Ohio Environmental Council

Ohio Environmental Council's Comments on
Ohio Power Siting Board's Five Year Review of Ohio Administrative Code chapters 4906-01 through 4906-07

On behalf of the Ohio Environmental Council ("OEC"), our nearly 100 environmental and conservation group members, and our thousands of individual members throughout the state, we thank the Ohio Power Siting Board (OPSB) for the opportunity to submit comments regarding this draft Five Year Review of Ohio Administrative Code (OAC) 4906-1 through 7.

The mission of the OEC is to secure healthy air, land, and water for all who call Ohio home. The OEC advocates for the decarbonization and democratization of Ohio's power system. OEC members are harmed when the siting process does not account for future effects of climate change or allow them to meaningfully participate in the siting process. OEC applauds this Board's goal to improve public access to the power siting process. To that end, the OEC offers the attached comments.

With the proposed changes below, the OEC invites this Board to envision an Ohio independent from outside forces, like inflation and supply chain disruptions, by capturing its own solar and wind resources. Given the threat posed by climate change and increasing inflation, Ohio must quickly transition toward a renewable energy future. This Board plays a critical role in ensuring renewable energy projects have fair access to the power siting process. The OEC urges this Board to create fair rules, without a disproportionate burden on renewable energy projects.

Our comments below are divided into two sections. In section I, we explain the three major themes of our suggested changes. These themes are public participation, climate change, and a fair process for all applicants. In section II, we suggest specific language to assist this Board in achieving an open, fair, and robust siting process.

I. The current proposed rules miss opportunities to create a meaningful, evidence-based siting process.

The OEC's comments focus on (A) fostering meaningful public engagement, (B) ensuring the siting process considers climate change, and (C) evening the playing field for applicants. The

proposed rules could improve meaningful public participation by adding guidance on the meaning of public interest and requiring the staff report to substantively respond to public comments. The OEC also encourages this Board to eliminate section 4906-4-09 as duplicative and unreasonably burdensome. If not, all applicants should be subject to these additional requirements. Finally, this Board must ensure all applicants are considering climate change in every step of the siting process. Climate change both impacts our electric distribution system and the public health of Ohioans–the Board must play a role in alleviating those harms.

A. This Board can improve meaningful public participation by providing guidance on the public interest prong and requiring the staff report to substantively respond to public comments.

The OEC applauds this Board's emphasis on encouraging public participation in the siting process. We appreciate the new requirement for applicants to provide a list of the public officials contacted in 4906-4-06(F)(7). We also support formally requiring the staff report to discuss the public interest prong from R.C. 4906.10(A). However, these rule changes still fall short of ensuring meaningful public participation. Meaningful public participation requires a substantive review and response to the public's concerns, weighing the probative value of each. It also requires clear guidance on the meaning of public interest. Without some guidance and response mechanism, this Board's important focus on public participation may lead to arbitrary results and a more frustrated public.

The rules should include more guidance on the public interest prong because recent public interest decisions have yielded arbitrary outcomes.[1] Staff has recently approached the public interest prong by tallying the number of comments opposed versus the number of comments in support of a project, but with wildly different results. In the 2016 *Duke* pipeline extension case most of the 1,390 comments were opposed. That opposition slightly altered the route of the pipeline, but did not prevent the project from getting a certificate. In contrast, staff recommended the roughly 40 comments in opposition to the *Scioto Farms Solar* application were too much for the project to go forward at all. Staff said "[w]hile some local opposition is common in many siting projects," the local opposition in this case made the project against the public interest.[2] However, this staff report does not explain why the overwhelming opposition in *Scioto Farms*, a solar project, is different from the *Duke* natural gas case. Each of these projects had opposition by local residents, officials, and emergency response personnel but very different staff recommendations.

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[1] *Scioto Farms Solar*, Case No. 21-0868-EL-BGN; *contra Duke Central Corridor Extension Gas Pipeline,* Case No. 16-0253-GA-BTX.

[2] *Scioto Farms Solar,* Staff Report, 45.

This example also demonstrates the need for substantive responses to public comments in the staff report. In both the *Duke* and *Scioto Farms* cases discussed above, many of the public comments expressed confusion about how their comments were used in the process. By responding directly to commenters in the staff report, the public will know the board reviewed their input.

This process would also allow this Board to foster more public conversation and correct false information spreading within a community. For example, many commenters in the *Scioto Farms* case mentioned fears that solar farms will reduce property values. Many of the commenters to these proposed rules refer to a study they say proves solar farms reduce property values by 30%. The researchers in that University of Texas study asked local appraisers in rural areas to rate whether solar farms would affect property values. Some appraisers had no experience with properties near solar projects. The appraisers with no practical experience were more likely to say solar would negatively affect property values. The Texas researchers found "experience assessing near a solar installation is associated with a much less negative estimate of impact."[3] In contrast, a study in Rhode Island and Massachusetts tracked the values of actual properties located near solar installations.[4] That study found solar *did not* negatively affect rural property values, only suburban ones. If the staff report was required to find this study and respond directly to these concerns, the Board would be able to foster a more robust and informed community conversation about property values.

Other Ohio agencies already practice this model for public comments. The Ohio EPA's response to comments on a proposed permit summarize public comments into certain categories and respond to each with anything from one sentence to several paragraphs. For example, here is an excerpt from the Ohio EPA's review of a recent antidegradation application for Plain City:

> *Comment 6:* Ensure that Big Darby Creek will be restored, such as through a determination that water quality will allow the return to this segment of Big Darby Creek of rare and sensitive species of mussels and fish. Antidegradation and related measures should not just mean that the streams are just protected to meet minimum standards of the Clean Water Act.
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> *Response 6:* Please see Response 4. A detailed antidegradation analysis was conducted and loadings of regulated pollutants are proposed to be capped, resulting in concentration limits being reduced in the draft NPDES permit to levels lower than what would be calculated using typical modeling procedures.

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[3] Leila Al-Hamoodah et al., *An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations, The University of Texas at Austin*, p.16 (May 2018). A copy is included as Exhibit B.

[4] Vasundhara Gaur and Corey Lang, *Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island*, University of Rhode Island (Sept. 29, 2020). A copy is included as Exhibit C.

The OEC agrees that this Board's legal obligation to consider the public interest includes meaningful input from the public. However, the OEC fears that the Board's recent practice of merely counting the number of comments for and against a project falls short of the statutory intent. This practice makes the Board vulnerable to inadvertently confirming false or misleading information circulating in a community because it does not weigh comments based on inaccurate information any differently than those based on peer-reviewed, sound evidence. Thus, we encourage this Board to utilize the rulemaking process as an opportunity to ensure meaningful public participation. The rules should include guidance on the meaning of public interest and require the staff report to respond directly to public comments.

B. The OEC encourages this Board to ensure applicants and staff account for climate change throughout the application process.

All future Ohio Power Siting Board cases must closely and holistically consider the project's impact on our environment and its relationship to climate change. The OPSB's primary legal obligation is to "ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service."[5] The science shows climate change is caused by anthropogenic greenhouse gas emissions (GHGs), and the electric power sector is one of the largest contributors to GHGs. The OPSB's proposed rules do not adequately factor climate impacts into its decision-making process.

This omission is a critical failure of this Board.

In the application stage, electric generation facilities—and natural gas pipelines—need to communicate information regarding climate impacts in their applications. This could include an estimate of greenhouse gasses emitted over the project's useful life; a GHG mitigation plan; whether the proposed project will directly result in the decommissioning of other greenhouse gas emitting projects; and predicted impacts of future climate shifts to the project location.

In the evaluation stage, the OPSB needs to explicitly acknowledge climate change's role in the elements under ORC 4906.10(A). In particular, the public interest and environmental impact prongs should include consideration of climate change. An example is the National Audubon Society's suggestion to provide preference or incentives to projects proposed on brownfield sites.[6] This Board can no longer ignore the public health and environmental implications of greenhouse gas emissions at the local, state, national, and international level in analyzing essential elements of the siting process.

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[5] R.C. 4928.02(A).

[6] Gary George and Adam Forrer, Comment on Docket No, 21-0902, National Audubon Society, Great Lakes (Aug. 1, 2022).

i. The OPSB cannot ensure reliable, safe electricity to consumers without considering climate change.

As the global and local impacts of human-induced climate change increase, this Board can no longer ignore climate change in the siting process. As Ohio faces more extreme heat and winter weather, Ohio's demand for power will significantly increase.[7] These challenges require this Board to foster more energy sources to meet this demand, while ensuring these sources do not worsen climate change and are prepared for extreme weather. Thus, this Board must require climate change considerations throughout the siting process, from the application itself to the elements necessary for approval, including the public interest analysis.

Climate change has had a global impact on our ecosystems and infrastructure. The 2022 UN report on the impacts of climate change observed high or very high changes in ecosystem structure, shifts in species, and changes in timing on land and water in North America.[8] US emissions cost the world $1.9 trillion in economic damages.[9] These impacts will only continue to increase.[10] Climate change has not only become an environmental concern but is also starting to shape consumer choices and drive the job market.[11] US customers are becoming increasingly concerned about purchasing energy sources with limited impact on climate change.[12]

While climate change is a global problem, Ohio and the Midwest have also directly felt the devastating impact of climate change. The Fourth National Climate Assessment outlines many of the risks faced by the region, including increased precipitation, extreme temperatures, and worsening air quality days.[13] Specifically for Ohio, even just over the last century, "rainfall

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[7] Union of Concerned Scientists, *Killer Heat in the United States: The Future of Dangerously Hot Days*, available at: https://ucsusa.maps.arcgis.com/apps/MapSeries/index.html?appid=e4e9082a1ec343c794d27f3e12dd006d1.

[8] Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2022: Impacts, Adaptation, and Vulnerability, Summary for Policymakers*, (2022), available at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

[9] Diana Kruzman, *US Emissions Cost the World $1.9 Trillion in Economic Damages*, Grist (July 13, 2022) available: https://grist.org/climate/us-emissions-cost-other-countries-1-9-trillion-in-economic-damages/?utm_medium=emai.

[10] "Climate Change Is Expected to Affect Every Aspect of the Electricity Grid." U.S. Government Accountability Office, *Electricity Grid Resilience: Climate Change Is Expected to Have Far-reaching Effects and DOE and FERC Should Take Actions* (Mar. 2021) available at: gao-21-346.pdf.

[11] A recent McKinsey study shows adapting to climate change is critical to avoid significant physical and socioeconomic outcomes. *See*, Kimberly Henderson et. al, *Climate math: What a 1.5-degree pathway would take*, McKinsey Quarterly, (April 2020), available at: https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-math-what-a-1-point-5-degree-pathway-would-take).

[12] Associated Press, *Presbyterians agree to divest from fossil fuel companies*, (July 8, 2022) available at: https://apnews.com/article/religion-phillips-66-16a0c164a6f2444537f16e9bbd778b7a?utm_medium=email

[13] The OEC has attached the Midwest chapter of the Fourth National Climate Assessment as "Exhibit A." 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller,

during the four wettest days of the year has increased about 35 percent, and the amount of water flowing in most streams during the worst flood of the year has increased by more than 20 percent."[14] These shifts in regional weather, directly caused by climate change and greenhouse gas emissions, will create untold costs for communities across Ohio. According to a recent analysis, the cost of climate change to municipalities in Ohio could increase by up to $5.9 billion *annually* by mid-century.[15]

Ohio's power sector has not been immune to these changes. The recent power outages striking Central Ohio were caused by extreme weather followed by breakdowns in the distribution system,[16] crises that will only become more prevalent over the next century.[17] In the Commission's hearing with AEP Ohio and PJM, PJM specifically stated that additional demand response (i.e., additional energy generation resources) could have alleviated some of the power loss experienced in Central Ohio.[18] These types of large scale, public interest concerns must factor into the Board's decision when approving or denying renewable energy projects. Likewise, climate change will shift weather patterns, and all energy generation facilities should be accounting for the shifting climate as they are developing their application and considering risks, like flood plains.

While Ohio's power industry is facing operational challenges due to climate change, it is also facing increased need. According to a 2019 report by the Union of Concerned Scientists, Ohio's days over 90 degrees will likely triple from the historical average.[19] This increase in hot days will only create more demand for electricity to cool residences, hospitals, schools, etc.[20] These stark projections are a clear mandate to this Board to ensure it is not stifling renewable energy generation in Ohio.

D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 872–940. doi: 10.7930/NCA4.2018.CH21

[14] *What Climate Change Means for Ohio*, United States Environmental Protection Agency, (August 2016), available at: https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-oh.pdf.

[15] This report was jointly developed by the Ohio Environmental Council, Power A Clean Future Ohio, and Scioto Analysis. *The Bill Is Coming Due: Calculating the Financial Cost of Climate Change to Ohio's Local Governments*, Scioto Analysis, (July 2022), available at: https://www.poweracleanfuture.org/oh-municipal-costs-of-climate-change

[16] Alissa Widman Neese, *Dangerous heat wave and power outages hit Central Ohio*, Axios Columbus (Jun. 15, 2022) available at: Record-breaking heat wave leads to power outages in Columbus, Ohio - Axios Columbus.

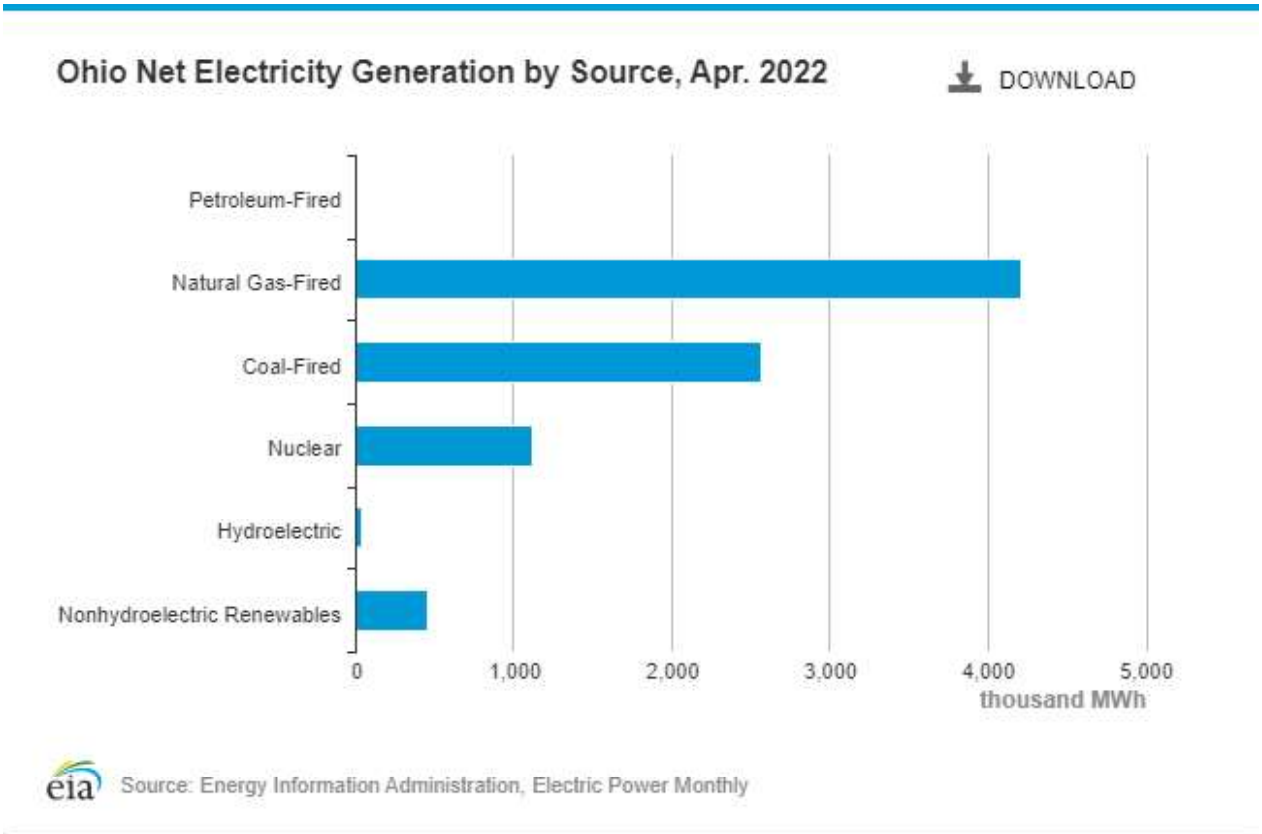
[17] "[W]e know that we're having in the country and even in this area due to climate change and other impacts more frequent and more severe storms." In the Matter of the Power: Outages that Occurred June 14-16, 2022, as Explained by AEP Ohio and PJM Interconnection, LLC., *Proceedings*, Public Utilities Commission of Ohio, p. 70, line 7-8 (July 13, 2022)

[18] *Id*. at p. 15-16.

[19] *See*, *supra*, Killer Heat.

[20] Power a Clean Future Ohio, T*he Bill is Coming Due Calculating the Financial Cost of Climate Change to Ohio's Local Governments* (July 2022) available at: https://static1.squarespace.com/static/602c33437336ed7a5ac5b3e6/t/62d5af4852f5bb7fd5abc700/1658239260260/OH-MunicipalCostsOfClimateChange.pdf. Included as Exhibit D.

Ohio's power sector has been a major contributor to climate change. The vast majority of Ohio's electricity still comes from coal and natural gas, to energy sources that produce greenhouse gas emissions. As of April 2022, according to the Energy Information Administration, Ohio still utilized over 6000 MWh of greenhouse gas-producing energy sources (See Table 1). Nationwide, the electric power sector accounted for 32% of all greenhouse gas emissions in 2021.[21]



ii. Applications: All siting applications should include a description of the project's relationship to climate change.

The requirements for all applicants in O.A.C. 4906-4-06 and 08 should include a description of the project's contributions to climate change, climate adaptation plans, climate mitigation plans, and any other relevant information on the project's relationship to climate change. These

[21] *Energy and the Environment Explained*, Energy Information Administration, (June 24, 2022), available at: https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php

provisions are missing from multiple aspects of the application process. A detailed description of our suggested changes can be found in the next section. However, here are some examples:

- The project summary and applicant information in 4906-4-03 should require a projection of the greenhouse gasses the project will emit over its useful life;
- The cost estimates in 4906-4-06 should include the social cost of carbon;[22]
- The health and safety provisions on 4906-4-08 should add a section (F) to cover extreme weather and climate change adaptation plans; and
- Decrease application barriers and increase incentives for solar projects developed on brownfields.

As discussed above, Ohio's increases in extreme weather should require developers to plan for climate change and mitigate any additional contributions to climate change. Climate adaptation plans should require an analysis of how applicants account for the impacts of climate change in planning projects, including emergency response plans, floodplain analysis, impacts to vegetation, and more.

Climate mitigation plans should require any applicant producing greenhouse gas emissions to illustrate how, if at all, they plan to mitigate their greenhouse gas emissions. Applicants could propose many greenhouse gas mitigation approaches, like implementing carbon capture technology, purchasing carbon credits, or investing in carbon sinks (like newly planted trees). The Board should also reduce application barriers for projects that mitigate contaminated areas, such as solar projects proposing construction on brownfields. The science of climate change is undisputed—we only have a few years left to chart a path toward a net-zero carbon energy system. Any project seeking approval from the Ohio Power Siting Board must share how it plans to mitigate its contribution to this immense public health risk.

iii. Evaluation: **Climate change must be implemented in the Board's public interest calculus under R.C. 4906.10(A)(6) and environmental impact under (A)(2).**

Historically, OPSB decisions have lacked a discussion of climate change, though recent decisions have acknowledged public support for projects based on their climate impacts. Given the weight of evidence regarding the infrastructure, public health, and other impacts of climate change, any public interest discussion without climate change is unlawful and unreasonable.

The manifest weight of evidence demonstrates the threat climate change poses to human health, electric grid stability, and the environment. Ohioans are seeing the impacts this summer, as they

[22] The Biden Administration has set the social cost of carbon to $51 per ton. For more information about the social cost of carbon, visit: White House, T*echnical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide* (Feb. 2021) (available at: https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdfilable). Included as Exhibit E.

experience more high temperature days than ever before. June 2022 was especially warm: "Looking at just land temperature, June 2022 was the Northern Hemisphere's second-warmest June on record — 2.81 degrees F (1.56 degrees C) above average — behind June 2021's record high land temperature. Europe and Asia also had their second-warmest June land temperature on record."[23] Ohio itself experienced extreme temperatures almost never seen before in June: for instance, the Youngstown region experienced the highest heat index recorded in June since 1947.[24] These hotter days increase demand for electricity to cool homes, businesses, and public buildings.

Because electric generation contributes to 32% of all greenhouse gas emissions in the United States, *See* FN 12, all governmental bodies regulating such facilities cannot ignore the contributions to climate change. It is fundamentally in pursuit of the public interest to appropriately weigh a project's contributions to climate change alongside other salient factors. To ignore them in any public interest analysis is like an ostrich sticking its head in the sand.

Any future Board rules must specifically outline a public interest analysis both for the Staff and the Board itself to consistently utilize when assessing any future electric generation facility or pipeline in Ohio. Every new renewable energy project denied is a lost source of carbon-free electricity. Every new fossil-fuel-fired facility is a locked in source of future greenhouse gas emissions. There may be additional factors necessary to weigh in that analysis, such as the need for additional sources of electricity, local socio-economic concerns, and beyond, but climate change must be an essential, overarching factor.

Similarly, climate change must be directly integrated into the Board's environmental impact determinations under R.C. 4906.10(A)(2). This Board should not approve an applicant who has not provided information on the nature of its probable impact to climate change. For renewable energy projects, this would include a calculation of how its carbon-free energy mitigates the causes of climate change. For future fossil-fuel-fired facilities, the analysis would include an accounting of total greenhouse gas emissions and any plans to mitigate those greenhouse gas emissions.

C. The OEC asks this Board to apply consistent requirements, where possible, for all electric generation facilities, pipelines, and transmission lines.

The OEC suggests eliminating proposed section 4906-4-09 (the "renewable-specific section") or expanding this section to all applicants. Ohio law prohibits this Board from duplicative and unreasonable rulemaking. R.C. 106.031. Ohio law also prohibits unreasonable rulemaking which

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[23] June 2022 was Earth's 6th warmest on record, National Oceanic and Atmospheric Administration, (July 14, 2022), available at: https://www.noaa.gov/news/june-2022-was-earths-6th-warmest-on-record

[24] Ryan Halicki, Heat index Wednesday hottest in at least 75 years in June, WKBN First News, (June 15, 2022), available at: https://www.wkbn.com/weather/heat-index-wednesday-hottest-in-at-least-75-years-in-june/

"is not in accordance with reason, or . . . has no factual foundation."[25] The renewable-specific section here is duplicative because each of the six substantive categories in the renewable-specific section, covering 17 pages, are already discussed in earlier sections of chapter 4906-4. Many of those earlier sections already include carve outs for renewable industries where applicable. While regulatory burden is often necessary to meet the critical objectives of ensuring safe and reliable power to Ohio, the proposed renewable-specific section has no reasonable rationale for these extra burdens on renewable applicants.[26]

The renewable-specific section is unlawful and unreasonable because most of this section only adds administrative or aesthetic burdens, rather than safety or substantive changes. For example, all applicants must complete geological testing through boreholes, but only renewable applicants must fill boreholes after completing the testing. OAC 4906-4-09(A)(2)(b)(iv) *contra* proposed OAC 4906-4-08(A)(5)(d). As another example, all applicants must create a plan to manage noxious weeds, but renewable applicants must also submit a yearly status report on that noxious weed management. Proposed OAC 4906-4-09(C)(3)(e) *contra* proposed OAC. Each of these additional requirements add needless costs and time for both this Board and developers with no evidence-based reasoning.

The renewable-specific section is also unnecessary because earlier sections of chapter 4906-4 already have reasonable carve outs for renewable applicants, like shadow flicker and blade shear. Proposed OAC 4906-4-08(A)(7) - (9). In fact, the first five categories (A-F) of the renewable-specific section already have dedicated sections earlier in the same chapter.[27] This creates an unnecessary administrative burden on businesses and complicates public understanding of application requirements.

In contrast, there are no changes in these proposed rules specific to fossil-fuel-fired electric generation facilities. This unreasonable focus on renewables overlooks the serious need for similar rules on fossil-fuel-fired plants as well as fossil fuel infrastructure, like pipelines. As a result, this Board fails its mandate to ensure safe access to electric generation for all Ohioans. For example:

> Setbacks: The renewable-specific section requires a lot of burdensome setback requirements in 4906-4-09(G)(4). There are no setback requirements for natural gas pipelines. However, natural gas pipelines create serious safety concerns for nearby

[25] *Citizens Committee v. Williams*, 56 Ohio App. 2d 61, 70, 381 N.E. 2d 661, 667 (1977).

[26] In Attachment H, Question 11, this Board noted it used no scientific data in drafting section 4906-4-09.

[27] Dedicated sections on construction, use, maintenance, and change can be found in 4906-4-08(A)-(C); erosion is in 4906-4-08(E) which is dedicated to soil management; aesthetics are in 4906-4-08(D)(6); wildlife protection is in 4906-4-08(B)(2); noise is in 4906-4-08(A)(3); and decommissioning is in 4906-4-06(F)(2).

residents. Gas pipelines create risks of explosion, injury, and death.[28] Ohio residents would benefit from similar rules on setbacks.

Decommissioning bonds: Similarly, the proposed rules require a bond for decommissioning renewable applicants, but no similar measure for fossil fuels. This lapse is particularly striking because the risk of hazardous material contamination is much higher during the decommissioning of coal and natural gas plants compared to wind and solar.[29]

This renewable-specific section will deter business from coming to Ohio. Very few, if any, other states put similar burdens on renewables to those proposed here. South Dakota has the closest rule provision to the one proposed here, and that has only thirteen, single-sentence, straightforward additions to renewable applications.[30] In contrast, many other states are welcoming renewable energy investments. For example, the Public Service Commission of Wisconsin is pursuing a "roadmap to zero carbon."[31] With some of the most restrictive siting rules for renewables of any state in the nation, the current renewable-specific provisions will deter important investments in Ohio.

The additional requirements in the proposed renewable-specific section are largely redundant or unreasonably burdensome and should be removed. Where this Board thinks these additional requirements are necessary to fulfill its statutory obligations, these rules should apply to all applicants. Where this Board chooses to apply rules to only one generation source, it must narrowly tailor them to a specific, evidence-based reason.[32]

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[28] Hundreds of thousands of natural gas pipeline leaks happen each year with the potential to escalate into injuries or death. From 1985 to 2003, the U.S. Office of Pipeline Safety found natural gas pipelines caused, on average, 11 incidents a year leading to deaths and 17 a year leading to injuries. Allegro Energy Consulting, *Safety Incidents on Natural Gas Distribution Systems: Understanding the Hazar*ds, Office of Pipeline Safety, U.S. Dept. of Transportation (April 2005) (available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/technical-resources/pipeline/gas-distribution-integrity-management/61731/safetyincidentsonnaturalgasdistributionsystemsunderstandinghazards.pdf.

[29] Taylor Curtis et. al, Best Practices at the End of the Photovoltaic System Performance Period, National Renewable Energy Laboratory (Feb. 2021) available at: https://www.nrel.gov/docs/fy21osti/78678.pdf; Environmental Protection Agency, Cal Plant Decommissioning, available at: https://www.epa.gov/sites/default/files/2016-06/documents/4783_plant_decommissioning_remediation_and_redevelopment_508.pdf; Canada Energy Regulator, Pipeline Decommissioning, available at: https://www.cer-rec.gc.ca/en/consultation-engagement/land-matters-guide/pipeline-decommissioning.html; https://digitalcommons.law.lsu.edu/cgi/viewcontent.cgi?article=1234&context=jelr.

[30] S.D. Admin. R. 20:10:22:33.02.

[31] Public Service Commission of Wisconsin, Docket No. 5-EI-158, Roadmap to Zero Carbon Investigation (April 2, 2021) (available at: https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=408370). Included as Exhibit F.

[32] For example, a wind turbine is the only electric generation source currently capable of creating shadow flicker. It makes sense that specific rules regarding shadow flicker would apply to wind turbines.

II. Specific suggestions to ensure innovation and meaningful public engagement in Ohio's power siting process.

Please find below the OEC's specific recommended changes to the current proposed rules for chapters 4906-1, 4906-3, and 4906-4. These comments are grounded in this Board's goal to eliminate confusion and improve public access to the siting process.

A. § 4906-1-01 provides definitions for the terms used in these rules.

Recommended revision: Include a definition of "public interest" and "environmental impact" that explicitly includes climate change and excludes the mere tallying of comments.

> *Proposed definition*: "For the purposes of ORC 4906.10(A)(6), and this section, the public interest, convenience, and necessity requires a broad balancing of factors beyond counting comments in support versus opposed. Factors relevant to public interest include, but are not limited to, mitigating climate change, maintaining market competition, ensuring electric reliability, and safety concerns.
>
> *Proposed definition*: "For the purposes of ORC 4906.10(A)(2), environmental impact includes, but is not limited to, potential contributions to climate change."

By setting some boundaries and examples around the meaning and scope of "public interest" this Board will avoid arbitrary results and encourage a clear, meaningful implementation of this important siting element.

B. § 4906-1-02 outlines the purpose and scope of these rules.

Recommended revision: Add a section (C) that commits all board members and administrative adjudicators to the Ohio Code of Judicial Conduct.

This suggestion is a best practice among adjudicative agencies. The Ohio EPA already requires agency adjudicators to adhere to Ohio's judicial code of ethics. The Ohio Consumers Counsel has requested the PUCO subject itself to this same code of ethics. Having a standard code of ethics across all judges and administrative adjudicators provides a clear and transparent system for the public. It will help to restore public trust in the Ohio Power Siting Board following recent scandals at the PUCO.

C. § 4906-3-03 (A)(1) reads:

> (1) A basic description of the project that shall include information about the anticipated function, equipment size, approximate acreage, general location, schedule, and purpose of the project.

Recommended revision: In addition to adding acreage to this section, also add a requirement that the preapplication discuss the project's potential environmental impacts and benefits. The new language could be:

> (1) A basic description of the project that shall include information about the anticipated function, equipment size, approximate acreage, general location, schedule, environmental impacts/benefits (including the project's relationship to climate change), and purpose of the project.

Consistent with this Board's emphasis on public participation, including the environmental impacts and benefits in the preapplication will allow the public to evaluate the benefits and disadvantages of the proposed project from the beginning of the process. Prompting applicants to review these issues during the preapplication stage will also ensure that sound, expert-driven information is presented to the public. This early information could also lessen the public's reliance on outside sources, with varying standards on fact-checking.

D. § 4906-3-03 (B) final sentence reads:

> If, under division (A)(2) of section 303.62 of the Revised Code, a county adopts a resolution limiting the boundaries of the proposed facility, the applicant will reconduct any public informational meeting or meetings that it had conducted under this paragraph prior to the county's adoption of that resolution, to reflect the updated boundaries under the county's resolution.

Recommended revision: Adjust the new requirement for applicants to reconduct any public informational meetings following a county's change in the boundaries of a facility to only those applicants who have not yet entered the PJM interconnection and regional transmission organization, L.L.C., new services queue. Thus, changing the language to:

> If, under division (A)(2) of section 303.62 of the Revised Code, a county adopts a resolution limiting the boundaries of the proposed facility, any applicant who has not yet entered the PJM interconnection and regional transmission organization, L.L.C., new services queue will reconduct any public informational meeting or meetings that it had conducted under this paragraph prior to the county's adoption of that resolution, to reflect the updated boundaries under the county's resolution.

Generally, the OEC encourages this Board to ensure consistency in the siting process, both with these proposed rules and as changes occur from outside entities. This Board should provide clear guidance on how these rules will affect current applicants. These proposed changes should not apply to any current applicants, and the Board should make this clear to all staff and applicants. To that end, this Board should also ensure applicants' investments are not upended overnight due to county action on restricted zones. These rules should make clear that any applicant who has

already entered into an interconnection agreement with PJM will not be affected by post-hoc actions from county commissioners.

E. § 4906-3-06 (A) reads:

> The applicant shall file a preapplication notification letter with the board at least twenty-one days prior to the date of any public informational meetings held pursuant to paragraph (B) of this rule. The preapplication notification letter shall include the following information:
>
> (1) A basic description of the project that shall include information about the anticipated function, equipment size, approximate acreage, general location, schedule, and purpose of the project.
>
> (2) The date, time, and location of the public informational meetings to be held pursuant to paragraph (B) of this rule.
>
> (3) A list of any waivers of the board's rules that the applicant anticipates it will be requesting for the project.
>
> (4) Confirmation that the applicant has prominently posted the information describes in this section on its website prior to filing the preapplication notification letter.

Recommended revision: Add an additional section "(5) A list of anticipated environmental impact studies the applicant will conduct during the application process."

As discussed above, this addition will assuage community concerns about how environmental issues will be investigated. It also allows the PUCO and public to provide direct comment on the prudence of planned assessments. Interested parties often challenge the studies used for determining environmental impact at the public hearing. This late stage challenge makes it difficult for applicants to adjust or start brand new assessments. Including the proposed studies earlier in the application process allows interested parties to provide input earlier in the process.

F. § 4906-3-06 (B) reads:

> After satisfying any applicable meeting requirements under section 303.61 of the Revised Code, and no more than ninety days prior to submitting a standard certificate application to the board, the applicant shall conduct at least two informational meetings open to the public to be held in the area in which the project is located. … If, under division (A)(2) of section 303.62 of the Revised Code, a county adopts a resolution limiting the boundaries of the proposed facility, the applicant will reconduct any public informational meeting or meetings that it had conducted under this paragraph prior to the county's adoption of that resolution, to reflect the updated boundaries under the county's resolution.

Recommended revision: Change the final sentence to "If, under division (A)(2) of section 303.62 of the Revised Code, a county adopts a resolution limiting the boundaries of the proposed facility, before the certificate application submission under ORC 4906.06, the applicant will

reconduct any public informational meeting or meetings that it had conducted under this paragraph prior to the county's adoption of that resolution, to reflect the updated boundaries under the county's resolution."

Alternative recommended revision: Change the final sentence to "If, under division (A)(2) of section 303.62 of the Revised Code, a county adopts a resolution limiting the boundaries of the proposed facility, before a letter of completeness is issued, the applicant will reconduct any public informational meeting or meetings that it had conducted under this paragraph prior to the county's adoption of that resolution, to reflect the updated boundaries under the county's resolution."

G. § 4906-3-07(B) reads:

> (B) In the case of a standard certificate application regarding a jurisdictional wind or solar facility, or an application for a material amendment as defined in section 303.57 of the Revised Code, not later than three days after the administrative law judge determines the applicant's compliance with division (A) of section 4906.31 of the Revised Code, the board will provide a full and complete copy of the application to each board of trustees and each board of county commissioners of the townships or counties in which the facility is to be located. In this case, the applicant need not provide a copy of the application to those entities under paragraph (A) of this rule.

Recommended revision: Remove the reference specific to wind and solar facilities by cutting out the first half of the first sentence. Thus, starting this section at "[N]ot later than three days …."

H. § 4906-4-03(B)(3)(d) reads:

> (d) A list of types of pollutant emissions and estimated quantities.

Recommended revision: Add the phrase, "including greenhouse gas emissions over the project's useful life" to the end of this sentence.

I. § 4906-4-06(E)(1)-(4) reads:

> (E) The applicant shall provide information regarding the economic impact of the project.
>
> > (1) The applicant shall provide an estimate of the annual total and present worth of construction and operation payroll.
> >
> > (2) The applicant shall provide an estimate of the construction and operation employment and estimate the number that will be employed from the region.
> >
> > (3) The applicant shall provide an estimate of the increase in county, township, and municipal tax revenue accruing from the facility.

(4) The applicant shall provide an estimate of the economic impact of the proposed facility on local commercial and industrial activities.

Recommended revision: Include a fifth section that requires the applicant to estimate the social cost of carbon (SCC) according to the federal guidelines in 86 F.R. 7037 (2021): "(5) The applicant shall provide an estimate of the social cost of carbon (SCC) according to the table below and federal guidance."

U.S. EPA Estimates for Social Cost of Carbon with a 3% discount rate from 2020 to 2050	
Year	Dollars per ton
2020	$51
2025	$56
2030	$62
2035	$67
2040	$73
2045	$79
2050	$85

J. § 4906-4-08 lays out several categories of considerations in sections (A)-(H).

Recommended revision: Add a section (F) to capture extreme weather conditions and climate change. For example:

(F) The applicant shall provide information regarding plans to prepare for extreme weather and climate change.

(1) Climate adaptation plan. The applicant shall submit a climate adaptation plan which:

(a) predicted climate shifts to the project site during the project's useful life;

(b) explains the projected impact of severe weather events on the project's capacity and operation;

(c) estimate the costs of repair likely to be incurred from extreme weather; and
(d) explains how the developer will adapt construction to prevent major operational or safety issues from extreme weather.

(2) Climate mitigation plan
(a) whether the proposed project will directly result, or likely result, in the decommissioning of greenhouse gas emitting projects;
(b) measures taken to limit greenhouse gas emissions;
(c) other activities, including carbon storage technology, carbon credits, or other viable techniques to counteract any emitted greenhouse gas emissions from the proposed project.

(3) Emergency response plan
(a) types of severe weather events most likely to affect the project site;
(b) frequency of these weather events forecasted for the project site;
(c) construction measures planned to avoid major damage during severe weather events.

K. the title to § 4906-4-09 reads:

Regulations associated with renewable energy generation facilities. The following requirements are applicable to a renewable energy generation facility.

Recommended revision: Remove this section as redundant with section 4906-4-08. Where this section adds new requirements not included in 4906-4-08 or not otherwise required by statute, these additional requirements are unreasonably burdensome on business under R.C. 107.61,

Alternative recommended revision: change title to "Additional conditions for electric generation plants and associated electric power transmission lines or gas pipelines." Also, change the second sentence from targeting renewable energy generation to exempting renewable projects proposed on brownfield sites: "The following requirements are not applicable to renewable projects proposed on brownfield sites."

Applying this section to all energy generation will ensure a fair process for all applicants. It will also avoid discouraging innovative energy generation projects from coming to Ohio and limiting Ohio's energy market. Also, to the extent these additional regulations are important to improve safety and security of Ohio energy generation; they should apply to all projects.

The OEC also joins calls from clean energy developers and the National Audubon Society to incentivize renewable project development on existing brownfields. Many of the commenters opposing solar projects in Pickaway County have also expressed a preference for solar fields to

be developed on old oil and gas sites before farmland. By creating incentives, like reducing application barriers in 4906-4-09, this Board can respond to the interests of multiple stakeholders, while also mitigating previously contaminated oil and gas sites in Ohio.

L. § 4906-4-09(A)(2)(a)(ii) reads:

> (ii) The applicant shall maintain a copy of this safety manual in the operations and management building of the facility.

Recommended revision: Remove as redundant because section 4906-4-08(1)(d) already requires the applicant to, "Include a complete copy of the manufacturer's safety manual or similar document and any recommended setbacks from the manufacturer."

M. § 4906-4-09(A)(2)(b)(iii) reads:

> The geotechnical exploration and evaluation shall include borings to provide subsurface soil properties, static water level, rock quality description, per cent recovery, and depth and description of the bedrock contact and recommendations needed for the final design.

Recommended revision: Remove as redundant because section 4906-4-08(5)(d)(i)-(v) already requires the applicant to include test borings that analyze the five categories listed above.

N. § 4906-4-09(A)(3)(a) reads:

> The applicant shall maintain the wind farm equipment in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and security measures.

Recommended revision: Remove the specific reference to "wind farm" to open this requirement up to all applicants.

O. § 4906-4-09(A)(3)(e) reads:

> The Applicant shall prevent the establishment and propagation of noxious weeds identified in Ohio Adm.Code Chapter 901:5-37 in the project, including its setback areas, during construction, operation, and decommissioning via procedures and processes specified and required by the project's vegetation plan. The Applicant shall provide annual proof of weed control for the first four years of operation, with the goal of weed eradication significantly completed by year three of operation.

Recommended revision: Remove this section as unnecessarily burdensome. Section 4906-4-08(B)(5) already requires a developer to take steps to eliminate noxious weeds and comply with

any public orders of abatement of weeds. Thus, the rules already contemplate the need to abate noxious weeds, and allow local officials to manage and cite any unnecessary noxious weed growth. Finally, if a particular project site has a particularly invasive or disease-carrying noxious weed, this Board may always include annual proof of weed control as a condition in that specific site's certificate. Including this requirement for all applicants is too broad and creates an unreasonable burden on businesses.

P. § 4906-4-09(A)(3)(f) reads:

> The Applicant shall, to the extent practicable, minimize the clearing of wooded areas, including scrub/shrub areas, which would lead to fragmentation and isolation of woodlots or reduce connecting corridors between one woodlot and another.

Recommended revision: Remove as redundant because the exact same language is already included in section 4906-4-09(D)(6).

Q. The first sentence of § 4906-4-09(F)(3) reads:

> The applicant shall, at its expense, complete decommissioning of the facility, within twelve months after the end of the useful life of the.

Recommended revision: Add the word "facility." to the end of this sentence.

R. § 4906-4-09(G)(3) reads:

> Fencing. Solar panel perimeter fence type is to be both small-wildlife permeable and aesthetically fitting for a rural location. Such fencing requirement does not apply to substation fencing governed by the National Electric Safety Code or other similar safety code standards applicable to substations.

Recommended revision: Replace the term "aesthetically fitting for a rural location to "consistent with recommendations from the Ohio Landscape Architects Board." This would remove the unreasonably vague term "rural aesthetic" and make this section overall more consistent by utilizing the same resource recommended in part 5 of this section.

S. § 4906-6-04(B)(2) reads:

> (B) If an applicant requests expedited processing of an accelerated certificate application . . . the applicant shall:
>
> (2) Pay a fee of two thousand dollars due at the time of the filing. This payment is in addition to the payment due pursuant to paragraph (C) of this rule.

Recommended revision: Exempt the $2,000.00 filling for expedited renewable applications planned on brownfield sites. The new section (B)(2) could read:

> (2) With the exception of renewable projects proposed on brownfield sites, pay a fee of two thousand dollars due at the time of the filing. This payment is in addition to the payment due pursuant to paragraph (C) of this rule.

CONCLUSION

The OEC thanks this Board for the opportunity to provide feedback on its proposed rules. As the impacts of climate change to Ohio become ever more apparent, we look forward to seeing the agency implement fair rules without undue burdens on renewable energy projects.

Now, more than ever, it is essential for Ohio to implement climate policy into all facets of our government. Climate change is impacting us now, and we must act now to avoid its worst impacts.

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Respectfully submitted,

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