OSART Good Practices
OPERATIONAL EXPERIENCE FEEDBACK
Trending and review of operating experience

Cruas, France

Mission Date; 24 Nov.-11 Dec., 2008

TERRAIN (an OE database)   has been introduced at the plant   for effective tracking and trending of Low Level Events (LLE), Near Misses (NMs) and deviations.
Until February 2008, the plant used to report LLE, NMs and deviations in a paper format which was quite slow and ineffective. In February 2008, TERRAIN was introduced and its use started in April 2008. During a short period of 8 months about 3000 reports have been put into the system and tracking by management of this vital element of operating experience has been strengthened.

Benefits: The database
-       Provides plant staff with a tool to input and screen positive and negative observations collected during daily activities. Negative observations are used for correcting and enhancing human performance and behaviour while positive observations are used for acknowledging and encouraging the right behaviour.
-        Is a web-based, user-friendly application which has various facilities such as extracting information on an excel sheet for a better trending and analysis.
-       Helps in identifying the broken barriers for LLE and deviations. These barriers, selected by a drop down menu, are based on IAEA references.
-       Is used for trending of the whole plant down to section level.
-       Can also be used to monitor programme deficiencies in the"Managers in the Field" Programme as deviations observed by managers in the field are also fed into this system.

During various international operational safety missions, weaknesses in the monitoring and trending of LLE and NMs have been observed as a major weakness in the nuclear industry worldwide. An effective tool such as TERRAIN in this area will be of great benefit in improving the safety and reliability of the nuclear industry.

Rovno 3/4, Ukraine

Database and trending of operating experience - advanced integrated OE information system (OISDE)

An advanced integrated OE information system (OISDE) has been recently developed by the plant. It is successfully used as a database to manage and distribute in a timely manner through the Intranet information about the external OE from WANO, Ukraine and the Russian Federation, as well as internal OE on significant and minor events. Personnel are held accountable for acquainting themselves with the information on significant events.

The main tool that is used for processing of the information messages about external operational experience, and registration of the plant's staff safety-related proposals, is the Integrated operational experience information system (IOEIS). IOEIS is accessible via the Intranet at the following page: http://de.aes.rnpp.atom.gov.ua

The functional capabilities of the IOIES include:
- accumulation of information messages in the form of electronic feedback forms;
- on-line free access to the information for all users;
- search facilities for information based on the specified criteria;
- collective discussion and making decisions on specific information messages;
- preparation of the measures to support decisions making;
- generation of reports;
- statistic and analytical assessment of the accumulated information.

Currently, the IOEIS process statistics are as follows:

Categories of information messages	Number of registered information messages	Number of proposals / guidance on information messages processing by the plant personnel
Ukrainian NPPs	45	113
Russian NPPs	14	31
Messages about the deviations in RNPP operation	7	42
Safety-related proposals of RNPP personnel	13	14
WANO (SOER, SER, EAR, ENR, JIT, MER)	333	74
Total	412	274

The first positive results of the utilization of the system are already obtained, namely: the personnel have started to report more actively human performance related issues (e.g. near misses). Also special paper/electronic forms allow the personnel to communicate information concerning OE anonymously with the high level plant managers. A procedure has been developed to address the reported issues and to communicate the management decisions.
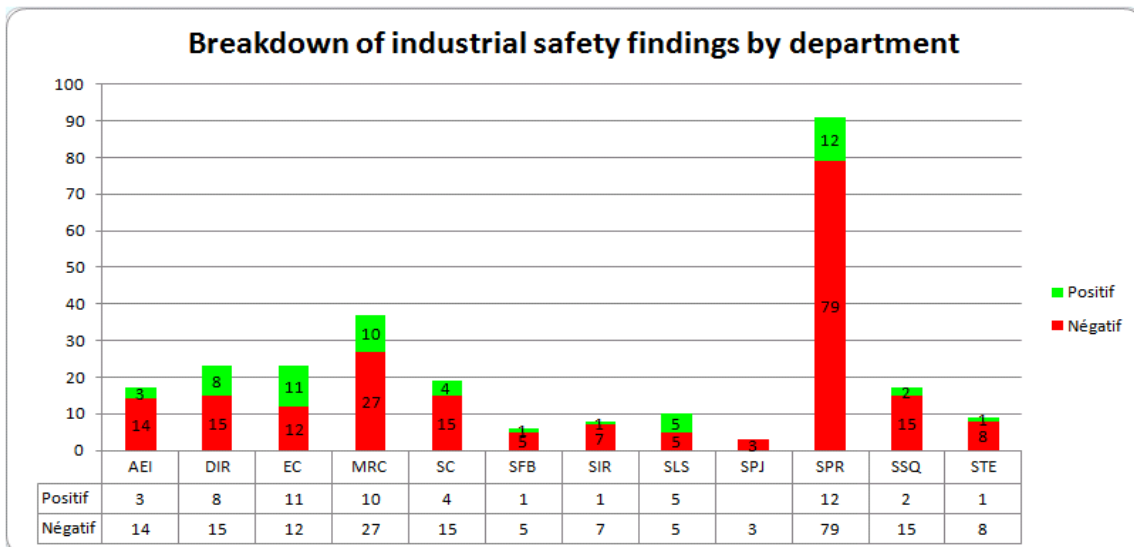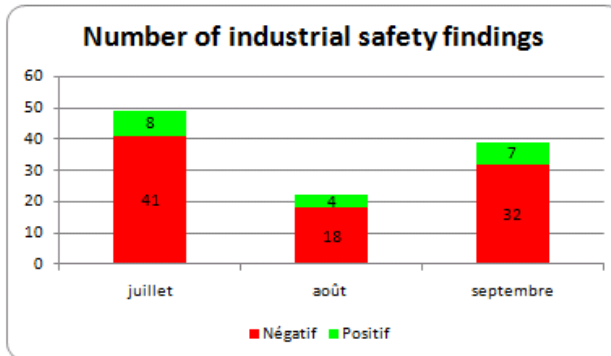
Metzamor, Armenia

Online plant database.

All events are entered in the plant event database. Every event in the database is attributed by about 40 parameters, such as time, cause, corrective measures, implementation deadline, direct and root causes, etc. The database uses own coding system based on WANO, IRS, IAEA codes. Besides, the database software is designed with additional capability of generating of 85 more standard trends, such as number of events reported by departments, number of corrective measures not implemented by a department, event distribution according to their root causes, direct causes, distribution of near misses according to cause groups, thus, ensuring the process to be user-friendly. When accessing the database all plant personnel can easily get on-line information about the trends of interest and can build their own trend reports without additional effort. This allows for optimizing users' work related to the event trending.

Flamanville, France

The plant has developed a unique electronic tool for trending of the corrective action programme data that does not require any manual manipulation/sorting. The tool provides a mechanism for consistent reporting using defined templates. The database is user friendly and includes live time electronic guidance to further assist the user. Trending can be easily performed at various levels from the macro process down to department level.

Examples of Trend Data Graphs

Number of industrial safety findings

	juillet	août	septembre
Positif	8	4	7
Négatif	41	18	32

■ Négatif   ■ Positif

Breakdown of industrial safety findings by risk

■ Positif
■ Négatif

Breakdown of industrial safety findings by department

	AEI	DIR	EC	MRC	SC	SFB	SIR	SLS	SPJ	SPR	SSQ	STE
Positif	3	8	11	10	4	1	1	5		12	2	1
Négatif	14	15	12	27	15	5	7	5	3	79	15	8

■ Positif
■ Négatif

Benefits:

This tool enables plant departments and process owners to have easy and prompt access to trends in relevant areas. The stakeholders can proactively identify and manage issues before they become actual discrepancies and deviations. The plant has developed and implemented this tool independent of the fleet to help them improve in trend analysis. This process has resulted in measurable improvements. It has been assessed by the local French regulator as 'meaningful and promising'.