

## **N65. AEA TECHNOLOGY'S 3D TV EQUIPMENT SHOWS PERFORMANCE BENEFITS OVER CONVENTIONAL TELEVISION**

AEA Technology's 3D equipment is quicker to use, requiring less precision and less camera deployment manipulators. Operators have taken to the new system very quickly.

The latest, third generation 3D TV camera can be used in many different nuclear applications.

Requirements were matched at different nuclear facilities in the United Kingdom and the most stringent values were adopted. This approach placed extreme constraints on the camera design, but the result is a versatile and robust camera which will also be suitable for many applications beyond those foreseen at present.

The benefits of 3D TV include:

- A general reduction in the number of views (and hence, cameras and support structures) required.
- Faster operational times, with greater improvements for task elements requiring alignment.
- Fewer manipulator movements for a given task, which implies fewer errors and less collisions.
- Less critical camera positioning.
- Operator preference for 3D.

The last point is significant in that no ill effects have been noticed in trials of the prototype and engineered systems. The fact that new and untrained operators appear to be at ease with a task more quickly using 3D TV implies that the complexity of the task could be increased, or conversely, that less skilled operators could be used. The results of human factors and experimental trials have been used to refine the design of the 3D TV system hardware and operational procedures.

*For more, see "3D TV -- Looking forward in depth," Nuclear Engineering International, 44-45, November 1990.*