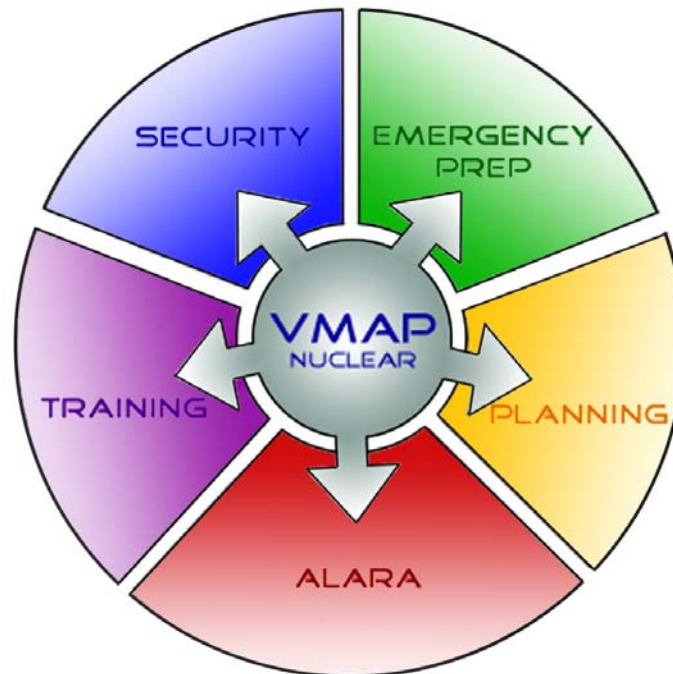


Applications for Spherical Video Mapping



Spherical Video Mapping services can assist with:

- Dose Reduction
- Easily showing navigation to critical components
- Mapping paths to work areas and virtually walk the path
- Viewing work areas to supplement pre-job briefs and promote safety
- Tourism & Site amenities
- Building configuration knowledge
- New employee training
- Emergency response
- Security readiness
- Hostage duress
- Initiating events evaluation
- Evacuation paths
- Job safety analysis
- Critical component proximity
- Cooperate oversight from remote locations
- 360° visual record of critical enclosures - ex: reactor building close-out
- Online planning
- Outage turnaround durations
- Pre-job briefs
- Help in planning for refurbishing and repair of plant facilities

Some example applications:

- **Security**
 - Training new guards with remote walk-throughs of the entire site
 - Security Enforcement - Greater visual intelligence - see it before you arrive
 - Monitoring access gates, doors and fences
 - Live Streaming Monitors - Additional level of live coverage and surveillance - Total coverage for maximum security

Applications for Spherical Video Mapping

- **Training**
 - Now they can see it - Training will never be the same!
 - Let's face it, navigating through these plants can be a daunting task. Working in those chaotic outage conditions can sometimes be difficult. How many times have you walked through your plant only to stop and look around with uncertainty as to which way you last turned or where you are? Now imagine those new contractors who have never been in your plant before that are coming in next week to help you with your job.
 - Human Performance errors can be directly reduced through the use of this visual intelligence tool.
 - Pre-Job Briefs - Show Them! Don't just talk about it! You will be able to show workers their work area - show them the layout of the room - show them the component they are working on. They can visually walk the path that they will be taking to get to their work site. They will be able to see all the hazards and critical issues to avoid.
 - New access employees will be able to see the interior of the site before they step through the gate. They can learn about the layout of the site and what to expect by actually seeing and visually walking through the facilities.
 - All of those contractors coming in for the outage (the new guys as well as the experienced ones) will now be able to get a visual refresher before putting themselves at risk in the work environment.
- **ALARA**
 - HPs can use this tool to help with mapping and radiation surveys
 - Help to reduce dose by giving workers additional training before entering contaminated areas. During the HP briefs, show your workers the room, show them where exactly to setup their equipment such that they will receive less dose and get the job done quicker and more efficiently, show them where the low dose waiting areas and the hot spots to avoid are located.
 - HPs can use the LIVE streaming cameras to monitor their critical radiation access points or problem areas.
 - With this visual tool, workers can better interact with HPs when they need to review a situation in the room - without having to go back in the contaminated area.
 - Reactor Building close-out - perfect for recording the final walkthrough to satisfy the NRC and for the planners to use until they open the building up again at the next outage.
- **Planning**
 - Engineers can more effectively plan for their next outage with visual references to go by. They can review the recorded spherical video of the whole work area to properly plan for the right amount of scaffolding and preparation that will be required to get the job done. How will your job interfere with jobs going on in the same room - take a look and plan accordingly. Not only will you get a visual perspective from different points in the room, you will have a reference on the floor plan of where these views are from - plus the ability to look in all directions from each point.
- **Emergency Preparedness**
 - Show workers the escape routes and gathering areas and then actually "visually" walk the evacuation paths.
 - This could become standard in the training for all general access personnel.
 - Every nuclear power plant in the country has a detailed plan for responding in the event of an emergency. Companies test that plan regularly, with the participation of local and state emergency response organizations. This visual tool can be incorporated into these plans.
- **Improve Safety**
 - Job safety is a priority at nuclear power plants.
 - Being aware of the hazards in the workplace by visually identifying them is key to reducing safety incidents at nuclear facilities. During the pre-job briefs, spherical video of the work area will help identify the hazards and prepare the workers in advance of starting the job.
 - A better tool for job safety analysis - visual identification of safety issues will make the analysis more complete and relevant to the actual situation.