May 5, 2006

Western Protective Relay Conference
W. 303 North River Drive
Spokane, WA 99201

Dear Dave Angell:

We have enclosed the conceptual design proposal “Speaker Timing System for the Western Protective Relay Conference” for your review. This report explains a speaker timing system that we will design, build, and test to help decrease the problem of guest speakers overrunning their allotted time, thus keeping the conference on schedule and improving the experience of the audience members.

The speaker timing system consists of two units. Each unit will include a master station and a remote slave station. The master station will be designed so the moderator can easily and quickly program the timing parameters (presentation length and two warning times) into it. The slave station will be placed near the speaker where they can clearly see it. A countdown timer and warning lights will be installed in each station to allow the speaker and moderator to always know the remaining time of the presentation.

The speaker timing system will be inexpensive to build compared to commercial systems. Commercial systems with the same functionality cost over $1000 per unit. The estimated cost for the two units we will build is $1587.

We have done a thorough analysis to determine what the system must do too help keep the conference on schedule. We are confident that the speaker timing system will be exactly what the WPRC needs.

Sincerely,

Tim Montoya
Frank Gonzales
Jesse Rebeck
Hugh Roberts