

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

MEMORANDUM TO: SynchroPhasor Data Providers, Users and Researchers

FROM: David N. Cook  
Vice President & General Counsel

SUBJECT: Overview and Introduction to the NASPI SynchroPhasor Data-Sharing Agreements

DATE: February 22, 2010

Attached for your use are two data-sharing agreements in connection with the NASPI synchrophasor project. The primary agreement (“Industry Synchrophasor Data-Sharing Agreement” or “Industry Agreement”) is to cover the sharing, within the NERC phasor community, of operational and reliability phasor data on a confidential basis. The second agreement (“Researcher Synchrophasor Data-Sharing Agreement” or “Researcher Agreement”) is to cover the industry’s sharing of such phasor data with researchers on a restricted basis for the benefit of the entire industry. NERC has signed the Industry Agreement and is prepared to sign the Researcher Agreement, as and when that becomes appropriate.

Grid participants that will be sharing synchrophasor (“phasor”) data with NERC, each other, and researchers will sign the Industry Agreement. The Researcher Agreement is an exhibit to the Industry Agreement. By signing the Industry Agreement, industry participants are agreeing to share synchrophasor data under the terms of the Researcher Agreement. The Researcher Agreement limits the use of phasor data shared with researchers and vendors to support grid understanding and reliability tools development. Under these agreements, phasor data become the property of the entire interconnected grid, rather than being owned and controlled by a single entity (including even the owner of a PMU that collected those data). NERC will facilitate the sharing and management of phasor data, including administering the two agreements and resolving disputes between data providers or researchers.

The legal structure underlying these agreements parallels that of the electric industry’s Operating Reliability Data (“ORD”) agreement — each party that signs the agreement enters into that agreement with every other signatory, and agrees to share and protect all phasor data covered under the agreement. However, the proposed agreements differ from the current NERC ORD data-sharing agreement in that they (1) do not provide for data sharing with regulators, (2) only relate to phasor data, (3) explicitly allow sharing with researchers for use in research, and (4) specify the treatment of certain intellectual property that may result from research.

## **Industry Agreement**

The Industry Agreement is designed to address the sharing and protection of grid condition data collected by phasor measurement units (PMUs) (Covered Data) and share those data with other

industry members through wide area monitoring and visualization systems and diagnostic tools (Derived Data). The Industry Agreement requires the signatory to use the phasor data (both Covered Data and Derived Data) only for grid reliability purposes. The Industry Agreement indicates that the data are provided “unprocessed” (because of their high-speed, real-time nature), and that phasor Data Providers are not liable for any harm or costs incurred by Data Recipients using such data for reliability purposes.

The Industry Agreement prohibits the sharing of such data with any entities having a merchant or market function and directs the data holder to resist governmental requests to release any phasor data. By signing this Industry Agreement, the Data Provider also agrees that phasor data can be shared with researchers for reliability-supporting purposes. The Industry Agreement will establish an Oversight Committee of signatories’ representatives to address potential future issues related to the two agreements.

### **Researcher Agreement**

Researchers’ inability to access phasor data has been a significant obstacle to the development of reliability-enhancing activities such as grid condition base-lining research and development of additional wide-area monitoring and visualization tools. To resolve this problem, the Researcher Agreement will facilitate the sharing of phasor data (Covered Data) with researchers such as universities and national laboratories, consultants conducting research on behalf of industry members, and vendors developing new reliability tools.

Like the Industry Agreement, the Researcher Agreement identifies phasor data as confidential, business sensitive, critical energy infrastructure information, and states its release would be potentially harmful to both competition and security. The Researcher Agreement requires researchers to take strong measures and due diligence to protect the data from deliberate or inadvertent release. Every individual working for a researcher who has access to Covered Data must sign a statement agreeing that they understand their responsibility to protect the data. The Researcher Agreement also requires researchers to submit any papers or products derived from phasor data to allow NERC or its agents to review that paper (within a 15-day period) to be sure that the paper will not release any information that might be sensitive from an infrastructure security or market purpose.

In many cases, Covered Data shared with researchers will be provided in “anonymized and historical” format, i.e., aggregated and stripped of any easily identifiable individual PMU location information, and shall be no less than 60 days old. Other than this, phasor data provided to researchers will be “unprocessed,” without modification from the form in which it was originally collected.

While all research work using phasor data must be reliability-related, NERC may authorize the use of Covered Data to develop commercial products or services that may enhance grid reliability or reduce grid operating costs. The Researcher Agreement directs that when the industry shares phasor data with a signatory researcher or vendor, the industry will obtain limited licenses and negotiated rates and terms for any commercial product or service created from those phasor data. This is because phasor data reflects the state of the entire interconnected grid, those data have value, and those data are provided at no up-front cost to researchers in exchange for negotiated rates, terms, and conditions. When NERC (with input from the industry Oversight Committee) negotiates terms for commercial research products, NERC will be acting as an agent for the industry and will not itself obtain any right to the researcher’s intellectual property.

## Phasor Data and NDA Oversight and Management

As the designated Electric Reliability Organization, it is appropriate for NERC to act as the coordinator and agent for the industry for phasor data, as it now does for other common reliability data and tools. These two agreements were developed to enable the industry to use common agreements in a streamlined administrative fashion, to avoid the need for negotiation of individual agreements between phasor data providers and other data users and/or researchers (which has already proven to be unmanageable). The agreements permit NERC to contract with another entity to handle various management tasks such as responding to researchers' data requests, consistent with guidance from the Oversight Group. NERC will maintain a list of signatories to the two agreements on its web site.

### Agreement Development Process

The language for these two agreements is drawn primarily from existing industry agreements that have a similar purpose or concern for the security of sensitive information, including regional data-sharing agreements and the NERC ORD. Once NERC had working drafts of the two agreements, those drafts were shared for comment with NERC's Legal Advisory Committee. A revised draft was shared with legal staff from the companies represented in the NAPSI Executive Steering Committee and with members of the NASPI Research Initiatives Task Team and other teams and grid participants. Many of these reviewers offered comments that have been reflected in one or both agreements, particularly with respect to an industry oversight process and clarification of intellectual property rights.

I request that your organization provide leadership to the industry as an early signatory to the agreements, and I hope you will encourage other organizations to do the same. Please return the signed agreement to me at NERC, 1120 G St. NW, Washington, DC 20005, or by email to [david.cook@nerc.net](mailto:david.cook@nerc.net). Please also provide the name and contact information for your authorized representative, in the following format:

[ \_\_\_\_\_ Party\_Name \_\_\_\_\_ ]  
[ \_\_\_\_\_ Address \_\_\_\_\_ ]  
[ \_\_\_\_\_ Address \_\_\_\_\_ ]  
[ \_\_\_\_\_ Address \_\_\_\_\_ ]  
Attn: [ \_\_Authorized\_Individual\_\_ ]  
Telephone: [ \_\_\_\_\_ ]  
E-mail address: [ \_\_\_\_\_ ]

If you have questions or need additional information, please contact me at [david.cook@nerc.net](mailto:david.cook@nerc.net) or (202) 393-3998. Thank you for your prompt consideration of this important matter.