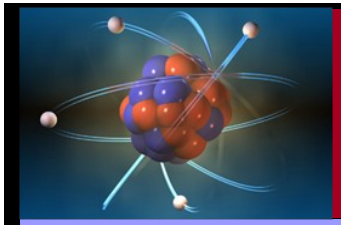
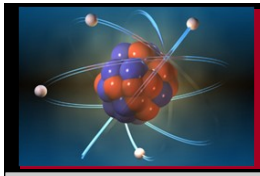


NUCCORP'S NGAT™ GL08-01 SOLUTIONS COMPARISON MATRIX	NGAT	UT	Standard Vents	Simplified Equation (UT Required)	Guided Wave	Permanent Mounted UT Devices	Large Gas Separator
Finds Voids	●	●		●	●	●	
Indicate Amount of Gas in Pipe	●	●		●	●	●	
Continuous Monitoring	●				◒	◒	
Accumulates Gas	●						●
Removes Gas Instantly & Prior to ECCS Actuation	●						
Provides Ability to Vent	●		●				●
Allows for Trending	●	●	●	●	●	●	
Ease of Technician Cross-Training	●		●				●
Remote Indication Option	●				●	●	
Remote Venting Option	●						
No Permanent Electrical Power Required	●	●	●	●			●
Supports ALARA Principles	●				●	●	●
NEI TIP Award Winner	●						
Total Solution	●						
Installation & Implementation Cost	MED	LOW	MED	LOW	HIGH	HIGH	HIGH
Ongoing Cost	LOW	HIGH	HIGH	HIGH	HIGH	LOW	LOW
Training Costs	LOW	HIGH	LOW	HIGH	HIGH	MED	LOW
Net Risk to Utility	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Reason for Risk/Excessive Costs (see notes on page 2)	Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7



NUCCORP'S NGAT™ GL08-01 SOLUTIONS COMPARISON MATRIX

NOTES:

1. The NGAT is the ultimate solution to tracking and removing air/gas to maintain compliance with station Technical Specifications. Real-time, continuous literal compliance is available at a simple glance. The NGAT moves the air/gas up and out of the main piping stream, as it is collected, thus enhancing nuclear safety. The NGAT defines the initial plant conditions to ensure the ECCS and other system remain OPERABLE ("full") per station Technical Specifications. The NGAT requires no electricity and uses passive principles of nature (buoyancy and magnetism) to manage/track air/gas accumulation. Plus the NGAT was just awarded an NEI Top Industry Practice Award (TIP) in 2012.

2. UT must be performed by trained technicians, usually from QC, to take multiple readings to detect an area of low density inside of the piping. If the piping is sloped, more "slices" must be made to, essentially, manually integrate the volume of air/gas. Furthermore, if air/gas is found and no vent exists at that location, then there is no direct means for air/gas removal. Also, scaffolding may have to remain erected over safety-related equipment, as measurements may need to be taken every 30 days; this can impact OPERABILITY of near-by systems. Also, the act of performing the UT measurements can result in excessive personnel doses, which is in conflict with ALARA principles. Furthermore, one utility in particular had a false positive of air, made an NRC report, began to shutdown and then retracted the report after the more trained technicians re-performed the measurements. Finally UT does not allow for continuous measurement of accumulated air/gas. The overall risk is high due to reliability issues and the inability to constantly ensure OPERABILITY of safety-related fluid systems.

3. Standard Vents obviously work to vent systems, but UT is required to know when to vent. Note 2 describes the problems with UT. Net risk is high, as air/gas can exist for up to 29 days without detection (between 30 day venting requirements).

4. The Simplified Equation is not a solution, but is a method to justify the existence of given quantities of air/gas. The method depends on UT to provide a found amount of air/gas with that maximum that would be allowed by the equation. If more than can be tolerated is found, then there would be no way to directly vent the system. This results in systems being declared INOPERABLE and can result in costly shutdowns and degraded levels of nuclear safety. Furthermore, if the NRC does approve of this method, the methodology may be further scrutinized in the future such that the method is no longer acceptable. However, the NGAT could be used in conjunction with this method to determine if acceptable levels exist. Regulatory risk could be high, as this method may have to be defended during periodic NRC audits.

5. Guided Wave requires two sensors per piping high-point and the results are very difficult to interpret. Plus there is no direct way to remove the air/gas if found, unless, by chance a vent already exists at the high-point in question. The overall risk is high due to reliability issues and the inability to constantly ensure OPERABILITY of safety-related fluid systems. Continuous monitoring is optional.

6. See note 2 for problems with the UT approach. Permanently mounted UT does, however, promote ALARA principles by monitoring remotely. Continuous monitoring is optional. Risk is high due to uncertainty with UT technology. Plus electricity is required and there is uncertainly with the life of the UT coupling material for "permanent" installations.

7. The large gas separator is a very large collection system that would be installed in ECCS pump suction headers. The concept is that when the postulated design basis event occurs (e.g., LOCA), any entrapped air/gas would be swept up and into the separator. This is problematic, as the separator must perform correctly during the event. Also, any ignored and unmonitored air/gas would be swept around the ECCS before the separator captures it, which could cause unanalyzed water-hammer loading during the LOCA. Furthermore, the device is relatively large and installation interferences could make it impossible to install. Risk is high due to its reliance to operate correctly during the LOCA.