Westinghouse

Westinghouse Electric Company LLC
2000 Day Hill Road
Windsor, CT 06095

September 30, 2002
LTR-ESI-02-169

Mr. Adam M. Scheinman
Director, Office of Export Control Policy and Cooperation, NA-242
Office of Nonproliferation and International Security
U.S. Department of Energy
Washington, DC 20585

Subject: **Quarterly Report Pursuant to 10 CFR 810 Specific Authorization**

Reference: (1) DOE 10 CFR Part 810 Authorization to Westinghouse Electric Company to Provide Nuclear Power Reactor Technology to the Democratic People's Republic of Korea, Spencer Abraham, dated May 3, 2001.

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the third quarter of 2002 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (DPRK). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirements stated in Reference 1.

1. **Name and address of the person submitting this report:**
   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. **Name and address of the entity for which the activity is being performed:**
   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

Korea Electric Power Corporation (KEPCO)
167, Samsung-Dong, Kangnam-Gu
Seoul, Republic of Korea

Doosan Heavy Industries & Construction Co. ("Doosan")
555, Guygok-Dong, Changwon
KyungsangNam-Do, Republic of Korea

KEPCO Nuclear Fuel Co., Ltd. (KNFC)
150, Dukjin-Dong, Yusung-Ku
Taejon, Republic of Korea

Korea Power Engineering Company, Inc. (KOPEC)
360-9, Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Republic of Korea

3. Description of Activities:

A permit to construct the KEDO LWR Project Unit 1 & 2 plants was issued to KEDO by the DPRK on September 1, 2001. Ceremonies marking the first concrete pour at Unit 1 took place on August 7, 2002. In May 2002, KEDO announced the construction schedule to complete LWR Unit 1 was to be 2008 vice the original target of 2003.

Thousands of NSSS-related documents will need to be transferred to the DPRK for the construction, operation and maintenance of the KEDO LWR-1&2 units. Review of many such documents is being performed by DOE consultants in advance of the actual need date to ensure that the critical path is not affected and that such documents comply with the requirements of the Part 810 specific authorization. Supporting this effort, DOE consultants were in Windsor on September 10-12, 2002 to continue their review of technical documents prepared by Westinghouse and associated contractors for the LWR 1 & 2 Project.

While in Windsor, DOE consultants also toured the Westinghouse Electro-Mechanics Operations fabrication facilities in New Britain, CT to assess potential information disclosure / security issues should DPRK nationals visit these facilities. This tour was in preparation for an audit by KEDO with potential DPRK participation of Westinghouse facilities during 2003.

Westinghouse judges that the document review task is progressing very well. We greatly appreciate the dedicated and diligent efforts of the DOE personnel assigned to this significant project. DOE's initiative and timely responses to questions from Westinghouse as well as from associated South Korean contractors are also very helpful.

Feel free to contact Virgil Paggen at 860-731-6287 or me at 860-731-6289 if you have any questions.

Sincerely,
Westinghouse Electric Company, LLC

Ian C. Rickard
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach):
Zan Hollander(zan.hollander@hq.doe.gov)
Karen Wright (karen.wright@hq.doe.gov)
Robin DeLaBarre (delabarrer@T.state.gov)
Sam Bosken (boskenjj@state.gov)
Janice Dunn Lee (jdl@nrc.gov)
E. McDonough, H. Sepp, R. Llovet (Westinghouse)
F. Murray, J. McInerney (Westinghouse)

The Secretary of Energy
Washington, DC 20585

DETERMINATION PURSUANT TO DEPARTMENT OF ENERGY REGULATIONS 10 CFR PART 810 ON WESTINGHOUSE REQUEST FOR RENEWAL OF AUTHORIZATION TO PROVIDE NUCLEAR POWER REACTOR TECHNOLOGY TO THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA (95NK001)

Having considered the factors listed in 10 CFR Part 810.10, the Department of Energy (DOE or the Department) staff recommendation of approval, concurrence by the Department of State, and consultations with the Departments of Defense and Commerce and the Nuclear Regulatory Commission, I have determined that it will not be inimical to the interest of the United States to renew the May 6, 1996, authorization to allow Westinghouse Electric Company to provide technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (DPRK).

I, therefore, authorize the activities described in Westinghouse's January 29, 2001, letter of application, subject to:

- DPRK Government assurances given in the 1994 Agreed Framework between the U.S. and DPRK Governments and the 1995 Agreement on Supply between the Korean Peninsula Energy Development Organization (KEDO) and the DPRK Government, that:
  - Transferred Westinghouse technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose.
  - Neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent.
  - The reactors being built in the DPRK will be placed under International Atomic Energy Agency safeguards.
- Westinghouse's agreement to:
  - Ensure that its technology transferred to DPRK entities is only that technology necessary for the licensing and safe operation of the reactors, including design and manufacturing data needed for such licensing and safe operation, but not technology enabling design or manufacture of nuclear reactor components or fuel.
  - To make written reports on its DPRK-related activities on a quarterly basis and brief DOE and representatives of other U.S. Government agencies on these activities whenever DOE so requests.

This renewed authorization shall be valid for a period of five years, renewable by the Department, in consultation with the Department of State, in the light of experience and the circumstances at that time, and shall be suspended, subject to reinstatement by the Department, if either the United States or the DPRK abrogates the Agreed Framework or the 1995 KEDO Supply Agreement. It also may be modified, suspended, or withdrawn if at anytime it is determined to be inimical to the interest of the United States.

Spencer Abraham

Spencer Abraham

May 3, 2001

Date

Westinghouse

Westinghouse Electric Company LLC
2000 Day Hill Road
Windsor, CT 06095

July 11, 2002
LTR-ESI-02-123

Director, Office of Export Control Policy and Cooperation, NA-242
Office of Nonproliferation and International Security
U.S. Department of Energy
Washington, DC 20585

Subject: **Quarterly Report Pursuant to 10 CFR 810 Specific Authorization**

Reference: Letter, A. M. Scheinman (DOE) to P. W. Richardson (Westinghouse), dated May 9, 2001

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the second quarter of 2002 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (DPRK). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. **Name and address of the person submitting this report:**
   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. **Name and address of the entity for which the activity is being performed:**
   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

Korea Electric Power Corporation (KEPCO)
167 Samsung-Dong, Kangnam-Gu
Seoul, Republic of Korea

Doosan Heavy Industries & Construction Co. ("Doosan")
555 Guygok-Dong, Changwon
Kyungnam, Republic of Korea

KEPCO Nuclear Fuel Co., Ltd. (KNFC)
150 Dukjin-Dong, Yusung-Ku
Taejon, Republic of Korea

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Republic of Korea

3. Description of Activities:

A permit to construct the KEDO LWR Project Unit 1 & 2 plants was issued by the DPRK on September 1, 2001. Ceremonies marking the start of construction were held on September 14, 2001 with excavation and site preparation well underway as of June 2002. The first concrete pour for Unit 1 is currently scheduled for August 7, 2002.

Thousands of documents will need to be transferred to the DPRK for the construction, operation and maintenance of the KEDO LWR-1&2 units. Review of these documents is being performed in advance of the actual need date to ensure that the critical path is not affected and that such documents comply with the requirements of the Part 810 specific authorization. DOE consultants were in Windsor on June 11-12, 2002 to review additional construction documents needed for the Project. During this session, DOE consultants were also asked to review many Quality Assurance related documents that Doosan is planning to make available for a QA audit of its Changwon facility in late August 2002. KEDO will perform the audit of the Doosan Changwon facility, with DPRK participation. Doosan continues to submit additional QA documents/samples to Westinghouse; these documents will be confirmed by DOE consultants prior to their release for use in the Doosan audit.

The training facility for DPRK personnel was dedicated and general training for approximately 200 DPRK personnel was initiated on June 5, 2002. This facility is located near the plant site in Kumho, North Korea, with training being provided by KEPCO.

Westinghouse judges that the document review task is progressing very well. We greatly appreciate the dedicated and diligent efforts of the DOE personnel assigned to this significant project. DOE's initiative and timely responses to questions from Westinghouse as well as our South Korean licensees are also very well received. DOE consultants plan another meeting in Windsor in mid September to continue the document review. Westinghouse is also planning an Export Controls meeting with DOE, KEDO, KEPCO, Doosan, KNFC, KOPEC and Mitsubishi Heavy Industries in mid September in Windsor. Westinghouse expects that this meeting will serve to reinforce the entire Part 810 process and provide an opportunity for export-related discussions among the affected parties. This Export Controls meeting will be preceded by the 9th Joint NSSS Status Review meeting to be held in Windsor beginning September 9, 2002.

A meeting was held with DOE / DOC / NRC / State Department on May 8, 2002 to discuss technology transfer, export jurisdiction, and conditions needed to issue validated licenses for export of computer software to the DPRK.

The 8th Joint Status Review Meeting was held in Seoul, and the 5th Project Review Meeting was held in Changwon, South Korea during the week of May 6-10, 2002. During this meeting, the construction schedule for completing KEDO LWR Unit 1 was officially announced to be year 2008 vice the original "target date" of year 2003.

Feel free to contact Virgil Paggen at 860-731-6287 or me at 860-731-6289 if you have any questions.

Sincerely,
Westinghouse Electric Company, LLC

Virgil Paggen (for)

Ian C. Rickard
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach):
zan.hollander@hq.doe.gov
karen.wright@hq.doe.gov
R. DeLaBarre (delabarrer@T.state.gov)
Janice Dunn Lee (jdl@nrc.gov)
E. McDonough, H.Sepp, R.Llovet (Westinghouse)
F. Murray, J. McInerney (Westinghouse)

Westinghouse

Westinghouse Electric Company LLC
2000 Day Hill Road
Windsor, CT 06095

April 11, 2002
LTR-ESI-02-074

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: **Quarterly Report Pursuant to 10 CFR 810 Specific Authorization**

Reference: Letter, A. M. Scheinman (DOE) to P. W. Richardson (Westinghouse), dated May 9, 2001

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the first quarter of 2002 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. **Name and address of the person submitting this report:**
   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. **Name and address of the entity for which the activity is being performed:**
   Korean Peninsula Energy Development Organization (KEDO)

Korea Electric Power Corporation (KEPCO)
167 Samsung-Dong, Kangnam-Gu
Seoul, Korea

Doosan Heavy Industries & Construction Co. (DHICO)
555 Guygok-Dong, Changwon
Kyungnam, Korea

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Korea

US Department of State
2201 C Street, NW
Washington, DC 20520

3. Description of Activities:

A permit to construct the LWR Project Unit 1 & 2 plants was issued by the DPRK on September 1, 2001. Ceremonies marking the start of construction were held on September 14, 2001 with excavation and site preparation well underway as of March 2002. The first concrete pour is currently scheduled for August 2002.

Thousands of documents will need to be transferred to the DPRK for the construction, operation and maintenance of the LWR-1&2 units. Review of these documents is being performed in advance of the actual need date to ensure that the critical path is not affected and that such documents comply with the requirements of the Part 810 specific authorization. DOE consultants were in Windsor on March 5-6, 2002 to review Plant Monitoring System, Core Protection Calculator System and KNFC training material needed for the Project. Since some of the training material contains detail that is directly related to topical reports that have been withheld, Westinghouse expects that such training material cannot be taught until DPRK comes into compliance with the IAEA full scope safeguards. DOE/NNSA letter dated March 27, 2002 approved all Plant Monitoring System and Core Protection Calculator training documents except one, which requires modification. DOE consultants are presently reviewing the KNFC Nuclear Fuel training material. Westinghouse judges that the document review task is progressing very well. We greatly appreciate the dedicated and diligent efforts of the DOE personnel assigned to this significant project. DOE's initiative and timely responses to questions from Westinghouse as well as our South Korean licensees are also very well received. DOE consultants plan another meeting in Windsor in the near future to continue the document review.

The 7th Joint NSSS Status Review Meeting was held at Mitsubishi's facilities in Kobe, Japan during the week of February 4, 2002. The 5th Project Status Review Meeting is scheduled for the week of May 6 in South Korea.

Feel free to contact Virgil Paggen at 860-731-6287 or me at 860-731-6289 if you have any questions.

Sincerely,
Westinghouse Electric Company, LLC

Virgil Paggen (for)

Ian C. Rickard
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: Z. Hollander, K. Wright (DOE)
(w/o R. DeLaBarre (DOState)
attach): Janice Dunn Lee (NRC)
E. McDonough, H.Sepp, R.Llovet (Westinghouse)
F. Murray, P. Leombruni (Westinghouse)

Korea Electric Power Corporation (KEPCO)
167 Samsung-Dong, Kangnam-Gu
Seoul, Korea

Doosan Heavy Industries & Construction Co. (DHICO)
555 Guygok-Dong, Changwon
Kyungnam, Korea

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Korea

US Department of State
2201 C Street, NW
Washington, DC 20520

SUPERSEDES LTR-ESI-02-071
Corrected date below.
(LTR-ESI-02-071 incorrectly reported October 2002)
K. Paggen

3. Description of Activities:

A permit to construct the LWR Project Unit 1 & 2 plants was issued by the DPRK on September 1, 2001. Ceremonies marking the start of construction were held on September 14, 2001 with excavation and site preparation well underway as of March 2002. The first concrete pour is currently scheduled for August 2002.

Thousands of documents will need to be transferred to the DPRK for the construction, operation and maintenance of the LWR-1&2 units. Review of these documents is being performed in advance of the actual need date to ensure that the critical path is not affected and that such documents comply with the requirements of the Part 810 specific authorization. DOE consultants were in Windsor on March 5-6, 2002 to review Plant Monitoring System, Core Protection Calculator System and KNFC training material needed for the Project. Since some of the training material contains detail that is directly related to topical reports that have been withheld, Westinghouse expects that such training material cannot be taught until DPRK comes into compliance with the IAEA full scope safeguards. DOE/NNSA letter dated March 27, 2002 approved all Plant Monitoring System and Core Protection Calculator training documents except one, which requires modification. DOE consultants are presently reviewing the KNFC Nuclear Fuel training material. Westinghouse judges that the document review task is progressing very well. We greatly appreciate the dedicated and diligent efforts of the DOE personnel assigned to this significant project. DOE's initiative and timely responses to questions from Westinghouse as well as our South Korean licensees are also very well received. DOE consultants plan another meeting in Windsor in the near future to continue the document review.

Westinghouse

Westinghouse Electric Company LLC
2000 Day Hill Road
Windsor, CT 06095

23 January 2002
LTR-ESI-02-014

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: **Quarterly Report Pursuant to 10 CFR 810 Specific Authorization**

Reference: Letter, A. M. Scheinman (DOE) to P. W. Richardson (Westinghouse), dated May 9, 2001

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the fourth quarter of 2001 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. **Name and address of the person submitting this report:**
   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. **Name and address of the entity for which the activity is being performed:**
   Korean Peninsula Energy Development Organization (KEDO)

Doosan Heavy Industries & Construction Co. (DHICO)
555 Guygok-Dong, Changwon
Kyungnam, Korea

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

A permit to construct the LWR Project Unit 1 & 2 plants was issued by the DPRK on September 1, 2001. Formal ceremonies marking the start of construction were held on September 14, with excavation for the foundations of both units well underway as of late December. The next major project milestone, pouring of first concrete, is currently scheduled for August 2002.

DOE consultants Joan Boudreau and Brent Heilman were at the Westinghouse-Windsor facility on December 11-12, 2001 to review certain design documents needed for the LWR-1&2 Project. Many of the documents reviewed were approved for delivery to the DPRK as documented in DOE/NNSA letter dated December 21, 2001. Included in this approval were a number of generic documents identified via their Functional Breakdown Structure such as quality plans, system design requirements, interface requirements, test requirements, and equipment data sheets. Because a significant quantity of documents will need to be transferred to the site for construction and operation, reviews of these documents are being performed in advance of the actual need date to ensure that the critical path is not affected, and that such documents comply with the requirements of the Part 810 specific authorization. This activity is progressing very well from Westinghouse's perspective. On January 8, 2002, DOE provided Westinghouse with an annotated list of all of the documents already reviewed and dispositioned, along with those yet to be reviewed; this list was forwarded to Westinghouse's customers/licensees in Korea. Westinghouse greatly appreciates the dedicated and diligent efforts of the DOE personnel assigned to this important project. DOE's initiative and timely responses to questions from Westinghouse as well as our South Korean licensees are also very well received. DOE consultants plan another meeting in Windsor for early March to continue the document reviews.

Discussions have begun with DOE on the method to secure the LWR-1 & 2 design documents (e.g. drawings and specifications) needed on-site by the Republic of Korea constructor entities. DHICO was informed that DOE has requested greater detail on the security plan submitted by KEDO; DOE is also pursuing information directly from KEDO about the security plans for such documents. On October 25, KEDO and KEPCO

advised Westinghouse that a final security plan was expected to be submitted to KEDO by mid-December and thereafter to DOE. As of this writing, Westinghouse is not aware that KEDO and DOE have concluded this issue.

The 4th Project Status Review Meeting was held at the Kumho, North Korea plant site on October 24 & 25, 2001. The 6th Joint NSSS Status Review Meeting (SRM) was held at KOPEC's facilities in Taejon, South Korea on October 19 & 20. The 7th Joint NSSS SRM will be held at Mitsubishi's facilities in Kobe, Japan during the week of February 4, 2002.

An orientation course for senior DPRK management personnel was presented on December 17-29, 2001. Nineteen (19) DPRK personnel attended including Mr. Kim Hui-Mun, General Director of the DPRK General Bureau for the LWR Project. The training program comprised 36 hours of classroom lectures on a variety of subjects including nuclear safety, along with visits to the Ulchin plant and Engineering / Manufacturing facilities involved in the LWR-1 & 2 Project and located in the Republic of Korea.

Feel free to contact Virgil Paggen at 860-731-6287 or me at 860-731-6599 if you have any questions.

Sincerely,
Westinghouse Electric Company, LLC

Philip W. Richardson
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach): Z. Hollander, K. Wright (DOE)
R. DeLaBarre (DOState)
Janice Dunn Lee (NRC)
E. McDonough, H.Sepp, R.Llovet (Westinghouse)
F. Murray, P. Leombruni (Westinghouse)

Westinghouse

Westinghouse Electric Company LLC
2000 Day Hill Road
Windsor, CT 06095

30 October 2001
LTR-ESI-01-209

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: **Quarterly Report Pursuant to 10 CFR 810 Specific Authorization**

Reference: Letter, A. M. Scheinman (DOE) to P. W. Richardson (Westinghouse), dated May 9, 2001

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the third quarter of 2001 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:
   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:
   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Gu
   Seoul, Korea

Doosan Heavy Industries & Construction Co. (DHICO)
555 Guygok-Dong, Changwon
Kyungnam, Korea

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

The LWR Project Unit 1 & 2 Preliminary Safety Analysis Report was submitted to the DPRK licensing authority in February 2001; the Korea Institute of Nuclear Safety is supporting the DPRK's review of the PSAR. Three rounds of questions on the PSAR, plus supplementary questions, etc., have been issued to date by the DPRK. Responses to these questions are proposed by our South Korean licensees, then reviewed by Westinghouse in consultation with DOE and its technical consultants before being approved for issuance. In addition to questions on the PSAR, the DPRK licensing authority has requested copies of various CE topical reports referenced in the PSAR in order to support their review of the LWR Project application for a construction permit. Requested reports not in the public domain were forwarded to DOE for review and approval; those reports approved by DOE were marked and forwarded to DHICO. DOE-approved reports are independently reviewed and approved by the Korean Ministry of Science and Technology before transmittal to the DPRK State Nuclear Safety Review Committee. At present, all PSAR-related questions and all CE topical reports requested by the DPRK have been dispositioned by the DOE with no remaining backlog.

A Permit for construction of the LWR Project Unit 1 & 2 plants was issued by the DPRK on September 1, 2001. Formal ceremonies marking the start of construction were held on September 14, with excavation for the foundations of both units well underway as of late October. The next major project milestone, pouring of first concrete, is currently scheduled for August 2002.

Discussions have begun with DOE on the method to secure the LWR-1 & 2 design documents (e.g. drawings and specifications) needed on-site by the ROK entities. DHICO was informed that DOE has requested greater detail on the security plan submitted by KEDO; DOE is also pursuing information directly from KEDO about the security plans for such documents. On October 25, KEDO and KEPCO advised Westinghouse that a final security plan was expected to be submitted to KEDO by mid-December and thereafter to DOE.

Westinghouse Electric Company

2000 Day Hill Road
Windsor, CT 06095

August 6, 2001
LD-2001-0044

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: Quarterly Report Pursuant to 10 CFR 810 Specific Authorization

Reference: Letter, A. M. Scheinman (DOE) to P. W. Richardson (Westinghouse), dated May 9, 2001

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the second quarter of 2001 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:

   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Gu
   Seoul, Korea

   Doosan Heavy Industries & Construction Co. (DHICO)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

   Korea Power Engineering Company, INC. (KOPEC)
   360-9 Mabuk-Ri, Kusong-Myon, Yongin
   Kyunggi, Korea

   US Department of State
   2201 C Street, N.W.
   Washington, DC 20520

3. Description of Activities:

Westinghouse applied for renewal of the North Korea Part 810 specific authorization by letter dated January 29, 2001. On May 3, 2001, DOE Secretary Abraham approved the requested Part 810 renewal for a period of five years.

The LWR Project Unit 1 & 2 Preliminary Safety Analysis Report was submitted to the DPRK licensing authority in February 2001; the Korea Institute of Nuclear Safety is supporting the DPRK's review of the PSAR. Three rounds of questions on the PSAR have been issued to date by the DPRK. Westinghouse reviews answers to these questions, proposed by our South Korean licensees, in consultation with DOE and its technical consultants before being approved for issuance. Additional questions are expected as the DPRK Licensing Authority continues its review of the PSAR in preparation for issuing a Construction Permit anticipated in September 2001.

The DPRK licensing authority has requested copies of CE topical reports referenced in the PSAR in order to support their review of the LWR Project application for a construction permit. Requested reports not in the public domain are forwarded to DOE for review and approval; those reports approved by DOE are marked and forwarded to DHICO. DOE-approved reports are independently reviewed and approved by the Korean Ministry of Science & Technology before transmittal to the DPRK State Nuclear Safety Review Committee. Sixteen topical reports have been transmitted to the DOE for review this quarter; eight of these have been dispositioned (3 approved as-is, 3 approved with comments, 2 restricted). The remaining eight reports are currently under review.

Discussions have begun with DOE on the method to secure the LWR-1 & 2 design documents (e.g. drawings and specifications) needed on-site by the ROK entities. DHICO was informed that DOE has requested greater detail on the security plan submitted by KEPCO/DHICO. We understand that DOE is also pursuing information directly from KEDO about the security plans for such documents.

DOE guidelines for indoctrination training of DPRK senior management personnel in South Korea during August 2001 were transmitted to DHICO. This training will include guided visits to several relevant engineering and manufacturing facilities in South Korea, plus a tour of Ulchin 3 & 4, the reference plant for the KEDO LWR Project, Units 1 & 2.

The fifth Project Status Review Meeting was held in Windsor on June 25-28, 2001.

Feel free to contact Virgil Paggen at 860-731-6287 or me at 731-6599 if you have any questions. Please note these new phone numbers for your records.

Sincerely,
Westinghouse Electric Company, LLC

Philip W. Richardson
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach): M. Watt, Z. Hollander (DOE)
R. DeLaBarre (State)
R. Hauber (NRC)
E. McDonough, H.Sepp, R.Llovet (Westinghouse)
F. Murray, J. Ford, P. Leombruni (Westinghouse)

Department of Energy
National Nuclear Security Administration
Washington, DC 20585

May 9, 2001

Mr. Philip W. Richardson
Licensing Project Manager
Windsor Nuclear Licensing
Westinghouse Electric Company
2000 Day Hill Road
Windsor, Connecticut 06095

Dear Mr. Richardson:

I am pleased to inform you that the Secretary of Energy has approved your January 29, 2001, request for renewal of Westinghouse's May 6, 1996, authorization pursuant to Department of Energy (DOE) regulations 10 CFR Part 810. The renewed authorization permits Westinghouse to continue providing technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors (LWRs) in the Democratic People's Republic of Korea (DPRK).

A copy of the May 3, 2001, renewed authorization is enclosed.

Note that the authorization is subject to:

- DPRK Government assurances given in the 1994 Agreed Framework between the United States and the DPRK and the 1995 Agreement on Supply between the Korean Peninsula Energy Development Organization (KEDO) and the DPRK Government, that:
  - transferred Westinghouse technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose;
  - neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent; and
  - the reactors being built in the DPRK will be placed under International Atomic Energy Agency safeguards.
- Westinghouse's agreement to:
  - ensure that its technology transferred to DPRK entities is only that necessary for the licensing and safe operation of the reactors, including design and manufacturing data needed for such licensing and safe operation, but not technology enabling design or manufacture of nuclear reactor components or fuel; and

Printed with soy ink on recycled paper

- make written reports to my office on a quarterly basis on activities related to the KEDO project and to brief Department of Energy National Nuclear Security Administration (DOE/NNSA) and representatives of other U.S. Government agencies whenever DOE/NNSA so requests.

In regard to the first condition levied upon Westinghouse, as you know, my office and Westinghouse have developed a system of review for technical documents, including software, proposed for transfer to the DPRK or used in training of DPRK personnel. Westinghouse's cooperation has been excellent, especially in obtaining DOE/NNSA guidance on questions raised by Westinghouse's South Korean licensees and KEDO, and requiring that the licensees and KEDO comply with the DOE/NNSA guidance in their treatment of Westinghouse technology. As a consequence, the review system is working well. We expect this close cooperation to continue.

Like the original, this authorization is valid for a period of five years, renewable by the Secretary, in consultation with the Department of State, in the light of experience and the circumstances at that time. In addition, this authorization can be suspended, subject to reinstatement by the Department, if either the United States or the DPRK abrogates the Agreed Framework or the 1995 KEDO Supply Agreement. It also may be modified, suspended, or withdrawn if at any time it is determined by the U.S. Government to conflict with U.S. policy towards North Korea.

Further, Westinghouse employees engaged in the authorized activities should be cautioned against inadvertent disclosure of technology not covered by the authorization, including Naval Nuclear Propulsion Information. Failure to comply with this requirement could result in legal action, both individually and against Westinghouse, and revocation of the authorization.

Finally, in order to exercise the authorization, Westinghouse must obtain any necessary Nuclear Regulatory Commission or Department of Commerce export licenses in connection with proposed transfers.

In accord with section 810.10 (d), a copy of this determination will be made available at the Department's Public Reading Room in about 30 days unless Westinghouse objects and, as stated in the Part 810 regulations, shows that "public disclosure will cause substantial harm to its competitive position."

If you have any questions regarding this matter, please feel free to contact me (202-586-2331) or Mr. Zander Hollander, a consultant to my office (202-586-2125).

Sincerely,

Adam M. Scheinman
Director
Office of Nuclear Transfer and Supplier Policy

Enclosure

This renewed authorization shall be valid for a period of five years, renewable by the Department, in consultation with the Department of State, in the light of experience and the circumstances at that time, and shall be suspended, subject to reinstatement by the Department, if either the United States or the DPRK abrogates the Agreed Framework or the 1995 KEDO Supply Agreement. It also may be modified, suspended, or withdrawn if at anytime it is determined to be inimical to the interest of the United States.

Spencer Abraham

Spencer Abraham

May 3, 2001

Date

The Secretary of Energy
Washington, DC 20585

DETERMINATION PURSUANT TO DEPARTMENT OF ENERGY REGULATIONS 10 CFR PART 810 ON WESTINGHOUSE REQUEST FOR RENEWAL OF AUTHORIZATION TO PROVIDE NUCLEAR POWER REACTOR TECHNOLOGY TO THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA (95NK001)

Having considered the factors listed in 10 CFR Part 810.10, the Department of Energy (DOE or the Department) staff recommendation of approval, concurrence by the Department of State, and consultations with the Departments of Defense and Commerce and the Nuclear Regulatory Commission, I have determined that it will not be inimical to the interest of the United States to renew the May 6, 1996, authorization to allow Westinghouse Electric Company to provide technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (DPRK).

I, therefore, authorize the activities described in Westinghouse's January 29, 2001, letter of application, subject to:

- DPRK Government assurances given in the 1994 Agreed Framework between the U.S. and DPRK Governments and the 1995 Agreement on Supply between the Korean Peninsula Energy Development Organization (KEDO) and the DPRK Government, that:

  - Transferred Westinghouse technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose.

  - Neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent.

  - The reactors being built in the DPRK will be placed under International Atomic Energy Agency safeguards.

- Westinghouse's agreement to:

  - Ensure that its technology transferred to DPRK entities is only that technology necessary for the licensing and safe operation of the reactors, including design and manufacturing data needed for such licensing and safe operation, but not technology enabling design or manufacture of nuclear reactor components or fuel.

  - To make written reports on its DPRK-related activities on a quarterly basis and brief DOE and representatives of other U.S. Government agencies on these activities whenever DOE so requests.

Westinghouse Electric Company

2000 Day Hill Road
Windsor, CT 06095

April 27, 2001
LD-2001-0027

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: Quarterly Report Pursuant to 10 CFR 810 Specific Authorization

Reference: Letter, T. Dedik (DOE) to C. Brinkman (CE, Inc.), dated May 10, 1996

Dear Sir:

This letter reports activities undertaken by Westinghouse Electric Company, LLC during the first quarter of 2001 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by Westinghouse are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:

   Westinghouse Electric Company LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Ku
   Seoul, Korea

   Korea Heavy Industries & Construction CO., LTD. (HANJUNG)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

   Korea Power Engineering Company, INC. (KOPEC)
   360-9 Mabuk-Ri, Kusong-Myon, Yongin
   Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

Information regarding an Integrated NSSS document delivery schedule, security of documents at the plant site, and secure communications between South Korea and the site were forwarded to DOE this quarter. This transmittal fulfilled a commitment made in meetings between Westinghouse and DOE in late 2000.

Westinghouse has also conferred with DOE on plans to begin indoctrination training of DPRK senior management personnel in South Korea during August 2001. This training will include guided visits to several of the relevant engineering and manufacturing facilities in South Korea, plus a tour of the Ulchin 3 & 4 Site. Ulchin 3 & 4 is the reference plant for the KEDO LWR Project, Units 1 & 2.

Discussions have been held with DOE concerning renewal of the Part 810 Specific Authorization for North Korea. These discussions have focused on clarification of conditions to ensure that nuclear technology for the design and manufacture of the reactor and fuel is safeguarded while permitting the transfer of information to North Korea that is needed for licensing and safe operation. Westinghouse forwarded an application letter to DOE on January 29 requesting renewal of the Part 810 Specific Authorization that is scheduled to expire in May 2001.

The LWR Project Unit 1 & 2 Preliminary Safety Analysis Report was submitted to the DPRK licensing authority in February 2001. The Korea Institute of Nuclear Safety (KINS) is supporting the DPRK's review of the PSAR. Before issuance, all Westinghouse responses to DPRK questions are screened for compliance with the criteria of Part 810.

KEDO requested that certain licensing topical reports be provided to the DPRK licensing authority to support the PSAR. DOE reviewed these reports and approved transmittal of those meeting the conditions of the Part 810 Specific Authorization. Approved reports were marked and forwarded to HANJUNG on November 28; these reports are being reviewed by MOST before transmittal to the DPRK State Nuclear Safety Review Committee.

On December 18, Westinghouse forwarded the final package of operator training material to DOE for review pursuant to the Part 810 Specific Authorization. Transmittal of this operator training material to the DPRK is pending review and approval by DOE.

Please contact Virgil Paggen at 860-285-4700 or me if you require any additional information regarding this report.

Sincerely,
Westinghouse Electric Company, LLC

Philip W. Richardson
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach): M. Watt, Z. Hollander (DOE)
R. DeLaBarre (State)
R. Hauber (NRC)
E. McDonough, H.Sepp, R.Llovet (Westinghouse)
F. Murray, J. Ford, P. Leombruni (Westinghouse)

Westinghouse Electric Company
CE Nuclear Power LLC

2000 Day Hill Road
Windsor, CT 06095

October 5, 2000
LD-2000-0054

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: Quarterly Report Pursuant to 10 CFR 810 Specific Authorization

Reference: Letter, T. Dedik (DOE) to C. Brinkman (CE, Inc.), dated May 10, 1996

Dear Sir:

This letter reports activities undertaken by CE Nuclear Power LLC (CENP), a subsidiary of Westinghouse Electric Company LLC, during the third quarter of 2000 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by CENP are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:

   CE Nuclear Power LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Ku
   Seoul, Korea

   Korea Heavy Industries & Construction CO., LTD. (HANJUNG)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

   Korea Power Engineering Company, INC. (KOPEC)
   360-9 Mabuk-Ri, Kusong-Myon, Yongin
   Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

CENP Project Managers participated in the 1st Project Review Meeting, which was held by KEPCO at the SINPO site on September 6 & 7, 2000. Transportation to and from the Site was by ship from Sokcho, South Korea. Site construction progress at the community area, the site breakwater and barge docking facility, and the freshwater pumping station was viewed.

An integrated manufacturing quality plan for the control element drive mechanism control system was submitted to Hanjung. CENP is working with Hanjung to identify the Witness & Hold points and the coordination that will be needed for future KEDO and DPRK factory visits.

A substantial number of technical documents will be needed at the KEDO site to ensure licensing and safe operation of the plants. CENP is currently negotiating the list of such documents with Hanjung and KEPCO; once agreement is reached, this list will be submitted for review by DOE.

CENP prepared sample "approved for transmittal" CEDM drawings for review and comment by DOE and other participants during the June 5-7, 2000 Status Review Meeting. These drawings have been submitted to Hanjung for final review and confirmation.

A set of public-information ASME and related National Codes and Standards have been obtained, marked "Approved for transmittal to the DPRK," and transmitted. These Codes and Standards are a normal deliverable item per KEPCO nuclear supply contracts.

The DPRK SNSRC (licensing body) has requested, through KEDO, copies of proprietary CENP Topical Reports referenced in the SINPO PSAR. CENP is consulting with DOE to coordinate a response to this request.

DOE consultants from Los Alamos and Argonne visited the CENP offices in Windsor on August 29 and September 19, 2000 to review the available Operator Training material for compliance with the Part 810 specific authorization. The review generally confirmed that this Operator Training Material is suitable for transmittal to the DPRK.

Please contact Virgil Paggen at 860-285-4700 or me if you require any additional information regarding this report.

Sincerely,
CE Nuclear Power LLC

Philip W. Richardson
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach):
D. Martin / Z. Hollander (DOE)
R. DeLaBarre (DOS)
R. Hauber (NRC)
E. McDonough/ H.Sepp/ R.Llovet (Pittsburgh)
F. Murray/ J. Ford/ P. Leombruni (Windsor)

Department of Energy
Washington, DC 20585

May 10, 1996

Mr. C. B. Brinkman
Director, Nuclear Licensing
Combustion Engineering, Inc.
P.O. Box 500
1000 Prospect Hill Road
Windsor, Connecticut 06095-0500

Dear Mr. Brinkman:

I am pleased to inform you that the Secretary has approved Combustion Engineering's (CE) August 9, 1995, application pursuant to Department of Energy (DOE) regulations 10 CFR Part 810. This authorizes CE to provide a broad range of technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea).

Note that the authorization, a copy of which is enclosed, is subject to:

- U.S. Government receipt of North Korean Government assurances that:
  - Transferred CE technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose.
  - Neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent.
  - The reactors to be built in North Korea will be placed under International Atomic Energy Agency safeguards.
- CE's agreement to:
  - Ensure that its technology transferred to North Korea is only that necessary for the licensing and safe operation of the reactors and not technology enabling the design or manufacture of nuclear reactor components or fuel.
  - Make written reports on its North Korea-related activities to my office on a quarterly basis and to brief DOE and representatives of other U.S. Government agencies whenever DOE so requests.

This authorization is valid for an initial period of five years, renewable by the Department in the light of experience and the circumstances at that time, but will be suspended automatically, subject to reinstatement by the Department, if either the United States or North Korea abrogates the Agreed Framework agreement establishing the Korean Peninsula Energy Development Organization and the arrangements under which the reactors will be supplied.

Further, CE employees engaged in this activity, especially those with experience in Naval Nuclear Reactors, should be cautioned against inadvertent disclosure of technology not covered by the authorization, including Naval Nuclear Propulsion Information. Failure to comply with these requirements could result in legal action, both individually and against CE, and revocation of the authorization.

Finally, in order to exercise the authorization, CE must obtain any necessary Department of Commerce export licenses in connection with the proposed transfers.

The Department of State has been requested to obtain the required North Korean Government assurances.

In accord with section 810.10 (d), a copy of this determination will be made available at the Department's Public Reading Room in about 30 days unless CE objects and shows that "public disclosure will cause substantial harm to its competitive position." I also call your attention to the reporting requirements imposed by section 810.13(a) on the recipient of a specific authorization.

If you have any questions regarding this matter, please contact Mr. Zander Hollander of my staff. His telephone is (202) 586-2125.

Sincerely,

Trisha Dedik, Director
Export Control Division
Office of Arms Control
and Nonproliferation

Enclosure

The Secretary of Energy
Washington, DC 20585

DETERMINATION PURSUANT TO DEPARTMENT OF ENERGY REGULATIONS 10 CFR PART 810 ON COMBUSTION ENGINEERING REQUEST TO PROVIDE NUCLEAR POWER REACTOR TECHNOLOGY TO THE PEOPLE'S DEMOCRATIC REPUBLIC OF KOREA (95NK001)

Having considered the factors listed in 10 CFR Part 810.10, the Department of Energy staff recommendation of approval, the Department of State concurrence, and the consultations with the Departments of Defense and Commerce, the Arms Control and Disarmament Agency, and the Nuclear Regulatory Commission, I have determined that it will not be inimical to the interest of the United States for Combustion Engineering, Inc., to provide technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea).

I, therefore, authorize the activities described in Combustion Engineering's August 9, 1995, letter of application, subject to:

- U.S. Government receipt of North Korean Government assurances that:
  - Transferred Combustion Engineering technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose.
  - Neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent.
  - The reactors to be built in North Korea will be placed under International Atomic Energy Agency safeguards.
- Combustion Engineering's agreement to:
  - Ensure that its technology transferred to North Korea is only that necessary for the licensing and safe operation of the reactors and not technology enabling the design or manufacture of nuclear reactor components or fuel.

- To make written reports on its North Korea-related activities on a quarterly basis and brief DOE and representatives of other U.S. Government agencies on its North Korea-related activities whenever DOE so requests.

This authorization shall be valid for an initial period of five years, renewable by the Department in the light of experience and the circumstances at that time, and shall be suspended, subject to reinstatement by the Department, if either the United States or North Korea abrogates the Agreed Framework agreement establishing the Korean Peninsula Energy Development Organization and the arrangements under which the reactors will be supplied.

Hazel R. O'Leary

Hazel R. O'Leary

May 6, 1996

Date

Westinghouse Electric Company
CE Nuclear Power LLC

2000 Day Hill Road
Windsor, CT 06095

January 24, 2001
LD-2001-0006

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: Quarterly Report Pursuant to 10 CFR 810 Specific Authorization

Reference: Letter, T. Dedik (DOE) to C. Brinkman (CE, Inc.), dated May 10, 1996

Dear Sir:

This letter reports activities undertaken by CE Nuclear Power LLC (CENP), a subsidiary of Westinghouse Electric Company LLC, during the fourth quarter of 2000 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by CENP are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:

   CE Nuclear Power LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Ku
   Seoul, Korea

   Korea Heavy Industries & Construction CO., LTD. (HANJUNG)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

   Korea Power Engineering Company, INC. (KOPEC)
   360-9 Mabuk-Ri, Kusong-Myon, Yongin
   Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

CENP personnel met with DOE, KEDO and State Department representatives in Washington, DC on November 2 and December 13, 2000 to discuss renewal of the Part 810 specific authorization for North Korea. Discussions focused on the clarification of conditions to ensure that nuclear technology for the design and manufacture of the reactor and fuel is safeguarded while permitting the transfer of information to North Korea that is needed for licensing and safe operation.

Light Water Reactor-1 & 2 project management personnel from CENP, KEPCO, HANJUNG and KOPEC met in Windsor during the week of December 11, 2000 for the third Joint Status Review Meeting. The meeting focused on export requirements and included a visit by these project management personnel to Washington, D.C. to participate in the December 13 meeting with DOE on renewal of the Part 810 specific authorization.

Following consultation with DOE to ensure that all the requirements of the existing specific authorization were met, a number of CENP licensing topical reports which KEDO had requested be made available for use by the DPRK licensing body were marked "Approved for Transmittal to the DPRK." These approved reports were forwarded to HANJUNG on November 28, 2000.

On December 18, CENP forwarded the final package of operator training material to DOE for review pursuant to the Part 810 specific authorization. Transmittal of this operator training material to the DPRK is pending review and approval by DOE.

An integrated manufacturing quality plan for the control element assemblies was submitted to Hanjung. CENP worked with Hanjung to identify the Witness & Hold points. This quality plan was approved by HANJUNG in December.

Please contact Virgil Paggen at 860-285-4700 or me if you require any additional information regarding this report.

Sincerely,
CE Nuclear Power LLC

Philip W. Richardson
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach):
D. Martin, Z. Hollander (DOE)
R. DeLaBarre (DOS)
R. Hauber (NRC)
E. McDonough, H.Sepp, R.Llovet (Westinghouse)
F. Murray, J. Ford, P. Leombruni (Westinghouse)

Westinghouse Electric Company
CE Nuclear Power LLC

2000 Day Hill Road
Windsor, CT 06095

October 5, 2000
LD-2000-0054

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

EDMS
4700

Subject: Quarterly Report Pursuant to 10 CFR 810 Specific Authorization

Reference: Letter, T. Dedik (DOE) to C. Brinkman (CE, Inc.), dated May 10, 19t

Dear Sir:

This letter reports activities undertaken by CE Nuclear Power LLC (CENP), a subsidiary of Westinghouse Electric Company LLC, during the third quarter of 2000 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by CENP are in support of the Agreed Framework and are reported in accordance with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:

   CE Nuclear Power LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Ku
   Seoul, Korea

   Korea Heavy Industries & Construction CO., LTD. (HANJUNG)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

   Korea Power Engineering Company, INC. (KOPEC)
   360-9 Mabuk-Ri, Kusong-Myon, Yongin
   Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

CENP Project Managers participated in the 1st Project Review Meeting, which was held by KEPCO at the SINPO site on September 6 & 7, 2000. Transportation to and from the Site was by ship from Sokcho, South Korea. Site construction progress at the community area, the site breakwater and barge docking facility, and the freshwater pumping station was viewed.

An integrated manufacturing quality plan for the control element drive mechanism control system was submitted to Hanjung. CENP is working with Hanjung to identify the Witness & Hold points and the coordination that will be needed for future KEDO and DPRK factory visits.

A substantial number of technical documents will be needed at the KEDO site to ensure licensing and safe operation of the plants. CENP is currently negotiating the list of such documents with Hanjung and KEPCO; once agreement is reached, this list will be submitted for review by DOE.

CENP prepared sample "approved for transmittal" CEDM drawings for review and comment by DOE and other participants during the June 5-7, 2000 Status Review Meeting. These drawings have been submitted to Hanjung for final review and confirmation.

A set of public-information ASME and related National Codes and Standards have been obtained, marked "Approved for transmittal to the DPRK," and transmitted. These Codes and Standards are a normal deliverable item per KEPCO nuclear supply contracts.

The DPRK SNSRC (licensing body) has requested, through KEDO, copies of proprietary CENP Topical Reports referenced in the SINPO PSAR. CENP is consulting with DOE to coordinate a response to this request.

DOE consultants from Los Alamos and Argonne visited the CENP offices in Windsor on August 29 and September 19, 2000 to review the available Operator Training material for compliance with the Part 810 specific authorization. The review generally confirmed that this Operator Training Material is suitable for transmittal to the DPRK.

Please contact Virgil Paggen at 860-285-4700 or me if you require any additional information regarding this report.

Sincerely,
CE Nuclear Power LLC

Philip W. Richardson
Licensing Project Manager

Attachment: 10 CFR 810 Authorization

e-copy: (w/o attach):
D. Martin / Z. Hollander (DOE)
R. DeLaBarre (DOS)
R. Hauber (NRC)
E. McDonough/ H.Sepp/ R.Llovet (Pittsburgh)
F. Murray/ J. Ford/ P. Leombruni (Windsor)

Westinghouse Electric Company
CE Nuclear Power LLC

2000 Day Hill Road
Windsor, CT 06095

July 10, 2000
LD-2000-0042

Director, Nuclear Transfer and Supplier Policy Division, NN43
Office of Arms Control and Nonproliferation
U.S. Department of Energy
Washington, D.C. 20585

Subject: Report Pursuant to 10 CFR 810 Specific Authorization

Reference: Letter, T. Dedik (DOE) to C. Brinkman (CE, Inc.), dated May 10, 1996

Dear Sir:

This letter reports activities undertaken by CE Nuclear Power (CENP), a subsidiary of Westinghouse Electric Company, during the second quarter of 2000 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea). These activities by CENP are in support of the Agreed Framework and are reported in accord with the requirement stated in the Reference letter.

1. Name and address of the person submitting this report:

   CE Nuclear Power LLC
   2000 Day Hill Road
   Windsor, CT 06095
   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Ku
   Seoul, Korea

   Korea Heavy Industries & Construction CO., LTD. (HANJUNG)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

CENP signed contracts with HANJUNG and KOPEC in January 2000. These contracts require that certain NSSS components for the KEDO-1 & 2 nuclear power plants be exported from the USA beginning in early 2004.

The first joint Status Review Meeting for the KEDO-1 & 2 project was held in Windsor, CT on June 5 - 7, 2000. The Review focused on actions needed by CENP, Hanjung and KEPCO to ensure compliance with the Part 810 authorization. DOE participation in this meeting was especially helpful and appreciated.

A substantial number of technical documents will be needed at the KEDO site to ensure licensing and safe operation of the plants. CENP is currently negotiating the list of such documents with Hanjung and KEPCO; once agreement is reached, this list will be submitted for

Department of Energy

Washington, DC 20585

May 10, 1996

Mr. C. B. Brinkman
Director, Nuclear Licensing
Combustion Engineering, Inc.
P.O. Box 500
1000 Prospect Hill Road
Windsor, Connecticut 06095-0500

Dear Mr. Brinkman:

I am pleased to inform you that the Secretary has approved Combustion Engineering's (CE) August 9, 1995, application pursuant to Department of Energy (DOE) regulations 10 CFR Part 810. This authorizes CE to provide a broad range of technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea).

Note that the authorization, a copy of which is enclosed, is subject to:

- U.S. Government receipt of North Korean Government assurances that:
  - Transferred CE technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose.
  - Neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent.
  - The reactors to be built in North Korea will be placed under International Atomic Energy Agency safeguards.
- CE's agreement to:
  - Ensure that its technology transferred to North Korea is only that necessary for the licensing and safe operation of the reactors and not technology enabling the design or manufacture of nuclear reactor components or fuel.
  - Make written reports on its North Korea-related activities to my office on a quarterly basis and to brief DOE and representatives of other U.S. Government agencies whenever DOE so requests.

This authorization is valid for an initial period of five years, renewable by the Department in the light of experience and the circumstances at that time, but will be suspended automatically, subject to reinstatement by the Department, if either the United States or North Korea abrogates the Agreed Framework agreement establishing the Korean Peninsula Energy Development Organization and the arrangements under which the reactors will be supplied.

Further, CE employees engaged in this activity, especially those with experience in Naval Nuclear Reactors, should be cautioned against inadvertent disclosure of technology not covered by the authorization, including Naval Nuclear Propulsion Information. Failure to comply with these requirements could result in legal action, both individually and against CE, and revocation of the authorization.

Finally, in order to exercise the authorization, CE must obtain any necessary Department of Commerce export licenses in connection with the proposed transfers.

The Department of State has been requested to obtain the required North Korean Government assurances.

In accord with section 810.10 (d), a copy of this determination will be made available at the Department's Public Reading Room in about 30 days unless CE objects and shows that "public disclosure will cause substantial harm to its competitive position." I also call your attention to the reporting requirements imposed by section 810.13(a) on the recipient of a specific authorization.

If you have any questions regarding this matter, please contact Mr. Zander Hollander of my staff. His telephone is (202) 586-2125.

Sincerely,

Trisha Dedik, Director
Export Control Division
Office of Arms Control
and Nonproliferation

Enclosure

The Secretary of Energy
Washington, DC 20585

DETERMINATION PURSUANT TO DEPARTMENT OF ENERGY REGULATIONS 10 CFR PART 810 ON COMBUSTION ENGINEERING REQUEST TO PROVIDE NUCLEAR POWER REACTOR TECHNOLOGY TO THE PEOPLE'S DEMOCRATIC REPUBLIC OF KOREA (95NK001)

Having considered the factors listed in 10 CFR Part 810.10, the Department of Energy staff recommendation of approval, the Department of State concurrence, and the consultations with the Departments of Defense and Commerce, the Arms Control and Disarmament Agency, and the Nuclear Regulatory Commission, I have determined that it will not be inimical to the interest of the United States for Combustion Engineering, Inc., to provide technology, equipment, and services for the design, construction, operation, and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea).

I, therefore, authorize the activities described in Combustion Engineering's August 9, 1995, letter of application, subject to:

- U.S. Government receipt of North Korean Government assurances that:
  - Transferred Combustion Engineering technology will be used only for peaceful nuclear power generation and not for any military or nuclear explosive purpose.
  - Neither the transferred technology nor equipment based upon it will be retransferred to another country without prior U.S. Government consent.
  - The reactors to be built in North Korea will be placed under International Atomic Energy Agency safeguards.
- Combustion Engineering's agreement to:
  - Ensure that its technology transferred to North Korea is only that necessary for the licensing and safe operation of the reactors and not technology enabling the design or manufacture of nuclear reactor components or fuel.

- To make written reports on its North Korea-related activities on a quarterly basis and brief DOE and representatives of other U.S. Government agencies on its North Korea-related activities whenever DOE so requests.

This authorization shall be valid for an initial period of five years, renewable by the Department in the light of experience and the circumstances at that time, and shall be suspended, subject to reinstatement by the Department, if either the United States or North Korea abrogates the Agreed Framework agreement establishing the Korean Peninsula Energy Development Organization and the arrangements under which the reactors will be supplied.

Hazel R. O'Leary

Hazel R. O'Leary

May 6, 1996

Date

March 31, 2000
LD-2000-0024

Director, Export Control Operations Division
IS-40, Office of Export Control and International Safeguards
U.S. Department of Energy
Washington, D.C. 20585

Subject: Report Pursuant to 10 CFR 810 Specific Authorization dated May 6, 1996

Dear Sir:

The purpose of this letter is to report activities undertaken by ABB C-E Nuclear Power, Inc. (ABB CENP) through the first quarter of 2000 to provide technology, equipment and services for the design, construction, operation and maintenance of two light water nuclear power reactors in the Democratic People's Republic of Korea (North Korea), in support of the Agreed Framework. Specific Authorization for such activities was issued by the Department of Energy on May 10, 1996. In accordance with the authorization and 10 CFR 810.13, ABB CENP hereby provides its quarterly written report on its activities involving North Korea.

1. Name and address of the person submitting this report:

   ABB C-E Nuclear Power, Inc.
   2000 Day Hill Road
   Windsor, CT 06095

   Citizenship: U.S.A.

2. Name and address of the entity for which the activity is being performed:

   Korean Peninsula Energy Development Organization (KEDO)
   600 3rd Avenue, 12th Floor
   New York, New York 10016

   Korea Electric Power Corporation (KEPCO)
   167 Samsung-Dong, Kangnam-Ku
   Seoul, Korea

   Korea Heavy Industries & Construction CO., LTD. (HANJUNG)
   555 Guygok-Dong, Changwon
   Kyungnam, Korea

ABB C-E Nuclear Power, Inc.

PO Box 500
2000 Day Hill Rd.
Windsor, CT 06095-0500
Telephone (860) 285-9678
Fax (860) 285-4189

Korea Power Engineering Company, INC. (KOPEC)
360-9 Mabuk-Ri, Kusong-Myon, Yongin
Kyunggi, Korea

US Department of State
2201 C Street, N.W.
Washington, DC 20520

3. Description of Activities:

ABB CENP signed contracts with HANJUNG and KOPEC in January 2000. These contracts require ABB CENP to deliver certain NSSS components and associated technical documents for the KEDO-1 & 2 nuclear power plants beginning in approximately June 2004.

Markups of the Ulchin 5&6 PSAR related to the Digital Plant Protective System and the Digital Engineered Safety Feature Actuation System were provided to KOPEC for use in generating the KEDO PSAR. Suggested revisions to the Ulchin 5&6 Design Specifications and Interface Requirements Documents for the Digital Plant Protective System and the Digital Engineered Safety Feature Actuation System were also provided to KOPEC.

Please contact Virgil Paggen at 860-285-4700 or me if you require any additional information regarding this report.

Very truly yours,

Ian C. Rickard
Director, Nuclear Licensing

Attachment: 10 CFR 810 Authorization

copy: Z. Hollander (DOE)
R. Hauber (NRC)
R. DeLaBarre (State)