November 20, 2002

MEMORANDUM TO: Christopher I. Grimes, Program Director
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

FROM: Richard Dudley, Senior Project Manager ***/RA/***
Policy and Rulemaking Program, Section A
Division of Regulatory Improvement Programs, NRR

SUBJECT: NOTICE OF PUBLIC MEETING REGARDING OPTION 3 GUIDANCE ON RISK-INFORMING REGULATIONS AND DRAFT PLAN FOR ACHIEVING RISK-INFORMED COHERENCE IN REACTOR SAFETY ARENA

DATE & TIME: December 5, 2002
9:00a.m - 3:00 p.m.

LOCATION: U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852
Room 13B4

PURPOSE: Staff of the U.S. Nuclear Regulatory Commission will discuss (1) the current status of the guidance document on how to risk-inform NRC reactor regulations and (2) the current draft of the Coherence Working Group's proposed plan for achieving coherence among risk-informed regulatory activities within the reactor safety arena. The meeting agenda is provided in Attachment 1. The draft coherence plan is provided in Attachment 2. This is a work in progress and does not reflect an official NRC position.

PARTICIPANTS:	NRC	NEI
	S. West	T. Pietrangelo
	M. Drouin, et al.	A. Heymer, et al.

CATEGORY: This is a Category 3 meeting. The public is invited to participate in the meeting by providing comments and asking questions throughout the meeting.

Attachments: (1) Agenda
(2) Draft Plan for Achieving Coherence

Meetings between the NRC technical staff and applicants or licensees are open for interested members of the public, petitioners, interveners, or other parties to attend pursuant to "Commission Policy Statement on Staff Meeting Open to the Public," 67 Federal Register 36920, May 28, 2002. Members of the public who wish to attend should contact David Diec at (301) 415-2834 or DTD@nrc.gov or Richard Dudley at 301-415-1116 or RFD@nrc.gov for further information.

MEMORANDUM TO: Christopher I. Grimes, Program Director November 20, 2002
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

FROM: Richard Dudley, Senior Project Manager ***/RA/***
Policy and Rulemaking Program, Section A
Division of Regulatory Improvement Programs, NRR

SUBJECT: NOTICE OF PUBLIC MEETING REGARDING OPTION 3 GUIDANCE ON RISK-INFORMING REGULATIONS AND DRAFT PLAN FOR ACHIEVING RISK-INFORMED COHERENCE IN REACTOR SAFETY ARENA

DATE & TIME: December 5, 2002
9:00a.m - 3:00 p.m.

LOCATION: U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852
Room 13B4

PURPOSE: Staff of the U.S. Nuclear Regulatory Commission will discuss (1) the current status of the guidance document on how to risk-inform NRC reactor regulations and (2) the current draft of the Coherence Working Group's proposed plan for achieving coherence among risk-informed regulatory activities within the reactor safety arena. The meeting agenda is provided in Attachment 1. The draft coherence plan is provided in Attachment 2. This is a work in progress and does not reflect an official NRC position.

PARTICIPANTS:

NRC	NEI
S. West	T. Pietrangelo
M. Drouin, et al.	A. Heymer, et al.

CATEGORY: This is a Category 3 meeting. The public is invited to participate in the meeting by providing comments and asking questions throughout the meeting.

Attachments: (1) Agenda
(2) Draft Plan for Achieving Coherence

Meetings between the NRC technical staff and applicants or licensees are open for interested members of the public, petitioners, interveners, or other parties to attend pursuant to "Commission Policy Statement on Staff Meeting Open to the Public," 67 Federal Register 36920, May 28, 2002. Members of the public who wish to attend should contact David Diec at (301) 415-2834 or DTD@nrc.gov or Richard Dudley at 301-415-1116 or RFD@nrc.gov for further information.

ADAMS Accession Number:**ML023250020** *See previous concurrence

OFFICE	RPRP:PM	RES	RPRP:SC
NAME	RDudley*	M. Drouin****/by phon****e/	KSWest*
DATE	11/20/2002	11/19/2002	11/20 /2002

OFFICIAL RECORD COPY

Distribution: NOTICE OF PUBLIC MEETING re OPTION 3 GUIDANCE ON RISK-INFORMING REGULATIONS AND DRAFT PLAN FOR ACHIEVING RISK-INFORMED COHERENCE - December 5, 2002
ADAMS - PUBLIC
OGC
ACRS

Email
SCollins/JJohnson
BSheron
DMatthews/FGillespie
WBorchardt
MRubin
MCunningham
MDrouin
BHardin
WBeckner
GImbro
CGrimes
SWest
DDiec
SMagruder
GHolahan
MJohnson
MReinhart
JShea, OEDO
OPA
PMNS (post agenda on External Web)
MSnodderly, ACRS

Agenda

9:00	- 9:15	Introduction - NRC
9:15	- 10:45	Status of Risk Informing 10CFR Part 50 - NRC
10:45	- 11:00	Break
11:00	- 11:30	Overview of Draft Coherence Program - NRC
11:30	- 12:00	Discussion of Draft Coherence Program - all participants
12:00	- 1:00PM	Lunch
1:00	- 2:30	Discussion of Draft Coherence Program (cont.) - all participants
2:30	- 3:00	Conclusions and Next Steps - NRC

Attachment 1

PLAN FOR ACHIEVING "COHERENCE"

1.0 INTRODUCTION

1.1 Background

Although a great deal of progress has been made towards risk-informing regulatory activities, the staff believes that some existing reactor arena activities (regulations, staff programs and processes) may be inconsistent (or incoherent) with risk-informed practices. Many NRC regulations and processes have evolved in a less-than-integrated manner over the years. For example, the risk-informed significance determination processes used to evaluate performance deficiencies under the current reactor oversight program (ROP) have identified numerous regulations for which non-compliance is not risk-significant. In addition, since risk was not assessed when most reactor design basis regulations were promulgated, use of the risk-informed ROP emphasizes safety issues not directly addressed in licensee Final Safety Analysis Reports or other docketed material. Furthermore, research and analysis over the years has revealed that some NRC regulations are overly conservative or unnecessarily burdensome without commensurate benefits to public safety. These regulations divert licensee and NRC resources away from more safety significant issues. There may also be inconsistencies between the approaches and the objectives that the staff has used to make different activities risk-informed .

Consequently, the staff has been developing a program to address the coherence of regulatory activities. This program would provide an approach in which the reactor regulations, staff programs, and processes are built on a unified safety concept and are properly integrated so that they complement one another. An inter-office working group has been formed and is developing a detailed action plan for the program to improve coherence among risk-informed activities. The staff intends to engage stakeholders throughout the process.

Responding to a briefing by the staff on significant issues in the reactor safety arena, the Commission stated in a February 8, 2002, SRM that, in parallel to these staff activities, "in the next version of the RIRIP, the staff should provide its plan for moving forward with risk-informed regulation to address regulatory structure convergence with our risk-informed processes."

1.2 Objectives

1.2.1 Coherence Program

The objective of the coherence program is to develop and implement a plan such that "the reactor regulations, staff programs, and processes are built on a unified safety concept and are properly integrated so that they complement one another."

To determine that the above objective has been met, a major product of the program, **not this plan**, is the development of a " Risk-Informed Coherence Process" (see Task 1-1). This process will (1) define what is meant by "a unified safety concept," "properly integrated" and "complement one another," (2) provide guidance for achieving the program objective, and (3) provide the acceptance criteria for determining if the program objective has been met. For example, the process will define the safety concept, provide the guidance and criteria for making the safety concept "unified."

1.2.2 Coherence Plan

The objective of the coherence plan is to identify the staff activities that will be implemented to accomplish the objective of the above program. This plan will also identify schedule, resources and responsibilities.

Since this plan details the tasks that will need to be implemented such that the program objective can be met, the tasks will need to include the following features:

- clear articulation of the program objectives and associated products
- mechanism by which to measure success (determine program objectives have been accomplished)

The plan does not contain these features, but identifies the tasks such that these features will be accomplished.

1.3 Scope and Limitations

The coherence program will be based on current activities such as the framework for risk-informing Part 50 and the ROP. It will complement ongoing activities already addressing the coherence issue. The program is not an attempt to re-invent the regulatory structure for reactor-related activities.

The coherence program is addressing "regulatory structure convergence" which will determine if regulatory activities are built on a unified safety and are properly integrated such that they complement one another. This program, therefore, only addresses the structure (e.g., principles, guidance) associated with each regulatory activity for coherence; it does not evaluate if the regulatory activity is implemented in accordance with its principles.

As noted above, this program is in regard to current activities; that is, this plan addresses regulatory structure convergence for ongoing, current efforts. It is assumed that as new risk-informed activities (e.g., risk-informing Part 54) are implemented, they will be implemented in accordance with the risk-informed coherence process developed as part of this program.

The program will also only address regulatory activities associated with current licensed reactors. Although many insights may be gained from this program regarding the regulatory structure for future reactors, they are not within the scope of the program.

Finally, the intent of the coherence program is that the lead for each activity reviewed will remain in each respective organization. The goal is that current efforts will continue unimpeded, however, they may be re-evaluated and adjusted on the basis of a coherence review.

2.0 COMMUNICATION

2.1 Purpose

The purpose of the Communication plan is to (1) identify the stakeholders, both internal and external to the NRC, (2) identify the message to be communicated to the stakeholders, and (3) provide the structure for communicating the messages to the stakeholders.

[FROM THIS POINT ON, A TENTATIVE OUTLINE IS PROVIDED BELOW, THIS SECTION TO BE WRITTEN]

2.2 Communication with Targeted Audience

2.2.1 INTERNAL STAKEHOLDERS

- Interface with Office Directors and Division Directors
- Interface with the NRC's Regional Offices
- Interface with the NRC's Office of Public Affairs (OPA)
- Interface with the NRC's Office of State Programs and Congressional Affairs (OSP/OCA)
- Interface with the NRC's Offices of the Commission and the Executive Director for Operations OCM/OEDO

2.2.2 OVERSIGHT COMMITTEES

– Advisory Committee on Reactor Safeguards (ACRS)
– Committee to Review Generic Requirements (CRGR)
– Probabilistic Risk Assessment (PRA) Steering Committee
– Joint ET/LT

2.2.3 INTERNAL WORKSHOPS

2.2.4 EXTERNAL STAKEHOLDERS

– The Nuclear Energy Institute (NEI) and Pertinent Industry Groups
– Individual Licensees
– Public Interest Groups, Local Community Leaders, and the Public

2.2.5 MEETINGS, WORKSHOPS, CONFERENCES WITH TARGETED AUDIENCES

2.2.6 NRC EXTERNAL WEB SITE

2.3 Evaluation and feedback

2.4 Roles and Responsibilities and points of contact

- Interoffice Oversight Committee
- Lead activities
- Interoffice counterparts
- Subject Matter Points of Contact

3.0 APPROACH

This section of the plan presents the ***approach*** that is used to accomplish the objective of the coherence program in responding to the Commission's SRM of February 8, 2002. The objective of the program, as stated above, is to develop and implement a plan such that "the reactor regulations, staff programs, and processes are built on a unified safety concept and are properly integrated so that they complement one another." The objective of this plan is to provide the approach (e.g., staff efforts) and associated schedule and resources for accomplishing the program.

In determining what staff efforts are needed to meet the above objective, it first must be decided where and if the reactor regulations, staff programs and processes are not built on a unified safety concept and are not properly integrated so that they do not complement one another. Second, the proposed staff efforts to achieve coherence may not be either feasible and desirable. Consequently, prioritization should be performed prior to any implementation. Therefore, a phased approach has been proposed as shown in Figure 1.

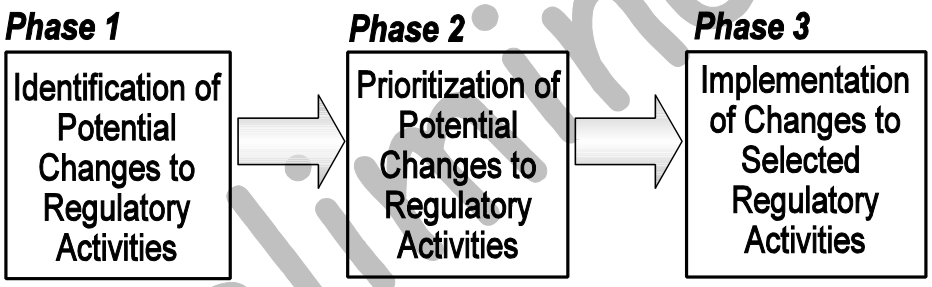


Figure 1. Phased Approach in Achieving Coherence.

In Phase I, a risk-informed coherence process is developed and potential candidate regulatory activities are identified that may need to be refined (i.e., changed). The risk-informed coherence process will be developed by modifying and combining existing guidance documents (e.g., the framework for risk-informed changes to the technical requirements of 10 CFR 50). The candidate regulatory activities (i.e., reactor regulations, staff programs and processes) are identified by assessing where and if the reactor regulations, staff programs and processes either are not built on a unified safety concept or are not properly integrated so that they do not complement one another; and if not, then the cause for this determination is identified.

In Phase 2, the potential changes to the candidate regulatory activities are prioritized. This prioritization examines the feasibility and desirability of refining the regulatory activity. Therefore, the staff effort that would be required to refine the regulatory activity is evaluated and then prioritized by its potential feasibility and desirability.

In Phase 3, the changes to the candidate regulatory activities whose staff efforts to achieve coherence identified as "high" from the prioritization are selected and consequently implemented. This implementation may result in reactor regulations, staff programs or processes being refined.

The details of each phase of the plan are described below.

3.1 Phase 1: Identify Potential Changes to Regulatory Activities

The purpose of phase 1 is to identify what regulatory activities may need to be refined such that reactor regulations, staff programs and processes are built on a unified safety concept and are properly integrated so that they complement one another. To accomplish this objective, three major tasks have been identified:

1-1 — Development of Process for a Risk-Informed Coherence Effort
1-2 — Identification of Regulatory Activities
1-3 — Evaluation and selection of regulatory activities

The relationship of these tasks is shown in Figure 2 and described in detail below.

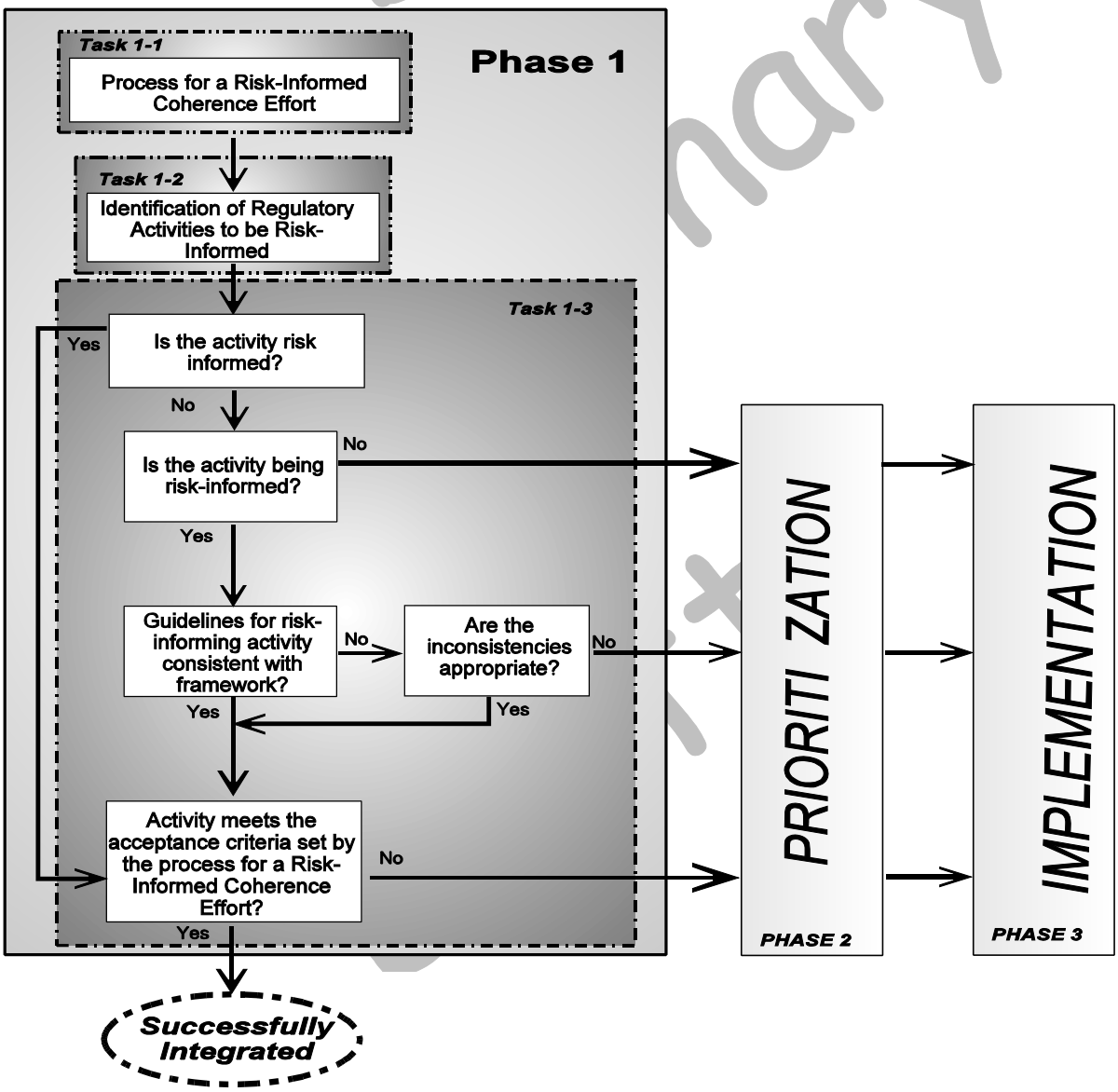


Figure 2.

The tasks are shown in a somewhat sequential fashion. However, it must be noted that the various tasks in all three phases are actually performed in an iterative manner. For example, the process for a risk-informed coherence effort may be adjusted and modified as the remaining tasks of each phase are performed. Similarly, a specific task may be modified as a result of a subsequent task. Further, it is anticipated that this process is a "living" process and will be modified, adjusted, revised over time as appropriate.

3.1.1 TASK 1-1: DEVELOPMENT OF A RISK-INFORMED COHERENCE PROCESS

The purpose of this task is to develop a Risk-Informed Coherence Process. This process provides the guidance and criteria for:

(1) defining what is meant by a unified safety concept and determining if the regulatory activities are coherent with this concept, and

(2) ensuring that the regulatory activities are properly integrated so that they complement one another.

Two subtasks are implemented in developing this guidance and criteria:
1-1.1 — Development of a Risk-Informed Coherence Process
1-1.2 — Development of terminology glossary

Subtask 1-1.1: Development of a Risk-Informed Coherence Process

Objective:
The purpose of this task is to develop a mechanism that can be used to demonstrate and ensure that the reactor regulations, staff programs, and processes are built on a unified safety concept and are properly integrated so that they complement one another. The form of this mechanism is a Process for a Risk-Informed Coherence Effort (PRICE) that provides for a systematic review of the regulatory activities.

Workscope:
There are on-going efforts in this area that provide pieces and elements of this process. The framework/guidance for risk-informing the technical requirements of 10 CFR Part 50 (known as the "Option 3 Framework"), has integrated the concepts and principles from various efforts (e.g., reactor oversight process, regulatory guide 1.174). The approach here is to adopt and refine this framework/guidance as necessary to develop a PRICE.

As noted above, this framework/guidance provides a process for risk-informing the technical requirements in 10 CFR Part 50, and as such, it is an approach for making generic changes. The PRICE will be a mechanism for addressing risk-informing issues on both a plant-specific and generic basis, and assessing changes to regulatory practices other than licensing requirements. Therefore, in refining this framework in developing the PRICE, the various pieces and elements will be examined and modified for their applicability. The specific elements and associated examination involve the following:

- ***Definition of risk-informed regulation*** — Integrate the Commission's statement on risk-informed regulation with the views from the ACRS and those contained in RG 1.174. This definition will be examined to determine if it needs to be modified or expanded such that the model provides explicit criteria for determining whether an activity is now, or should be, risk-informed.

- ***Acceptance Criteria*** — Guidance and criteria will be provided that define when success has been achieved regarding a PRICE;" that is, this criteria determines whether the objective of "reactor regulations, staff programs, and processes are built on a unified safety concept and are properly integrated so that they complement one another" has been met. The criteria provided in SECY-98-0300 regarding the desired characteristics of a risk-informed Part 50 will be used (and modified as needed) to define the characteristics of an acceptable PRICE. These characteristics are listed below:

  — In concert with other NRC regulations, it would continue to provide reasonable assurance of adequate protection of public health and safety.

  — It would contain requirements on specific attributes of nuclear power plant design and operations commensurate with their safety significance. This safety significance would be assessed using principles of risk-informed regulation including the following:

    - consistency with the defense-in-depth philosophy
    - maintenance of sufficient safety margins
    - consistency with the intent of the Safety Goal Policy Statement

  – The requirements would be written in a manner that would accommodate the plant-specific nature of the safety significance of design and operational attributes.

  – It would provide a clear, consistent, and coherent set of requirements that would also facilitate consistency in treatment among the assessment, inspection and enforcement programs.

  – It would provide a regulatory basis for all NRC reactor-related activities, including licensing, inspection, enforcement, and assessment.

  – It would be performance-based to the extent practical. This decision will be based on the process described in NUREG/BR-xxxx, "Guidance for Performance-Based Regulation."

  – It would be practical to implement for both licensees and the NRC.

– ***Defense-in-depth*** — Integrate the Commission's statement on defense-in-depth with the views from the ACRS and those contained in RG 1.174. This definition will be examined to determine if it needs to be modified or expanded. In addition, explicit guidance will be provided in describing the principles of defense-in-depth and how they are implemented.

– ***Uncertainties*** — Provide a description of uncertainties and guidance regarding the treatment of uncertainties in the decision-making process. This guidance also addresses defense-in-depth and safety margins. The treatment regarding defense-in-depth in the framework/guidance for risk-informing the technical requirements for 10 CFR 50, integrates the Commission's, RG 1.174 and ACRS views on defense-in-depth and uncertainties. The framework will be examined to determined if the guidance needs to be refined such that the treatment of uncertainties and defense-in-depth have a common understanding regarding its implementation.

– ***Quantitative Risk Guidelines*** — Provide quantitative risk values for staff use, as guidelines only, to provide insights for decision-making regarding generic changes to the technical requirements in 10 CFR Part 50. These guidelines are based on the QHO's in the

Commission's Safety Goal Policy Statement and are consistent with the guidelines in RG 1.174. These values will be examined to determine if they need to be refined such that they can support both generic type decision-making and other types of risk-informed activities.

– ***Prioritization*** — The major product from Phase 1 is a list of the regulatory activities that are either not built on a unified safety concept or are not integrated such that they do not complement each other. This list of activities, however, does not consider the worthiness of refining or adjusting these activities. Consequently, prior to any effort to refine a regulatory activity, these activities will be prioritized which will address the feasibility and desirability. This effort (prioritizing the regulatory activities) is Phase 2 of the Coherence Program and is discussed in detail in Section 3.2 of this plan.

Responsibility/Interfaces:
As noted in the introduction, the intent of the coherence program is that the lead and the associated activity will remain in each respective organization, but may be reevaluated and adjusted to achieve the coherence objective. Consequently, this subtask will be performed by RES as part of the ongoing effort for risk-informing the technical requirements of 10 CFR 50.

Products:
This PRICE provides a critical element of the coherence program in that it provides the guidance and criteria for a unified safety concept and for determining that the reactor regulations, and staff programs and processes are properly integrated so that they complement one another. It is, therefore, proposed that the PRICE be documented in a NUREG report.

Subtask 1-1.2: Development of Terminology

Objective:
The purpose of this task is to develop a standard set of definitions and usage of terms in an effort to a have common understanding to help facilitate discussions and communication regarding the PRICE.

A detailed discussion of each term (i.e., working definitions) will not be provided; however a reference to appropriate documents for the working definitions will be provided.

Workscope:
In developing a glossary of terms and definitions, three major steps (identification of terms, evaluation of definitions, development of definitions) will be performed:

(1) Identification of the terms that need to be defined such that there is a common understanding of their meaning. In this step, the information sources used will be identified. These information sources will include, at a minimum:
   – Risk-Informed Environment Program
   – Risk Communication Program
   – NUREG reports, SECY papers, Commission Policy Statements, etc.

   Examples of terms include:
   – adequate protection
   – defense-in-depth
   – dominant
   – level of protection
   – performance-based
   – risk-based, -informed
   – risk management
   – safety margin
   – safety significant
   – unified safety concept

(2) Once the various terms have been identified, the sources will be reviewed for definitions. Where differences in definitions are identified, the contexts will be examined. Special attention will be placed on terms where the context is similar but there is inconsistency, ambiguity, or confusion in the definition.

(3) A glossary will be developed. This glossary will contain those terms that are key to facilitating discussions and improving communication. More than one definition may be needed for the various terms. In these cases, the contexts will be provided with the definitions.

Responsibility/Interfaces:
The initial glossary will be developed by an expanded CoG working group that will draw on resources from each of the activities under review. The glossary will be given to each responsible organization for review and comment before finalization.

Products:
The glossary will be published as part of the NUREG containing the PRICE.

3.1.2 TASK 1-2: IDENTIFICATION OF REGULATORY ACTIVITIES

The purpose of this task is to develop criteria and then determine what regulatory activities (i.e., reactor regulations, staff programs and processes) need to be looked at for coherence.

Subtask 1-2.1: Development of Coherence Criteria

Objective:
The purpose of this task is to develop the criteria that will be used to determine what regulatory activities (reactor regulations, staff programs, and processes) are within the scope of the coherence program; that is, this criteria will define which PRICE regulatory activities should be risk-informed.

It should be noted that it is the expectation that this step of the PRICE is simply a documentation of the process that was used to previously determine which regulatory activities should be risk-informed and that they have already been identified.

Workscope:
The PRICE developed in Task 1-1 will provide the guidance and criteria for determining whether a regulatory activity should be risk-informed, and consequently, whether the activity is within scope of the coherence program.

Responsibility/Interfaces:
Since this effort will be performed in the development of the PRICE, it is addressed in Task 1-1.

Products:
This task will be documented in the NUREG for the PRICE.

Subtask 1-2.2: Identification and Selection of Activities

Objective:
The objective of this task is to identify which regulatory activities are within the scope of the coherence program.

Workscope:
The various regulatory activities that will be considered in addressing the scope of the coherence program, fall into one of three categories:

(1) Regulations — Development and implementation of the regulations governing the design, maintenance and operation of the facility, as associated with the reactor arena. This category also includes (consistent with the Commission's definition of a regulatory framework) evaluating the processes for the development of supporting guidance, such as:
   – generic letters
   – information notices
   – regulatory guides

(2) Licensing activities — staff programs and processes addressing submittals by licensees requesting changes to their licensing basis; for example, technical specification changes, regulatory guide 1.174, inservice inspection and testing.

(3) Plant oversight — staff programs and processes such as inspection, assessment, and enforcement (i.e., ROP) that provides assurance that plants are operated safely and in accordance with the NRC's regulatory requirements.

The regulatory activities associated with each of these categories (as related to the reactor arena) are identified. These regulatory activities are then evaluated against the guidelines and criteria (from Subtask 1-2.1) to select those that are in the scope of the coherence program. These selected activities are, therefore, the regulatory activities that should be risk-informed, and consequently should be built on a unified safety concept and should be properly integrated so that they complement one another.

Responsibility/Interfaces:
The initial identification of the regulatory activities associated with each category, and initial determination of whether the regulatory activity should be risk-informed, will be performed by an expanded CoG working group that will draw on resources from each of the activities under review. This assessment will be given to each responsible organization for review and comment before finalization.

Products:
The activities identified as part of the scope of the coherence program will be documented and provided to the Commission in a status report.

3.1.3 TASK 1-3: EVALUATION OF REGULATORY ACTIVITIES

The purpose of this task is to determine specifically which regulatory activities are either not built on a unified safety concept or not integrated such that they do not complement one another. This task is performed in two steps in determining if the two objectives of the Coherence program are met. These two subtasks involve:

1-3.1 — Safety Concept Evaluation
1-3.2 — Integration Evaluation

Subtask 1-3.1: Safety Concept Evaluation

Objective:
The purpose of this task is to determine if each of the various regulatory activities (from Subtask 1-2.2) are built on a unified safety concept. This will be a relatively high level evaluation to determine if an activity is consistent with the price. It will not evaluate all details of each activity to determine whether there may be some specific implementation details that are somewhat lacking in coherence. Possible reevaluations of activity implementation specifics could be conducted after Phase 3 of this program and possibly preceded by a few test evaluations to identify potential benefits of further assessment.

Workscope:
The bases for each of the regulatory activities are evaluated against the guidelines and criteria of the PRICE provided in Subtask 1-1.1, which involves two steps.

The first step of this subtask is to identify all the regulatory activities that either are currently risk-informed or are being risk-informed (from Task 1-2.2). Those regulatory activities that should be risk-informed, but either have not been or are not being risk-informed, will be prioritized as part of Phase 2. If implemented, they will be risk-informed coherently in accordance with the PRICE.

In the second step of this subtask, each regulatory activity identified above in Step 1 is evaluated to determine if an explicit "safety concept" (e.g., cornerstones for ROP) has been defined and documented for the activity. Where not, the activity is evaluated to determine if an implicit "safety concept" is being used. If neither an explicit or implicit "safety concept" exists then this regulatory activity is flagged as not meeting the criteria for "being built on a unified safety concept."

Where either an explicit or implicit safety concept is used for a regulatory activity, the evaluation then determines if the safety concept is consistent with the safety concept defined in the PRICE. If the safety concept used in each activity is consistent with the PRICE then the regulatory activity is built on a unified safety concept. If inconsistencies are identified, the bases/causes for the inconsistency are also identified. The regulatory activities identified as incoherent will then be prioritized (see Phase 2) to determine if changes are warranted (which would be performed under Phase 3).

The regulatory activities identified as being built on a unified safety concept will next be assessed to determine if they are properly integrated so that they complement one another (see Task 1-3.2).

Responsibility/Interfaces:
The initial assessment to determine if each regulatory activity is built on a unified safety concept will be performed by the CoG working group, supplemented by activity experts, as necessary. This assessment will be given to each responsible organization for review and comment before finalization.

Products:
The regulatory activities identified as not being built on a unified safety concept will be documented and provided to the Commission in a status report.

Subtask 1-3.2: Integration Evaluation

Objective:
The purpose of this task is to determine if the various regulatory activities are properly integrated and complement one another.

Workscope:
Although the regulatory activities may be built on a unified safety concept, they may be implemented such that they are not properly integrated and consequently do not complement one another. Consequently, to assure "coherence," it needs to be determined if these regulatory activities are integrated so that they complement one another. To make the above determination, each of the regulatory activities are evaluated relative to each other using the acceptance criteria from the PRICE.

This evaluation will involve staff activities to identify inconsistencies and commonalities, safety concerns, inefficiencies and unnecessary burden relative to the regulatory activities. It should be noted that legitimate differences may exist among the regulatory activities due to their particular purpose but that the regulatory activities should each contribute to the goal of the PRICE. Examples of staff activities:

– Assessment of the regulations against the PRICE, more specifically, against the reactor safety cornerstones. The reactor safety cornerstones include:
  (1) Initiating events — minimizing events that could lead to an accident
  (2) Mitigation systems — assure the ability of safety systems to respond to and lessen the severity of an accident
  (3) Barrier Integrity — maintain barriers to the release of radioactivity in an accident
  (4) Emergency preparedness — plans by the utility and governmental agencies to shelter or evacuate people in the community in the event of a severe accident.

  Each "reactor" regulation is reviewed to determine which cornerstone is supported by that regulation. In addition, this assessment includes an examination of the specific requirements and supporting documents associated with the regulation. For example, 10 CFR 50.44 addresses the safety concern associated with possible combustion from hydrogen challenging the integrity of the containment. In reviewing the safety concern associated with the regulation, it would appear that this regulation solely supports the third cornerstone, 'barrier integrity.' However, in reviewing the associated requirements and supporting guidance documents, it can be seen that the regulation also support the fourth cornerstone, emergency preparedness.

• Assessment of the "findings" from reactor oversight process (ROP) against the regulations. This evaluation looks at the ROP findings, to identify insights indicating where the ROP is inconsistent with the regulations, and therefore, they do not complement one another. For example,
  – identify any "trends," that is, the findings primarily relate to a single regulation such that the regulation (or the ROP) should be evaluated.
  – findings indicate the regulation is overly prescriptive and not risk-informed.

– Assessment of licensing actions against the regulations. For example,
  – determine whether the requested licensing actions are plant-specific or have generic implications.

- Identification of conflicts between the Maintenance Rule and Technical Specifications — the staff is aware that licensees have identified situations where the output from their configuration risk management programs, developed to implement section (a)(4) of the maintenance rule, is in conflict with their technical specification requirements. For example, under certain conditions an SSC may have more risk significance than the allowed outage times in technical specifications reflect. Licensees have been conservatively shortening the time these SSCs are inoperable, however, the staff recognizes that there should be a better interface between technical specifications and the maintenance rule.

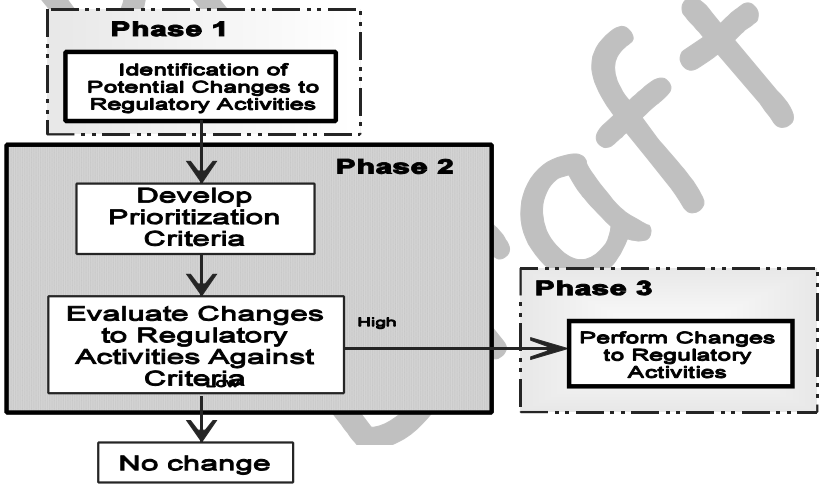
Responsibility/Interfaces:
The initial assessment to determine if the regulatory activities are properly integrated so that they complement one another will be performed by the CoG working group, supplemented by activity experts, as necessary. This assessment will be given to each responsible organization for review and comment before finalization.

Products:
The regulatory activities identified as not being integrated and that do not complement one another, and the bases for this determination, will be documented and provided to the Commission in a status report.

3.2 Phase 2: Prioritization of Activities

The purpose of Phase 2 is to prioritize the regulatory activities requiring refinement so that the reactor regulations, staff processes and programs are built on a unified safety concept and that they are integrated such that they complement each other. To accomplish this objective, two major tasks, as shown below, have been identified:

2-1 — Development of criteria to be used to prioritize activities
2-2 — Prioritization of regulatory activities



3.2.1 TASK 2-1: DEVELOPMENT OF PRIORITIZATION CRITERIA

Objective
The purpose of this task is to develop criteria to prioritize the regulatory activities requiring refinement so that the reactor regulations, staff processes and programs are built on a unified safety concept and are integrated such that they complement each other.

Workscope
The PRICE provides guidelines and criteria which includes prioritization. The development of these criteria are performed under the framework described in Subtask 1-1.1 and is a two step effort.

The first step develops criteria to perform an initial screening. These prioritization criteria examine the extent to which the refined regulatory activity (as determined in Phase 1) would support the NRC strategic performance goals in addressing the NRC mission of protecting the public health and safety. Consequently, these criteria prioritize the refined regulatory activity relative to:

- maintaining safety
- increasing public confidence
- making decisions more effective, efficient and realistic, and
- reducing unnecessary regulatory burden.

The manner in which the determination is made, whether qualitatively or quantitatively, will be developed.

The second step develops criteria to perform the final prioritization. This prioritization criteria examines the extent to which the staff effort required to refine a regulatory activity is both feasible and desirable. Therefore, criteria will be developed that addresses, at a minimum, the following:

- The degree to which the regulatory activity is not coherent.
- Can the necessary change to the regulatory activity be performed in a timely manner? For example,
  - are the tools, information, etc. that is necessary to make the change to the regulatory activity available, and if not, can it be developed in a timely, cost-effective manner?
- What are the resources necessary to both make and implement the change?
- Do other factors exist which would impact the staff or licensee effort?

Responsibility/Interfaces:
The development of the prioritization criteria is performed in the development of the PRICE, and therefore, the responsibility for this effort has been defined in Subtask 1-1.1.

Products:
One “element” of the PRICE is the prioritization criteria. Consequently, this result of this task is documented in the NUREG for the PRICE.

3.2.2 TASK 2-2: PRIORITIZATION OF REGULATORY ACTIVITIES

Objective
The purpose of this task is to prioritize the regulatory activities that will be refined so that the reactor regulations, staff processes and programs are built on a unified safety concept and that they are properly integrated such that complement each other.

Workscope
This task is a two step effort. In the first step, each regulatory activity identified in Subtasks 1-3.1 and 1-3.2 as requiring refinement is evaluated against the screening criteria developed above in Task 2-1. The regulatory activities screened "out" are the changes that play little to no role in meeting the four strategic goals; that is, refining the regulatory activity would have negligible impact on either

- maintaining safety
- increasing public confidence
- making decisions more effective, efficient and realistic, or
- reducing unnecessary regulatory burden.

In the second step, those regulatory activities not screened out, are then evaluated against the prioritization criteria developed in Task 2-1. This evaluation identifies which regulatory activities should be refined because the staff effort to achieve coherence for the regulatory activity is both feasible and desirable. This evaluation will also prioritize which are the most to the least feasible and desirable. Consequently, the result of this task is prioritization of the regulatory activities to be refined for achieving coherence; that is, with refinement, the regulatory activities will be built on a unified safety concept and will properly integrated such that they complement one another.

Responsibility/Interfaces:
The prioritization of the regulatory activities to be refined will be performed by the CoG working group, supplemented by activity experts, as necessary. This assessment will be given to each responsible organization for review and comment before finalization.

Products:
The prioritized regulatory activities identified to be refined to achieve coherence will be documented and provided to the Commission in a status report.

3.3 Phase 3: Implementation of Selected Regulatory Activities

The output of Phase 2 will be a prioritized list of regulatory activities that have been identified as needing to be refined so that they are consistent with the unified safety concept and are properly integrated such that they complement one another. Actual selection of the regulatory activities will be decided by the PBPM process (see Section 5 on Resources).

In Phase 3, the coherence working group will assist the responsible organizations in making the appropriate modifications to their activities. As previously discussed, the lead for the activities will not change, rather the coherence working group will facilitate the modifications and continue to report to senior management on the status of the coherence effort.

4.0 SCHEDULE

MILESTONE	DATE
– ACRS meeting	Jan/Feb 2003

– Preliminary draft
  – PRICE
  – Terminology/glossary
	February 2003

– Scope of Regulatory Activities to be Evaluated	February 2003

– Public Workshop/meeting
  – Draft PRICE
  – Scope of Regulatory Activities
	February 2003

– Preliminary assessment/evaluation of regulatory activities	April 2003
– Public workshop/meeting – Preliminary assessment/evaluation of regulatory activities	May 2003

– Status report to Commission
  – Results of Tasks 1-1 (PRICE) and 1-2 (Scope of Coherence)
  – Preliminary results of Task 1-3 (Evaluation of Regulatory Activities)
	June 2003

– Initial prioritization	September 2003
– Public workshop/meeting	September 2003

– Status report to Commission
  – Results of Phase 1 and 2
  – Initial findings from Phase 3
	December 2003

5.0 RESOURCES

The resources to complete and implement the coherence plan are included in the FY 2003 and FY 2004 budgets. The staff does not expect that the efforts of Phase 3 will significantly impact the resources needed to complete the regulatory activities. As with other staff activities, however, changes to the resources allocated to implementation activities for risk-informed regulation will continue to be made consistent with the PBPM process to reflect changes to the Agency's budget and priorities.