

# U.S. NUCLEAR REGULATORY COMMISSION

## DIRECTIVE TRANSMITTAL

TN: DT-99-04

To: NRC Management Directives Custodians

Subject: Transmittal of Management Directive 10.146, "Distinguished Engineers and Scientists Program"

Purpose: Directive and Handbook 10.146 have been revised to add responsibilities of the Deputy Executive Director for Management Services, change the Office of Personnel to the Office of Human Resources and the Division of Security to the Division of Facilities and Security, delete reference to Standard Form 171, and update the management directive system format.

Office and  
Division of Origin: Office of Human Resources

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Volume: 10 Personnel Management

Part: 6 Senior Executive Service, Senior Level Positions, and Judges

Directive: 10.146 Distinguished Engineers and Scientists Program

Availability: Rules and Directives Branch  
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*OFFICE OF ADMINISTRATION*

Distinguished  
Engineers and  
Scientists Program

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Directive  
10.146

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# U. S. Nuclear Regulatory Commission

Volume: 10 Personnel Management

Part: 6 Senior Executive Service, Senior Level  
Positions, and Judges

HR

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## Distinguished Engineers and Scientists Program Directive 10.146

### Policy (10.146-01)

It is the policy of the Nuclear Regulatory Commission to recruit, appoint, and retain, as distinguished engineers and scientists in the NRC, individual contributors with highly specialized skills at the agency's highest echelon of technical expertise, who are capable of making exceptional contributions to the agency's technical mission. (011)

This directive and handbook govern NRC policy, objectives, procedures and responsibilities related to the use of the excepted service authority of the NRC to recruit, appoint, and retain distinguished engineers and scientists. (012)

### Objectives (10.146-02)

- To ensure the technical proficiency, expertise, and in-house analytical capabilities of the NRC staff in areas such as reactor physics, thermal-hydraulic analyses, material sciences, structural loading, health physics, advanced plant control techniques, safeguards, earth sciences, criticality, and other related areas. (021)
- To attract and retain highly proficient engineers and scientists. (022)

Organizational Responsibilities and  
Delegations of Authority  
(10.146-03)

Executive Director for Operations (EDO)  
(031)

- Approves the establishment of a position and the appointment and compensation of an individual as a distinguished engineer or scientist. (a)
- Designates his or her title as "Distinguished Engineer/Scientist for (area of expertise)." (b)

Deputy Executive Director for  
Management Services (DEDM)  
(032)

- Provides oversight and direction on issues involving the Distinguished Engineers and Scientists Program. (a)
- Provides advice and guidance to the EDO and the Executive Resources Board (ERB) on areas of significance regarding the Distinguished Engineers and Scientists Program. (b)

Executive Resources Board (ERB)  
(033)

- Recommends to the EDO whether or not to establish or create the proposed distinguished engineer or scientist position. (a)
- Reviews applications and recommends candidates to the EDO. (b)
- Recommends compensation to the EDO for distinguished engineers or scientists. (c)

## Organizational Responsibilities and Delegations of Authority

(10.146-03) (continued)

### Director, Office of Human Resources (HR) (034)

- Advises and assists in establishing positions, recruiting, and appointing distinguished engineers or scientists. (a)
- Facilitates appropriate programs to recognize the accomplishments of both distinguished engineers and scientists. (b)
- Facilitates the modification of appropriate human resources programs to accommodate the unique requirements for attracting and retaining the services of these nationally recognized experts. (c)
- Provides assistance to office directors and regional administrators for distinguished engineers and scientists proposals. (d)
- Reviews descriptions for referral to the ERB. (e)

### Office Directors and Regional Administrators (035)

- Identify the requirements for distinguished engineer or scientist positions needed to carry out the organization's mission and recommend action to the ERB. (a)
- Define the knowledge(s) required for this purpose, and carry out the search for candidates, taking into consideration the advice of technical authorities inside and outside the NRC. (b)

Organizational Responsibilities and  
Delegations of Authority  
(10.146-03) (continued)

Office Directors and  
Regional Administrators  
(035) (continued)

- Recommend the best candidates to the ERB. (c)
- Provide management direction and general policy guidance to the distinguished engineers and scientists assigned to their organization. (d)
- Anticipate future technological and discipline areas and situations that might become critical enough to warrant a distinguished scientist or engineer. (e)
- Participate in recruitment activities to identify the experts by discipline. (f)
- Prepare proposed position descriptions and forward them to HR. (g)

Definition  
(10.146-04)

The **distinguished engineer or scientist** is a nationally recognized expert with very high technical credentials who is recognized by his or her peers as having unusual knowledge of a specified technology. His or her opinion is sought after in relation to a wide variety of issues related to that specialization. The individual is recognized nationally and/or internationally through publication of papers or books, citation of opinions, regulatory contributions, invitations to speak at conferences and symposia, and participation or consultation on highly complex problems.

## Applicability

(10.146-05)

The policy and guidance in this directive and handbook apply to all employees hired to participate in the Distinguished Engineers and Scientists Program.

## Handbook

(10.146-06)

The handbook contains the procedures and criteria for identifying situations that qualify for designation as a distinguished engineer or scientist position and for recruiting, selecting, utilizing, compensating, and rewarding nationally recognized internal and external experts placed in these positions.

## References

(10.146-07)

Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

*Code of Federal Regulations*, Title 5, "Administrative Personnel."

Energy Reorganization Act of 1974, as amended (42 U.S.C. 5801 et seq.).

*United States Code*, Title 5, "Government Organization and Employees."



Distinguished  
Engineers and  
Scientists Program

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Handbook

10.146

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## Distinguished Engineers and Scientists Program

### Purpose (A)

This program provides a means through which the NRC can identify and utilize the services of experts with highly specialized skills who are capable of making exceptional contributions to the resolution of critical mission concerns involving national health, safety, and safeguards issues. The program also provides the opportunity to reach the top of the technical career path for NRC employees who choose to remain in nonsupervisory positions and whose work and expertise develop into the level of professional recognition granted to a nationally recognized expert.

### Identification and Approval of Distinguished Engineer and Scientist Positions (B)

#### **Need (1)**

Distinguished engineer and scientist positions require a high level of expertise combined with a unique, strategic, and, where applicable, continuing work situation. It would be unusual to have more than a very limited number of situations develop at any one time.

Identification and Approval of  
Distinguished Engineer and Scientist  
Positions (B) (continued)

**Description of Position (2)**

The position is nonsupervisory. (a)

Duties and responsibilities will depend on the need, as identified to the Executive Resources Board (ERB). (b)

Substantial public health and safety and environmental issues may be involved. (c)

The assignment can produce new methods and approaches to problems and regulatory activities with findings that have widespread applicability within both the domestic and foreign nuclear industry. It may influence activities in other NRC programs, universities, and the nuclear industry. (d)

The distinguished engineer or scientist will report to an office director but will be assigned to the manager located within the organizational element most central to the work assignment. (e)

The incumbent must have the ability to initiate, carry out, and follow through to the completion of issues assigned to him or her, including definition of the problem, planning the program, and implementing and completing it with findings and recommendations. (f)

The incumbent serves as either an independent expert or as part of a project group for formulating and guiding a broadscale approach to a problem of critical importance. (g)

## Distinguished Engineer or Scientist Recruitment Procedures (C)

Once the need for a distinguished engineer or scientist is identified, a vacancy announcement will be developed with the assistance of the requesting office. The opportunity will be posted utilizing internal and external sources so that the position can be filled as quickly as practicable. (1)

Office directors and regional administrators are responsible for identifying future distinguished engineer or scientist needs through workforce planning. They also are responsible for taking the lead in identifying probable internal and external sources. (2)

Briefings and publicity about the program will be made both internally and externally to ensure appropriate recruitment sources are familiar with and interested in the program. (3)

## Staffing and Selection Procedures (D)

### **Executive Resources Board (1)**

Following the notice period and receipt of applications, designated members of the ERB will screen applicants, conduct interviews as appropriate, and make a recommendation to the Executive Director for Operations (EDO). The board also recommends a salary for the distinguished engineer or scientist, on the basis of the position and the person recommended.

### **Selection Criteria (2)**

Selection is based on the following attributes:

- Nationally recognized authority as demonstrated by such factors as— (a)

## Staffing and Selection

### Procedures (D) (continued)

#### **Selection Criteria (2) (continued)**

- Reputation is such that he or she serves as a recruiting attraction for others who seek opportunities to observe or work under his or her guidance (i)
- Sought as an advisor and consultant on programs and problems that extend well beyond his or her own field (ii)
- Significant honors and awards received in recognition for his or her accomplishments (iii)
- Frequently invited as a speaker or guest lecturer at national and international symposia and professional meetings (iv)
- Frequently has books and/or articles published in professional journals that have an impact on the professional discipline. (v)
- Is attuned to and supportive of the mission of the agency. (b)
- Has the ability to develop a technical consensus on an issue, considering scope and difficulty of previous assignments and performance record, and, where the nature of the assignment requires it, ability to work as part of a project group on a multifaceted assignment. (c)
- Has the ability to communicate well, both orally and in writing. (d)

#### **Executive Director for Operations (3)**

The EDO—

## Staffing and Selection

### Procedures (D) (continued)

#### **Executive Director for Operations (3) (continued)**

- Reviews the ERB list of candidates, interviews candidates, as appropriate, and makes a selection (a)
- Considers the ERB recommendation for compensation and determines the salary (b)
- Forwards the documentation to the Office of Human Resources (HR) to initiate the process of bringing the distinguished engineer or scientist on board (c)

#### **Salary (4)**

Distinguished engineers and scientists will be compensated in accordance with the agency's statutory authority for scientific and technical salaries. (a)

Pay for distinguished engineers and scientists will be within a range with its minimum rate the lowest salary for the pay band for positions above grade 15 and its maximum the rate payable for the top of the band (Executive Level IV). (b)

#### **Office of Human Resources (5)**

Once the EDO makes a selection and a salary decision, HR initiates the process to make the offer and effect a promotion or reassignment in the case of an internal selectee, or bring an outside selectee on board. (a)

HR works with the individual selected to expedite paperwork requirements, provides any necessary preliminary information and responds to questions regarding employment or directs questions

## Staffing and Selection

### Procedures (D) (continued)

#### **Office of Human Resources (5) (continued)**

regarding the assignment to a contact point in the office controlling the assignment. (b)

HR sets an entry on duty date (EOD) when all pre-employment requirements have been completed, and provides an initial orientation to the new employee. (c)

#### **Division of Facilities and Security (6)**

Works with HR, when necessary, to expedite pre-employment security requirements for the selectee.

## Utilization and Retention of the Distinguished Engineer or Scientist (E)

#### **Appointments (1)**

Appointment as a distinguished engineer or scientist may be permanent or for a specified period of time.

#### **Assignments (2)**

The distinguished engineer or scientist will— (a)

- Be assigned to line organizations, either as an independent contributor or as part of a project group, for the purpose of accomplishing scientific or technical work that directly furthers the technical mission of the agency (i)



Utilization and Retention of the  
Distinguished Engineer or  
Scientist (E) (continued)

**Assignments (2) (continued)**

- Be provided general direction and policy guidance from the office director or regional administrator to whom he or she is assigned and operational direction by the line manager (ii)
- Not hold supervisory or staff positions such as technical assistant or special assistant (iii)
- Be responsible for carrying out the task assigned with the latitude and decisionmaking authority appropriate to his or her stature, if assigned as a technical participant or mentor for a critical project (iv)

Assignments may be for the duration of a specific situation or may be of a continuing nature because of ongoing complexities. (b)

**Performance Appraisal (3)**

Annual performance appraisals will be completed for distinguished engineers and scientists using the NRC appraisal system applicable to other senior level non-SES employees with the exceptions noted below:

- A streamlined performance plan will be used that briefly states the purpose and concept of the assignment or project. (a)
- The plan will describe the anticipated expectations and quality for each project phase discussed and the nature of the accountability expected. (b)

Utilization and Retention of the  
Distinguished Engineer or  
Scientist (E) (continued)

**Compensation (4)**

Office directors and regional administrators may propose adjustments within the band to the salaries of distinguished engineers and scientists annually on the basis of demonstrated performance. (a)

Salary recommendations along with a copy of the performance appraisal will be forwarded to the EDO within 30 days of completion of the appraisal. (b)

Adjustments to salaries will be approved by the EDO on the basis of the level of contribution and the distinguished engineer or scientist's current place in the range of possible salaries. (c)

**Recognition (5)**

Appropriate non-monetary and monetary awards may be given to distinguished engineers and scientists. (a)

Lectures would be held for NRC employees where the distinguished engineer or scientist will be the principal speaker, when feasible. (b)