CHARLES H. CRUSE

Vice President Nuclear Energy

A. Mohseni

Bakimore Gas and Electric Company Calvert Cliffs Nuclear Power Plant 1650 Calvert Cliffs Parkway Las 5y2 Maryland 20657

410 495-4453

63 FR 38865 July 20 1888

79

September 22, 1998



U. S. Nuclear Regulatory Commission Washington, DC 20555

ATTENTION:

Mr. David L Meyer, Chief

Rules Review and Directives Branch

SUBJECT:

Calvert Cliffs Nuclear Power Plant

Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318

Request for Comments; Draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents"

(63 FR 8865, July 20, 1998)

We have reviewed draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents," concerning the historical use, technical basis, and industry experiences with KI as a supplemental protective action for the general public.

We endorse the draft NUREG's conclusion that careful consideration should be given to whether the use of KI for the public during an emergency is advantageous. The draft NUREG accurately states that "considering" stockpiling or predistribution of KI as a protective action will not add any significant public health and safety benefit beyond the existing emergency planning practices at commercial nuclear power plants.

Baltimore Gas and Electric Company also agrees with the staff's assessment in SECY 98-061 "Staff Options for Resolving a Petition for Rulemaking Relating to Re-evaluation of the Policy Regarding the Use of Potassium Iodide (KI) by the General Public After a Severe Accident at a Nuclear Power Plant." We endorse Option 2. This option recommends denying the petition and supports Federal Radiological Preparedness Coordinating Committee policy statement discussed in draft "Federal Register Notice on Potassium Iodine Policy," COMSECY 97-028, which maintains that evacuation and sheltering are the primary protective actions. We strongly urge the NRC to reconsider its approval of the proposed rulemaking petition.

9810090350 981007 PDR NUREG 1633 C PDR

CHARLES H. CRUSE

Vice President Nuclear Energy

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Baltimore Gas and Electric Company Calvert Cliffs Nuclear Power Plant 1650 Calvert Cliffs Parkway Lossy Maryland 20657 410 495-4455

63 FR 38865 July 20 1898

September 22, 1998



U. S. Nuclear Regulatory Commission Washington, DC 20555

ATTENTION:

Mr. David L Meyer, Chief

Rules Review and Directives Branch

SUBJECT:

Calvert Cliffs Nuclear Power Plant

Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318

Request for Comments; Draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents"

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Baltimore Gas and Electric Company also agrees with the staff's assessment in SECY 98-061 "Staff Options for Resolving a Petition for Rulemaking Relating to Re-evaluation of the Policy Regarding the Use of Potassium Iodide (KI) by the General Public After a Severe Accident at a Nuclear Power Plant." We endorse Option 2. This option recommends denying the petition and supports Federal Radiological Preparedness Coordinating Committee policy statement discussed in draft "Federal Register Notice on Potassium Iodine Policy," COMSECY 97-028, which maintains that evacuation and sheltering are the primary protective actions. We strongly urge the NRC to reconsider its approval of the proposed rulemaking petition.

9810090350 981007 PDR NUREG 1633 C PDR

Mr. David L Meyer, Chief September 22, 1998 Page 2

Should you have questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

CHC/JMO/dlm

cc: Document Control Desk, NRC

R. S. Fleishman, Esquire J. E. Silberg, Esquire

S. S. Bajwa, NRC

A. W. Dromerick, NRC

H. J. Miller, NRC

Resident Inspector, NRC

R. I. McLean, DNR

J. H. Walter, PSC

Commonwealth Edison Company 1400 Opus Place Downers Grove, IL 60515-5701 A trapseni

BFR 38865 July 29, 1988

ComEd (8)

September 18, 1998

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Subject:

Comments on Draft NUREG-1633, "Assessment of the Use of

Potassium Iodide (KI) As a Protective Action During Severe

Reactor Accidents"

Reference:

Federal Register Volume 63, No. 138, Page 38865, July 20, 1998

This letter provides Commonwealth Edison (ComEd) Company comments on the subject Draft NUREG.

We have reviewed draft NUREG-1633,"Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents," (Federal Register Volume 63, No. 138, Page 38865, July 20, 1998). ComEd strongly supports the comments provided by the Nuclear Energy Institute and the State of Illinois in separate letters dated September 11, 1998.

Draft NUREG-1633 supports the position that "considering stockpiling or redistribution of KI as a protective action will not add any significant public health and safety benefit to the adequate level of protection currently provided by existing emergency planning at and around commercial nuclear power plants." ComEd concurs with this conclusion and recommends that the Nuclear Regulatory Commission review the current position and reconsider the adoption of Option 2 (i.e., the option to not have stockpiling or redistribution of KI as a protective action) of SECY 98-061, "Staff Options for Resolving a Petition for Rulemaking Relating to Re-evaluation of the Policy Regarding the Use of Potassium Iodide (KI) by the General Public After a Severe Accident at a Nuclear Power Plant."

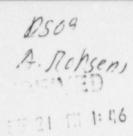
Respectfully,

R. M. Krich

Vice President - Regulatory Services

9809280243 A Unicom Company





63FR 78865 July 20, 1988

North Atlantic Energy Service Corporation P.O. Box 300 Seabrook, NH 03874

The Northeast Utilities System

September 16, 1998 NYN-98108

(603) 474-9521

Mr. David L. Meyer Chief, Rules Review and Directives Branch Mail Stop T-6 D69 Office of Administration United States Nuclear Regulatory Commission Washington, D.C. 20555-0001

> Seabrook Station Draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents," (63 Fed. Reg. 38865, July 20, 1998)

Norm Atlantic Energy Service Corporation (North Atlantic), managing agent for the Joint Owners of Seabrook Station Nuclear Power Plant, endorses the Nuclear Energy Institute's (NEI) comments on the draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents," (63 Fed. Reg. 38865, July 20, 1998).

North Atlantic believes that the use of KI as a protective action may be detrimental to the implementation of an effective emergency preparedness program that utilizes evacuation as a fundamental action. Therefore, we recommend that the NRC reverse its decision to revise emergency planning regulation to include consideration of KI as a protective measure for the general public.

North Atlantic appreciates the opportunity to comment on the draft NUREG. If you should have any questions on North Atlantic's comments, please contact Mr. Donald R. Tailleart, Emergency Preparedness Manager, at (603)773-7359.

Very truly yours,

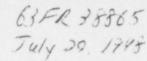
NORTH ATLANTIC ENERGY SERVICE CORP.

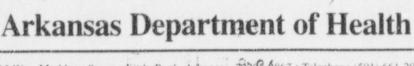
Ted Keyen lan

Executive Vice President and

Chief Nuclear Officer

A. Morsen







4815 West Markham Street • Little Rock, Arkansas 7226 \$867 • Telephone (501) 661-2000 Sandra B. Nichols, M.D., Director • Mike Huckabee, Governor

September 16, 1998

Mr. David L. Meyer Chief, Rules Review and Directives Branch Mail Stop T-6 D69 Office of Administration Unites States Nuclear Regulatory Commission Washington, D. C. 20555-0001

Subject:

Draft NUREG-16333, Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents.

Dear Mr. Meyer:

The Arkansas Department of Health does not agree with the concept of stockpiling and distributing KI to the general public. The State's crimary protective actions in response to an event at a nuclear power plant are "evacuation and sheltering". These actions better ensure the safety of the public and correspond to the "conservative approach" the State takes in response to an event.

If you have require additional information or if you have any questions, please call me at (501) 661-2301.

David D. Shellings, Jr., Director Division of Radiation Control and

Emergency Management

Keeping Your Hometown Healthy

"An Equal Opportunity Employer"





Georgia Emergency Management Agency

1509 1. Tohseni

P.O. Box 18055 Atlanta, Georgia 30316-0055 Tel: (404) 635-7000 In Georgia 1-800-TRY- GEMA FAX: (404) 635-7205 53 FR 38865 FORMAT

July 20, 1988 GARY W. McCONNELL

DIRECTOR

September 15, 1998

Mr. David L. Meyer
Chief
Rules Review and Directive Branch
Office of Administration
United States Nuclear Regulatory Commission
Mail Stop T-6 D69
Washington, D.C. 20555-0001

Dear Mr. Meyer:

This letter is in reference to your request for comments on the Draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents." (63 Fed. Feg. 38865, July 20, 1998)

It is the position of the Georgia Emergency Management Agency (GEMA) that the pre-distribution and stockpiling of Potassium Indide (KI) as a protective measure in the event of a severe reactor accident will not significantly reduce the risk to the citizens of Georgia. The extensive planning and preparedness of local and state governments along with a rigorous public awareness program is the surest method to ensure the safety of the general public living near a Nuclear Power Generating facility.

The problems associated with decision making and the logistical distribution of KI to the general public in the event of a severe accident may actually have a negative impact on the primary defensive measure, evacuation. Clearly, the most efficient and effective strategy to protect the public is to remove them from the danger. Any requirement that may delay this evacuation would be considered counterproductive.

KI is well recognized for its ability to protect the Thyroid Gland from exposure to radioactive iodine. As you are surely aware, KI offers no protection for any other organs and provides no protection from whole body dose exposure. Care must be taken to ensure the public is not fulled into a false sense of security that a pill will provide all the protection they may need. Evacuation, again, is the optimum protective measure and is the key to protecting the public.

The use of KI by emergency workers who may be required to remain in an affected area is well recognized. Appropriate levels of KI inventory at the local level is already incorporated into Georgia's plans for distribution to the emergency workers when required.

Mr. David L. Meyer Page Two September 15, 1998

Extensive planning, coordination, and preparedness has been accomplished across the spectrum from the utilities through the local communities and at the state level. All of these plans and preparations are regularly evaluated by federal authorities to include the Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission. These emergency plans consider every possible tool for protecting the general public and are evaluated then from a benefit point of view. When these plans of the state and local governments are implemented, it is felt by this agency that Potassium lodide will not offer any significant protection to the population at best, and at worst, may negatively impact on the execution of other important aspects of those emergency plans.

We appreciate the opportunity to provide comments and opinions prior to the consideration for approval of this new regulation. Should any additional information be required please contact Patrick Cochran at (404) 635-7233.

Sincerely,

GARYWIMCCONNELL

Director

GWM/cd



DSO9 A Monseni South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station P.O. 8ox 88 Jenkinsville, SC 20065

Jenkinsville, SC (803) 345-4344 (803) 345-5209 Gary J. Taylor Vice President Nuclear Operations

> 63FR 38865 July 20 1948

September 14, 1998 RC-98-0165

Mr. David L. Meyer Chief, Rules Review and Directives Branch Mail Stop T-6 D69 Office of Administration United States Nuclear Regulatory Commission Washington, DC 20555-0001

Dear Mr. Meyer:

Subject:

VIRGIL C. SUMMER NUCLEAR STATION

DOCKET NO. 50/395

OPERATING LICENSE NO. NPF-12 DRAFT NUREG-1633 COMMENTS

South Carolina Electric and Gas submits these comments in response to the subject notice. We have a reviewed draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Several Reactor Accidents," (63 Fed. Reg. 38865, July 20, 1998). The draft NUREG reviews the historical use, technical basis, and industry experiences with KI as a supplemental protective action for the general public.

Draft NUREG-1633 supports the industry position that "considering" stockpiling or predistribution of KI as a protective action will not add any significant public health and safety benefit to the adequate level of protection currently provided by existing emergency planning at and around commercial nuclear power plants. SCE&G urges the NRC to reconsider its approval of the proposed rulemaking petition.

SCE&G endorses the draft NUREG which concludes careful consideration should be given to whether the use of KI for the public during an emergency is advantageous. SCE&G agrees with the staff's assessment in SECY 98-061, "Staff Options for Resolving a Petition for Rulemaking Relating to Reevaluation of the Policy Regarding the Use of Potassium Iodide (KI) by the General Public After a Severe Accident at a Nuclear Power Plant." We endorse Option 2. This option recommends denying the petition and supports the FRPPC policy statement discussed in COMSECY 97-028 which maintains that evacuation and sheltering are the primary protective actions.

USNRC NRG-1633 RC-98-0165 Page 2 of 2

If administered promptly, KI can be effective in blocking the thyroid and preventing radioiodine uptakes. The population most at risk in the situation are children through age 15. However, most emergency plans suggest precautionary evacuation of schools and day care facilities at declaration of a Site Area Emergency. Under these conditions, there is no imminent release of radioactive material that will exceed EPA Protective Action Guidelines beyond the site boundary. If children are evacuated, there is no opportunity to further reduce risk through distribution of potassium iodide.

A major impediment to KI distribution to school children is coordination and administration of the program, e.g., the actual decision-making process to administer KI or evacuate, parental approval and record keeping, identification and mitigation of allergic reactions, and the availability of a qualified medical professional to administer the potassium iodide.

The U.S. federal agencies, nuclear industry, state and local emergency response organizations have developed the most effective and sophisticated emergency preparedness plans in the world. The U.S. model recognizes that evacuating an area is the most effective response for protecting the public health and safety. Where evacuations are performed, potassium iodide would not add any measure of safety to this proven approach, and could actually complicate and hinder emergency response.

Very truly yours,

Stl a. Bul +0x 43;

Gary J. Taylor

RAM/GJT/vjk

c: J. L. Skolds

W. F. Conway

R. R. Mahan

R. J. White

L. M. Padovan

M. K. Batavia

L. C. Hipp (505)

V. J. Kelley (507)

RTS (NRG 1633)

File (811.10)

DMS (RC-98-0165)



M. S. Tuckman Executive Vice President Nuclear Generation DS 09 A. Monseni 1001 500 22 FN 3: 09
FULL | 1011 50

Duke Energy Corporation

526 South Church Street P.O. Box 1006 (F.C07H) Charlotte, NC 28201-1006 (704) 382-2200 GFFICE (704) 382-4360 FAX

63 FR 38865 July 20, 1988

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September 10, 1998

Mr. David L. Meyer Chief, Rules Review and Directives Branch Mail Stop T-6 D69 Office of Administration U. S. Nuclear Regulatory Commission Washington, DC 20555-0001

Subject: Draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents," (63 Federal Register 38865, July

20, 1998)

Duke Energy offers the following comments on Draft NUREG-1633, "Assessment of the Use of Potassium Iodide (KI) As a Protective Action During Severe Reactor Accidents," (63 Federal Register 38865, July 20, 1998). The Draft NUREG provides an evaluation of the use of potassium iodide as a supplemental protective action within the plume exposure pathway.

The Draft NUREG-1633 provides a researched conclusion that the proposed rule change, requiring stockpiling and prophylactic issue of KI, will not effectively improve protective actions for the public. In some instances, KI may slow evacuations or even be administered unnecessarily as a result of the rule. Unnecessary administration of KI may have significant health consequences. Duke Energy urges the NRC to reconsider its approval of the Petition for Rulemaking filed by Mr. Peter G. Crane (60 Federal Register 58256, November 27, 1995).

Consequences of Chernobyl are often cited as a reason that the United States should distribute KI. This NUREG states that most of the thyroid dose at Chernobyl was from ingestion pathway. This emphasizes the importance of existing emergency planning for the ingestion pathway, rather than KI. For severe accidents with containment failure, the whole body doses are hazardous, not just the thyroid doses. Evacuation is more effective in reducing the

Mr. David L. Meyer September 10, 1998 Page 2

dose to the whole body. Where evacuations are performed, KI would not add any measure of safety to the existing emergency response, and could actually hinder emergency response by decreasing the speed of evacuation.

Administration of a drug without medical supervision to a broad population is a significant departure from the norm in emergency response, which is evacuation. In addition, the population most sensitive to radioiodines is children. One impediment to KI distribution to children in day cares and schools is the logistics associated with obtaining parental approval and having sufficient, qualified medical personnel available to administer the KI. Most offsite emergency plans call for precautionary evacuation of schools and day cares when a Site Area Emergency is declared. Under these conditions, offsite doses should not exceed a small fraction of the EPA protective action guideline levels of 5 Rem Thyroid CDE offsite, and should be much lower than the EPA's protective action guideline for the administration of stable iodine (25 Rem Thyroid CDE).

In order to achieve maximum thyroid blocking, KI has to be taken just prior to a release. The dose reduction is only a factor of 2 if KI is taken 3 to 4 hours after exposure, which would more typically be the case if KI were given outside the Emergency Planning Zone when people arrive at a reception center.

Severe accident studies have shown that even if there is serious damage to the core, there may not be a large release to the environment. The information included on the likelihood of a severe accident, and what (small) fraction of those result in a large early release, needs to be emphasized. In all four of the examples sited, the release occurred more than 11 hours after the initiating event, allowing time for evacuation to be completed prior to the release, eliminating the need for KI. The draft NUREG states, "If containment integrity can be maintained for 24 hours or more, the offsite risk is limited because of decay and in-containment removal processes." Duke Energy has implemented Severe Accident Management to help achieve that end in the unlikely event of a severe accident.

Mr. David L. Meyer September 10, 1998 Page 3

If there are any questions regarding the comments provided, please contact Tina Kuhr by telephone at (704) 382-3151.

Yours truly,

M. S. Tuckman

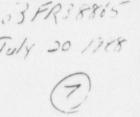
OHIO DEPARTMENT OF HEALTH 03 FR3 8865

Post Office Box 118 Columbus Ohio 43250-0118

Telephone (014) 466-3543



WIGHAM RYAN Cirector of medich



August 24, 1998

Dr. Ernest L. Mazzaferri, M.D. Department of Internal Medicine 213 Means Hall The Ohio State University 1654 Upham Drive Columbus, Ohio 43210-1228

Dear Dr. Mazzaferri:

USE OF POTASSIUM IODIDE BY THE PUBLIC IN THE EVENT OF A NUCLEAR POWER PLANT ACCIDENT

It was a pleasure to meet with you on August 20, 1998, in order to discuss the issue of public distribution of potassium iodide (KI) for nuclear power plant accident use. We were glad to learn of your interest in reviewing the Ohio Department of Health draft policy on KI public distribution, as well as your interest in responding to the request by the NRC for comments to their draft report, NUREG-1633. A copy of both are enclosed.

During our meeting we mentioned the wording of the package insert for THYRO-BLOCK, the stable KI tablet that we currently distribute for use by emergency workers and institutionalized populations in the 10-mile emergency planning zones around nuclear power plants. We also mentioned that the NRC recently sent a letter to the FDA requesting their assistance in considering mass distribution of KI to the public, (Frank J. Congel to Michael A Friedman, M.D., Acting FDA Commissioner, July 29, 1998.) A copy of both documents are enclosed.

In consideration of the information provided and your own expert knowledge, research and experience, we would appreciate your response to the questions that the NRC posed to Dr. Friedman and your consideration of other aspects listed in the attachment. The NRC has requested comments on NUREG-1633 by September 15, 1998 We would appreciate getting your comments, so that we may forward them to the NRC. If you have any questions, please contact me or Harvey Brugger at (614) 644-2727.

Roger L. Suppes, Chief

Bureau of Radiation Protection

RLS/HBB/hb

File: ki\mazzafer.trn

Attachments

pc: Harvey B. Brugger

9809280216

An Equal Opacitunity Employer/Provider

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QUESTIONS FOR YOUR RESPONSE

- The Ohio Department of Health (ODH) currently recommends evacuation, if the total effective dose equivalent (TEDE) is projected to exceed one Rem, or if it is projected that the committed dose equivalent (CDE) to a child's thyroid is expected to exceed 5 Rem. Using the draft ODH policy, when this dose projection is made, a recommendation would also be made to all those people in the areas to be evacuated to take the first 130 mg KI tablet. Previously, the take your KI recommendation was only made to emergency workers and institutionalized populations, and that recommendation would be based on a projection of 25 Rem to the thyroid or greater, per FDA guidance. Would you comment on the proposed projected dose level for taking KI?
- In the ODH Craft policy, those who do not have KI when it is 2. recommended to be taken, would need to go to a reception center or elsewhere out of the evacuated area to get it. They would be urged not to delay their evacuation in order to get it in the affected area. If they successfully evacuate before the plume's arrival, of course taking KI would be unnecessary. Also, since evacuation would be based on a projection that may not come to pass, many people might be taking KI who would not be exposed or would be minimally exposed. Nor would we expect anyone to be exposed from ingesting radioiodine, since the food supply would be interrupted and people would be urged not to eat locally grown food. In consideration of this situation, would the benefit of mass use of KI outweigh the health risks?
- 3. The U.S. Pharmacopeia and the Physician's Desk Reference make statements concerning contraindications and side effects, as discussed in NUREG-1633. The World Health Organization recommendations also contain some serious warnings on taking it. In light of these cautions, and the ODH recommended use of 130 mg tablets to adults (including pregnant and/or lactating women) and children one year of age and older; and 1/2 of a tablet to babies under 1 year of age (including neonates), for upwards of ten days, what do you think about the benefits versus the risks of taking KI?
- Some opponents to mass distribution of KI do not believe thyroid cancer is serious enough to warrant the mass distribution of KI. Would you comment on this in light of your research on metastasized cancer found in children having radiation induced thyroid cancer from the Chernobyl accident in Belarus and other areas?
- If the emergency response of the Federal, State and local authorities could indeed prevent ingestion of radioiodines, and since taking KI in the 10-mile emergency planning zone (EPZ) cannot protect the thyroid from direct dose from the

QUESTIONS FOR YOUR RESPONSE

cloud or ground shine, would mass distribution of KI still be warranted?

- Figure 1, Page 8 in NUREG-1633 presents time before and after 6. exposure versus percentage blocking of the thyroid with stable iodine. (This figure is taken from NUREG-6310, An Analysis of Potassium Iodide (KI) Prophylaxis for the General Public in the event of a Nuclear Accident, USNRC, February 1995. Copy enclosed.) The figure appears to indicate that stable iodine would be capable of up to 95% blocking of the thyroid for perhaps two hours after exposure, but that the blocking diminishes rapidly to 50% in about 4 hours, and zero in about 8 hours. Would you comment on the time frame for which KI would be effective?
- 7. Would you comment on the aspects of taking KI at the recommended dosage, versus taking more than one tablet at one time, at a time when the person may be stressed by the situation, and therefore not capable of understanding the risks of their action - the potential and effect of overdosing?
- Would you comment on the situation that the person who is 8. distributing KI will in all likelihood not be a trained medical person or even capable of observing for side effects and understanding what to do about them if they appeared?
- 9. Would you comment on the probability that the mass public could safely store a personal supply of KI over a five year period and still have it effective when needed? (The Thyro-Block package insert states "Store at controlled room temperature between 15° and 30°C (59° and 86°F). Keep container tightly closed and protect from light."
- 10. Would you comment on whether a personal supply of KI can be safely stored by the mass public, in light of the possibility of mistakes that could happen; i.e., including someone very young accidentally taking the entire 10 tablet contents of the bottle?

Nuclear Regulatory Commission

Office of Public Affairs Washington DC 20555

Telephone: 301/415-8200 - E-mail: opa@nrc.gov

No. 97-102

July, 1, 1997

NRC REVISES POSITION ON USE OF POTASSIUM IODIDE IN CASE OF ACCIDENT AT NUCLEAR POWER PLANT

The Nuclear Regulatory Commission has decided to modify its position regarding the use of potassium iodide as a protective measure for the general public in case of a severe nuclear reactor accident. The agency has decided to endorse the Federal Radiological Preparedness Coordinating Committee's (FRPCC) recommended policy to federally fund the purchase of potassium iodide for states at their request, and the NRC will provide the funding.

The Commission noted that the federal government recently began stockpiling potassium iodide near major metropolitan areas for use in mitigating the consequences of potential terrorist use of nuclear, biological or chemical weapons. The potassium iodide would be available to any state for any type of radiological emergency at any time.

If a state wishes to have its source of potassium iodide close at hand for use in a possible nuclear reactor accident, the federal government would fund the purchase, under the Commission's revised position.

Potassium iodide, if taken in time, blocks the thyroid gland's uptake of radioactive iodine and thus could help reduce thyroid diseases that might otherwise be caused by exposure to airborne radioactive iodine that could be dispersed in a nuclear accident.

Under the NRC's revised position, the federal government would purchase potassium iodide, but interested state and local governments would be responsible for maintenance, distribution and subsequent costs. NRC licensees would, as part of their emergency response planning, discuss this matter with state and local governments who make decisions on protective measures as part of their planning for responses to potential emergencies.

If finalized by the FRPCC, the proposed new policy will be published in the Federal Register. NRC will work with the Federal Emergency Management Agency to prepare the final policy statement and to develop implementation details, including criteria for evaluating a state's request for funding for potassium iodide.

The current federal policy was published in the Federal Register in 1985. It recommends that potassium iodide be stockpiled and distributed to emergency workers and institutionalized persons during radiological emergencies, but does not recommend requiring pre-distribution or stockpiling for the general public.

The best technical information indicates that prompt evacuation and in-place sheltering are the preferred protective actions for the general public. However, the state (or in some cases, the local government) bears ultimately responsibility for the protection of its citizens. Therefore, the decision for local stockpiling and use of potassium iodide as a protective measure for the general public is left

http://www.nrc.gov/OPA/gmo/nrarev/97-102.htm





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to the discretion of the state or local government. Currently two states (Tennessee and Alabama) include in their emergency planning the use of potassium iodide as a protective measure for the general public.

In 1995 the White House issued Presidential Decision Directive 39 on "U.S. Policy on Counterterrorism." It directed federal agencies to take a number of measures to reduce vulnerability to the potential use by terrorists of nuclear, biological and chemical weapons.

A report was prepared by a group chaired by the Federal Emergency Management Agency, with representatives from the NRC and other federal agencies. The report recommended that the federal government purchase and stockpile chemical nerve gas antidotes, vaccines for anthrax, antibiotics, potassium iodide and other medicines for use by the general public in the event of a terrorist artack. Currently there are three national stockpiles of medical supplies that include potassium iodide. Additionally, there will be 26 Metropolitan Medical Strike Teams, each with a full set of medical supplies, including potassium iodide. Two of the teams have been established, and the remaining 24 are in the process of being established. Thus the size and number of locations of federal stockpiles of potassium iodide are expected to increase. Potassium iodide from these resources could be used as a protective measure for the general public in the event of a severe nuclear accident.

This report was presented to the President and approved for distribution in May. Thus potassium iodide is already available nationally as part of emergency response preparedness for terrorism involving nuclear, biological and chemical agents.

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