NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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STATEMENT OF COMMISSIONER DICUS
RELATING TO POTASSIUM IODIDE (KI) RULEMAKING
IN RESPONSE TO PETITIONS FOR RULEMAKING (AMENDMENT TO 10 CFR 50.47)

December 22, 2000

The opening paragraph of the Rational for the Commission Decision on potassium iodide (KI) defines the difficulty former Commissioners have had in reaching finality on this issue. Each, (including the current Commissioners), has realized the importance of the use of KI as an adjunct to evacuation and sheltering. We are in agreement to its use under these circumstances. I differ only on the proper way to implement a national KI policy. I appreciate and respect the views of my fellow Commissioners. I believe the Federal Register Notice should have included some additional information and discussion of these various issues. For that reason, I have chosen to provide the following comments.

Having previously had the responsibility for off-site emergency planning at Arkansas Nuclear One, the use of KI for the general population was considered, but rejected due to the utilization and effectiveness of other protective measures. Nevertheless, KI was provided and predistributed in areas for those individuals that could or would not be evacuated. These included: emergency workers; nursing home residents, critical care patients, and their care givers; and those incarcerated and the associated security staff. KI was placed in these locations. This was done as an extra precaution because these individuals could be expected to be in a contaminated environment for a prolonged period. The general population, however, was expected to be evacuated from this environment. They would also be protected from contaminated food.

Following the Chernobyl accident, Polish authorities provided KI to the population some days after the event. However foods, including milk, that might be contaminated with radioactive iodine or other radioactive materials were embargoed almost immediately. The combination of these actions resulted in minimal thyroid health impacts on children and adults in Poland. This was not the case in other Chernobyl-impacted areas where neither protective measure was implemented in a timely manner. Thyroid health impacts in these areas were significant.

Due to the importance of embargoing contaminated food, I am disappointed that the Federal Register Notice (FRN) does not give at least a brief explanation of this important and effective

emergency protective measure. In emergency exercises, off-site decision-making authorities can be evaluated (and often are) on their ability to make a decision about food embargos. Evaluations are also made on the timeliness of that decision.

One of the issues raised supporting state stockpiles is that unless KI is provided very quickly, it will not be effective. The experience in Poland suggests that if other protective measures are implemented in a timely fashion, it may not be necessary to supply KI immediately or within a few hours of the event. For chemical and biological agents, regional stockpiles of protective pharmaceuticals have been determined to be appropriate, and one presumes, that the logistics for rapid deployment of these pharmaceuticals have been established. In some cases, these protective pharmaceuticals must be administered quickly and in some cases there are few other protective measures that can be implemented. In light of the above, it appears to me that the argument that regional stockpiles of KI would be ineffective is neutralized. As a final comment, the new source term adopted by the NRC suggests that if radioactive iodine is released as the result of an event, it will be in the elemental form as Cesium iodide. As such, uptake by the body through inhalation will be minimal -- further underscoring that the primary pathway will be ingestion.

The current KI policy adopted by the Commission may result in a patchwork quilt of protection for the American public. Unless the CDC or another Federal Agency chooses to stockpile KI, there will be no Federal stockpile (regional or centrally located) for use anywhere in the country, should it be necessary. I believe this to be a questionable public heath policy.
I believe that Federal Funding for a stockpile would better serve the public because States could fund their own stockpiles and a federal stockpile would serve as a prudent backup measure for States whose stockpile proves to be insufficient, or where a State has elected not to stockpile KI. Accordingly, I believe that funding a federal stockpile would be an effective use of Federal funds and would be more consistent with the allocation of responsibility between the Federal government and the States for all other emergency matters.

The Commission has chosen to place a disclaimer in the FRN addressing the NRC's liability regarding the use of KI. The disclaimer states in part that "...the NRC and any of its employees are not to be held responsible for any activity connected with transporting, storing, distributing, administering, using, or determining the proper doses of KI for adults or children." This disclaimer has been included for legal purposes presumably because a pharmaceutical is involved in this NRC action. It should be noted that the NRC has little or no responsibility for the actions listed in the disclaimer. It is my view that the disclaimer is not to be interpreted to mean that the NRC is involved in the decision-making authority of the State, and where appropriate, local governments. The decision to stockpile KI and the decision to recommend its use rests entirely with state and/or local decision-making authorities. The decision by a member of the public to follow a recommendation to take KI remains a voluntary action of that member of the public. The NRC is not involved in these decisions.

This decision regarding KI has been a difficult one and it has taken some time to come to finality on the issue. Going forward, it is important that the implementation of the policy is efficient and effectively provides an adjunct protective measure, as appropriate, for the American public.