



# IEEE

## Ottawa Section



Webinar by the IEEE Ottawa Section Instrumentation & Measurement Society (IMS) Chapter, Power & Energy Society (PES) Chapter, Reliability Society and Power Electronics Society (RS/PELS) Joint Chapter, Communications Society, Consumer Electronics Society, and Broadcast Technology Society (ComSoc/CESoc/BTS) Joint Chapter, and IEEE Ottawa Educational Activities (EA)

*The IEEE Ottawa Section is inviting all interested IEEE members and non-members to a webinar*

### ***The Truth about the Phasor Measurement Unit***

By

***Dr. Harold Kirkham, Fellow IEEE***  
***DRM Associates, Richland, WA, USA***

**DATE:** Wednesday, December 6, 2023.

**TIME:** Webinar: 6:30 p.m. – 8:00 p.m., EDT

**PLACE:** Online. Free, registration required at: <https://events.vtools.ieee.org/m/384651>.

#### Abstract

If you look up "*phasor measurement unit*" on Wikipedia, you will learn a little about PMU that is right and a lot that is wrong. (To start with, phasors predate Steinmetz.) If you turn to the various papers and books that have been written on the topic, you will still not get the whole truth. Even the IEEE and IEC standards about PMUs have got significant parts wrong! If a PMU is built so as to fully comply with the standards, it will be an under-performing device that breaks the fundamental rules of measurement. The presenter, Dr. Harold Kirkham, is listed as a member of the working group that wrote the 2011 IEEE PMU standard. However, he was so upset by it that he is NOT listed as having voted for it! It has taken him a long time to figure out exactly what is right and what is wrong about the standard. This webinar will set the record straight and explain what is wrong with the current treatment of the subject.

#### Speaker's Bio



**Harold Kirkham** (Fellow, IEEE) received the Ph.D. degree from Drexel University, Philadelphia, PA, USA. His thesis was on the control of the real and reactive power of HVDC terminals to stabilize the AC power system. After a few years at American Electric Power (AEP), he went to NASA's Jet Propulsion Laboratory (JPL) in Pasadena, CA, where he managed a DOE project that in many ways was a forerunner of the Smart Grid today. He worked at the Pacific Northwest National Laboratory (PNNL) 2009 – 2021, spending a significant fraction of this time studying PMUs. He is now the Principal Researcher of DRM Associates, Richland, WA, USA. Dr. Kirkham is a member of IEEE PES, IMS, DEIS, Communications, and Oceanic Engineering Societies. For several years he chaired the IEEE PES Instrumentation and Measurement Committee. He was a member of the working group that wrote the IEEE PMU standard C37-118.1-2011.

**Admission:** Free. Registration required at: <https://events.vtools.ieee.org/m/384651>.

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