



LR-N20-0009

10 CFR Part 73.22

January 13, 2020

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Salem Nuclear Generating Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-70 and DPR-75
NRC Docket Nos. 50-272 and 50-311

Hope Creek Generating Station
Renewed Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: Use of Encryption Software for Electronic Transmission of Safeguards Information

This letter provides notification that PSEG Nuclear, LLC (PSEG) will begin using Symantec Endpoint Encryption version 11 that was developed with the Symantec Pretty Good Protection (PGP) cryptographic engine. National Institute of Standards and Technology (NIST) certificate number 2377 validates compliance of this software development tool with Federal Information Processing Standard (FIPS) 140-2 requirements. A copy of the FIPS 140-2 validation certificate is attached. Submittal of this letter meets the requirement that the NRC be notified before "first use" of new software.

If you have any questions or require additional information, please do not hesitate to contact me at (856) 339 – 1893 or Trina.Washington@pseg.com.

This letter contains no regulatory commitments.

Sincerely,

A handwritten signature in black ink, appearing to read "Trina C. R. Washington".

Trina C. R. Washington
Director, Corporate Security - Nuclear
PSEG Nuclear, LLC

Enclosure 1: Federal Information Processing Standard (FIPS) 140-2 Consolidated Validation Certificate No. 0053

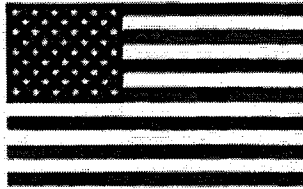
cc: USNRC Project Manager – Salem and Hope Creek, NRR
USNRC Senior Resident Inspector – Salem
USNRC Senior Resident Inspector – Hope Creek
USNRC Reactor Security Branch, NSIR
USNRC Information Security Branch, NSIR
USNRC Cyber Security Branch, NSIR

Enclosure 1

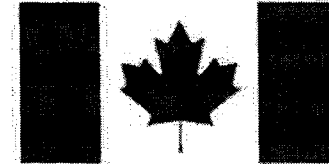
Federal Information Processing Standard (FIPS) 140-2

Consolidated Validation Certificate No. 0053

FIPS 140-2 Consolidated Validation Certificate



The National Institute of Standards and Technology of the United States of America



The Communications Security Establishment of the Government of Canada

Consolidated Certificate No. 0053

The National Institute of Standards and Technology, as the United States FIPS 140-2 Cryptographic Module Validation Authority; and the Communications Security Establishment Canada, as the Canadian FIPS 140-2 Cryptographic Module Validation Authority; hereby validate the FIPS 140-2 testing results of the cryptographic modules listed below in accordance with the Derived Test Requirements for FIPS 140-2, Security Requirements for Cryptographic Modules. FIPS 140-2 specifies the security requirements that are to be satisfied by a cryptographic module utilized within a security system protecting Sensitive Information (United States) or Protected Information (Canada) within computer and telecommunications systems (including voice systems).

Products which use a cryptographic module identified below may be labeled as complying with the requirements of FIPS 140-2 so long as the product, throughout its life-cycle, continues to use the validated version of the cryptographic module as specified in this consolidated certificate. The validation report contains additional details concerning test results. No reliability test has been performed and no warranty of the products by both agencies is either expressed or implied.

FIPS 140-2 provides four increasing, qualitative levels of security: Level 1, Level 2, Level 3, and Level 4. These levels are intended to cover the wide range and potential applications and environments in which cryptographic modules may be employed. The security requirements cover eleven areas related to the secure design and implementation of a cryptographic module.

The scope of conformance achieved by the cryptographic modules as tested are identified and listed on the Cryptographic Module Validation Program website. The website listing is the official list of validated cryptographic modules. Each validation entry corresponds to a uniquely assigned certificate number. Associated with each certificate number is the module name(s), module versioning information, applicable caveats, module type, date of initial validation and applicable revisions, Overall Level, individual Levels if different than the Overall Level, FIPS-approved and other algorithms, vendor contact information, a vendor provided description and the accredited Cryptographic Module Testing laboratory which performed the testing.

Signed on behalf of the Government of the United States

Signature: Michael Cooper
Dated: 5 June 2015

Chief, Computer Security Division
National Institute of Standards and Technology

Signed on behalf of the Government of Canada

Signature: [Signature]
Dated: 5 June 2015

Director, Architecture and Technology Assurance
Communications Security Establishment Canada

TM A Certification Mark of NIST, which does not imply product endorsement by NIST the U.S. or Canadian Governments

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
2356	05/19/2015	Kernel Mode Cryptographic Primitives Library (cng.sys) in Microsoft Windows 8.1 Enterprise, Windows Server 2012 R2, Windows Storage Server 2012 R2, Surface Pro 3, Surface Pro 2, Surface Pro, Surface 2, Surface, Windows RT 8.1, Windows Phone 8.1, Windows Embedded 8.1 Industry Enterprise, StorSimple 8000 Series	Microsoft Corporation	Software Versions: 6.3.9600 and 6.3.9600.17042
2365	5/4/2015	Cisco Systems 5508 Wireless LAN Controller	Cisco Systems, Inc.	Hardware Version: 5508 with 5508 FIPS kit (AIR-CT5508FIPSKIT=) and CN56XX; Firmware Version: 8.0 with SNMP Stack v15.3, OPENSSE-0.9.8g-8.0.0, QUICKSEC-2.0-8.0 and FP-CRYPTO-7.0.0
2366	5/4/2015	FortiGate-60C/60D/80C and FortiWiFi-60C/60D	Fortinet, Inc.	Hardware Versions: C4DM93 [1], C1AB28 [2], C4BC61[3], C4DM95 [4], and C1AB32 [5] with Tamper Evident Seal Kits: FIPS-SEAL-BLUE [3] or FIPS-SEAL-RED [1,2,4,5]; Firmware Version: 5.0, build0305, 141216
2367	5/4/2015	FortiGate-100D, FortiGate-200B, FortiGate-200D, FortiGate-300C, FortiGate-600C and FortiGate-800C	Fortinet, Inc.	Hardware Versions: C4LL40 [1], C4CD24 [2], C4KV72 [3], C4HY50 [4], C4HZ51 [5] and C4LH81 [6] with Tamper Evident Seal Kits: FIPS-SEAL-BLUE [2] or FIPS-SEAL-RED [1,3,4,5,6]; Firmware Version: 5.0, build0305,141216
2368	5/4/2015	FortiGate-1000C, FortiGate-1240B, FortiGate-3140B and FortiGate-3240C	Fortinet, Inc.	Hardware Versions: C4HR40 [1], C4CN43 [2], C4XC55 [3] and C4KC75 [4] with Tamper Evident Seal Kits: FIPS-SEAL-RED [1,3,4] or FIPS-SEAL-BLUE [2]; Firmware Version: FortiOS 5.0, build0305,141216

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
2369	5/4/2015	FortiGate-1500D and 3700D	Fortinet, Inc.	Hardware Versions: C1AA64 [1] and C1AA92 [2] with Tamper Evident Seal Kits: FIPS-SEAL-RED [1,2]; Firmware Version: FortiOS 5.0, build0305,141216
2370	5/4/2015	FortiOS™ 5.0	Fortinet, Inc.	Firmware Version: 5.0, build0305, 141216
2371	5/4/2015	FortiGate-3600C and FortiGate-3950B	Fortinet, Inc.	Hardware Versions: C4MH12, [C4DE23 with P06698-02] with Tamper Evident Seal Kits: FIPS-SEAL-RED; Firmware Version: FortiOS 5.0, build0305,141216
2372	05/05/2015	FortiGate-5140B Chassis with FortiGate/FortiSwitch 5000 Series Blades	Fortinet, Inc.	Hardware Version: Chassis: P09297-01; Blades: P4CJ36-04, P4EV74, C4LG17 and P4EX84; AMC Component: P4FC12; Air Filter: PN P10938-01; Front Filler Panel: PN P10945-01; ten; Rear Filler Panel: PN P10946-01: fourteen; Tamper Evident Seal Kit: FIPS-SEAL-RED; Firmware Version: FortiOS 5.0, build0305, 141216
2373	05/05/2015	Neopost Postal Security Device (PSD)	Neopost Technologies, S.A.	Hardware Version: A0014227-B; Firmware Version: a30.00; P/N: A0038091-A
2374	05/08/2015	Avaya WLAN 9100 Access Points	Avaya Inc.	Hardware Versions: P/Ns WAO912200-E6GS [1], WAP913200-E6GS [2], WAP913300-E6GS [2], WAP917300-E6GS [2]; Enclosure (Form Factor): WAO912200-E6GS [1], WAB910003-E6 [2]; SKU WLB910001-E6; Firmware Version: AOS-7.1
2375	05/20/2015	HP P-Class Smart Array RAID Controllers	Hewlett-Packard Development Company, L.P.	Hardware Versions: P230i, P430, P431, P731m, P830, and P830i; Firmware Version: 1.66

<http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140val-all.htm>

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
2376	05/21/2015	Aegis Secure Key 3.0 Cryptographic Module	Apricorn Inc.	Hardware Version: RevD; Firmware Version: 6.5
2377	5/21/2015	Symantec PGP Cryptographic Engine	Symantec Corporation	Software Version: 4.3
2379	05/21/2015	Ciena 6500 Packet-Optical Platform 4x10G	Ciena Corporation	Hardware Version: 1.0; Firmware Version: 1.10
2380	05/21/2015	Samsung UFS (Universal Flash Storage) Shark SED	Samsung Electronics Co., Ltd.	Hardware Versions: KLUAG2G1BD-B0B2, KLUBG4G1BD-B0B1, KLUCG8G1BD-B0B1; Firmware Version: 0102

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
2381	05/21/2015	Brocade® MLXe®, Brocade® NetIron® CER 2000 Ethernet Routers and Brocade CES 2000 Routers and Switches	Brocade Communications Systems, Inc.	Hardware Versions: {[BR-MLXE-4-MR-M-AC (P/N: 80-1006853-01), BR-MLXE-4-MR-M-DC (P/N: 80-1006854-01), BR-MLXE-8-MR-M-AC (P/N: 80-1004809-04), BR-MLXE-8-MR-M-DC (P/N: 80-1004811-04), BR-MLXE-16-MR-M-AC (P/N: 80-1006820-02), BR-MLXE-16-MR-M-DC (P/N: 80-1006822-02), BR-MLXE-4-MR2-M-AC (P/N: 80-1006870-01), BR-MLXE-4-MR2-M-DC (P/N: 80-1006872-01), BR-MLXE-8-MR2-M-AC (P/N: 80-1007225-01), BR-MLXE-8-MR2-M-DC (P/N: 80-1007226-01), BR-MLXE-16-MR2-M-AC (P/N: 80-1006827-02), BR-MLXE-16-MR2-M-DC (P/N: 80-1006828-02)] with Component P/Ns 80-1006778-01, 80-1005643-01, 80-1003891-02, 80-1002983-01, 80-1003971-01, 80-1003972-01, 80-1003811-02, 80-1002756-03, 80-1004114-01, 80-1004113-01, 80-1004112-01, 80-1004760-02, 80-1006511-02, 80-1004757-02, 80-1003009-01, 80-1003052-01, 80-1003053-01, NI-CER-2048F-ADVPREM-AC (P/N: 80-1003769-07), NI-CER-2048F-ADVPREM-DC (P/N: 80-1003770-08), NI-CER-2048FX-ADVPREM-AC (P/N: 80-1003771-07), NI-CER-2048FX-ADVPREM-DC (P/N: 80-1003772-08), NI-CER-2024F-ADVPREM-AC (P/N: 80-1006902-02), NI-CER-2024F-ADVPREM-DC (P/N: 80-1006904-02), NI-CER-2024C-ADVPREM-AC (P/N: 80-1007032-02), NI-CER-2024C-ADVPREM-DC (P/N: 80-1007034-02), NI-CER-2048C-ADVPREM-AC (P/N: 80-

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
				1007039-02), NI-CER-2048C-ADVPREM-DC (P/N: 80-1007040-02), NI-CER-2048CX-ADVPREM-AC (P/N: 80-1007041-02), NI-CER-2048CX-ADVPREM-DC (P/N: 80-1007042-02), BR-CER-2024F-4X-RT-DC (P/N: 80-1007212-01), BR-CER-2024C-4X-RT-DC (P/N: 80-1007213-01), BR-CER-2024F-4X-RT-AC (P/N: 80-1006529-01), BR-CER-2024C-4X-RT-AC (P/N: 80-1006530-01), NI-CER-2024C-2X10G (P/N: 80-1003719-03), BR-CES-2024C-4X-AC (P/N: 80-1000077-01), BR-CES-2024C-4X-DC (P/N: 80-1007215-01), BR-CES-2024F-4X-AC (P/N: 80-1000037-01), BR-CES-2024F-4X-DC (P/N: 80-1007214-01), RPS9 (P/N: 80-1003868-01) and RPS9DC (P/N: 80-1003869-02)} with FIPS Kit XBR-000195; Firmware Version: Multi-Service IronWare R05.7.00
2382	05/21/2015	HGST Ultrastar 7K6000 TCG Enterprise HDDs	HGST, Inc.	Hardware Versions: P/Ns HUS726060AL5215 (0001); HUS726060AL4215 (0001); HUS726050AL5215 (0001); HUS726050AL4215 (0001); HUS726040AL5215 (0001); HUS726040AL4215 (0001); HUS726030AL5215 (0001); HUS726030AL4215 (0001); HUS726020AL5215 (0001); HUS726020AL4215 (0001); Firmware Version: R519
2383	05/21/2015	HP Virtual Connect 16Gb 24-Port FC Module	Hewlett-Packard Company	Hardware Version: 40-1000779-08 Rev C (80-1007799-04); Firmware Version: VC 4.40

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
2384	05/21/2015	Brocade® DCX, DCX 8510-8, DCX-4S and DCX 8510-4 Backbones, 6510 FC Switch, 6520 FC Switch and 7800 Extension Switch	Brocade Communications Systems, Inc.	Hardware Versions: {[DCX Backbone (P/Ns 80-1001064-10, 80-1006751-01, 80-1004920-04 and 80-1006752-01), DCX-4S Backbone (P/Ns 80-1002071-10, 80-1006773-01, 80-1002066-10 and 80-1006772-01), DCX 8510-4 Backbone (P/Ns 80-1004697-04, 80-1006963-01, 80-1005158-04 and 80-1006964-01), DCX 8510-8 Backbone (P/Ns 80-1004917-04 and 80-1007025-01)] with Blades (P/Ns 80-1001070-07, 80-1006794-01, 80-1004897-01, 80-1004898-01, 80-1002000-02, 80-1006771-01, 80-1001071-02, 80-1006750-01, 80-1005166-02, 80-1005187-02, 80-1001066-01, 80-1006936-01, 80-1001067-01, 80-1006779-01, 80-1001453-01, 80-1006823-01, 80-1003887-01, 80-1007000-01, 80-1002839-03, 80-1007017-01, 49-1000016-04, 49-1000064-02 and 49-1000294-05), 6510 FC Switch (P/Ns 80-1005232-03, 80-1005267-03, 80-1005268-03, 80-1005269-03, 80-1005271-03 and 80-1005272-03), 6520 FC Switch (P/Ns 80-1007245-03, 80-1007246-03, 80-1007242-03, 80-1007244-03, 80-1007257-03), 7800 Extension Switch (P/Ns 80-1002607-07, 80-1006977-02, 80-1002608-07, 80-1006980-02, 80-1002609-07 and 80-1006979-02)} with FIPS Kit P/N Brocade XBR-000195; Firmware Version: Fabric OS v7.2.1 (P/N 63-1001421-01)
2385	05/22/2015	µMACE	Motorola Solutions, Inc.	Hardware Version: P/N AT58Z04; Firmware Version: R01.07.01

<http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140val-all.htm>

Certificate Number	Validation / Posting Date	Module Name(s)	Vendor Name	Version Information
2386	05/22/2015	Hitachi Virtual Storage Platform (VSP) Encryption Engine	Hitachi, Ltd.	Hardware Version: R800L1; Firmware Version: 02.09.28.00 and 02.09.32.00
2387	05/22/2015	HP XP7 Encryption Ready Disk Adapter (eDKA) Level1	Hewlett-Packard Company	Hardware Version: R800L1; Firmware Version: 02.09.28.00 and 02.09.32.00
2388	05/28/2015	IOS Common Cryptographic Module (IC2M) Rel5	Cisco System, Inc.	Firmware Version: Rel 5