

# SAFETY MANAGEMENT TO NINH THUAN NPP PROJECT BY REGULATORY BODY

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**Ho Chi Minh City, 20<sup>th</sup>- November 2014**

# **PRESENTATION OUTLINE**

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**I. Safety management system**

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**II. Legal Instrument for safety management**

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**III. Preparation for safety assessment**

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**IV. Conclusions**

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# VARANS in State Management

National Assembly

GOVERNMENT

State Assessment  
Council

National Nuclear  
Safety Council

MOST<sup>1</sup>

Dept. of  
Legislation

Dept. of Int'l  
Cooperation

VARANS<sup>2</sup>

DOSTs

VAEI

MOIT<sup>3</sup>

Dept. of Energy

ISTEA

EVN

MONRE

GDEP

MOH

VAPM

DAV

VADDT

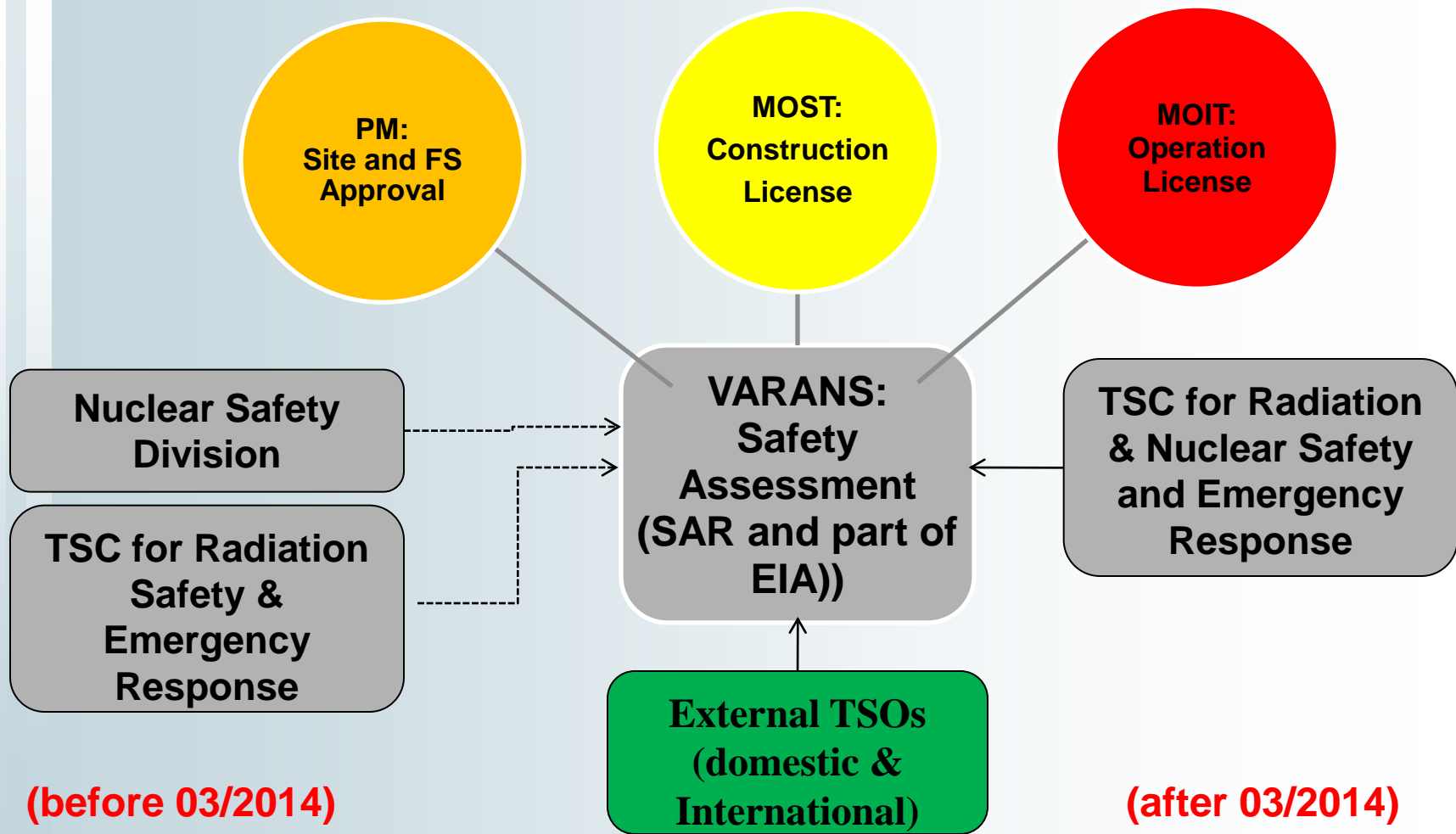
VDEH

MOFA

Dept. of Int'l  
Organizations

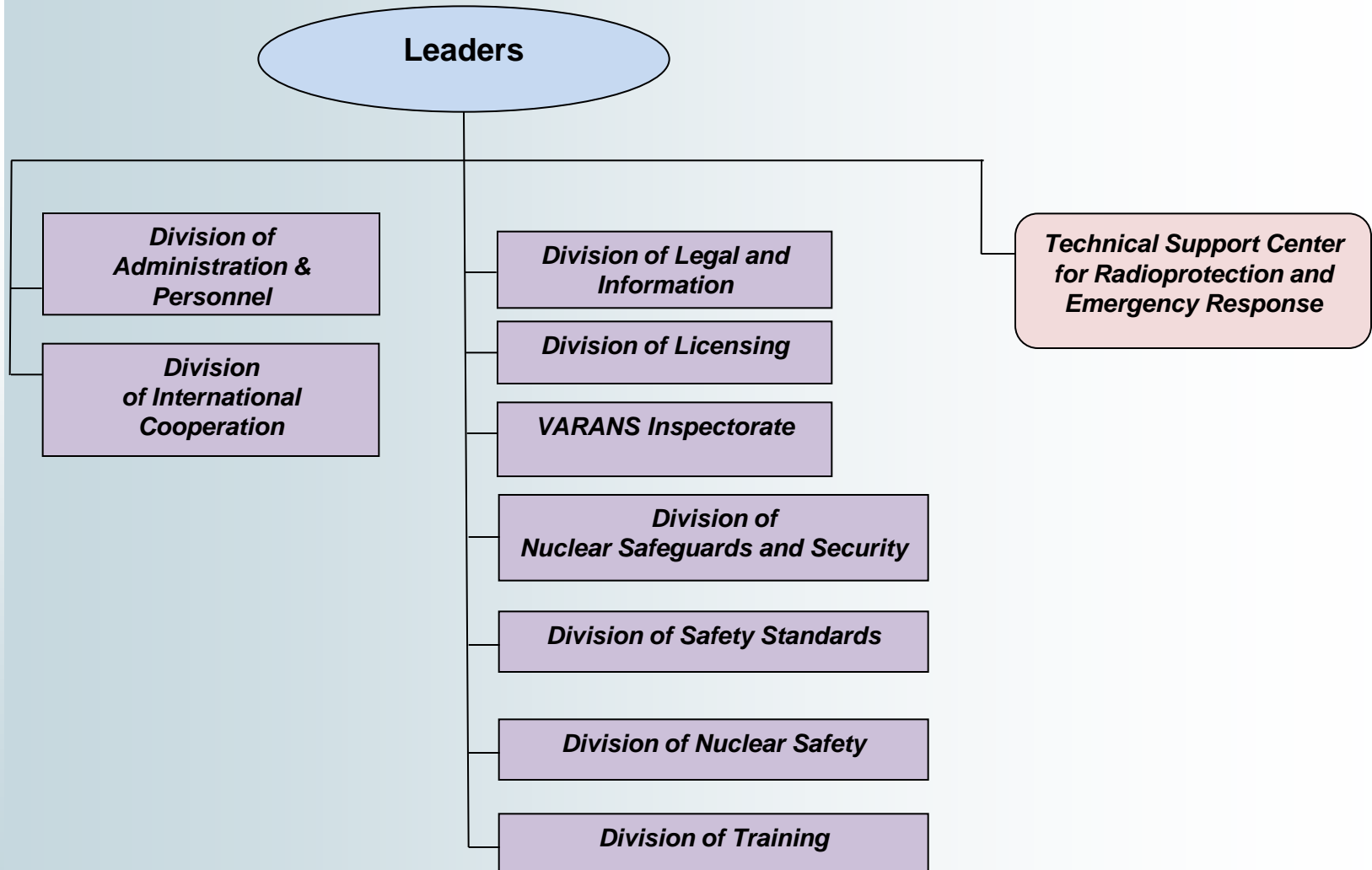
## VARANS's duty to assess safety

For nuclear power: VARANS has duty to assess safety for all stages



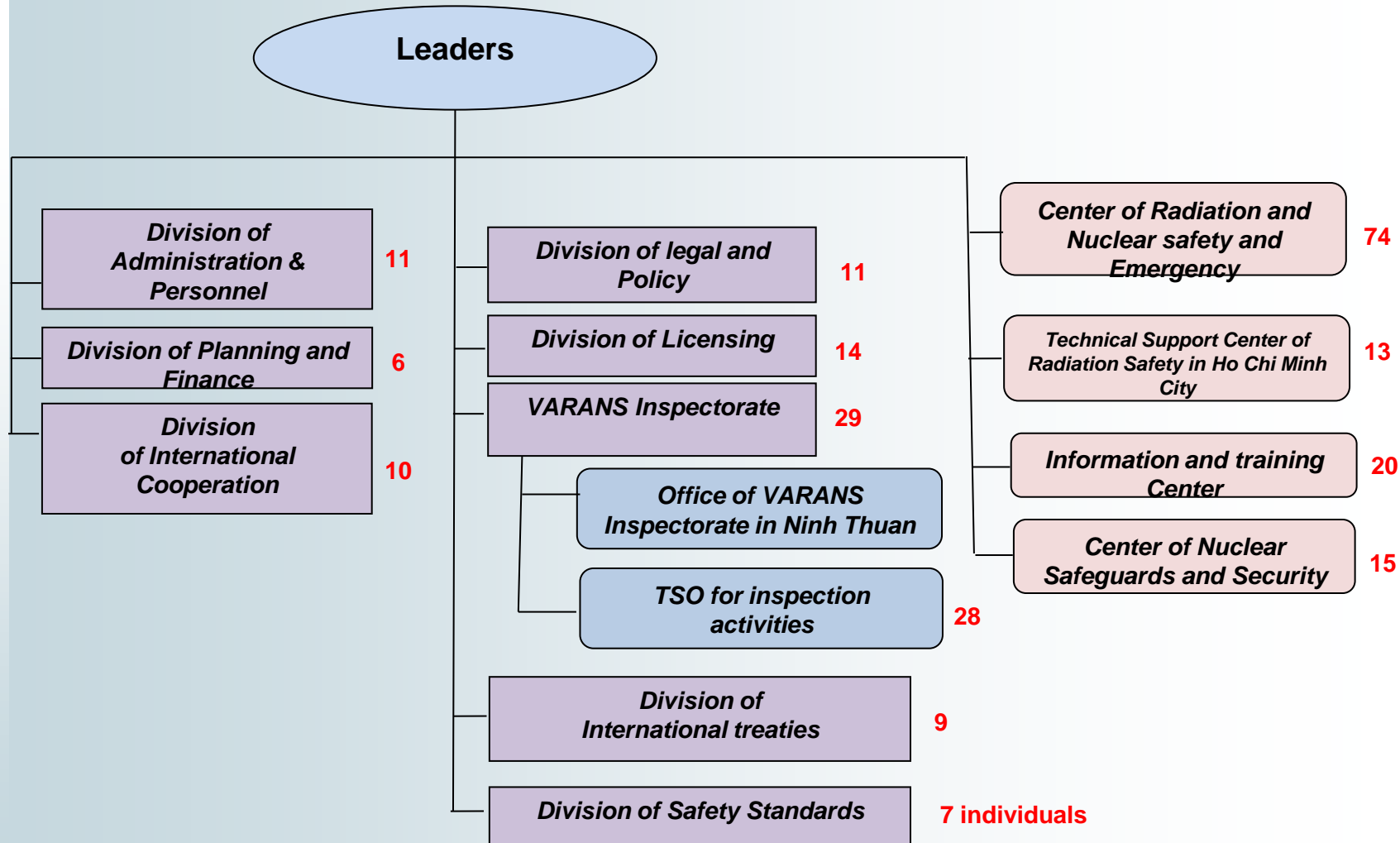
# Organization of VARANS

Current chart: ~100 staffs



# Organization of VARANS

**Up to 2020: Total 250 individuals (Draft)**



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## II. Legal Instrument for safety management

### ATOMIC ENERGY LAW (2008)

#### The Strategy

for peaceful uses of atomic energy up to 2020

#### Decree

No.70/2010/NĐ-TTg dated June 22, 2010 detailing and guiding a number of articles of the law on atomic energy regarding NPPS

#### Circular

No 13/2009/TT-BKHCN dated May 20, 2009 on preliminary nuclear safety assessment for site selection

#### Circular

No. 28/2011/TT-BKHCN dated 28th November, 2012 on nuclear requirements for nuclear power plants site

#### Circular

No. 29/2012/QĐ-BKHCN dated 28th December, 2012 on format and content of SAR for NPP site approval

#### Circular

No. 30/2012/QĐ-BKHCN on requirements on nuclear safety of design of NPPs

#### Circular

No. 08/2014/TT-BKHCN on Requirement of the format and content of SAR for FS approval phases

#### Circular

No.

19/2010/TT-BKHCN on guiding specialized inspection for radiation and nuclear safety

#### Circular

No.

25/2014/TT-BKHCN, dated 8<sup>th</sup> October, 2014 on Requirements of emergency response and preparation to radiation and nuclear accidents and planning and approval of response plan to radiation and nuclear accidents

#### Circular

No. 24/2014/TT-BKHCN dated August 25<sup>th</sup>, 2014 on Requirements on management of radiation waste and spent radiation source

#### Circular

No.

21/2013/TT-BKHCN dated September 12<sup>th</sup>, 2013 on Requirements on application of regulation and standards on nuclear safety in site selection, design, operation and decommission of NPPs

# Regulations for Safety Assessment

## The content of SAR (Decree No. 70/NĐ-TTg)

#	CONTENTS	Site approval	FS approval	Construction Licence	Operation Licence
1	INTRODUCTION	X	X	X	X
2	GENERAL DESCRIPTION OF PLANT	X	X	X	X
3	SAFETY MANAGEMENT		X	X	X
4	SITE EVALUATION	X	X	X	X
5	GENERAL DESIGN ESPECTS		X	X	X
6	DESCRIPTION OF ESSENTIAL SYSTEMS OF NPP		X	X	X
7	SAFETY ANALYSIS		X	X	X
8	CORRECTION AND TESTING OPERATION PROGRAM			X	X
9	OPERATION ESPECTS			X	X
10	OPERATION LIMITS AND CONDICTIONS			X	X
11	RADIATION PROTECTION		X	X	X
12	EMERGENCY PREPAREDNESS	X	X	X	X
13	ENVIRONMENTAL ESPECTS	X	X	X	X
14	RADIOACTIVE WASTE MANAGEMENT		X	X	X
15	DECOMMISSIONING AND END OF LIFE ASPECTS		X	X	X

# Regulations for Safety Assessment

Circular No. 29/2012/QĐ-BKHCHN dated 28th December, 2012 on format and content of SAR for NPP site approval

## The content of SAR

#	CONTENTS	Site approval	FS approval	Construction Licence	Operation Licence
1	INTRODUCTION	X	X	X	X
2	GENERAL DESCRIPTION OF PLANT	X	X	X	X
3	SAFETY MANAGEMENT		X	X	X
4	SITE EVALUATION	X	X	X	X
5	GENERAL DESIGN ESPECTS		X	X	X
6	DESCRIPTION OF ESSENTIAL SYSTEMS OF NPP		X	X	X
7	SAFETY ANALYSIS		X	X	X
8	CORRECTION AND TESTING OPERATION PROGRAM			X	X
9	OPERATION ESPECTS			X	X
10	OPERATION LIMITS AND CONDICTIONS			X	X
11	RADIATION PROTECTION		X	X	X
12	EMERGENCY PREPAREDNESS	X	X	X	X
13	ENVIRONMENTAL ESPECTS	X	X	X	X
14	RADIOACTIVE WASTE MANAGEMENT		X	X	X
15	DECOMMISSIONING AND END OF LIFE ASPECTS		X	X	X

# Regulations for Safety Assessment

Circular No. 08/2014/TT-BKHCN on Requirement of the format and content of SAR for FS approval phases

## The content of SAR

#	CONTENTS	Site approval	FS approval	Construction Licence	Operation Licence
1	INTRODUCTION	X	X	X	X
2	GENERAL DESCRIPTION OF PLANT	X	X	X	X
3	SAFETY MANAGEMENT		X	X	X
4	SITE EVALUATION	X	X	X	X
5	GENERAL DESIGN ESPECTS		X	X	X
6	DESCRIPTION OF ESSENTIAL SYSTEMS OF NPP		X	X	X
7	SAFETY ANALYSIS		X	X	X
8	CORRECTION AND TESTING OPERATION PROGRAM			X	X
9	OPERATION ESPECTS			X	X
10	OPERATION LIMITS AND CONDICTIONS			X	X
11	RADIATION PROTECTION		X	X	X
12	EMERGENCY PREPAREDNESS	X	X	X	X
13	ENVIRONMENTAL ESPECTS	X	X	X	X
14	RADIOACTIVE WASTE MANAGEMENT		X	X	X
15	DECOMMISSIONING AND END OF LIFE ASPECTS		X	X	X

# Regulations for Safety Assessment

Circular on Requirement of the format and content of SAR for construction permit phases (will be issued in Nov. 2014)

## The content of SAR

#	CONTENTS	Site approval	FS approval	Construction Licence	Operation Licence
1	INTRODUCTION	X	X	X	X
2	GENERAL DESCRIPTION OF PLANT	X	X	X	X
3	SAFETY MANAGEMENT		X	X	X
4	SITE EVALUATION	X	X	X	X
5	GENERAL DESIGN ESPECTS		X	X	X
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14	RADIOACTIVE WASTE MANAGEMENT		X	X	X
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# Regulations for Safety Assessment

## The Requirements/Criteria for Safety Review

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1	INTRODUCTION
2	GENERAL DESCRIPTION OF PLANT
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- Law/Decree

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▪ Law/Decree

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15	DECOMMISSIONING AND END OF LIFE ASPECTS

- Circular No. 13/2009/TT-BKHCN dated 20th May, 2009 by Minister of Science and Technology guiding on preliminary nuclear safety assessment for site selection for nuclear power plants in the investment decision stage (Pre-FS stage);
- Circular No. 28/2011/TT-BKHCN dated 28th November, 2012 on nuclear requirements for nuclear power plants site
- 5 Technical Standards (basing on IAEA technical guides



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- Circular No. 30/2012/QĐ-BKHCN on requirements on nuclear safety of design of NPPs (SSR 2/1)

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12	EMERGENCY PREPAREDNESS
13	ENVIRONMENTAL ESPECTS
14	RADIOACTIVE WASTE MANAGEMENT
15	DECOMMISSIONING AND END OF LIFE ASPECTS

- Circular No. 30/2012/QD-BKHCN on requirements on nuclear safety of design of NPPs (SSR 2/1)
- Circular on Requirements of DSA and PSA (will be issued in November 2014)

# Regulations for Safety Assessment

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▪ Not Available

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IV. Conclusions & Proposals for collaboration

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# Preparation for safety assessment of the Ninh Thuan NPP Project

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## Using international consultant for the first NPPs

- VARANS (together with MONRE) is preparing for the Technical Specifications of the bid's document for international consultant to support the Vietnam Regulatory Bodies for evaluation of SAR and EIA reports (both Site and FS approval phases)

## Organized 14 technical groups to:

- Preliminarily safety assess;
- Develop technical requirements and acceptance criteria for Technical Specifications of the bid's document;
- Manage safety assessment of international consultant;
- Participate in the assessment activities of international consultant;
- Review the evaluation reports of international consultant.

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## IV. Conclusions

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- Safety assessment is complicated and unfamiliar in Vietnam which need to be performed by high quality experts. For 2 first NPPs in Vietnam, using international consultants for supporting safety assessment is an appropriate approach.
- We have already initially prepared for safety assessment: infrastructure, legal development and human development.
- The achievement gained recently is significant, however, there are many things have to do in the coming future.







Sunday, August 19, 2012

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### THE LATEST NEWS:



**Cooperation with Japan on improvement of national legal system on compensation for nuclear damage**

On 14 August, Minister of Economy, Trade and Industry of Japan Yukio Edano came to visit and work with Minister of Science and Technology Nguyen Quan on cooperation in the field of nuclear energy.

### ANNOUNCEMENT

### AGENCY'S ACTIVITIES



#### Fourth international meeting on Next Generation Safeguards

From 3 to 5 July, the Vietnam Agency for Radiation and Nuclear Safety (VARANS) in collaboration with the U.S Department of Energy/National Nuclear Security Administration (DOE/NNSA) organized the Fourth international meeting on Next Generation Safeguards. Deputy Director General of VARANS Le Quang Hiep came to attend and address the opening speech.

- ▣ Seminar on nuclear regulatory body
- ▣ Implementing EC project on strengthening capabilities of the regulatory body
- ▣ Essential knowledge workshop on PSA
- ▣ France to support training of nuclear human resources for VN

**Thank  
you  
for  
your  
attention!**

