

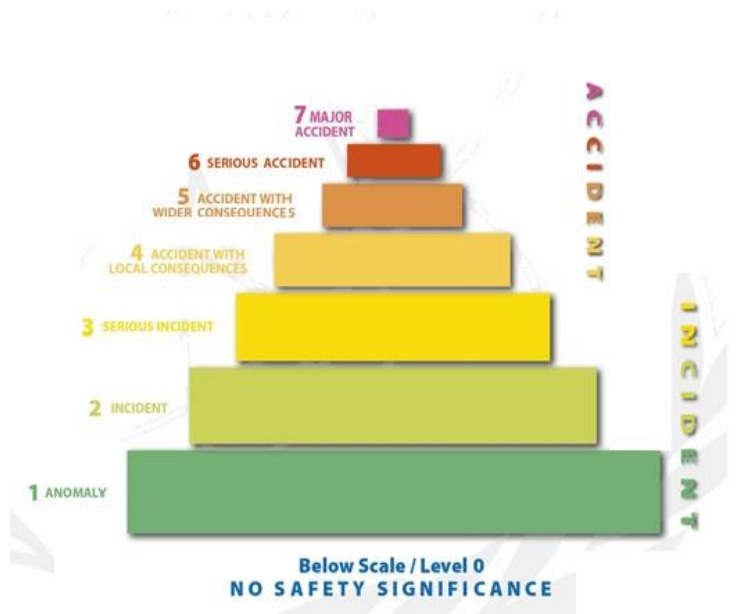
Significant Events

It is obligatory for operating nuclear power plants to report promptly to regulatory body, certain events that occur in the plant which have or may have impact on operational safety. Under the reporting system established by AERB, the events reportable to the regulatory body are divided into two categories, termed as,

- (a) Events and
- (b) Significant Events

This categorization of events is done based on their safety significance and importance to operational safety experience feedback. Based on the established reporting criteria, event reports (ER) and significant event reports (SER) are submitted to AERB.

The SERs received from the operating NPPs are rated on the International Nuclear and Radiological Event Scale (INES) of International Atomic Energy Agency (IAEA). As per the INES, nuclear and radiological events depending on their safety significance can be classified at seven levels (1 to 7) as shown below.



Events rated at level 4 and above are termed as 'Accidents'. The accidents at Chernobyl NPP in former USSR (now in Ukraine) in April 1986 and Fukushima NPPs in Japan in March 2011 were rated at level 7 on INES. Events rated at levels 1, 2 and 3 are called 'Incidents'. Events with no safety significance are rated at level 0 or below scale.

During the year 2021, thirty-one significant events were reported from operating NPPs. These events considering their safety significance were evaluated for INES rating as per the INES User's Manual. The station wise break-up of the events along with their INES ratings are given in table below:

| NPPs | INES Rating of Events | | | | | Significant events reported in 2021 |
|--------------|-----------------------|----------|----------|----------|--------------------------|-------------------------------------|
| | 0 | 1 | 2 | >2 | Industrial safety events | |
| TAPS-1 & 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| TAPS-3 & 4 | 4 | 0 | 0 | 0 | 0 | 4 |
| RAPS-1 & 2 | 4 | 0 | 0 | 0 | 0 | 4 |
| RAPS-3 & 4 | 1 | 0 | 0 | 0 | 0 | 1 |
| RAPS-5 & 6 | 3 | 0 | 0 | 0 | 0 | 3 |
| MAPS-1 & 2 | 6 | 0 | 0 | 0 | 0 | 6 |
| NAPS-1 & 2 | 4 | 0 | 0 | 0 | 0 | 4 |
| KAPS-1 & 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| KGS-1 & 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| KGS-3 & 4 | 3 | 0 | 0 | 0 | 0 | 3 |
| KK-1&2 | 2 | 0 | 0 | 0 | 0 | 2 |
| Total | 31 | 0 | 0 | 0 | 0 | 31 |

In August 2022, two significant events were reported from operating NPPs. These events considering their safety significance were evaluated for INES rating as per the INES User's Manual. The station wise break-up of the events along with their INES ratings are given in table below:

| NPPs | INES Rating of Events | | | | Significant events reported in 2022 |
|--------------|-----------------------|----------|----------|--------------------------|-------------------------------------|
| | 0 | 1 | >1 | Industrial safety events | |
| TAPS-1 & 2 | 0 | 0 | 0 | 1 | 1 |
| TAPS-3 & 4 | 2 | 0 | 0 | 0 | 2 |
| RAPS-1 & 2 | 2 | 0 | 0 | 0 | 2 |
| RAPS-3 & 4 | 3 [#] | 0 | 0 | 0 | 3 |
| RAPS-5 & 6 | 1 [#] | 0 | 0 | 0 | 1 |
| MAPS-1 & 2 | 2 [#] | 0 | 0 | 0 | 2 |
| NAPS-1 & 2 | 3 | 0 | 0 | 0 | 3 |
| KAPS-1 & 2 | 2 | 0 | 0 | 0 | 2 |
| KGS-1 & 2 | 0 | 0 | 0 | 0 | 0 |
| KGS-3 & 4 | 0 | 0 | 0 | 0 | 0 |
| KK-1&2 | 3 [#] | 0 | 0 | 0 | 3 |
| Total | 18 | 0 | 0 | 1 | 19 |

One event each at RAPS-4, RAPS-5, KKNPP-2 & MAPS-2 is assigned provisional INES rating of level 0 since these are under review.