**INTERNATIONAL ATOMIC ENERGY AGENCY**

**TECHNICAL CO-OPERATION & ASSISTANCE PROGRAMME**

**EXPERT REQUEST FORM**

**N.B: this request form must be submitted to the IAEA at least 3 months prior to expected mission dates**

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| **ADMINISTRATIVE MATTERS** | |
| Project code: | IRA/ 2/013 |
| Project title: | Enhancing the Level of Operational Safety and Reliability of the Bushehr Nuclear Power Plant |
| Title of mission: | Expert Mission on strategies and reviewing methods and decision making on the applied modifications on nuclear power plant typical program and utilizing the risk-based inspection on reducing the inspections and / or hydraulic tested on plants systems – The IAEA will come back to NPPD by the end of May 2019 with proposal for implementation. |
| Duty station: | - |
| Administrative (including VISA Support) contact person:  (specify address, phone and E-mail) | +98-021-24882808  shokoohi@nppd.co.ir |
| Technical contact person:  (specify address, phone and E-mail) | - |
| Duration of mission: | 5 days |
| Venue date proposal (provide 2): | Quarter 4 / 2021 |
| Expected breaks and working hours during mission: | - |

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| **TECHNICAL CONTEXT** | | |
| Context of the mission – why is it needed:  (add a justification for the request of the expert mission e.g. To support national project, IAEA project) | * Necessity for revision in organizing In-Service Inspections after 6 year operation of BNPP * Limitations in the present inspections in Typical Program of ISI of BNPP and its necessity for program updating * Application of Risk-Based Inspection on the NPP In-Service Inspections * Methodology for implementation of RBI on the In-Service Inspections * Methodology for the increase/decrease of In-Service Inspections program and their related requirements * Using non-destructive tests instead of systems and equipment hydraulic tests-advantages/disadvantages and related experiences * Application of new and advanced methods for the inspection of main and crucial equipment of NPP * Application of new and advanced methods of NDE and NDT to predict the failure of equipment and reduce the unnecessary repair * All of above- mentioned items is needed to be studied from western and eastern point of view | |
| Expected outcomes – what is needed: | * Be familiar with the experience, methods and methodologies of revise on the ISI programme and it’s organisation * Be familiar with the overhaul and ISI experience and their application in typical program of ISI * Application of Risk-Base Inspection methodology in the inspections and their usage in time of necessity * Application / not application of NDT methods instead of hydraulic tests according to the mission outcome- advantages/disadvantages and related experiences * Application of new and advanced methods of NDE and NDT to predict the failure of equipment and reduce the unnecessary repair * Establishing new inspection methods , improving safety and inspection outcome | |
| Expected number of attendees (people attending the mission): | 5-7 person | |
| Level of the audience (specify the technical background and the professional experience of the attendees) | * Quality Control inspection manager with 13-year experience in PSI and ISI inspections- PhD in Nuclear Engineering(NDT and DT level 3) * NDT group head with 12-year experience in PSI and ISI inspections- Mechanical Engineer(NDT level 3) * Technical Control and Inspection group head with 12-year experience in PSI and ISI inspections- Master of Science in Nuclear Engineering(NDT level 2) * Technical Control and Inspection experts with 7year experience in PSI and ISI inspections- Master of Science in Physics(NDT level 2) * NDT expert with 12-year experience in NDT tests- Mechanical Engineer(NDT level 2) * DT expert with 10-year experience in DT tests- Master of Science in Materials Engineering(DT level 3) | |
| **EXPERT MATTERS** | | |
| Number of Expert/s expected: | 3-4 persons(from both of western and eastern NPPs) | |
| Field of Expertise: | Materials Inspector, NDT Specialist, ISI Documentation Specialist, Advanced methods Inspecting Specialist, RBI Specialist | |
| Duties: | Experts of ISI documentation, NDT, RBI and Advanced NDT with enough experience in NPP or Nuclear Leading Material Organisation | |
| Qualification of expert: | Level 3 NDT and Field experts of NNPs or Nuclear Leading Material Organisation in ISI documentation, NDT, and RBI | |
| Acceptable working language of expert: | English, Russian | |
| **If specific expert is suggested, please indicate the name and address. This does not mean that the expert will be automatically considered for the mission**. | | |
| Name:  Telephone:  E-mail and Address: | |  |