

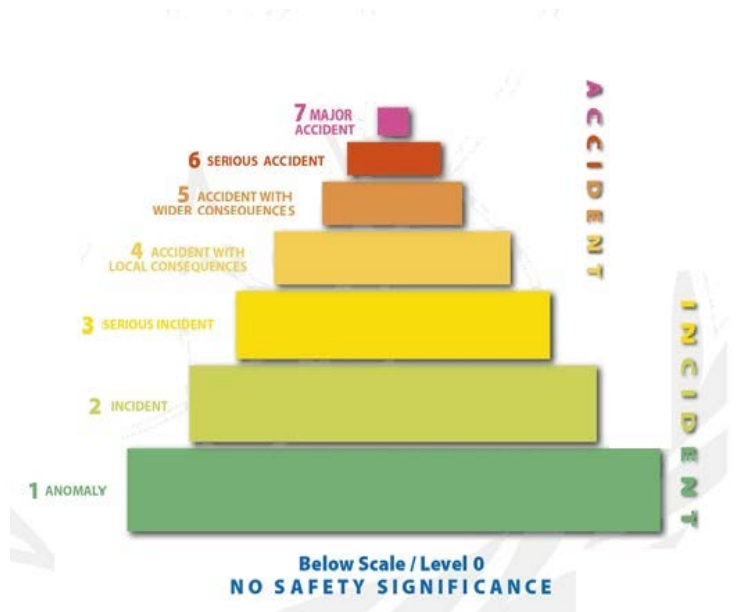
## Significant Events

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 period from January 2016 to December 2016, 32 significant events were reported from operating Indian NPPs. These events considering their safety significance were evaluated for INES rating as per the INES User's Manual 2008 of IAEA and OECD/NEA. The station wise break-up of these events along with their INES ratings are given in table below:

Plants	INES Rating of Significant Events			Total Significant Events in Year 2016
	0	1	>1	
TAPS 1 & 2	2	0	0	2
TAPS 3 & 4	3	2	0	5
RAPS-1 & 2	6	0	0	6
RAPS-3 & 4	4	0	0	4
RAPS-5 & 6	2	0	0	2
MAPS-1 & 2	2	0	0	2
NAPS-1 & 2	2	1	0	3
KAPS-1 & 2	0	1*	0	1
KGS- 1 & 2	2	0	0	2
KGS- 3 & 4	1	0	0	1
KK-1	3	1	0	4
<b>Total</b>	<b>27</b>	<b>5</b>	<b>0</b>	<b>32</b>

\* This is provisional INES rating

In the first quarter of year 2017, ten significant events were reported from operating NPPs (five from KK-1, two from MAPS-1 and one each from RAPS-4, TAPS-4 and KGS-3). Out of these, one event each from MAPS-1 and KK-1 had occurred in year 2016. These events considering their safety significance were evaluated for INES rating as per the INES User's Manual 2008 of IAEA and OECD/NEA. The station wise break-up of these events along with their INES ratings are given in table below:

Plants	INES Rating of Events			Total Events
	0	1	>1	
TAPS 1 & 2	0	0	0	0
TAPS 3 & 4	1	0	0	1
RAPS-1 & 2	0	0	0	0
RAPS-3 & 4	1	0	0	1
RAPS-5 & 6	0	0	0	0
MAPS-1 & 2	2	0	0	2
NAPS-1 & 2	0	0	0	0
KAPS-1 & 2	0	0	0	0
KGS- 1 & 2	0	0	0	0
KGS- 3 & 4	1	0	0	1
KK-1	5	0	0	5
<b>Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>