STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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TESTIMONY OF
ROB WOOD, DIRECTOR, BUREAU OF LAND RESOURCES

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

SPEAKING IN OPPOSITION TO L.D. 1207

AN ACT TO REQUIRE THE DEPARTMENT OF ENVIRONMENTAL PROTECTION TO MONITOR AIR AND WATER TEMPERATURES AROUND COMMERCIAL SOLAR ENERGY DEVELOPMENTS

PRESENTED BY SEN. BLACK

BEFORE THE JOINT STANDING COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

DATE OF HEARING:

MARCH 31, 2025

Senator Tepler, Representative Doudera, and members of the Committee, my name is Rob Wood and I am the Director of the Bureau of Land Resources at the Department of Environmental Protection. I am speaking in opposition to L.D. 1207.

The Department appreciates the intent of L.D. 1207, which is to ensure that solar energy developments are not having adverse effects on the surrounding environment. In particular, the Department agrees that if a solar energy development—or any development that converts vegetated areas to developed or impervious areas—is built too close to a waterbody, the potential exists for the development to have adverse

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effects on water quality, including water temperature. That is one reason why the Mandatory Shoreland Zoning Act requires setbacks from waterbodies, and why when the Department reviews large development proposals under the Site Law, we often require developers to maintain vegetated buffers around waterbodies, especially streams.

However, the air and water temperature monitoring program contemplated by L.D. 1207 would require substantial resources that the Department does not have. The Department estimates there are roughly 700 ground-mounted solar developments of three acres or more that are currently operational or may soon become operational in Maine. Even if only a subset of these facilities were monitored, this program would constitute a significant undertaking requiring additional staff and funding to carry out.

Water temperature monitoring, for example, entails site scoping, sensor deployment, sensor field checks, data quality checks, loading data into databases, and data analysis and reporting. The data loggers that are used to measure stream temperatures typically cost approximately $200 each. At a minimum, it is likely that at least two sensors per site would be needed. Study design for stream temperature monitoring adjacent to solar projects may include installation of sensors above and below the project area and pre- and post-construction. Depending on the location, there might not be suitable monitoring sites nearby, since streams should be large enough to have year-round flow and appropriate substrate to affix the sensor underwater. Multiple years of data may be needed to accurately assess any potential changes from a solar installation. Additionally, at solar sites that have already been developed, lack of pre-construction data would hinder the Department's ability to assess changes in water temperature attributable to the already-installed solar array.

Rather than establish a monitoring program, the Department suggests that the Committee should consider addressing the potential effects of solar arrays and other types of development on water temperatures by requiring developers to leave in place natural vegetative buffers around lakes and streams, especially cold-water streams.

While the Department has the authority under the Site Law to require buffers for larger solar projects—and the Department of Inland Fisheries and Wildlife usually recommends a 100-foot buffer along streams—developers do not always agree to accept this requirement. If the Site Law were amended to require lake and stream buffers, with larger buffers for cold-water streams, this would directly address potential water temperature and water quality issues caused by solar arrays and other types of development that are built too close to waterbodies.

Thank you for the opportunity to testify before you today. I would be happy to answer any questions from the Committee, both now and at the work session.