## **Commitment to Nuclear Safety**

TVA's nuclear power activities are carried out with public health and safety, the protection of its employees, and the environment as paramount considerations. With guidance from the TVA Board of Directors, the President and Chief Executive Officer and the Chief Operating Officer bear the responsibility for the safety of all TVA activities, and for ensuring that nuclear safety is a top priority. The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, are responsible for ensuring that TVA's nuclear-related activities are carried out consistent with this policy and applicable regulatory requirements.

To support this objective, it is TVA's policy to maintain a strong nuclear safety culture that serves to make nuclear safety the overriding priority for each nuclear facility and for each individual associated with it. TVA will rely on a competent staff which demonstrates integrity and will work together as a team to safely design, construct, test, and operate TVA's nuclear facilities. TVA will seek continuous improvement, utilizing the best applicable industry standards to achieve operating excellence. TVA will conduct thorough and qualified reviews and audits and be accountable for all results. TVA will value honest, open communication which encourages and shows respect for all points of view. TVA will also undertake such supporting development activities as are necessary to maintain the quality of TVA's facilities and staff to maintain the success of its nuclear program.

TVA will comply with applicable laws and regulations dealing with nuclear power and environmental protection.

TVA encourages employee awareness and the expression of safety concerns associated with the design, construction, testing, and operation of TVA nuclear facilities. TVA provides protective measures to ensure that employees may express concerns and differing views without fear of recrimination or reprisal (see *TVA Principles, Practices, and Procedures*, Communications Practice 5, Expressing Concerns and Differing Views). This protection extends to employees providing information to regulatory officials, either voluntarily or as part of their official duty.

The Board of Directors will review and, as appropriate, act upon proposals having major nuclear safety significance, including proposals to file applications for nuclear plant early site permits, construction permits, combined licenses, operating licenses, operating license extensions, or proposals to cease nuclear plant operations.

**The President and Chief Executive Officer** will recommend each of the above-mentioned activities to the Board of Directors and, in addition, review and, as appropriate, act upon:

- 1. Proposals involving disagreement about nuclear safety requirements between TVA and a nuclear regulatory agency that have advanced to the level of an appeal to a nuclear regulatory agency office head.
- Employee safety concerns that have not been resolved by the Chief Operating Officer; the Chief Nuclear Officer
  or the Senior Vice President, Nuclear Generation Development and Construction, to the satisfaction of the
  concerned employee.

**The Chief Operating Officer** is responsible for ensuring that production concerns do not override concerns regarding safe operation of TVA's nuclear facilities. Acting as a liaison to and in conjunction with the President and Chief Executive Officer, the Chief Operating Officer reviews and, as appropriate, acts upon:

- Employee safety concerns that have not been resolved by the Chief Nuclear Officer or the Senior Vice President, Nuclear Generation Development and Construction, to the satisfaction of the concerned employee.
- Reports containing final recommendations or proposed actions related to intimidation and harassment of individuals expressing safety concerns about TVA's nuclear activities.
- 3. TVA comments or recommendations regarding nuclear safety regulations that involve significant new or controversial safety issues.

The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, are responsible for establishing and maintaining a strong <u>nuclear safety culture</u>. That is, an organization's' values and behaviors—modeled by its leaders and internalized by its members—that serve to make nuclear safety the overriding priority. TVA's principles for a strong nuclear safety culture include:

- 1. Personal responsibility and authority for nuclear safety are well defined, clearly understood, and shared by all. Reporting relationships, positional authority, staffing, and financial resources support nuclear safety responsibilities. Corporate policies emphasize the overriding importance of nuclear safety.
- Leadership will demonstrate a commitment to safety. Executive and senior managers are the leading advocates of nuclear safety and demonstrate their commitment both in word and action. Leaders throughout the nuclear organization set an example for safety, communicating the nuclear safety message frequently and consistently.
- 3. Trust should permeate the organization. A high level of trust is established in the organization, fostered, in part, through timely and accurate communication. The work environment reflects a free flow of information in which issues are raised and addressed and employees are informed of measures taken in response to their concerns.
- 4. Decision-making must reflect safety first. Decisions are consistently made which support safe, reliable plant operation. Operators are vested with the authority and understand the expectation, when faced with unexpected or uncertain conditions, to place the plant in a safe condition. Leaders support and reinforce conservative decisions.
- 5. Nuclear technology is recognized as special and unique. The special characteristics of nuclear technology are taken into account in all decisions and actions. Reactivity control, continuity of core cooling, and integrity of fission product barriers are valued as essential, distinguishing attributes of the nuclear station work environment.
- 6. A questioning attitude is cultivated. Individuals demonstrate a questioning attitude by challenging assumptions, investigating anomalies, and considering potential adverse consequences of planned actions. This attitude is shaped by an understanding that accidents often result from a series of decisions and actions that reflect flaws in the shared assumptions, values, and beliefs of the organization. Employees are watchful for conditions or activities that can have an undesirable effect on plant safety.
- 7. Organizational learning is embraced. Operating experience is highly valued, and the capacity to learn from experience is well developed. Training, self-assessments, corrective actions, and benchmarking are used to stimulate learning and improve performance.
- 8. Nuclear safety is constantly examined. Oversight is used to strengthen safety and improve performance. Nuclear safety is scrutinized through a variety of monitoring techniques including those which provide an independent "fresh look."

The Chief Nuclear Officer is responsible for ensuring the safe operation of TVA's nuclear generation facilities. The Chief Nuclear Officer oversees all aspects associated with plant operations and has the authority to establish management policies and procedures related to nuclear power operations safety issues and activities. The Chief Nuclear Officer is responsible for submitting operating license amendments and any other necessary operations-related documentation including comments on or recommendations for changes to existing or proposed nuclear regulatory requirements affecting nuclear plant operations, as well as responses to Orders, violation notices, and other associated nuclear-related correspondence. The Chief Nuclear Officer is responsible for ensuring that all such activities are conducted in accordance with applicable regulatory requirements.

The Senior Vice President, Nuclear Generation Development and Construction, is responsible for ensuring the safe design, construction, and testing of TVA's pre-operational nuclear generation facilities. The Senior Vice President, Nuclear Generation Development and Construction, oversees the design, construction, and pre-operational testing of TVA's nuclear facilities and has the authority to establish management policies and procedures associated with related nuclear safety issues. The Senior Vice President, Nuclear Generation Development and Construction, is responsible for submitting applications for nuclear plant early site permits, construction permits, combined licenses, and operating licenses. The Senior Vice President, Nuclear Generation Development and Construction, is responsible for preparing necessary licensing documentation, comments on or recommendations for changes to existing or proposed nuclear regulatory requirements affecting nuclear plant design, construction, or pre-operational testing as well as responses to Orders, violation notices, and other associated nuclear-related correspondence. The Senior Vice President, Nuclear Generation Development and Construction, is responsible for ensuring that all such activities are conducted in accordance with applicable regulatory requirements.

The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, are authorized to undertake such studies, activities, or programs within their organizations deemed necessary to improve the safety, reliability, or efficiency of TVA's nuclear facilities. The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, inform the Chief Operating Officer about issues that could significantly affect the safety or schedule of nuclear plant design, construction, testing, or operations and provide reports on regulatory compliance. The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, also keep the Chief Operating Officer informed on a regular basis and as significant events occur regarding the design, construction, testing, or operational performance of TVA's nuclear plants and are responsible for matters relating to the reporting of defects, noncompliances, events, and other nuclear power matters reportable under the regulations of the Nuclear Regulatory Commission.

The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, are responsible for establishing processes and procedures within their respective organizations to accept, assess, and reach determinations about nuclear power safety issues that could potentially be reportable to regulatory agencies and provide information to other TVA organizations on compliance with reporting requirements and posting of notices to employees involved in nuclear power-related activities. The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, are also responsible for ensuring that activities associated with their respective responsibilities are in compliance with TVA's principles, standards, practices, and procedures.

The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, are responsible for establishing quality assurance and independent review programs to ensure that activities related to nuclear power safety are carried out in accordance with quality assurance and nuclear safety requirements. The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, also ensure that organizations external to TVA that provide safety-related material, equipment, or services to the Nuclear Power Group or to Nuclear Generation Development and Construction do so in accordance with the nuclear quality assurance program requirements.

The Chief Nuclear Officer and the Senior Vice President, Nuclear Generation Development and Construction, consult with the Executive Vice President and General Counsel, as appropriate, regarding TVA's legal obligations concerning nuclear safety and licensing matters. The Executive Vice President and General Counsel provides advice and comment regarding the consequences of licensing actions, policy initiatives, proposed legislation affecting TVA's nuclear activities, or any other action which potentially has a significant legal impact on TVA. The Executive Vice President and General Counsel provides legal support for the implementation of TVA's principles for a strong nuclear safety culture.

Those Executive and Senior Vice Presidents responsible for operations and activities within their organizations that utilize or produce ionizing radiation other than as described above, are responsible for and have the authority to establish policies and procedures related to the safety of such operations and activities. These officers will undertake such actions as are necessary or appropriate to ensure the safety, reliability, and efficiency of such nuclear non-power related operations and activities and will inform the Chief Executive Officer about any issues or instances significantly affecting the safe use and disposition of such radiation sources.

The Inspector General may conduct any audit or investigation the Inspector General determines appropriate; this includes audits of nuclear-related employee concerns processes and programs as well as investigations of employee concerns related to misconduct, intimidation and harassment, and abuse of authority. The Chief Nuclear Officer or the Senior Vice President, Nuclear Generation Development and Construction, or their designees, may request the Inspector General to investigate or audit any issues they deem appropriate.

All TVA organizations and employees are responsible for adhering to nuclear regulatory requirements and for making their safety, and the safety of their co-workers, a high priority. In addition to ensuring that their own actions are appropriate and consistent with this policy, employees have an obligation to report potential safety deficiencies,

safety deviations, or noncompliances with the Atomic Energy Act of 1954, as amended, and its regulations as they relate to nuclear licensed activities. Employees will provide any requested information, documents, assessment support, or other assistance required to identify or determine the significance of potential nuclear safety issues.

## **PRINCIPLES**

Commitment to Nuclear Safety

Approved by the Board of Directors October 30, 2008