



Gender Equality in Nuclear Field and Women in Emergency Preparedness and Response at NPP

Dr. Tracy, Tsai-Yueh Luo

- **Board member in International Nuclear Societies Council**
- **Taiwan Nuclear Safety Commission Representative in Washington DC**
- **Past President of WiN-Taiwan**

Outline

- **Gender Equality in Nuclear Field**
 - International Nuclear Societies Council
 - Nuclear Safety Commission at Taiwan
- **Women in Executing the Emergency Preparedness and Response at NPP**



International Nuclear Societies Council (INSC)

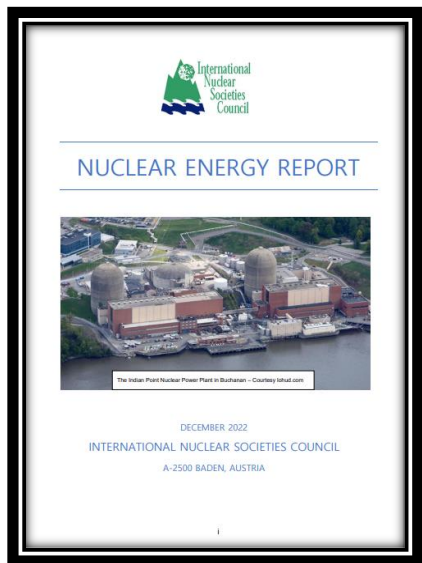
- ❖ Found on **November 11, 1990**.
- ❖ **40** Member Societies represent more than 100,000 nuclear professionals.
- ❖ To act as a **global Non-Governmental Organization in Nuclear Matters** of international nature.
- ❖ To **represent the views and positions of professionals and workers in the nuclear field**.
- ❖ To **value the work and achievements of the nuclear community**.



Members divided into 5 Regions:
Asia Pacific, Europe, Latin America,
North America, At-Large



Gender equality and global service equality at INSC

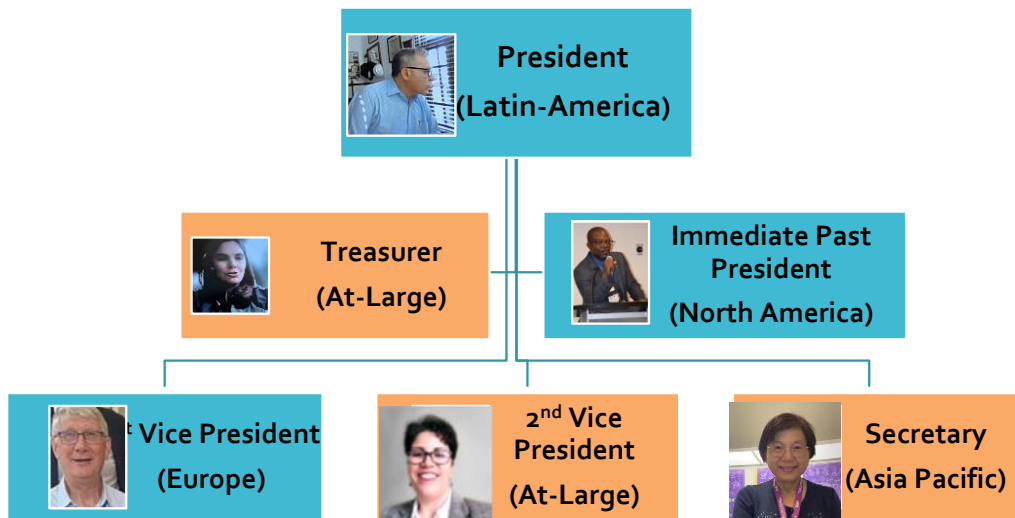


**Nuclear Energy
Report 2022**



**2023 Global Award
(Dr. Sama Bilbao y Leon)**

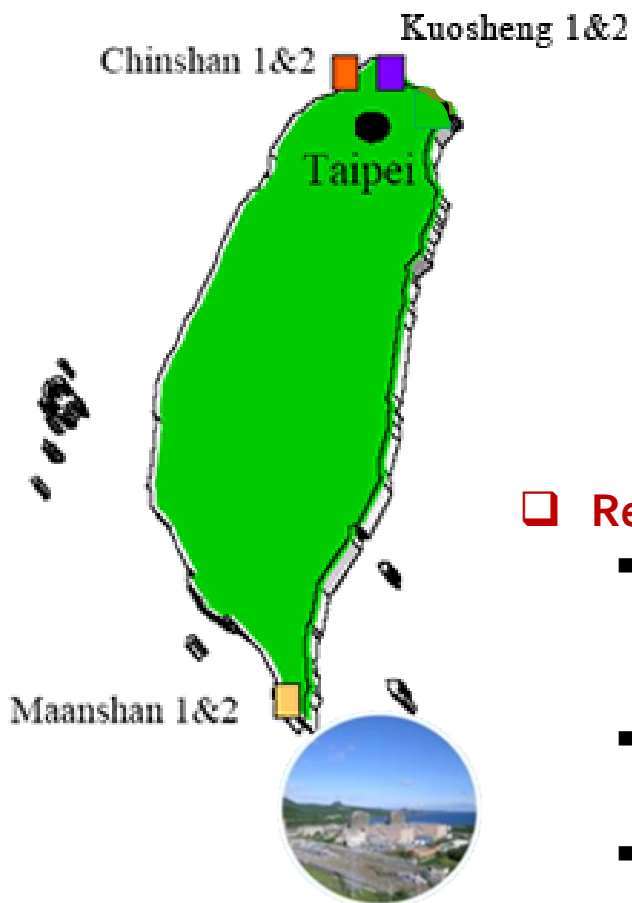
2024 Executive Committee





Nuclear Application in Taiwan

- ❑ **3 Nuclear power plants:**
one in operation
(2023, 8.25 %
electricity)



- ❑ **Medical Application :**

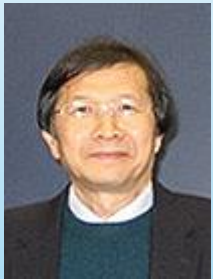
- **High-Intensity Medical Radiation Facilities :** 4 operation , 2 under review
- **13 cyclotrons** dedicated to radiopharmaceutical production. (PET, PET/CT/MRI, SPECT/CT....)
- **Boron Neutron Capture Therapy:** Research Reactor

- ❑ **Research Application:**

- **Radiation sterilization services:** healthcare, laboratory, pharmaceutical, food, packaging, cosmetic, and related industries.
- **Industrial radiography (IR):** assessing material integrity and construction processes
- **New Radiopharmaceutical Development**



Nuclear Safety Commission at Taiwan



Dr. Dong-Yang Chen



Chairperson and
Vice Chairperson



Dr. Shin Chang

5 Adjunct
Commissioners



Secretary
General



General
Planning
Office



Nuclear
Regulation
Office



Nuclear
Security and
Emergency
Response
Office



Fuel Cycle
and
Material
Regulation
Office



Radiation
Monitoring
Center



Secretari
at Office



Accoun
t Office



Human
Resour
ces
Office



Govere
mnt
Ethics
Office



$F / (F+M) = 28\%$
(section chief, director, chairperson)

“STEM vs Gender Equality”

Workshop themed “STEM vs Gender Equality” jointly organized with the **National Taiwan University of Arts** and Nuclear Safety Commission.



2023
科學領域 VS 女性角色

性別平等座談會

Wen-Jean Hsueh
Chair, Women in Engineering,
Chinese Institute of Engineers

Hui-Yu Tsai
Professor, NTHU

Wen-Ting Shan
Associate Prof. & Director, NTUA

Ching-Wen Chang
The Former Head of AEC

Chung-Der Wang
Secretary General, NSC

Szu-Li Chang
Chairman, RPA

Ting-Yi Wang
Vice Pres., WiN Taiwan

Ju-Chuan Huang
President, WiN Taiwan
(NSC)

- ✓ **"AI, Mind & Brain"**
- ✓ **"Exploring the Underpinnings of Cultural Artifacts: Non-destructive Applications and Advancements of Radiological Technology in the World of Art"**

AI時代的大腦心思維



國立陽明交通大學
生物科技學系/腦科學研究所



TAIWAN

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Executing the Emergency Preparedness and Response at NPP

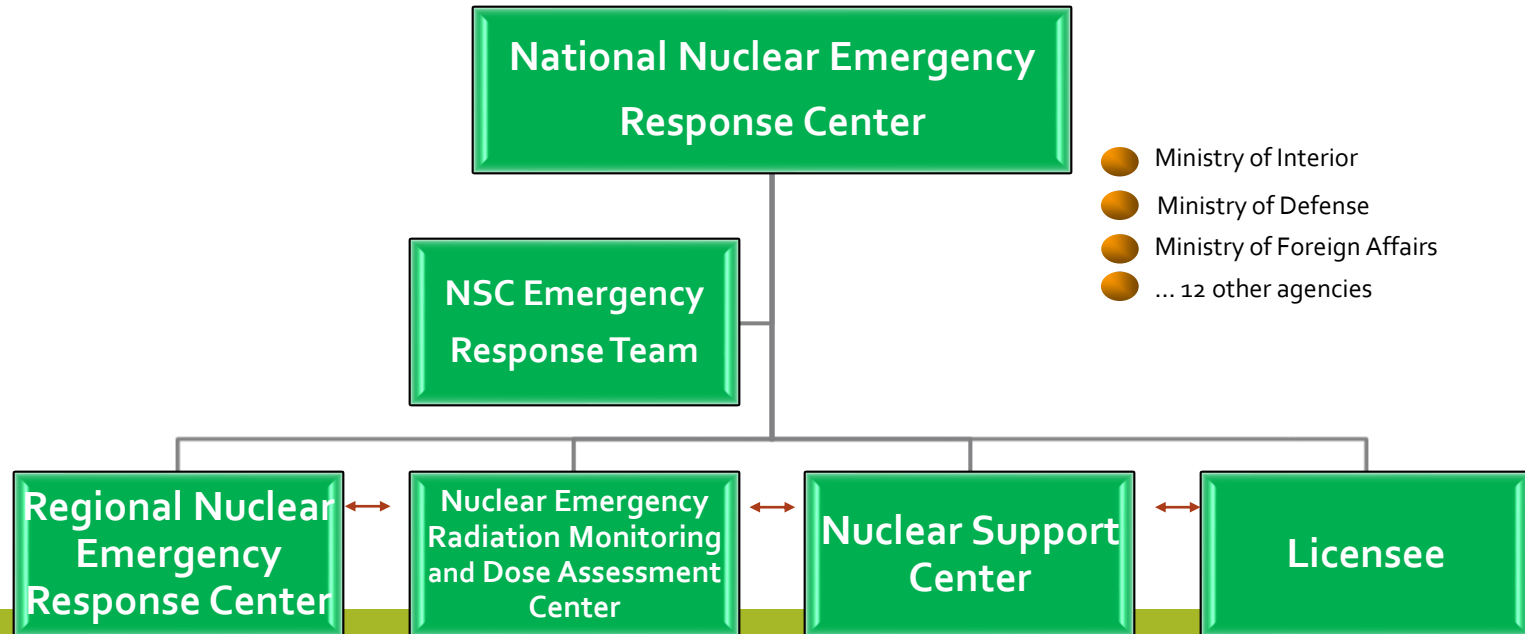
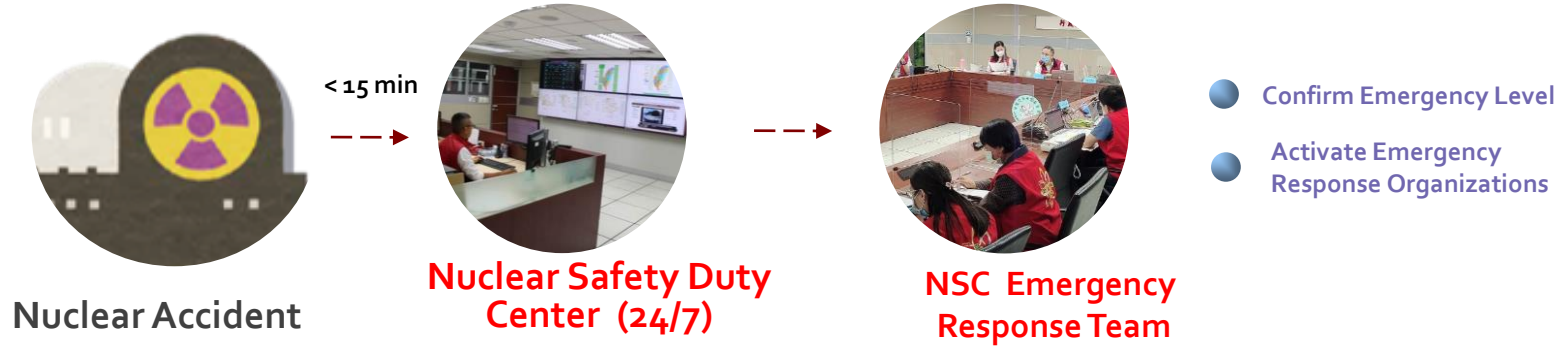
According to Nuclear Emergency Response Act and its Enforcement Rules, a Nuclear Emergency Exercise shall be conducted periodically in one of the **Emergency Preparation Zones**.

Plant	Capacity/ Type	License Expiration Date
Chinshan ²⁰²¹	1,804 MWt/unit GE BWR4 X 2	Unit 1:2018.12.05 Unit 2:2019.07.15
Kuosheng ²⁰²³	2,943 MWt/unit GE BWR6 X2	Unit 1:2021.12.27 Unit 2:2023.03.14
Maanshan ²⁰²²	2,822 MWt/unit WH PWR X2	Unit 1:2024.07.27 Unit 2:2025.05.17





Nuclear Emergency Response Mechanism





Area

Emergency Planning Zone

Notification

Alert and Notification System, phone messages and TV etc.

Monitoring

Radiation Monitoring Stations

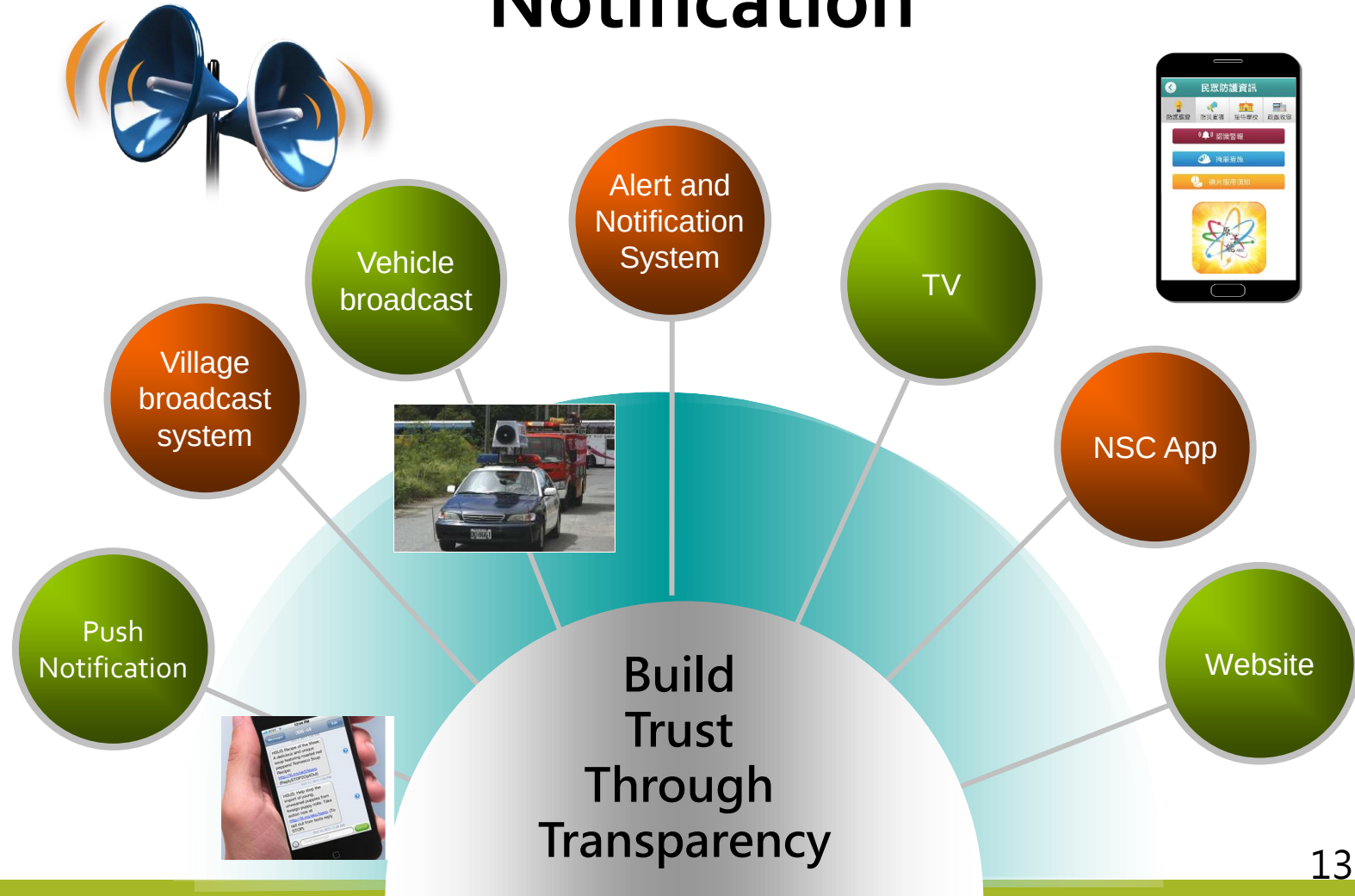
Public Outreach

Home visit project, Information material distribution,
Science Exhibition, Exercise Attendance, etc.





Notification





Radiation Monitoring Stations

(1) Emergency Preparation Zones

NPP-1



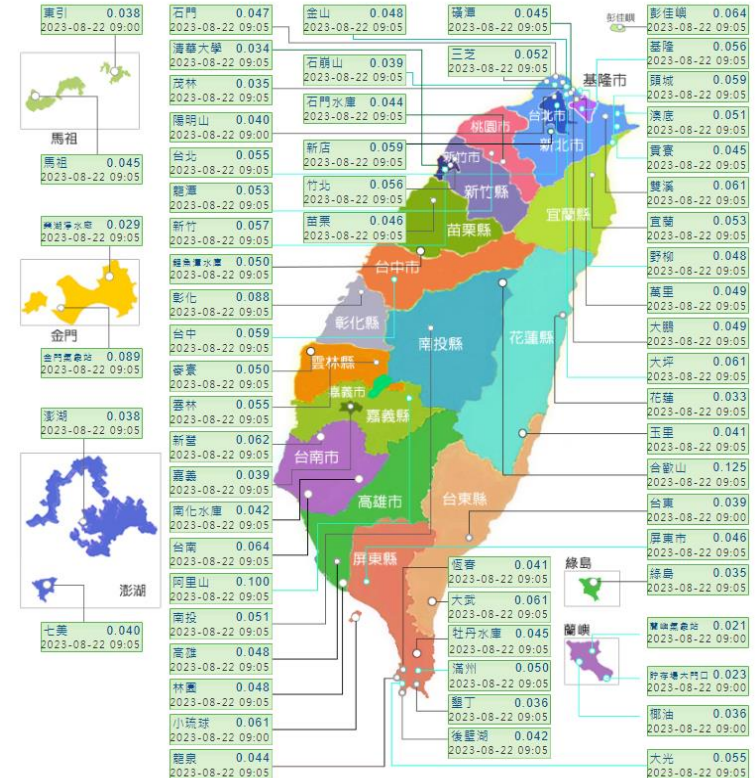
NPP-2



NPP-3



(2) Nationwide





Increasing Public Awareness



Science
Exhibition



Pamphlet
Distribution



Home Visit
Program



Exercise
Attendance





Flyer



Annual Calendar

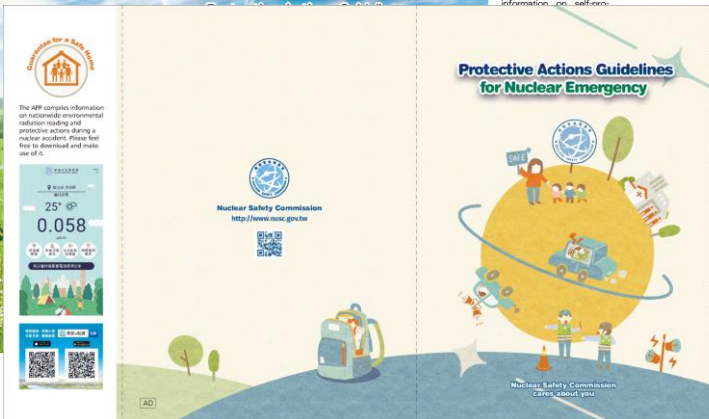


The AEC APP compiles information on nationwide environmental radiation reading and protective actions during a nuclear accident. Please feel free to download and make use of it.



核子事故應變指南

The guidebook compiles protective actions to be taken during a nuclear accident, including shelter in house, take iodine tablets and evacuation/reception, providing the general public with information on self-protection.



Pamphlet



Nuclear Emergency Exercise

According to Nuclear Emergency Response Act and Enforcement Rules, we need to conduct exercise periodically in one of the EPZs.

Exercises are used to evaluate emergency response mechanisms, and ensure that public protection measures can be effectively implemented.

Emergency exercises have been conducted in mock scenario, on-scene and real-life since 2013.

International Observation Program



2017 10 guests



2019 25 guests



2018 23 guests



2023 30 guests



Women in Executing the Emergency Preparedness and Response at NPP

Communication
/Gratitude

Cooperation
/Adaptability

Strong-willed
/Integrity

Knowledgeable
/Faithful

Section chief of Emergency and Preparedness Office at NSC :

Ms. Amy Chen



- Women can play more important roles in nuclear field.



THANK YOU FOR YOUR ATTENTION!!

U.S. Nuclear Regulatory Commission

