## Interpretation IC 90.1-1989-19 - January 19, 1998

ASHRAE/IES Standard 90.1-1989, Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings

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**References**: This request refers to ASHRAE/IESNA Standard 90.1-1989, Sections 5.4.1.3 and 5.4.1.4 as it relates to provision for portable or permanent check metering for feeders or feeder conductors.

**Background:** There is no definition for feeders or feeder conductors in the above referenced standard. The 1996 National Electrical Code definition of feeder is: "All circuit conductors between the service equipment or the source of a separately driven system and the final branch-circuit overcurrent device."

**Question 1:** Are wires of branch circuits from the circuit breaker panels to service equipment considered feeder conductors?

**Answer**. No. Branch circuits are not feeders and therefore do not require metering.

**Question 2:** Are wires between main circuit breakers and distribution panels considered feeders?

Answer. Yes.

**Question 3:** If the main panel serves 3 building services and provisions are made for two feeders from the main panel to their sub panels to be metered, does metering of the main panel qualify for determination of the electrical consumption of the third service by subtraction?

Answer. Yes.

**Question 4:** What is the definition of feeder in the context of this standard?

<u>Answer</u>. The wires that connect the service equipment to the branch circuit breaker panels. Branch circuits are the circuit conductors between the final overcurrent device protecting the circuit and the outlet(s); the final wiring run to the load.