



BWR FUEL

UP TO 5 YEARS
EXPERIENCE

PHASE I

FUEL
INTRODUCTION »

PHASE II

BWR FUEL
ENGINEERING »

PHASE III

BWR CHEMISTRY
INTRODUCTION »

PHASE IV

FUEL DESIGN AND MANUFACTURING:

- FUEL DESIGN REVIEW »
- FUEL FABRICATION
 - FUEL FABRICATION AUDIT/REVIEW »
 - ZR ALLOY MANUFACTURING »
 - MICROSTRUCTURE OF ZR ALLOYS AND EFFECTS ON PERFORMANCE »

FUEL PERFORMANCE IN-REACTOR AND TESTING:

ZR ALLOYS

- ZR ALLOY MICROSTRUCTURE »
- DIMENSIONAL CHANGES OF FUEL ASSEMBLIES/CHANNELS AND COMPONENTS
 - IRRADIATION GROWTH »
- FUEL RELIABILITY
 - › RADIOCHEMISTRY » » FUEL RELIABILITY I » »» FUEL RELIABILITY II »
- MECHANICAL TESTING OF ZIRCONIUM ALLOYS »
- ZR MECHANICAL PROPERTIES AND IRRADIATION EFFECTS »
- HOT CELL EXAMINATION
 - › PART 1 » » PART 2 »
- ZR ALLOY CORROSION AND HYDROGEN PICKUP
 - › ZR ALLOY CORROSION AND HPU » » ZR ALLOY CORROSION AND HYDROGEN PICKUP MECHANISMS »
- ACCIDENT TOLERANT FUEL
 - › ATF I » » ATF II » »» ATF III »
- PELLET CLADDING INTERACTION »
- REACTIVITY INITIATED ACCIDENT »

INTERIM DRY STORAGE:

- › INTERIM DRY STORAGE I » » INTERIM DRY STORAGE II » »» INTERIM DRY STORAGE III »

PHASE I

5-10 YEARS
EXPERIENCE

PHASE II

BWR FUEL
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INTERIM DRY STORAGE:

- INTERIM DRY STORAGE I » » INTERIM DRY STORAGE II » »» INTERIM DRY STORAGE III »
- DELAYED HYDRIDE CRACKING »

IRRADIATION OF ZR ALLOYS:

- CHARGED PARTICLE BOMBARDMENT OF ZIRCONIUM ALLOYS »

LONG TERM STORAGE OF NUCLEAR FUEL/OPERATIONAL WASTE:

- LONG TERM STORAGE OF NUCLEAR WASTE »

10+ YEARS EXPERIENCE

PHASE I

BWR FUEL ADVANCED »

PHASE IV

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