

**From:** TAVASSOLI Kamran (AREVA) [kamran.tavassoli@areva.com]  
**Sent:** Monday, November 07, 2011 3:26 PM  
**To:** Rankin, Jennivine  
**Cc:** Tom Szymanski  
**Subject:** RE: Clarifications to the thermal files to support North Anna and Surry exemption requests  
**Attachments:** ANSYS Macro Explanation - NRC.DOC

Hi Jennie,

Please see the clarifications provided in the attached file for the macro "HEAT\_RECONG.mac". The clarifications refer to the relevant SAR sections in providing the explanations to assist in recognizing the parameters.

The differences between this macro and the original macro are also included in the clarifications.

Please do not hesitate to call me if you have any questions or more clarifications are required.

Thank you,  
Kamran Tavassoli

Licensing Manager (Transportation)  
Transnuclear, Inc. (An AREVA Company)  
7135 Minstrel Way - Suite 300  
Columbia, MD 21045  
Phone: 410-910-6944  
Fax: 410-910-6902  
[kamran.tavassoli@areva.com](mailto:kamran.tavassoli@areva.com)

---

**From:** Rankin, Jennivine [<mailto:Jennivine.Rankin@nrc.gov>]  
**Sent:** Friday, November 04, 2011 8:32 AM  
**To:** TAVASSOLI Kamran (TRANSNUCLEAR INC)  
**Cc:** Tom Szymanski  
**Subject:** Clarifications to the thermal files to support North Anna and Surry exemption requests

Hi Kamran,

It was nice to see you yesterday. As I mentioned to you, the thermal reviewer would like some clarification on the HEATGEN\_RECONF.MAC file to aid in his review for the North Anna and Surry exemptions.

He is looking for the meanings and units for the following variables and values listed in the HEATGEN\_RECONF.MAC file. For example, he would like to know what "level" means...is it a distance, etc?

level(1 through 15)  
pfact(1 through 14)  
zone(1 through 5)  
cmname(1 through 14)

decayh  
dunit (briefly describe the algorithm)

Within the dunit equation:

a\_fuel

0.8, 1.1, 1.2, 0.86 value

3412.3 value

0.984 value

144 value

The reviewer would also like to see the difference in values between the above file (the model with the reversed loaded heat loads) and the original model. Is it possible to identify any differences in values, if there is any?

Please let me know if you have any questions or if it is easier for you to have a phone call, and I can always set up a teleconference with the reviewer.

Thank you!

Jennie Rankin

Project Manager

U.S. Nuclear Regulatory Commission

Mailstop EBB 3D-02M

Washington, DC 20555

301-492-3268

[Jennivine.Rankin@nrc.gov](mailto:Jennivine.Rankin@nrc.gov)