]reasonable" standard applies).

determined were necessary to make reasonable progress.[194] In the proposal, EPA itself explains that "during development of the Plan, Hawaiian Electric agreed to enforceable shutdowns at several EGUs in order to exclude these units from further evaluation."[195] As a result, the State had no reason to provide assurances that the retirement deadlines that HECO had proposed would not violate the Takings Clause. Rather, EPA has explained in multiple guidance documents, memoranda, guidelines, and SIP actions that, where a state relies on a voluntary retirement to avoid conducting Four-Factor Analyses or requiring facilities to install reasonable and cost-effective controls, as Hawai'i did here, those retirements must be included as federally enforceable SIP measures.[196] Hawai'i relied on EPA's long-standing guidance on how to address voluntary retirements in regional haze SIPs here.[197] EPA arbitrarily gave Hawai'i "*one* set of metrics to draft [its] plan[] and then use[d] *another* set of metrics to grade [that plan]."[198] Thus, the best interpretation is that the State must only provide necessary assurances that it is not currently, rather than potentially in the future based on circumstances unknown at the time, prohibited by law from carrying out the SIP.[199]

Here, Hawai'i provided assurances that it has authority to adopt and implement the SIP. Appendix Y provided a detailed analysis of the State's authority to adopt and implement the 2024 SIP.[200] Notably, the State did not identify any provision of state or federal law that would prohibit the State from doing so. EPA generally defers to such state certifications of authority unless there is actual evidence, such as a court ruling, demonstrating that the SIP or a provision thereof is prohibited by some other law.[201]

This best reading of the Act—that states must only provide assurances that they are not actively prohibited by law from implementing the SIP—is further bolstered by the fact that the statute provides mechanisms to address a SIP that subsequently cannot legally be implemented by the State after EPA has approved it. If a source in the future cannot shut down because the shutdown somehow becomes prohibited by law, then EPA is authorized to issue a Clean Air Act section 110(k)(5) SIP call to require the State to address the deficiency in the approved long-term

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[194] *See supra* section III.A.

[195] 91 Fed. Reg. at 7217.

[196] *See infra* section V.

[197] *See id.*

[198] *Kentucky v. EPA*, 123 F.4th 447, 470 (6th Cir. 2024) (internal quotation marks omitted, emphasis in original).

[199] If EPA finalizes its interpretation that 110(a)(2)(E)(i) requires necessary assurances as to whether there *could* potentially be a violation of the Takings Clause, EPA must then also assess under that same provision whether there *could* potentially be a violation of "any" federal law, including disparate impacts under Title VI of the Civil Rights Act, and "any" federal or state law codifying the Public Trust Doctrine.

[200] 2024 SIP, App. Y, Legal Authority, EPA-R09-OAR-2025-0152-0003_attachment_28, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003; *see also* 75 Fed. Reg. 27938, 27941 (May 19, 2010) (noting non-exhaustive list of what form necessary assurances can take, such as "a narrative discussion (e.g., legal authority chapter), an Attorney General's letter, the statutes themselves, or some combination of the above").

[201] *See, e.g.*, 88 Fed Reg. 45276, 45320 & nn.420-21 (July 14, 2023) ("EPA is entitled to rely on a state's certification unless it is clear that the SIP violates state law and proof thereof . . . is presented to EPA." (alteration in original)); 88 Fed. Reg. 86581, 86584 (Dec. 14, 2023) (explaining that EPA "generally relies on facts, analyses, and other forms of assurances from the state" to evaluate necessary assurances); 81 Fed. Reg. 39424, 39431 (June 16, 2016) ("[N]o court has found the Anti-Idling Regulations to be in violation of the Commerce Clause or any other provision of federal law.").

strategy.[202] And, if information comes to light after EPA's approval of the SIP that the State in fact was barred by federal or state law from implementing measures in the SIP, EPA has the authority to address this scenario under section 110(k)(6) by determining that its prior approval of the SIP was in error.[203] Clean Air Act sections 110(k)(5) and (6) thus prescribe appropriate mechanisms to redress the potential (again, not actual) takings concerns EPA expresses as a basis to disapprove Hawai'i's long-term strategy, if they indeed come to pass.

As previously described, EPA provides no evidence that Hawai'i's SIP presents an actual taking. Rather, the agency merely conjectures that it *could*.[204] The text and context of Clean Air Act section 110(a)(2)(E)(i) does not require a state to hypothesize, without any basis for such hypothesis, whether there may be a future prohibition by law to implement the SIP. The Ninth Circuit, which encompasses the state of Hawai'i, has upheld actions in which EPA declined to determine that a State failed to provide necessary assurances that its SIP did not violate federal law when there was no evidence actually demonstrating that implementation of the SIP would result in a violation.[205] Here, EPA provides no evidence that Hawai'i's SIP would pose a potential, current, or on-going violation of the Takings Clause or any other law. EPA must approve Hawai'i's long term strategy, and, if the SIP's source retirements become prohibited by federal or state law in the future, the Clean Air Act provides appropriate remedies to address that scenario when it actually arises.

B. Sections 110 and 169A Allow States to Incorporate Retirement as a SIP Measure.

"Context confirms [the] reading"[206] that Clean Air Act section 110(a)(2)(E)(i) does not require states to conjecture about future potential prohibitions under the Takings Clause. As many courts, including the Supreme Court itself, have acknowledged in the context of SIPs, "so long as the ultimate effect of a State's choice of emission limitations is compliance with the national standards . . . , the State is at liberty to adopt whatever mix of emission limitations it deems best suited to its particular situation."[207] As described below, nothing precludes such a mix from including source retirements, including on a timeframe that a source may not prefer. While the Court in *Train* was referring to state determinations under the NAAQS Program, states similarly can select a mix of measures, including source retirements, to make reasonable progress toward Congress's stated "national goal" under Clean Air Act section 169A to prevent and remedy manmade regional haze. Furthermore, as EPA itself recognizes, Clean Air Act section 110 applies to Regional Haze SIP submissions, underscoring Hawai'i's ability to select a mix of measures to make reasonable progress, so long as the Act's haze goals and requirements are met.

Contrary to long-standing caselaw, EPA now proposes an unlawful and arbitrary and capricious interpretation of Clean Air Act sections 110(a)(2)(A) and 169A(b)(2). Specifically,

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[202] 42 U.S.C. § 7410(k)(5).
[203] *Id.* § 7410(k)(6).
[204] 91 Fed. Reg. at 7217.
[205] *El Comité Para El Bienestar de Earlimart v. EPA*, 786 F.3d 688, 700-01 (9th Cir. 2015).
[206] *Sw. Airlines Co. v. Saxon,* 596 U.S. 450, 457 (2022).
[207] *Train v. Nat. Res. Def. Council, Inc.*, 421 U.S. 60, 79 (1975).

EPA proposes to interpret that the phrase "other control measures, means, or techniques" under section 110(a)(2)(A) and "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress" under section 169A(b)(2) do not allow states to incorporate retirement deadlines that would require a source to close on a timeframe not agreed to by the owner/operator.[208] EPA claims its proposed interpretation is supported by reading "measures" and "means" in context and informed by the surrounding statutory terms, including the parenthetical phrase discussing market-based incentives that contemplate ongoing operations.[209]

EPA's proposed interpretation undermines the purpose of the Clean Air Act. As both a textual and contextual matter, the laundry list of controls that a SIP may include under section 110(a)(2)(A) makes clear that Congress intended for states to avail themselves of a wide range of available controls and emission reduction measures to meet the Act's requirements.[210] By using a list of broadly phrased terms that go beyond emission limitations, Congress clearly encouraged States to use all kinds of tools, such as source retirements (including on a timeframe the State deems appropriate), to accomplish the relevant goals and requirements of the Clean Air Act. Clean Air Act section 110(a)(2) generally evinces Congress's intent for SIPs to prioritize public health and welfare in identifying necessary controls to achieve the Act's purpose. [211]

If Congress intended to prohibit a state from utilizing particular measures in a SIP, it knew how to do so. For example, Clean Air Act section 110(a)(5)(E) specifies that the term "transportation control measure" does not include any measure which is an indirect source program.[212] Clean Air Act section 110(a)(2)(A) includes no such exception or caveat for "measure" or "means." These terms must thus be given their plain meaning, and both terms are sufficiently broad to encompass a retirement requirement, even if on a timeframe that an owner or operator would not prefer. A "measure" is defined as "a step planned or taken as a means to an end."[213] In this case, Hawai'i's retirement requirements are a step planned or taken as a means of achieving the regional haze requirements. A "means" is defined as "something enabling one to achieve a desired end."[214] In this case, Hawai'i's retirement requirements enable the State to achieve its statutory obligations under the Regional Haze Program to make reasonable progress toward the national visibility goal.

EPA claims that its interpretation that these terms preclude an unconsented retirement is informed by the surrounding statutory terms.[215] EPA references the parenthetical phrase discussing market-based incentives "that contemplate[s] ongoing operations."[216] Yet again, EPA ignores the actual statutory text. The parenthetical permits states to include in their SIPs any mix of the laundry list of measures referenced in Clean Air Act section 110(a)(2)(A), *including*

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[208] 91 Fed. Reg. at 7218.
[209] *Id.*
[210] 42 U.S.C. § 7410(a)(2)(A); *Train*, 421 U.S. at 79.
[211] *See generally Union Elec. v. EPA*, 427 U.S. 246 (1976).
[212] 42 U.S.C. § 7410(a)(5)(E).
[213] Merriam-Webster, *Measure* (last visited Apr. 17, 2026), https://www.merriam-webster.com/dictionary/measure.
[214] Merriam-Webster, *Means* (last visited Apr. 17, 2026), https://www.merriam-webster.com/legal/means.
[215] 91 Fed. Reg. at 7218.
[216] *Id.*

economic incentives.[217] Nothing about the use of "including" in this parenthetical suggests a limiting factor. To the contrary, it supports that Clean Air Act section 110(a)(2)(A) authorizes states to impose a wide variety of measures beyond numerical emission limitations, including those that impose economic costs on sources. Additionally, EPA's suggestion that this parenthetical on market-based measures necessarily "contemplate[s] ongoing operations" is fundamentally incorrect. If a SIP implements a fees program for a source to emit or purchase emissions rights, and a source cannot afford the fees or allowances or simply does not want to pay for the fees or allowances, then the source may need or want to retire rather than pay based on market forces. Thus, the parenthetical in Clean Air Act section 110(a)(2)(A) actually supports that the best reading of this provision allows a state to include a SIP measure that provides for retirement on a different timeframe than the source may otherwise prefer, including because of market forces.

EPA further proposes that Hawai'i's closure requirements are neither "necessary" nor "appropriate" under Clean Air Act section 110(a)(2)(A). This proposed interpretation is arbitrary and capricious. EPA proposes that the closures are not "'necessary' under the circumstances here nor otherwise required by the [Clean Air Act]."[218] As an initial matter, EPA provides no reasoned explanation for why it is not "necessary" for these closures to be included in the SIP. However, Hawai'i thoroughly analyzed and determined that they are necessary to make reasonable progress in the second planning period to meet the regional haze requirements. As described in detail above,[219] HECO itself requested enforceable retirement deadlines in lieu of installing reasonable controls under Hawai'i's 2024 SIP. Thus, in accordance with EPA's own guidance requiring states to incorporate federally enforceable retirement deadlines in SIPs under such circumstances,[220] Hawai'i incorporated HECO's requested deadlines into the SIP to comply with the requirements of the Act and RHR.

In any event, even if a retirement is above and beyond what is required to meet the requirements of the RHR, a state may include such retirement in its SIP, and EPA does not have the authority to disapprove that choice.[221] The Supreme Court has interpreted the "as may be necessary" language under Clean Air Act section 110(a)(2)(A) previously, determining that "the most natural reading of the 'as may be necessary' phrase in context is simply that the Administrator must assure that the minimal, or 'necessary,' requirements are met, not that he detect and reject any state plan more demanding than federal law requires."[222] EPA does not acknowledge this controlling precedent and offers no explanation of how its proposed interpretation can be reconciled with it.

EPA's interpretation that the reference to "appropriate" in Clean Air Act section 110(a)(2)(A) precludes inclusion of source closure in a SIP because it allegedly *might* amount to an uncompensated taking is similarly arbitrary and capricious. As previously described, EPA

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[217] 42 U.S.C. § 7410(a)(2)(A).
[218] 91 Fed. Reg. at 7218.
[219] *See supra* section III.A.
[220] *See infra* section V.
[221] *Union Electric*, 427 U.S. at 263-66.
[222] *Id.* at 263.

provides no reasoned explanation for why there *could* be an uncompensated taking here.[223] Even so, EPA's proposal to interpret that it is not "appropriate" to approve the closures into the SIP because they "*could* amount to an uncompensated taking in violation of federal and state law"[224] is not the best reading of the statute and is arbitrary and capricious.

Congress did not use the term "appropriate" in Clean Air Act section 110(a)(2)(A) to require a determination as to whether a measure might result in a violation of any other law. Clean Air Act section 110(a)(2)(A) requires emission limitations and other control measures, or means as may be appropriate *to meet the applicable requirements* of the Clean Air Act. The focus and intent of this provision is, thus, Clean Air Act-specific, and these closures are necessary or appropriate for inclusion in the Hawai'i SIP in order to meet the applicable requirements of Clean Air Act section 169A. Congress did not provide that any other law must be met under Clean Air Act section 110(a)(2)(A). By contrast, Clean Air Act section 110(a)(2)(E)(i) clearly does require consideration of other laws.[225]

Similarly, nothing in the Act's haze provisions under section 169A or the RHR limits the types of measures that states may consider in their reasonable progress Four-Factor Analyses or incorporate into their regional haze SIPs. The Clean Air Act provides that haze SIPs must "contain such emission limits, schedules of compliance and *other measures* as may be necessary to make reasonable progress."[226] The RHR similarly provides that states' long-term strategies "must include the enforceable emissions limitations, compliance schedules, and *other measures* that are necessary to make reasonable progress."[227] The "other measures" language in both section 169A and the RHR is a broad catchall that provides states with the ability to consider all available measures, including source retirements and associated timeframes. Nothing in these statutory or regulatory provisions evinces an intent from Congress or EPA to limit the reasonable progress measures states can consider for regional haze purposes.

Moreover, neither Congress nor EPA have adopted any definitions in the haze program that limit the reasonable progress measures a state may consider in a Four-Factor Analysis or incorporate into their SIPs. Notably, Congress did not define "measure" or "control measure" in the visibility provisions of the Clean Air Act.[228] Rather, Congress explicitly provided, and EPA adopted, a definition for "reasonable progress" based on the four statutory factors.[229] None of these factors, in turn, limit the types of measures a state may consider.[230] In fact, as discussed in

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[223] *See supra* section IV.A.

[224] 91 Fed. Reg. at 7218 (emphasis added).

[225] EPA cannot suggest that Clean Air Act section 110(a)(2)(A)'s reference to "the applicable requirements of [the Clean Air Act]," 42 U.S.C. § 7410(a)(2)(A), includes consideration of the Takings Clause or other laws under Clean Air Act section 110(a)(2)(E)(i). The latter provision requires necessary assurances regarding the SIP by the State. It is nonsensical to interpret 110(a)(2)(A) as requiring emission limitations and other measures or means to meet the State's separate obligation to provide necessary assurances. It is the other way around, the necessary assurances are required with respect to the emission limitations and other measures or means that the State includes in its SIP.

[226] *Id.* § 7491(b)(2) (emphasis added).

[227] 40 C.F.R. § 51.308(f)(2) (emphasis added).

[228] *See* 42 U.S.C. §§ 7491-7492; *see also* 40 C.F.R. § 51.301 (similarly not defining "control" or "control measure").

[229] 42 U.S.C. § 7491(g)(1); 40 C.F.R. § 51.308(f)(2)(i).

[230] 42 U.S.C. § 7491(g)(1); 40 C.F.R. § 51.308(f)(2)(i).

detail below, EPA has repeatedly explained that, where states rely on source retirements to avoid conducting Four-Factor Analyses or requiring facilities to adopt reasonable controls, those retirement deadlines must be included as federally enforceable measures in the State's regional haze SIP.[231] Thus, EPA's long-standing guidance confirms that retirement deadlines can be "measures" as used in section 169A of the Act and the RHR.

For all of the reasons stated above, Clean Air Act sections 110 and 169A contemplate source retirements, including on timeframes that a source may not prefer, as a legitimate means to accomplish the requirements of the Clean Air Act, including the Regional Haze Program. Nothing in the statute suggests that the fact that a source may otherwise prefer not to close or not close by the precise deadline in the SIP is a relevant factor to including such closure in the SIP. To the contrary, the statute clearly contemplates that a state may require as part of its SIP for a source to close before the owner or operator would prefer. Clean Air Act section 110(g) allows that, during the period a SIP submission is pending before EPA (i.e., has not yet been approved or disapproved), the state may issue a four-month or less temporary emergency suspension of the SIP submission's requirements if it determines both that it is necessary to prevent the closing of a source and to prevent substantial increases in unemployment which would result from such closing.[232] Clean Air Act section 110(g)(1), however, prohibits the state from making this determination with respect to a source which would close regardless of whether the retirement is included in the SIP.[233] Notably, Hawai'i has made no such determination for the HECO plants in the year-plus that the 2024 SIP has been pending before EPA.

Clean Air Act section 110(g)(1) thus clearly contemplates that SIPs may include two kinds of source closures. One is a retirement that would have happened regardless of whether the state included the shutdown as an enforceable requirement in the SIP. The other is a retirement that a facility may have chosen to implement to avoid having to adopt or install other measures and controls to comply with the requirements of the Act, as is the case with Hill, Kahului, and Maalaea. This provision thus supports that the best reading of the statute is that states may include retirements in their SIPs in order to meet applicable Clean Air Act requirements, and such retirements may occur on a timeframe that the source owner or operators may not prefer.

In any event, whether the Act permits states to incorporate enforceable shutdown deadline in SIPs on a timeframe the owner/operator may not prefer is not an issue here. As explained throughout the Conservation Groups' comments, EPA's claim that the retirement deadlines in the 2024 SIP are forced or unconsented is factually incorrect. However, if, once the retirement deadlines are imminent, there is actual evidence demonstrating that retirement of the HECO units by the SIP deadlines would present grid reliability issues, the Act has built in mechanisms that EPA and the State can use to address the retirement deadlines, including the mechanisms under section 110(k) discussed above.[234]

Additionally, the State retains the discretion to revise its SIP after EPA approves it. For example, if grid reliability concerns arise as a SIP-approved retirement date draws near, a State

[231] *See infra* section V.
[232] 42 U.S.C. § 7410(g).
[233] *Id.* § 7410(g)(1).
[234] *See supra* section IV.A.

may choose to submit a SIP revision or supplement that replaces the enforceable retirement date with appropriate control measure requirements that allow the source to continue operating while still meeting the RHR and Clean Air Act.

C. EPA's Proposed Interpretations Would Allow Facilities to Evade the Act's Requirements.

For all of the reasons described above, EPA's proposed interpretations of Clean Air Act sections 110 and 169A are completely unsupported by the law and are arbitrary and capricious. Further underscoring these legal deficiencies, EPA's proposed interpretation would open a massive loophole in any Clean Air Act program that is implemented by SIPs, including both the Regional Haze Program and the NAAQS Program. Congress could not have intended for the regulatory programs it established in the Act to "tak[e] a stick to the States,"[235] and thereby accomplish important air quality goals, to be rendered toothless paperwork exercises. Yet, that is precisely what EPA's proposal does.

Under EPA's proposed interpretation of Clean Air Act sections 110 and 169A, *any* source subject to the Regional Haze Program could offer to take a retirement date in lieu of implementing controls at the SIP development stage, but once the SIP is submitted to EPA, reverse course and take the position that it no longer agrees with the retirement date. This change in position would then result in EPA disapproving the retirement commitment in the SIP, thereby allowing the source to avoid having to do anything to reduce their emissions or comply with the Act's haze requirements. Indeed, this is the exact scenario present here, where EPA is proposing to partially disapprove Hawai'i's SIP based on claims made by HECO more than a year after the State submitted its SIP to EPA. This gaping loophole resulting from EPA's proposed statutory interpretation cannot be what Congress intended when it enacted the haze program, which is meant to eliminate all manmade visibility impairment at Class I areas. In fact, rather than achieve necessary reductions to improve visibility, this scenario results in no reductions at all. EPA's proposal effectively renders the entire haze program superfluous, a clearly absurd result.[236]

Furthermore, EPA's proposed interpretations threaten to severely undermine all other programs implemented through SIPs, including the NAAQS Program. Clean Air Act sections 110(a)(2)(A) and (E)(i) apply to *any* SIP that includes control requirements for a source, such as section 172(c)(1) Reasonably Available Control Technologies for a nonattainment SIP and section 110(a)(2)(D)(i) emission reduction requirements for upwind sources that are significantly contributing to downwind nonattainment.[237] EPA's proposed interpretations, applied to these programs, would allow sources to completely escape regulation and cause states to fail to meet their statutory obligations. EPA's interpretation, thus, incentivizes sources to play a shell game,

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[235] *Train*, 421 U.S. at 64.

[236] *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 575 (1982) ("[I]nterpretations of a statute which would produce absurd results are to be avoided if alternative interpretations consistent with the legislative purpose are available."); *Armstrong Paint & Varnish Works v. Nu-Enamel Corp.*, 305 U.S. 315, 333 (1938) (explaining that "to construe statutes so as to avoid results glaringly absurd, has long been a judicial function").

[237] 42 U.S.C. §§ 7410(a)(2)(D)(i), 7502(c)(1).

agreeing to retire during SIP development, then changing course after SIP submission to avoid having to comply with any SIP requirements.

Take, for example, an SO_2 nonattainment area that has two sources, Source A and Source B, that are equally the cause of that area's nonattainment problem. As EPA itself has established, SO_2 is a localized pollutant, and nonattainment of this NAAQS is typically attributable to specific sources.[238] The State in which that nonattainment area is located plans to include in its nonattainment SIP the same emission reduction requirements on both of the equally polluting sources, so that the area will meet the Clean Air Act's attainment requirements.

Now assume that Source A decides that, based on its fixed and variable production costs, product supply and demand elasticity, and company profits, that it would be better to retire than incur the costs of implementing controls to meet the state's emission reduction requirements. Source A accordingly informs the state that it would prefer to accept an enforceable requirement to retire. Then, *after* the state adopts such a requirement and submits the SIP to EPA, Source A claims it opposes the retirement. Under EPA's proposed legal interpretations, it must disapprove not only the inclusion of the retirement, but the entire nonattainment SIP, since the currently planned emission reduction requirements on Source B would not be sufficient to provide for attainment of the SO_2 NAAQS in the affected area.

At that point, the state faces clocks for both mandatory sanctions under Clean Air Act section 179,[239] and for imposition of a Federal Implementation Plan (FIP) under Clean Air Act section 110(c), unless it submits and EPA approves another nonattainment SIP for the area.[240] In order to avoid both of these serious consequences, the only choice the state has is to ratchet down the emission reduction requirements on Source B in order to make up for the lack of emission reductions from Source A. EPA surely cannot be suggesting that some sources should inequitably be punished because the other source reneged on its commitment to retire. Furthermore, it is conceivable that the imposition of more stringent requirements could cause Source *B* to assess and relay to the state that it would prefer an enforceable retirement date. Then, if Source B follows Source A's lead and later represents, after the revised SIP has been adopted and is pending in front of EPA, that it does not consent to closure, EPA's proposed interpretations would disallow approval of this SIP revision as well.

In such a scenario, the state would have no path forward. Based on SIP adoption requirements and associated timing, there is a real risk that mandatory sanctions would be applied to the state. The FIP clock would likely expire as well, and EPA would be under an obligation to implement a FIP for the area. Notably, the necessary assurances requirement of Clean Air Act section 110(a)(2)(E)(i) does not apply to EPA in implementing a FIP. Is the outcome of this hypothetical that EPA ends up implementing the same emission reduction

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[238] *See, e.g.* 86 Fed. Reg. 31645, 31646 (June 15, 2021) ("The transport of SO_2 is more analogous to the transport of lead (Pb) because its physical properties result in localized pollutant impacts very near the emissions source.").
[239] 42 U.S.C. § 7509. While Clean Air Act section 179 sanctions do not apply to disapproved of Regional Haze SIP, the purpose of this example is to demonstrate the types of severe consequences states would face under EPA's proposed and broadly applicable interpretations of Clean Air Act sections 110(a)(2)(A) and 110(a)(2)(E)(i).
[240] *Id.* § 7410(c)(1).

requirements as in the State's original SIP revision, even if those requirements prompt both sources to retire?

To avoid getting caught in this shell game, states would also, perversely, be incentivized to require facilities that are about to shutdown to still install controls. To avoid the scenario Hawai'i faces here—where the State incorporated retirement deadlines at the request of facilities and now faces EPA disapproval for doing so—states may refuse to incorporate retirement deadlines into their SIPs. Under EPA's own guidance,[241] states then could not avoid conducting Four-Factor Analyses for those sources, nor could they shorten the remaining useful life for those sources or reject controls that would be reasonable based on a full remaining useful life without a federally enforceable retirement deadline in the SIP. This would ultimately cost states and industry more time and money. States would have to spend more resources conducting analyses for sources that are soon to retire. And sources would have to spend more resources, including financial resources, installing controls even though they plan to retire in the near future. EPA's interpretation, again, produces an absurd result.[242]

EPA's proposed interpretations contain no limiting principles, and as demonstrated above, could result in gamesmanship that delays or outright evades meeting the Clean Air Act's mandated visibility and health protections. The Clean Air Act clearly does not contemplate such an absurd outcome, and it is unlawful for both EPA and sources to utterly eviscerate the Act's SIP programs based on interpretations of sections 110 and 169A that are not the best reading of the statute. For all of the reasons above, EPA cannot finalize the proposed partial disapproval based on these deeply flawed interpretations. After all, Congress does not hide statute-upending elephants in mouseholes.

V. EPA's New Position on How States May Consider Announced Retirements Is Unlawful, Arbitrary, and Capricious.

EPA proposes to partially disapprove Hawai'i's 2024 SIP because the State included retirements that HECO proposed, agreed to, and requested that the State include in the SIP to avoid conducting Four-Factor Analyses and installing reasonable and cost-effective controls.[243] EPA's proposal, thus, contradicts its long-standing position that, where states rely on source retirements to exempt them from complying with the requirements of the haze program, those retirement deadlines must be included as federally enforceable measures in their SIPs. Yet, EPA fails to acknowledge, let alone explain, its change in position in the proposal. Thus, EPA fails to comply with the fundamental principles of reasoned agency decision-making.

Since the first regional haze planning period, EPA has repeatedly explained that, if a state relies on a source retirement to avoid the requirements of the haze program, that retirement must be made enforceable in the SIP. For instance, in its 2005 BART Guidelines, EPA provided that, where a forthcoming retirement affects a control determination, "this date should be assured by a federally- or State-enforceable restriction preventing further operation."[244] EPA confirmed this

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[241] *See infra* section V.

[242] *Griffin* , 458 U.S. at 575; *Armstrong Paint & Varnish Works*, 305 U.S. at 333.

[243] 91 Fed. Reg. at 7217-18.

[244] 40 C.F.R. pt. 51, App. Y § IV(D)(4)(k).

long-standing position in its 2019 Guidance and 2021 Clarification Memo for the second planning period. In the 2019 Guidance, for instance, EPA explained that states may consider source retirements "in selecting sources for control measure analysis, for example, by not selecting sources that have an enforceable commitment to be retired or replaced by 2028."[245] Similarly, in the 2021 Clarification Memo, EPA stated that "source shutdowns . . . may be relied upon to forgo a four-factor analysis or shorten the remaining useful life of a source."[246] Where a state relies on a retirement to shorten the remaining useful life of the source, EPA has explained that "[t]he remaining useful life factor is closely related to the cost of compliance factor, with the calculated cost of compliance generally increasing with a shorter remaining useful life."[247] Thus, when a state relies on a retirement "to forgo a four-factor analysis or to shorten the remaining useful life of a source" that retirement is "necessary to make reasonable progress and must be included in a SIP."[248] EPA's 2005 BART guidelines, 2019 Guidance, and 2021 Clarification Memo are all still in place and effective.

In fact, EPA proposed to disapprove SIPs where states inappropriately relied on unenforceable plans to retire a facility to evade the requirements of the haze program. In the agency's proposal to partially disapprove Wyoming's SIP, EPA noted that "Wyoming [] improperly relies on unenforceable source retirements [in facility Integrated Resource Planning documents] to avoid conducting a four-factor analysis for certain sources."[249] EPA explained that "if a state is relying on source shutdowns to forgo conducting a four-factor analysis (because a shutdown is effectively the most stringent control available), the shutdown must be federally enforceable (for example, through inclusion in the SIP)."[250] As a result, EPA determined that "Wyoming has not demonstrated that these planned retirements are federally enforceable as required under the [Clean Air Act] and RHR," and so, that State "unreasonably failed to consider the required four statutory factors to determine the emission reduction measures necessary to make reasonable progress for sources it determined may affect visibility at Class I areas."[251] Similarly, in its proposal to partially disapprove Arizona's second planning period SIP, which EPA later finalized,[252] the agency proposed to determine that Arizona inappropriately shortened

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[245] 2019 Guidance at 22; *id.* at 20 ("If a source is expected to close by December 31, 2028, under an enforceable requirement, a state may consider that to be sufficient reason to not select the source at the source selection step.").

[246] 2021 Clarification Memo at 10.

[247] 2019 Guidance at 20.

[248] 2021 Clarification Memo at 10; *see also* 91 Fed. Reg. at 7207 ("Pursuant to section 51.308(f)(2)" of the RHR, "measures that are necessary to make reasonable progress towards the national visibility goal must be included in a state's long-term strategy and in its SIP."); *id.* ("If the outcome of a four-factor analysis is that an emissions reduction measure is necessary to make reasonable progress towards remedying existing or preventing future anthropogenic impairment, that measure must be included in the SIP."); *id.* at 7211 ("After considering the four statutory factors, all measures that are determined to be necessary to make reasonable progress must be in the long-term strategy.").

[249] 89 Fed. Reg. at 63060.

[250] *Id.*

[251] *Id.* at 63061.

[252] 89 Fed. Reg. 102744 (Dec. 18, 2024). Although EPA granted Petitions for Reconsideration of its final partial disapproval of Arizona's SIP, the agency did not state that it granted Petitions based on the agency's determination with regard to Arizona's reliance on unenforceable retirements in the SIP. Letter from Joshua Cook, Region 9 Reg'l Admin., U.S. Env't Prot. Agency, to George A. Tsiolis, Att'y at Law (July 15, 2025) (attached as Ex. 28); Letter from Joshua Cook, Region 9 Reg'l Admin., U.S. Env't Prot. Agency, to Aaron M. Flynn, Partner, McGuireWoods LLP (July 15, 2025) (attached as Ex. 29).

the remaining useful life for controls at a compressor station even though there was no enforceable requirement for that compressor station to retire.[253] EPA stated that "in situations where an enforceable shutdown date does not exist, the remaining useful life of a control under consideration should be the full period of the useful life of the control as recommended by EPA's Control Cost Manual."[254] Thus, because Arizona deviated from the Control Cost Manual without adequate explanation, EPA determined that the State's "cost analyses are not sufficiently reliable to support to its control determinations."[255]

When an agency changes position, courts have long required that the agency provide a reasoned explanation for doing so.[256] To adequately provide that explanation, EPA must (1) acknowledge that it is changing position, (2) show there are "good reasons" for the change, and (3) show that the change "is permissible under the statute."[257] Although EPA changes its position on how states must treat source retirements in their SIPs here by proposing to partially disapprove Hawai'i's SIP for including federally enforceable retirements in the SIP in lieu of Four-Factor Analyses and requirements to install reasonable progress, the agency does not acknowledge or explain this change in position anywhere in the proposal.

In addition to failing to provide any explanation for its change in position here, EPA also entirely ignores that Hawai'i relied heavily on the agency's guidance and memoranda noted above in the 2024 SIP. Throughout the 2024 SIP, Hawai'i cited EPA's long-standing position on how to address source retirements. For instance, in the State's responses to HECO's initial Four-Factor Analyses for the Hill, Kahului, and Maalaea plants, Hawai'i explained that HECO had to use a full remaining useful life in its assessment of potential control measures, stating that "[i]n the situation of an enforceable requirement for the source to cease operation before the end of the useful life of the controls under consideration, EPA guidance for the second planning period allows the use of the enforceable shutdown date as the end of the remaining useful life" and that the retirement "would need to be included in the RH-SIP and/or be federally enforceable."[258] Hawai'i explained that only "[i]f Hawaiian Electric agrees to make a commitment to the shutdowns through federally enforceable permit limits," the utility's shortened remaining useful life assumptions for analyzed controls would be "acceptable."[259] Thus, even before HECO proposed to retire units at these three plants, Hawai'i relied on EPA guidance to explain that HECO must conduct complete and reasonable Four-Factor Analyses unless and until it committed to enforceable retirements for units at its facilities.

Hawai'i again relied on EPA's long-standing guidance in its responses to HECO's later requests that the State incorporate enforceable retirement deadlines for Hill, Kahului, and Maalaea units into the SIP. In the State's November 2021 Letter to HECO, in which the State

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[253] 89 Fed. Reg. 47398, 47429 (May 31, 2024).
[254] *Id.*
[255] *Id.*
[256] *Fox Television Stations, Inc.*, 556 U.S. at 515.
[257] *Id.*
[258] Kanoelehua-Hill Four-Factor Analyses at 63; Kahului Four-Factor Analyses at 64 (same); Maalaea Four-Factor Analyses at 69 (same).
[259] Kanoelehua-Hill Four-Factor Analyses at 63; Kahului Four-Factor Analyses at 64 (same); Maalaea Four-Factor Analyses at 64 (same).

first addressed the utility's request to include enforceable retirement deadlines for Hill and Kahului, Hawai'i explained that, "[t]o make reasonable progress, the regional haze program for the second planning period offers flexibility in selecting an enforceable commitment to source retirement by 2028 as an option to performing regional haze four-factor analyses and selection of cost-effective control measure(s)."[260] Similarly, Hawai'i explained in its discussion of the remaining useful life factor for its Four-Factor Analyses in the SIP that "[a]ccording to [EPA's 2019] guidance, a state may be able to justify not selecting a source for four-factor analysis of control measures if there is an enforceable requirement for the source to cease operation by a date after 2028."[261] Indeed, notes from Hawai'i's regular consultation meetings with EPA show that the agency explicitly told Hawai'i that its "2019 guidance allows for units shut down by 2028 to be excluded from four-factor analysis."[262]

Where, as here, the agency's "prior policy has engendered serious reliance interest," courts have further held that those interests "must be taken into account."[263] In this instance, EPA must "provide a more detailed justification than what would suffice for a new policy created on a blank slate" because "a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy."[264] Again, EPA fails to acknowledge Hawai'i's reliance on its long-standing position for how states must treat source retirements in their SIPs, let alone provide a reasoned explanation for disregarding the State's reliance interests in that long-standing position.

Moreover, EPA's proposal violates the Clean Air Act's requirement that the agency act consistently across SIPs. The Clean Air Act requires EPA to "assure fairness and uniformity in the criteria, procedures, and policies applied by the various [EPA] regions in implementing and enforcing" the Act.[265] EPA's regulations implementing this provision further require that EPA regional office SIP actions "[a]re as consistent as reasonably possible with the activities of" other EPA regions.[266] In providing that the agency's actions across SIPs must be consistent, EPA explained that it interprets the Act "as a mandate to assure greater consistency among the Regional Offices in implementing the Act, [and] certainly not as a license to institutionalize the kind of inconsistencies that prompted Congress to enact this provision."[267] As noted above, EPA partially disapproved two second planning period SIPs—Wyoming and Arizona—for unreasonably relying on unenforceable retirements to evade requirements of the Act. EPA's proposal here to partially disapprove Hawai'i's 2024 SIP for properly including federally enforceable retirements on which the State relied to exempt sources from conducting Four-Factor Analyses and installing reasonable controls is inconsistent with EPA's prior SIP actions, in violation of the Act.

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[260] App. P at 93.
[261] 2024 SIP at 94.
[262] App. P at 34.
[263] *Fox Television*, 556 U.S. at 515.
[264] *Id.* at 515-16.
[265] 42 U.S.C. § 7601(a)(2)(A).
[266] 40 C.F.R. § 56.5(a).
[267] 44 Fed. Reg. 13043, 13045 (Mar. 9, 1979).

VI. EPA Fails to Provide Adequate Notice of Its Rationales Relied on for Disapproval.

In its proposal, EPA states it is "relying on and incorporating the arguments set forth in the EPA's final action disapproving the Colorado Regional Haze Plan for the Second Implementation Period and the EPA's final action partially disapproving the California Heavy-Duty Vehicle Inspection and Maintenance Program to the extent applicable to this proposed partial approval and partial disapproval" of Hawai'i's 2024 SIP.[268] However, EPA does not identify which arguments from its actions on the Colorado SIP and California Program the agency relies on, nor does it provide any explanation for how those arguments apply to the 2024 SIP or support EPA's proposal to partially disapprove the SIP. EPA provides only general citations to its notices on the Colorado and California Program, without noting any particular section of the notices that the agency believes apply to the Hawai'i SIP.[269] Moreover, EPA's action on the California Program does not relate to the Regional Haze Program and involves an entirely different constitutional issue than EPA's proposal on the Hawai'i 2024 SIP.[270] By failing to provide any explanation for its reliance on the Colorado and California actions, EPA's reasons for proposing to partially disapprove the 2024 SIP are "known only to the agency,"[271] and EPA leaves the Conservation Groups and the public to guess at those unstated reasons. As a result, there is not sufficient information available in the record for EPA's proposal for the Conservation Groups to address EPA's reliance on the Colorado and California actions here. EPA, thus, fails to provide adequate notice of its basis for partially disapproving the 2024 SIP.[272]

VII. If Hawai'i's Power Plants Do Not Retire, They Must Adopt Reasonable and Cost-Effective Emission Reduction Measures.

As noted above, the record before the agency does not support any conclusion that the retirement deadlines for the Hill, Kahului, or Maalaea plants are forced. HECO's assertions that retiring units at these facilities by the SIP deadlines, which HECO requested that the State incorporate as federally enforceable measures, could present grid reliability concerns are speculative and unsupported.[273] EPA's proposal to partially disapprove Hawai'i's 2024 SIP is neither supported nor warranted, as EPA effectively proposes to predetermine that approval of SIP retirement deadlines could present a violation of federal or state law without any evidence or support for that claim in the record. Thus, EPA fails to draw a rational connection between the facts found in the record and the choice it proposes to make.[274] If, at the time of the deadlines,

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[268] 91 Fed. Reg. at 7217.

[269] *Id.*, nn.79-80.

[270] 91 Fed. Reg. 5325, 5327 (Feb. 6, 2026) (explaining that EPA partially disapproved California's Heavy-Duty Vehicle Maintenance and Inspection Program based on that State's alleged failure to provide "necessary assurances" that the Program would not violate the Commerce Clause).

[271] *Am. Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 237 (D.C. Cir. 2008) (quoting *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 393 (D.C. Cir. 1973)).

[272] *State Farm*, 463 U.S. at 43; *Cboe Futures Exch., LLC*, 77 F.4th at 977 (holding that the agency "failed adequately to explain its rationale and failed to consider an important aspect of the problem" and that "those deficiencies require vacatur"); *MCI Telecomms. Corp. v. FCC*, 57 F.3d 1136, 1140 (D.C. Cir. 1995) ("The APA requires the Commission to provide notice of a proposed rulemaking adequate to afford interested parties a reasonable opportunity to participate in the rulemaking process." (internal quotation and citation omitted)).

[273] *See supra* section III.A.-B.2.

[274] *State Farm*, 463 U.S. at 43.

retirement of the HECO units would actually present grid reliability issues, then the State and EPA can properly address that circumstance through the Clean Air Act's existing mechanisms discussed above,[275] including a SIP revision or SIP supplement that adopts emission reductions measures that would be necessary to comply with the Act's haze requirements for each facility.

If, however, EPA finalizes its proposed partial disapproval of the source retirement deadlines for the Hill, Kahului, and Maalaea plants, Hawai'i would be required to submit a new SIP revision to EPA incorporating measures for the HECO plants that are necessary to make reasonable progress based on a Four-Factor Analysis. The evidence in the State's rulemaking record and in the attached Stamper Report shows that there are reasonable and cost-effective controls available for the HECO plants that would be necessary to make reasonable progress assuming a full remaining useful life for those plants. Additionally, at no point has HECO proposed a retirement deadline for the Puna plant boiler, so HECO must implement the fuel switch to ULSD for the Puna boiler that Hawai'i has repeatedly determined is cost-effective and necessary to make reasonable progress.

A. Kanoelehua-Hill Generating Station

As discussed above, Hawai'i relied on an enforceable shutdown commitment for Hill boilers 5 and 6 by December 31, 2028, in lieu of requiring the installation of controls identified in the Four-Factor Analysis in the 2024 SIP.[276] The total reduction from the shutdown of the boilers would be 2,829 tons of NOx, SO_2, and PM10 combined.[277] However, if Hill remains operational, HECO must adopt reasonable and cost-effective control measures for boilers Hill 5 and 6 to make reasonable progress during this planning period.

The Hill Power Plant is located on Hawai'i Island.[278] Boilers Hill 5 and 6 are the facility's major emitters, with a combined generating capacity of 37 MW, and both boilers fire No. 6 fuel oil.[279] Hawai'i selected Hill for a Four-Factor Analysis based on initial emissions over distance (Q/d) screening, followed by Weighted Emissions Potential/Area of Influence (WEP/AOI) analysis.[280] The WEP/AOI results ranked Hill as the most significant contributor to visibility impairment at Hawai'i Volcanoes National Park for both sulfate and nitrate.[281] Hawai'i also ranked the facility among the top five contributors to sulfate and nitrate impairment at Haleakalā National Park.[282]

Hawai'i's revised cost analyses show that there are readily available and cost-effective measures for the Hill boilers that would be necessary to make reasonable progress assuming a full remaining useful life. For instance, in the State's 2022 SIP, Hawai'i revised Four-Factor Analyses submitted by HECO to correct for multiple errors in the HECO analyses that artificially

[275] *See supra* section IV.A-B.
[276] *See supra* section III.A.2.
[277] 2024 SIP at 97, tbl.6.6-1.
[278] *Id.* at 71.
[279] Stamper Report at 4.
[280] 2024 SIP at 59, 71.
[281] *Id.* at 65-66.
[282] *Id.*

inflated the costs of controls.[283] Hawai‘i noted that, among other errors, HECO used an inappropriately short remaining useful life in its initial March 2020 cost analyses, in violation of EPA's Control Cost Manual.[284] After consulting with EPA and correcting HECO's cost analyses to comply with EPA's feedback, HECO determined that there were multiple controls for boilers Hill 5 and 6 that were cost-effective.[285] Based on a full remaining useful life of 20 years, Hawai‘i concluded that switching Hill 5 and 6 to ULSD and installing NOx combustion controls (LNB, FGR, and OFA) were cost-effective.[286] Additionally, based on a full remaining useful life of 30 years, Hawai‘i also determined that SCR was cost-effective for the two boilers.[287] Hawai‘i's cost-effectiveness determinations for controls on Hill 5 and 6 in the 2022 SIP are summarized in the table below.[288]

Unit	Switch to ULSD ($/ton,[289] 20-year useful life)	NOx Combustion Controls ($/ton,[290] 20-year useful life)	SCR ($/ton,[291] 30-year useful life)
Hill 5	$4,319	$1,051	$1,733
Hill 6	$4,684	$598	$1,858

The costs of these controls were all well below Hawai‘i's 2022 SIP cost-effectiveness threshold of $5,800/ton.[292] The State also determined that switching to ULSD, NOx combustion controls, and SCR for the Hill boilers would reduce NOx, SO_2, and PM10 combined by 2,779 tpy and that these controls satisfied the other three statutory factors.[293] Thus, Hawai‘i selected these controls for Kanoelehua-Hill in the 2022 SIP as necessary to make reasonable progress.[294]

The Stamper Report reaffirms the State's analysis showing controls would be necessary to make reasonable progress for the Hill boilers. The Stamper Report revises the cost analyses for SCR plus combustion controls at boilers Hill 5 and Hill 6 based on the total of the capital and operational cost estimates for these controls and the NOx emission reductions provided by HECO for these controls in its March 2020 Four-Factor Analysis.[295] Namely, the Stamper Report modifies HECO's cost analyses by (1) escalating costs from 2019 dollars to 2024 dollars using the Chemical Engineering Plant Cost Index (CEPCI), (2) using the current bank prime

[283] *Id.* at 77; Kanoelehua-Hill Four-Factor Analyses at 63-66.
[284] Kanoelehua-Hill Four-Factor Analyses at 64.
[285] Kanoelehua-Hill Four-Factor Analyses at 145-82; 2024 SIP at 77-78.
[286] 2024 SIP at 77.
[287] *Id.*
[288] *Id.* at 77-78.
[289] The $/ton figure for switching to ULSD is based on total combined reductions for NOx, SO_2, and PM10. *Id.* at 77.
[290] The $/ton figure for NOx combustion controls is based on reductions for NOx only. *Id.*
[291] The $/ton figure for SCR is based on reductions for NOx only. *Id.*
[292] *Id.* at 84.
[293] *Id.* at 83-84, 86.
[294] *Id.* at 86.
[295] Stamper Report at 5.

interest of 6.75%, (3) using a full remaining useful life of 30 years, and (4) not applying a cost multiplier, in line with the State's revisions to HECO's March 2020 analysis.[296] The revised cost-effectiveness analyses show that SCR plus NOx combustion controls would be $3,351/ton of pollution reduced for Hill 5 and $3,212/ton of pollution reduced for Hill 6, assuming a remaining useful life of 30 years.[297] The costs are well below Hawai'i's 2024 SIP cost-effectiveness threshold of $6,800/ton.[298]

HECO stated in its initial March 2020 Four-Factor Analysis that it plans to "retire the Hill 5 and 6 boilers after securing replacement with renewable sources as [Renewable Portfolio Standard] plans are carried out to achieve the goal of 100%, which is necessary to meet Hawai'i's statutory requirement to discontinue the use of fossil fuels for electric generation by 2045."[299] Although these "plans" do not reflect federally enforceable deadlines to retire the Kanoelehua-Hill boilers, additional cost calculations were conducted for these NOx controls at Hill 5 and Hill 6 with a shorter remaining useful life of 19 years.[300] Additionally, the Stamper Report further revised the cost analyses by using an inflated 1.2 retrofit factor for SCR.[301] Even assuming a shorter remaining useful life and inflated retrofit factor, which both overestimate the costs of controls, the revised cost analyses for units 5 and 6 still show that SCR plus combustion controls would be cost-effective at $4,423/ton and $4,241/ton, respectively.[302] Again, these costs are well below Hawai'i's cost-effectiveness threshold of $6,800/ton.[303]

Moreover, the cost-effectiveness of ULSD for Hill 5 and Hill 6 generally would not be changed by a lengthening or shortening of the remaining useful life of the units.[304] Thus, those controls should continue to be considered as cost-effective based on Hawai'i's analysis.

B. Kahului Generating Station

Like Hill, Hawai'i relied on an enforceable shutdown commitment for Boilers K-1 through K-4 at Kahului by no later than December 31, 2028, instead of requiring the installation of control technologies evaluated in the Four-Factor Analysis.[305] These shutdown commitments were incorporated into Covered Source Permit (CSP) No. 0232-01-C as necessary reasonable progress measures.[306] Based on these assumed retirements, Hawai'i projected 2,908 tons of SO_2, NOx, and PM10 emissions reductions from this facility.[307] However, if the Kahului boilers

[296] *Id.* at 5-6.
[297] *Id.* at 6.
[298] 2024 SIP at 95.
[299] Kanoelehua-Hill Four-Factor Analyses at 14, 21.
[300] Stamper Report at 7.
[301] *Id.*
[302] *Id.*
[303] 2024 SIP at 95.
[304] Stamper Report at 8.
[305] *See supra* section III.A.2.
[306] App. X at 738-57.
[307] 2024 SIP at 97, tbl.6.6-2.

remain operational, HECO must adopt feasible and cost-effective emission control measures to achieve reasonable progress for this planning period.

The Kahului Power Plant is located on Maui.[308] The facility consists of four steam boilers, Units K-1, K-2, K-3, and K-4, with a combined generating capacity of approximately 33 MW.[309] All four boilers are fired with Fuel Oil No. 6.[310] Hawai'i selected Kahului for a Four-Factor Analysis based initially on the Q/d screening, followed by the WEP/AOI analysis.[311] Based on the WEP/AOI analysis, Kahului is the most significant contributor to sulfate-related visibility impairment and the second most significant contributor to nitrate-related visibility impairment at Haleakala National Park.[312]

Hawai'i's revisions to HECO's cost analyses show that there are cost-effective measures for the Kahului boilers that would be necessary to make reasonable progress assuming a full remaining useful life for the facility. For instance, in the State's initial 2022 SIP, Hawai'i evaluated multiple control options for the Kahului boilers by revising Four-Factor Analyses submitted by HECO to correct for multiple errors in that analysis that artificially inflated the costs of controls.[313] Hawai'i noted that, among other errors, HECO used an inappropriately short remaining useful life in its initial March 2020 cost analyses, in violation of EPA's Control Cost Manual.[314] After consulting with EPA and correcting HECO's cost analyses to comply with EPA's feedback, Hawai'i determined that switching the Kahului boilers from residual fuel oil to ULSD, NOx combustion controls (including LNB, FGR, and OFA), and SCR would be cost-effective, resulting in significant SO_2 and NOx reductions for all four Kahului boilers.[315] Hawai'i's determinations were based on a full remaining useful life of 20 years for switch to ULSD and NOx combustion controls and a full remaining useful life of 30 years for SCR.[316] Hawai'i's cost-effectiveness determinations for controls on Kahului boilers in the 2022 SIP are summarized in the table below.[317]

Unit	**Switch to ULSD ($/ton,[318] 20-year useful life)**	**NOx Combustion Controls ($/ton,[319] 20-year useful life)**	**SCR ($/ton,[320] 30-year useful life)**
K-1	$4,935	$3,723	$3,719

[308] *Id.* at 71.
[309] Stamper Report at 8.
[310] *Id.* at 9.
[311] 2024 SIP at 59, 71.
[312] *Id.* at 66-67.
[313] *Id.* at 79-81; Kahului Four-Factor Analyses at 63-67, 148-68.
[314] Kahului Four-Factor Analyses at 64.
[315] 2024 SIP at 79-81.
[316] *Id.* at 79.
[317] *Id.* at 80-81.
[318] The $/ton figure for switching to ULSD is based on total combined reductions for NOx, SO_2, and PM10. *Id.* at 80.
[319] The $/ton figure for NOx combustion controls is based on reductions for NOx only.
[320] The $/ton figure for SCR is based on reductions for NOx only.

K-2	$4,910	$3,239	$3,795
K-3	$4,920	$803	$1,456
K-4	$5,156	$2,050	$2,381

The costs of these controls were all well below Hawai‘i’s 2022 SIP cost-effectiveness threshold of $5,800/ton.[321] The State also determined that switching to ULSD, NOx combustion controls, and SCR for the Kahului boilers would reduce NOx, SO_2, and PM10 combined by 2,879 tpy and that these controls satisfied the other three statutory factors.[322] Thus, Hawai‘i selected these controls for Kahului in the 2022 SIP as necessary to make reasonable progress.[323]

The Stamper Report provides a revised cost analyses for SCR plus combustion controls at the Kahului units, reaffirming the State’s determination that controls are necessary for reasonable progress at the facility. The Stamper Report analyses are based on the total of the capital and operational cost estimates for these controls and the NOx emission reductions provided by HECO in its March 2020 Four-Factor Analysis for Kahului with some modifications.[324] Namely, the Stamper Report modifies HECO’s cost analyses by (1) escalating costs from 2019 dollars to 2024 dollars using the CEPCI, (2) using the current bank prime interest of 6.75%, (3) using a full remaining useful life of 30 years and (4) not applying a cost multiplier, in line with the State’s revisions to HECO’s March 2020 analysis.[325] The revised analysis shows that NOx combustion controls plus SCR would be cost-effective. For units K-3, and K-4, these controls are well below the Hawai‘i’s cost-effectiveness threshold of $6,800/ton, at $2,753 and $4,461, respectively.[326] In addition, if the State’s cost threshold is escalated to 2024 dollars using the CEPCI for an apples-to-apples dollar year comparison, then the costs of these controls for units K-1 and K-2 would be below the escalated 2024 year threshold of $7,700/ton,[327] at $7,178/ton and $7,516/ton, respectively.[328]

The Stamper Report provides additional cost calculations for SCR plus NOx combustion controls on the Kahului boilers assuming a shorter remaining useful life. As noted above, HECO claimed in its analyses that it would retire fossil fuel fired boilers in accordance with Hawai‘i’s RPS, which sets a goal of 100% renewable energy for the State by 2045.[329] Although the RPS does not provide a federally enforceable retirement deadline for the Kahului boilers, the Stamper Report analyzes the costs of controls for Kahului assuming a 19-year remaining useful life.[330] Additionally, the Stamper Report further revises the cost analyses by using an inflated 1.2 SCR

[321] *Id.* at 84.
[322] *Id.* at 83-84, 86.
[323] *Id.* at 86.
[324] Stamper Report at 9-10.
[325] *Id.* at 10.
[326] *Id.* at 10-11.
[327] *Id.* at 3.
[328] *Id.* at 10.
[329] *See supra* section VII.A.
[330] Stamper Report at 11.

cost multiplier.[331] Even assuming a shorter remaining useful life and inflated retrofit factor, which both overestimate the costs of controls, SCR plus NOx combustion controls would still be cost-effective and well under Hawai‘i’s cost threshold in the 2024 SIP for Units K-3 and K-4, at $3,609/ton and $5,895/ton, respectively.[332]

Moreover, the cost-effectiveness of switching to ULSD for boilers K-1, K-2, K-3, and K-4 generally would not be changed by a lengthening or shortening the remaining useful life of the units.[333] Thus, those controls should continue to be considered as cost-effective based on Hawai‘i’s analysis.

C. Maalaea Generating Station

HECO’s Maalaea plant is located on Maui Island.[334] The plant consists of 14 diesel engine generators, 4 combustion turbines, 2 steam generators, and 1 steam turbine.[335] Hawai‘i selected Maalaea for a Four-Factor Analysis, with a Q/d value of 110.18 for Haleakalā National Park’s big island unit, a Q/d value of 57.98 for Haleakalā National Park’s small island unit, a Q/d value of 16.57 for Hawai‘i Volcanoes National Park, and a Q/d value of 14.65 for the ‘Ōla‘a tract of Hawai‘i Volcanoes.[336] Based on emissions reported to EPA’s 2014 National Emissions Inventory (NEI), the 2024 SIP shows that Maalaea emits 2,114 tpy of NOx, 549 tpy of SO_2, and 148 tpy of PM10.[337] Notably, more recent emissions data reported to EPA’s 2020 NEI shows that, while the facility’s SO_2 emissions have decreased slightly to 411 tpy, Maalaea’s NOx emissions have increased to 2,513 tpy in the time since the 2014 NEI.[338]

As discussed above, the 2024 SIP gives HECO the option to either shutdown engines at the Maalaea plant or install controls on those engines.[339] Nothing in the SIP forces HECO to shutdown the Maalaea engines, and EPA’s proposal to partially disapprove the 2024 SIP’s inclusion of retirement deadlines for the Maalaea plant is arbitrary and capricious. However, HECO proposed and agreed to staggered retirement deadlines for multiple engines at the Maalaea plant to shorten the remaining useful life of the plant such that controls would exceed Hawai‘i’s cost-effectiveness threshold.[340] Thus, if the enforceable retirement deadlines for the Maalaea engines are removed from the SIP, then HECO must adopt reasonable and cost-effective emission reduction measures for the Maalaea engines that would be necessary to make reasonable progress assuming a full remaining useful life for the facility.

Hawai‘i has consistently determined that there are readily available controls that are reasonable and cost-effective for the Maalaea plant based on either a full remaining useful life or

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[331] *Id.*
[332] *Id.*
[333] *Id.* at 12.
[334] 2024 SIP at 71, fig.5.11-1.
[335] 2024 SIP at 57; Stamper Report at 12.
[336] 2024 SIP at 55-57, 71.
[337] *Id.* at 55.
[338] *See* NPCA Haze Map.
[339] *See supra* section III.A.3.
[340] *See id.*

a shortened remaining useful life for the facility. HECO submitted numerous cost analyses to the State over the three years Hawai‘i was developing the 2022 and 2024 SIPs.[341] For each of those cost analyses, Hawai‘i noted various ways that HECO's cost analyses unreasonably inflated the costs of controls.[342] For instance, in the initial April 2020 Four-Factor Analysis for Maalaea that HECO submitted to the State, Hawai‘i explained that HECO inappropriately assumed an unreasonably short remaining useful life for the facility, used an unreasonably high interest, and relied on an unsupported retrofit factor.[343] Similarly, in Hawai‘i's response to HECO's June 2021 letter providing new cost information, the State explained that HECO continued to use an inappropriately high interest rate and an inappropriately inflated retrofit factor that did not comply with EPA's Control Cost Manual.[344] Thus, Hawai‘i revised each of HECO's cost analyses for Maalaea to comply with NPS and EPA feedback. Hawai‘i's revised cost-effectiveness determinations for controls at Maalaea are summarized in the table below:[345]

Unit	**Control**	**HECO Initial Analysis ($/ton, full useful life)**	**Hawai‘i Revised 2022 SIP Analysis ($/ton, full useful life)**	**Hawai‘i Revised 2024 SIP Analysis ($/ton shortened useful life)**
M1	FITR	$4,159	$3,030	$5,328 (full useful life)
M2	FITR	$7,173	$5,225	$9,186 (full useful life)
M3	FITR	$4,159	$3,030	$5,328 (full useful life)
M7	SCR	$6,162	$5,530	$7,753 (10-yr useful life)
M10	SCR	$8,335	$8,757	$6,258 (5-yr useful life)
M11	SCR	$8,546	$8,859	$7,174 (5-yr useful life)
M12	SCR	$11,832	$12,423	$7,256 (10-yr useful life)
M13	SCR	$10,805	$11,292	$7,020 (10-yr useful life)

Based on Hawai‘i's revised cost analyses, the State determined in the 2022 SIP that FITR for engines M1, M2, and M3, and SCR for engine M7 were cost-effective, assuming a full remaining useful life for those engines, and the controls satisfied the other three statutory factors.[346] As a result, Hawai‘i determined those controls were necessary to make reasonable

[341] 2024 SIP at 81-83, 90-92; Maalaea Four-Factor Analyses at 2-61, 68-137; App. P at 52-54, 59-73, 78-81, 91, 234-37, 239-63.
[342] 2024 SIP at 81-83, 90-92; Maalaea Four-Factor Analyses at 63-66, 139-56; App. P at 93-94, 99-103, 124-28.
[343] Maalaea Four-Factor Analyses at 63-65.
[344] App. P at 99-100, 102-03.
[345] 2024 SIP at 81-82, 91-92. The $/ton figures are based on reductions in NOx only. *Id.* at 82.
[346] 2024 SIP at 81-84.

progress.[347] In the 2024 SIP, Hawai‘i’s revised cost analyses for the Maalaea engines assumed shortened remaining useful lives for those units given HECO’s commitment to federally enforceable retirement deadlines.[348] Yet, even with a shortened remaining useful life, Hawaii determined that controls would still be cost-effective.[349] Thus, had the State assumed a full remaining useful life in the 2024 SIP revised analyses, additional controls likely would have been cost-effective.

The attached Stamper Report confirms the State’s determinations that controls would be reasonable and cost-effective for the Maalaea engines assuming a full remaining useful life. For SCR controls, the Stamper Report revises the cost analyses for engines M7 and M10-M13 using (1) Hawai‘i’s revisions to HECO’s 2023 submittals, escalated to 2024 dollars using the Chemical Engineering Plant Cost Index (CEPCI); (2) the current bank prime rate of 6.75%; and (3) a 20-year remaining useful life.[350] These revised SCR costs show that, assuming a full remaining useful life for the Maalaea engines, SCR would be cost-effective for all five engines, with costs ranging from $4,375/ton of pollution reduced to $6,255/ton of pollution reduced.[351] These costs are all well below Hawai‘i’s 2024 SIP cost-effectiveness threshold of $6,800/ton. These costs are also well below an updated cost-effectiveness threshold escalated to 2024 dollars using the CEPCI of $7,700/ton.[352] In fact, the Stamper Report shows that, even if Hawai‘i assumed shorter remaining useful lives for the Maalaea engines, SCR would still be cost-effective. Assuming a remaining useful life of just fourteen years, SCR would still be below the State’s 2024 SIP cost-effectiveness threshold for engines M7 and M10 through M13, with costs ranging from $4,604/ton to $6,583/ton.[353] And assuming a very short remaining useful life of just six years, SCR would still be below the State’s cost-effectiveness threshold for engines M10 through M13.[354]

For FITR controls, the Stamper Report also revises the cost analyses for engines M1 through M3. As with the SCR cost analyses, the Stamper Report revises the FITR cost analyses using: (1) HECO cost analyses in 2018 dollars, escalated to 2024 dollars using the CEPCI; (2) the current bank prime rate of 6.75%; and (3) a 20-year remaining useful life.[355] Again, the Stamper Report’s revised FITR costs show that, assuming a full remaining useful life for the Maalaea engines, FITR would be cost-effective for engines M1 and M3, with costs of $5,365/ton of pollution reduced for both engines.[356] Even assuming a shortened thirteen-year remaining useful life, FITR would still be cost-effective for both engines M1 and M3, at costs of $6,837/ton.[357]

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[347] *Id.* at 86, tbl.6.3-2.
[348] *Id.* at 91-92.
[349] *Id.*
[350] Stamper Report at 14.
[351] *Id.* at 15.
[352] *Id.* at 3.
[353] *Id.* at 15.
[354] *Id.* at 15.
[355] *Id.* at 15-16.
[356] *Id.* at 16.
[357] *Id.*

Thus, there is ample evidence showing controls would be reasonable, cost-effective, and necessary to make reasonable progress for the Maalaea engines if HECO does not commit to federally enforceable retirement deadlines for these units in the Hawai‘i SIP.

D. Puna Generating Station

Notably, at no point has HECO proposed to commit to an enforceable retirement deadline for the Puna plant. Thus, HECO must implement the emission reduction measures that Hawai‘i has determined are necessary to make reasonable progress in the second planning period.

HECO's Puna plant is located on Hawai‘i Island.[358] The main emission unit at the facility is a 15.5 MW boiler that fires No. 6 fuel oil with a maximum sulfur content of 2%.[359] Hawai‘i selected Puna for a Four-Factor Analysis, with a Q/d value of 22.7 for Hawai‘i Volcanoes National Park and a Q/d value of 27.09 for the ‘Ōla‘a tract of Hawai‘i Volcanoes.[360] Based on emissions reported to EPA's 2014 National Emissions Inventory (NEI), the 2024 SIP shows that Puna emits 70 tpy of NOx, 524 tpy of SO_2, and 29 tpy of PM10.[361]

As with Hill, Kahului, and Maalaea discussed above, the SIP materials contain an extensive record of communications between HECO and the State demonstrating that switching the Puna boiler to ULSD is reasonable and cost-effective. HECO submitted an initial Four-Factor Analysis to the State in March 2022.[362] However, after consulting with EPA, Hawai‘i determined that HECO artificially inflated the costs of controls analyzed in a number of ways, including inappropriately assuming shortened remaining useful life for the plant without any enforceable retirement deadline, assuming an unreasonably high retrofit factor, and using an inflated interest rate.[363] After correcting errors in HECO's analysis, Hawai‘i determined that switching the Puna boiler to ULSD would be cost-effective at $4,690/ton of pollution reduced, which was below the State's cost threshold of $5,800/ton in the 2022 SIP.[364] Hawai‘i also determined that switching the Puna boiler to ULSD satisfied the other three statutory factors.[365] Thus, in the 2022 SIP, Hawai‘i selected ULSD as a necessary measure to make reasonable progress for the Puna plant.[366]

Even after HECO submitted multiple rounds of updated cost information to the State, Hawai‘i continued to determine that switching the Puna boiler to ULSD was cost-effective and reasonable. In the 2024 SIP, Hawai‘i again revised HECO's cost analyses for Puna to align with

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[358] 2024 SIP at 60, fig.5.7-1.
[359] *Id.* at 79.
[360] *Id.* at 56, 59, 71.
[361] *Id.* at 56.
[362] 2024 SIP, App. H, Regional Haze Four-Factor Analysis: Hawaiian Electric Light Company, Inc.: Puna Generating Station: August 12, 2022 RH-SIP Submittal, at 2-60 [hereinafter "Puna Four-Factor Analyses"], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_11, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003.
[363] *Id.* at 62-65; 2024 SIP at 78-79.
[364] Puna Four-Factor Analyses at 151, 161; 2024 SIP at 78-79, 84.
[365] 2024 SIP at 83-84.
[366] *Id.* at 86.

EPA guidance.[367] Hawai‘i also, again, found that switching the Puna boiler to ULSD with a maximum sulfur content of 0.0015% would be cost-effective at $6,014/ton of pollution reduced, which is below the State's cost threshold of $6,800/ton in the 2024 SIP.[368] The State further reaffirmed that switching the Puna boiler to ULSD still satisfies the other three statutory factors.[369] Thus, Hawai‘i again selected switching the Puna boiler to ULSD as a necessary measure to make reasonable progress in the 2024 SIP.[370]

E. HECO's August 2025 Letter Does Not Demonstrate that Controls Would Not Be Necessary to Make Reasonable Progress.

In its August 2025 Letter, HECO again provides new cost information for controls on the Hill, Kahului, Maalaea, and Puna plants, asserting that no new or additional controls are necessary for those plants.[371] Namely, HECO provides new cost analyses assuming a 10-year remaining useful life and a 7.5% interest rate for all controls analyzed for all four of its EGUs.[372] HECO's new cost analyses are unreasonable and do not demonstrate that new and additional controls are unreasonable, cost-ineffective, or unnecessary to make reasonable progress.

First, HECO does not provide any documentation for its revised control analyses in the August 2025 letter. The RHR requires that "the technical basis, including . . . cost, engineering, and emissions information" be documented for determinations on the "measures that are necessary to make reasonable progress in each mandatory Class I Federal area" affected by the state.[373] In the letter, HECO provides only a summary table for its revised cost analyses, noting only the interest rate and remaining useful life used.[374] HECO does not provide any of the cost spreadsheets or other cost information used for its revised analyses. As a result, no one, including EPA, Hawai‘i, or the Conservation Groups, can review HECO's analyses or assess whether the other cost information underlying its revised analyses is reasonable and complies with the requirements of the Act and the RHR. Thus, HECO's revised analyses do not satisfy the RHR's documentation requirements.

Second, HECO unreasonably attempts to use a shortened 10-year remaining useful life in its new analyses while simultaneously claiming that it cannot meet retirement deadlines in the SIP. A shortened 10-year useful life for the controls analyzed does not comply with EPA's Control Cost Manual. Rather, as the State explained, EPA's Control Cost Manual at the time the State developed the 2024 SIP provided that the remaining useful life of SCR should be 30 years and the remaining useful life for all other controls, including combustion controls and FITR,

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[367] *Id.* at 89; App. P at 52-54, 59-82, 88-91 (providing HECO's new cost information); *id.* at 93-94, 97-103, 108-10 (providing Hawai‘i's responses to HECO's new cost information, including revised cost analyses).
[368] 2024 SIP at 89, 95.
[369] *Id.* at 93-95.
[370] *Id.* at 97.
[371] HECO August 2025 Letter at 9-10.
[372] *Id.* at 10.
[373] 40 C.F.R. § 51.308(f)(2)(iii).
[374] HECO August 2025 Letter at 10.

should be 20 years.[375] The State also noted that, generally, remaining useful life does not impact the annualized cost of that measure since fuel switching does not require capital investments.[376] However, after HECO provided additional cost information in its June 6, 2021, letter to the State, Hawai‘i explained that the remaining useful life for the fuel atomization systems and tank containment liners HECO claimed were necessary for Puna to fire ULSD is 25 years based on Public Utility Commission filings, noting that the Control Cost Manual does not address the remaining useful life for these pieces of equipment.[377] As discussed in detail above, states may only shorten the remaining useful life in its Four-Factor Analyses when there is a federally enforceable retirement deadline in place.[378] HECO does not provide any basis for assuming a shortened 10-year remaining useful life in its new analyses, including any alternative commitments to retire its EGUs.

Finally, even with HECO's unreasonably shortened remaining useful lives, many, if not most, of the controls analyzed in the August 2025 Letter would still be cost-effective. Notably, even under HECO's (highly flawed) revised cost analyses, the following controls would still be cost-effective based on Hawai‘i's $6,800/ton cost-effectiveness threshold for the second planning period:[379]

- Hill: (1) switch to ULSD for Hill 5 and Hill 6 at $5,318/ton and $5,578/ton, respectively; and (2) SCR and combustion controls for Hill 5 and Hill 6 at $5,982/ton and $5,855/ton, respectively.
- Kahului: (1) switch to ULSD for K-1 through K-4 at $5,033/ton to $5,225/ton; and (2) SCR and combustion controls for K-3 and K-4 at $4,188/ton and $6,838/ton, respectively.[380]

HECO asserts that Hawai‘i should lower its cost threshold to align with those used by other states in the second planning period.[381] However, if Hawai‘i did so, it would likely increase, not decrease, that threshold. Multiple other western states that are part of the WRAP used much higher cost thresholds in their second planning period SIPs. For instance, Oregon, Colorado, Nevada, and New Mexico all used a $10,000/ton of pollution reduced threshold for their second planning period SIPs.[382] Colorado noted that its threshold value of $10,000/ton "is

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[375] 2024 SIP at 77-83, 93-94; Kanoelehua-Hill Four-Factor Analyses at 63, 144; Kahului Four-Factor Analyses at 64, 148; Maalaea Four-Factor Analyses at 64, 139; Puna Four-Factor Analyses at 64, 151.

[376] 2024 SIP at 83.

[377] *Id.* at 93.

[378] *See supra* section V.

[379] 2024 SIP at 87, 95-96.

[380] HECO August 2025 Letter at 10, tbl.4.

[381] *Id.* at 9.

[382] Or. Dep't Env't Quality, Oregon Regional Haze State Implementation Plan for the Period 2018-2028 at 35 (Aug. 27, 2021), https://www.oregon.gov/deq/aq/Pages/Haze.aspx (attached as Ex. 30); In the Matter of Proposed Revisions to Regulation Number 23, Colo. Dep't Pub. Health & Env't, Air Pollution Control Div., Prehearing Statement at 7 (Oct. 7, 2021) [hereinafter "Colorado SIP Revision"] (attached as Ex. 31); Nev. Div. of Env't Prot., Nevada Regional Haze State Implementation Plan for the Second Planning Period at 5-6 (Aug. 2022) [hereinafter "Nevada SIP Revision"], https://ndep.nv.gov/uploads/air-plan_mod-docs/All_SIP_Chapters.pdf (attached as Ex. 32); N.M. Env't Dep't, Air Quality Bureau, State of New Mexico Regional Haze State Implementation Plan Revision, Second Planning Period (2019 – 2028) at xiii, 103 (Feb. 24, 2025),

an increase from Round 1 and reflects the fact that with each successive round of planning, less costly and easier to implement strategies have already been adopted."[383] Nevada similarly explained that its chosen cost-effectiveness threshold was double what that State used to assess BART controls during the first implementation period "to ensure that the entire fleet of potential new control measures throughout Nevada are thoroughly considered, as well as, to ensure that enough controls are implemented during the second period to continue achieving reasonable progress."[384] Notably, EPA approved both Oregon's and Nevada's use of $10,000/ton thresholds for the second planning period.[385]

If Hawai'i changed its threshold to align with thresholds used by these other western states, additional controls at the HECO facilities would still be cost-effective even under HECO's unreasonable revised analyses. Even under HECO's revised cost analyses, the following controls, in addition to those noted above, would still be cost-effective based on a $10,000/ton cost-effectiveness threshold for the second planning period:

- Puna: switch to ULSD at $8,829/ton.
- Maalaea: (1) FITR for engines M1 and M3 at $8,455/ton; (2) SCR on engines M7, M10, and M11 at $9,141/ton, $10,296/ton, and $10,690/ton, respectively.[386]

Thus, contrary to HECO's claims in the August 2025 Letter, if the utility does not retire units at the Hill, Kahului, and Maalaea plants, it must install reasonable and cost-effective controls that would be necessary to make reasonable progress at those facilities. Additionally, contrary to HECO's claims, it must still adopt reasonable and cost-effective controls for the Puna Plant that are necessary to make reasonable progress.

VIII. EPA's Assertions About Hawai'i's Modeling and Reasonable Progress Goals Are Arbitrary and Capricious.

Although EPA does not propose to disapprove any portion of Hawai'i's 2024 SIP based on adjustments to baseline, natural, or current conditions or adjustments to reasonable progress goals to screen out volcanic SO_2 emissions, EPA makes a number of assertions about the effect of volcano emissions on visibility impairment for Hawai'i's Class I areas. EPA asserts in the proposal that, even after adjusting baseline, natural, and current conditions for Haleakalā National Park and Hawai'i Volcanoes National Park, sulfate extinction at both parks is still relatively high, which the agency claims indicates that the adjusted 20% most impaired days for both parks "include a substantial contribution from ammonium sulfate resulting from volcanic emissions."[387] EPA attributes this to the fact that the Kilauea volcano on the island of Hawai'i

https://cloud.env.nm.gov/resources/_translator.php/OTI5MTYyMThlZDhlMTUyZGRkYTJiNDBmNV8xODMxNTA~.pdf (attached as Ex. 33).

[383] Colorado SIP Revision at 7.

[384] Nevada SIP Revision at 5-6.

[385] 89 Fed. Reg. 81361 (Oct. 8, 2024); 91 Fed. Reg. 5321 (Feb. 6, 2026). Although EPA disapproved Colorado's second planning period SIP, the agency did not do so based on the State's chosen cost-effectiveness threshold. 91 Fed. Reg. 3048 (Jan. 26, 2026).

[386] HECO August 2025 Letter at 10, tbl.4.

[387] 91 Fed. Reg. at 7210.

was continuously erupting from 1983 to 2018.[388] As a result, EPA asserts that visibility conditions at Hawai‘i’s Class I areas reflect variations in natural volcanic emissions and not changes in anthropogenic emissions, that visibility conditions at those Class I areas “are not able to adequately identify anthropogenic emissions impacts and continue to include the impact of volcanic emissions,” and that “there is uncertainty in the projection of the URP” for Hawai‘i’s Class I areas.[389] EPA’s claims, however, are belied by readily available information and are irrelevant to determining the measures necessary to make reasonable progress in the 2024 SIP.

A. EPA’s Assertions About the Influence of Volcano Emissions on Hawai‘i’s Calculation of the URP and Reasonable Progress Goals Are Unsupported and Beside the Point.

EPA’s suggestions regarding the impact of volcano emissions and the role of anthropogenic emissions in visibility impairment at Hawai‘i’s Class I areas are belied by readily available information.

As an initial matter, Hawai‘i relied on EPA’s own adjustments to baseline, current, and natural conditions in the 2024 SIP, which followed EPA’s own white paper for making such adjustments.[390] Thus, EPA again appears to arbitrarily give Hawai‘i “*one* set of metrics to draft [its] plan[] and then use[s] *another* set of metrics to grade [that plan].”[391]

In asserting that visibility impairment at Hawai‘i’s parks follows volcanic, rather than anthropogenic, contributions and that there is uncertainty in the URPs for those parks because volcanic emissions cannot be completely screened out, EPA makes causal leaps that are not supported by the available evidence. EPA appears to hint that most, if not all, of the remaining sulfate impairment after the agency adjusted visibility conditions for Hawai‘i’s Class I areas is from volcano emissions.[392] However, nothing in the proposal or the 2024 SIP provides how much of the remaining sulfate impairment is from volcanic SO_2 emissions versus anthropogenic SO_2 emissions. EPA itself even notes that the remaining impact of volcano emissions is unknown, stating that “the influence *remains to an unknown extent* within the calculated 2028 projections for the twenty percent most impaired days.”[393] Indeed, EPA does not even attempt to quantify how much of the sulfate contribution to light extinction after adjusting baseline, current, and natural conditions is from volcanic and anthropogenic SO_2 emissions.

In any event, even if EPA is correct that most of the post-adjustment sulfate impairment at Hawai‘i’s Class I areas is from volcano emissions, that would not mean that anthropogenic emissions do not also contribute to impairment at Hawai‘i Volcanoes and Haleakalā. In fact, EPA ignores readily available information showing that anthropogenic emissions do, indeed, contribute to visibility impairment, including sulfate impairment, at both parks. For instance, the 2024 SIP notes that, according to preliminary U.S. Geologic Survey (USGS) emissions data

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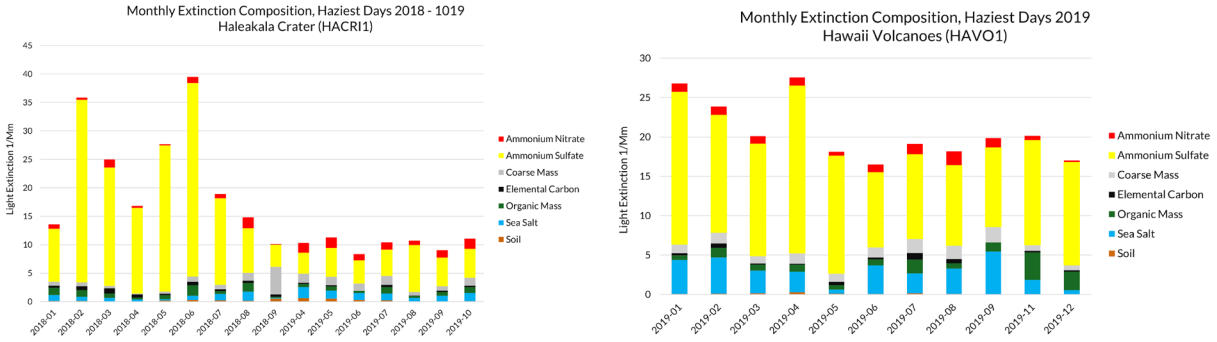
[388] *Id.*
[389] *Id.* at 7210-11, 7219.
[390] *Id.* at 7209-11 & n.53.
[391] *Kentucky*, 123 F.4th at 470 (internal quotation marks omitted, emphasis in original).
[392] 91 Fed. Reg. at 7210-11, 7219.
[393] *Id.* at 7219.

results, SO_2 emissions from the Kilauea volcano in 2019 (when the volcano was not actively erupting) were 17,301 tons.[394] Total combined 2017 SO_2 emissions from point sources that Hawai‘i screened in for Four-Factor Analyses in the SIP were 18,058 tons, making Kilauea's 2019 emissions 757 tons less than those from point sources in 2017.[395] 2019 volcanic emissions also only equated to 39% of the total statewide average anthropogenic SO_2 emissions from 2005 to 2017.[396] As Hawai‘i explained in the 2024 SIP, this data "shows how Hawaii anthropogenic SO_2 emissions are closer to volcanic SO_2 emissions when Kilauea is not actively erupting," and that "point sources played a more significant part in SO_2 visibility impacts" at the State's Class I areas after Kilauea stopped erupting.[397]

The impact of anthropogenic SO_2 emissions is borne out by 2019 IMPROVE monitoring data. IMPROVE data for both parks shows that, although sulfate extinction declined in 2019 when Kilauea did not erupt, sulfate extinction did not drop to zero, as shown in the figures below:[398]



Additionally, the figures show that sulfate was still a large contributor to light extinction at both parks in 2019. Thus, even when volcano emissions are significantly lower than they were in 2018 and prior years, there is still significant sulfate extinction at Hawai‘i Volcanoes and Haleakalā, a substantial portion of which is likely from anthropogenic sources.

Indeed, using monitored 2019 light extinction for Hawai‘i Volcanoes and Haleakalā and emission inventory data reported in Hawai‘i's 2025 Progress Report for the second planning period, the percent of overall light extinction attributable to anthropogenic SO_2 emissions can roughly be calculated. The 2025 Progress Report notes that 2019 volcanic SO_2 emissions totaled 17,301 tons.[399] Although the Progress Report does not include an emission inventory for 2019

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[394] 2024 SIP at 19.

[395] *Id.* Note that the 2024 SIP states that Kilauea's 2019 emissions were 939 tons less than total combined 2017 point source emissions. *Id.* However, the 939-ton figure appears to be incorrect.

[396] *Id.* at 39, fig.4.1-2.

[397] *Id.*

[398] Data used to create the figures was downloaded from IMPROVE. Interagency Monitoring of Protected Visual Env'ts (last visited Apr. 1, 2026), https://vista.cira.colostate.edu/Improve/.

[399] Haw. Dep't of Health, Regional Haze Progress Report for Second Planning Period State Implementation Plan at 87 (Jan. 7, 2025) [hereinafter "2025 Progress Report"], https://health.hawaii.gov/cab/regional-haze/ (attached as Ex. 34); *see also* 2024 SIP at 19.

anthropogenic emissions, it does include inventories for 2017 and 2020.[400] As shown in the attached workbook adapting tables from the 2025 Progress Report, anthropogenic SO_2 emissions for 2019 were estimated using a linear interpolation based on anthropogenic SO_2 emissions from 2017 to 2020. This yielded estimated 2019 anthropogenic SO_2 emissions of approximately 17,371 tons.[401] Thus, 2019 anthropogenic SO_2 emissions were likely 70 tons higher than volcanic emissions. Because 2019 volcanic and anthropogenic SO_2 emissions were likely approximately equal, it is reasonable to assume that about 50% of total sulfate extinction at both parks in 2019 is likely attributable to anthropogenic SO_2 sources. In other words, anthropogenic SO_2 emissions likely make up a substantial share of total light extinction at Hawai‘i Volcanoes and Haleakalā. According to the 2025 Progress Report, monitored total light extinction at Haleakalā National Park on the 20% most impaired days in 2019 was 9.5 Mm^{-1}, of which 5.5 Mm^{-1} is attributed to sulfate.[402] Additionally, total light extinction at Hawai‘i Volcanoes National Park on the 20% most impaired days in 2019 was 19.48 Mm^{-1}, of which 14.7 Mm^{-1} is attributed to sulfate.[403] Thus, anthropogenic SO_2 sources likely contributed 28.95% and 37.73% of total light extinction in 2019 at Haleakalā and Hawai‘i Volcanoes, respectively.[404] Again, this data shows that anthropogenic sources likely make up a significant portion of total light extinction at Hawai‘i’s Class I areas.

Moreover, EPA also ignores readily available data showing that reductions from long-term strategy measures in the 2024 SIP will result in a demonstrable improvement in visibility conditions at Hawai‘i’s Class I areas in 2028. Hawai‘i scaled its 2028 reasonable progress goals for both parks based on (1) reductions from measures included in the 2024 SIP long-term strategy, and (2) an additional adjustment to volcanic SO_2 emissions to further screen out emissions from the continuous eruption of Kilauea.[405] As shown in the attached workbook adapting tables from Appendix V of the 2024 SIP, the sulfate scaling factor can be recalculated to scale only for: (1) further adjustments to volcanic SO_2 emissions, and (2) anthropogenic SO_2 reductions.[406] Calculating revised 2028 reasonable progress goals based on those recalculated scaling factors shows that reductions in anthropogenic SO_2 emissions improves impairment at the Class I areas. For instance, Hawai‘i’s 2028 reasonable progress goal for Hawai‘i Volcanoes

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[400] 2025 Progress Report at 80, tbl.6.0-1.

[401] *See* the workbook titled “Hawai‘i Anthropogenic Contributions” (go to the tab titled “2019 Sulfate Extinction”) (attached as Ex. 35). Data used to calculate approximate total SO_2 anthropogenic emissions for 2019 are derived from the 2025 Progress Report. 2025 Progress Report at 80, tbl.6.0-1.

[402] *See* the workbook titled “Hawai‘i Anthropogenic Contributions” (go to the tab titled “2019 Sulfate Extinction”). Data used to calculate light extinction values at Haleakalā and Hawai‘i Volcanoes in 2019 are derived from the 2025 Progress Report. 2025 Progress Report at 58-59, tbls.4.1-1 & 4.1-3.

[403] *See* the workbook titled “Hawai‘i Anthropogenic Contributions” (go to the tab titled “2019 Sulfate Extinction”).

[404] *Id.*

[405] 2024 SIP, App. V, Regional Haze Adjusted Reasonable Progress Goals at 1 [hereinafter “App. V”], Docket No. EPA-R09-OAR-2025-0152-0003_attachment_25, https://www.regulations.gov/document/EPA-R09-OAR-2025-0152-0003 (“Volcano emissions were included for determining the RPG adjustment); *id.* at 2 (“Light extinction values were adjusted using post-modeling RPG scaling factors for light extinction components . . . based on the relative effect of enforceable control measures for reducing emissions.”); *see also* the workbook titled “Hawai‘i Anthropogenic Contributions” (go to the tab titled “Recalculated RPGs,” showing how the State’s sulfate scaling factor was calculated).

[406] *See* the workbook titled “Hawai‘i Anthropogenic Contributions” (go to the tab titled “Recalculated RPGs”).

National Park on the most impaired days is 15.0682 dv.[407] The 2028 reasonable progress goal for Hawai‘i Volcanoes scaled for only additional adjustments to volcanic SO_2 emissions would be 15.0761 dv, roughly the same as Hawai‘i's 2028 reasonable progress goal for the Park.[408] But the 2028 reasonable progress goal for Hawai‘i Volcanoes scaled only for anthropogenic SO_2 reductions would be 14.2171 dv.[409] Similarly, the 2028 reasonable progress goal for Haleakalā scaled only for additional volcanic SO_2 adjustments is roughly the same as the State's 2028 reasonable progress goal for the Park, whereas the 2028 reasonable progress goal scaled only for anthropogenic SO_2 reductions is lower than the State's goal.[410] Thus, adjustments to screen out volcano emissions likely dampened or minimized the impact of the 2024 SIP's long-term strategy measures on future visibility impairment at the Class I areas.

Contrary to EPA's suggestions in the proposal, anthropogenic sources undoubtedly contribute to impairment at Hawai‘i's Class I areas, and reductions in anthropogenic SO_2 emissions have a demonstrable impact on impairment at those Class I areas. In the 2024 SIP, Hawai‘i noted that "[p]oint sources that combust fuel oil are anthropogenic emitters of SO_2 that cause sulfate" and the "majority of these sources are power plants on the islands of Oahu, Maui, and Hawaii that combust fuel oil No. 6 with as much as 2.0% sulfur content."[411] Thus, Hawai‘i appropriately identified measures necessary to make reasonable progress for in-state point sources that combust fuel oil, like the HECO plants.[412]

B. Congress Directed States and EPA to Eliminate All Anthropogenic Visibility Impairment at Class I Areas.

EPA's assertions about the impact of volcano emissions are effectively irrelevant for purposes of determining the measures necessary to make reasonable progress for in-state anthropogenic sources. Even if the contribution of emissions from Hawai‘i's anthropogenic sources to visibility impairment at the State's Class I areas is relatively small compared to that from volcanic emissions, Hawai‘i still must address the contribution from in-state sources to visibility impairment.

In section 169A(a)(1), Congress "declare[d] as a national goal the prevention of *any* future, and the remedying of *any* existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution."[413] Controlling precedent mandates that words like "any" have an "expansive" meaning[414] and the repeated use of "any" in this

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[407] 2024 SIP at 133; App. V. at 4, tbl.V-2.

[408] *See* the workbook titled "Hawai‘i Anthropogenic Contributions" (go to the tab titled "Recalculated RPGs").

[409] *Id.*

[410] *Id.*

[411] 2024 SIP at 23.

[412] Notably, even if EPA is correct that the URPs for Haleakalā and Hawai‘i Volcanoes are "uncertain," that would generally only affect Hawai‘i's comparison of the 2028 reasonable progress goals for the parks against the URP to determine whether the State would be required to make "a robust demonstration" under the RHR. 40 C.F.R. § 51.308(f)(3)(ii). However, Hawai‘i made such a demonstration in the 2024 SIP. 2024 SIP at 131.

[413] 42 U.S.C § 7491(a)(1) (emphasis added).

[414] *Dep't of Hous. and Urban Dev. v. Rucker*, 535 U.S. 125, 131 (2002) (explaining that "'any' has an expansive meaning, that is, 'one or some indiscriminately of whatever kind'"); *Ali v. Fed. Bureau of Prisons*, 552 U.S. 214, 219 (2008) ("[R]ead naturally, the word 'any' has an expansive meaning.").

provision makes the Act's mandate broadly inclusive.[415] The purpose of the Act's visibility provisions is underscored by Congress's second double use of "any" in section 169A(b)(2), directing that states that are reasonably anticipated "to cause or contribute to *any* impairment of visibility" in "*any* [Class I] area" must develop regional haze SIPs to make reasonable progress toward achieving the natural visibility goal.[416] The repeated double use of "any" shows that Congress meant what it said in the statute—EPA and states must eliminate all manmade visibility pollution affecting all Class I national parks and wilderness areas.[417]

EPA itself has reaffirmed that the aim of the Regional Haze Program is to eliminate all anthropogenic haze pollution in Class I areas. For the 2017 RHR revision, EPA explained, in response to comments urging that the national goal set forth in section 169A(a)(1) should only be considered aspirational, that "CAA section 169A(a)(1) establishes that the desired ultimate condition at every Class I area is the absence of any impairment due to anthropogenic sources."[418] Thus, in the 2017 RHR revision preamble, EPA noted that requiring states to submit SIPs to make reasonable progress based on the four statutory factors in each planning period "is consistent with and advances the ultimate goal" of section 169A to eliminate all manmade visibility pollution and "it would be antithetical to allow states to avoid implementing reasonable measures until and unless that goal is achieved."[419]

EPA further explained in the 2017 RHR revision preamble that "the pollutants that lead to regional haze can originate from sources located across broad geographic areas" and "these sources may be numerous and emit amounts of pollutants that, even though small, contribute to the collective whole."[420] Although there have been improvements in visibility since Congress first adopted the visibility provisions of the Act, "additional progress is needed to achieve the national goal set by Congress" and states must continue to "[e]valuat[e] control measures for relatively smaller sources (with commensurate smaller visibility benefits from each individual source) . . . to continue making reasonable progress towards the national goal."[421]

In fact, EPA has disapproved SIPs where states alleged that they do not need to select sources or consider potential emission reduction measures based on the four factors because their contributions to impairment are allegedly minimal. In its proposal to fully disapprove Kansas's second planning period SIP, which EPA later finalized,[422] the agency noted that Kansas failed to select any sources for Four-Factor Analyses, claiming that the impact of Kansas pollution on Class I areas was comparatively smaller than other states and that in-state sources "have an

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[415] *Massachusetts v. EPA*, 549 U.S. 497, 528-29 (2007) (explaining that the Clean Air Act's use of "any" in the definition of "air pollutant" made the definition "sweeping" and the Act's "repeated use of the word 'any'" showed that Congress meant to for the definition to "embrace[] all airborne compounds of whatever stripe").

[416] 42 U.S.C. § 7491(b)(2) (emphasis added).

[417] *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 509 (2014) (explaining that practical difficulties in implementation or administrative efficiency do not justify departure from the Act's plain text; courts "must presume that a legislature says in a statute what it means and means in a statute what it says there.").

[418] 2017 RHR RTC at 83.

[419] 82 Fed. Reg. at 3094.

[420] *Id.* at 3082; *see also* 2024 SIP at 20 (same).

[421] 2021 Clarification Memo at 14.

[422] 89 Fed. Reg. 64373 (Aug. 7, 2024).

insignificant visibility impact" on affected Class I areas.[423] EPA rejected Kansas's claims. The agency explained that even "a small visibility impact on any of the Class I Areas identified by Kansas" was "sufficient to trigger the regional haze requirements to evaluate sources for control measures considering the four factors."[424] EPA further stated that, even if other states contribute more to impairment at affected Class I areas, "that does not mean that Kansas's contributions to visibility impairment are insignificant."[425] Rather, EPA noted that the fact that Kansas's own analyses showed that it contributes to impairment at Class I areas was "evidence that sources in Kansas should be evaluated, including consideration of the four factors, to determine whether cost effective controls for those sources exist and to determine measures that are necessary to make reasonable progress."[426] Thus, the agency recognizes that, even where a state's contribution to impairment is purportedly small, the Act requires the state to determine whether there are emission reduction measures that would be necessary to make reasonable progress toward the natural visibility goal based on an analysis of the four statutory factors.

EPA has also rejected the idea that sources should be permitted to evade the Act's requirements by claiming their contributions to impairment are not "perceptible" or that potential emission reduction measures would not achieve "perceptible" improvements in visibility impairment. In its response to comments document on the 2017 RHR revision, EPA explained that:

> [r]egional haze is typically caused by contributions from many sources, some of which may not be individually perceptible to the human eye but in the aggregate are perceptible. If each source could be exempted from control based on its individual impact not being perceptible, the aggregate impact of the exempted sources could be very perceptible and prevent reasonable progress towards natural visibility conditions.[427]

EPA concluded that "[a] measure may be needed to make reasonable progress even if the source in question is not in total making a perceptible change in visibility and even if the measure would not make such a change, because . . . making progress will require that many relatively small contributions to visibility impairment be addressed."[428]

EPA has similarly disapproved SIPs where states have rejected reasonable controls by alleging those controls would result in too little visibility improvement. In its proposal to partially disapprove North Dakota's second planning period SIP, which EPA later finalized,[429]

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[423] 89 Fed. Reg. 178, 188 (Jan. 2, 2024).
[424] *Id.*
[425] *Id.* at 189.
[426] *Id.*; *see also id.* at 189 n.37 (citing the 2017 RHR RTC at 87-88).
[427] 2017 RHR RTC at 190.
[428] *Id.* at 269.
[429] 89 Fed. Reg. 95126 (Dec. 2, 2024). Although EPA granted Petitions for Reconsideration of its final partial disapproval, the agency did not assert that its determinations in the proposal referenced here were the basis of its decision to reconsider the final rule. *See, e.g.*, Letter from Cyrus Western, Reg'l Admin., U.S. Env't Prot. Agency Region 8, to Margaret Olson, Sr. Staff Counsel, Basin Elec. Power Coop. at 1 (Apr. 30, 2025) (stating only that "EPA is writing to inform you that we are granting your request for reconsideration") (attached as Ex. 36); Letter

the agency explained that North Dakota rejected controls for two facilities based on modeling results that purportedly showed the emission reductions from analyzed controls would not be "perceptible" to the human eye.[430] EPA concluded that North Dakota's "rationale lack[ed] foundation in *both the text and the purpose of the CAA* and RHR."[431] As the agency explained, "*nowhere in the statute* or regulations is there a requirement that control measures produce perceptible visibility improvements to be considered necessary to make reasonable progress at a particular Class I area."[432]

IX. Conclusion

The Conservation Groups strongly oppose EPA's proposal to partially disapprove Hawai'i's 2024 SIP. The 2024 SIP contains measures that are necessary to make reasonable progress at Hawai'i's two Class I national parks. The State faithfully satisfied the requirements of the Clean Air Act and RHR by properly selecting, analyzing, and proposing controls and other measures for haze-polluting sources in the state. EPA must withdraw its proposal to partially disapprove the 2024 SIP and must, instead, approve the SIP for the reasons set forth above.

We look forward to further action from EPA to gain needed emission reductions to benefit our treasured national parks and wilderness areas during the second planning period.

Sincerely,

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from Cyrus Western, Regional Administrator, EPA Region 8, to L. David Glatt, Dir., N.D. Dep't of Env't Quality at 1 (Apr. 30, 2025) (same) (attached as Ex. 37).

[430] 89 Fed. Reg. 56693, 56706 (July 10, 2024).

[431] *Id.* (emphasis added).

[432] *Id*. (citing 82 Fed. Reg. at 3093) (emphasis added); *see also id.* ("Nothing in the language of either the CAA or the RHR suggests that non-statutory factors, such as whether visibility improvement is 'perceptible' or 'significant,' can outweigh the results of an analysis based on those factors explicitly prescribed in the statute.").

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List of Exhibits to Comments on Partial Approval and Partial Disapproval of Air Quality Implementation Plans; Hawai‘i; Regional Haze State Implementation Plan for the Second Implementation- 91 Fed. Reg. 7204 (February 17, 2026)
EPA-R09-OAR-2025-0152

EXHIBIT	DESCRIPTION
Exhibit 1	Victoria Stamper, Comments on the EPA's February 17, 2026 Proposed Act on the State of Hawaii's Regional Haze Plan for the Second Implementation Period Regarding Three Facilities: The Kanoelehua-Hill Generating Station, the Kahului Generating Station, and the Maalaea Generating Station (Apr. 16, 2026)
Exhibit 1a	Worksheets for Cost Effectiveness Calculations
Exhibit 2	Rebecca Latson, *Invasive Species and Endangered Endemics at Haleakala National Park*, NAT'L PARKS TRAVELER (July 14, 2025, 8:05 AM)
Exhibit 3	Nat'l Park Serv., *Hawai'i Volcanoes National Park: Hawai'i* (last visited Mar. 4, 2026)
Exhibit 4	Nat'l Park Serv., 2024 National Park Visitor Spending Effects (Sept. 2025)
Exhibit 5	Bureau of Econ. Analysis, Outdoor Recreation Satellite Account (ORSA): 2023—Hawai'i (2024)
Exhibit 6	David Keiser et al., *Air Pollution and Visitation at U.S. National Parks*, 4 SCI. ADVANCES 3-6 (July 18, 2018)
Exhibit 7	Env't Prot. Agency, *Health Effects of Ozone Pollution* (last updated Feb. 24, 2026)
Exhibit 8	Env't Prot. Agency, *Basic Information About NO_2* (last updated July 10, 2025)
Exhibit 9	Env't Prot. Agency, *Health and Environmental Effects of Particulate Matter (PM)* (last updated May 23, 2025)
Exhibit 10	Env't Prot. Agency, *Sulfur Dioxide Basics* (last updated Jan. 2, 2026)
Exhibit 11	Nat'l Parks Conservation Ass'n, Polluted Parks: How Air Pollution and Climate Change Continue to Harm America's National Parks (2024)
Exhibit 12	Env't Prot. Agency, *Ecosystem Effects of Ozone Pollution* (last updated Sept. 30, 2025)
Exhibit 13	Hawaiian Elec. Co., Inc., Adequacy of Supply Report (Jan. 30, 2026)
Exhibit 14	Hawaiian Elec. Light Co., Inc., Adequacy of Supply Report (Jan. 30, 2026)
Exhibit 15	Maui Elec. Co., Ltd., Adequacy of Supply Report (Jan. 30, 2026)
Exhibit 16	*In re Pub. Utils. Comm'n*, Dkt. No. 2021-0024, Order No. 37624 (Feb. 11, 2021)

EXHIBIT	DESCRIPTION
Exhibit 17	*In re Pub. Utils. Comm'n*, Dkt. No. 2014-0183, Hawaiian Electric Companies' PSIPs Update Report (Dec. 23, 2016)
Exhibit 18	Hawaiian Elec., Integrated Grid Plan: Action Plan Annual Update (2025)
Exhibit 19	*In re Pub. Utils. Comm'n*, Dkt. No. 2018–0165, Order No. 41022 (Sept. 6, 2024)
Exhibit 20	*In re Hawaiian Elec. Co., Inc., et al.*, Dkt. No. 2024-0199, Decision & Order No. 41909 (Sept. 2, 2025)
Exhibit 21	Env't Prot. Agency, Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program (June 1, 2007)
Exhibit 22	Memorandum from Peter Tsirigotis, Dir., Env't Prot. Agency, to Reg'l Air Dirs., Regions 1-10 (Aug. 20, 2019)
Exhibit 23	Env't Prot. Agency, Comments on Draft Colorado Revised Regional Haze State Implementation Plan for the Second Implementation Period (Nov. 2, 2021), Docket No. EPA-R08-OAR-2024-0607-0011_attachment_16
Exhibit 24	Letter from Cyrus Western, Region 8 Reg'l Admin., U.S. Env't Prot. Agency, to Todd Parfitt, Dir., Wy. Dep't of Env't Quality (Apr. 30, 2025)
Exhibit 25	Letter from Cyrus Western, Region 8 Reg'l Admin., U.S. Env't Prot. Agency, to Emily Schilling, Partner, Holland and Hart, LLP (Apr. 30, 2025)
Exhibit 26	Memorandum from Peter Tsirigotis, Director, EPA, to Regional Air Directors, Regions 1-10 (July 8, 2021)
Exhibit 27	Press Release, EPA, EPA Launches Biggest Deregulatory Action in U.S. History (Mar. 12, 2025)
Exhibit 28	Letter from Joshua Cook, Region 9 Reg'l Admin., U.S. Env't Prot. Agency, to George A. Tsiolis, Att'y at Law (July 15, 2025)
Exhibit 29	Letter from Joshua Cook, Region 9 Reg'l Admin., U.S. Env't Prot. Agency, to Aaron M. Flynn, Partner, McGuireWoods LLP (July 15, 2025)
Exhibit 30	Or. Dep't Env't Quality, Oregon Regional Haze State Implementation Plan for the Period 2018-2028 (Aug. 27, 2021)
Exhibit 31	In the Matter of Proposed Revisions to Regulation Number 23, Colo. Dep't Pub. Health & Env't, Air Pollution Control Div., Prehearing Statement (Oct. 7, 2021)
Exhibit 32	Nev. Div. of Env't Prot., Nevada Regional Haze State Implementation Plan for the Second Planning Period (Aug. 2022)

EXHIBIT	DESCRIPTION
Exhibit 33	N.M. Env't Dep't, Air Quality Bureau, State of New Mexico Regional Haze State Implementation Plan Revision, Second Planning Period (2019 – 2028) (Feb. 24, 2025)
Exhibit 34	Haw. Dep't of Health, Regional Haze Progress Report for Second Planning Period State Implementation Plan (Jan. 7, 2025)
Exhibit 35	Hawai‘i Anthropogenic Contributions.xlsx
Exhibit 36	Letter from Cyrus Western, Reg'l Admin., U.S. Env't Prot. Agency Region 8, to Margaret Olson, Sr. Staff Counsel, Basin Elec. Power Coop. (Apr. 30, 2025)
Exhibit 37	Letter from Cyrus Western, Regional Administrator, EPA Region 8, to L. David Glatt, Dir., N.D. Dep't of Env't Quality (Apr. 30, 2025)