

MEMORANDUM FOR: Malcolm R. Knapp, Director
Program Management, Policy Development
and Analysis Staff, NMSS

FROM: B. J. Youngblood, Director
Division of High-Level Waste Management, NMSS

SUBJECT: PROPOSED BENCHMARKS FOR THE SENIOR LEVEL SYSTEM (Ticket 9200226)

In response to your request, we have reviewed the proposed benchmarks for the Senior Level System provided by the Director of the Office of Personnel. In general, the benchmark descriptions for Senior Level engineering and scientific positions are thorough, comprehensive and encompass appropriate duties and skill requirements. However, we recommend the attached changes to more clearly draw a distinction between the role of Senior Levels 1 and 2 and that of Senior Level 3.

As noted in the Career Planning publication of the NRC Office of Personnel of January 1992, Senior Band 3 is reserved for Distinguished Engineers and Scientists. These individuals are intended to serve as an agency-wide resource in definitive scientific or engineering areas of expertise applicable to high priority problems or issues. In our view, Senior Levels 1 and 2 would best serve the agency by assuming a technical leadership role in complex, specialized scientific areas closely related to programmatic needs or functional areas. Senior Level expertise in the area of performance assessment for the regulation of high-level waste disposal is illustrative of such a specialized technical area.

Another point of clarification is needed regarding the duties and functions of the Senior Level 3 benchmark description. Item 2 requires the incumbent to "represent the agency in all interactions with external entities....relating to the area of technical expertise." Such representation may not be feasible and flexibility should be retained.

We have no comments on Senior Level Professional and Administrative or Senior Level Legal benchmark descriptions.

JS
B. J. Youngblood, Director
Division of High-Level Waste Management, NMSS

Enclosures:

- 1. Flow Chart for Technical Staff
- 2. Senior Level Benchmarks Mark-up

DISTRIBUTION NMSS-9200226

Central Files
PDR & LPDR
BJYoungblood, HLWM
MFederline, HLHP
LSS

HLHP r/f
CNWRA
JJLinehan, HLWM
JHolonich, HLPD

NMSS r/f
ACNW
RBallard, HLGE
~~HLHP c/f~~

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WM-1
NH18
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OFC :	HLHP	:	HLWM	:	HLHP	:	
NAME:	MFederline/cj	:	JJLinehan	:	BJYoungblood	:	
Date:	4/21/92	:	4/21/92	:	4/21/92	:	

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FLOW CHART FOR TECHNICAL STAFF

TYPICAL GRADE LEVELS

GG-5 to GG-13

TYPICAL GRADE LEVELS

GG-5 to GG-13

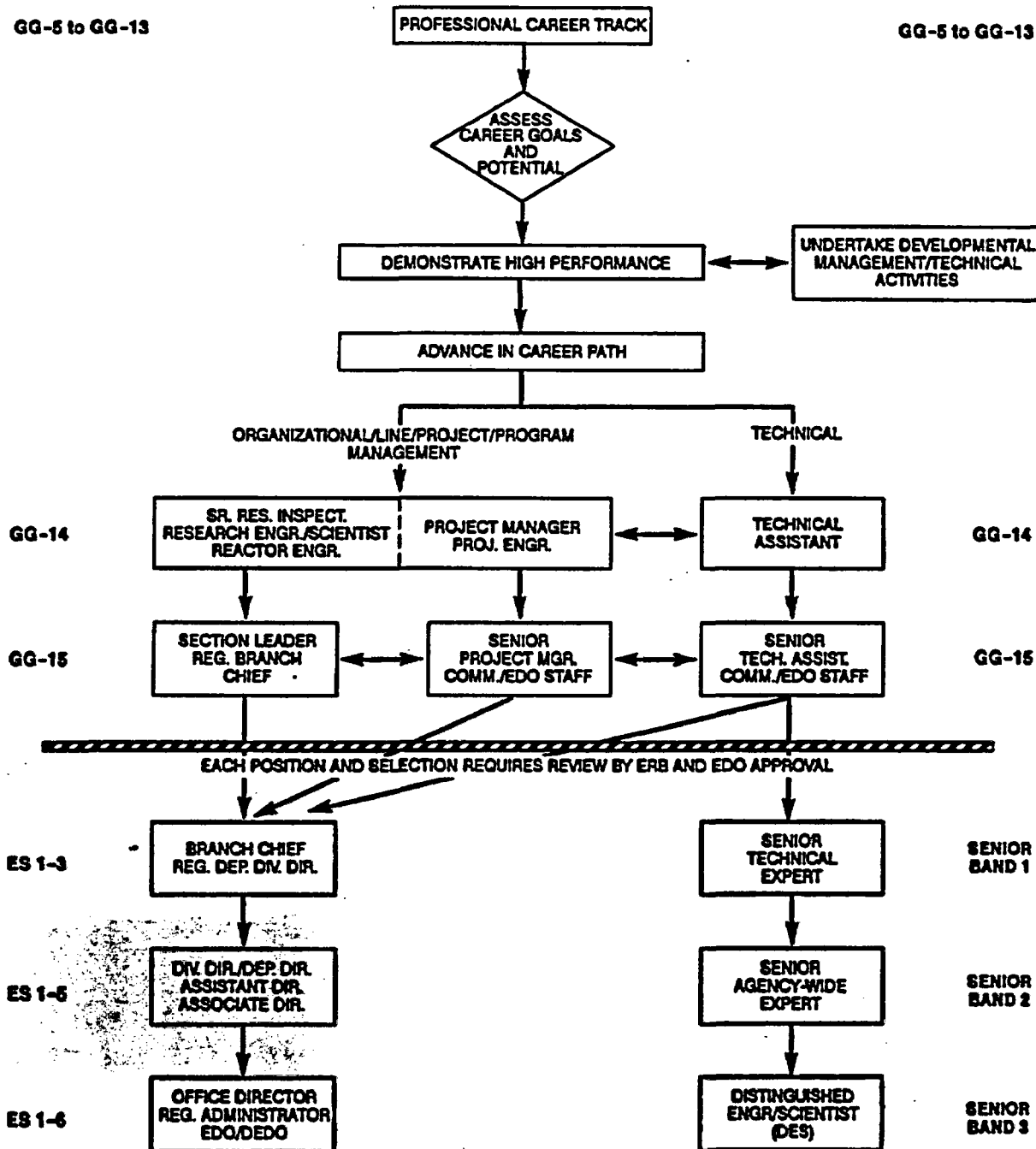


Figure I.1

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONSBMK: SL-1, Engineering
and Scientific

BENCHMARK DESCRIPTION

Purpose of Position

Provides authoritative technical assistance, consultation, and support to assigned office management and staff as either: a) senior technical advisor for a complex, specialized subject matter or functional area of expertise; or, b) senior staff assistant with broad responsibility for high-level issues and initiatives related to the assigned organization's overall mission and responsibilities. ~~Functions as the office and/or Commission expert for a specified scientific or engineering area or as the senior staff technical assistant to the assigned Office Director.~~

- AS A KEY SENIOR TECHNICAL EXPERT IN A COMPLEX,
SPECIALIZED SCIENTIFIC OR ENGINEERING AREA

Major Duties and Functions

1. Serves as ^{A KEY SENIOR} ~~the office/Commission~~ staff technical expert for a complex, specialized scientific or engineering subject matter or functional area; or as the senior assistant/advisor to the assigned Office Director with broad responsibility for office-level technical oversight, coordination, and staff support. Provides authoritative consultation, guidance, assistance, and recommendations in the area of specialization or responsibility to office management and staff, other NRC offices and personnel, and Commission members and their staffs.
2. Coordinates crucial agency interactions with external entities, both government and industry, relating to the area of specialization or responsibility and presents and defends NRC technical positions, concerns, objectives, and requirements. Represents the office/Commission at government, academic, and industry conferences, seminars, and meetings.
3. Reviews proposed regulations, policies, reports, memoranda, and other agency documentation relating to or potentially impacting activities in the specialty or responsibility area, and provides comments, analysis, or suggestions as appropriate. Counsels office and agency management regarding the likely effect of regulatory or policy actions in or related to the area of specialization or responsibility.

Illustration:

Reviews NRC technical issuances, e.g., regulations, information notices, research studies, etc., on behalf of the Office Director and identifies those with potential for significant impact on the organization's responsibilities, based on broad knowledge and in-depth understanding of the office's mission, functions, technical resources, and capabilities. Independently consults with senior engineering management and staff in both assigned and originating organizations regarding issues identified, develops authoritative analyses and recommendations, and counsels the Office Director regarding needed changes in office level technical activities, priorities, or resource allocations.

4. Reviews related work produced by assigned office staff for technical merit, accuracy, and rigor, and suggests or directs revisions or additional analysis as needed to ensure technical quality of output. Serves as a technical trainer and mentor for subordinate level staff, providing guidance regarding methodology, information sources, or scientific/engineering approaches to problems or issues.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-1, Engineering
and Scientific

Major Duties and Functions (continued)

5. Identifies requirements and opportunities for research, analysis, or data development/acquisition relating to problems or issues associated with the specialty discipline. Independently plans, coordinates, and initiates such activities based on personal assessment of the value and relevance of potential lines of inquiry to office and overall NRC mission responsibilities.

PROGRAMMATIC AND FUNCTIONAL NEEDS

6. Functions as a research, analysis, or evaluation group/team leader for both assigned and self-generated technical, regulatory, or policy development and review projects. Coordinates efforts of group members within and/or external to the assigned organization, integrates findings and recommendations, develops reports, memoranda, or other documentation as appropriate, and presents project results and products to office or agency management.

Illustration:

Leads and directs interdisciplinary analysis teams charged with developing and performing sensitivity studies involving the application of potential or proposed new rules and/or experimental concepts to alternative operational and environmental scenarios. Conducts individual inquiry and evaluation, provides technical consultation and support to team leaders and members, compares and synthesizes study team findings with current external research and scholarship, and develops and presents comprehensive analytical findings, impact assessments, and recommendations regarding required regulatory or policy development initiatives for office Director(s) and/or Commission consideration and action.

Knowledge and Skill Requirements

- Expert knowledge of the principles, concepts, theories, and methods of an established scientific or engineering discipline and their relationship to specific technological issues, problems, and applications associated with the nuclear industry.
- Stature as an acknowledged expert in the field or discipline of specialization as demonstrated by contribution to the technical literature, external peer recognition and awards, presentation of technical papers, and participation on panels at professional meetings and conferences.
- Broad knowledge of the NRC's mission, functions, organization, and regulatory philosophy and practices, as well as in-depth understanding of the relationship between the NRC and other Federal agencies, industry organizations, professional societies, and interest groups.
- Demonstrated ability to independently identify requirements for advanced technical research, analysis, or evaluation activities in the area of specialization, ability to oversee and coordinate the work of contractors in carrying out such activities, and skill in achieving cooperation and consensus among parties engaged in joint or parallel efforts.
- Advanced skills in oral and written communication sufficient to effectively convey and represent complex, detailed information of a technical and/or policy nature to colleagues, peers, senior office and agency management, and representatives of other institutions, agencies, or organizations.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-1, Engineering
and Scientific

Knowledge and Skill Requirements (continued)

- Demonstrated ability to apply specialized knowledge and skills to the examination, evaluation, or resolution of complex technical, regulatory, or policy issues associated with the nuclear industry, to establish new lines of inquiry, and to contribute to the advancement of the field of specialization.

EVALUATION OF NUCLEAR
INSTALLATIONS AND FACILITIES

Contacts and Commitments

The position requires ongoing contact and interaction with:

- Senior management and technical staff in the office of assignment as well as in other NRC offices and organizations for the purpose of providing technical consultation, guidance, review, and assistance.
- Commission members and their personal staffs for the purpose of providing information, briefings, technical comments or review, or consultation regarding the area of specialization.
- Senior technical staff and officials of other government agencies and industry organizations for the purpose of conducting project activities, responding to inquiries, or presenting NRC views or requirements regarding technical matters.
- Management and technical staff of contractors associated with the assigned organization for the purpose of reviewing activities, proposed initiatives, or project results and recommendations.

Independently represents the office and/or Commission as the organization's designated technical expert for the area of specialization, or as the personal staff representative of the Office Director, with full latitude to speak and act authoritatively on behalf of the organization in the assigned area of responsibility.

Discretion and Responsibility

Senior Technical Advisor - Assigned to an appropriate subject matter or functional area organization reporting directly to a Branch Chief or higher echelon manager, who provides administrative oversight and consultation regarding incumbent activities.

Senior Staff Assistant - Assigned to the office-level staff of the organization of assignment reporting directly to the Office Director or Deputy Director, who provides administrative oversight and consultation regarding incumbent activities.

Continually exercises independent responsibility for refining and redirecting the specific emphasis and focus of position activities, based on personal knowledge and expertise, interaction and collaboration with NRC and external technical specialists and managers, and comprehensive understanding of the needs and requirements of the office and/or Commission in the area of specialization.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-2, Engineering
and Scientific

BENCHMARK DESCRIPTION

Purpose of Position

Provides authoritative technical assistance, consultation, and support to assigned office management and staff as either: a) senior technical advisor for a complex, specialized subject matter or functional area of exceptionally high priority and/or criticality; or, b) senior staff assistant with broad, independent responsibility for critical high-level issues, new initiatives, or all advanced technical matters associated with the assigned office's overall mission and responsibilities. Functions ~~as the office and/or Commission expert for a specified scientific or engineering area or as the senior staff technical assistant to the assigned Office Director.~~

Major Duties and Functions

AS A KEY SENIOR TECHNICAL EXPERT
IN A (COMPLEX) SPECIALIZED SCIENTIFIC
OR ENGINEERING AREA

1. Serves as ^{A KEY SENIOR} ~~the office/Commission~~ staff technical expert for a complex, specialized scientific or engineering subject matter or functional area; or as the senior assistant/advisor to the assigned Office Director with broad responsibility for office-level technical oversight, coordination, and staff support. Provides authoritative consultation, guidance, assistance, and recommendations in the area of specialization or responsibility to office management and staff, other NRC offices and personnel, and Commission members and their staffs.
2. Coordinates crucial agency interactions with external entities, both government and industry, relating to the area of specialization or responsibility and presents and defends NRC technical positions, concerns, objectives, and requirements. Represents the office/Commission at government, academic, and industry conferences, seminars, and meetings.
3. Reviews proposed regulations, policies, reports, memoranda, and other agency documentation relating to or potentially impacting activities in the specialty or responsibility area, and provides comments, analysis, or suggestions as appropriate. Counsels office and agency management regarding the likely effect of regulatory or policy actions in or related to the area of specialization or responsibility.
4. Reviews related work produced by assigned office staff for technical merit, accuracy, and rigor, and suggests or directs revisions or additional analysis as needed to ensure technical quality of output. Serves as a technical trainer and mentor for subordinate level staff, providing guidance regarding methodology, information sources, or scientific/engineering approaches to problems or issues.
5. Identifies requirements and opportunities for research, analysis, or data development/acquisition relating to problems or issues associated with the specialty discipline. Independently plans, coordinates, and initiates such activities based on personal assessment of the value and relevance of potential lines of inquiry to ~~office~~ and overall NRC mission responsibilities.
6. Functions as a ^{PROGRAMMATIC AND FUNCTIONAL NEEDS} research, analysis, or evaluation group/team leader for both assigned and self-generated technical, regulatory, or policy development and review projects. Coordinates efforts of group members within and/or external to the assigned organization, integrates findings and recommendations, develops reports, memoranda, or other documentation as appropriate, and presents project results and products to office or agency management.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-2, Engineering
and Scientific

Knowledge and Skill Requirements

- Expert knowledge of the principles, concepts, theories, and methods of an established scientific or engineering discipline and their relationship to specific technological issues, problems, and applications associated with the nuclear industry.
- Stature as an acknowledged expert in the field or discipline of specialization as demonstrated by contribution to the technical literature, external peer recognition and awards, presentation of technical papers, and participation on panels at professional meetings and conferences.
- Substantial record of outstanding performance and significant professional accomplishment at the SL-1 level within the agency or at a comparable level externally, as well as extensive high-level experience in the field or discipline of specialization as characterized by length and/or nature of service, i.e., experience in a variety of organizations or environments.
- Broad knowledge of the NRC's mission, functions, organization, and regulatory philosophy and practices, as well as in-depth understanding of the relationship between the NRC and other Federal agencies, industry organizations, professional societies, and interest groups.
- Demonstrated ability to independently identify requirements for advanced technical research, analysis, or evaluation activities in the area of specialization, ability to oversee and coordinate the work of contractors in carrying out such activities, and skill in achieving cooperation and consensus among parties engaged in joint or parallel efforts.
- Advanced skills in oral and written communication sufficient to effectively convey and represent complex, detailed information of a technical and/or policy nature to colleagues, peers, senior office and agency management, and representatives of other institutions, agencies, or organizations.
- Demonstrated ability to apply specialized knowledge and skills to the examination of new or unknown areas or phenomena; to develop novel approaches for addressing complex technical, regulatory, or policy issues associated with the nuclear industry; and to establish new lines of inquiry which contribute to the advancement of the field of specialization and influence industry practices and standards.

EVALUATION OF NUCLEAR MATERIALS AND FACILITIES

Contacts and Commitments

The position requires ongoing contact and interaction with:

- Senior management and technical staff in the office of assignment as well as in other NRC offices and organizations for the purpose of providing technical consultation, guidance, review, and assistance.
- Commission members and their personal staffs for the purpose of providing information, briefings, technical comments or review, or consultation regarding the area of specialization.
- Senior technical staff and officials of other government agencies and industry organizations for the purpose of conducting project activities, responding to inquiries, or presenting NRC views or requirements regarding technical matters.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-2, Engineering
and Scientific

Contacts and Commitments (continued)

- Management and technical staff of contractors associated with the assigned organization for the purpose of reviewing activities, proposed initiatives, or project results and recommendations.

Independently represents the office and/or Commission as the organization's designated technical expert for the area of specialization, or as the personal staff representative of the Office Director, with full latitude to speak and act authoritatively on behalf of the organization in the assigned area of responsibility.

Discretion and Responsibility

Senior Technical Advisor - Assigned to an appropriate subject matter or functional area organization reporting directly to a Branch Chief or higher echelon manager, who provides administrative oversight and consultation regarding incumbent activities.

Senior Staff Assistant - Assigned to the office-level staff of the organization of assignment reporting directly to the Office Director or Deputy Director, who provides administrative oversight and consultation regarding incumbent activities.

Continually exercises independent responsibility for refining and redirecting the specific emphasis and focus of position activities, based on personal knowledge and expertise, interaction and collaboration with NRC and external technical specialists and managers, and comprehensive understanding of the needs and requirements of the office and/or Commission in the area of specialization.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-3, Engineering
and Scientific

BENCHMARK DESCRIPTION

Purpose of Position

Provides definitive scientific/engineering consultation, technical leadership, concept development, and research, analysis, and evaluation support to Commission members and senior agency management and staff for a highly specialized subject matter or functional area of critical and far-reaching importance to the successful accomplishment of broad NRC mission objectives and responsibilities. Establishes within the agency a resource of national/international stature in a technical discipline characterized by either exceptional *depth and complexity* or extraordinary *breadth and scope*, applicable to multiple NRC organizational activities, functional responsibilities, or high-priority problems and issues.

Major Duties and Functions

1. Serves as an in-house expert consultant to senior agency management and staff, and as a personal advisor to the Commission chairman and members, for all matters and issues relating to a highly specialized, mission-critical subject matter or functional area. Provides definitive scientific or engineering expertise and input to NRC activities and mission responsibilities involving or related to the area of specialization, both directly in support of the office of assignment as well as other NRC offices and staffs, Federal agencies, or external organizations and groups.
2. Represents the agency in ~~all~~ interactions with external entities - including government, industry, legislative, and interest groups - relating to the area of technical expertise and establishes, presents, and defends NRC scientific or engineering positions, concerns, objectives, and requirements. Represents the Commission as a featured speaker or event chairman at government, academic, and industry conferences, seminars, and meetings.
3. Reviews proposed regulations, policies, reports, memoranda, and other agency documentation associated directly or indirectly with the area of expertise, and provides comments, analysis, or revisions/modifications as required. Develops definitive technical, regulatory, or policy recommendations related to the specialty area and advises the Commission chairman, members, and senior agency management regarding the scientific or engineering implications of such recommendations.
4. Serves as an advisor and mentor for agency technical staff at all levels, providing guidance regarding methodology, information sources, or scientific/engineering approaches to complex and/or novel problems or issues. Periodically conducts lectures and seminars for NRC staff on topics or technological developments relating to the area of specialization, and arranges and chairs symposia or conferences to bring external researchers and experts together with agency staff to exchange information, share ideas, or to address specific issues and problems.
5. Conceptualizes, plans, implements, and oversees long-term research, analysis, or evaluation studies relating to high priority problems or issues associated with the scientific or engineering area of expertise and critical NRC mission responsibilities. Regularly publishes significant research or analytical findings in academic, industry, and agency journals and reports, and presents papers before major academic and professional society meetings and conferences.

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-3, Engineering
and Scientific

Major Duties and Functions (continued)

6. Functions as an agency resource for research, analysis, or evaluation group/team activities in or related to the principal field of expertise, and provides technical leadership for senior scientific and engineering staff engaged in parallel or complementary activities. Personally assesses new or emerging technologies in the specialty area for impact on and applicability to agency mission responsibilities, and recommends new or revised regulations, national or international standards, statutory changes, or other significant actions as required to respond appropriately to developments in the field of expertise.

Knowledge and Skill Requirements

- Acknowledged status and national/international reputation as an expert in the scientific or engineering field or discipline of specialization as demonstrated by extensive publication of books, articles, or research papers; leadership of academic and professional societies and organizations; receipt of major fellowships, awards, or academic and professional honors; or chairmanship of editorial review boards, award committees, or major national/international advisory groups and commissions.
- Broad knowledge of the principles, concepts, theories, and methods of a variety of scientific and/or engineering disciplines related to the principal field of specialization, the interrelationships between and among these associated areas and the primary discipline, and the relevance of these related areas to application of the principal specialization to complex technological issues and problems associated with the nuclear industry.
- Knowledge of the NRC's overall mission, functions, organization, and regulatory philosophy and practices; indepth understanding of the relationship between the NRC and other Federal agencies, professional societies, and interest groups; and knowledge of broad issues, developments, and trends associated with the nuclear industry in both the United States and foreign countries.
- Demonstrated ability to independently conceptualize, plan, and oversee critical, long-term technical research, analysis, or evaluation activities in and related to the area of expertise; ability to integrate and synthesize the work of diverse groups and organizations; and exceptional skill in achieving technical consensus between and among various U.S. government agencies, industry organizations, professional and interest groups, and other parties involved in the examination and resolution of complex issues.
- Advanced skills in oral and written communication sufficient to effectively present highly complex information of a technical and/or policy nature to Commission members, senior agency management and staff, and representatives of other institutions and agencies, as well as to influence actions or decisions on the part of industry organizations, legislative bodies, or foreign governments.
- Demonstrated ability to apply advanced subject matter expertise to the definition, assessment, and resolution of complex technical, regulatory, or policy issues associated with the nuclear industry; to establish new methods, theories, and approaches; and to carry out original work which advances the state-of-the-art and influences both theory and practice in the discipline of specialization.

EVALUATION OF NUCLEAR MATERIAL
AND FACILITIES

EVALUATION OF NRC SENIOR LEVEL (SL) POSITIONS

BMK: SL-3, Engineering
and Scientific

Contacts and Commitments

The position requires ongoing contact and interaction with:

- Commission chairman, members, and their personal staffs for the purpose of providing definitive technical guidance, advice, and consultation regarding the principal area of specialization as well as related problems or issues.
- Senior management and technical staff in the office of assignment and throughout other NRC offices and organizations for the purpose of providing technical leadership, consultation, guidance, review, and recommendations.
- Senior technical staff and officials of other U.S. and foreign government agencies, industry organizations, and academic and professional societies for the purpose of coordinating and conducting project activities, responding to requests for consultation or assistance, or presenting NRC views or requirements regarding the area of specialization.
- Members of Congress and their senior staff for the purpose of providing high-level technical briefings and presenting agency recommendations, proposals, or positions relating to the scientific or engineering area of expertise.

Independently represents the agency as the organization's designated expert for the subject matter or functional area of specialization, and as the personal technical representative of the Commission, with full authority to speak and act definitively on behalf of the organization with regard to all technical matters associated with the scientific or engineering discipline.

Discretion and Responsibility

Attached to the office-level staff of the appropriate subject matter or functional NRC organization, reporting for administrative purposes to the Office Director or Regional Administrator.

Continually exercises full independent authority for defining, establishing, and carrying out position responsibilities based on personal stature within the field or discipline of specialization; responsibilities as a senior technical advisor to the Commission chairman, members, and senior agency management; and comprehensive understanding of the needs, requirements, obligations, and objectives of the NRC and the nuclear industry.

Ticket

DATE RECEIVED: 04/16/92 ORIGINAL DUE DT: 04/24/92 CONTROL NO: 9200226
DIVISION DATE: 04/22/92 DOC DT: 04/15/92
FROM: TIME: COMP DT:

Bird
OP

TO:

Bernero

FOR SIGNATURE OF:

** BLUE **

SECY NO:

ASSIGNED TO:

CONTACT:

SIG
IMNS
SGTR
LLWM
HLWM

Knapp

DESC:

ROUTING:

PROPOSED BENCHMARKS FOR THE SENIOR LEVEL SYSTEM

SPECIAL INSTRUCTIONS OR REMARKS:

SIG (Knapp) has action. IMNS/SGTR/HLWM/LLWM -
Please provide your input to Mal Knapp by 4/22/92.
SIG's due date is 4/24/92.

Bernero
Arlotto - request
your comments also
Beveridge
Moss
Jenkins

Action: MVF

Josef Arlotto