ACRONYMS

AB	Authorization Basis
ABCN	Authorization Basis Change Notice
AIChE	American Institute of Chemical Engineers
AIHA	American Industrial Hygiene Association
ALARA	As Low As Reasonably Achievable
CAR	Construction Authorization Request OR Corrective Action Report
CFR	Code of Federal Regulations
Ci	Curie
CM	Configuration management
DAR	Deactivation Authorization Request
DBE	Design Basis Earthquake OR Design Basis Event
DCD	Design Criteria Database
DIM	Design Input Memorandum
DOE	U.S. Department of Energy
DOELAP	DOE Laboratory Accreditation Program
DOE-RL	U.S. Department of Energy Richland Operations Office
DOH	Washington State Department of Health
DR	Deficiency Report
DRR	Document Review Request
DWPF	Defense Waste Processing Facility
EAL	Emergency Action Level
EARP	Enhanced Actinide Removal Plant
Ecology	Washington State Department of Ecology
ECP	Employee Concerns Program
EDSP	Engineering Design Safety Principle
EIS	Environmental Impact Statement
EMP	Emergency Management Program
EMS	Emergency Management System
EP	Emergency Plan
EPA	U.S. Environmental Protection Agency
EPIP	Emergency Plan Implementing Procedure
ER	Environmental Report
ERPG	Emergency Response Planning Guide
ERPP	Environmental Radiation Protection Program
ES&H	Environment, Safety, and Health
FHA	Fire Hazard Analysis
FR	Federal Register
FSAR	Final Safety Analysis Report
HAL	Highly Active Liquids
HAR	Hazard Analysis Report
HAZOP	Hazard and Operability (analysis)
HEPA	High-Efficiency Particulate Air (filter)
HLW	High-Level Waste
HRC	Hazards Research Corporation
Hwy	Highway
ICBO	International Conference of Building Officials
IPT	Integrated Product/Process Team
IRT	Independent Review Team
ISA	Integrated Safety Analysis
ISAR	Initial Safety Analysis Report

ISMP	Integrated Safety Management Plan
ISO	International Organization of Standards
LAW	Low-Activity Waste
LPS	Licensing, Permitting, and Safety
LWA	Limited Work Authorizations
MSDS	Material Safety Data Sheets
NAICS	North American Industry Classification System
NCR	Non-Conformance Report
NCRP	National Council on Radiation Protection and Measurements
NPH	Natural Phenomenon Hazard
NRC	U.S. Nuclear Regulatory Commission
NVLAP	National Voluntary Laboratory Accreditation Program
OAR	Operating Authorization Request
OPM	Operational Preventive Measures
OSHA	Occupational Safety and Health Administration
PFD	Process Flow Diagram
PHA	Process Hazards Analysis
PHMC	Project Hanford Management Contractor
PSAR	Preliminary Safety Analysis Report
PSC	Project Safety Committee
PSM	Process Safety Management
QA	Quality Assurance
QAPIP	Quality Assurance Program Implementing Plan
QAP	Quality Assurance program
QAPP	Quality Assurance program plan
QARD	Quality Assurance Requirements and Description
QL	Quality Level
QR	Quality Requirements
RAMI	Reliability, Availability, Maintainability, and Inspectability
RCRA	*Resource Conservation and Recovery Act of 1976*
rem	Roentgen-Equivalent Man
RG	Regulatory Guide
RL	Department of Energy Richland Operations Office
RMP	Risk Management Plan
RPP	Radiation Protection Program
RU	Regulatory Unit
SA	Safety Assessment
SAR	Safety Analysis Report
SDC	Safety Design Class
SDS	Safety Design Significant
SER	Safety Evaluation Report
SIXEP	Site Ion Exchange Effluent Plant
SNM	Special Nuclear Material
SPD	System Performance Demonstrations
SRD	Safety Requirements Document
SSC	Structures, Systems, and Components
STD	Standard (also Std)
TSR	Technical Safety Requirement
TEDE	Total Effective Dose Equivalent
THORP	Thermal Oxide Reprocessing Plant
TWRS	Tank Waste Remediation System
TWRS-P	Tank Waste Remediation System-Privatization

UBC	Uniform Building Code
UK	United Kingdom
USC	United States Code
USQ	Unreviewed Safety Question
VPP	Voluntary Protection Program
VSL	Vitreous State Laboratory
WAC	*Washington Administrative Code*
WISHA	Washington Industrial Safety and Health Administration
WVP	Waste Vitrification Plant

As allowed by 10 CFR 835.101(l) BNFL Inc. may make changes to the approved RPP so long as the change does not decrease the effectiveness of the RPP and the RPP, as changed, continues to meet the requirements of 10 CFR 835. Proposed changes that decrease the effectiveness of the RPP are not implemented without submittal to and approval by DOE. Updates to the RPP are required if a change or addition is made to the RPP. Updates of the RPP are considered approved 180 days after submittal unless rejected by the regulator.

In accordance with *Regulatory Unit Position on Contractor Initiated Changes to the Authorization Basis*, RL-REG-97-13, BNFL Inc. may make changes to the design or administrative controls if a review of the Authorization Basis is performed prior to implementation of the change and either:

a) The review demonstrates that a proposed change is consistent with the existing Authorization Basis or

b) The Authorization Basis is revised prior to the implementation of the proposed change.

The review that demonstrates that a proposed change is consistent with the existing Authorization Basis (AB) will be conducted as follows:

1. For design changes, a Design Input Memorandum (DIM) will be prepared. Signature on the DIM by the cognizant engineer indicates that the proposed design change was evaluated against the existing AB (through review of the Design Criteria Database, which includes the design-related portions of the AB).

2. For changes to administrative controls (procedure, program, plan or management process), a the proposed change will be reviewed against the existing AB by individuals designated as experts on each of the documents comprising the Authorization Basis. This review will be documented on a Design Review Request form.

In accordance with footnote 10 to RL/REG-97-13, Rev. 5, BNFL Inc. will develop a list of the types primary design documents that must be reviewed for AB consistency. Similarly, BNFL Inc. will develop a list of those administrative control documents that, if changed, could impact the AB and, therefore, must be reviewed against the AB prior to change approval. Only new administrative control documents or changes to listed administrative control documents will undergo AB consistency review.

In either case, if the proposed change is not consistent with the existing AB, an Authorization Basis Change Notice (ABCN) shall be issued.

During the design and construction phases (i.e., prior to Cold Testing of the facility), BNFL Inc. may implement such changes prior to revision of the Authorization Basis, as discussed below, provided that:

a) BNFL Inc. has informed the Regulatory Official (or his designee) of the change, if Regulatory Unit approval is required

b) BNFL Inc. has assessed the change against the following guidelines to determine if it is appropriate to implement the change at risk:

Proceed at risk will not be used for a change that meets any of the following:

1. Design changes that would not meet SRD Safety Criteria or top-level safety standards

2. Changes to Implementing Standards that would have broad design implications

3. Design changes that would result in significant dose increases to workers or the public

4. Design changes that would result in introduction of significant new hazards.

Proceed at risk may be used for a change that meets the following:

1. Changes whose delay pending AB revision would result in significant cost or schedule impact, and

2. Design changes that are physically reversible at an acceptable cost, as determined by the appropriate Design Manager or Area Project Manager, and any of the following:

   a) Changes involving interpretations to or tailoring of Implementing Standards that would have limited design implications and are judged to have no significant safety impact

   b) Design changes that may increase the consequences of a previously-evaluated design basis event (DBE), but not significantly (i.e., the consequences are judged to be well below the applicable exposure standards)

   c) Design changes that could result in a new DBE, but the consequences are judged to be well below the applicable exposure standards

   d) Changes where prior Regulatory Unit approval is not required.

Concurrent with approval of an “at-risk” change, BNFL Inc. will issue a Deficiency Report (DR) against the change. The DR will be used to track closeout of pending ABCNs and to focus management attention on the need to complete timely revisions of the AB, thus ensuring that the duration for which the change is at risk will be minimized. The DR will also be used for trending purposes, thus ensuring that potential programmatic issues are identified and resolved, as described in section 3.16.8.

For those changes impacting the authorization basis and requiring approval of the Regulatory Unit that are to be implemented prior to approval by the Regulatory Official, the Contractor will expedite preparation of a request to amend the authorization basis and will request expedited review by the Regulatory Unit of the request.

In the event that the Regulatory Official disapproves the request to amend the AB, a Non-Conformance Report (NCR) or Corrective Action Report (CAR) shall be issued, as described in

the approved Quality Assurance Program. The NCR or CAR will ensure prompt identification and implementation of any needed corrective actions, including potential rework.

Safety Evaluations

~~revisions~~ Revisions to the authorization basis, other than to the QAP and RPP as discussed above, may be made without prior approval of the Regulatory Unit provided a safety evaluation is performed that demonstrates the revision:

1) Does not involve deletion or modification of a standard previously identified or established in the approved SRD

2) Does not involve a modification of an approved Technical Safety Requirement

3) Does not result in a reduction of a commitment described in the Authorization Basis

4) Does not result in a reduction in the effectiveness of any program, procedure, or plan described in the Authorization Basis

5) Does not result in an Unreviewed Safety Question (USQ), if a Production Operations Authorization has been issued.

With regard to the documentation of the safety evaluations:

1) All changes, authorization basis revisions, and associated evaluations are documented, retained as quality assurance records, and made available for review by the Regulatory Unit

2) Safety evaluations are documented in sufficient detail such that a knowledgeable individual reviewing the evaluation can identify the technical issues considered during the evaluation and the basis for the determinations

3) The Regulatory Unit is notified of revisions to the authorization basis within 30 days of completing such revision.

Authorization Basis Amendment Requests

Changes impacting the authorization basis that require approval of the Regulatory Unit may be implemented following approval by the Regulatory Official of a request to amend the authorization basis. A request to amend the authorization basis includes:

1) A description of the proposed revision

2) The reason for the proposed revision

3) A descriptions of the proposed implementation schedule for the revision and associated change(s)