**Section 410.150 Meter Accuracy Requirements**

a) The accuracy of service watt-hour meters shall be determined using the following criteria:

1) Light Load test: 10% of test amps at 100% power factor;

2) Heavy Load test: 100% of test amps at 100% power factor; and

3) Power Factor test: 100% of test amps at 50% lagging power factor. The power factor test is only required on meter shop tests.

b) Accuracy limits:

1) On any test of a service watt-hour meter, the meter shall be left so adjusted that the error shall not be in excess of the following:

A) Average error: 1% fast or slow.

B) Error at heavy load: 1% fast or slow.

C) Error at light load: 1% fast or slow.

D) Error at power factor: 2% fast or slow.

2) Meters shall not be deliberately set in error by any amount.

c) Each entity shall test a service watt-hour meter for creep at the time it makes any accuracy test of that meter if the percent registration at light load deviates by greater than 2% from the percent registration at heavy load. No service watt-hour meter found to creep shall be placed in service or allowed to remain in service in that condition.

d) The average percent registration of a watt-hour meter shall be determined by adding the light load registration to 4 times the heavy load registration and dividing that quantity by 5.

e) Demand meters, when tested on the loads specified in this Section, shall be adjusted, if necessary, to meet the following requirements:

1) Demand Meters other than Lagged Demand Meters:

A) Electrical element – Error shall not exceed that specified for service watt-hour meters in this Section.

B) Timing element – When used to measure time interval only, error shall not exceed 2%. When used also to keep a record of time of day at which the demand occurs, error shall not exceed 0.25%.

2) The demand error for lagged demand meters shall not exceed 3% of full scale indication.