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Site Assessments: Objective appraisal planning and expertise make a difference

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Site assessments are an excellent means for making an objective appraisal of a facility's true strengths and weaknesses and can provide a substantial return on investment. This is especially true for mission-critical facilities where the real value lies in the facility's capability to sustain continuous operations and the associated mission without interruption.

Unlike most commercial buildings in which value is measured in dollars per square foot of rentable space, critical facilities are buildings that sustain the life of a business, organization, agency, corporation, or whatever other "mission" that runs within their walls. When enterprise-sized data centers fail, entire corporations can be at risk of failure; national security, life safety communications, or the economy can be impacted as well. That's why even the owners and occupants of small- and medium-sized data centers consider them critical.

Not all site assessments are alike, nor should they be. The first order of business is to define the purpose and scope of what to assess. In many cases, this is predicated on why an objective appraisal is needed in the first place. Assessments can target specific or general aspects of the site including:

- Due-diligence associated with purchase speculation
- Forensic analysis and anomaly response
- "Tier" rating and reliability assessment
- Master planning, expansions and upgrades, and capital improvements
- Single point-of-failure (SPOF) analysis
- Energy-efficiency and performance optimization
- Capacity planning and load management
- Facilities management (staff, training, operations, maintenance, SLAs, documentation, load testing, capacity tracking, and load management, etc.)
- Any combination of the above

Different approaches are appropriate for assessing sites you own than for performing due diligence on a site you know little or nothing about.

Assembling a team of professionals with the correct expertise and experience for your scope and critical facility is key to ensuring a quality assessment. The ultimate goal is to identify the strengths and weaknesses of a facility and make recommendations for improvements that can lead to

fundamental changes including capital expenditures, policy and procedure changes, staffing and management changes, or even as to whether you purchase, keep, or sell a property. It is therefore essential that the process be comprehensive and highly accurate. In other words, this is probably not an initiative to be awarded to the lowest bidder.

In almost all cases, the assessment team should include highly knowledgeable experts, with years of experience and a broad background that spans engineering and design, operations and maintenance, and facilities management spread over as many different facilities as possible.

The engineering and design expertise ensures the team can dissect the physical infrastructure sufficiently to comprehend design intent, rated capacities, physical capabilities, and sequences-of-operations, etc.

The operations and maintenance experience is required to understand how the infrastructure is being utilized and maintained and the associated industry best practices, and to compare these against actual site practices to identify opportunities for improvement and yes, failure.

The facilities management knowledge is needed to evaluate the overarching processes, procedures, policies, and people (management and staff) and to ensure these are sufficiently resourced and capable of reliably carrying out the duties and responsibilities necessary (which means doing everything, doing everything right, and doing everything right every time).

Another important criterion is that the team has experience in a broad range of facilities. This brings a perspective to assessing the site that cannot be found internally. There is a unique skill set that can only be developed by having worked in a wide variety of different sites, designs, management structures, and operations and maintenance programs, etc., and seeing firsthand how each has excelled and/or fallen short of expectations. Even if this perspective exists internally, the most qualified and competent staff that knows the site in every detail will inevitably (even subconsciously) carry some bias or prejudice and may “miss the forest for the trees.”

This is certainly not to say that the site staff should be excluded from the assessment. Quite the opposite is true. A good assessment depends on the involvement of the site staff. Every critical facility is unique (some more than others) and the assessment team benefits from having the site staff participate in the process and support their work. No outside team, no matter how talented, can succeed without the help and site-specific knowledge and experiences of those who have been there day in and day out.

The site staff also facilitates the assessment process by providing access to secured spaces, opening panels, providing as-built documentation, demonstrating and navigating the monitoring systems, and, where necessary, gaining approval (change control or other work authorization) for some requested activities. The site staff has the history and institutional knowledge unique to their facility that in most instances provides valuable insight to the strengths and weaknesses that the assessment team seeks. And to the extent the site management and staff understand the assessment is an opportunity for them to demonstrate their knowledge and expertise and to suggest recommendations for improvement, they can direct the assessment team directly to the most relevant aspects of the facility where the assessment team can be most productive and effective.

So don't rush into performing a site assessment. Do research and due diligence and plan accordingly. Establish what the purpose and goals of the assessment are, and, just as important, establish what will be done with the results. Clearly define the scope, deliverables, and level of content expected in way

of information and a final report, and include this in a scope of work and request for proposal. Select the best team of professionals suited for the scope and award on best value, not lowest price.

Prepare the site and staff for the assessment, understanding that the assessment team will be most effective if provided the necessary access, documentation, and cooperative and knowledgeable escorts available. And communicate to both the assessment team and site staff the importance of the work, the high priority the effort has been given, and communicate that the process is seen as an opportunity to improve the site and the staff's potential for success.



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