

An Integrated Used Fuel Disposition and Generic Repository Model

A Nuclear Engineering and Engineering Physics PhD Preliminary Report

Kathryn D. Huff

University of Wisconsin-Madison

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Outline

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Motivation

Methodology

② Literature Review

Repository Capabilities within Systems Analysis Tools

Conceptual Discussion of Disposal Environments

Models of Radionuclide Transport

Models of Heat Transport

③ Modeling Paradigm

CYCLUS Simulator Paradigm

Repository Modeling Paradigm

④ Proposed Work

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Base Case

Extensions

Summary

i++i



i++i

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Modeling Paradigm

Proposed Work

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i++*i*

i++i



i++i

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i++*i*

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i++*i*



i++*i*

i++*i*

i++*i*



i++i

i++i

i++*i*

i++*i*



i++*i*

i++*i*

i++*i*



i++*i*

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i++*i*

i++
i

i++*i*



i++*i*

i++*i*

i++*i*



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i++*i*



i++i

i++i

i++*i*



i++i

i++i

i++*i*



i++i

i++i

i++*i*



i++i

i++i

i++*i*



i++i

i++i

i++*i*



i++i

i++i

i++*i*



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