STATEMENT OF CONSIDERATIONS

REQUEST BY SCHWEITZER ENGINEERING LABORATORY FOR WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS IN DOE S-122,671 ENTITLED "WEB INTERFACE TO AN INTELLIGENT ELECTRONIC DEVICE OVER A SERIAL LINK" MADE UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-07NT43311, W(I)-10-009, CH-1589

The Petitioner, Schweitzer Engineering Laboratory (Schweitzer), has requested a waiver of domestic and foreign patent rights in the following subject invention and related patent application:

S-122,671; Entitled "WEB INTERFACE TO AN INTELLIGENT ELECTRONIC DEVICE OVER A SERIAL LINK"; and U.S. Provisional Patent Application 61/361,201, Filed 7/2/2010, Entitled "Remote Device Management"

The above-identified invention was made under DOE cooperative agreement No. DE-FC26-07NT43311 to Schweitzer. The invention was conceived and reduced to practice solely by Schweitzer employees. It is anticipated that the invention will be used in Schweitzer's products, including SEL-3025. Briefly, the invention allows for remote management of devices that use an existing serial like for SCADA and the optimization of data for quick webpage traversal through the serial link. The purpose of this waiver is to vest Schweitzer with clear title to the invention in order to enable Schweitzer to commercialize the technology.

Referring to item 3, the objective of Schweitzer's cooperative agreement, the Hallmark Project, was to address the need to reduce the risk of energy disruptions due to cyber incents regarding control systems. The goal was to develop solutions that can be both applied to existing control systems and designed into new control system, adding much needed additional security measures. The additional security techniques will help to mitigate energy network vulnerability. The scope of the cooperative agreement contains four primary elements:

1. Technology transfer of secure supervisory control and data acquisition (SCADA) Communications Protocol (SSCP) from Pacific Northwest National Laboratories (PNNL) to Schweitzer. The project will use this technology to develop a Federal Information Processing Standard (FIPS) 140-2 compliant original equipment manufacture (OEM) module to be called Cryptographic Daughter Card (CDC).
2. Development of a Link Authentication module (LAM) using the FIPS 140-2 validated Secure SCADA Communications Protocol (SSCP) CDC module.
3. Validation of the CDC and Link Authenticator modules via laboratory and field tests.
4. Creation of documents that record the impact of the Link Authenticator to the operators of the control system and the control system itself.

The cooperative agreement was awarded October 1, 2007. The total cost of the cooperative agreement is for $5,410,342 of which $2,945,566 is Schweitzer's cost share, about fifty-four percent (54%) of the total cost of the work under the cooperative agreement. The remaining $2,464,776, about 46 percent (46%) was paid using Government funds. The Government has no plans for further research and development on the invention, beyond the research done in the cooperative agreement with Schweitzer.

Referring to items 5-9 of the waiver petition, Schweitzer is a world leader in microprocessor-based electronic devices for protecting electric power systems, and has lead innovation in communication among such devices for many years. Schweitzer has over 25 years of experience in developing and selling electric power control system product technology, including protective relays, control and monitoring of electric power systems, communications devices, automation controllers, faulted circuit indicators, industrial computers, meters, control enclosures, precise timing instruments, instrument panels, software, etc.. Schweitzer already has an extensive line of products available to customers, including SEL-3620 Ethernet Security Gateway and a Link Authenticator Module (LAM) using the FIPS 140-2 validated Secure SCADA Communications Protocol (SSCP) CDC Module both developed under a cooperative agreement with DOE. Schweitzer also has an extensive customer base including electric power transmission and distribution utilities, food and beverage industrial plants, hospitals, manufacturing plants, mining operations, petroleum refineries etc. Government sales are only a fraction of Schweitzer's business. Schweitzer has stated that it will expend the necessary capital and resources to develop the invention to the point of readiness for commercialization. Schweitzer has demonstrated its technical competence in the field of remote SCADA equipment management.

At this time a number of competitive alternatives technologies are being deployed and researched for remote communication through a serial link. For example, PPP (point-to-point protocol) and SLIP (serial line interface protocol) are stable, readily available alternatives. The invention will offer alternatives to the existing commercial technologies and solutions. Specifically, the invention offers an alternative with unique optimizations for data transfer, reducing the amount of data needing to pass through the relatively slow serial link. Once the invention is brought to market, competitors will be able to incorporate the product into their existing systems. Therefore, the grant of this waiver should effectively promote the continued development and commercial utilization of the invention since Schweitzer will be able to develop these technologies and incorporate them into its commercial portfolio without an adverse patent interest overshadowing its development efforts.

Referring to item 10 of the waiver petition, granting this waiver will not have an adverse impact on competition. If anything, the technology forming the subject matter of the collaboration can be expected to provide a new entrant into the growing market.

The grant of this waiver will effectively promote the continued development and commercial utilization of the invention since Schweitzer will be able to develop the invention incorporate it into its commercial portfolio. Schweitzer estimates the invention was developed with about $47,712, with about $28,627 funded by Schweitzer. Schweitzer believes it possess all fabrication skills and facilities need to commercialize the subject technology and that the subject technology may be quickly commercialized into multiple communications products.

The grant of this waiver will help ensure that Schweitzer can realize a fair return on its current and future investments thus motivating a more rapid introduction. Schweitzer has already filed a provisional patent application on the invention, and ownership of the invention will enhance the likelihood Schweitzer will increase investment in commercial products in the market. Schweitzer, having expertise in both development and commercialization, is in the best position to bring to quickly bring to market a product utilizing the invention. Thus, the waiver is necessary for development to proceed given the size and nature of the investment necessary to commercialize the invention.

Schweitzer has agreed to accept the terms of the Large-Business, Confirmatory license, including the Government license, march-in rights and preference for U.S. industry set forth in 35 USC §§ 202, 203, and 204. The confirmatory license associated with this invention will also include the U.S. Competitiveness clause (attached hereto).

Upon evaluation of the waiver petition, in view of all the objectives and consideration set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

[redacted]

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Deputy Chief Counsel
Intellectual Property Law Division

Date: 6/28/2011

[redacted]

Michael J. Dobbs
Patent Attorney
Intellectual Property Law Division

Date: 6/28/2011

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted.

CONCURRENCE:

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Date: 7/12/2011