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LPDR- WM-10 (2)
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WM-16 (2)

NOTE TO: Neil Coleman
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THRU: Seth M. Coplan, Section Leader
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FROM: Pauline Brooks
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SUBJECT: REVIEW OF NEFTRAN USER'S MANUAL (FIN A1158)

I have reviewed the draft NUREG/CR-4766 entitled "User's Manual for the NEFTRAN Computer Code." My comments are provided in this note.

In the absence of a chance to apply the acid test of any user's manual i.e., use the manual to learn to run the code, the key question for our review was whether the content, format and clarity of exposition appears to meet the user's needs. The major parts of this document, mathematical description, program and subprogram description, input description, sample problems, and the supporting appendices appear to cover the major questions the new user would have.

My review focused on Chapter 2, "Mathematical Description," because this chapter should answer the user's first question, "Is this the computer code I should be using to solve the problem at hand?" For all computer programs, and particularly for a code such as NEFTRAN, which is designed to be computationally efficient, knowledge of the simplifying assumptions and limitations of the code are important to the user. Assumptions and limitations are indeed discussed in the text. However, I suggest that, in addition to the discussion in the text, the code capabilities, the simplifying assumptions and limitations be summarized in a chart at the end of Chapter 2 to serve as a handy reference.

Some markup pages showing minor corrections are attached.

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