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| C:\Users\tarykin\Desktop\LOGO-Full Wording-P301.jpg | **World Association of Nuclear Operators**  **Moscow Centre**  **WANO – MC**  25 Ferganskaya, Moscow, 109507, Russia  Phone. +7 495 376 15 87  Fax: +7 495 376 08 97  [info@wanomc.ru](mailto:info@wanomc.ru) |

**REQUEST**

**to provide technical and organizational information via WANO**

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| 1. **NPP/Organization:** Bushehr NPP IRAN (Request Number BNPP2022.Rq01.eng) |
| 1. **The topic of information request:** Requirements for existence of prohibition of connection of the backup input in the doubly-fed control circuits at the time of short circuit error |
| 1. **The goal of information request:** Gaining Experience and using information from other NPPs about requirements for existence of prohibition of connection of the backup input in the doubly-fed control circuits at the time of short circuit error. A) If the doubly-fed design would be used for the consumers of the control circuit, is the prohibition of connection of the backup input required or not? B) What is the criterion for selecting a design? |
| 1. **The describing of problem:**   In the Bushehr-1 Nuclear Power Plant, occurrence of short circuit during the repairs on the control circuit caused the disconnection of the main power supply input switch and due to lack of prohibition of connection of the backup switch, the backup switch was connected and the control circuit was activated under the short circuit. |
| 1. **Specific Questions:**   Occurrence of short circuit during the repairs on the control circuit (Voltage level=220v) caused the disconnection of the main power supply input switch and due to lack of prohibition of connection of the backup switch, the backup switch was connected and the control circuit was activated under the short circuit. Since the occurrence of such conditions is not unexpected, the following question would be brought up in regard to facing such design.  **1- What are the regulatory requirements for the doubly-fed circuits of the control circuits?**  **2- Regardless of the type of consumers, is the “prohibition of connection of backup switch in case of occurrence of short circuit” is mandatory from the safety point of view?**  **3- In case of impossibility of implementation of the design of prohibition of connection of backup switch in case of occurrence of short circuit, what is the alternative solution?**  We ask you to share any related information and experiences from your NPP . |
| 1. Proposed organizations for sending this request: ALL NPPs |
| 1. Department – request initiator: Electricity Management of BNPP |
| 1. Contact details of the requester: A. Alipour - Manager of Electricity |
| 1. Date of request: 02 Feb. 2022 |

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