

THE STATUS OF NUCLEAR POWER INFRASTRUCTURE DEVELOPMENT IN VIETNAM

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Resolution by the
National
Assembly on the
Investment Policy
in Ninh Thuan
Nuclear Power
Project
(25/11/2009):

Decided to invest in Ninh Thuan Nuclear Power Project with 2 plants (2 units/plant) to generate electricity for socio-economic development in Vietnam in general and in Ninh Thuan province

Ninh Thuan Nuclear Power Project

- ▶ **Ninh Thuan 1:** Phuoc Dinh, Ninh Thuan
 - ▶ Capacity: 2 units x 1,000 MWe
- ▶ **Ninh Thuan 2:** Vinh Hai, Ninh Thuan
 - ▶ Capacity: 2 units x 1,000 Mwe

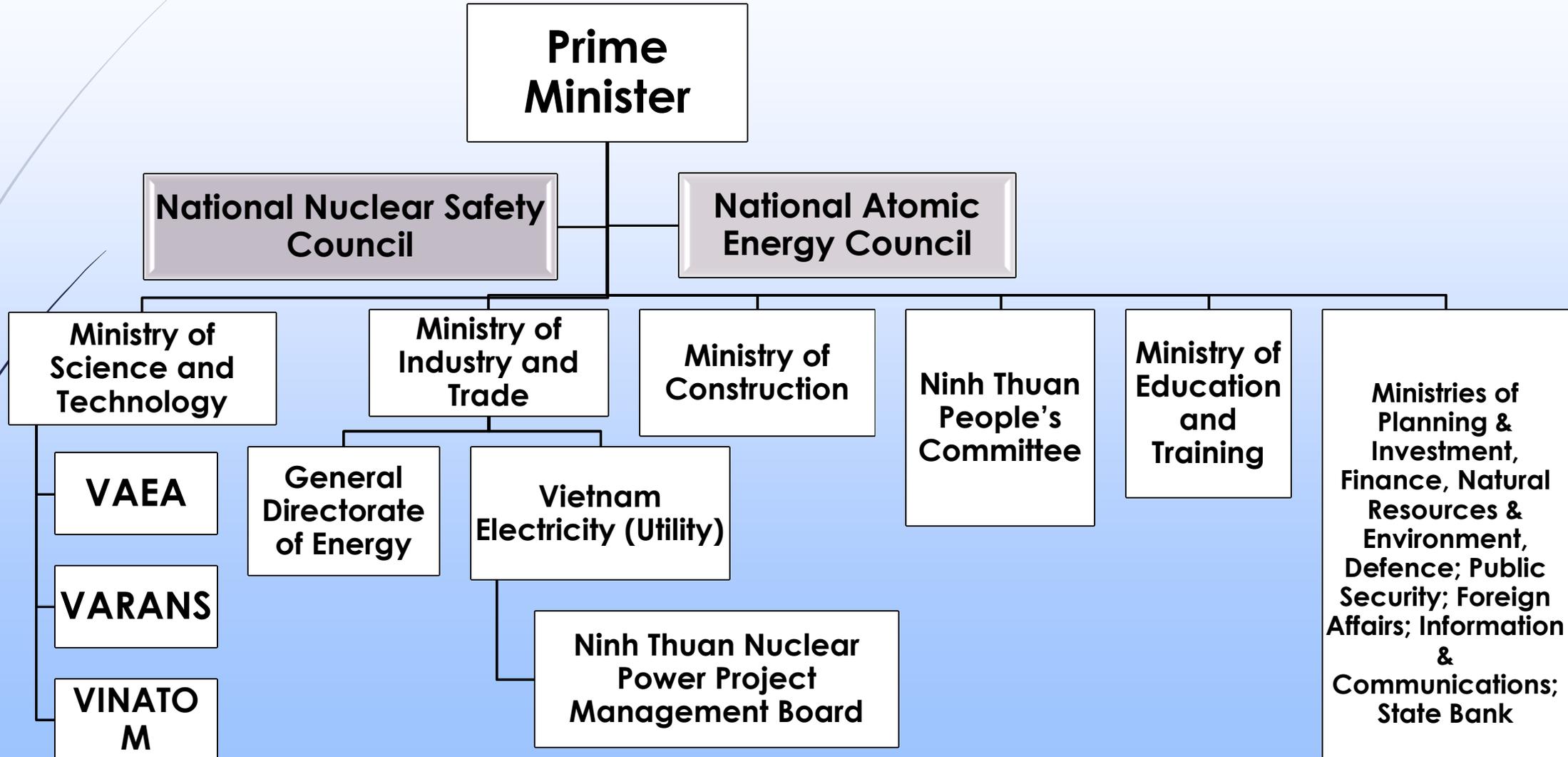
FSs and SADs for Ninh Thuan 1 and Ninh Thuan 2 NPPs were basically completed and are being appraised by the competent authorities before being submitted to the Prime Minister for approval



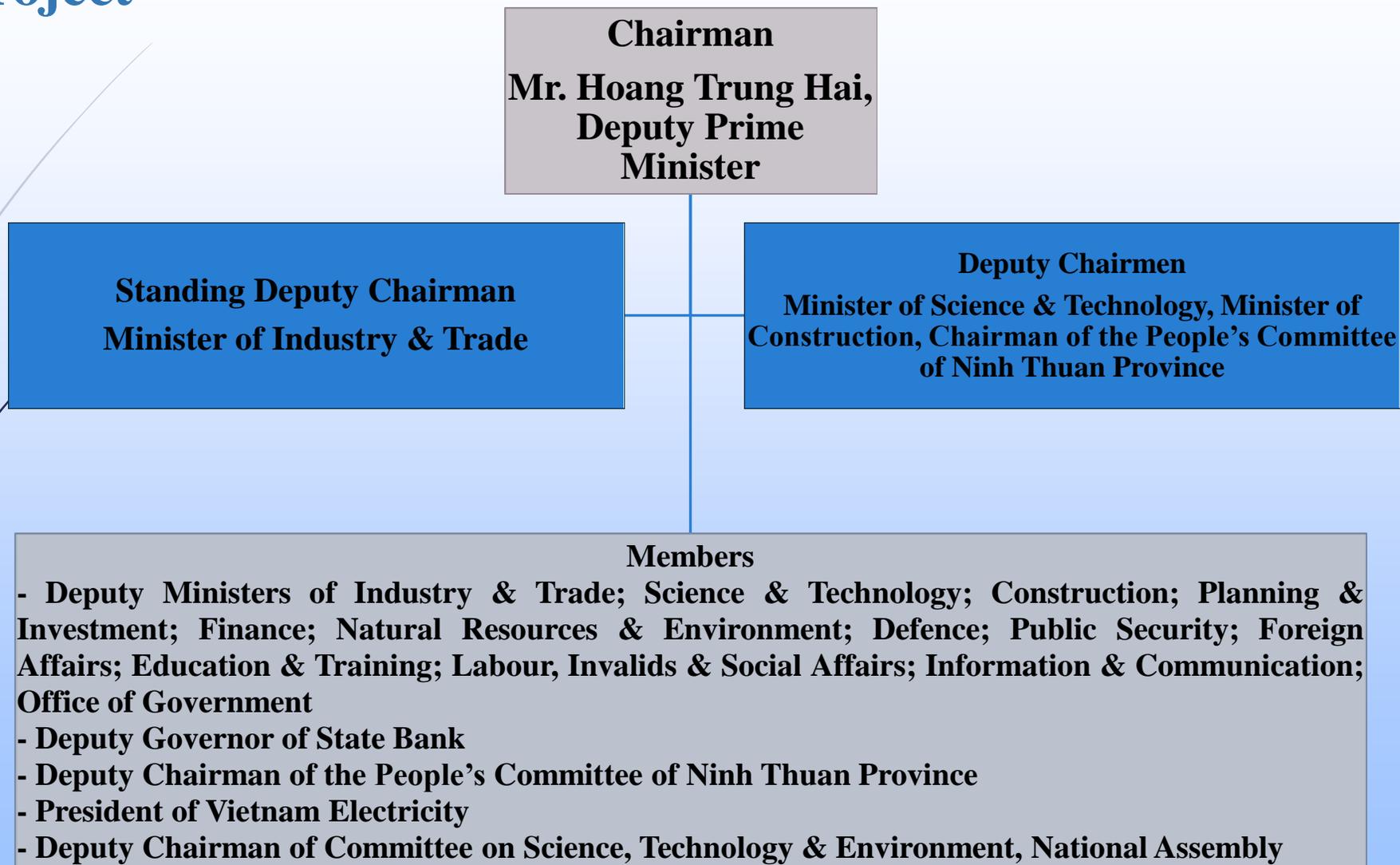
Component Projects



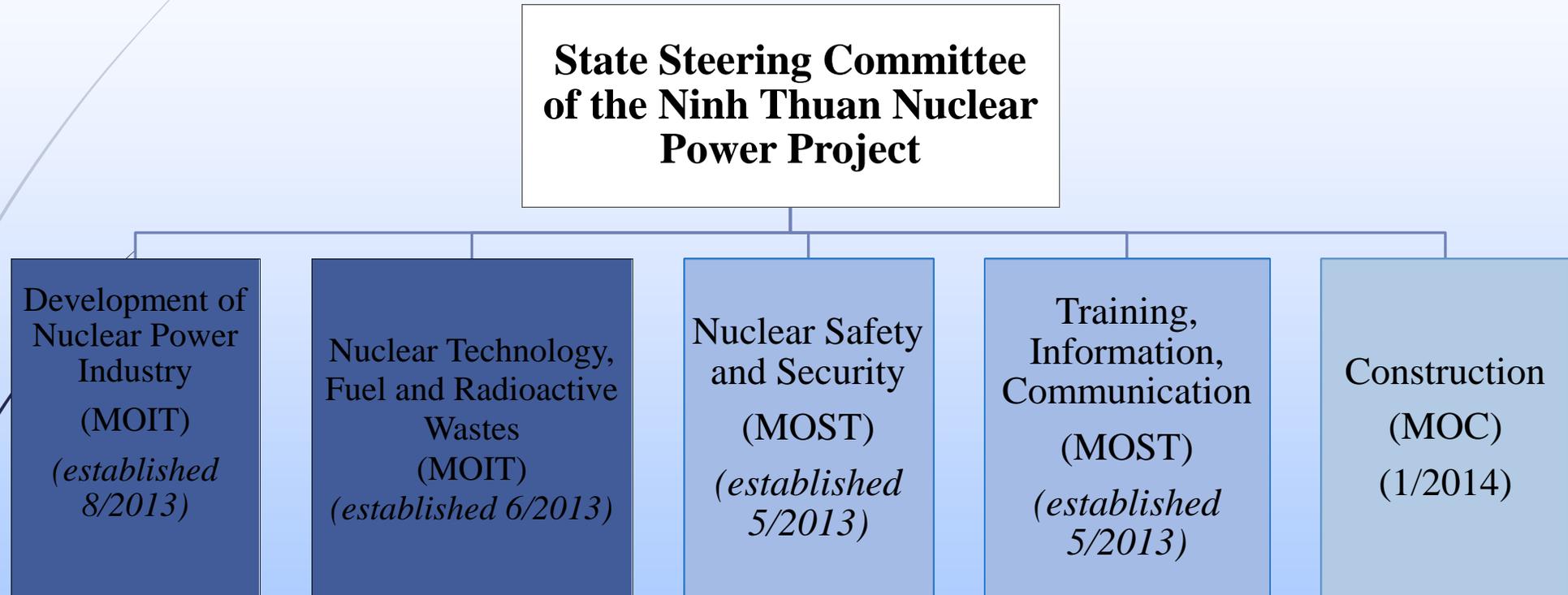
Key Agencies/Organizations in Vietnam Nuclear Power Programme



State Steering Committee of the Ninh Thuan Nuclear Power Project

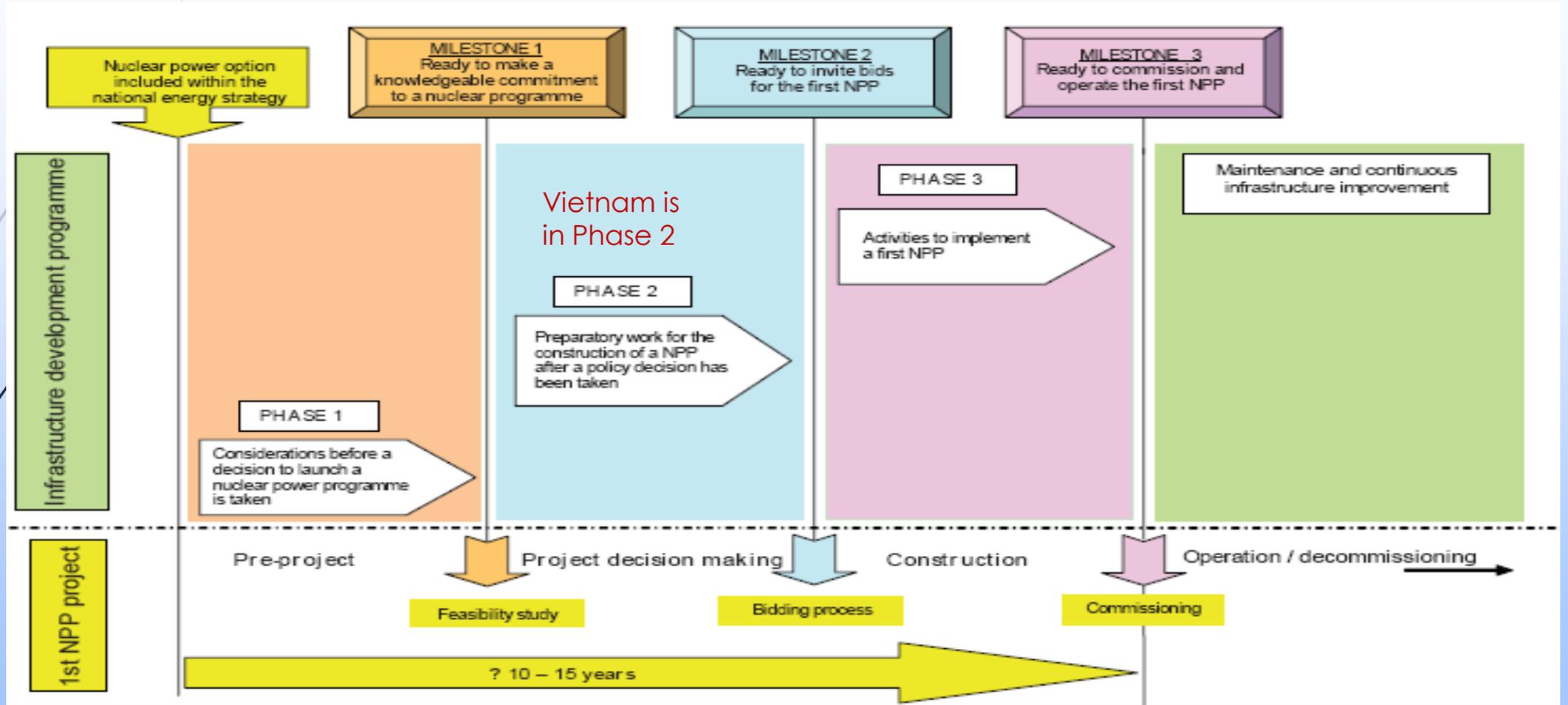


State Steering Committee of the Ninh Thuan Nuclear Power Project



Roles and responsibilities of Members of the State Steering Committee are defined in the *Regulation of Operation of the National Steering Committee of the Ninh Thuan NPP Project* (Decision No. 93/QĐ-TTg dated 17/01/2011) and the *Decision Amending and Supplementing Some Articles of the Regulation of Operation of the National Steering Committee of the Ninh Thuan NPP Project Promulgated along with the Decision No. 93/QĐ-TTg dated 17 January 2011 by the Prime Minister* (Decision No. 717/QĐ-TTg dated 14/06/2012)

Vietnam has been actively preparing necessary nuclear infrastructure and currently in the Phase 2.



7 Key areas recommended by the IAEA INIR Mission 2012

1. The relevant legislation, in particular the Law on Atomic Energy (2008) should be revised and promulgated as soon as possible.
2. The regulatory framework should be strengthened.
3. The human resource development plans should be strengthened and integrated.
4. The Management Systems should be improved.
5. Financing and funding issues need to be addressed.
6. A policy and strategies for the management of spent fuel and radioactive waste should be developed.
7. The National Nuclear and Radiological Emergency Plan (NNREP) should be completed and approved.

Master Plan for the development of the nuclear power infrastructure in Vietnam up to 2020 was approved by the Prime Minister in 12/2014:

12 approved projects/tasks and 19 additional projects to be carried out up to 2020

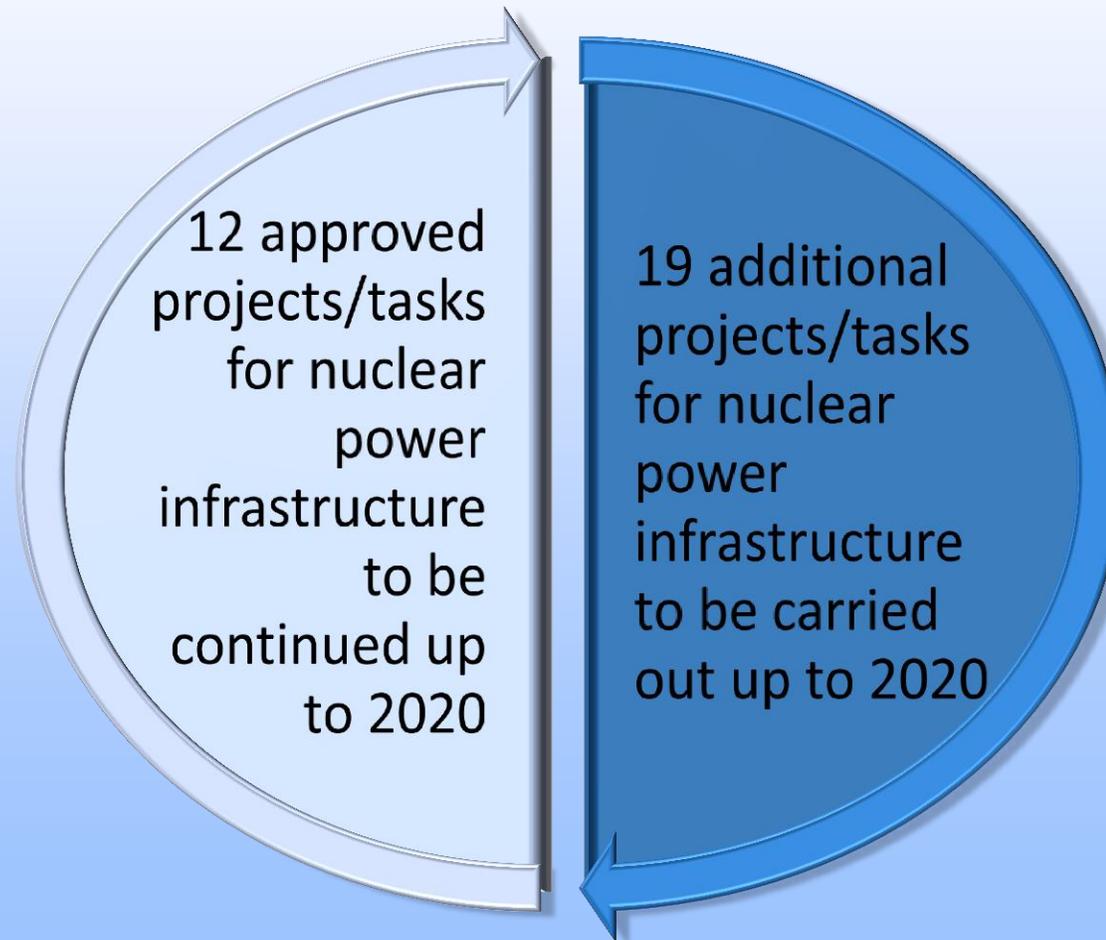
Overall objective:

Developing comprehensively the national nuclear power infrastructure in accordance with IAEA's guidance and Vietnam's condition, meeting requirements for implementing the Ninh Thuan NPP safely, secured and effectively

Specific Objectives of the Master Plan

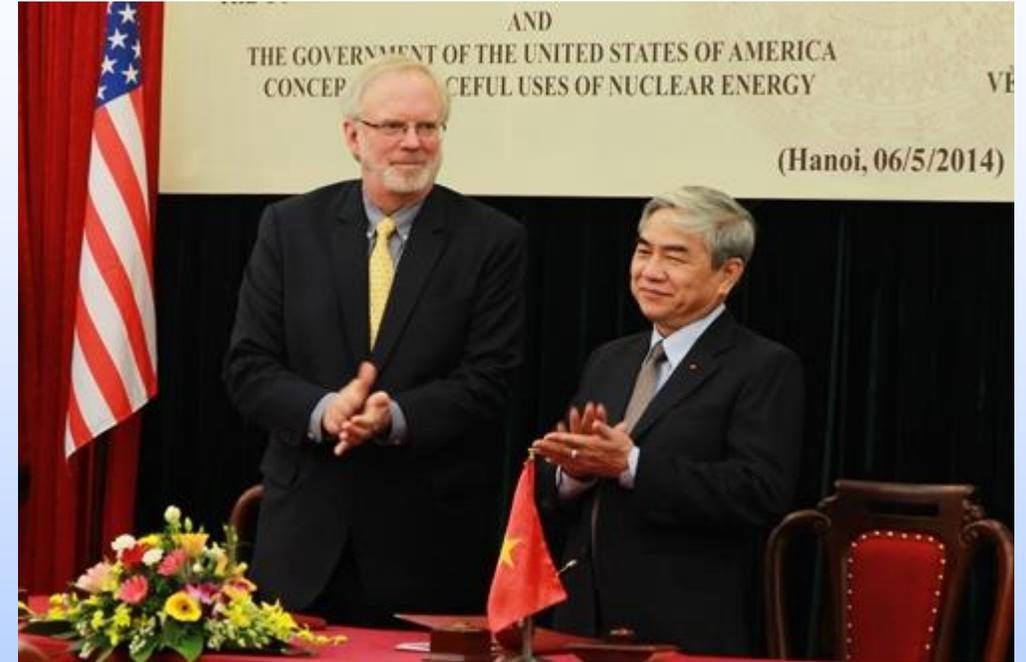
- Developing legislative and regulatory framework, mechanism, policy for nuclear power
- Training and developing human resource in terms of structure, quantity, quality for state management, technical support, research and training, construction and operation of the NPP
- Ensuring physical infrastructure for state management, TS, research and training, environmental radiation monitoring and warning, nuclear and radiological incident response in project phases
- Meeting requirements on approval of site and FS for Ninh Thuan NPP; ensuring necessary infrastructure for the construction of NPP

Master Plan for the development of nuclear power infrastructure (approved by the Prime Minister, Decision 2241/QĐ-TTg dated 11 Dec. 2014)



International cooperation

- ▶ Cooperation with IAEA in developing nuclear power infrastructure
- ▶ Cooperation with vendor countries (Russia, Japan) to implement Ninh Thuan 1 and Ninh Thuan 2 NPPs
- ▶ Cooperation with other advanced nuclear countries in nuclear power development: USA, EU members, ROK, etc
- ▶ Cooperation with USA:
 - ▶ Agreement between Vietnam and USA on peaceful nuclear cooperation (Agreement 123) signed in 5/2014
 - ▶ Cooperation with USA, Russia and IAEA in completing the conversion of the nuclear research reactor in Dalat from using highly enriched uranium to low-enriched uranium fuel (in 2013).
 - ▶ MOUs between Vietnamese and US organizations to cooperate in nuclear energy field



Signing Ceremony of Agreement 123, 5/2014

Major activities in 2015

Implementing tasks under the Master Plan for developing nuclear power infrastructure up to 2020

- ▶ Finalizing FSs and SADs of Ninh Thuan 1 and Ninh Thuan 2 to submit for approval
- ▶ On-going revising the Draft Amended Atomic Energy Law to be submitted to PM for approval in 2016
- ▶ Elaborating regulatory documents and revising the List of legal and regulatory documents in nuclear to be elaborated and issued up to 2020
- ▶ Implementing National Project on Public Information and Communication for Nuclear Power Development approved in 2/2013 (Project 370)
- ▶ Implementing National Scheme on HRD in the field of atomic energy

Major activities in 2015

Implementing tasks under the Master Plan for developing nuclear power infrastructure up to 2020

- ▶ Drafting Plan for training staff of governmental agencies, R&D and Technical supporting organizations for nuclear power development up to 2020 (expectedly to be approved in 2015)
- ▶ Drafting Programme on scientific research and technology development in the field of atomic energy (to be submitted to the Minister of MOST in 2015)
- ▶ On-going preparation for developing Center for Nuclear Energy Science and Technology

Conclusion

- ▶ Since the National Assembly's Resolution No. 41 on investment in Ninh Thuan NPP (2009), Vietnam has been **conducting numerous activities for nuclear power infrastructure development** and currently in Phase 2 as assessed by the IAEA.
- ▶ In the coming time, Vietnam continues developing the national nuclear power infrastructure comprehensively in accordance with IAEA's guidance and Vietnam's condition, with a view to implementing the Ninh Thuan NPP safely, securely and effectively **through implementing the newly approved Master Plan** (in particular HRD, legal and regulatory framework, preparatory activities for the project)
- ▶ Nuclear power infrastructure development is challenging for a newcomer as Vietnam, thus it is needed to get **efforts of all Vietnamese agencies, institutions, organizations** and to receive the timely and effective international support by the IAEA and experienced nuclear states

THANK YOU FOR YOUR ATTENTION!