## INTERPRETATION IC 90.1-2010-17 OF ANSI/ASHRAE/IES STANDARD 90.1-2010 Energy Standard for Buildings Except Low-Rise Residential Buildings

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**<u>Reference</u>**: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2010, Section 9.4.1.4(a), relating to Automatic Daylighting Controls for *Primary Sidelighted Areas* and the light sensor for the photocontrol.

**Background:** In the past a stand alone daylight sensor calibration might have been achieved by physically altering the photocell and/or adjusting a trim pot on the sensor. This required the physical presence of an individual at the sensor during time of calibration thus distorting the readings. The language in 9.4.1.4 (a) was intended to prevent the use of these types of sensors in order to assure calibration accuracy. However, wireless sensors today being part of a system with external control logic may have buttons or some type of actuator for placing the daylight sensor into a calibration or setup mode. This permits the calibration to be performed by the control logic in the controller, and allows the installer to vacate the space before calibration sequence begins. The delay before calibration begins can be predetermined within an automatic calibration algorithm or may be activated by the external logic controller.

**Interpretation:** Calibration buttons or an actuator on the daylight sensor are acceptable by the Standard if such actuators are for the purpose of placing the daylight sensor in a calibration mode while allowing the installer to vacate the room, but are not acceptable if the actual calibration of the unit requires the physical presence of a person at the sensor at the time of calibration.

**Question:** Is this interpretation correct?

## Answer: Yes.

**Comments:** The standard says that the light sensor shall be remote from where the calibration adjustments are made. In the case described by the interpretation request, the calibration is not performed by a human operator. Instead, the calibration is performed by the system software, and therefore the process of calibration does not interfere with the sensor's determination of available daylight in the space, provided that the person starting the calibration procedure vacates the area near the sensor after starting the procedure. The committee realizes the current language is confusing and ambiguous, and plans to address it in the future.