



**Consumers  
Power**

**POWERING  
MICHIGAN'S PROGRESS**

Palisades Nuclear Plant: 27780 Blue Star Memorial Highway, Covert, MI 49043

February 18, 1993

**P M Donnelly**  
Safety and Licensing Director

Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT - GUIDELINES FOR COUNTRY  
CONTROL NUMBER (CCN) MANAGEMENT

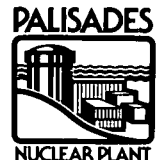
This letter is in followup to discussions between Messrs John Ho of Consumers Power Company and Richard Gramann of NMSS. Attached is a summary of a survey on the trend of Country Control Number (CCN) management adopted by some of the other nuclear plants in the U.S.

In most cases, the fuel vendor's DOE/NRC Form 741 for new fuel shipment, provides the country of origin information which is not itemized for each fuel assembly, but rather for a batch of fuels, or a sub-batch of fuels (a certain number of fuel assemblies in a fuel batch). If there is more than one country of origin specified to a batch or sub-batch of fuels, a question will be raised as to which fuel assembly will be assigned to which country of origin.

The conventional way is to assign all the countries of origin to all the affected fuel assemblies. This is what Consumers Power does now, but difficulties have been experienced in managing SNM inventory after a fuel assembly was repaired or reconstituted. We recently conducted a survey to search for a better solution. The result is attached for your review and reference.

Other utilities have adopted the CNN management method described in Attachment A. Consumers Power is requesting your approval, to employ the same CCN management method, by April 1, 1993. Approval by this date will allow us to utilize the CNN method in our next semi-annual report.

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A CMS ENERGY COMPANY

*Approval*  
*Add: Richard Gramann*  
*Mr. End*

We strongly believe that the method given in Attachment A, will greatly help us:

1. To easily manage the SNM inventory work after a fuel assembly is repaired or reconstituted.
2. To follow the general trend set up by other nuclear utilities.



Patrick M. Donnelly  
Plant Safety & Licensing Director

CC Administrator, Region III, USNRC  
NRC Resident Inspector - Palisades

NRC/NMSS ATTN: Mr. R. Gramman

Attachment

ATTACHMENT A

Consumers Power Company  
Palisades Plant  
Docket 50-255

METHOD OF CCN MANAGEMENT

Described below is an effective method to assign the country of origin to a new batch or sub-batch of fuel assemblies with more than one CCN. This method has been adopted by some other nuclear utilities. The concept as it applies to new fuel receipt can similarly be applied to repairs or reconstitution of fuel assemblies which have more than one CCN.

The following statements summarize the concept of the CCN management method:

1. For example;

Countries of origins, USUS0000 and FRFR0000 are specified by the fuel vendor in the Form 741, to assemblies A01, A02, A03, A04, A05, A06, A07, A08 and A09.

The total Uranium element weights for the 9 assemblies are:

1,093,270 grams from USUS0000 and  
2,550,974 grams from FRFR0000

2. The country of origin will be assigned in the following way:

Assembly Number	Element Wt. *(grams)	CCN Assigned	Accumulated Ele. Weight (gms)
A01	404916	USUS000	404916
A02	404916	USUS000	809832
A03	404916	USUS000 (=283438 gm) FRFR000 (=121478 gm)	1093270 1214748
A04	404916	FRFR0000	1619664
A05	404916	FRFR0000	2024580
A06	404916	FRFR0000	2429496
A07	404916	FRFR0000	2834412
A08	404916	FRFR0000	3239329
A09	404916	FRFR0000	3644244

\* Shown as equal for simplicity in example. In reality, exact total weights for each assembly provided by the fuel vendor would be used.

3. The basic concepts are:

- a. Assign only one CCN sequentially to all assemblies until the allocated element weight for USUS0000 is used up.
- b. At the breaking point (Assembly A03 for the above sample case) two countries of origins may have to assigned.

- c. Follow the same concept to assign the second CCN (for the above sample case, FRFR0000) to the rest of the batch or sub-batch assemblies until the allocated element weights for the said CCN is used up.

The result is that there are only a few assemblies having two countries of origin. The rest of the batch or sub-batch assemblies have only one country of origin.