

**BNPP**

**DEPUTY of SAFETY**

**EMERGENCY PLANNING**

**Plan for**

**Bushehr NPP Comprehensive Emergency Exercise**

**With Participation of WANO Regional Crisis Center (RCC) and Members**

**October 2022**

**Plan for**

**Bushehr NPP Comprehensive Communication Exercise**

**With Participation of Off-site Response Organizations including WANO Regional Crisis Center (RCC) in Moscow and WANO Members**

1. **Date for implementing the emergency preparedness exercise**: October 19, 2022.
2. **Time (Moscow time) for implementing the emergency preparedness exercise**: 9:00 am – 2:30 pm
3. **Subject**:

Bushehr NPP Emergency Communication Exercise with Participation of WANO Regional Crisis Center (RCC**)** during the Accident and Exchanging Information for fixing it based on the Accident Scenario.

1. **A summary of accident scenario**

All power supply lines (non-emergency) of the Plant alternative current are disconnected due to unknown causes. In this situation, reactor emergency protection signal is actuated due to the shutdown of three RCPs out of four operating RCPs. However, due to mechanical problems in working mechanism of control rods, control rods get stuck and do not insert into reactor core and hence reactor emergency protection is not actuated completely. Some of control rods do not insert into reactor core and some others insert into reactor core about 50% at most and as the result of this, reactor power does not become zero and reactor mode is not transferred to subcritical mode.

1. **Objective of Exercise:**
* Ensuring a systemic communication between Bushehr NPP and WANO Regional Crisis Center at Moscow;
* Evaluating the quality and efficacy of communication systems in NPP and RCC;
* Evaluating the personnel in using the communication systems;
* Evaluating the personnel in filling and approving the report forms;
* Evaluating the inter-team communications in BNPP during the accident and how to offer recommendation, consultancy and required guides;
* Evaluating the quality and adequacy of required responses received from off-site (recommendation, consultancy, expertise).
* Identifying the possible defects and deficiencies and formulating the corrective measures.
1. **Manager of Exercise:**

Mr. Reza Banazadeh: Director of Bushehr NPP-1.

1. **Coordinator Person:**

Mr. Mohammad Hadi Jafari: Emergency Planning manager at Bushehr NPP-1;(Saturday to Wednesday, 07:30 a.m. – 02:00 p.m. (local Time) +987731112640).

1. **Protocol group manager:**

Mr. Kazem Khezri: Manager of Management and Supervision System at Bushehr NPP-1.

1. **Participants:**
* Crisis management Committee of Bushehr NPP-1;
* WANO Moscow Centre RCC;
* WANO London office Emergency Response Organization (ERO);
* National Nuclear Safety Department (Regulatory Body);
* Nuclear Power Production & Development Co. of Iran (Operating Organization);
* Other WANO Members (other NPPs).
1. **Initial Organization of Participants:**
* the BNPP scenario formulation committee determines and approves the scenario and exercise program and notifies to the internal and external members who participate in it;
* Internal coordinating and ensuring the readiness of crisis management center and communication systems considered therein;
* Making coordination with WANO Regional Crisis Center(Moscow)
* Making coordination with NNSD (Regulatory Body);
* Making coordination with Nuclear Power Production & Development Co. of Iran (Operating Organization);
1. **Type of exercise**

Comprehensive Communication with participation of WANO Regional Crisis Center (Moscow) and domestic response organizations.

1. **Method of performing the exercise**
* In Time Mode by simulating the accident at the “Unit-1” of the BNPP and notifying the WANO (Moscow) Crisis Management Center according to the Regulation for Information Exchange and the instructions for planning, implementing and assessing preparedness exercises for emergencies at the “Unit-1” of the BNPP.
* Informing to the WANO Regional Crisis Center (Moscow) and other member NPPs as per the regulation for information exchange and procedure on “how to inform the emergencies during the accident at BNPP-1”.
1. **Organizing the information transfer in emergency preparedness exercises within RCC framework:**
* Readiness of communication system for operation such as telephone, fax, internet, email and video conference;
* Telephone number of drill manager for responding: +987731112644;
* Telephone number of Crisis Center Coordinator Person: +987731112640 (Saturday to Wednesday, 07:30 a.m.– 02:00 p.m., Iranian local time);
* Fax number of Crisis Center for responding: +987731112655;
* E-mail of Crisis Center Coordinator: Bnpp.ICS@nppd.co.ir;
* Telephone number of plant shift Supervisor:

+987731113112 & +987731114403 (7/24);

* All information and reports are developed and sent on the basis of Regulation for Information Exchange;
* All conversations and correspondences through various communication systems begin with the word **“exercise”**.
1. **Evaluating the emergency preparedness exercise:**

Evaluation is made based on achieving the objectives in article 2 and as per the following criteria:

* Using the Regulation for Information Exchange;
* Using the approved reporting forms;
* Using sufficient communication systems during the accident;
* Implementing the exercise as per schedule of accident trend;
* Correct answers for handle the simulated accident;

**Plan of BNPP Crisis Management Center in Emergency Preparedness Exercise**

| NO | Official time (Moscow) | Time for taking measures | Simulated accident, Measures taken by participants | Actor |
| --- | --- | --- | --- | --- |
|  | 08:00 – 09:00 (am) | H+0:00 – H+1:00 | Starting the emergency preparedness exercise with simulating the accident in initial hours of accident in BNPP | Bushehr NPP |
|  | 08:30 – 09:00 (am) | H+0:30 - H+1:00 | Simulation of calling the members of crisis management committee to crisis management center and submission of accident report by NPP shift supervisor to the committee and decision making of the committee members based on submission of report to Moscow regional crisis center. | Bushehr NPP |
|  | 09:10 – 09:40 (am) | H+1:10 - H+1:40 | Sending the safety significant event message at BNPP (Form RCC-2) to WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body)  | Bushehr NPP |
|  | 09:20 – 09:50 (am) | H+1:20 - H+1:50 | Sending the message from WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body) to BNPP on receiving the information on safety significant accident in Bushehr NPP. | RCC- NPPD- NNSD  |
|  | 09:50 – 10:20 (am) | H+1:50 – H+2:20 | Sending the message on on-site accidents / extensive accidents (Form RCC-3) to WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body).  | Bushehr NPP |
|  | 10:00 – 10:30 (am) | H+2:00 – H+2:30 | Sending the message from WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body) to BNPP on receiving the information about the on-site or extensive accidents. | RCC- NPPD- NNSD |
|  | 10:30 – 11:00 (am) | H+2:30 – H+3:00 | Sending the information from NPP in each inspection made from Unit status as well as the radiation status in BNPP and on-site (Form RCC-3a-1) to WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body). | BNPP |
|  | 10:40 – 11:10 (am) | H+2:40 – H+3:10 | Sending the message from WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body) to BNPP on receiving the Form RCC-3a-1. | RCC- NPPD- NNSD |
|  | 11:10 – 11:40 (am) | H+3:10 – H+3:30 | Sending the request for consulting/expert, technical-engineering and logistic support (Forms RCC-4 & RCC-5) to WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body), | Bushehr NPP |
|  | 11:40 (Am) – 12:10 (pm) | H+3:40 – H+4:10 | Sending the information from NPP in each inspection made from Unit status as well as the radiation status in BNPP and on-site (Form RCC-3a-2) to WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body. | BNPP |
|  | 11:50 (Am) – 12:20 (pm) | H+3:50 – H+4:20 | Sending the message from WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body) to BNPP on receiving the Form RCC-3a-2. | RCC- NPPD- NNSD  |
|  | 12:30 – 12:50 (pm) | H+4:30 – H+4:50 | Receiving the consulting-expert and technical- engineering response from WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body. | RCC- NPPD- NNSD  |
|  | 12:50 – 01:20 (pm) | H+4:50 – H+5:20 | Sending the information from NPP in each inspection made from Unit status as well as the radiation status in BNPP and on-site (Form RCC-3a-3) to WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body). | BNPP |
|  | 01:00 – 01:30 (pm) | H+5:00 – H+5:30 | Sending the message from WANO Regional Crisis Center (Moscow), NPPD Co. of Iran (Operating Organization), NNSD (Regulatory Body) to BNPP on receiving the Form RCC-3a-3. | RCC- NPPD- NNSD  |
|  | 01:30 – 01:50 (pm) | H+5:30 – H+5:50 | Announcing the resolving of accident in Bushehr NPP & Announcing the end of emergency exercise plan (Form specified for end of exercise) | BNPP |
|  | 02:00 – 02:30 (pm) | H+6:00 – H+6:30 | Three-way video conferencing meeting with the WANO RCC (Moscow) and NPPD Co. of Iran (Operating Organization) to bring the exercise to a conclusion | BNPP- RCC  |

Форма РКЦ-2 (Format RCC-2)
Сообщение о событиях на АС важных с точки зрения безопасности/
*Plant safety significant event message*сообщение / *message* №

|  |  |
| --- | --- |
| Адресат /Аddressee: | Региональный кризисный центр ВАО АЭС в МосквеWANO Moscow Centre Regional Crisis Center |
| От /From:       |  |
| Факс /Fax: |       | Эл. почта / Email: |       | Телефон / Phone: |       |
| Число страниц /Pages      |  |
| [ ]  | срочно /urgently | [ ]  | требует ответа /response required | [ ]  | для ознакомления / for information | [ ]  | подтвердить получение/acknowledge receipt |
| 1. Станция /Plant:       Блок / Unit:       Тип РУ / Reactor type:       Страна / Сountry:       |
| 2. Возникновение события (местное время) /Event Occurrence (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 3. Состояние реакторной установки до возникновения события / Unit status prior event: |
| **[ ]**  | **На мощности /At power** |  | **% от ном./% of nominal** | **[ ]**  | **Горячий ост. /Hot Condition** | **[ ]**  | **Холодный ост./Cold Condition** | **[ ]**  | **Перегрузка / Refueling** |
| 4. Событие / Event:4.1 Срабатывание системы безопасности/ Safety system actuation [ ]  4.2 Отказ системы безопасности / Safety system failure [ ]  4.3 Отключение от энергосистемы / Loss of external grid [ ]  4.4 Пожар или взрыв/ Fire or explosion [ ]  4.5 Внешняя опасность злонамеренных действий/ External human threat [ ]  4.6 Экстремальные внешние условия/ Extreme external conditions [ ]  4.7 Выход радиоактивности в пределах станции/ Release of radioactivity inside plant [ ]  4.8 Выход радиоактивности за пределы станции/ Release of radioactivity outside plant [ ] 4.9 Другое/ Other [ ]  |
| 5. Описание события /Description of event:            |
| *(при необходимости, продолжите описание события на стр. 2 / if necessary, continue the description on page 2)* |

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| 6. Последствия / Consequences: 6.1 Количество пострадавших/ Number of injured persons:      6.2 Повреждения станции/ Plant damages:      6.3 Радиационная обстановка/ Radiation situation: нормальная / normal [ ] 6.4 Повышенные уровни радиации внутри зданий станции/ Increased levels measured inside plant buildings [ ]        мЗв/ч / mSv/h6.5 Повышенные уровни радиации на промплощадке / Increased levels measured inside the fence [ ]        мЗв/ч / mSv/h |
| 7. Надзорные органы оповещены/ Authorities informed: Да / Yes [ ]  Нет / No [ ]  7.1 Население и пресса оповещены/ Public and media informed: Да / Yes [ ]  Нет / No [ ]  |
| 8. Состояние энергоблока на момент сообщения / Unit status at time of message:  |
| **[ ]**  | На мощности /At power |       | % от ном./of nominal | [ ]  | Горячий ост. /Hot Condition | [ ]  | Холодный ост./Cold Condition | [ ]  | Перегрузка / Refueling |
| 9. Отправлено: Ф.И.О. и должность / Sender and position:      Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:     local time мест.время |
| 10. Получено Ф.И.О. и должность/ Receiver and position:       Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:      МСК MSK |
| 11. Направлено на станции- члены ВАО АЭС / Forwarded to member plants: Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:      МСК MSK |

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| *(при необходимости продолжите описание события здесь / if necessary, continue the description here)* |
|       |

Форма РКЦ-3-ВВЭР (Format RCC-3-VVER)
Сообщение об аварии в пределах промплощадки АС / общей аварии
*ON-SITE / GENERAL EMERGENCY* message

сообщение / *message* №

|  |  |
| --- | --- |
| Адресат /Аddressee: | Региональный кризисный центр ВАО АЭС в Москве/WANO Moscow Centre Regional Crisis Center |
| От /From:       |  |
| Факс /Fax: |       | Эл. почта / Email: |       | Телефон / Phone: |       |
| Число страниц /Pages | 2 |
| [ ]  | срочно /urgently | [ ]  | требует ответа /response required | [ ]  | для ознакомления /for information | [ ]  | подтвердить получение/acknowledge receipt |

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| 1. Станция /Plant:       Блок / Unit:       Страна / Сountry:       |
| 2 Объявлена /Announced:авария в пределах промплощадки АС/ On-Site Emergency [ ] , общая авария / General Emergency [ ]  |
| 3. Авария объявлена (местное время) /Announced at (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 4. Состояние реакторной установки до возникновения события / Unit status prior event: |
| [ ]  | На мощности/At power |       | % от ном./% of nominal | [ ]  | Горячий ост. /Hot Condition | [ ]  | Холодный ост./Cold Condition | [ ]  | Перегрузка / Refueling |
| 5. Работоспособность систем безопасности / Availability of safety systems: Наличие аварийного электропитания / Emergency power supply: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Питание от дизель-генератора/ Emergency diesel power: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Внешнее питание / External grid: Да/Yes [ ]  Нет/ No [ ]  Неизвестно/Status unknown [ ] Отвод остаточного энерговыделения /Residual heat removal: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] САОЗ ВД /High pressure safety injection: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] САОЗ НД/Low pressure safety injection: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Баки САОЗ/Emergency water tanks: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Гидроемкости САОЗ/ECCS accumulators: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ]  |
| 6. Описание события /Description of event:       |
| *(при необходимости, продолжите описание события на стр. 2 / if necessary, continue the description on page 2)* |

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| 7. Последствия / Consequences: 7.1 Количество пострадавших/ Number of injured persons:      7.2 Повреждения станции/ Plant damages:      7.3 Радиационная обстановка/ Radiation situation: нормальная /normal [ ] 7.4 Максимальное повышение уровня радиации внутри зданий станции /Maximum Increased levels measured inside plant buildings [ ]        мЗв/ч / mSv/h; Указать где / Where?      7.5 Радиационная обстановка на промплощадке / Increased levels measured inside the fence [ ]        мЗв/ч / mSv/h; Указать где / Where?       |
| 8. Надзорные органы оповещены/ Authorities informed: Да / Yes [ ]  Нет / No [ ]  8.1 Население и пресса оповещены/ Public and media informed: Да / Yes [ ]  Нет / No [ ]  |
| 9. Состояние энергоблока на момент сообщения/ Unit status at time of message:  |
| [ ]  | На мощности /At power |       | % от ном./% of nominal | [ ]  | Горячий ост. /Hot Condition | [ ]  | Холодный ост./Cold Condition | [ ]  | Перегрузка / Refueling |
| 10. Отправлено: Ф.И.О. и должность / Sender and position:      Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:     local time мест.время |
| 11. Получено Ф.И.О. и должность/ Receiver and position:       Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:      МСК MSK |
| 12. Направлено на станции- члены ВАО АЭС / Forwarded to member plants: Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:      МСК MSK |
| *(при необходимости продолжите описание события здесь / if necessary, continue the description here)* |
|       |

**Форма РКЦ-3а-ВВЭР (Format RCC-3а-VVER)
Данные о развитии аварии в пределах площадки/общей аварии**

***Status up-date of on-site / general emergency*сообщение / *message* №**

|  |  |
| --- | --- |
| Адресат /*Аddressee:* | Региональный кризисный центр ВАО АЭС в МосквеWANO Moscow Centre Regional Crisis Center |
| От /*From:* |  |
| Факс /*Fax:* |  | Эл. почта / Email: |  | Телефон / Phone: |  |
| Число страниц /Pages | 2 |
| [ ]  | срочно */urgently* | [ ]  | требует ответа /*response required* | [ ]  | для ознакомления / *for information* | [ ]  | подтвердить получение*/acknowledge receipt* |

|  |
| --- |
| 1. Станция /Plant:       Блок / Unit:       Страна / Сountry:       |
| 2 Объявлена /Announced:авария в пределах промплощадки АС/ On-Site Emergency [ ] , общая авария / General Emergency [ ]  |
| 3 Авария объявлена (местное время) /Announced at (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 4. Состояние критических функций безопасности / Status of critical safety functions:Функция (Состояние)/ Экстремальное Тяжелое Неудовл. Удовл. НеизвестноFunction(Condition) Extreme Severe Unsatisf. Satisf. Not known 4.1 Подкритичность активной зоны /Reactor core subcriticality [ ]  [ ]  [ ]  [ ]  [ ] 4.2 Охлаждение активной зоны / Reactor core cooling [ ]  [ ]  [ ]  [ ]  [ ] 4.3 Отвод остаточного тепловыделения (перв./втор. контур)/Residual heat removal (prim./sec. circuit) [ ]  [ ]  [ ]  [ ]  [ ] 4.4 Наличие конечного поглотителя / Ultimate heat sink availability [ ]  [ ]  [ ]  [ ]  [ ] 4.5 Целостность первого контура /Primary circuit integrity [ ]  [ ]  [ ]  [ ]  [ ] 4.6 Целостность гермооболочки / Containment integrity [ ]  [ ]  [ ]  [ ]  [ ] 4.7 Запас теплоносителя в первом контуре / Primary circuit inventory [ ]  [ ]  [ ]  [ ]  [ ]   |
| 5. Работоспособность систем безопасности / Availability of safety systems: Внешнее питание / External grid: Да/Yes [ ]  Нет/ No [ ]  Неизвестно/Status unknown [ ] Питание от дизель-генератора/ Emergency diesel power: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Отвод остаточного энерговыделения/Residual heat removal: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] САОЗ ВД /High pressure safety injection: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] САОЗ НД/Low pressure safety injection: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Баки САОЗ/Emergency water tanks: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ] Гидроемкости САОЗ/ECCS accumulators: Да/Yes [ ]  Нет/No [ ]  Неизвестно/Status unknown [ ]  |
| 6. Корректировка данных по ситуации (изменения в ситуации перед последним сообщением)/ Situation update (changes in situation prior last message):      *при необходимости, продолжите описание события на стр. 2 / if necessary, continue the description on page 2)* |

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| 7. Последствия /Consequences: 7.1 Количество пострадавших/ Number of injured persons:      7.2 Повреждения станции/ Plant damages:      7.3 Радиационная обстановка/ Radiation situation: нормальная / normal [ ] 7.4 Максимальное повышение уровня радиации внутри зданий станции /Maximum Increased levels measured inside plant buildings [ ]        мЗв/ч mSv/h  Указать где / Where?      7.5 Повышенные уровни радиации на промплощадке / Increased levels measured inside the fence [ ]        мЗв/ч mSv/h Указать где / Where?      7.6 Персонал станции эвакуирован /Plant personnel evacuated: Да/Yes [ ]  Нет/No [ ] 7.7 Население из зоны аварийного реагирования эвакуировано / Protective area evacuated:Да/Yes [ ]  Нет/No [ ]  |
| 8. Метеорологические условия/ Weather conditions:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Направление распространения выброса / release transport direction |       | Осадки/ Precipitation | [ ]  | да/yes | [ ]  | нет/no |  |
| C:\Users\loktionov\Documents\2014\РКЦ\ПАТ ВИЗИТЫ\ПАТ Ростовская 21-07-2015\roza NPP2.jpg | Скорость/ Speed, м/с  m/s |       | Интенсивность осадков / Precipitation intensity | мм/ч      mm/h |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

 |
| 9. Дополнительная информация/ Additional information Ф.И.О. Name:       Телефон/ Phone:       |
| 10. Отправлено: Ф.И.О. и должность / Sender and position:      Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:     local time мест.время |
| 11. Получено Ф.И.О. и должность/ Receiver and position:       Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:      МСК MSK |
| 12. Направлено на станции- члены ВАО АЭС / Forwarded to member plants: Год/Year:      Месяц/Month:      День/Day:      Час/Hour:      Мин/Min:      МСК MSK |

|  |
| --- |
| *(при необходимости продолжите описание здесь / if necessary, continue the description here)* |
|       |

**Форма РКЦ-4 (Format RCC-4 )**

**Запрос об оказании экспертной / консультативной и инженерно-технической поддержки/**

***Request for expert/consultative and engineering support***

**сообщение / *message* №**

|  |  |
| --- | --- |
| Адресат /*Аddressee:* | Региональный кризисный центр ВАО АЭС в Москве*WANO Moscow Centre Regional Crisis Centre* |
| От /*From:* |  |
| Факс /*Fax:* |  | Эл. почта / Email: |  | Телефон / Phone: |  |
| Число страниц (Pages) | 1 |
| [ ]  | срочно */urgently* | [ ]  | требует ответа /*response required* | [ ]  | для ознакомления / *for information* | [ ]  | подтвердить получение*/acknowledge receipt* |

1. Станция /Plant:  Блок / Unit:  Страна / Сountry:

2. Суть запроса / Content of request:

|  |
| --- |
|  |

|  |
| --- |
| 3. Отправлено: Ф.И.О. и должность / Sender and position:      |
| 4. Дата и время (местное) / Date and time ( местное время/local time):  Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:        |
| 5. Получено Ф.И.О. и должность (местное время) /Receiver and position (МСК/Moscow time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:        |
| 6. Направлено на станции- члены ВАО АЭС (местное время) / Forwarded to member plants (МСК/Moscow time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |

**Форма РКЦ-5 (Format RCC-5 )**

**Запрос о предоставлении о противоаварийных сил и средств членов РКЦ/
Request for provision of RCC member emergency response forces and resources**

**сообщение / *message* №**

|  |  |
| --- | --- |
| Адресат /*Аddressee:* | Региональный кризисный центр ВАО АЭС в Москве*WANO Moscow Centre Regional Crisis Centre* |
| От /*From:* |  |
| Факс /*Fax:* |  | Эл. почта / Email : |  | Телефон / Phone : |  |
| Число страниц /Pages | 1 |
| [ ]  | срочно */urgently* | [ ]  | требует ответа /*response required* | [ ]  | для ознакомления / *for information* | [ ]  | подтвердить получение*/acknowledge receipt* |

1. Станция /Plant:  Блок / Unit:  Страна / Сountry:

2. Требуются следующие силы (людские ресурсы) / *Required forces (human resources)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Страна/ *Country* | Наименование организации/ *Name of organization* | Необходимы следующие силы (специализация)/ *Required forces (specialization)* | Численность/ *Quantity* | Примечание/ *Comments* |
|  |  |  |  |  |
|  |  |  |  |  |

3. Требуются следующие материально-технические средства (МТС)/ *Required material and technical resources*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Страна/ *Country* | Наименование организации/ *Name of organization* | Необходимые материально-технические средства (название и подробные характеристики)/ *Required material and technical resources (names and detailed characteristics)* | Количество/ *Quantity* | Примечание/ *Comments* |
|  |  |  |  |  |

|  |
| --- |
| 4. Отправлено: Ф.И.О. и должность */ Sender and position*: Год/*Year:* Месяц/ *Month:* День/ *Day:* Час/ *Hour:* Мин/ *Min:* (местное время/local time) |
| 5. Получено Ф.И.О. и должность *Receiver and position*:(МСК/Moscow time) Год/*Year:* Месяц/ *Month:* День/ *Day:* Час/ *Hour:* Мин/ *Min:* |
| 6. Направлено на станции- члены ВАО АЭС *Forwarded to member plants*: (МСК/Moscow time) Год/*Year:* Месяц/ *Month:* День/ *Day:* Час/ *Hour:* Мин/ *Min:* |

**Форма РКЦ-7 (*Format RCC-7)***

**Форма подтверждения получения**

**Региональным кризисным центром сообщения от «аварийной» АС/**

 **Regional Crisis Center’s confirmation form of**

**getting the message from «emergency» NPP**

|  |  |
| --- | --- |
| Адресат /*Аddressee:* |  |
| От /*From:* |  |
| Факс /*Fax:* |  | Эл. почта / Email : |  | Телефон / Phone : |  |
| Число страниц (Pages) | 1 |
| [ ]  | срочно */urgently* | [ ]  | требует ответа /*response required* | [ ]  | для ознакомления / *for information* | [ ]  | подтвердить получение*/acknowledge receipt* |

1. Ваше Сообщение №       от год      месяц       день       час       мин      получено / *Your Message №       dated by year      month:       day:       hour:       min       have been received.*

|  |
| --- |
| 2. Отправлено: Ф.И.О. и должность */ Sender and position*: Год/*Year:* Месяц/ *Month:* День/ *Day:* Час/ *Hour:* Мин/ *Min:* |
| 3. Получено Ф.И.О. и должность *Receiver and position*:  |
| 4. Год/*Year:* Месяц/ *Month:* День/ *Day:* Час/ *Hour:* Мин/ *Min:* |

**Региональный кризисный центр/Regional Crisis Centre**

**Объявление оперативной паузы при проведении тренировки/Operational break announcement**

**сообщение / *message* №***.*

|  |  |
| --- | --- |
| Адресат /Аddressee: | Региональный кризисный центр ВАО АЭС в МосквеWANO Moscow Centre NPPs Regional Crisis Centr |
| От /From:  |       |
| Факс /Fax: |       | Эл. почта / Email: |       | Телефон / Phone: |       |
| Число страниц /Pages | 1 |
| [ ]  | срочно /urgently | [ ]  | требует ответа /response required | [ ]  | для ознакомления / for information | [ ]  | подтвердить получение/acknowledge receipt |

1. Станция /Plant:       Блок / Unit:       Тип РУ / Reactor type:       Страна / Сountry:

2. Дополнительная информация // Additional information

|  |
| --- |
| 3. Отправлено: Ф.И.О. и должность / Sender and position:      |
| 4. Дата и время (местное) / Date and time (local time):  Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 5. Получено Ф.И.О. и должность (местное время) /Receiver and position (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 6. Направлено на станции- члены ВАО АЭС (местное время) / Forwarded to member plants (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |

**Форма РКЦ «Окончание тренировки» (Format ”End of Exercise”)**

**сообщение / *message* №***.*

|  |  |
| --- | --- |
| Адресат /Аddressee: | Региональный кризисный центр ВАО АЭС в МосквеWANO Moscow Centre NPPs Regional Crisis Centr |
| От /From:  |       |
| Факс /Fax: |       | Эл. почта / Email: |       | Телефон / Phone: |       |
| Число страниц /Pages | 1 |
| [ ]  | срочно /urgently | [ ]  | требует ответа /response required | [ ]  | для ознакомления / for information | [ ]  | подтвердить получение/acknowledge receipt |

1. Станция /Plant:       Блок / Unit:       Тип РУ / Reactor type:       Страна / Сountry:

2. Тренировка завершена в // Exercise was terminated at Час/Hour:     Мин/ Min:       (местного времени//local time).

Благодарим за сотрудничество! //Thank You for cooperation!

3. Дополнительная информация // Additional information

|  |
| --- |
| 4. Отправлено: Ф.И.О. и должность / Sender and position:      |
| 5. Дата и время (местное) / Date and time (local time):  Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 6. Получено Ф.И.О. и должность (местное время) /Receiver and position (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |
| 7. Направлено на станции- члены ВАО АЭС (местное время) / Forwarded to member plants (local time): Год/Year:      Месяц/ Month:       День/ Day:       Час/ Hour:       Мин/ Min:       |