

NEW JERSEY SKYLANDS CHAPTER

International Association of Electrical Inspectors

Hunterdon, Morris, Somerset, Sussex, and Warren Counties



12 July 2018

Officers:

President

Robert Rutan

1st V/President

Frank Baguiao

Secretary

Greg Chontow

29 Normandy Circle

Hopatcong, NJ 07843

[GregChontow@IAEI-](mailto:GregChontow@IAEI-Skyland.org)

Skyland.org

Treasurer

Donald Storms

Board of Directors:

James Burke

Ernest Fletcher

Chris Frankowski

Roy Konwiser

Greg Lwowski

Kevin O'Connor

William O'Connor

Larry Ott

Chris Walthour

President Robert Rutan opened the meeting at 6:02 pm with the flag salute and a moment of silence for our men and women overseas. The President requested a report from Treasurer Don Storms. Storms reported a strong balance. The motion was made and seconded to accept the Treasurer's report. Rutan then asked Greg Chontow for the Secretary's report. Chontow stated that the May minutes were posted on the Chapter's website. He asked if there were any necessary corrections. As there were none, he requested and received a motion to accept the minutes. At the request of Treasurer Storms, Rutan returned to old business from the May meeting. We previously discussed open splices in irrigation access boxes for the use of septic pumps. We had mentioned that it was not listed and therefore not approved for electric use. Storms mentioned that NEC 110.3(B) does not state that all equipment shall be listed. Chontow mentioned (as he always does) in New Jersey, we do not use the NEC. Our code book is the Uniform Construction Code. In that code, it references the NEC with modifications. One of the first modifications is N.J.A.C. 5:23-3.8(d)2i, which states "only products listed, labeled, approved, and identified are acceptable". Additionally, the NEC states in 314.15 "Boxes installed in wet locations shall be listed for use in wet locations." With that issue put to rest, Chontow then commented on the new Membership Structure that IAIEI is rolling out over the next year merging Inspector Members and Associate Members into the new category of Professional Member. Rutan then opened up the meeting from questions from the floor. A member mentioned that he had a customer that had stray voltage at the pool, and he was looking for ideas to analyze the issue. The consensus was to shut the main breaker from the house to determine whether the stray voltage comes from inside the house or from the exterior to try to isolate the issue. Since there was no more questions from the floor, Rutan introduced the guest speaker for the evening, Jeff Simpson, Lead Regulatory Engineer of UL and regular attendee at our meetings. Jeff had made a presentation of part one of his Available Fault Current in January. He returned for part two. After a brief recap he went right in to mention the factors that can modify the available fault current provided by a power source such as the Utility. These factors include length of wire, size of wire, wire type - cable or raceway, and if a raceway, whether the raceway is ferrous or non-ferrous. Simpson went on to describe in great detail, the concept of Series Rated and Fully Rated

NEW JERSEY SKYLANDS CHAPTER

International Association of Electrical Inspectors

Hunterdon, Morris, Somerset, Sussex, and Warren Counties



systems. Simply put, a fully rated system shall be able to pass the full fault safely by rating the overcurrent device equal to or greater than the available fault current at the device. Series Rated is a system of fuse and breaker or breaker and breaker where the upstream device is capable of carrying the full short circuit current, and the downstream device is compatible (through manufactures testing) with the upstream device as a series rated system. Simpson mentioned that a series rated system is considerably less expensive, however, because it is not always a preferred method, it can not be used in certain applications such as Article 517 for Health Care, Article 620 – Elevators, Article 645 – Information Technology, 695 – Fire Pumps, 700 & 701 – Emergency and Legally Requires standby Systems. Simpson Also pointed out that Motor Contribution must be taken into consideration when dealing with a series rated system, as that could have an additive effect to the available short circuit current.

Simpson ended his presentation with a round of applause from the 37 members present.

Respectfully Submitted
Greg Chontow, Secretary