



# ZERO DEFECT LEVEL IN VVER 1000



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# INTRODUCTION

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- Dream: Problems free operation
- Current Fuel:
  - cost effective,
  - flexible fuel cycle,
  - operational flexibility,
  - defect free - reliable,
- What shall we do?
- TVEL initiative
  - 2012: Driving to zero level defect
  - 2013: 4 + 1 participants

# PROJECT SCOPE 1



- 4-party Memorandum: Fuel supplier TVEL + Project administrator ALVEL
  - + ČEZ, a.s, (Czech Republic)
  - + NAEK Energoatom, (Ukraine)
  - + Kozloduj NPP (Bulgaria)
- Project structure
  - Steering Committee
  - Executive Committee
  - Working Groups (WG)
    - Design
    - Manufacturing
    - Operation
- Intergroup communication.
  - Executive Committee
  - Joint meetings

# PROJECT SCOPE 2

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- Defect / fuel failure
  - leakers
  - any deviation from design
- Stages
  - 1: 2013-2014  
Analysis of situation and root cases of fuel failures definition
  - 2: - 2014-1015  
Development of *organizational and technical actions* for fuel failures elimination
  - 3: 2015-2017 r. r.  
Implementation and monitoring of actions at Participant's and fuel developer's enterprises

# CURRENT STATUS

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- Approved Project regulations
- Approved WG schedules
- Project Success Criteria
- Fuel types specifics
- Operational conditions specification
- Fuel assemblies of interest

# CONCLUSION

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- Operation safety increase
- Operation reliability increase
- Spent fuel amount decrease
- Rad waste decrease
- Maintenance staff exposure decrease
- Operation economy increase

Thank you for your attention