

A Logical Approach to HVAC Management



Introduction

Choosing a facilities solutions partner is a crucial choice for your organization. You want someone who understands your equipment and its needs, someone you can trust and customer service that exceeds your expectations. At CLS Facility Services, we address those concerns with our three exclusive Logic Programs.

We invite you to read further to learn more about how the concepts behind these programs can help you run a more efficient and effective facility services program.

As with all our e-books, we welcome your feedback and questions. Please do not hesitate to contact us at 800-548-3542.





About CLS

With experience dating back to our founding in 1970, CLS has proven to be a leader within the facility services industry. Our service providers are ready to help with facility maintenance whenever you require the support, from complete project implementation to everyday repairs. We offer in-depth help to facility managers for the most significant and costly areas of concern.

We invite you to learn more about our industry-leading facility maintenance solutions by visiting our website at www.clsfacilityservices.com or calling us any time at 800-548-3542.

PM Logic®

Taking the Guesswork out of HVAC Management and Maintenance

Like any piece of equipment or machinery, HVAC equipment must be maintained and cared for. Certainly, that encompasses the basic tasks associated with most preventive maintenance (PM). But it also means accounting for the universe of variables that affect HVAC unit performance, then analyzing data, and making smart decisions based on your analysis. That may not seem overly challenging if you manage a dozen or so stores. But if you manage hundreds or even thousands of stores, small decisions add up to big expenditures.

Think of patient care in a hospital. Each patient has different medical challenges and should be treated differently. In order to do so, doctors need relevant information – about the patient, about his or her condition, and about unique circumstances that may determine the ultimate course of treatment.

HVAC maintenance is really no different. Good decisions occur when thoughtful questions are asked up front. Here are just a few to consider:

- Do you know the age and condition of the HVAC equipment at all of your facilities?
- Do you know when each of your HVAC units was last serviced?
- Do you know which of your HVAC units are under warranty and for how long?
- How many emergency HVAC calls did you have, and how much did those calls cost you in total?
- What's the age, make and model of all equipment that may have failed?

You may have dealt with several HVAC emergencies last summer, but knowing the age, make and model of the equipment that failed, you can put those emergencies in the right context. Say that half of all those emergencies occurred with rooftop units (RTUs) that were over 25 years old. No matter how much your service provider pampered those units, they would still struggle during a hot summer.

Proper PM can seem like a daunting proposition. So, too, can knowing the questions you need to ask in order to maximize PM. Thankfully, at CLS Facility Services, we pioneered a solution that takes the guesswork out of HVAC management and maintenance. It's called **PM Logic®**, an industry exclusive solution from CLS that transforms troubleshooting into logical and effective HVAC maintenance management.

Site ID	Location	Address	City	State	Zip Code	PMLogic Site
5350-5101	CLOCK TOWER VILLAGE	717 N. 96TH STREET	OMAHA	NE	68114	
5350-5102	CENTRO PLAZA SC	400 N 48TH STREET	LINCOLN	NE	68504	
5350-5103	METRO CROSSING	3701 METRO DRIVE SUITE 400	COUNCIL BLUFFS	IA	51501	
5350-5104	MARKET POINTE	8650 S.71ST PL2 SUITE D	PAPILLION	NE	68133	
5350-5109	WOODBURY MARKETPLACE	9965 HUDSON PLACE	WOODBURY	MN	55125	
5350-5110	FOUNTAINS AT ARBOR LAKES	11651 FOUNTAINS DR. N STE A-104	MAPLE GROVE	MN	55369	
5350-5111		6500 PENN AVENUE S.	RICHFIELD	MN	55423	
5350-5112	HAR MAR MALL	2100 SNELLING AVENUE NORTH	ROSEVILLE	MN	55113	
5350-5113	NORTH COURT COMMONS	680 COUNTRY ROAD 10 NE	BLAINE	MN	55434	
5350-5114	BURNSVILLE MARKET PLACE	13921 ALDRICH AVENUE S	BURNSVILLE	MN	55337	

PM Logic® provides easy, Web-based access to industry knowledge that can save you time, keep your equipment healthy and efficient for years, and optimize your facility management budget.

PM Logic® is an easy-to-use online interface that provides comprehensive data-driven analysis and operational recommendations, including:

- PM recommendations for your specific unit type, including situational and environmental variables;
- Repair tracking and status updates, including a detailed history of service calls, repairs, open work orders and previous quotes;
- Equipment evaluation and replacement data;
- Equipment replacements;
- Warranty tracking that helps clients realize money-saving opportunities;
- Energy management system installation and monitoring.

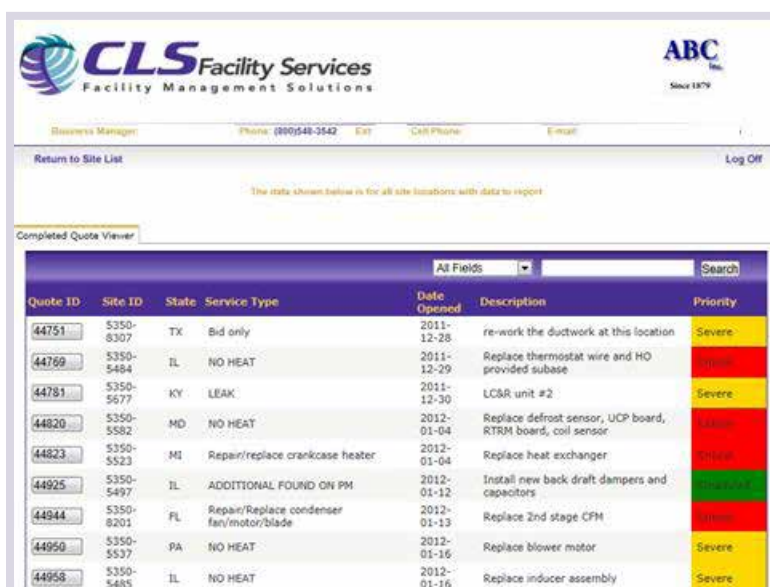
PM Logic® provides a wealth of HVAC asset management knowledge that is both site sensitive and RTU specific. Just as important, it makes that knowledge easy to access and manage through CLS' simple online system. **PM Logic®** helps you keep all of your locations at just the right temperature, whether it's in the dead of winter, or the dog days of summer.

Why the PM Logic Score is Crucial to Proper HVAC Preventive Maintenance

In our last section, we talked about the challenges of designing and implementing a thorough HVAC preventive maintenance (PM) program, and we highlighted CLS Facility Services' **PM Logic®** as a solution to this critical facility management challenge.

One of the central questions that **PM Logic®** answers is, what level and frequency of repairs does your equipment really need? **PM Logic®** addresses this through what we call the **PM Logic®** Score.

Most HVAC PM programs are designed to deliver the same frequency of service across a company's portfolio of stores, regardless of unit age, condition or other key variables. At CLS, we think this approach just doesn't make sense.



Quote ID	Site ID	State	Service Type	Date Opened	Description	Priority
44751	5350-8307	TX	Bid only	2011-12-28	re-work the ductwork at this location	Severe
44769	5350-5484	IL	NO HEAT	2011-12-29	Replace thermostat wire and HO provided subbase	Minor
44781	5350-5677	KY	LEAK	2011-12-30	LC&R unit #2	Severe
44820	5350-5582	MD	NO HEAT	2012-01-04	Replace defrost sensor, UCP board, RTRM board, coil sensor	Minor
44823	5350-5523	MI	Repair/replace crankcase heater	2012-01-04	Replace heat exchanger	Minor
44925	5350-5497	IL	ADDITIONAL FOUND ON PM	2012-01-12	Install new back draft dampers and capacitors	Minor
44944	5350-8201	FL	Repair/Replace condenser fan/motor/blade	2012-01-13	Replace 2nd stage CFM	Minor
44950	5350-5537	PA	NO HEAT	2012-01-16	Replace blower motor	Severe
44958	5350-5485	IL	NO HEAT	2012-01-16	Replace inducer assembly	Severe

It's easy to budget four annual PMs for every store, but it's not prudent. For example, there is no good reason to schedule four PMs on a pristine rooftop unit (RTU) on a mountaintop in arid Utah. If your portfolio also includes an old RTU in hot and humid Mobile, Alabama with a history of problems, wouldn't you rather take two PMs away from the Utah RTU and add them to the Mobile RTU's annual PM program?

We think it's a sensible approach; but with numerous stores under management, the broad task can be overwhelming.

Enter the **PM Logic®** Score. As part of our proprietary **PM Logic®** solution, a separate score is created for each rooftop unit (RTU) based on that specific piece of equipment's history, no matter the number of units or stores. Key inputs are derived from CLS' extensive field experience, as well as from specific customer-supplied information.

Depending on the **PM Logic®** Score, CLS' HVAC technical team then determines the optimal level and type of repairs needed on the equipment. We provide a list of stores that can get by with, say, two PMs per year, and others that may need six. Your budget will stay the same; you're simply allocating the resources where they are most needed.

In the end, a **PM Logic®** Score serves as a driver for us at CLS to act intelligently on your behalf when we send a quote to you. **PM Logic®** Score is the personification of CLS working alongside our customers, sharing information so that decisions can be made intelligently about undertaking – or not undertaking – expensive repairs. If you as a facility manager oversee hundreds or even thousands of stores, and a vendor like CLS makes strategic and informed recommendations to you about your HVAC expenditures, then your job becomes much, much easier.

How to Prevail Over HVAC Estimate Overload

As a facility manager, you get service quotes every day – for windows, doors, plumbing, roofing, air conditioners and more. You name it, the quotes keep coming in; they never seem to stop. So if you oversee hundreds or even thousands of stores, how do you decide which quotes are critical, and which aren't?

Consider this question from an HVAC perspective alone. You probably get a steady stream of quotes for repairs at locations throughout your geographic footprint...maybe a \$700 service call here, a \$1,000 repair there, a \$3,000 replacement estimate somewhere else. Before you know it, you're blowing through your facility management budget, and there's no good way to tell whether you made truly wise choices.



The screenshot shows a web application interface for PM Logic. At the top, there are navigation links: "Return to Site List", "Log Off", and a site ID "Site ID: 1150-0012". Below this, there are tabs for "Open Work Orders", "Completed Work Orders", "New Work Request", "Quote Manager", and "PM Logic". The main content area displays a large image of a rooftop unit (RTU) with a tooltip showing equipment details: "Equipment Name: 02RTU", "Model: 50TFQ006-S11", "Serial Number: 2090G50569", and "Year Manufactured: 1990". Below the image, there is a table with the following data:

ID	Manufacturer	Model	Serial Number	Manufacture Year
01RTU	CARRIER	50TFQ007-S11	2004G30523	2004
02RTU	CARRIER	50TFQ006-S11	2090G50569	1990
03RTU	CARRIER	50TFQ007-S11	2004G30525	2004
04RTU	CARRIER	50TFQ006-S11	2090G50441	1998

All quotes aren't created equal. Rather, they should be considered based on established criteria, and prioritized accordingly.

At CLS Facility Services, our **PM Logic**[®] solution manages this critical function, and helps facility managers make the right decisions on the many quotes they receive each day.

To illustrate this, consider three hypothetical quotes:

Quote #1: This is a replacement quote for a unit that isn't working at all – it's not blowing any cold air. The situation is critical. In our proprietary **PM Logic**[®], we'll tag this quote as red.

Quote #2: This is also a replacement quote, though in this case, the unit is chugging along and challenged. Perhaps the compressor is pulling 19 amps, so it's running too high, and it will need to be replaced eventually, though not necessarily tomorrow. In **PM Logic**, we'll tag this quote as yellow.

Quote #3: This quote is for a recommended repair to a given unit that is relatively new and functioning well. The repair is prudent, and something you'll want to eventually do – probably down the road. In **PM Logic**[®], we'll tag that quote as green.

Now, through **PM Logic**, we possess a schedule that clearly shows which service calls are necessary, and in what order. And so, if you as a facility manager are challenged to stay within your budget, what's your next move? According to **PM Logic**[®], you focus on the red-tagged quotes. Once you handle the red quotes – and assuming you're staying within budget – then perhaps you move on to the yellow-tagged quotes. Eventually, you address the green-tagged ones as well – and you can schedule those, perhaps as part of the next scheduled PM on the unit in question to avoid an emergency call to address those issues.

As we mentioned earlier in this ebook, CLS Facility Services' **PM Logic**[®] helps you make these kinds of strategic, smart decisions that save money and keep equipment running smoothly.

QC Logic[®]

Finding HVAC Contractors You Can Trust (Relax...It's Easy)

For companies that build and sell products, quality control is a pretty straightforward proposition: A product is manufactured based on strict design specifications; that product is then inspected in order to determine whether or not it meets those specifications; and any deviations are identified using quantifiable metrics.



But how do you quality control (QC) a service when an HVAC vendor performs a preventive maintenance (PM) program on a rooftop unit (RTU) in Tuscaloosa, Alabama – particularly when you can't be on site to view that PM being performed? How do you know that you're getting what you're paying for?

The honest answer is, you really don't. Most national HVAC management companies are third-party companies. They may say they'll implement a thorough PM program; but for facility managers like you, it's difficult to accurately evaluate their fitness for the job, and their performance when they're in the field – presumably working on your units.

At CLS Facility Services, we understand how challenging this aspect of facility management can be. That's why we developed *QC Logic*®, a proprietary CLS solution designed to centrally and systematically quality control HVAC contractors, and by doing so, help to ensure that you're getting your money's worth when it comes to third-party HVAC contractor services.

Through *QC Logic*®, CLS's vendor relations team ensures that all contractors meet our exacting standards in areas that include credentials, insurance, references, work history, general background, and any signed agreements that prohibit sub-contracting. Additionally, CLS' certified technical team reviews each quote for completeness, precision, cost-effectiveness, and alternative options. QC Logic is ideally suited to HVAC, but we designed it to work with all other CLS services as well.

QC Logic® offers big benefits: Service providers know they are being audited, so PMs and R&M are done accurately and on time – or else the provider risks future business. Additionally, their work scopes are implemented 100%, and manufacturer specifications are followed. In the case of HVAC PM, proper filters are used, and no shortcuts are taken. The list goes on.

How *QC Logic*® Helps You Identify and Track Trusted HVAC Contractors

If you manage facilities for a retail chain with stores located throughout the country, how are you hiring contractors to service HVAC and other critical building systems in each location? What's your process?

It seems like a simple question. But when we at CLS Facility Services pose it to our current and potential clients, we often hear many of the same answers:

Referrals.

Yellow Pages.

Google.

Resources like these are okay as a starting point. But big money is on the line when you account for the maintenance and repair of hundreds or even thousands of HVAC units and systems in different geographies. You should know who's doing the work. What are their qualifications? Are they trustworthy? Are they accountable? Are they even licensed and insured to do the work in the first place?

It's a tough proposition, made even tougher when the stores and locations really start adding up. Thankfully, there is a better way – at CLS, we call it *QC Logic*®, a proprietary solution that helps quality control (QC) third-party contractors to help ensure that they are trusted, capable and accountable.

QC Logic® is a four-stage solution. Here's how it works:

Stage One: Initial Evaluation

When it comes time to hire a third-party HVAC vendor in any of your given markets, we at CLS grab the reigns and undertake a systematic, thoughtful evaluation process on your behalf, similar to a typical employee hiring process. We ask the vendor for his/her resume. We ask for a copy of their license in order to verify that they're insured properly. We ask for references.

If a provider measures up at this first stage, then we offer them a small quantity of our client's work at the outset, and we carefully gauge their performance in the delivery of that work. This means we watch their response time – how quickly their quotes arrive, whether they show up to scheduled appointments on time, and how efficiently they work while on site – and we also solicit feedback on them from the store manager on their presence, and their work. If that vendor continues to perform well, then they will continue to earn a greater percentage of our client's work, and as long as they continue to do a great job, that volume will continue to build.

Stage Two: HVAC Contractor Quote Evaluation

In the second stage of *QC Logic*®, we evaluate the quotes you receive from the vendors we screen during stage one. Once we've hired contractors in given markets, those contractors will be sending you quotes for preventive maintenance (PM) and repairs. Without digging deeper, or without sufficient industry expertise at your disposal, it's difficult to know whether or not those quotes represent the best possible costs for the work.

In stage two of *QC Logic*®, CLS's certified HVAC technicians – CLS employees – review and evaluate any work quotes that come in. In cases where we perceive potential issues, we will contact vendors and question those issues, whether they be the cost of a compressor or the number of hours estimated. In stage two, we act on our client's behalf – we question the quote, and the labor and the material cost in order to determine what's fair and accurate.

Stage Three: Third-Party HVAC Contractor Audits



As valuable as stages one and two are, stage three of *QC Logic*® is unique in the industry: third-party audits. At this stage in the process, we're confident that we hired the best possible vendor for you, our client – we took our time, and we interviewed and investigated them thoroughly. We've also been watching them on the job, and they're doing pretty good work so far. Yet even at this point, they're still not completely "our" guy just yet. The only way to really validate the quality of their service is to look at the service that they actually provide.

Therefore, we audit our key contractors on a regular basis. If they just performed a large repair, or a normal PM, then we photograph the work – just to make sure that they changed the filter that they were supposed to change during the PM; that they replaced the old compressor that may have been scheduled for replacement; that they cleaned up the area after they finished their work; and so on.

Stage Four: Vendor Scorecard

Finally, we take information and data from the three first stages of *QC Logic*®, and we process it in order to develop a scorecard for every vendor. Scorecard components include:

- How quickly the vendor sends quotes in, and how accurate they are;
- How many of their quotes are approved;
- How quickly they respond to emergency calls;
- Intangibles – were they polite and presentable; did they check in and out properly?

We then share our scorecard with its corresponding vendor. Our message to them: "If you keep a high score on your scorecard, then we'll give you a steady flow of our client's (translation: your) work. You won't need to worry about a competitor undercutting you by a few dollars per hour on this particular client. We'll turn to you if you keep a high score, which means treating our clients like we want you to. If you don't treat them well, then you'll lose business."

It's as simple as that – *QC Logic*® helps us do everything that we possibly can do to ensure that our client gets what they pay for.

The HVAC industry is driven enormously by cost – it's one of the most cost-competitive industries we can think of. One provider just cannot charge much more than other or he'll eventually be undercut and lose the business. All things being equal, then, wouldn't you rather do business with a company that undertakes a solution like *QC Logic*® in order to minimize your headaches and your problems, as opposed to a company that doesn't?

CM Logic®

Real-Time Reporting – All of the Time

As the old saying goes, “The devil lives in the details,” and facility management is no exception. Indeed, details about every facet of facility management matter – a lot.

To illustrate this, consider a hypothetical example: The facility management company you’ve hired to manage your chain of stores comes to you one day and says, “Last quarter, you spent \$287,000.” That number alone is meaningless; there’s no context from which you can draw educated conclusions.

Instead, what that management company should be telling you is, “You spent \$287,000 last quarter; let us break it down for you by store: Here’s how much of it you spent on HVAC compressors; here’s your aggregate cost on lighting; here’s how much was spent on ballast repair versus burned-out bulbs. Given what this data is showing us, here are some recommendations that can help you save money and operate more efficiently.”

At CLS Facility Services, we know that it’s a real challenge for facility managers to accurately track the multiple projects that consume their day-to-day business – then make sense of their expenditures and adjust future spending accordingly. *CM Logic*®, CLS’ proprietary client management solution, is designed specifically to do all this – it delivers real-time reporting, all of the time, and the professionals who stand behind it are trained to work hand-in-hand with customers to spend their resources wisely.

CM Logic® is ideally suited to all CLS services, including HVAC, lighting, electrical and plumbing. It provides real-time work order status updates, custom financial reporting, and a dedicated customer service team headed by an experienced CLS business manager. With *CM Logic*®, our online maintenance work order system provides real-time updates on all open work orders without ever having to pick up the phone. You can also generate custom financial reports at the click of a mouse.

Additionally, *CM Logic*® integrates our top-notch finance capabilities. Through *CM Logic*®, our finance professionals work with you and your team on payables and receivables in order to provide expedited and accurate invoicing.

Just as important, *CM Logic*® integrates the expertise of a dedicated CLS business manager. This manager reviews and analyzes all relevant data from each of your stores each quarter, discusses the data with you, and works with you to develop strategies to help you operate your stores more efficiently and profitably.



An HVAC example underscores the value of **CM Logic**®: Say your current management company reports that you've had 80 emergency HVAC calls during the recent summer season. If they just tell you that, and nothing else, then what actionable steps can you as a facility manager realistically take?

The answer, frankly, is none. Now, if that same management company reported that of those 80 emergency calls, 60 of them were caused by clogged coils, then you as a facility manager can draw a logical conclusion and make an informed decision – like for example, proposing a coil cleaning program to your boss. Those 80 emergency calls average about \$850. The cost to clean a coil during a regularly scheduled Preventive Maintenance (PM) appointment is about \$120. That's a big cost savings for even one store, let alone dozens, hundreds or even thousands, and it's a powerful argument to make to your boss.

Tying It All Together

When we developed our Logic series, we interviewed dozens of customers and asked them to describe their perfect service vendor. Over and over, we heard many of the same answers:

- Communicate easily with me;
- Get me my invoices on time;
- Give me someone in accounts receivable who's pleasant to talk to;
- Give me someone who I can turn to as an escalation manager when issues arise;
- Give me detail on how I'm spending my money;
- I need a good PM program, and I need to know that I'm really getting what I'm paying for.

We listened to our customers, and our Logic series was built specifically to meet their needs at every turn – in other words, to deliver the ultimate facility management customer service experience.

At CLS, we view **PM Logic**®, **QC Logic**® and **CM Logic**® like circles that overlap at common junctures, with common threads that bind them together. PM Logic offers customers efficient, reliable and cost-effective service. QC Logic assures customers that they're getting what they pay for. And as we stated in our last post, CM Logic represents the third circle of this integrated experience – it's the expertise of a dedicated business manager who provides expert analysis and intercedes when issues arise; it's the granular detail of real-time reporting and costs; and it's the insight and analysis that helps facility managers maximize efficient spending.

How do some companies make facility management look so easy?

It's not Magic, It's Logic



PM Logic®

Unique Asset Management Tools

Real Time Work
Order/Warranty Tracking

Equipment Evaluation &
Replacement

Energy Management Solutions



QC Logic®

Certified Contractor Database

Third-party Contractor Audits

In-house Certified HVAC
Estimators

First Visit Solutions



CM Logic®

Custom Financial Reporting

Dedicated Customer Service Team

Dedicated Business Manager

Budget & CAPX Planning

Choosing a facilities solutions partner is a crucial choice for your organization. You want someone who understands your equipment and its needs, someone you can trust and customer service that exceeds your expectations. Learn more about CLS at www.clsfacilityservices.com.

