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 Generating Officer bear the responsibility for the safety of all TVA activities, and for ensuring that nuclear safety is a top priority. The Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear 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 will engage with independent, outside reviewers and oversight organizations. TVA will communicate candidly with, obtain outside perspectives and use information from independent organizations to develop an understanding of TVA's compliance with applicable safety standards and to establish priorities that align with nuclear safety. TVA will utilize reviews by and incorporate input from independent organizations in safely designing, constructing, testing and operating TVA's nuclear facilities.

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 harassment, intimidation, retaliation or discrimination ("HIRD") (see *TVA Standard Programs and Processes*, <u>TVA-SPP-11.8.4</u>, <u>Expressing Concerns and Differing Views</u>). 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.
- 2. Employee safety concerns that have not been resolved by the Chief Generating Officer, the Executive Vice President and Chief Nuclear Officer or the Senior Vice President, Nuclear Construction, to the satisfaction of the concerned employee.

The Chief Generating 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 Generating Officer reviews and, as appropriate, acts upon:

- 1. Employee safety concerns that have not been resolved by the Executive Vice President and Chief Nuclear Officer or the Senior Vice President, Nuclear Construction, to the satisfaction of the concerned employee.
- 2. Reports containing final recommendations or proposed actions related to HIRD for 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 Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear Construction, are responsible for establishing and maintaining a strong <u>nuclear safety culture</u>. That is, the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment. Nuclear safety is the overriding priority. TVA policies, principles, values, and procedures reflect the individual commitments, the management commitments, and the management systems that embody the following traits of a healthy nuclear safety culture:

- 1. All individuals take personal responsibility for safety. Responsibility and authority for nuclear safety are well defined and clearly understood. Reporting relationships, positional authority, and team responsibility emphasize the overriding importance of nuclear safety.
- 2. Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action. All employees are watchful for assumptions, anomalies, values, conditions, or activities that can have an undesirable effect on plant safety.

- 3. Communications maintain a focus on safety. Safety communication is broad and includes plant-level communication, job-related communication, worker-level communication, equipment labeling, operating experience, and documentation. Leaders use formal and informal communication to convey the importance of safety. The flow of information up the organization is considered to be as important as the flow of information down the organization.
- 4. Leaders demonstrate a commitment to safety in their decisions and behaviors. Executive and senior managers are the leading advocates of nuclear safety and demonstrate their commitment both in word and action. The nuclear safety message is communicated frequently and consistently, occasionally as a stand-alone theme. Leaders throughout the nuclear organization set an example for safety. Corporate policies emphasize the overriding importance of nuclear safety.
- 5. Decisions that support or affect nuclear safety are systematic, rigorous, and thorough. 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. Senior leaders support and reinforce conservative decisions.
- 6. Trust and respect permeate the organization. A high level of trust is established in the organization, fostered, in part, through timely and accurate communication. Differing professional opinions are encouraged, discussed, and resolved in a timely manner. Employees are informed of steps taken in response to their concerns.
- 7. Opportunities to learn about ways to ensure safety are sought out and implemented. Operating experience is highly valued, and the capacity to learn from experience is well developed. Training, self-assessments, and benchmarking are used to stimulate learning and improve performance. Nuclear safety is kept under constant scrutiny through a variety of monitoring techniques, some of which provide an independent "fresh look."
- 8. Issues potentially affecting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance. Identification and resolution of a broad spectrum of problems, including organizational issues, are used to strengthen safety and improve performance.
- 9. A safety-conscious work environment is maintained where personnel feel free to raise safety concerns without fear of HIRD. The organization creates, maintains, and evaluates policies and processes that allow personnel to raise concerns freely.
- 10. The process of planning and controlling work activities is implemented so that safety is maintained. Work management is a deliberate process in which work is identified, selected, planned, scheduled, closed, and critiqued. The entire organization is involved in and fully supports the process.

The Executive Vice President and Chief Nuclear Officer is responsible for ensuring the safe operation of TVA's nuclear generation facilities. The Executive Vice President and 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 Executive Vice President and 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 Executive Vice President and Chief Nuclear Officer is responsible for ensuring that all such activities are conducted in accordance with applicable regulatory requirements.

The Senior Vice President, Nuclear Construction, is responsible for ensuring the safe design, construction, and testing of TVA's pre-operational nuclear generation facilities. The Senior Vice President, Nuclear 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 Construction, is responsible for submitting applications for nuclear plant early site permits, construction permits, combined licenses, and operating licenses. The Senior Vice President, Nuclear 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 Construction, is responsible for ensuring that all such activities are conducted in accordance with applicable regulatory requirements.

The Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear Construction, are authorized to undertake such studies, activities, or programs within their organizations deemed necessary to improve the safety, reliability, and efficiency of TVA's nuclear facilities, including those which address the added ability to respond to unexpected internal or extreme external events. The Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear Construction, inform the President and Chief Executive 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 Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear Construction, also keep the President and Chief Executive 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 Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear 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 Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear 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 Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear 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 Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear Construction, also ensure that organizations external to TVA that provide safety-related material, equipment, or services to the Nuclear Power Group or to Nuclear Construction do so in accordance with the nuclear quality assurance program requirements.

The Executive Vice President and Chief Nuclear Officer and the Senior Vice President, Nuclear 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 involve new nuclear generation development, or 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 their activities. These officers will undertake such actions as are necessary or appropriate to ensure the safety, reliability, and efficiency of such nuclear--related activities and will inform the President and Chief Executive Officer about any issues or instances significantly affecting their respective activities.

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 Executive Vice President and Chief Nuclear Officer or the Senior Vice President, Nuclear 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.