UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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August 30, 2006

PG 0803 - MANAGING IMPLEMENTATION OF THE SIGNIFICANCE DETERMINATION PROCESS (SDP)

EFFECTIVE: Upon issuance
SUPERSEDES: N/A
CONTACT: Director, DRS
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APPROVAL: /RA/
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A. Purpose/Discussion

To establish a procedure for managing the implementation of the significance determination process (SDP) by Region IV. The procedure incorporates "Best Practices" to gain the most margin for success in meeting the SDP timeliness goal. Effective application of the "Best Practices" will enhance quality and timeliness of final significance determinations for allocation of supplemental inspection resources in the framework of the Reactor Oversight Process.

As stated in Inspection Manual Chapter (IMC) 0609, the Agency's goal for SDP timeliness is that all significance determinations be completed within 90 days from the issue date of the first official correspondence that described the finding and documented the need for further review to determine significance.

Enclosure:
SDP Timeliness Flowchart and Best Practices

SUNSI Review Completed: RLB ADAMS: ☐ Yes ■ No Initials: RLB
☐ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☐ Non-Sensitive

DOCUMENT: R:_ROPG\PG0803-0 BEST PRACTICES FOR MANAGING IMPLEMENTATION OF THE SIGNIFICANCE DETERMINATION PROCESS (SDP).WPD

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B. Responsibilities and Authorities/Actions

1. General Responsibilities and Authorities/Actions

All Region IV personnel involved in the SDP shall follow the guidance provided in IMCs 0609 and 0612, and this policy guide. The Enclosure provides an SDP timeliness flowchart with explanatory notes. It also includes a list of "Best Practices" to be applied to the SDP to gain the most margin for success in meeting the SDP timeliness goal and to ensure the quality of final significance determinations.

The "Best Practices" can be summarized in two main areas:

(1) Early Engagement and Frequent Communications

Thorough inspection and effective communication of the inspection issue (and resulting performance deficiency) with licensee staff, branch chief, SRA, etc. is critical to successful SDP timeliness. Entry into the SDP should occur promptly and is expected during the course of the inspection to help identify and focus additional inspection required to support the SDP. Inspection issues should be fully developed into solid performance deficiencies prior to entering the SDP.

(2) Project Management Approach

Successful completion of the SDP within the timeliness goal requires a single managerial point of contact who has ownership of the performance deficiency (PD). The applicable DRP or DRS branch chief is the "Project Manager." The project management approach should begin immediately after completion of a Phase 2 SDP evaluation or an SDP flowchart that produces a greater than green result. The project management approach should also be utilized when there is an inability to process a PD through the SDP. The branch chief will be responsible for the processing of the inspection finding through the final determination of significance. This requires establishment of milestones, convening regional planning meetings, using the Planning SERP and SERP process, and monitoring the progress of assigned work (as described above and in the Enclosure). Planning SERPs should be considered and used early in the process when it appears clear that additional resources beyond the branch chief's staff and SRA are required or when an SDP analysis tool is lacking. These Planning SERPs will elevate management attention to the issue and enable the branch chief to obtain the resources required to complete the process. The regional branch chief remains responsible for "Project Managing" the finding to meet the SDP timeliness goal.

Ideally, a Choice Letter to the licensee should be issued with the inspection report that documents the potentially greater than green inspection finding. This provides the most margin for success in meeting the SDP timeliness goal.

For SDP analyses involving the SRAs, implementation of the "Best Practices" is very important. When adequate assessment tools or information needed to support an estimation of the risk significance of a finding do not exist, this should be promptly discussed with management and the burden of analysis placed more directly upon the

licensee. The SDP is intended to be risk-informed, not risk-based, and should not require an exhaustive risk analysis to allocate supplemental inspection resources in the framework of the Reactor Oversight Process.

2. Specific Responsibilities and Authorities/Actions

a. Director, Division of Reactor Projects (DRP) and Director, Division of Reactor Safety (DRS)

(1) Manages implementation of the SDP for assessment of inspection findings within their respective divisions, including establishing priorities for completion of inspection and analyses necessary to complete a final significance determination.

(2) Participates as the regional sponsor on Significance and Enforcement Review Panels (SERPs) and Planning SERPs.

(3) Briefs the Regional Administrator (RA) or Deputy Regional Administrator (DRA) on all inspection findings following the Regional Panel and prior to their presentation at SERP to ensure the regional position regarding the finding is effectively communicated. Also provides status briefings biweekly at the principal staff meeting for all inspection findings that are potentially greater than green and being worked through the SDP process.

(4) Makes decisions following a Regulatory Conference and Caucus to determine the level of staff effort required to review information provided by the licensee.

b. DRP and DRS Branch Chief

(1) Manages assigned inspectors and ensures that inspection findings are correctly processed in accordance with IMCs 0612 and 0609. This includes ensuring that all inspection findings are sufficiently developed during the inspection process to complete a final determination of significance within the SDP timeliness goal. This is applicable for all of the SDP assessment tools (i.e., all of the attachments of IMC 0609).

(2) Notifies an SRA when a potentially greater than green issue is identified so that the issue can be tracked on the regional tracking list for performance deficiencies that are being actively worked through the Significance Determination Process.

(3) Serves as the "Project Manager" for inspection findings in his/her branch. This includes the development and management of project timelines with appropriately developed milestones for successful completion of a final significance determination within the SDP timeliness goal.

(4) Coordinates with a Senior Reactor Analyst (SRA) for findings involving Initiating Events (IE), Mitigating Systems (MS), or Barrier Integrity (BI) cornerstone SDPs, early in the assessment process, to obtain assistance. This may involve

providing guidance to the inspection staff as they complete their Phase 1 and Phase 2 SDP reviews.

(5) Schedules a Regional Planning Meeting with the inspector and the SRA when a completed Phase 2 analysis results in a potentially significant finding or when an SDP is not available or applicable for evaluating the specific finding. As "Project Manager," the branch chief will obtain commitments from the SRA for any analysis required to support the Significance Determination Basis section of the SERP package.

(6) In consultation with the Regional Enforcement Staff, prepares packages for SERP and completion of related correspondence (inspection report, choice letter, final significance determination).

(7) Coordinates with counterparts in other offices (e.g., NRR\DRA, NRR\DIRS, NSIR\DSO, NSIR\DPR) in conjunction with Planning SERPs and SERPs to agree upon responsibilities and timelines for completing interoffice action items agreed upon during the panel.

(8) Provides status of findings, both those "on the clock" for the 90-day metric and those that are being evaluated for potential of being greater than green, at the biweekly SDP Status meeting.

(9) Directs inspection resources as required to close unresolved items (URIs) in order to fully develop a performance deficiency and understand its impact on the plant prior to entering the SDP. Closure of URIs should be a high priority and should be accomplished no later than 6 months from initiation.

(10) Directs inspection resources, if required, to support completion of a final significance determination. This may include review of engineering calculations, review of procedures to verify adequacy, etc.

(11) Ensures that all of the "Best Practices" are applied to gain the most margin for success in meeting the SDP timeliness goal.

c. Senior Reactor Analyst

(1) Provides guidance to inspectors and reviewing inspector-completed Phase 2 SDPs in the Initiating Events (IE), Mitigating Systems (MS), and Barrier Integrity (BI) cornerstones.

(2) Completes "modified Phase 2" or Phase 3 evaluations in the IE, MS, and BI cornerstones and provides inspection report or SERP package analysis input to the responsible branch chief. These evaluations will include consideration of external events and large early release frequency (LERF) as required by IMC 0609. Provides reasonable commitments to the responsible branch chief for timeliness of analysis completion. Promptly informs the branch chief when a change to the timeliness commitment is necessary to ensure accuracy and quality of the preliminary significance determination.

(3) Coordinates with other SRAs or headquarters risk analysts for support in performing SDP evaluations as required depending upon the needs of the particular analysis, including peer review for all SDPs presented to a SERP.

(4) Promptly notifies the branch chief and DRS director when it becomes apparent that a lack of information, inadequate SDP tool, or insufficient technical expertise exists, so that a Regional Planning Meeting or Planning SERP may be convened.

(5) Coordinates with licensee risk analyst counterparts to obtain licensee risk perspectives on the risk associated with inspection findings. These discussions should attempt to achieve a common understanding of the methods used to assess the performance deficiency, influential assumptions in the analysis, "best available information" used to complete the analysis, and an understanding of the licensee's results. Inform the responsible branch chief if items in the analysis may require inspector verification.

(6) Participates in Planning SERP, Regional Panel, SERP, Regulatory Conference, and Caucus.

(7) Maintains a regional tracking list for performance deficiencies that are being actively worked through the Significance Determination Process and have any potential for a greater then green outcome. Coordinates with the DRS Senior Technical Analyst to ensure the accuracy of items being tracked on the Agency tracking list of items that are on-the-clock for SDP timeliness. Discusses the status of risk assessments at the biweekly SDP Status meeting.

d. Inspector

(1) Develops and communicates performance deficiencies and collects sufficient information in the inspection process to support completion of the SDP.

(2) Promptly completes the Phase 1 and Phase 2 of the SDP during the inspection for the IE, MS, and BI cornerstones with SRA assistance as necessary.

(3) Promptly completes the SDP during the inspection for the EP, OS, PS, and PP cornerstones.

(4) Discusses potentially significant findings as early after identification as possible with licensee staff and branch chief to ensure prompt corrective actions are taken and to support timely completion of the SDP. This includes documentation in the associated inspection report and, if necessary, may include documentation to support a Planning SERP, Regional Panel, SERP, and Regulatory Conference.

(5) Performs additional inspection as necessary to support closeout of URIs or to support the SDP. This may include, for example, in-office review of calculations or procedures, or onsite inspection to review licensee information provided at a Regulatory Conference.

(6) Initiates SDP evaluation of a finding promptly as discussed in the "Best Practices" to gain the most margin for success in meeting the SDP timeliness goal. When needed, consult with regional SRAs for assistance in implementing IMC 0609.

C. References

1. Inspection Manual Chapter 0609, "Significance Determination Process"

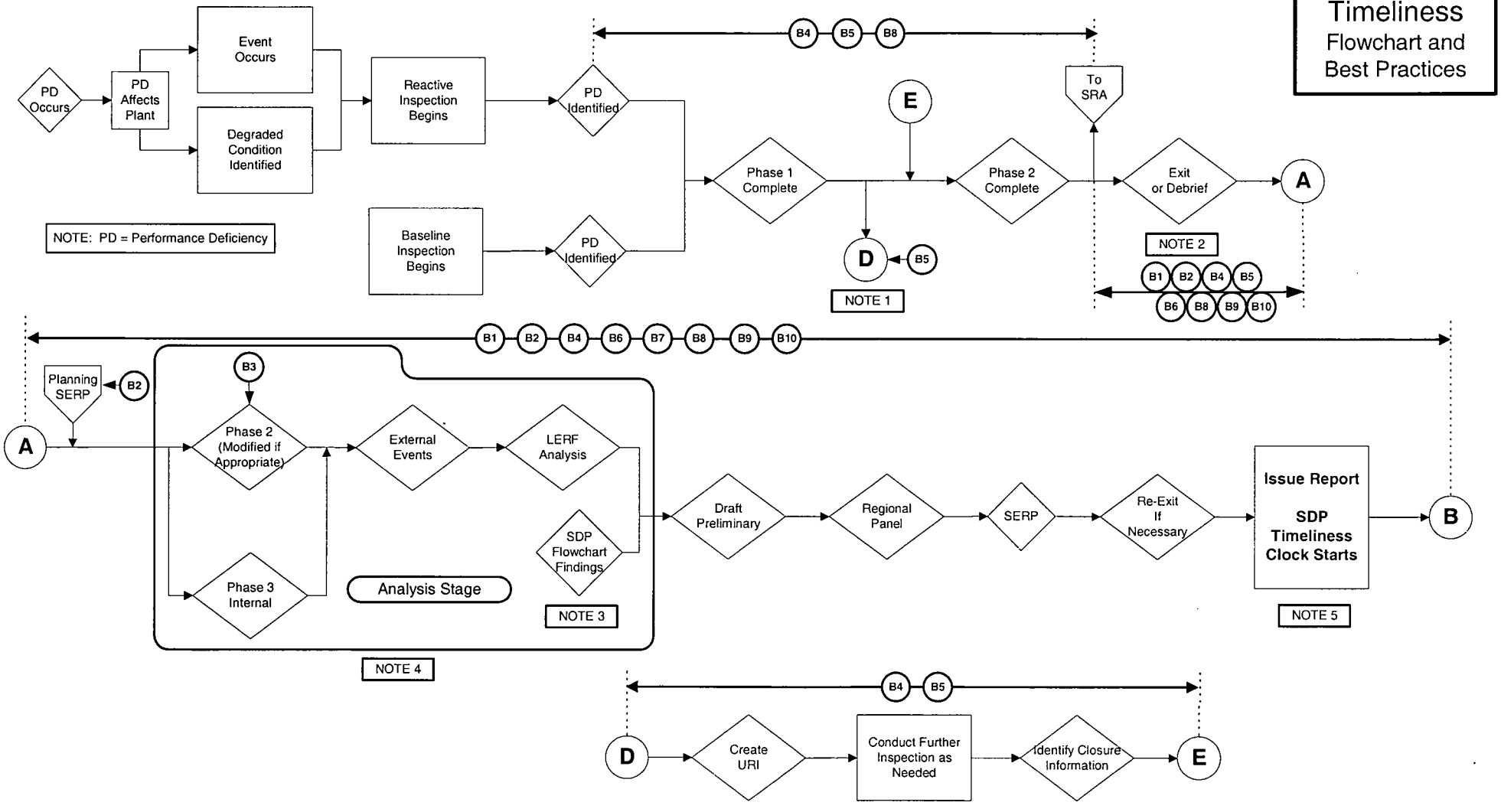
2. Inspection Manual Chapter 0308, Attachment 3, "Significance Determination Process Basis Document"

3. Inspection Manual Chapter 0612, "Power Reactor Inspection Reports"

ENCLOSURE
INSPECTION AND SDP ACTIVITIES FOR GREATER THAN GREEN FINDINGS

(Not on SDP Timeliness Clock - Optimize Steps for Completion of SDP Activities by Applying Best Practices Prior to Issuing Report)

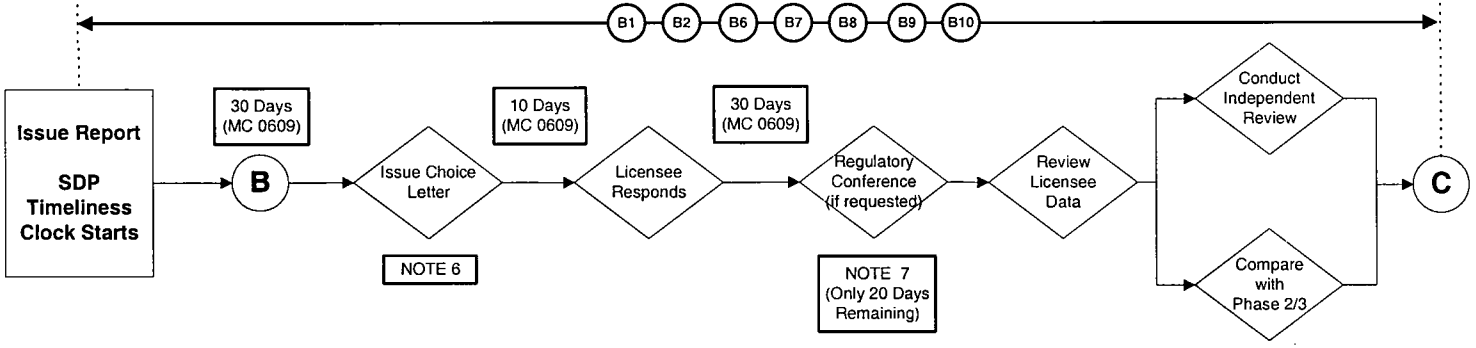
SDP Timeliness Flowchart and Best Practices

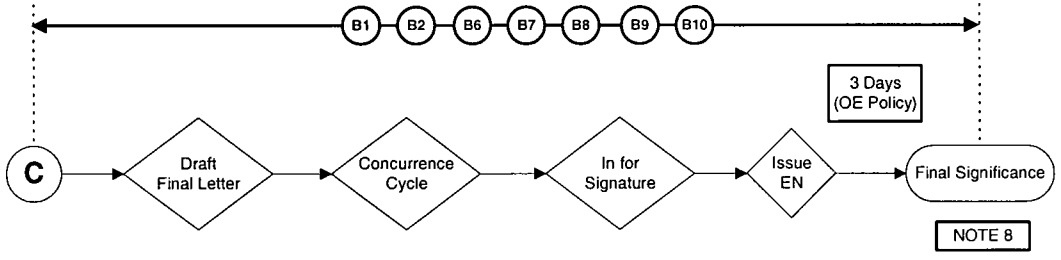


INSPECTION AND SDP ACTIVITIES FOR GREATER THAN GREEN FINDINGS

(SDP Timeliness Clock for 90-day Metric Begins with Inspection Report Issuance)

SDP Timeliness Flowchart and Best Practices





SDP TIMELINESS FLOWCHART WITH BEST PRACTICES
(Notes 1 through 8)

Note 1 - A decision should be made at this point regarding whether additional inspection is needed to fully understand the potential plant impacts from the performance deficiency. In some cases, it may require further analysis by the licensee and subsequent review and inspection by NRC. The inspector and responsible branch chief should also consult with the SRAs to determine what additional inspection may be required to support the needs for a risk assessment. If it is determined that additional inspection is required, either the inspection should be extended or an unresolved item (URI) should be created to track the need for further review and inspection.

Note 2 - For an inspection exit or inspection debrief at this point in the SDP process, if the performance deficiency (PD) is determined to be potentially greater than green, the PD should be described as an apparent violation with significance to be determined.

Note 3 - In those cases where a deterministic SDP (SDP Flowchart Finding) is being utilized to assess the potential significance of a PD such as in emergency preparedness, radiation protection, or security, the preliminary results of the SDP must be presented to a regional panel and a SERP. The review of the deterministic SDP should begin as early as possible during the inspection and if the PD is potentially greater than green, the PD should be described as an apparent violation with significance to be determined at the inspection exit or inspection debrief.

Note 4 - The analysis stage for the SDP process may involve SRA analysis including support from the program office in some cases or it may involve SDP flowchart assessment by the inspector and branch chief. This stage may actually begin with Phase 2 completion or prior to the exit meeting for SDP flowchart findings. For complex issues, this stage can be the most challenging for SDP timeliness and Best Practice 10 for project managing the process is essential for success.

Note 5 - It is important to note at this point that the SDP timeliness clock will start and there are 90 days allowed to issue the final significance determination. The ideal situation for success with the 90 day goal would be that all of the preliminary SDP actions are complete and a choice letter can be issued at the same time as the inspection report. Any time utilized after report issuance for the preliminary significance determination reduces processing and evaluation time for the PD and may challenge the ability to meet the 90 day goal.

Note 6 - Any delays in issuing the choice letter to the licensee will significantly challenge the ability to meet the 90 day SDP timeliness goal. Again, the ideal situation for success with the 90 day goal would be to issue the choice letter with the inspection report.

SDP TIMELINESS FLOWCHART WITH BEST PRACTICES
(Notes 1 through 8)

Note 7 - If requested by the licensee, scheduling of the regulatory conference is extremely important in meeting the SDP timeliness goal of 90 days. The approximate milestones for meeting the SDP timeliness goal provided in MC 0609, "Significance Determination Process", provide little margin for success. If the approximate milestones from MC 0609 were applied, it would only leave 20 days following the regulatory conference to issue the final significance determination and 3 of the 20 days are utilized to issue the Enforcement Notification. The administrative process for issuing the final determination can easily require the 17 calendar days for processing which leaves little time for further review and analysis of information from the regulatory conference. Again, more margin for success can be gained if the choice letter is issued with the inspection report and it is extremely important that the regulatory conference be scheduled as soon as possible. The sample choice letter in Exhibit 2 of MC 0609.01 states that the Regulatory Conference should be held within 30 days of the receipt of the choice letter.

Note 8 - The "Project Management" approach discussed in Best Practice 10 should ensure that all actions are tracked and completed such that the final significance determination is issued well before the 90 day goal and no last minute scramble is required to meet the goal. The branch chief responsible for processing the PD assumes the "Project Management" role for ensuring success in meeting the SDP timeliness goal.

REGIONAL "BEST PRACTICES" FOR MANAGING SDP TIMELINESS
(Overlay on SDP Timeliness Flowchart B1 - B10)

B1 Use of a tracking list for all SDP items that are officially "on the clock" and for items that are being evaluated for the potential for being greater than GREEN. The regions may chose to maintain one list or two lists, but the tracking list that NRR maintains on the internal WEBSITE will be the common Agency tracking list for items that are officially "on the clock". These lists would be periodically reviewed with affected regional divisions (some regions use their morning meetings as a venue for this review) and the program office as appropriate to ensure accuracy and that SDP timeliness is being managed.

B2 Use of regional planning meetings and/or planning Significance and Enforcement Review Panels (SERPs) with NRR as needed to discuss actions necessary to bring a complicated SDP issue to completion. These meetings may result in assignments to various parties for specific actions needed to support SDP timeliness.

B3 Use of a modified Phase 2 estimation for the risk assessment in lieu of a full-scale Phase 3 analysis **as appropriate**.

B4 Use of early engagement with the regional Senior Reactor Analysts (SRAs) before the exit meeting and report issuance in order to get an early start on the risk assessment.

B5 Use of early engagement with the inspectors in the field to ensure that all necessary inspection is complete prior to identifying a finding with "significance to be determined." The use of "unresolved items" is appropriate in those cases where additional inspection is required to understand the impact on the plant, as long as timeliness for inspection of any "unresolved item" meets expectations.

B6 Use of early engagement of licensee probabilistic risk analysis (PRA) staff by regional SRAs to help with the understanding of where there may be differences in licensee and NRC assumptions affecting the risk assessment. This also helps in identifying areas for additional inspection if appropriate.

B7 Use of early engagement with NRR risk analysts particularly for those items that are expected to require a SERP.

B8 Use of early involvement by regional management to help with decision making on assumptions and resource utilization to support the risk assessment.

B9 Use of early engagement with the licensee so that there is an understanding of the time available for providing analysis or testing results to support their position on the risk assessment. The use of "best available" information should be the normal approach. This means that the information that is available to support the risk assessment within the time constraints of the SDP timeliness goals should be utilized. Licensee time for analysis or testing must be accounted for by the regional branch chief in managing SDP timeliness by applying "Best Practice" 10.

REGIONAL "BEST PRACTICES" FOR MANAGING SDP TIMELINESS
(Overlay on SDP Timeliness flowchart B1 - B10)

B10 Use of a "Project Management" approach for managing a finding with a time line identifying necessary milestones to meet the timeliness goal for potentially greater than GREEN findings. The "Project Management" approach should begin early and not wait for the inspection exit or report issuance and should be the responsibility of the regional branch chief issuing the finding. Actions necessary to meet identified milestones should be tracked with a responsible individual identified for the action. A meeting should be scheduled early in the process and periodically as necessary to ensure that all actions are on track to meet the timeliness goal.