



November 2, 2020

United States Nuclear Regulatory Commission
11555 Rockville Pike,
Rockville, Maryland 20852

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

Subject: Isolation Test Report for Amendment 4 to the HFC-6000 Safety Platform

- Reference:
- (1) Doosan HF Controls letter to NRC dated April 15, 2019, "Submittal of Non-proprietary information for Amendment 4 to the HFC-6000 Safety Platform" (ADAMS Accession No. ML19109A165)
 - (2) NRC letter to Doosan HF Controls letter to NRC dated June 11, 2019, "Acceptance Review and Requests for Withholding of 'Submittal of Non-proprietary information for Amendment 4 to the HFC-6000 Safety Platform'" (ADAMS Accession No. ML19127A009)
 - (3) NRC letter to Doosan HFC Control dated July 23, 2020, "Regulatory Audit Report for 'Submittal of Non-Proprietary Information for Amendment 4 to the HFC-6000 Safety Platform'" (EPID L-2018-TOP-0031)

Ladies and Gentlemen:

In Reference 1 HF Controls (HFC) formally requested the beginning of an Acceptance Review on Amendment 4 to the HFC-6000 Safety Platform. In Reference 2 NRC accepted HFC Amendment 4 topical report RR901-107-10-PI Revision F for review. HFC is submitting the enclosed information to address HFC Condition Report 2020-0093, which was initiated during the NRC audit on HFC-FPGA platform from May 4th through May 27th in Reference 3.

The isolation test demonstrated the electrical isolation capability of class 1E control equipment from non-class 1E equipment as well as isolation between different Class 1E channels. All acceptance criteria were met, which satisfies the requirements of IEEE Std 384.

The material enclosed is considered proprietary and HFC requests that the proprietary material be withheld from public disclosure. In accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding," an affidavit is enclosed identifying the specific portions of the submitted material that are proprietary and the basis for making that determination. Non-proprietary versions of the submitted material are also provided with proprietary information redacted.

We thank the agency for the work.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Nov. 2, 2020

Yours Truly,

A handwritten signature in black ink, appearing to read "Steve Yang", written over a horizontal line.

Dr. Steve Yang
Senior Vice President
Doosan HF Controls

Enclosures:

1. Supporting documents in Proprietary and Non-Proprietary versions:

Non-Proprietary Version	Proprietary Version	Description	Rev.
TR901-302-03-NP	TR901-302-03-PI	VV0115 Isolation Test Summary Report	A
CR2020-0093-NP		Condition Report, associated CR Response and Training Record	N/A

2. Proprietary Information Notice
3. Justification of Proprietary Information

CC: Joseph J. Holonich, Sr. Project Manager
Licensing Process Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation
MS O-12D1



Submittal Documents Proprietary Version

1. TR901-302-03-PI, VV0115 Isolation Test Summary Report, Rev. A



HF Controls

Justification for Proprietary Information Affidavit

- (1) My name is Steve Yang. I am the Senior Vice President of Doosan HF Controls (HFC) Corporation and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of Doosan HFC Corporation.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Doosan HFC application for withholding accompanying this affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Doosan HFC in designating information as trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (a) The information sought to be withheld from public disclosure is owned and has been held in confidence by Doosan HFC Corporation.
 - (b) The information is of a type customarily held in confidence by Doosan HFC and not customarily disclosed to the public. Doosan HFC has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, uses a uniform method to determine when and whether to hold certain types of information in confidence. The application of our method and its substance constitute Doosan HFC's policy and provide the rational basis required.

Under the Doosan HFC method, information is held in confidence if it falls in one or more of several types of information, the release of which might result in the loss of an existing or potential competitive advantage as follows:

- ❖ Its use by a competitor would reduce his expenditure of resources and improve his competitive position in the design, manufacture, installation, assurance of quality, or licensing a digital based I&C system.
- ❖ It reveals cost or price information, production capacities, budget levels, or commercial strategies of Doosan HFC, its customers or suppliers.

- ❖ It reveals aspects of past, present or future Doosan HFC or customer funded development plans and programs of potential commercial value to Doosan HFC.
- ❖ It contains patentable ideas, for which patent protection may be desirable.

For this affidavit, all of the information marked proprietary is because its use by a competitor would reduce his expenditure of resources and improve his competitive position in the design, manufacture, installation, assurance of quality, or licensing a digital based I&C system (type one above). This leads to a Doosan HFC need to restrict certain commercial information from the public to prevent its use by competitors and creating a commercial advantage for them to the detriment of Doosan HFC.

The development of the HFC-6000 system design is the result of many years of development by uniquely experienced personnel in an intensive effort along with the expenditure of a considerable sum of money. In order for competitors to duplicate the Doosan HFC design and applicable information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience would have to be expended for the development of a digital design to equal the HFC-6000 system design.

There are sound Doosan HFC policy reasons behind the Doosan HFC proprietary designation system which include the following:

- a) The Use of such information by Doosan HFC gives Doosan HFC a competitive advantage over its competitors. It is therefore, withheld from disclosure to protect the Doosan HFC competitive position.
- b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Doosan HFC ability to sell products involving the use of the information.
- c) Use by our competitors would put Doosan HFC at a competitive disadvantage by reducing their expenditure or resources at Doosan HFC expense.
- d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Doosan HFC of a competitive advantage.
- e) Unrestricted disclosure would jeopardize the position of Doosan HFC in the world market such as South Korea, and thereby give a market advantage to the competition in those countries.

- (5) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR 2.390, it is to be received in confidence by the Commission.
- (6) Available information has not been previously employed in the same original. The information sought to be protected is not available in public sources or manner or method to the best of our knowledge and belief.
- (7) All documents in this submittal are to be held as proprietary in their entirety, as listed in the table below:

Proprietary Version	Description	Rev.
TR901-302-03-PI	VV0115 Isolation Test Summary Report	A

- (8) The proprietary information sought to be withheld in the submittal is that which is appropriately marked by deletion with brackets or block-out, in the following HFC non-proprietary documents:

Non-Proprietary Version	Description	Rev.
TR901-302-03-NP	VV0115 Isolation Test Summary Report	A
CR2020-0093-NP	Condition Report, associated CR Response and Training Record	N/A

AFFIDAVIT, STATE OF TEXAS, COUNTY OF Dallas

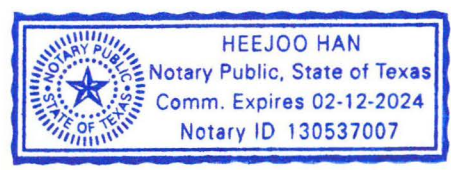
Before me, the undersigned authority, personally appeared Steve Yang, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Doosan HF Controls Corporation (HFC) and the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information and belief:

Steve Yang
Steve Yang

Sworn to and subscribed
Before me this 2nd day
of November, 2020

Notary Public

Heejoo Han



Proprietary Information Notice

On November 2, 2020, Doosan HF Controls transmitted the following documents in non-proprietary format:

Non-Proprietary Version	Description	Rev.
TR901-302-03-NP	VV0115 Isolation Test Summary Report	A
CR2020-0093-NP	Condition Report, associated CR Response and Training Record	N/A

In order to conform to the requirements of 10 CFR 2.390 concerning the protection of proprietary information submitted to the NRC, the proprietary version of the document listed above is marked "HFC Proprietary" on the title page and on each subsequent page. For the corresponding non-proprietary versions, all proprietary information has been deleted, with brackets or greyed-in fields in some documents, such that only non-proprietary information remains. In addition, the deletion was done in the manner such that the formatting of the documents was preserved so that page numbers, headings and section numbers remain unchanged. Since the basis for deleting the information in all instances is to protect Doosan HFC corporation confidential commercial information; there is no adjacent marking for each deletion as specified in 10 CFR 2.390(b)(1)(i)(B). Instead, in order to facilitate the review process, the locations of the proprietary information in each file are listed in the table below:

Non-Proprietary Version	Locations of the proprietary information as deleted in the non-proprietary version
TR901-302-03-NP	Pg. 1, 4-11.