

Committee on Environment and Natural Resources % Legislative Information Office 100 State House Station Augusta, ME 04333

March 31, 2025

Re: LD 935, Resolve, Directing the Department of Environmental Protection to Report on Air and Soil Chemical and Metal Levels and on Soil Testing on Solar Panel Farm Sites

Dear Senator Tepler, Representative Doudera and Members of the Committee:

Thank you for the opportunity to share testimony in opposition to LD 935, *Resolve, Directing the Department of Environmental Protection to Report on Air and Soil Chemical and Metal Levels and on Soil Testing on Solar Panel Farm Sites,* on behalf of the Maine Renewable Energy Association (MREA). MREA is a not-for-profit association of renewable energy producers, suppliers of goods and services to those producers, and other supporters of the industry. Our member companies include wind, solar, hydropower, biomass, and tidal energy generators and developers of such projects, as well as companies that provide services to those producers, such as environmental engineers, electricians, and general contractors.

LD 935 proposes to direct the Department of Environmental Protection (Department) to submit a report to the Committee with "information regarding soil testing done by the Department on solar panel farm sites in the State, including testing done before installation, testing done after installation and any ongoing testing, and any results of that testing".¹ MREA opposes this bill because similar–if not the same–testing and reporting has already taken place and as such, is not an efficient use of State resources.

A guide from the Massachusetts Department of Energy Resources, "Clean Energy Results, Question & Answers, Ground-Mounted Solar Photovoltaic Systems", compiles and distills academic literature on public and environmental health concerns (among other concerns) regarding solar development.² In response to the question, "What, if any, health risks do

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¹ LD 935 also proposes to direct the Department to submit a report that includes "available information on the levels of chemicals and metals, both airborne and in soil, in the State, including information on any periodic sampling performed by the Department." Though MREA's testimony does not include comment on this specific portion of the bill, some of our concerns regarding the other portion of the bill are applicable.

² See Massachusetts Department of Energy Resources, "<u>Clean Energy Results, Question & Answers,</u> <u>Ground-Mounted Solar Photovoltaic Systems</u>". June 2015.

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chemicals used to manufacture solar panels and other devices used in solar PV arrays pose if they are released into the environment?" the guide states, in part: "Because PV panel materials are enclosed, and don't mix with water or vaporize into the air, there is little, if any, risk of chemical releases to the environment during normal use. The most common type of PV panel is made of tempered glass, which is quite strong. They pass hail tests, and are regularly installed in Arctic and Antarctic conditions."³

The guide goes on to say that solar panel materials are contained in a solid matrix that is insoluble and non-volatile at ambient conditions and therefore "release to the ground from leaching, to the air from volatilization during use, or from panel breakage, are not a concern."⁴ Similarly, an article from the Journal of Natural Resources and Development finds, based on soil testing at solar energy development locations, that "no [toxic] elements were, on average, present in concentrations that would pose a risk to nearby ecosystems. PV systems thus remain a cleaner alternative to traditional energy sources, such as coal, especially during the operation of these energy production systems."⁵ This article, along with the guide and many other peer-reviewed resources demonstrate that metal and chemical leaching from solar energy development is highly unlikely, does not pose an undue risk to human and environmental health, and has been studied. As such, MREA does not believe the testing and reporting proposed in this bill is an efficient use of State resources.

Thank you for your consideration of our testimony. We urge the Committee to vote "Ought Not to Pass" on LD 935.

Thank you,

Eliza Dragnue

Eliza Donoghue, Esq. Executive Director

³ See Id. at 5.

⁴ See Id. at 5.

⁵ See Robinson, Seth A., Meindl, George A., *Potential for leaching of heavy metals and metalloids from crystalline silicon photovoltaic systems,* Journal of Natural Resources and Development, 2019; 09: 19-24.