



Jong Shik Kim, Congres National Assembly, ROS 1-1, Yeouido-Dong Youngdeungpo-ku, Seoul Korea, 150-702

US Nuclear Regulatory Commission Was: gton, DC 20555

Attntion : Chairman, Lando Zech

Dear Chairman Zech,

Last year KEPCO began negotiation with C.E. for two Nuclear Steam Supply Systems based upon combination-design of two different designs of 1)Scaled-down System 80 (Palo Verde, year 1973 Model) and 2)Fre-System 80 (Arkansas Unit #2, year 1970 Model). In April 1987 the contract was signed pending ROK Government's final Approval.

Since that time we have continued to watch development and regulatory trends in the U.S. and have concluded that these trends will have a great impact upon U.S. designs and design requirments.

Specially we have noticed that SEVERE ACCIDENT POLICY remains an open issue in U.S. regulation and to that extend it is not fully clear what features will be required in future U.S. plants to satisfy severe accident protection requirements. We also found the escalation in important of the joint industry effort led by the Electric Power reserct Institute (EPRI) to develop new requirements for future plants. It looks to be the intention of EPRI and NRC that new plants must meet these requirements in order to be licensable in the U.S.

7/28...To GPA to Prepare Response in conjunction with EDO and OGC for Signature of GPA...Date due: Aug. 12,,,Cpys to: RF, EDO, OGC,,,88-0692.

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Through our contacts we are aware of the important efforts being made by both G.E. and C.E. to get DESIGN CERTIFICATION of their large plant designs. It is our understanding that both G.E./C.E. are implementing those design changes deemed necessary to enable these designs to meet the new requirements. In the case of Combustion Engineering (C.E.), this has involved very extensive changes/modifications to the criginal System 80 design such as application of 4-trains of safeguards and inclusion of emergency recirculation water within the reactor containment. The revised design is also known as System 80 Plus (System 80 +).

The above considerations convinced us that if KEPCO proceed with the present design in Korea, which is a combination of Scaled-down version of System 80 and Pre-System 80 designs; we would be basing our future nuclear power program upon a design which is old (1970 and 1973 model) and has been superseded by safer and more perable designs. Furthermore, we are concerned as to whether our present C.E. design(the combination of Scaled-down of System 80 and Pre-System 80) would be licensable of not in the U.S., or at a minimum, the licensing process would be a very difficult and lengthy one, because the System 80 design ITSELF does not satisfy the U.S. requirments as promulgated in the EPRI light Water Reactor Requirement Document.

Since it is important to us that our new phase of nuclear power plant installation should be vested in designs which are considered to be state-of-the-art in the country of origin, and since we wish to take the necessary steps to ensure this, we would deeply appreciate your comments upon the above evaluation.

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Comments from Korean Engineers...

Would it be possible for C.E. to obtain formal full regulatory approval to build such plant in the U.S. from U.S. ACRS and NRC ?

- Such approval would require FORMAL application to the NRC who would only consider such and application seriously if C.Z. had a U.S. domestic customer for the plant.
- Has C.E. received FULL Formal regulatory approval of the design to be implemented in Korea from US ACRS and US NRC ?
- 3. If not what extend of review has been completed by ACRS and NRC on this design, if any ? How long was the length of review and amount of documentation reviewed ?
- 4. If not approved, what would be involved in achieving such approval ? What degree of design and safety documentation would be required by ACRS and NRC ?
- 5. If the full formal regulatory approval of the combination of designs of Scaled-down System 80 (Palo Verde) and Pre-System 80 (Arkansas Unit#2) is sought in the U.S.; would the design be required to satisfy the new ZPRI Requirement Document for LWR design ?



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- 6. Korean officials understand that the on-going DESIGN CERTIFICATION program by C.E. for their System 8C Plus (System 60+) design is Only for the "larg:" plant, and NOT for family of plants which would include a Scaled-down System 80, just like the Korean model proposed by C.E. Is this understanding of Korean officials correct ?
- 7. When is the present DESIGN CERTIFICATION program scheduled for completion ?

Very truly yours Jong Shix K Congressman Kin