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BEFORE THE ARIZONA CORPORATION

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AZ CORP COMMISSION
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COMMISSIONERS

JEFF HATCH-MILLER, Chairman
WILLIAM A. MUNDELL
MIKE GLEASON
KRISTIN K. MAYES
BARRY WONG

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744	Docket No. E-01345A-05-0816 **NOTICE OF FILING OF SUPPLEMENTAL EXHIBIT**
IN THE MATTER OF THE INQUIRY INTO THE FREQUENCY OF UNPLANNED OUTAGES DURING 2005 AT PALO VERDE NUCLEAR GENERATING STATION, THE CAUSES OF THE OUTAGES, THE PROCUREMENT OF REPLACEMENT POWER AND THE IMPACT OF THE OUTAGES ON ARIZONA PUBLIC SERVICE COMPANY'S CUSTOMERS	Docket No. E-01345A-05-0826
IN THE MATTER OF THE AUDIT OF THE FUEL AND PURCHASED POWER PRACTICES AND COSTS OF THE ARIZONA PUBLIC SERVICE COMPANY	Docket No. E-01345A-05-0827

Arizona Public Service Company ("APS") hereby files the attached Supplemental Exhibit to the testimony of APS witness James Levine (Exhibit A).

. . .

. . .

RESPECTFULLY SUBMITTED this 11th day of December, 2006.

ARIZONA PUBLIC SERVICE COMPANY

By: _____
Thomas Mumaw
Karilee Ramaley
Pinnacle West Capital Corp.
400 East Van Buren
Phoenix, AZ 85004-2202

By: /s/ Micheal Healy
Michael Healy
Morgan Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

Original and 13 copies filed with Docket Control and copies mailed December 11, 2006, to:

Donna Bronski
Deputy City Attorney
3939 Drinkwater Blvd.
Scottsdale, AZ 85251

S. David Childers
AZ Competitive Power Alliance
Low & Childers, PC
2999 North 44th St., Suite 250
Phoenix AZ 85018

C. Webb Crockett
AECC & Phelps Dodge Mining
3003 N. Central Ave., Ste 2600
Phoenix, AZ 85012-2913

Michael M. Grant
Arizona Utility Investors Assoc,
c/o Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, AZ 85016

Timothy Hogan
SWEEP & WRA
202 E. McDowell Rd., Ste 153
Phoenix, AZ 85004

Jay I. Moyes
AZAG Group
c/o Moyes Storey Ltd.
1850 N. Central Ave., Ste 1100
Phoenix, AZ 85004

Bill Murphy
DEAA
5401 N. 25 St.
Phoenix, AZ 85016

Greg Patterson
AZ Competitive Power Alliance
916 W. Adams, Suite 3
Phoenix, AZ 85007

Lawrence Robertson, Jr.
Southwest Power Group II
c/o Munger Chadwick
PO Box 1448
Tubac, AZ 85646

Sean Seitz, President
AZ Solar Energy Industries Assoc.
3008 N. Civic Center Plaza
Scottsdale AZ 85251

Tracy Spoon
Sun City Taxpayers Association
12630 N. 103rd Ave., Suite 144
Sun City, AZ 85351-3476

Scott Wakefield
Chief Counsel, RUCO
1110 W. Washington St, Suite 220
Phoenix, AZ 85007

LTC Karen White
Chief. Air Force Utility Litig. Team
Federal Executive Agencies
139 Barnes Drive
Tyndall AFB, Florida 32403

Dan Austin
Comverge, Inc.
6509 W. Frye Road, Ste 4
Chandler, AZ 85226

David Berry
Western Resource Advocates
PO Box 1064
Scottsdale AZ 85252-1064

Andrew W. Bettwy
Southwest Gas Corporation
5241 Spring Mountain Road
Las Vegas, NV 89150

George Bien-Willner
3641 N. 39th Ave.
Phoenix, AZ 85034

Douglas Fant
3655 W. Anthem Way
Suite A-109, PMB 411

Robert Geake
Arizona Water Company
PO Box 29006
Phoenix, AZ 85038-9006

Eric Guidry
Western Resource Advocates
2260 Baseline Road, Suite 200
Boulder, CO 80302

Michael Kurtz
The Kroger Company
c/o Boehm Kurtz & Lowry
36 E. Seventh St, Suite 1510
Cincinnati, OH 45202

Michelle Livengood
Unisource Energy Services
One South Church St., Ste. 200
Tucson, AZ 85702

Walter Meek
Arizona Utility Investors Association
2100 N. Central Ave., Suite 210
Phoenix, AZ 85067

Amanda Ormond
InterWest Energy Alliance
7650 West McClintock, Suite 103-282
Tempe, AZ 85284

Michael Patten
Roshka DeWulf & Patten, PLC
One Arizona Center
400 E. Van Buren St., Suite 800
Phoenix, AZ 85004-3906

Jeff Schlegel
SWEEP Arizona
1167 W. Samalayuca Drive
Tucson, AZ 85704-3224

Kenneth R. Saline
K.R. Saline & Associates PLC
160 North Pasadena, Ste. 101
Mesa, AZ 85201

Tammie Woody
10825 W. Laurie Lane
Peoria, AZ 85345

David Kennedy
Arizona Interfaith Coalition on Energy
818 E. Osborn Road, Ste. 103
Phoenix AZ 85014

Joseph Knauer
Jewish Community of Sedona
PO Box 10242
Sedona, AZ 86339

Exhibit A

INPO®

Institute of Nuclear Power Operations

Suite 100
700 Galleria Parkway, SE
Atlanta, GA 30339-5957
770-644-8000
FAX 770-644-8549

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DEC - 5 2006

J.M. Levine

December 1, 2006

Mr. James M. Levine
Executive Vice President, Generation
Arizona Public Service Company
MS 9046
Palo Verde Nuclear Generating Station
400 North 5th Street
Phoenix, AZ 85004

Mr. ~~Levine~~: Jim

I am writing in response to your inquiry whether the Institute of Nuclear Power Operations ("INPO") would agree to the production of an INPO Evaluation Report and overall assessment regarding the Palo Verde Nuclear Generating Station ("PVNG") in a matter pending before the Arizona Corporation Commission ("ACC").

My understanding is that the Evaluation Report and assessment would be subject to an appropriate confidentiality order entered by the ACC that would be intended to limit use of the Report and assessment to this particular proceeding and to prohibit public disclosure.

The mission of INPO is to promote the highest levels of safety and reliability - to promote excellence - in the operation of commercial nuclear power plants. INPO does not engage in public, media, or legislative activities to promote nuclear power. It is strictly a safety organization.

INPO regards its interactions with each of its Members as private. The evaluation reports prepared by INPO remain the property of INPO and are maintained confidential. I have attached a copy of the current INSTITUTIONAL PLAN for INPO.

You will note on page 14 that it provides that: "Evaluation reports and specific information related to the evaluation (such as the overall assessment) are not distributed external to the member utility organization." This has been INPO's consistent policy since the mid-1980s.

This policy of preserving the privacy of the interactions between INPO and each of its Members is necessary to enable INPO to carry out its mission of promoting the public health and safety. Without confidentiality, it would be difficult or impossible for INPO to obtain the candid views and observations of the men and women who work in commercial nuclear power plants. Thus, without confidentiality, the quality of the information on which INPO depends for promoting nuclear safety would inevitably decline.

I note that in the early 1990s, Arizona Public Service Co. ("APS") and INPO filed suit against the ACC in the Superior Court for Maricopa County to prevent the ACC from releasing to the public an INPO Evaluation Report that had been provided to the ACC pursuant to confidentiality order. The Court, after an evidentiary hearing, entered an Order vacating and setting aside the ACC's action "as arbitrary and capricious." In addition, the Court found that, "[t]he evidence supplied by APS and INPO establish *a clear need for protection of the Evaluation Reports* provided by INPO to its client nuclear plants" (emphasis added). I have enclosed a copy of the Court's Order dated April 18, 1991.

The federal courts have also protected INPO reports. *Critical Mass v. NRC*, 975 F. 2d 871 (D.C. Cir. 1992) (INPO reports protected from disclosure under Freedom of Information Act), *cert. denied*, 507 U.S. 984 (1993); *Finestone v. Florida Power & Light Co.*, No. 03-14040-CIV-COHN/SNOW (S.D. Fla. Nov. 4, 2004), Slip Op. at 6 (prohibiting production of INPO Evaluation Reports and holding that, "INPO makes a *compelling argument for why those documents should not be produced,* even under the parties' Protective Order") (emphasis added); *see id.* (June 14, 2004), Slip Op. at 4 (granting INPO leave to intervene and holding, "The effectiveness of INPO's mission . . . is substantially dependent on *maintaining the confidentiality of communications* between INPO and nuclear power operators, *so as to ensure candor in those communications*") (emphasis added).

In light of INPO's consistent policy of protecting the privacy of its interactions with each of its Members, and also giving due consideration to the result of the litigation with the ACC on a similar issue in 1991, INPO does not agree to any disclosure of any of its Evaluation Reports on PVNGS, or any related information (such as the overall assessment).

If I can provide you with any further information with respect to INPO's policies in this regards, please telephone me at 770-644-8556.

Sincerely,

Terry E. Young
Director
Communications

TEY:eb

Enclosures: Institutional Plan
Court Order dated April 18, 1991

cc/wo: Mr. Michael F. Healy

4042.1 / 4/0

SUPERIOR COURT OF ARIZONA
MARICOPA COUNTY

COPY

CLERK OF THE COURT

April 19, 1991 HON. PHILIP W. MARQUARDT D. Robertson
Deputy

No. CV91-07813

ARIZONA PUBLIC SERVICE COMPANY

v.

ARIZONA CORPORATION COMMISSION, et al.

George H. Lyons/
Steven M. Wheeler/
Jeremy D. Mussman

Andrew D. Hurwitz/
David B. Rosenbaum

Christopher C. Kempley

James D. Miller/
Kerrie S. Covell
KING & SPALDING
1730 Pennsylvania Ave., N.W.
Washington, D. C. 20006-4706

Barbara S. Bush
COALITION/ENERGY EDUCATION
315 West Riviera Drive
Tempe, AZ 85282

Roger A. Schwartz

Paul J. Roshka, Jr./
Raymond S. Heyman

Richard L. Sallquist

Andrew W. Bettwy
SOUTHWEST GAS CORPORATION
P.O. Box 98510
Las Vegas, NV 89193

Norman J. Furuta
DEPARTMENT OF NAVY
900 Commodore Dr., Bldg. 107
P.O. Box 727 (Attn: Code 90C)
San Bruno, CA 94066-0720

Michael S. Dulberg

C. Webb Crockett

SUPERIOR COURT OF ARIZONA
MARICOPA COUNTY

CLERK OF THE COURT

April 18, 1991 HON. PHILIP W. MARQUARDT D. Robertson
Deputy

No. CV91-07813

APS v. ACC

Continued

Larry R. Graber
Cypress Metals Company
9011 E. Mineral Circle
Englewood, Colorado 80112

Paul A. Bullis

David C. Kennedy

Thomas Sheets
Director, Regulatory Affairs
Southwest Gas Corporation
P. O. Box 98510
Las Vegas, NV 89193

Rick Lavis
ARIZONA COTTON GROWERS ASS'N
4139 E. Broadway
Phoenix, AZ 85040

William F. Sullivan

This Court accepts jurisdiction over this special action. This Court is called upon to make a twofold decision:

1. Is there a common law privilege or should one be created for a "self-critical analysis" such as the INPO Evaluation Report;

2. Did the Arizona Corporation Commission violate the agreement of confidentiality in reference to the INPO Evaluation Report and thus, act in an arbitrary and capricious manner.

The evidence supplied by APS and INPO establish a clear need for protection of the Evaluation Reports provided by INPO to its client nuclear plants. The Court will not reiterate those reasons but refers to Exhibit "A" attached to INPO's Memordum of Points and Authorities in support of its Complaint. However, this Court can find no legislative mandate or Arizona appellate Court decision of a self-critical privilege such as is sought here. In absence of either appellate Court guidelines or legislative mandate, this Court will not create such a privilege.

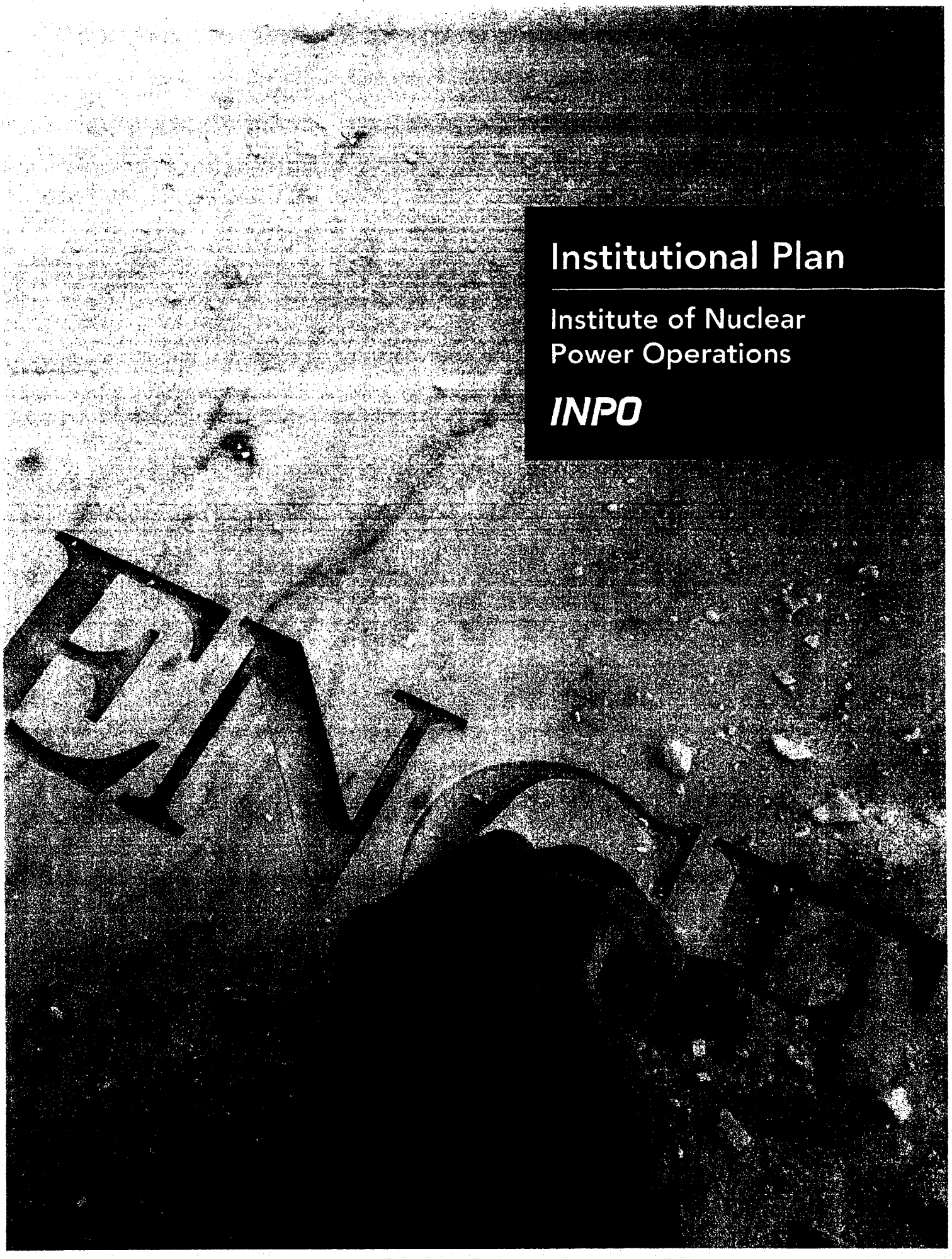
The Court next turns to the second question before it. There has been no waiver of the confidentiality agreements entered into by the parties. That confidentiality agreement provides in part that the information shall not be made part of the public record except upon a motion filed presenting specific grounds upon which it is claimed that the confidential information should be made part of the public record and a specific finding by the Commission that the confidential information needs to be made part of the public record. The decision of the Corporation Commission to reverse the Chief Hearing Officer Burns and release the contents of the INPO Evaluation Report to the public was done in violation of the Confidentiality Agreement which requires specific grounds based upon competent evidence as to the need to disclose these reports to the public. For this reason, the decision of the Commission is vacated and set aside as arbitrary and capricious, and this matter is remanded to the Commission to make those findings consistent with the Confidentiality Agreement that would warrant the release of the document in question to the public.

Each side shall bear their own costs and attorney's fees.

Institutional Plan

Institute of Nuclear Power Operations

INPO



Preface

The U.S. nuclear electric utility industry established the Institute of Nuclear Power Operations (INPO) in 1979 to promote the highest levels of safety and reliability—to promote excellence—in the operation of its nuclear plants.

In forming INPO, the nuclear utility industry took an unusual step. The industry placed itself in the role of overseeing INPO activities, while at the same time endowing INPO with ample authority to bring pressure for change on individual members. That feature makes INPO unique. By committing to meet INPO's performance objectives and criteria and to implement improvements in response to INPO recommendations, the industry clearly established and accepted a form of self-regulation through peer review. The industry's recognition that all nuclear utilities are affected by the action of any one utility motivated its commitment to and support of INPO. Each individual member is responsible for the safe operation of its nuclear electric generating plant(s). The U.S. Nuclear Regulatory Commission (NRC) has statutory responsibility for overseeing the licensees and verifying that each licensee operates its facility in compliance with federal regulations. Compliance with regulations alone, however, does not necessarily result in the best possible performance. INPO's role is to promote excellence in the operation of its members' nuclear power plants. The nuclear industry's commitment to continually strive for excellence has resulted in performance improvements.

The Institute grew from a handful of on-loan personnel in late 1979 to an established workforce of about 350 permanent and on-loan personnel. INPO's early years were marked by growth and evolution of its programs and organization. It now focuses on the effectiveness and enhancement of established programs and activities.

To carry out its role, INPO must have the support of its members and participants, as well as a cooperative but independent relationship with the NRC. A basis for that support and cooperation is an understanding of INPO's role. This Institutional Plan is intended to provide that understanding by defining the Institute's role and its major programs.

This plan considers the existing and projected needs of the industry and the overall environment in which INPO and its members and participants operate.

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I. Purpose

This Institutional Plan describes INPO's programs and provides a foundation for implementing them. This plan accomplishes the following:

- Sets forth the Institute's mission and principles of operation
- Sets forth the obligations for membership
- Defines the Institute's role in the industry and its relationship with its members and participants, other industry organizations, and government agencies
- Describes the Institute's key organizational elements
- Describes the programs the Institute is expected to carry out, including the objectives of each program

II. Background

The Institute of Nuclear Power Operations was established in 1979. An organizational plan and charter were developed with the assistance of several industry groups formed for that purpose. INPO's founders issued this original organizational plan and charter in September 1979. U.S. utilities with operating licenses or construction permits for nuclear plants were involved in its development, and all became members soon after the Institute was formed.

Since that time, all organizations having direct responsibility and legal authority to operate or construct commercial nuclear electric generating plants in the United States have maintained continuous membership in the Institute. Many organizations that jointly own these nuclear power plants are associate members. A number of international utility organizations and major supplier organizations also participate.

The Institute was incorporated as a nonprofit corporation in the State of Delaware on October 12, 1979 and began operation in Atlanta, Georgia on December 3, 1979. Since then, INPO's mission has remained the same: "to promote the highest levels of safety and reliability—to promote excellence—in the operation of nuclear electric generating plants."

The period following the Three Mile Island Nuclear Station accident was one of rapid change for the industry. Over the Institute's first few years, its role evolved to accommodate changing requirements in the industry and to build on the experience gained. Significant changes were made to the original organization, and new programs and activities were added to best achieve the Institute's mission. Nuclear operating organizations and supplier companies from the United States and other countries helped broaden the Institute's role. This period of development was guided by INPO's Board of Directors, with the advice of its Advisory Council; and by INPO management, with the advice and counsel of industry review groups.

After three years of continued growth, the Institute began consolidating its efforts, focusing on improvements in and refinements to established programs. INPO defined its emerging role in its Institutional Plan, first issued in May 1983. INPO and its Board of Directors stay abreast of issues affecting the nuclear utility industry to continually improve established programs and refine INPO's methods and products.

In 1993, with its member utilities facing an increasingly competitive environment, INPO undertook an extensive review of its mission and Institutional Plan and concluded that the INPO mission should not be changed, finding it appropriate for the new climate.

The utility business environment continues to change. The period of state-by-state deregulation, growing competition, and increasing merger and acquisition trends that dominated the late 1990s is continuing to affect the commercial electric power industry. The nuclear regulatory environment is changing as the Nuclear Regulatory Commission implements more risk-informed, performance-based regulatory processes. In light of these changes, INPO conducted comprehensive reviews of its mission and Institutional Plan in 2000 and 2003. As a result, INPO's mission was reaffirmed, and the Institute continues its strong focus on excellence in nuclear power plant operational safety and reliability.

III. Organization

In many ways, the Institute's organization is similar to that of a typical U.S. corporation. A board of directors, elected by INPO members, provides overall direction for the Institute's operations and activities. The president and CEO of the Institute is elected by and reports to its Board of Directors.

An Advisory Council of 12 to 18 professionals from outside INPO's membership meets periodically to review Institute activities and provide advice on broad objectives and methods to the Board of Directors. The Advisory Council is composed of distinguished professionals in areas related to the Institute's activities. Members include prominent educators, scientists, engineers, and business executives, as well as experts in organizational effectiveness, human relations, and utility finance.

The Institute's activities to enhance nuclear plant safety and reliability are reflected primarily in its cornerstone programs of on-site evaluations of each nuclear plant, training and accreditation, events analysis and information exchange, and assistance, as described in Appendix A. Nuclear technical divisions are organized to carry out the cornerstone functions. Other departments, such as support services, industry and external relations, and information services, support the nuclear technical divisions as well as the Institute's overall mission.

The National Academy for Nuclear Training operates under the auspices of INPO and integrates the training efforts of all U.S. nuclear utilities, the activities of the National Nuclear Accrediting Board, and the training-related activities of the Institute. An INPO executive normally serves as the executive director of the Academy.

The Atlanta Center of the World Association of Nuclear Operators (WANO) is co-located with the Institute. WANO was formed by the international nuclear community to promote worldwide improvements in the quality of nuclear plant operations. WANO's mission is to maximize the safety and reliability of the operation of nuclear power plants by exchanging information and encouraging communication, comparison, and emulation among its members. INPO provides operational support and facilities for the Atlanta Center and represents the U.S. nuclear utilities' membership in WANO. An INPO executive serves as the director of the WANO-Atlanta Center.

Non-U.S. nuclear utility organizations participate in the Institute's International Participant Program, managed by WANO-Atlanta Center at INPO's request. This program involves the active exchange of information on nuclear plant operations among utility organizations around the world. Each international participant organization is represented on an advisory committee that provides advice on the operation of this program as well as input on other Institute programs, as appropriate. (See Appendix C for information about INPO's relationship with WANO-Atlanta Center.)

Organizations engaged in providing commercial design, engineering, nuclear fuel cycle, or other services directly related to the construction, operation, or support of nuclear electric generating plants also participate in INPO through the Supplier Participant Program. This program allows supplier organizations to share experience and expertise with the Institute's members and provides a means to provide feedback on operational experience to the suppliers. The Supplier Participant Advisory Committee, made up of representatives from all supplier participants, provides advice on the operation of the program as well as on other Institute programs.

The Institute encourages members and participants to actively participate in its programs. Representatives from member utilities serve on the Executive Review Group, the Academy Council, the Analysis Review Board, and the Industry Communications Council. The Executive Review Group advises INPO management on the programs and products in the nuclear technical areas. The Academy Council provides advice in the areas of training, accreditation, and human performance. The Analysis Review Board advises on INPO's analysis activities, and the Industry Communications Council advises on effective communication of INPO programs and activities. Frequently, ad hoc industry groups are established to provide input on specific initiatives.

The Institute's permanent staff is augmented extensively by industry professionals who serve as loaned employees or international liaison engineers on long-term assignments. The Institute's resources and capabilities are further leveraged by the extensive use of U.S. industry and international utility peers and executive industry advisors. These peers participate in a wide range of short-term activities, especially on teams that visit nuclear plants.

IV. Mission, Principles of Operation, and Core Values

In carrying out its mission to promote the highest levels of safety and reliability—to promote excellence—in the operation of nuclear electric generating plants, the Institute strives to apply the following principles:

1. Encourage excellence in all phases of nuclear power plant operations.[1]

2. Promote improved management and leadership development in the industry through means such as Academy-sponsored courses and educational assistance.

3. Promote the highest levels of professionalism among all personnel involved in nuclear technology, including a strong emphasis on safety culture and conservative decision-making.

4. Assist members in the emulation and implementation of effective industry programs and practices to improve plant performance.

5. Assist members in achieving and maintaining accreditation of performance-based training programs at their facilities. Provide guidance for use by members in training and qualifying personnel to operate, maintain, and support their nuclear plants.

6. Analyze events that occur in the operation of nuclear plants worldwide and other operational data to identify possible precursors of more serious events and adverse trends. Communicate the lessons learned to facilitate understanding and prevent recurrence.

7. Assist members in identifying human performance and equipment problems and their root causes, and provide information and techniques that can assist plants in achieving effective preventive and corrective actions. Enhance the diagnostic abilities of nuclear plant operators.

8. Promote the exchange of information that assists in achieving safe, reliable, and efficient operation of nuclear electric generating plants.

9. Assist members in specific areas where the effective use of resources enhances the safe and reliable operation of nuclear electric generating plants.

10. Involve personnel from members and participants in INPO work to promote information exchange and to ensure INPO programs meet the current needs of members and participants.

11. Use expertise and experience from outside the U.S. nuclear utility industry to provide industry access to the best methods and technologies available, including information exchange through the World Association of Nuclear Operators.

12. Encourage members, through such means as the annual INPO CEO Conference, to hold each other accountable for the performance of their nuclear plants and to hold INPO accountable for its mission.

[1] Operations is used in a broad context in this document and includes the activities that support the operation of the plant (maintenance, training, engineering, and so forth).

13. In all interactions with members, recognize that, ultimately, safety is the responsibility of the member (licensee). Avoid undermining or preempting member management responsibilities and prerogatives.

INPO strives to apply similar principles for excellence and professionalism in its internal programs and activities. In carrying out its mission and principles of operation, INPO employees conduct themselves in a manner that is consistent with the following core values:

Excellence...Make it better.
We are committed to learning, improvement, and personal growth.

Perseverance...There is no finish line.
We are relentless and vigilant about nuclear safety and reliability.

Leadership...Make things happen.
We work with the industry to identify needs and aggressively stimulate industrywide progress.

Relationships...Knock down walls. Build bridges.
We respect each other. We work as a team and build a community that shares, compares, and improves.

Integrity...We are what we say and do.
We are accountable for our words and actions. Honesty and sincerity are fundamental to our credibility.

V. Programs and Activities—Overview

INPO's cornerstone technical programs are described in detail in Appendix A. The following is an overview of the Institute's major activities.

A. CORNERSTONE TECHNICAL PROGRAMS

1. **Evaluation Programs**
   Evaluations of nuclear plants operated by member utilities are conducted regularly. Corporate support of operating plants is also evaluated from time to time. In these evaluations, the INPO teams use standards of excellence based on experience and best practices. Written performance objectives and criteria guide the evaluation process.

2. **Training and Accreditation Programs**
   INPO interacts with all members in preparing for, achieving, and maintaining accreditation of training programs for personnel involved in the operation, maintenance, and technical support of nuclear plants. These interactions include evaluations of accredited training programs, activities to verify that the standards for accreditation are maintained, and assistance at the request of member utilities. Written objectives and criteria guide the accreditation process.

   The National Academy for Nuclear Training operates under the auspices of INPO. The Academy was formed to focus and unify industry efforts to ensure high standards in training and qualification and to promote professionalism of nuclear plant personnel. The Academy integrates the training-related activities of all members, the independent National Nuclear Accrediting Board, and the Institute. Through INPO, the Academy conducts seminars and courses and provides other training and training materials for utility personnel, as well as manages an industrywide educational assistance program.

3. **Analysis and Information Exchange Programs**
   The events analysis program is designed to identify the root causes of industry events that may be precursors of potentially more serious events. INPO personnel analyze off-normal events that occur in the operation of nuclear plants and conduct on-site reviews of selected events. Lessons learned are communicated to members and participants. Nuclear station responses to the resulting recommendations from this program are reviewed as part of the plant evaluation process. In addition, INPO analyzes a variety of operational data to detect trends in industry performance and communicates the results to the industry.

   INPO operates and maintains extensive computer databases to provide members and participants ready access to information on plant and equipment performance and operating experience. These databases are accessible from INPO's secure member Web site.

   Nuclear Network®, a worldwide Internet-based communication system, is used by INPO and its members and participants for the exchange of information on the operation of nuclear plants. The World Association of Nuclear Operators also uses Nuclear Network as a primary means for communicating and exchanging operating

experience among its members and regional centers.

WANO collects and monitors worldwide nuclear plant performance indicator data and shares this information with INPO members and participants. (See Appendix C.) Periodic reports are provided to the industry and are available on INPO's member Web site. Nuclear utilities are encouraged to use these indicators to monitor the performance of their nuclear plants and to emulate best practices that contribute to the highest levels of performance.

4. **Assistance Programs**
Between evaluations, INPO monitors the performance of member utility stations to identify areas where assistance can be used to improve plant performance or respond to declining performance. INPO also provides members with comparisons of their plants' performance with overall industry performance in a variety of areas.

Visits to member or participant utilities by INPO personnel and industry peers are also arranged in response to utility requests. This assistance is targeted for specific technical concerns, as well as for broader management and organizational issues.

Documents describing nuclear safety principles, effective leadership and management practices, and good work processes and practices are provided to assist member utilities. Members are encouraged to use these documents to address specific improvement needs.

Workshops, seminars, working meetings, and other activities are also conducted to assist in the exchange of information among members and to support development of industry leaders and managers.

B. SUPPORTING PROGRAMS

1. **Loaned Employee and Liaison Engineer Programs**
To augment its professional staff with a continuing source of personnel with recent nuclear plant experience, INPO uses the expertise of members and participants through the loaned employee program. This program also gives loaned personnel an opportunity to gain broader industry experience.

International participants and international supplier participants are eligible to assign liaison engineers to the INPO staff. This program provides ongoing liaison with these international organizations and helps support the INPO staff.

2. **INPO Reverse Loaned Employee Program**
INPO employees are loaned to member or participant organizations to meet the specific needs of these organizations. These reverse loan assignments also provide opportunities for INPO personnel to receive current industry experience while further developing their leadership and management skills.

3. **Peer Evaluator Programs**
Industry peers augment INPO field and other activities. Each plant evaluation team includes senior reactor operators and

other peer evaluators from selected plant functional areas. The peers assist INPO teams in reviewing plant performance.

Similarly, INPO accreditation teams are augmented by peers from utility training organizations. Peers are also used extensively on assistance, review, and international technical exchange visits. Most field visits involve one or more host peer evaluators from the plant being visited. Senior executives from member utilities serve as advisors on the Institute's plant and corporate evaluation teams.

4. **INPO Member Web Site**
A secure INPO member Web site provides INPO members and participants electronic access to a wide array of information that supports each of the Institute's cornerstone programs and supporting activities. The site is continually updated with new information and products to meet member needs. Examples of INPO information available on the member Web site are operating experience documents and associated training materials, guidelines and good practices, key strengths and areas for improvement from evaluation and accreditation team visits (with station and utility names removed), and the Nuclear Network and Equipment Performance and Information Exchange (EPIX) databases.

Entities other than INPO members, such as international participants, supplier participants, the Nuclear Regulatory Commission, EPRI, and the Department of Energy, have access to selected portions of the member Web site, in accordance with specific agreements with these groups.

C. INTERNATIONAL PARTICIPANT PROGRAM

A number of nuclear power operating organizations in other countries have become participants in INPO. This self-supporting program is intended to facilitate the exchange of information and experience, thereby promoting safe and reliable nuclear plant operations worldwide. International participants are invited to INPO workshops and receive many INPO products and services that are provided to domestic members. In addition, international technical exchange visits are conducted both in the United States and abroad to further enhance information exchange and emulation of best practices. International participants have access to INPO experience and can adopt INPO methods, as desired, in areas such as plant evaluations, training program accreditation, training courses, and operating experience analysis. At INPO's request, the International Participant Program is managed by the WANO-Atlanta Center. (See Appendix C.)

D. SUPPLIER PARTICIPANT PROGRAM

Organizations providing commercial design, engineering, nuclear fuel cycle, or other products and services directly related to the construction, operation, or support of nuclear electric generating plants are eligible to participate in INPO's Supplier Participant Program. This program is intended to promote the exchange of technical information to enhance INPO's programs as well as to incorporate plant operating experience into supplier participant activities that support the operation of nuclear power plants.

Supplier participants interact with INPO to

share experience and can use INPO practices, as appropriate, in support of their efforts. Supplier participant experience and expertise also are requested by INPO to support the Institute's programs and activities. To facilitate this interaction, supplier participants receive most INPO documents and data provided to domestic members and are invited to most INPO workshops and working meetings.

Occasionally, INPO assists supplier participants in technical areas related to INPO's mission.

E. ACTIVITIES WITH THE U.S. DEPARTMENT OF ENERGY

INPO provides assistance to the Department of Energy (DOE) to support improvement of operational safety at DOE nuclear facilities. A contract with the DOE specifies a baseline scope of assistance that is available. Under this contract, INPO conducts a limited number of assistance visits to DOE nuclear facilities, provides the DOE with copies of selected INPO documents and domestic operating experience reports, and allows DOE personnel to attend industrywide workshops and conferences. DOE personnel are provided access to Nuclear Network and selected information available on INPO's secure member Web site.

Occasionally, operating experience events at DOE facilities are communicated to INPO members and participants via the INPO Significant Event Evaluation and Information Network (SEE-IN) program.

VI. INPO's Relationship with Members, Participants, and Other Organizations

In carrying out its mission, INPO depends on the support of its members and participants and the cooperation of other industry organizations and federal agencies, particularly the Nuclear Regulatory Commission.

To ensure credibility with its members and with the federal government, INPO must maintain its independence with respect to any individual member and to government agencies. At the same time, INPO responds to the collective needs of its members and their requests for assistance. INPO also coordinates its activities with other industry and government organizations.

The principles and assumptions below provide for the coordination, support, and implementation of INPO programs.

A. MEMBERS ARE EXPECTED TO DO THE FOLLOWING:

1. Strive for excellence in the operation of their nuclear plants.

2. Establish a nuclear line organization that has clearly defined lines of responsibility and accountability for nuclear plant operation, maintenance, training, engineering support, and other activities necessary to ensure safe and reliable plant operation. The senior nuclear executive in the nuclear line organization shall be accountable in an unambiguous way to the organizational entity that holds federal authority (is licensed) to operate the nuclear facility.

3. Strive to meet INPO performance objectives and to meet the intent of INPO guidelines.

4. Respond to areas for improvement identified through INPO's evaluation, accreditation, and events analysis programs.

5. Achieve and maintain accreditation of training programs for personnel who operate, maintain, and support their nuclear plants.

6. Fully participate in other generic INPO programs designed to enhance nuclear plant safety and reliability. Examples are providing INPO with detailed and timely operating experience information and participating in the loaned employee, peer evaluator, and WANO performance indicator programs.

7. Share information, practices, and experiences to assist each other in maintaining high levels of operational safety and reliability. (See Appendix D, Principles of Sharing.)

8. Maintain the confidentiality of INPO evaluation reports and related information (such as the overall assessment), including not distributing this information external to the member utility organization.

B. MEMBERS AND PARTICIPANTS ARE EXPECTED TO DO THE FOLLOWING:

1. Use information provided by the Institute to improve nuclear operations and not for other purposes, such as to gain commercial advantage.

2. Avoid involving INPO or INPO documents in litigation.

3. Limit requests for assistance from INPO to areas or activities that are within the scope of the Institutional Plan.

C. INPO IS EXPECTED TO DO THE FOLLOWING:

1. Provide members with written reports describing results from evaluation, accreditation, and review visits. INPO follows up and verifies that effective corrective actions are implemented. INPO reports are maintained confidential. Evaluation reports and specific information related to the evaluation (such as the overall assessment) are not distributed outside of the member utility organization.

2. Ensure that, as appropriate, the Executive Review Group, Academy Council, and Analysis Review Board are provided an opportunity to review and comment on performance objectives, criteria, guidelines, and other INPO or National Academy for Nuclear Training documents.

3. Interact, in matters relating to its technical programs, with the member holding the operating license and having direct line responsibility for plant operation. This policy is necessary to maintain the responsibility for safe and reliable operation of the nuclear plant with the line organization. INPO expects its members to coordinate such matters with any joint owners. The Institute maintains a cooperative relationship with the Nuclear Non-Operating Owners Group.

4. Assist members in maintaining an environment that reinforces line management authority and responsibility in matters related to nuclear safety and reliability and that provides flexibility for self-improvement initiatives. INPO performance objectives and criteria are written without regard to constraints or agreements an individual member may have. Because the performance objectives and criteria and associated evaluation areas for improvement involve reactor safety and public health and safety, each member is expected to resolve any impediments to their implementation that may be imposed by outside organizations. Examples of such impediments are bargaining unit agreements or regulatory interactions.

D. THE FOLLOWING ARE ADDITIONAL PRINCIPLES AND ASSUMPTIONS:

1. A special procedure, approved by the INPO Board of Directors, provides guidance in the event a member is not responsive to INPO programs, is unwilling to take action to resolve a significant safety issue, has persistent shortfalls in performance, or has accreditation for its training programs put on probation or withdrawn by the National Nuclear Accrediting Board. The procedure stipulates that INPO and the member's management work to resolve any issues in contention. Should resolution not be satisfactory, the procedure calls for specific interactions between INPO's chief executive officer and the member's chief executive officer and, ultimately, the member's board of directors. The procedure gives INPO the authority to suspend the organization from membership if it continues to be unresponsive.

2. INPO members that also are members of Nuclear Electric Insurance Limited (NEIL) have authorized and instructed INPO to make available to NEIL copies of INPO evaluation reports and other data at the Institute's office. NEIL reviews these reports and data for items that could affect the insurability of its members.

3. INPO does not become involved in or conduct assistance visits in response to specific regulatory issues between individual members and the NRC. Such activities could result in INPO involvement in legal or enforcement proceedings and could adversely impact its independent status.

4. INPO does not engage in public, media, or legislative activities to promote nuclear power. Such activities would undermine INPO's credibility and objectivity.

To best serve its members and participants, INPO coordinates its activities with various domestic and international nuclear industry support organizations and nuclear steam supplier owners groups. A mutually supportive relationship is cultivated with these organizations, because they often perform related activities in helping to achieve nuclear safety and reliability goals. Coordination of activities among these groups also helps make efficient use of utility resources.

INPO has designated points of contact with these groups to facilitate information exchange and coordination. This includes serving on each other's advisory bodies and working groups and attending each other's workshops and conferences on issues of mutual interest. Each organization also supplements its technical expertise by soliciting input from the others.

INPO, EPRI, NEIL, and the Nuclear Energy Institute have a mutually supportive and cooperative relationship that is set out in a Memorandum of Agreement. These organizations' activities are often interrelated because many industry issues include elements of plant performance, research and development, and regulatory, political, or public interaction. To achieve the benefits of collaboration and unified approaches, it is important that nuclear utilities and industry support organizations coordinate their activities.

The Institute and the NRC have a formal Memorandum of Agreement that reflects the desires of both organizations for a continuing and cooperative relationship in the exchange of experience, information, and data related to the safety of commercial U.S. nuclear power plants. Although nuclear plant safety and protection of the public are fundamental goals of both INPO and the NRC, their roles, while complementary, are different. Coordination of INPO activities with the NRC is described more fully in Appendix B.

INPO coordinates its activities with other federal government agencies, as appropriate. For example, certain aspects of its international program are coordinated with the Department of State and the Department of Energy.

During its ongoing interactions with members and participants, INPO may become aware of policies or actions by a federal or state agency (or its personnel) that potentially detract from nuclear plant safety. INPO recognizes that it has an obligation to make the responsible agency aware of such issues in an appropriate manner and to follow up to see that the issues are addressed.

Appendix A
Description of Major INPO Programs

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Appendix A
1. Evaluation Programs

INPO conducts periodic evaluations to promote the highest levels of excellence in the operation, maintenance, and support of operating nuclear plants. All evaluation visits are based on performance objectives and criteria, developed by INPO with industry input and review. The evaluations are performance-oriented, emphasizing both the results achieved and the behaviors and organizational factors important to future performance.

a. Plant Evaluations

Teams of qualified, experienced personnel conduct evaluations of operating nuclear plants, focusing on plant safety and reliability. The evaluation teams are augmented by senior reactor operators, other peer evaluators from different utilities, host utility peer evaluators, and an executive industry advisor. The scope of the evaluation includes traditional functional categories such as operations, maintenance, and engineering that generally correspond to the nuclear station organization. The following areas are evaluated:

- Operations
- Maintenance
- Engineering
- Radiological Protection
- Chemistry
- Training

In addition, teams evaluate cross-functional performance areas—processes and behaviors that cross organizational boundaries and address organizational integration and interfaces. The following cross-functional areas are evaluated:

- Safety Culture
- Operational Focus
- Configuration Management
- Equipment Reliability/Work Management
- Performance Improvement (Learning Organization)
- Organizational Effectiveness

The performance of operations and training personnel during simulator exercises is included as part of each evaluation. Also included, where practicable, are observations of plant startups, shutdowns, and major planned evolutions. Evaluations of each operating nuclear station are conducted at an average interval of 24 months.

Team managers provide a focal point for evaluation of station management and leadership. Intensive training has been provided in this area, and a second team manager on each team concentrates on evaluating organizational effectiveness topics. In addition, teams are augmented with a senior utility executive as an advisor in this area.

Formal reports of areas for improvement are provided to the utility. The utility's response to the areas for improvement, with commitments to improve performance, are included in the final report. In subsequent evaluations, INPO assesses the effectiveness of actions taken to implement improvements.

In addition to the areas for improvement provided in the evaluation report, subjective team comments are often communicated during the evaluation exit meeting. These comments are intended to help utilities recognize and address potential issues before they adversely

impact actual performance. Copies of the plant evaluation report are distributed according to a policy approved by the Institute's Board of Directors.

WANO peer reviews conducted by the WANO-Atlanta Center are sometimes performed in lieu of INPO plant evaluations. These peer reviews use a methodology similar to that of plant evaluations, but with teams augmented with international peers.

b. Corporate Reviews

INPO occasionally conducts reviews designed to promote improvements in members' corporate support and monitoring of nuclear station activities. In most cases, these visits are conducted in conjunction with an operating plant evaluation.

c. Review Visits

INPO conducts review visits in selected areas to supplement the evaluation, accreditation, and events analysis programs. These visits are separate and distinct from assistance visits in that they are typically initiated by INPO and are evaluative in nature. The results of review visits are used as an input to the evaluation process. The visits are also used to monitor utility progress on issues.

Excellence
Perseverance
Leadership
Relationships
Integrity

Appendix A
2. Training and Accreditation Programs

a. National Academy for Nuclear Training

The National Academy for Nuclear Training was formed in 1985 to focus and unify industry efforts to continue improvements in training and qualification programs and to promote the professionalism of nuclear plant personnel.

The Academy operates under the auspices of INPO and is composed of the following three components:

- Nuclear utility training activities supported by the utilities' training centers, control room simulators, and training staffs
- Activities of the independent National Nuclear Accrediting Board, composed of eminent scholars and executives
- Training-related activities of the Institute

Plants with accredited training programs are branches of the Academy. A utility becomes a member of the Academy when all its operating plants have achieved accreditation for all applicable training programs.

The National Nuclear Accrediting Board examines the quality of utility training programs and makes all decisions with respect to accreditation. If training programs meet accreditation standards, the Board awards or renews accreditation. If significant problems are identified, the Board may defer initial accreditation, place programs on probation, or withdraw accreditation. The National Nuclear Accrediting Board is formed and supported by INPO, but it is independent in its decision-making authority.

An INPO executive normally serves as the Academy's executive director.

The Academy conducts and supports workshops, meetings, training courses, seminars, and other programs. It also produces documents designed to improve performance of nuclear plant personnel.

b. Performance-Based Training

The Academy provides assistance to members in establishing and maintaining performance-based training and qualification programs so personnel have the knowledge and skills to perform their jobs competently. The Academy provides guidance and assistance to utilities on a systematic approach to training that is used to develop performance-based training programs.

c. Accreditation Program

The National Academy for Nuclear Training manages the accreditation of utility training programs. The accreditation process is designed to identify strengths and weaknesses in training programs and to assist in making needed improvements. The process includes self-evaluations by members, with assistance provided by INPO staff; on-site evaluations by teams of INPO and industry personnel; and decisions by the independent National Nuclear Accrediting Board. Members are expected to seek and maintain accreditation of training programs for the following positions or skill areas:

- Shift managers
- Senior reactor operators
- Reactor operators
- Nonlicensed operators
- Continuing training for licensed personnel
- Shift technical advisors

- Instrument and control technicians and supervisors
- Electrical maintenance personnel and supervisors
- Mechanical maintenance personnel and supervisors
- Chemistry technicians
- Radiological protection technicians
- Engineering support personnel

Accreditation is maintained on an ongoing basis and is formally renewed for each of the above training programs every four years.

The accreditation process is independent of, but recognized by, the NRC as a means for satisfying regulatory training requirements.

d. Training and Qualification Guidelines

The Academy develops and distributes training and qualification guidelines for operations, maintenance, and technical personnel. These guidelines are designed to assist the utility in developing quality training programs and in selecting key personnel.

Training and qualification guidelines are revised and updated periodically to incorporate changes to address industry needs and to take into account lessons learned from other INPO programs such as evaluations, accreditations, events analyses, working meetings, and workshops. These training and qualification guidelines provide a sound basis for utility training programs.

e. Courses and Seminars

The Academy conducts courses and seminars to help personnel better manage nuclear technology, more effectively address leadership challenges, and improve their personal performance. Examples of courses conducted are as follows:

- Chief Executive Officer Seminar
- Reactor Technology Course for Utility Executives
- Senior Nuclear Executive Seminar
- Senior Nuclear Plant Management Course
- Human Performance Fundamentals Course
- Event Investigation Training
- High Performance Teamwork Development
- Professional development seminars for shift managers, operations supervisors, maintenance supervisors, engineering supervisors, radiation protection and chemistry supervisors, and training supervisors
- Seminars for new plant managers and for new managers in operations, radiological protection, chemistry, maintenance, engineering, and training

In addition to these courses and seminars, the Academy provides other training to its members on request.

f. Educational Assistance

The National Academy manages an industry educational assistance program to provide undergraduate scholarships and graduate fellowships for students majoring in nuclear or nuclear-related engineering or power generation health physics programs. Scholarship and fellowship recipients are encouraged to pursue careers in the nuclear power industry.

Appendix A
3. Analysis and Information Exchange Programs

a. Events Analysis Program

INPO reviews and analyzes operating events from both domestic and non-U.S. nuclear plants. The program is designed to provide in-depth analysis of nuclear operating experience and to apply the lessons learned across the industry. Events are screened and analyzed for significance, and those with generic applicability are disseminated to the industry in one or more of the following forms:

- Significant Operating Experience Reports (SOERs)
- Significant Event Reports (SERs)
- Significant Event Notifications (SENs)

The Institute conducts field reviews of selected events to determine root causes and provides accurate, timely communication of lessons learned to the industry to help prevent recurrence.

Members are expected to support the events analysis program by providing INPO with detailed and timely operating experience information. They are expected to evaluate and take appropriate action on recommendations provided in SOERs. During on-site evaluations, INPO follows up on the effectiveness of each utility's actions in response to SOER recommendations.

INPO provides SENs, SERs, and other reports to members for action, as appropriate. Unlike SOER recommendations, INPO does not follow up on the effectiveness of utility actions in response to these reports. INPO does evaluate the effectiveness of utility programs in extracting and applying lessons learned from industrywide as well as in-house operating experience.

INPO also provides just-in-time and equipment failure experience information in a format designed to assist plant personnel preparing to perform specific tasks.

b. Equipment Performance Data

The Institute operates and maintains the Equipment Performance and Information Exchange (EPIX) system. INPO members are expected to report equipment performance information to EPIX in accordance with established guidance. INPO and member utilities use the data to identify and solve plant equipment performance problems, with the goal of enhancing plant safety and reliability.

c. Nuclear Network® System

Nuclear Network is an international electronic information exchange for sharing nuclear plant information. It is the major communication link for the Significant Event Evaluation and Information Network (SEE-IN) and the WANO event reporting system. Operating experience information, Signifi-cant Event Reports, and other nuclear technical information are transmitted by the system. Nuclear Network also provides a vehicle for disseminating questions and other correspondence among INPO members and participants. Questions, for example, can be sent simultaneously to one, several, or all users.

The system includes a special dedicated topic for reporting plant emergency situations. This feature allows the affected utility to simultaneously provide timely information to all Network users, including the U.S. industry, INPO's international and supplier participants, and WANO members.

d. Performance Data Collection and Trending

The Institute operates and maintains the Consolidated Data Entry (CDE) System to collect data and information related to nuclear plant performance. Members provide data on quantitative performance indicators on a quarterly basis. This plant data is then consolidated for trending and analysis purposes. Industrywide data, plus trends developed from the data, are provided to member and participant utilities for a number of key operating plant performance indicators. These include the performance indicators used by WANO for worldwide nuclear plant performance comparisons. Members use this data in setting specific performance goals and in monitoring and assessing performance of their nuclear plants. INPO uses performance goals from individual utilities to help establish industrywide performance goals for plants in the United States.

e. Event Report Databases

INPO maintains an event database accessible from its member Web site. This database is designed primarily to support INPO's SEE-IN program activities and related efforts by members and participants. Operating experience information is received by INPO directly from the utilities and is entered into the database. The database is used for initial screening of operating experience information to identify potentially significant events, as well as for trending plant events. INPO, as a member of WANO, also has access to the WANO database of international event reports. These reports are maintained on the WANO Web site. The WANO event reports are also screened and used to support INPO's SEE-IN program activities.

f. Analysis Activities

The Institute analyzes industry operational data from a variety of sources—events, equipment failures, performance indicators, and regulatory reports—to detect trends in industry performance. Results of analyses are communicated to the industry using products such as Topical Reports. In addition, individual plant performance data is analyzed, with results used in support of other INPO activities.

Appendix A
4. Assistance Programs

INPO helps members improve in nuclear operations areas through assistance programs and activities that continually evolve to meet the changing needs of the nuclear industry. INPO provides assistance to member utilities on request and offers proactive assistance to selected stations that can benefit most from INPO and industry assistance. INPO monitors the performance of member utility stations in the interval between plant evaluations. The purpose of this monitoring is to identify, as early as possible, stations exhibiting indications of declining performance so that proactive assistance can be provided to help reverse the performance trend. INPO managers are assigned as senior representatives for all domestic stations, to facilitate INPO assistance efforts. The senior representatives maintain close liaison with station and utility management, to help identify where INPO resources can best be used to address specific issues and help improve overall station performance.

INPO assistance resources are assigned using a prioritized approach, such that plants with greater performance improvement needs receive a higher level of support and tailored assistance.

INPO facilitates information exchange among member utilities by identifying and cataloging information on a wide range of activities that stations are doing especially well. This information on effective programs and practices is shared with members on request and through a number of other forums. This assistance fosters comparison and the exchange and emulation of successful methods among members.

a. Assistance Visits

Members may request assistance visits in specific nuclear operations areas in which INPO personnel have experience or expertise.

Such visits are conducted by qualified INPO personnel and industry peers. For example, if a member requests assistance in some specific aspect of maintenance, INPO will include a peer from another plant that handles that aspect of maintenance well. Written reports detailing the results of the visits are provided only to the requesting utility. Where possible, actual methods and plans for improving performance are included as part of the assistance.

Several individual INPO staff members have detailed technical expertise in specific focus areas. These "niche" experts provide a focal point for INPO assistance to members and participants in their respective areas and represent INPO in industry forums related to these areas.

b. Development of Documents and Products

Several categories of documents and other products are designed and developed to assist member utilities and participants to achieve excellence in the operation, maintenance, training, and support of nuclear plants. Key categories of INPO documents and products are as follows:

1. Performance objectives and criteria and accreditation objectives and criteria documents provide a basis for INPO evaluation and accreditation programs. Members are expected to strive to meet the objectives set forth in these documents.

2. Principles documents address

professionalism, management and leadership development, human performance, and other cross-functional topics important to achieving sustained operational excellence. These documents are prepared by INPO with substantial involvement of industry executives and managers.

The first of these documents was *Principles for Enhancing Professionalism of Nuclear Personnel*, which addresses several human resource management areas focused on developing nuclear professionals, including personnel selection, training and qualification, and career development. Two supplemental documents—*Management and Leadership Development* and *Excellence in Human Performance*—build on the *Principles for Enhancing Professionalism of Nuclear Personnel*. Utility executives use *Management and Leadership Development* as assistance to identify, develop, assess, and select future senior managers. *Excellence in Human Performance* provides practical suggestions for enhancements in the workplace that promote excellent human performance.

In 1999, INPO distributed *Principles for Effective Self-Assessment and Corrective Action Programs*. This document also builds on the *Principles for Enhancing Professionalism of Nuclear Personnel*, emphasizing the importance of establishing a self-critical station culture and identifying the key elements of effective self-assessment and corrective action programs.

In 2003, INPO distributed *Principles for a Strong Nuclear Safety Culture*. This document is complementary to, and for use in conjunction with, previously published principles documents. It describes the essential attributes of a healthy nuclear safety culture, with the goal of creating a framework for open discussion and continuing evolution of safety culture throughout the industry.

INPO uses these documents, and the principles extracted from them, extensively in its evaluation and assistance activities.

3. Guidelines establish the bases for sound programs in selected areas of plant operation, maintenance, and training, as well as cross-functional areas of direct importance to the operation and support of nuclear stations. Guidelines assist members in meeting the objectives used in evaluations and accreditation. Member utilities are expected to strive to meet the intent of INPO guidelines.

4. Good practices, work process descriptions, Nuclear Exchange documents, and other documents are provided to assist members. Typically, these documents are developed from programs of member utilities and INPO's collective experience and are synthesized into documents by the INPO staff, with industry input and review. In general, the documents define one method of meeting INPO performance objectives in specific areas. It is recognized that other programs or methods may be as good or better. Utilities are encouraged to use these documents selectively in developing or improving programs applicable to their plants. These documents

can be used in whole or in part, as furnished, or modified to meet the specific needs of the plant involved.

5. Various other documents are produced, such as analysis reports and special studies, as needed. Assistance products include lesson materials, computer-based and interactive video materials, videotapes, and examination banks.

c. **International Technical Exchange Visits**

INPO usually conducts technical exchange visits coordinated by the WANO-Atlanta Center to international participants' facilities. These visits have the dual purpose of identifying strengths at non-U.S. plants that can be shared with plants worldwide and noting opportunities for improvement at the host facilities. When requested by international participants, technical exchange visits are focused on specific areas of interest to the participants. Technical exchange visit teams are often augmented with experts from other international participants or U.S. members to further enhance the mutual benefits of the international technical exchange.

d. **Workshops and Meetings**

INPO sponsors workshops and working meetings for specific groups of managers or on specific technical issues to provide forums for information exchange. This exchange provides an opportunity for INPO personnel and various levels of member and participant management to share industry lessons learned and obtain industry feedback on INPO programs and activities. INPO-sponsored workshops and working meetings also allow individuals from members and participants to meet and exchange information with their counterparts.

e. **Emergency Preparedness Program**

The Institute maintains an Emergency Response Center to assist members in mobilizing the resources of the nuclear industry to meet the needs of an emergency and to provide other resources or assistance if needed.

In 2004, following industry requests, INPO initiated a program to conduct review visits in emergency preparedness at member stations.

Appendix B
INPO's Relationship with the NRC

This appendix provides background and sets forth principles necessary for INPO to support the industry within the existing regulatory framework.

The nuclear utility industry in the United States, like other industries that may affect the health and safety of the general public, is regulated by the federal government. This regulatory function is based principally on the Atomic Energy Act of 1954, as amended, and is carried out by the U.S. Nuclear Regulatory Commission. In 1979, following the accident at Three Mile Island Nuclear Station, the President of the United States appointed a commission to investigate the accident. In its report, the commission, which came to be known as the Kemeny Commission, stated, "It is, of course, the responsibility of the Nuclear Regulatory Commission to issue regulations to assure the safety of nuclear power plants. However, we are convinced that regulations alone cannot assure safety."

INPO was not created to supplant the regulatory role of the NRC, but to provide the means whereby the industry itself could, acting collectively, make its nuclear operations safer. It was envisioned that peer reviews and performance objectives and criteria based on excellence would be effective in bringing about improvements. In the broad sense, the ultimate goals of the NRC and INPO are the same, in that both strive to protect the public; therefore, both review similar areas of nuclear power plant operations. How these goals are achieved is necessarily different. It was recognized that in establishing and meeting its goals and objectives, INPO would have to work closely with the NRC, while at the same time not becoming or appearing to become an extension of or an advisor to the NRC or an advocacy agent for the utilities.

The conduct of evaluations is one of INPO's most important functions. It is also the function that is closest to the role of a regulator. The NRC issues regulations and is required to determine that licensees consistently meet these regulatory requirements. INPO issues performance objectives and conducts evaluations to determine how well they are being met. While the two functions may appear similar, they differ significantly. There are two basic differences between NRC regulations and INPO performance objectives. NRC regulations set limits or conditions that are intended to provide reasonable assurance of protection of the public health and safety. Therefore, it is important that they reflect a consistent level of performance. INPO's performance objectives are broad statements of conditions that reflect striving for a higher level of overall plant performance—striving for excellence. These performance objectives, by their very nature, are difficult to achieve consistently. Regulations should be objective, whereas INPO performance objectives usually are subjective.

Another difference relates to the purpose of an evaluation in contrast to a regulatory inspection. The former stresses striving to achieve excellence as reflected in a given performance objective, whereas the latter stresses the licensee's ability to consistently meet regulatory requirements. Both are considered necessary.

It is because of these differences that INPO and its members conclude there should be a clear separation between INPO evaluations and NRC inspections. The NRC takes the INPO cornerstone programs into account when determining the extent and focus of its regulatory activities. However, in making this determination, the NRC focuses on the performance of the industry as a whole and the results achieved by individual

utilities, rather than through monitoring INPO's activities or specific interactions with an individual member.

Entanglement of NRC activities and INPO programs would divert INPO and the NRC from their respective missions. NRC and INPO activities are independent, yet complementary. INPO's effectiveness would be seriously undermined if an NRC regulatory document or activity incorporated, or in effect codified, INPO programs, documents, or performance objectives.

At the same time, INPO communicates frequently with the NRC on topics of mutual interest. Additionally, INPO participates in industry working groups and task forces that interface with the NRC on specific regulatory issues and initiatives relative to the Institute's mission and strategic objectives. These cooperative interactions have led to the elimination of some redundant activities, benefiting INPO members while enabling both the NRC and INPO to maintain or strengthen focus on their respective missions. For example, the Consolidated Data Entry System, operated by INPO, collects NRC monthly operating data. In some areas of interface with the NRC, INPO has expanded its role, enabling the NRC to focus on areas more directly related to its statutory responsibility.

The industry expects INPO to keep the NRC apprised of its generic activities, while INPO's interactions with an individual member are between that member and INPO (except where reportable occurrences are encountered, as discussed below).

INPO recognizes the need for the NRC to assess the overall quality of INPO's products and the success of its programs. The NRC has independent and diverse methods to assess industry progress or results that might be derived, in part, from INPO programs. In addition, INPO expects to obtain recognition for the industry's self-improvement and self-regulation efforts by providing the NRC with information on INPO programs and activities, including the following:

- Copies of selected generic documents
- Access to other pertinent information, such as EPIX, as described in specific agreements
- Attendance at periodic coordination meetings and briefings
- Observation of certain INPO field activities by NRC employees, with agreement from members
- Observation of National Nuclear Accrediting Board sessions

INPO encourages member utilities to make their plant evaluation reports and accreditation reports available to the NRC for review at each utility or site.

On the other hand, the NRC recognizes that evaluation of INPO activities or records is the responsibility of INPO's chief executive officer and Board of Directors. Reviews of INPO technical activities are carried out by the Executive Review Group and other ad hoc groups or organizations, as directed and approved by the CEO of INPO or the INPO Board of Directors. In view of this, while the industry expects and welcomes INPO's exchange of information with the NRC and NRC review of INPO products and results, it would be inappropriate for the NRC staff or a contracted third party to audit or inspect INPO activities. In recognition of their different roles but common goals, the NRC and INPO have entered into a Memorandum of Agreement that includes coordination plans covering specific areas of mutual interest.

INPO performance objectives and recommendations are based on best practices and the industry's commitment to excellence, not on regulatory requirements. In addition, INPO follows up to verify members are responsive to INPO evaluation and accreditation areas for improvement. Consequently, utilities should not have to answer to the NRC concerning INPO areas for improvement, except as noted below.

INPO has implemented a policy and appropriate procedures with regard to the handling of items that are potentially reportable to the NRC. INPO's policy is to inform utility management of such items during the normal course of business so that the utility can evaluate and report the items as appropriate. If INPO becomes aware of a defect or failure to comply that has been properly evaluated and requires a report under 10 CFR 21, the Institute has an obligation to ensure that the item is reported.

Transactions between INPO and its members are private. For example, when a member recognizes it is experiencing difficulty in an area where INPO has expertise, INPO encourages that member to request an assistance visit. NRC participation in or requests for copies of correspondence concerning such visits could be a deterrent to future requests for such visits. Similarly, the exit meetings following INPO evaluations are more productive if information is openly exchanged between the INPO team and the utility. NRC presence in these meetings would be a deterrent to open dialogue.

The NRC does not use the routine proceedings between INPO and its members as a basis for actions against INPO's members. In this regard, INPO evaluation-related reports, SEE-IN reports, assistance reports, correspondence between INPO and its members, and other INPO technical documents are all integral parts of INPO's private, routine interactions with its members. Both INPO and its members believe it would be counterproductive for the NRC or any party to use information derived from routine INPO proceedings with its members in licensing proceedings or to determine the level or degree of actions that might be taken against a licensee. The NRC has consistently used its best efforts to protect the privacy of these materials. The NRC's regulatory process provides ample data from which to make enforcement decisions.

Appendix C
INPO's Relationship with the World Association of Nuclear Operators-Atlanta Center (WANO-AC)

This appendix describes the relationship between INPO and WANO-AC.

WANO was formed in 1989 by the international nuclear community as the result of the Chernobyl Nuclear Power Plant accident. WANO's mission is to maximize the safety and reliability of the operation of nuclear power plants by exchanging information and encouraging communication, comparison, and emulation among its members. It operates through regional centers in Atlanta, Paris, Moscow, and Tokyo and a coordinating center in London. All operating nuclear power plants, and operator organizations formed by them, are ordinary members of WANO and members of one (or more) of the regional centers.

INPO, as an operating organization, is an ordinary member of WANO and represents the U.S. nuclear utilities in WANO activities. INPO is a member of WANO-AC. The WANO-AC Governing Board usually appoints an INPO executive to serve as the Atlanta Center director.

INPO provides WANO-AC resources in terms of seconded staff to support the center's day-to-day operation. To minimize duplication, INPO also provides WANO-AC administrative support services, such as payroll, computer support, and benefit administration. WANO-AC reimburses INPO for this support.

INPO supports the full range of WANO activities and programs and facilitates direct contacts between U.S. and non-U.S. WANO members. Such activities and programs include the following:

- WANO Voluntary Peer Reviews: Such reviews are conducted at the request of INPO members by WANO teams of U.S. and international peers who identify strengths and areas for improvement associated with nuclear safety and reliability. When conducted at a U.S. INPO member plant, a WANO peer review is performed in lieu of an INPO plant evaluation.

- WANO Exchange of Operating Experience Information: Detailed descriptions of events and lessons learned are distributed to member utilities worldwide.

- WANO Performance Indicators: Quantitative nuclear plant performance data is collected, trended, and disseminated to facilitate goal-setting, performance trending, and monitoring and to encourage emulation of the best industry performance.

- WANO Technical Support Missions: On-site visits are conducted to allow direct sharing of plant operating experience and ideas for improvement.

- WANO Professional and Technical Development: Courses, seminars, and workshops are designed for enhancing staff development and sharing operating experience.

At INPO's request, WANO-AC provides management and support services for the conduct of the INPO International Participant Program. For example, WANO-AC organizes and coordinates INPO technical exchange visits and International Participant Advisory Committee meetings.

Appendix D
Principles of Sharing

Throughout the process of electric deregulation in the United States, INPO's goal has remained the same: to promote the highest levels of safety and reliability—to promote excellence—in the operation of nuclear electric generating plants. That U.S. utilities were now in competition in certain areas meant a clear understanding was needed to continue sharing pertinent operational information to strengthen safety and reliability.

As nuclear professionals, we affirm our commitment to share information with each other to enhance the safe and reliable operation of our nuclear power plants. This cooperation is fundamental to our future success.

INDUSTRY RESPONSIBILITIES

We will continue to share the following:

- Practices important to safety and reliability
- Operating experience and operational performance data
- Information related to failure of equipment or processes
- Information to improve human performance
- Operational safety experiences with license renewal and decommissioning activities

We will assist each other in the following areas:

- Benchmarking to emulate best industry practices
- Nuclear oversight, self-assessment, and corrective action activities, as requested

We will provide support for the following:

- INPO cornerstone programs—plant evaluations, training and accreditation, events analysis and information exchange, and assistance

INPO RESPONSIBILITIES

We will continue to do the following:

- Emphasize nuclear safety and the sharing of principles
- Analyze and share operating experience, lessons learned, operational performance indicator data, and safety equipment performance data
- Promote industry use of plant strengths and areas for improvement

We will facilitate industry participation in the following:

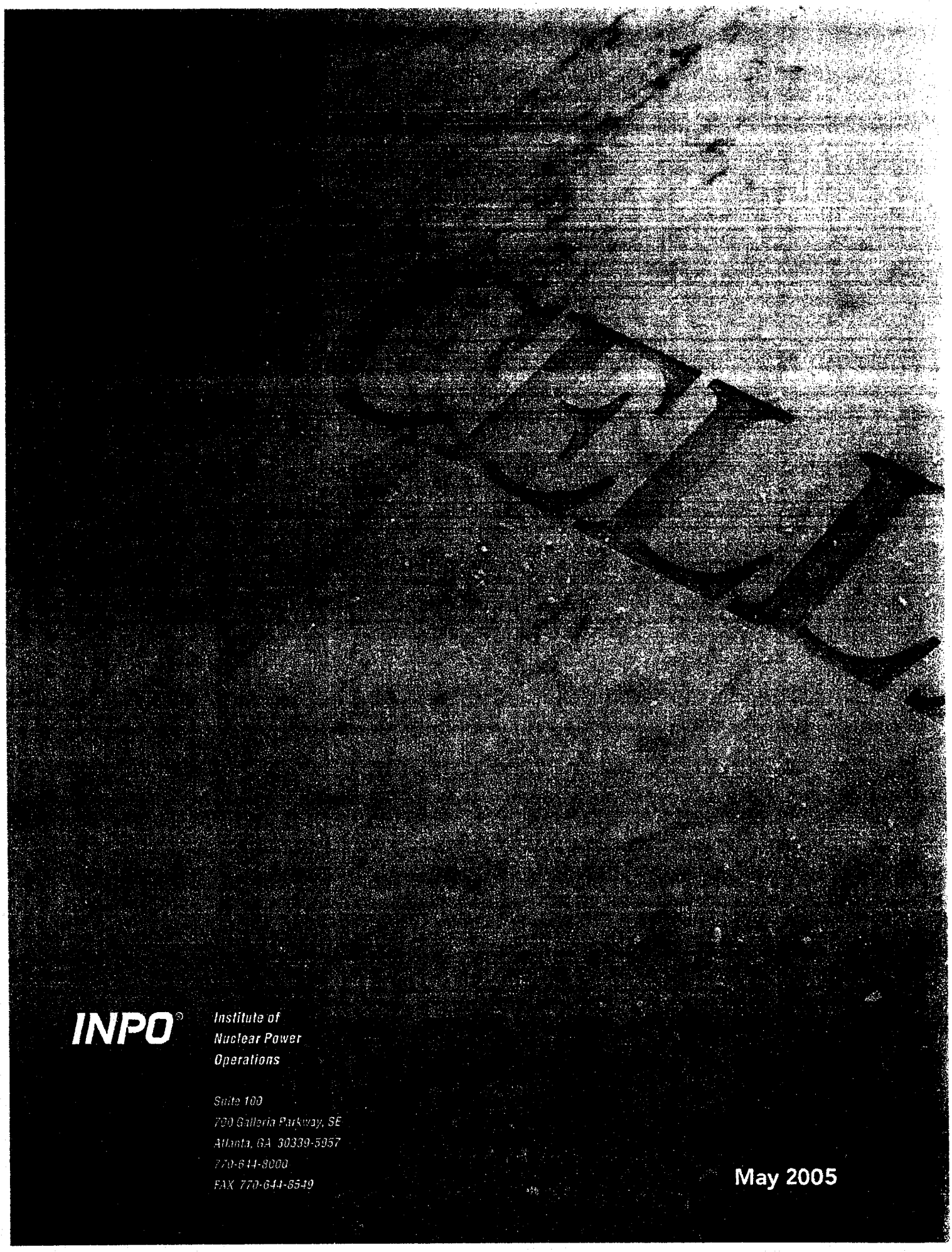
- INPO cornerstone programs—plant evaluations, training and accreditation, analysis and information exchange, and assistance

We will communicate sharing through the following:

- The member Web site, Nuclear Network, and other databases
- Guidelines, Nuclear Exchange documents, and other publications

NUCLEAR INDUSTRY BUSINESS CONDUCT

The industry and INPO recognize that certain information is private in nature. Examples include INPO plant evaluation and accreditation results, personal employee and individual performance information, and appropriate cost and power marketing data.



INPO®

Institute of
Nuclear Power
Operations

Suite 100
700 Galleria Parkway, SE
Atlanta, GA 30339-5957
770-644-8000
FAX 770-644-8549

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