

FUNDAMENTALS OF REACTOR REGULATION
FUNDAMENTALS OF REACTOR SAFETY

FUNDAMENTALS OF REACTOR REGULATION - SESSION 1

DATE/TIME	SESSION	ACTIVITY
DAY 1		
8:30 to 9:00	Opening Session	Welcome Address Introduction: Purpose Schedule, Agenda
9:00 to 10:30	FORR	I. General Aspects of Regulation
10:30 to 11:00	Break	
11:00 to 12:00	FORR (Cont'd)	II. Legal Framework
12:00 to 1:30	Lunch	
1:30 to 2:30	FORR (Cont'd)	III. Phases of Oversight
2:30 to 3:00	Break	
3:00 to 4:30	FORR (Cont'd)	IV. Regulatory Functions V. Other Agency Activities
DAY 2		
8:30 to 8:45	Questions & Answers	
8:45 to 10:00	FORR (Cont'd)	VI. Regulatory Agency Infrastructure <ul style="list-style-type: none"> • Organizational Structure • Staffing • Training/Qualification • Technical Support
10:00 to 10:30	Break	
10:30 to 12:00	FORR (Cont'd)	VI. Summary Course Evaluation Certificates
12:00 to 1:30	Lunch	

FUNDAMENTALS OF REACTOR SAFETY - SESSION 2

DATE/TIME	SESSION	ACTIVITY
DAY 2 (cont)		
1:30 to 2:30	Opening Session	<ul style="list-style-type: none"> - Welcome - Introduction: Purpose - Schedule, Agenda
2:30 to 3:00	Break	
3:00 to 4:30	Basic Nuclear Concepts	<ul style="list-style-type: none"> - Electricity from Nuclear Energy - The Nuclear Chain Reaction
DAY 3		
8:30 to 10:30	Basic Nuclear Concepts (Cont'd)	<ul style="list-style-type: none"> - Fundamental Radiation & Radiation Protection - Decay Heat - Activation
10:30 to 11:00	Break	
11:00 to 12:00	Reactor Safety Strategy	<ul style="list-style-type: none"> - Fundamental Safety Objectives - Acceptance Criteria - Safety Functions
12:00 to 1:30	Lunch	
1:30 to 2:30	Reactor Safety Strategy (Cont'd)	<ul style="list-style-type: none"> - Defense-in-Depth Philosophy - Single Failure Criterion - Safety Margins
2:30 to 3:00	Break	
3:00 to 3:30	Reactor Safety Strategy (Cont'd)	<ul style="list-style-type: none"> - Safety Design Considerations
3:00 to 4:30	Hazard Identification	<ul style="list-style-type: none"> - Internal Initiators - External Hazards
DAY 4		
8:30 to 8:45	Questions & Answers	
8:45 to 10:00	Safe Design and Operation	<ul style="list-style-type: none"> - Quality Assurance - Codes and Standards - Qualification Programs - Operations and Maintenance - Security - Management Excellence
10:00 to 10:30	Break	
10:30 to 12:00	Core Protection	<ul style="list-style-type: none"> - Safety Systems - Support Systems - Operator Actions
12:00 to 1:30	Lunch	
1:30 to 2:30	Consequence Mitigation	<ul style="list-style-type: none"> - Containment - Accident Management - Emergency Response/Protective Actions
2:30 to 3:00	Break	

3:00 to 4:30	Reactor Accidents	<ul style="list-style-type: none"> - Plant Operational Conditions - Accident Scenarios - Accident Progression - Accident Consequences - INES Scale - Three Mile Island Accident - Fukushima Event - Tokai-Mura
4:30 to 5:00		Summary Course Evaluation Certificates
5:00	Adjournment	

Sample Agenda