| NRC FORM   | 7 |
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| (11-2012)  |   |
| 10 CFR 110 |   |
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## U. S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB: NO. 3150-0027

# APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL,

OR CONSENT REQUEST(S)

EXPIRES: (11/30/2015)

Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the information Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer. Office of Information and Regulatory Affairs, NECB-10202, (3150-0027). Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a

| (See Instructions on Pages 4 and 5)  |   | person is not required to respond to, the information collection.  |   |  |  |
|--|---|--|---|--|--|
| PARTA: FOR NRCIUSE ONLY  | M PUBLIC  | OR NON-PUBLIC  | DATE RECEIVED                                 | 28 2014  |  |
| XCOM 1256/01   | DOCKET NUMBER   |  | ADAMS ACCESSION NUM<br>MLUUTT H               | A 85.Z   |  |
| PART B. TO BE COMPLETED FOR (If more space is needed to complet  | ALL LICENSES<br>te any of the items, us   | S, AMENDMENTS, REN<br>se Pages 3-4 first, and then at  | IEWALS, OR CONS<br>tach additional sheets, if | SENT REQUESTS necessary.)  |  |
| 1. NAME AND ADDRESS OF APPLICANT/LICENSEE  | 1a. NAME O<br>Neal Hul  | OF APPLICANT'S CONTACT<br>Se   | 16. APPLICANT'S RI<br>AAA0001-NRC             | EFERENCE NUMBER  |  |
| Kingsbury, Inc.<br>10385 Drummond Road   | 1c PHONE  | NUMBER<br>(215) 824-4967   | 1d. FAX NUMBER (215                           | ) 824-4004   |  |
| Philadelphia, PA 19154   |   | 1e. E-MAIL ADDRESS<br>ndh@kingsbury.com  |   |  |  |
| 2. TYPE OF ACTION REQUESTED (Check One)  EXPORT IMPORT (Parts B. C. E) (Parts B.   | रा ブ  | AMENDMENT/RENEWAL<br>Current License Number:<br>XCOM1256   | . Current                                     | ENT REQUEST<br>Parts B. C)<br>License Number:                        |  |
| 3. CONTRACT NUMBER(S) 4. FIRST SHIP Changjiang   | MENT DATE<br>06/12/2013   | 5 LAST SHIPMENT DATE<br>12/31/2014   |   | D EXPIRATION DATE<br>12/31/2016                                      |  |
| PART C. TO BE COMPLE (If more space is needed to complet   | TED FOR EXPO  | DRT LICENSES, AMENI<br>se Pages 3-4 first, and then at   | DMENTS, OR RENE                               | EWALS<br>necessary.)   |  |
| 7. NAME(S) / ADDRESS(ES) OF SUPPLIERS AND/OR OTHER PARTIES TO THE EXPORT  Aerofin  4621 Murray Place Lynchburg, VA 24502  GE Power ( Rotating M Xingyuan ) Qingyang I Yantai, Sha See page 3   |   | PRESS(ES) OF INTERMEDIATE SIGNEE(S) Inverteam, SAS Rompure Press, 54250, France Inversion Inters, Yantai Inters |   | S) OF ULTIMATE (S) achinery Co., Ltd. d 200240 PR China er Co., Ltd. |  |
| See page 3   | See page 3  |  | See page 3                                    |  |  |
| 10 DESCRIPTION OF RADIOACTIVE MATERIALS. SEALED SOURCE NUCLEAR FACILITIES, EQUIPMENT, OR COMPONENTS FOR NUCLEAR EQUIPMENT INCLUDE TOTAL DOLLAR VALUE OF EQUIPMENT FOR EXPORT  Kingsbury is providing two (2) unique bearing assemb   |   | 10a MAX TOTAL VOLUME /<br>ELEMENT WGT (KG). OR<br>TOTAL ACTIVITY (TBq)   | 10b MAX ENRICHMENT<br>OR WGT %                | 10c MAX ISOTOPE<br>WGT (KG)  |  |
| GE Energy/Converteam SAS on this contract assemblies are oil-lubricated and enclosed in fabricated steel housings. The first bearing at CV-686/380 Z contains both a thrust bearing bearing, and is located on the top of the moto by our customer. See page 3 for further descriptions. | t. Both bearing<br>their own<br>ssembly, model<br>and a journal<br>or being supplied<br>riptions. | NALIBA TOTAL VOI HAZE  |   | Recli  |  |
| 11. FOREIGN OBLIGATIONS (BY COUNTRY AND BY P   | ERCENTAGE OF MAXII  | MIDINI TOTAL VOLUME)   | JUN   | 2 3 2014   |  |

| ,   |  | R NRC EXPORT OR II<br>AL, OR CONSENT RE                                 | MPORT  | ULATORY COMMISSION                        |
|---|--|---|--|---|
| LICENSE NUMBER DOCKET NUMBER X COM 1256/01 1100   | 96071  | ADAMS ACCESSION NUMBER  | PUBLIC OF  | NON-PUBLIC                                |
| PART D. TO BE COMPL (If more space is needed to comple                                  | ETED FOR IMP   | PORT LICENSES, AMEN   | NDMENTS, OR RENE<br>attach additional sheets, if         | EWALS<br>necessary.)                      |
| 12 NAME(S) / ADDRESS(ES) OF FOREIGN<br>SUPPLIERS AND/OR OTHER PARTIES<br>TO IMPORT      | 13. NAME(S) / ADDRESS(ES) OF INTERMEDIATE CONSIGNEE(S) |   | 14 NAME(S) / ADDRESS(ES) OF ULTIMATE U S<br>CONSIGNEE(S) |   |
| 12a. NRC EXPORT LICENSE NUMBER(S) (if applicable)                                       | 13a. LICENSE NUMBER(S) / EXPIRATION DATE(S)            |   | 14a. LICENSE NUMBER(S)                                   | EXPIRATION DATE(S)                        |
|   | 13b. INTERMEDIATE                                      | ATE USE(S)  14b. ULTIMATE END USE(S)                                    |  | )   |
| 15. DESCRIPTION OF RADIOACTIVE MATERIALS, SE<br>NUCLEAR FACILITIES                      | ALED SOURCES.  | 15a. MAX TOTAL VOLUME /<br>ELEMENT WGT (KG). OR<br>TOTAL ACTIVITY (TBq) | 15b. MAX ENRICHMENT<br>OR WGT %                          | 15c. MAX ISOTOPE<br>WGT (KG)              |
| 16 FOREIGN OBLIGATIONS (BY COUNTRY AND BY F   |  |   |  | NT DE 0/1507/0\                           |
| PART E. TO BE COMPLETED FOR   | ALL LICENSE  | S, AMENDMENTS, REN  | NEWALS OR CONSE  | REQUEST(S)                                |
| 17. ADDITIONAL INFORMATION PROVIDED ON PAGES 3, 4, AND/OR ON SEPARATE SHEETS?           | YES N  | O 17a. COPIES OF RECI   |  | YES V NO                                  |
| 18. CERTIFICATION:  I, the applicant with Title10, Co of my knowledge.                  | de of Federal Re                                       | icial, hereby certify that the egulations, and that all inf             | nis application is prepa<br>formation provided is o      | ared in conformity<br>correct to the best |
| 18a PRINT NAME AND TITLE OF AUTHORIZED OFFICIAL Neal Hulse Manager, Engineered Products |  | 186 SIGNATURE - AUTHORIZED OFFICIAL  180 DATE  5/20/14                  |  |   |

**NRC FORM 7** (11-2012) 10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

### APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

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ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

- 7a. Aerofin is Kingsbury's subcontractor who will design, build and pressure-test two different cooling coil configurations; one (1) for the CV-686/381 Z and one (1) for the RV-356 Z. Both cooling coils will be designed, manufactured and tested per ASME III. Class 3 requirements but will not have the 'N' stamp applied. A quantity of (5) cooling coils will be required for each bearing model.
- 8a. GE Energy/Converteam, SAS is Kingsbury's customer and has the responsibility to design, build and test the motors that will drive the RCP at the nuclear power plant located in Changjiang County, PRC. Kingsbury needs to be able to communicate directly with GE Energy/Converteam, SAS on an unrestricted basis so that our design can be successfully integrated into our customer's motor. Kingsbury has no additional knowledge of GE Energy/Converteam, SAS having any other intermediate uses for these bearing assemblies.
- 8a. GE Power Conversion, Rotating Machinery is an affiliate of GE Energy and will be performing the assembly and testing of the bearing assemblies, motors and RCP prior to their installation at the nuclear power plant located in Changiang County, PRC. The Kingsbury bearings will be shipped directly from our manufacturing facility in Philadelphia, PA to this company's facility, as identified on sheet #1. Kingsbury has no additional knowledge of GE Energy/Converteam, SAS having any other intermediate uses for these bearing assemblies.
- 9a. According to GE Energy, Shanghai Electric Machinery Co., Ltd. is the name of the company that is the purchaser of the reactor coolant pumps that have the motor where our bearings are located. GE Energy has informed Kingsbury that the bearing assemblies will not be located at this company's listed address. Kingsbury has no additional knowledge of this company having any other intermediate uses for these bearing assemblies.
- 9a. According to GE Energy, Hainan Nuclear Power Co., Ltd. is the name of the company that is the end user of the Kingsbury bearing assemblies. Kingsbury has been informed that the reactor coolant pumps, the motor assemblies and the Kingsbury bearing assemblies will be in use at this company's facility for their operational lifetime providing cooling water to the nuclear reactor at this site. Kingsbury has no additional knowledge of this company having any other intermediate uses for these bearing assemblies.
- 10. The second bearing assembly, model RV-356 Z contains only an oil-lubricated radial bearing and is located on the bottom of the motor, closest to the RCP, being supplied by the customer. Both of the bearing assembly models are self-lubricated, and manufactured from steel and babbitt. All un-machined, exterior surfaces will be coated with a commercially available epoxied based primer. The housing for each bearing assembly also acts as an oil reservoir and contains one of the two different Aerofin cooling coils. The cooling coils will be manufactured from 316L stainless steel tubing with copper fins mounted on the outside surface of the tubing. There are water connections to each cooling coil on the outside of each bearing assembly housing to allow for cooling water to flow through the coils. Each housing has two (2) scals that prevent oil from escaping out of the housing and these will be manufactured from radiation resistant polymers. The total quantity of bearing assembly model CV-686/380 Z, which includes (1) cooling coil each, being shipped under this contract is five (5); and the total quantity of bearing assembly model RV-356 Z, which includes (1) cooling coils each, being shipped under this contract is also five (5). The total value of the components for export is

Amendment Dated April, 2014:

Remove: 8. - GE Power Conversion, Rotating Machines, Yantai, Xingyuan Xi Road, Qingyang Industrial Park, Fushan District of Yantai, Shandong, 265000 PRC. GE Energy has informed Kingsbury that as of January, 2014 the aforementioned facility has been closed for financial reasons. All of the motors and Kingsbury bearing assemblies that had been located at this facility have been moved to the Converteam Power Conversion (Shanghai) Co., Ltd facility.

Add: 8. - Converteam Power Conversion (Shanghai) Co., Ltd.; No. 3468, Yuanjiang Road, Minhang District, Shanghai 201109, PRC.

Add: 8. - SEC-KSB Nuclear Pumps & Valves Co., Ltd.: No. 257 Yitian Road, Lingang New City, Pudong District, Shanghai 201306, PRC.

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# APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

| LICENSE NUMBER | DOCKET NUMBER | ADAMS ACCESSION NUMBER | PUBLIC SOR NON-PUBLIC    |
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| Yraninthial    | Fronko 71     |                        | NON-PUBLIC OR NON-PUBLIC |
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ADDITIONAL INFORMATION (Reference applicable block numbers from page 1 and/or page 2 for each entry)

Amendment Date April, 2014 - continued:

Add: 8a. - According to GE Energy, Converteam Power Conversion (Shanghai) Co., Ltd. is an affiliate of GE Energy/Converteam and will be performing the assembly and testing of the remaining bearing assemblies and motors prior to their transport to SEC-KSB for RCP testing, which occurs prior to the installation of the RCP/motor assembly at the nuclear power plant located in Changjiang County, PRC. The remaining two (2) Kingsbury CV-686/380 Z bearing assemblies and the remaining two (2) Kingsbury RV-356 Z bearing assemblies will be shipped directly from our manufacturing facility in Philadelphia, PA to this company's facility. Kingsbury has no additional knowledge of Converteam Power Conversion (Shanghai) Co., Ltd. having any other intermediate uses for these bearing assemblies.

Add: 8a. - According to GE Energy, SEC-KSB Nuclear Pumps & Valves Co., Ltd. is a joint venture between Shanghai Electric Co., Ltd. and KSB Aktiengesellschaft. This company manufactures the reactor coolant pumps that are driven by the GE Energy. Converteam motors, for the Hainan Nuclear Power Plant. SEC-KSB will be performing multiple load and speed tests on the RCP motor assemblies as part of the acceptance criteria for the pumps to be used in the Hainan Nuclear Power Plant. GE Energy has informed Kingsbury that the motors (and therefore the bearing assemblies) will only be at this company's listed address for a brief time so that the pump/motor testing be completed. Kingsbury has no additional knowledge of this company having any other intermediate uses for these bearing assemblies.

Add: 10. - Kingsbury to provide spare parts to any, or all of the foreign intermediate consignees. During intra-company shipment, testing and installation onto the test stand, various bearing components are expected to break, wear out or need replacing for a variety of reasons. The components that may need to be replaced can be found on both the CV-686/380 Z bearing assemblies and the RV-356 Z bearing assemblies. It is not possible to identify ahead of time exactly what components on the bearing assemblies may need replacing because of the many varied causes of component failure. The total value of the spare components for export is

Add: 10. - Kingsbury to provide spare parts to one, or both, of the ultimate foreign consignees. During intra-site shipment, testing, installation, commissioning and general usage, various bearing components are expected to break, wear out and/or need replacing for a variety of reasons. The components that may need to be replaced can be found on both the CV-686/380 Z bearing assemblies and the RV-356 Z bearing assemblies. It is not possible to identify ahead of time exactly what components on the bearing assemblies may need replacing because of the many varied causes of component failure. The total value of the spare components for export is

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