Newman, Timothy Joseph

From: Krein, Philip T

Sent: Monday, April 13, 2015 11:18 PM **To:** Newman, Timothy Joseph

Subject: FW: Comments from F&S

Tim,

This is probably the message you really need.

Phil

From: Walker, Scott [mailto:swalker@jranck.com]
Sent: Tuesday, December 23, 2014 6:54 AM

To: Krein, Philip T

Cc: Erickson, Keith R; Hahn, Fred; Larson, Greg O

Subject: RE: Comments from F&S

Thanks Phil,

We will be working on the details and send back after the holiday. We have placed the order for the Solarbridge.

Thanks again,

SCOTT WALKER | BUSINESS DEVELOPMENT DIRECTOR

J. RANCK ELECTRIC, INC.

Renewable Energy Division | *NABCEP Certified PV Installation Professional*™ Office (800) 792-3822 | Mobile (931) 207-4354 | <u>www.jranck.com</u>



From: Krein, Philip T [mailto:krein@illinois.edu]
Sent: Monday, December 22, 2014 10:47 AM

To: Walker, Scott

Cc: Erickson, Keith R; Hahn, Fred; Larson, Greg O

Subject: RE: Comments from F&S

Scott,

Confirming three items:

- 1. The Facilities and Services contact will be Fred Hahn, fjhahn@illinois.edu, 217-244-8989.
- 2. Yes, the SolarBridge products meet the general requirements and have advantages in terms of panel-by-panel control. They are acceptable. As you know, it will be important to determine how to interface them into the 480 V three-phase solar feeder provided, since they do not have this direct capability.
- 3. The conceptual drawing will need to better show east-west walkable paths. Please see some comments below from Fred.

Philip Krein

Philip T. Krein, Ph.D., P.E.
Professor and Director, Grainger Center for Electric Machinery and Electromechanics
Department of Electrical and Computer Engineering
University of Illinois at Urbana-Champaign
306 N Wright St
Urbana, Illinois 61801
USA

krein@illinois.edu

+1 (217) 333-4732 Fax +1 (217) 333-1162

From: Hahn, Fred

Sent: Monday, December 22, 2014 9:17 AM

To: Krein, Philip T

Cc: Erickson, Keith R; swalker@jranck.com

Subject: Comments from F&S

You are correct, Phil, we will need more detail, including:

Dimensions

- Service walkways- with fall protection shown
- Path of access to service points-ladder, walking pavers on roof, etc
- Detail of securing supports to the roof. Looks like there should be lateral or racking braces.
- Structural calculations for wind loading. Note that we had PVs blown off the roof at BIF. Fortunately, no students or faculty were injured.

Please email and we can arrange a meeting to discuss further, if you wish.

Thanks!

Fred J. Hahn, P.E.

Associate Director, Engineering & Transportation Services University of Illinois, Urbana Champaign Room 130 Physical Plant Service Building 1501 South Oak Street Champaign IL 61820 Ph 217-244-8989 fjhahn@illinois.edu