ABB fully understands the importance of cyber security for substation automation systems. This document is to demonstrate ABB’s commitment to support our customers in their efforts to become or maintain compliance with NERC-CIP requirements.

We have been involved in cyber security for control systems for over a decade and have embedded it as part of our design, development, maintenance, lifecycle management and communications processes. Examples of activities include threat modelling and security design reviews, security training of software developers as well as in-house and external security testing.

ABB has chosen a systematic approach to handle cyber security on a global level. We have established Power Systems and Products Security Council to ensure that we have the latest knowledge about the global requirements. The mandate of the council and its members is to ensure that ABB products and solutions for power systems meet the expectations of our customers and are compliant with and supporting industry standards and regulations on cyber security, such as NERC-CIP. The council is also responsible for ensuring active ABB involvement in national and international security efforts.

ABB strives to continuously improve the security and robustness of its products and has integrated security testing as part of the development process. A dedicated, independent security test centre has been established where ABB products are subject to security and robustness tests utilizing current state-of-the-art commercial and open source security testing tools. Tests include profiling, known vulnerability, denial of service and negative protocol tests.

About NERC-CIP standard
NERC-CIP is a performance based standard and, thus, only utilities and other end-users can be NERC-CIP compliant. Any system, subsystem or product sold or delivered by ABB or other suppliers cannot be NERC-CIP compliant. They can, however, include technical features that help support utilities or other end-users in becoming NERC-CIP compliant. ABB is committed to supporting end-users in their compliance efforts, and thus provides the information included in this document. Compliance to NERC-CIP, however, is ultimately the responsibility of the end-user.

The following information provides an overview of the cyber security features included in DPU2000/2000R according to NERC-CIP standard.

NERC-CIP Statement concerning ABB’s protection and control products type DPU2000/2000R.

Routable protocols
The DPU2000 only supports serial interfaces. The DPU2000R Ethernet communications option lacks specific protection against routable protocols so ABB recommends this device be placed within your Electronic Security Perimeter and the protection be supported with a secured Ethernet network infrastructure.
Patch management
The products are in the End of Manufacturing Declaration phase of the ABB lifecycle. Firmware upgrades are therefore not planned in the future.

Malicious software prevention
The products utilize an internally developed operating system and the likelihood of encountering malicious software is extremely low. Malicious software prevention will not be supported and the product is unable to detect or log the presence of malicious code.

Account management
These devices support a single password (upper and lower case and numeric characters) for overall settings and configuration and a test password (upper and lower case and numeric characters) for operation and maintenance roles. In case the product has remote connections (for example via a modem), ABB recommends using a secure modem connection by for instance, using a bump in the wire security appliance.

Continuous Event Logging
The DPU2000/2000R products support Operations Record functionality that detects if relay settings or the configuration, amongst many other conditions, have been changed. These are only indication values and do not provide any specific details of the change itself. This value is recorded with the change event that is logged in the same Operations Records as other system events.

User Access Logs
The DPU2000/2000R products are unable to detect successful login attempts, failed access attempts, or failed login attempts and thus no logs of these events are available.

ABB would like to take this opportunity to refer customers to the Relion® protection and control product family, which supports the NERC-CIP requirements.

Yours faithfully,

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