
KNOWLEDGE MANAGEMENT IN JOSÉ CABRERA NUCLEAR POWER PLANT

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As a consequence of the completion of José Cabrera Nuclear Power Plant (JC NPP) exploitation license, in April 30th, 2006, the installation began the “transition period to dismantling”, with the main objective of fit out the installation for the transference to ENRESA, company in charge of the final dismantling.

The new situation of the plant, with very different objectives, has required a very wide change in all levels, with very different license documents, and with a different organizational structure adapted to the new position and function necessities.

In this change process, our Organization recognized the Knowledge Management (in a close collaboration with training) as one of the most powerful tools to face the new challenges. Due to this, it was our priority the adequate transmission of the associated knowledge to any position, to the new agents. This is extremely important, assuming the Organizations as a group, in which the knowledge of the group is significantly bigger than the addition of the individual knowledge, due to synergy processes.

Knowledge Management is the collection of processes and systems permitting that the intellectual capital increases significantly, through the efficient management of the problem resolution capabilities (in the shorter time), with the final objective to generate competitive advantages.

In the changes performed in an Organization, it is always present the risk of losing capabilities. It is fundamental to be capable to detect those capabilities and to control and retain them. The Organization has to set out the weaknesses and strengths associated to the change, and have to act in order to promote ones and erase others.

In the JC NPP, the preservation of this knowledge was probably the most critical point we have faced, due to the sudden plant shutdown. In a very short time, many organizational changes have occurred (both, in case of people leaving the plant, and in case of function redistribution), cause by the specific situation of the installation. The challenge was the detection of the “knowledge” arising in every situation, and the defining of the tool to keep it inside the Organization. The target was the development of the adequate environment and tools, to achieve the collaboration and support of the main part involved in the process, the employees. Also, we had the condition that every tool used, would have to be compatible with the short period of time available from the planning of the organizational change to the implementation.

Two kinds of knowledge exist: explicit and tacit. The explicit knowledge is the one we can obtain in a clear way, it is written, it is familiar to you and you can explain it (documents, PC applications, ...). The tacit knowledge is the one we implement mechanically, and you don't advertise the way that you do that. It is attitudes and tasks performed unconsciously and activities intuitively performed.

Tacit knowledge is very difficult to explain, but vital in the Organizations, because it provides a kind of behaviours that have been improving along time and they are close to the better way to perform it. If an Organization were capable of retaining that knowledge, could get the necessary added value to stand out from the competence.

In JC NPP, we set out two possible solutions: try to convert the most of the tacit in explicit, or perform adequate overlap periods between the two people involved in any position. First one was rejected because it would have required people in every task taking notes of everything during a long time in order to be able to taking down all the details. In JC NPP we didn't have time enough.

We thought that most effective knowledge management method, according with the special characteristics of the installation, was the second solution. We developed a set of documents supporting the whole process, in which we provided different formats trying to cover all the possible issues. This process involved in the same manner, the one leaving the position, the one getting the position, and the department manager, in charge of the supervision of the process from a more general point of view.

One of the main points for the right development of the knowledge management process was the implication of the Plant Management. From the beginning, they were conscious of the importance of the process and several times they declare it to the staff, giving priority to the activities related.

Nowadays, we can say that the results obtained in the adaptation of the Organization to the shutdown of the plant, demonstrates that we have achieved (in a high percentage) the keeping of the necessary valuables to appear inside the standards of effectiveness and competitiveness.