Planned losses accounting

Подопригора Андрей Владимирович(Pidipryhora Andrii)

Thu 5/20/2021 6:04 PM

**To:**Hamid Azarbad;

Хорошо. Буду ждать ответ.

Обсуждали все региональные центры)

Hamid Azarbad

Thu 5/20/2021 6:03 PM

Sent Items

Добрый день Андрей,  
Спасибо за уточнением и спасибо что этот вопрос рассмотрел, потому что это было мой вопрос также.  
Я могу субботу утром сообщить ответственным коллегам и сразу напишу тебе.  
Best regards  
Azarbad  
WANO MC OSR  
+98 917 351 6368

-------- Original Message --------  
Subject: FW: Planned losses accounting  
From: "Подопригора Андрей Владимирович(Pidipryhora Andrii)"  
To: Hamid Azarbad

Thu 5/20/2021 5:20 PM

Хамид, здравствуйте!

Переправляю вам ответ после обсуждения вопроса по учету плановых недовыработок в связи с остановом на ППР АЭС Бушер в 1-м квартале 2021.

Изначально я занял вашу позицию и попробовал выяснить этот момент более подробно.

Главное: мы можем не учитывать недовыработки из-за решения диспетчера сети только в случае, если блок готов к эксплуатации. Это могут быть случаи снижения мощности или полного останова, но при условии, что блок полноценно находится в резерве и может быть введен в эксплуатацию в любой момент.

Если же блок останавливается и на нем начинают проводится ремонтные работы, а также перегрузка топлива, то это попадает под категорию плановая недовыработка (в случае с АЭС Бушер).

Прошу в оперативном порядке пересчитать величину плановых недовыработок и направить мне/МЦ для ввода в базу данных по показателям. На текущий момент АЭС Бушер осталась последней АЭС для закрытия данных по показателям за 2021Q1. Ввиду того, что необходима только одна цифра можно отправить ее мне, по готовности, по почте.

С уважением,

Андрей Подопригора

**From:**  (INPO)

**Sent:** Wednesday, May 19, 2021 5:22 PM  
**To:** Подопригора Андрей Владимирович(Pidipryhora Andrii) <podoprygora@wanomc.ru>; **Subject:** RE: Planned losses accounting

Andrei,

That is correct, we don’t require losses – as long as the unit remains available for operation.  I don’t believe there is a difference, this is not new reporting requirements - no updates or clarifications were made to this section of the Reference Manual in the latest revision.

Regards,

Court

*Data Management & Industry Trends*

*Institute of Nuclear Power Operations (INPO)*

**From:** Подопригора Андрей Владимирович(Pidipryhora Andrii) <[podoprygora@wanomc.ru](mailto:podoprygora@wanomc.ru)>  
**Sent:** Wednesday, May 19, 2021 9:20 AM  
**To:**  (INPO)   
**Subject:** RE: Planned losses accounting

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One comment,

In case of power reduction or shutdown by the grid dispatcher due to lack of demand we don’t account losses.

What is the difference between this and previous situations?

Regards,

Andrei

**From:**  (INPO)]  
**Sent:** Wednesday, May 19, 2021 12:42 PM  
**To:** Подопригора Андрей Владимирович(Pidipryhora Andrii) <[podoprygora@wanomc.ru](mailto:podoprygora@wanomc.ru)>; A**Subject:** RE: Planned losses accounting

My apologies for not including earlier, here are some snip-its from the guidance:

Regards,

Court

*Data Management & Industry Trends*

*Institute of Nuclear Power Operations (INPO)*

**From:**  (INPO)  
**Sent:** Wednesday, May 19, 2021 5:05 AM  
**To:** Подопригора Андрей Владимирович(Pidipryhora Andrii) <[podoprygora@wanomc.ru](mailto:podoprygora@wanomc.ru)>; **Subject:** RE: Planned losses accounting

Andrei,

I understand the guidance as follows, but please challenge if you disagree.

* If the unit is requested to be shutdown by the grid due to lack of demand the losses are not reportable as long as the unit remains in a state/condition that allows it to operate at 100% power.
* If work is done on the plant (during the requested shutdown time) which would prevent it from be able to operate at 100% power, the related planned or unplanned losses should be reported accordingly.
* There is one exception to this rule – If a planned shutdown is scheduled with the grid operator 4 weeks in advance and then the grid requests it be moved earlier it can be moved within the 4 week window and remain planned, as opposed to becoming unplanned.

Therefore, I would say for the below situation – Planned (not unplanned losses) for the period where work is being done and the plant would not be able to operate at 100% power.  If the reactor becomes available to operate at 100% power prior to the ~3 month period, no losses should be associated for that time.

Background/Indicator Impact – UCF measures the capability of the reactor to produce power, therefore periods where the unit is not in a state where it can produce full power the associated losses should be reported.

Regards,

Court

*Data Management & Industry Trends*

*Institute of Nuclear Power Operations (INPO)*

**From:** Подопригора Андрей Владимирович(Pidipryhora Andrii) <[podoprygora@wanomc.ru](mailto:podoprygora@wanomc.ru)>  
**Sent:** Wednesday, May 19, 2021 4:35 AM  
**To:** Alex[ez@wano.org](mailto:ez@wano.org)>; Dirlirand <[berirlik@wanopc.org](mailto:berirlik@wanopc.org)>; Kamnori <[kam@wano-tc.or.jp](mailto:kam@wano-tc.or.jp)>; Hustney C. (INPO) <[Hu@inpo.org](mailto:Hu@inpo.org)>; Loyn E. (INPO) <[LoE@INPO.org](mailto:LoE@INPO.org)>  
**Subject:** Planned losses accounting

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Dear colleagues,

We are faced with an interesting question about data accounting and we need your professional help in accounting for planned losses during outage with refueling.

The Bushehr station was preparing for a planned shutdown, but prematurely received a command from the grid dispatcher about the energy overproduction in the grid and the requirement to shut down the Unit. This situation (overproduction) should last for 3 months. The station made a decision to shutdown and carry out scheduled outage with refueling at this time specified by the grid dispatcher.

When we received the data for 2021Q1, the planned losses were not given, but only the number of hours of work in critic was reduced.

**Question:** is it necessary to take into account the planned losses in this case?

**My answer:** the planned losses does not need to be taken into account, since such a shutdown of the Unit was beyond the control of the station. Such situation not fully clear covers by PI Manual (maybe we should add it in future revision).

What do you think?

Regards,

Andrei

***Andrei Podoprigora***

*PA Programme Manager, WANO Moscow Centre*