

The Regulator and Licensee in Mexico

Briefing

for

Commissioner J. Merrifield

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Regulatory Authority of Mexico - CNSNS

- Director General: Ing. Jose Luis Delgado Guardado
- Regulates according to requirements of country of NPP origin
- Primary requirement is the U.S. NRC 10 CFR and also the regulations of IAEA

Technical Staff

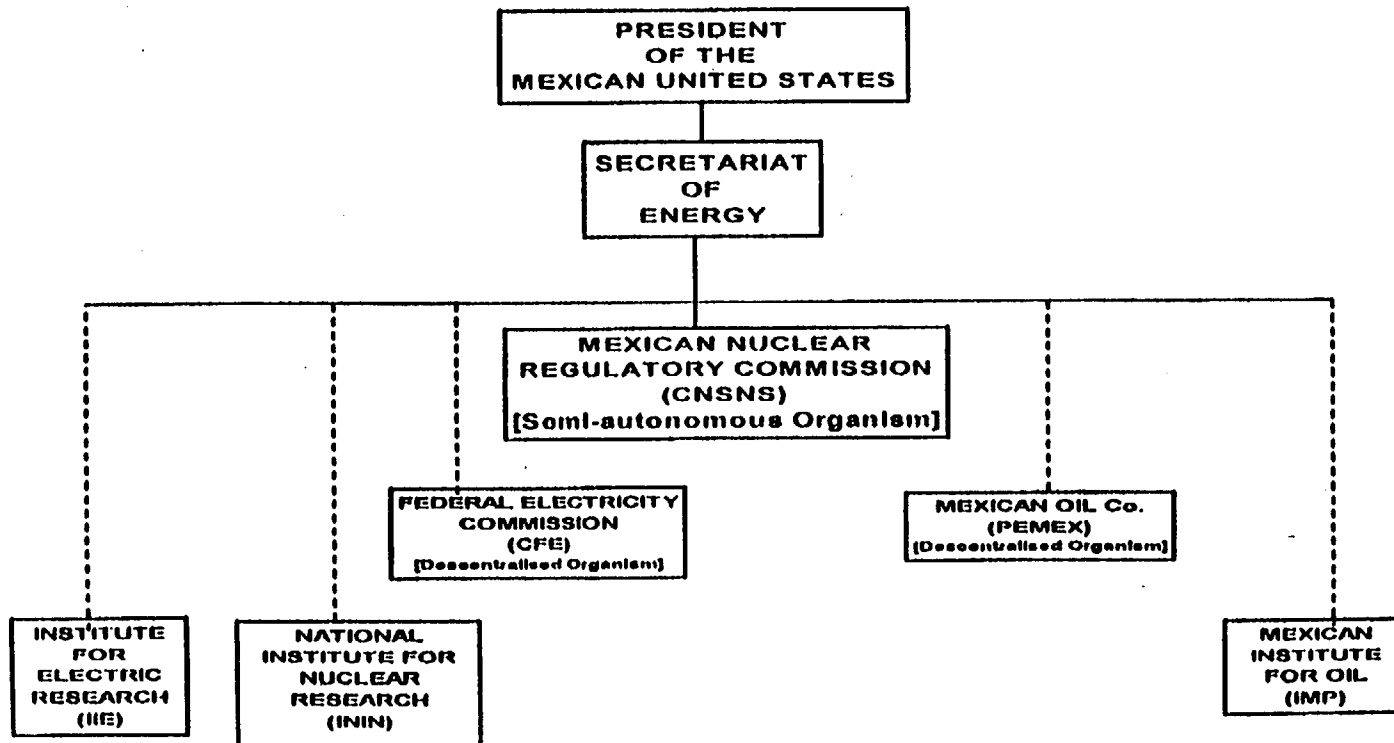
	NUMBER	%
Specialised Technicians or equivalent.	18	15.04
Professionals with a Bachelor's Degree or equivalent	64	53,4
Professionals with a Master's Degree or equivalent	31	25.8
Professionals with a Ph. D.	7	5,8
TOTAL	120	100

Budget

Four million dollars. 80% from licensee for maintenance of license, 20% from Federal Government.

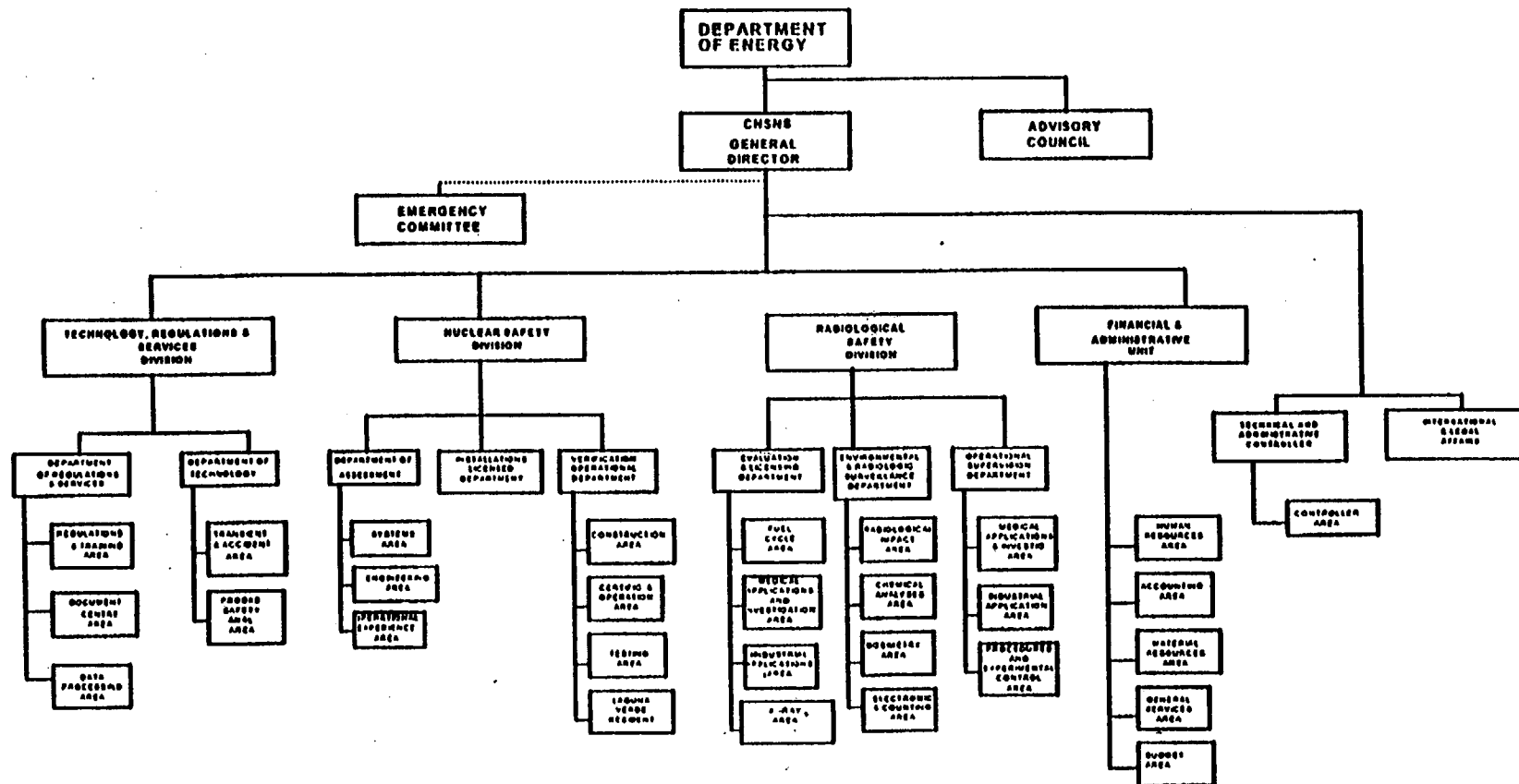
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POSITION OCCUPIED BY CNSNS IN THE FEDERAL
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The Licensee, CFE

CFE, part of the Mexican government, owns and operates Laguna Verde NPP (LVNPS). LVNPS is two 675 MWe GE BWRs. Unit 1 commenced operation in 1990, Unit 2 in 1995.

Total installed capacity of CFE is:

THERMOELECTRIC	19,394 MWe	59%
HYDROELECTRIC	9,329 MWe	28%
COAL FIRED	2,250 MWe	7%
NUCLEAR	1,309 MWe	4%
GEOTHERMAL	735 MWe	2%
WIND POWERED	33,037 MWe	0%
TOTAL		100%

NRR/CNSNS Areas of Information Exchange

- Digital Instrumentation and Control Systems
- Risk Informed Regulations
- Maintenance Rule
- Improved Technical Specifications
- Periodic Safety Review
- Individual Professional Development Plan
- How to Improve Work of Inspectors

Digital Instrumentation and Control Systems

- CFE has installed several safety-related digital systems in LVNPP
- NRR expert conducted two IAEA-sponsored missions to provide advice to CNSNS on the evaluation of safety digital systems (SRP NUREG 0800, Chapter 7), the review process for commercial off-the-shelf (COTS) software, digital operating experience in U.S. NPPs, implementation of review guidance for electromagnetic interference and the overall concept of software quality assurance (SQA).
- NRR expert recommended that CFE develop a SQA program that follows SRP Chapter 7.

Two assignees to NRR from CNSNS worked in NRR on digital I&C (1994-1996).

Probabilistic Safety Assessment

- Using the PSA for several applications:
 - Risk Based Regulations (w/IAEA)
 - Modification of Technical Specifications
 - Prioritization of Maintenance
 - Configuration control of equipment out of service
 - Prioritization of Inspection Activities

Other Items of Interest

- A Periodic Safety Review is conducted every 10 years
- Implicit License Term is 30 years
- Interest in License Renewal
- LVNPS has had a 5% power uprate
- Plant subject to INPO inspections
- WANO Peer Reviews
- Insurance Company Inspections (ASEMEX)
- IAEA Safeguards Inspections, OSART missions and technical visits

Main conclusions

The OSART team concluded that the senior managers at Laguna Verde are committed to improving operation at the plant. The team has identified a number of commendable features, including the following:

Plant management is well aware of the industry's good practices to improve safety culture and has a strategy in place to implement them. The plant has a well developed technical exchange process with international organizations, such as the IAEA and INPO.

Plant staff's exceptional openness during the OSART review process.

Good practices were identified with respect to the development of support material to allow plant staff to quickly have an overview of actions to be taken or results achieved. Examples included flow charts used in emergency planning and chemistry analysis results.

A number of proposals for improvements in operational safety was offered by the team. The more significant opportunities for improvements are summarized below :

At present, safety is still not clearly presented by management to personnel as the overriding priority of the plant.

- Plant personnel do not always comply with plant policy for temporary changes to plant systems.

The lack of adherence to important safety related plant procedures which refer to processes such as: plant safety clearance (red tag system) and equipment deficiency reporting system.

Several activities at the plant that are not in accordance with radiation protection procedures and expectations.

Suggested Talking Points

- What has been your experience with application of LVNPS PSA
- What is your experience with the IRRT process
- Are you able to share the IRRT findings with us
- Are you in agreement with the findings
- Could you describe your experience with digital systems at LVNPS
- What has been the trend over the past few years in Technical Specification violations