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BOA
Building Operators Association of Canada

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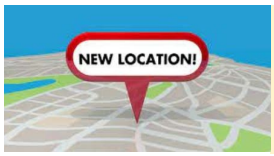

Thorncliffe Greenview Community Association

5600 Centre Street N at 5pm

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Front Cover:

Monika Bhandari

Important Phone Numbers

Emergency	911
Alberta Boiler Safety Association	403 291 7070
Alberta Labour (Emergency)	403 297 2222
Buried Utility Locations	1 800 242 3447
City Of Calgary (All Departments)	311
Dangerous Goods Incidents	1 800 272 9600
Environmental Emergency	1 800 222 6514
Poison Centre	403 670 1414
Weather Information (24hr)	403 299 7878

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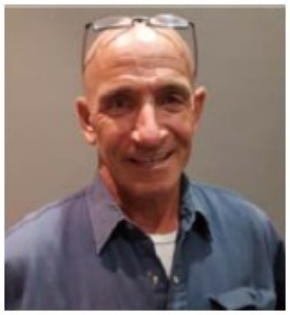
President's Message

I hope this message finds you & yours well and in good health



BOA is offering to management companies, a corporate membership that will allow their property management staff access to the association.

BOMA Calgary will put out a notification to their members via the electronic newsletter, BOA meeting times and dates along with who will be the guest speakers and the topics presented. Hopefully this will encourage operators to attend the monthly educational sessions.

Building Operator Curriculum Update

BOA has reached out to other jurisdictions that have been affected by the dissolving of Pan Global Publications. It has affected the Jurisdictions from BC through to Manitoba as well all the northern territories. It seems the owners of the material, SAIT, NAIT and BCIT are playing their cards very close to their chest and not making any commitments other than they will release the material to the public early 2026 and did not make any comments as to updating the archaic Building Operator material or the dates that they will be released. There are still options out there as to the best fit….? I feel that Building Operators have been placed on the back burner. We can't wait too long; we cannot begin classes until this is resolved. BOMA and BOA as a group have reached out to municipal affairs our as we fall under their jurisdiction. I will keep you notified if we hear anything more of concern.

The guest speaker meeting dates and times will remain the same, Second Tuesday of each month from 5-7 PM at the **Thorncliffe Greenview Community Association 5600 Centre Street North**. There is plenty of parking available and the meeting rooms are spacious and bright. There is a restaurant at the community centre, and the meeting rooms are licenced.

With the new meeting place at Thorncliffe which has large rooms available. This will allow us to resume our Biannual trade show. There has been a Five-year hiatus since our last one, I will start looking for vendors to display their latest in technology or processes to the Operators.

It has been a challenge this past year for the association. The magazine remains successful, but we just need to get **you** out to attend the guest speaker meetings. The speakers are knowledgeable and the Q&A sessions after, is an opportunity to have a light shined on a question you may have, by an expert in their field.

If you have a topic you would like to know more on and or know of a subject matter expert that supports the Building Operators and would be willing to present at an association meeting. Drop Mark Arton a line to chairman@boacalgary.com.

Invoices have been sent out to members. Please process them, as the funds are necessary to continue support guest speaker meetings and to produce the magazine.

Warm regards,

Les Anderson
BOA Calgary President

BOA Building Operators Association of Canada

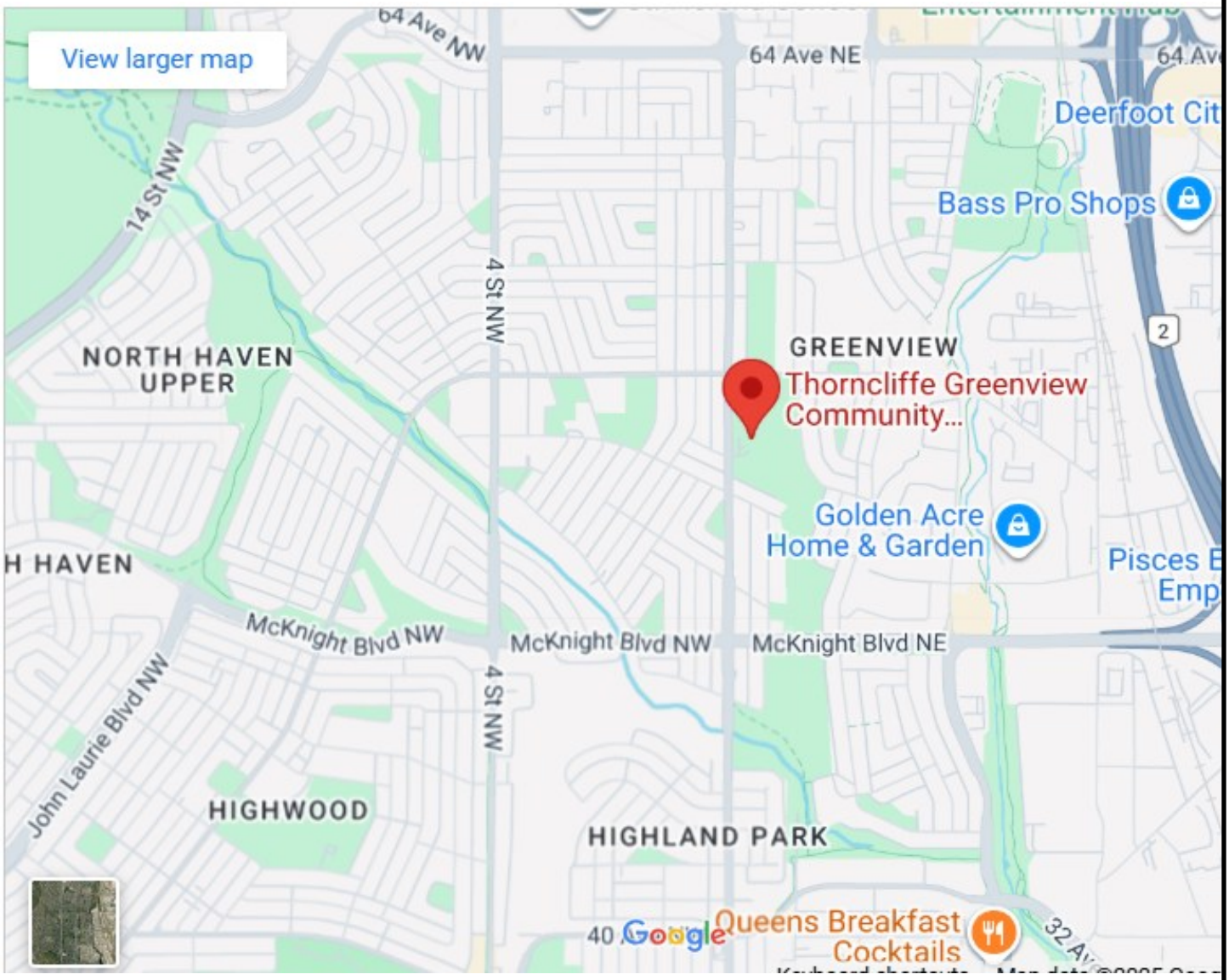
Join us at our Monthly Meeting on

Tuesday January 13th, 2026

at our new location:

Thorncliffe Greenview Community

5600 Centre St N, Calgary, AB T2K 0T3



Meeting starts at 5pm to 7pm
Free Parking

TEST YOUR OPERATOR IQ!

Are you equally adept at troubleshooting problems in the boardroom and the boiler room? As the resident facility guru, there's a lot riding on whether or not you know the difference between sounds control and a sound investment.
Try our monthly Operator IQ challenge...*answers on page 32*

1. Boiler surfaces may have what appear to be blisters which are composed of:

a. iron oxide
b. sodium sulfite
c. caustic soda
d. ferric sulfate
e. chelates

2. Boiler water chemicals are injected:

a. in measured amounts once per year
b. after considering the water test readings
c. into the water softener
d. to prevent the water becoming too alkaline
e. each time after blowing down

3.Boiler water testing is done in the average power plant every:

a. shift
b. week
c. month
d. time the boiler inspector requests it
e. time the chief engineer requests it

4.Boiler water with a pH of 6 is considered:

a. alkaline
b. basic
c. acidic
d. neutral
e. acceptable for boiler water

5.Boiler water with an alkalinity that is too high will likely:

a. have a lot of scale
b. show signs of pitting
c. have a low pH
d. foam
e. have grooving on its surfaces

Taking Tool Safety in Hand

Power tools, more powerful and flexible than ever, prompt managers to revisit their departments' safety-training strategies

Today's power tools have become workhorses of repair and renovation, delivering reliable performance for maintenance and engineering departments that use them for a variety of essential tasks. Drills, drivers and saws are among the power tools that front-line technicians have come to rely on.

These advances in power and performance, however, make the need for ongoing power-tool safety greater than ever. As technicians use more power tools more often, maintenance and engineering managers will need to update safety training to ensure tools are used properly and safely.

The book on power tools

Many features of new-generation power tools offer users increased reliability, ease of operation, and safety. They offer an array of advances, including automatic power shut-off, anti-kickback, and improved guarding, as well as better and more durable materials and more ergonomic designs.

One feature far surpasses all the others — the increased care and detail that power-tool manufacturers put into operating manuals. Efforts by the tool industry to raise the bar

and protect users' safety and health have paid off handsomely. All three sections of today's manuals — safety, setup and operation, and maintenance — offer useful information that has resulted in more positive user experience.

For example, today's manuals are better illustrated. They show users what safety features look like and how they should perform, and they contain useful tips about getting the best performance out of a tool. They also offer contact information in case users needs more details or parts, or if they need timely repairs to keep the tool in top condition.

But the safety payoff doesn't come until someone reads the information, processes it, and implements manufacturer safety recommendations. Managers can make this happen through a comprehensive training and safety program that includes releasing new tools only after users have had thorough training and an opportunity to practice under the trained eye of a skilled user.

Managers often hear the argument that technicians don't have time for training and have to get the job done. Maintenance work always comes with a degree of urgency and requires a certain amount of time, but it takes much longer to administer to an injured person and get that person to the emergency room in the event of an accident. Smart managers know they don't need the risk exposure and, so, need to find the time for safety training.

Performance pointers

Detailed knowledge of the tool is the first challenge and the most important safety solution. Each power tool's carrying case should contain a copy of the tool's specific safety rules, setup and operating instructions, and care and maintenance procedures for the user's reference.

Users must review their knowledge of this information before attempting to use the tool. And if it is missing or damaged, they should be able to get another one. Questions these documents should answer include:

- What tasks should I use it for, and never use it for?
- How do I use it correctly?
- How should the tool look with all the safety features on it?
- Is the tool in good operating condition?
- How should I hold it?
- What should I wear, and avoid wearing, while using the tool?
- Does the safety stop work? The user should try the tool and safety features under no-load conditions before operating it under load.

Is the work area clear of hazards, such as water, fumes, trip or fall obstacles, chemicals,

flammables, and awkward or confined locations?

A closer look

Among the safety challenges that front-line technicians must consider before handling, setting up, or operating drills, drivers, saws and sanders are these:

Drills. Is the cord and extension cord in good condition, with no fraying or exposed wires? Is the extension cord suitable for the job — for instance, an exterior cord for exterior use?

If the drill is cordless, technicians should follow operating manual directions for battery use, charging, storage and disposal. Does the safety switch and trigger shut off the power to the tool as soon as it is released? Are bits sharp and of the proper grade for the job — carbon steel, high-speed steel, or carbide for wood, and high-speed steel or carbide for metal? Is the angle ground on the tip right for the job?

Drill-bit conditions are very important. Good bits used properly improve safety because they require the user to exert less force. The danger of a bit snapping off during use is significantly lessened.

Drivers. In addition to the cord and tool checks described for drills above, drivers should be variable-speed type for best operator control. These drivers usually can operate at lower speeds and higher torque than drills, so operators should use a drill for driving fasteners only if it offers the right speed range for the job.

Saws. Besides the cord and safety checks above, guards are a must for saws of all types. The guard should retract as the saw enters the work piece and snap back over the blade when the cut is finished. Sometimes, a little lubrication on the guard can relieve sticking. Also, keeping the guard clear of cuttings or sawdust is important for smooth, reliable operation.

Sharp saw blades are a must for safe operation. Users want the least effort possible to do the job because this ensures operator control. Too much pressure, followed by sudden release causing imbalance, is a common cause of injuries. Ear protection also is a must when operating most types of saws, as they can produce a great deal of noise, and long-term exposure can cause hearing loss.

Some of the most productive saws also require the most attention during use. A technician can take several minutes to cut metal pipe with a band saw or power hacksaw, but an abrasive cutoff saw can do the job in seconds. But the cutoff saw’s high rpm, coupled with the brittle nature of abrasive wheels, mean it is essential to match the tool to the material. Technicians should never use an abrasive saw blade material for anything other than the work piece material for which it was intended, and they should never operate it at speeds outside its designated range.

When these blades shatter, they can cause

serious injury. The coding on the blade describes its application. All abrasive saw blade catalogs contain descriptions of the various wheels and their intended uses. The blades are marked with the code for reference to the catalog.

Sanders, grinders and wire brushes. Sanders come in a variety of types, from belt type to disc, as well as the closely related array for grinders, wire brushes and polishers. Tool users should never be in a position that exposes them to the radial force of the rotating tool. If a grinding wheel shatters or if wire flies off a wire brush, operators do not want to be in the line of flight. Therefore, care and practice are required to keep the tool held in a way that prevents contact with flying objects.

Safety sources

Periodic safety information releases by agencies such as the U.S. Consumer Product Safety Commission (CPSC) offer recall advice for power tools that present hazards. Recent releases include safety switches that stick in the "on" position and tools that continue to operate after the trigger is released. Some of these malfunctions have caused injury to users.

Frequent review of this information and comparison with the model number, serial number and date on power tool nameplates might help managers protect technicians from serious injury. Managers and tool users can report a dangerous tool or tool that caused injury to the CPSC hotline listed below.

Finally, 26 states have OSHA-approved safety and health programs. These programs might

be different from the federal regulations, so managers should check them for added safety information. Other safety resources include

GUIDELINES FOR SAFER TOOL USE

- Wear personal protective equipment (PPE), including safety glasses, a hard hat, insulated gloves, safety shoes and, where required, a respirator.
- Dress properly. Do not wear loose clothing, jewelry, or long hair that can get caught in rotating power tools.
- Review the specific safety procedures recommended for the tool in use.
- Keep the work area and floor clean and uncluttered.
- Keep the work area well lit. Use a good flashlight in dark or shadowy areas.
- Do not use electric tools near flammable liquids or gases, due to potential for brush sparks.
- Keep away from grounded equipment, such as pipes and radiators.
- Check wiring prints or insert a fiber optic light scope before drilling in walls or ceilings where electric wiring might be present.
- Always use sharp cutting tools and well-maintained drills and jack-hammer bits. Excess pressure can cause injury from broken or dull bits or sudden jamming.
- Unplug or lock out power tools before changing tools.
- Use the correct type and size tool for the job.
- Carry the tool with finger off the trigger to avoid accidental starting.
- Know proper chip geometry to predict potential for flying chips.
- Never touch the bit immediately after use. Watch for signs of hot drill bits or other tool accessories, such as smoking, and use lubricants if indicated.
- Don’t use a power tool while it is wet or when standing in water.
- Do not operate a power tool if fatigued or taking medication that can cause drowsiness.
- Keep power tools well maintained. Look for frayed or damaged cords or loose, damaged or bent parts.

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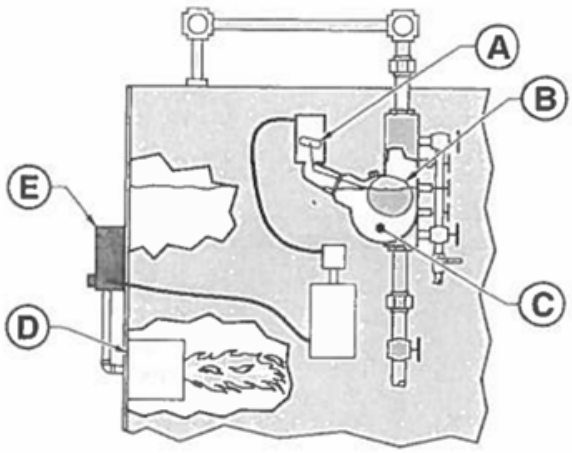
TESTING LOW WATER FUEL CUTOFF

Label the diagram:



_____ 1. Burner

_____ 2. Float at NOWL position

_____ 3. Mercury switch

_____ 4. Burner control

_____ 5. Float chamber

DID YOU KNOW THAT SNOW CAN ACTUALLY ACT AS INSULATION? SNOW IS MADE UP OF TINY AIR POCKETS THAT TRAP HEAT AND CAN KEEP THE GROUND BENEATH IT WARMER THAN THE AIR TEMPERATURE, LIKE A COZY BLANKET.

KIDMINDS.ORG

The Demand for Power Is Reshaping Buildings

Vlad Bakic

Commercial real estate tenants now demand higher electrical power capacity because they need to operate AI-based workspaces, data centers, and electrified operations. Workloads that require continuous operation, high power consumption, and absolute system availability. Many assets show no spare megawatts on paper; however, disciplined operations management reveals available capacity through peak hour analysis, schedule optimization, dead-band reduction and Peak Mode implementation in the BAS, creating measurable capacity without new transformers or feeders [8], [9]. The industry has learned that capacity functions as a strategic element while control functions as a powerful tool which enables "clean" operations through reliable operations and cost management.

Clean Nationally, Constrained Locally

The Canadian real estate market experiences three concurrent trends which drive electric demand growth because data centers and AI operations concentrate their power usage in particular areas, heat-pump electrification shifts thermal energy to the grid, and EV charging

creates new peak demand patterns [5], [7]. The Canadian power grid operates at a low-emissions level but buildings connect to local distribution systems which operate under thermal restrictions and time-based connection limitations instead of using national averages.

The Ontario power grid faces transformer and substation congestion which blocks new load connections primarily in Toronto's central business district.

The interest in firm clean power generation including nuclear refurbishments and small modular reactors has resurfaced to balance grid stability because renewable energy capacity continues to expand. The strategic focus for property owners and operators has evolved from energy reduction to guaranteeing sufficient affordable low-carbon power supply during critical usage periods.

Electrify Now - But Electrify Peak-Smart

The practical approach requires building capacity and flexibility before achieving complete cleanliness. The implementation of staged

electrification together with demand management systems provides sustainable paths toward complete decarbonization without creating unnecessary financial losses [7], [8], [9].

The main reason why projects fail to connect new loads to feeders occurs before financing becomes a problem.

A building which fails to handle heat-pump loads and dense tenant requirements will not achieve faster decarbonization through initial focus on purity. The management of reliability through proper load sequencing serves as the essential method which enables actual greenhouse gas reductions.

Why DR Exists When There Seems To Be "Plenty of Power"

Utility companies continue to request Demand Response (DR) participation from buildings even though national power supply appears abundant. The availability of power at peak hours differs from annual energy capacity because local infrastructure systems determine project feasibility.

1. Buildings receive compensation

Buildings receive compensation from utilities to decrease their power usage during critical times which helps prevent system overloads.

2. Prevents forced power cuts

This approach prevents forced power cuts and delays expensive infrastructure upgrades that remain idle for most of the year.

3. Market-based flexibility

Research indicates that acquiring brief power flexibility through the market proves more affordable and quicker than building additional grid infrastructure to handle infrequent peak demands.

The roadmap is discussed further as a strategy to ensure electrification remains viable at the meter level.

Implications for Property, Asset, and Facility Management

Property leaders must adopt new strategies to manage electrical capacity as a strategic asset. The following five imperatives define success in the new power landscape.

A. Govern Capacity Like an Asset

The management of electrical capacity should be treated as an asset that requires governance. Service ratings, feeder margins, transformer capabilities and fault current levels should be understood by all stakeholders.

The BAS system should receive fifteen-minute data from sub-metered mains, risers, chillers and EV chargers and major end uses to enable early peak detection.

Service Ratings - Understand transformer capabilities and fault current levels
Real-Time Data - Implement fifteen-minute interval monitoring across all major systems
Stakeholder Alignment - Ensure all parties understand feeder margins and capacity constraints

B. Institutionalize Peak Mode

The organization should create a Peak Day Playbook which defines roles and includes procedures for pre-conditioning and temperature and pressure resets and VFD floor adjustments and non-critical load control stages before critical peak events .

C. Electrify in Phases

The installation of heat-pump systems should follow a zone-by-zone approach while implementing dual-fuel operation for specific areas that need it. The management of kW consumption before kWh usage becomes essential because demand charges now represent an increasing portion of operational expenses .

The optimization of the top 50–100 peak hours enables substantial annual cost reductions which amount to double-digit percentage points.

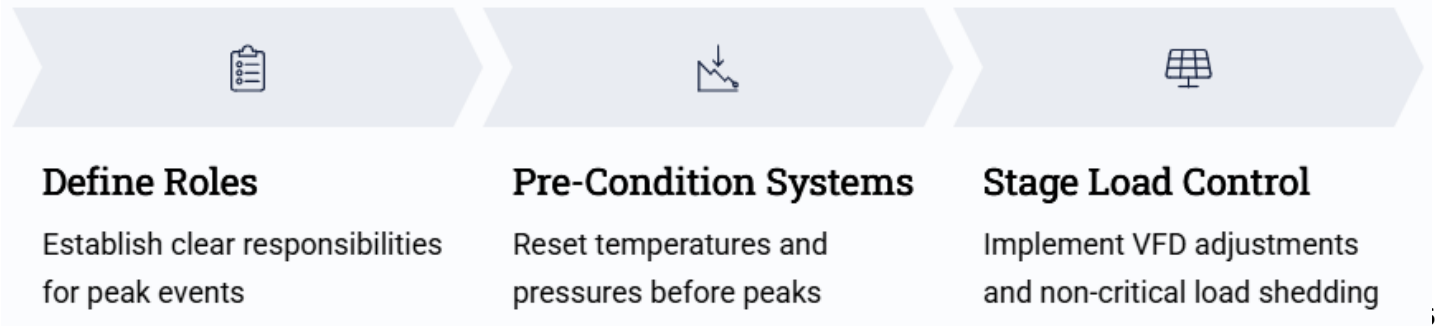
Full, one-shot electrification of heating in a capacity-constrained city is not climate leadership; it's a stranded-asset risk. Buildings that electrify without peak management and dual-fuel options often lock in higher operating costs just as demand charges are rising

D. Make DR a Revenue and Reliability Product

DR should function as a product which generates revenue and provides reliability to customers. The enrollment process should occur through an aggregator or program administrator while the CMMS should contain defined curtailment procedures and the system should maintain detailed M&V trend logs.

Revenue Generation - Enroll through aggregators to monetize flexibility
Reliability Enhancement - Define curtailment procedures in CMMS
Measurement & Verification - Maintain detailed M&V trend logs for compliance

E. Hedge With Firm and Flexible Resources



The combination of firm and flexible resources should serve as a hedging strategy. The system should use batteries with PV to perform peak demand reduction and system resilience while operating under structured supply contracts or tariffs. The system should operate as one unified unit because all assets connect to a single BAS control layer.

A Practical Roadmap Aligned With Budgets and Lead Times

90 Days - Foundations

Confirm fifteen-minute data feeds for mains and major loads; publish the **Peak Day Playbook** with triggers/owners/timeline; remediate schedules, seasonal resets, and stale overrides; validate economizer and heat-recovery logic; and enroll one pilot site in DR to test signaling, curtailment steps, and M&V .

Implement 15-minute interval monitoring - Deploy power feed updates for essential loads and main sources

Create Peak Day Playbook - Document operational procedures and execution protocols

Fix existing control issues - Address scheduling, seasonal resets, and override problems

Enroll test site in DR program - Verify signal reception and M&V procedures

The following 12 months will focus on implementing essential systems

Commission a **service study** of switchgear, feeders, transformer margins, power quality, and connection timelines with the local utility; retrofit VFDs and critical actuators; modernize BAS demand-limit logic; and pilot zone-based heat-pump expansions where hydronics support lower supply temperatures.

Service Study - Evaluate switchgear, feeders, transformers, and connection timelines

Equipment Upgrades - Install VFD and actuator improvements

BAS Logic - Implement demand-limit control sequences

Heat Pump Testing - Pilot zone-based electrification through hydronics

The 24-month period will focus on implementing major investments which match the timing of grid operations

Align chiller, tower, and boiler EoL cycles with a cohesive **electrification and firming** strategy; prepare hydronics for lower supply temperatures and verify delta-T; evaluate a BMS re-platform where native demand-limit functions and improved data quality materially strengthen execution; and sequence grid-interactive systems with capital renewal to avoid stranded assets while meeting regional capacity-planning realities.

Before approving a major heating electrification project, ask:

- What winter peak kW are we designing for, and how will we cap it?
- Have we modelled demand charges, not just annual kWh?
- What dual-fuel or hybrid options did we reject, and why?
- Can the local feeder and transformer actually connect this load in the next 3–5 years? How will DR and Peak Mode be operationalized in the CMMS/BAS from day one?

Controls: First, Best, and Fastest Capacity

Routine verification of Building Automation System (BAS) sequences continues to deliver the highest and most reliable capacity gains for the lowest cost. By focusing on these foundational elements, organizations can achieve significant peak demand reductions before considering major hardware investments.

Setpoint & Deadband Optimization - Ensure precise temperature and pressure settings for optimal energy use and comfort.

Dynamic Resets - Implement intelligent temperature and pressure resets to respond efficiently to changing conditions.

Economizer & Damper Control - Verify sealing and modulation of economizer and relief dampers for efficient ventilation.

Sensor Accuracy & Change Control - Maintain calibrated sensors and versioned change control for transparent system edits and performance.

The Toronto area has shown that retro-commissioning studies achieve 10-20% peak demand reduction through controls optimization instead of adding new equipment [2], [4]–[6]. These gains are particularly effective when paired with Demand Response (DR) programs and an understanding of existing distribution constraints, often remove the need for immediate hardware expansion.

In policy language, these control strategies are how buildings turn decarbonization “targets” into real, meter-level emissions cuts, without waiting for a new substation.

Conclusion

Organizations require peak hour margins together with sequence control and capacity planning flexibility to succeed. Where national policy is colliding with the economics of heating, portfolios that govern capacity, build flexible controls, electrify in phases, and manage the top 50–100 hours that drive risk and cost will be ready when the call arrives for more power. Whether for a strategic tenant, an AI workload, or a seasonal surge.

The most valuable operational statement of the decade will not be a slogan about technology but a calm response to a demanding request: **we can make that work**.

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The Silent Sabotage: Why the ‘Yes Man’ is Your Building’s Biggest Risk

Juan Carlos LaGuardia Merchán

Picture the scene. It’s 8:00 AM on a Monday. The BMS is flagging a critical fault in the primary chiller, the CEO is complaining about the temperature in the boardroom, and you have a vendor meeting in ten minutes to discuss a failing SLA.

In this chaos, we crave simplicity. We crave agreement.

When you ask your Senior Technician if the chiller can be patched up by lunch, and he looks you in the eye and says, *"No, that’s impossible. We need to isolate the circuit, and the parts won't be here until Wednesday,"* your heart sinks. You feel a flash of irritation. He’s being difficult. Again.

Conversely, when you ask your new Operations Coordinator if they can squeeze a full deep-clean of the reception area into an already packed weekend schedule, and they smile and say, *"Absolutely, consider it done,"* you feel a wave of relief. Finally, someone who gets it. Someone who is on the team.

But here is the hard truth that took me years of broken boilers and blown budgets to learn: **The technician was saving your reputation. The coordinator is about to destroy it.**

The Illusion of Harmony

In Facility Management and Building Operations, we are obsessed with "soft skills." We want team players. We want

people who are "solution-oriented." And quite rightly so. But somewhere along the line, we confused being solution-oriented with blind compliance.

I used to have a Chief Engineer let's call him Dave. Dave was a headache. If I proposed a new CAPEX project to retrofit the lighting, Dave would immediately pull out a spreadsheet and list ten reasons why my timeline was rubbish. He questioned the vendor's specs. He grumbled about the disruption to the tenants.

I spent a lot of energy "managing" Dave. I thought he was the conflict.

Then there was "Yes Man" Simon. Simon was a dream. Need to cut 10% from the OPEX budget? *"No problem, boss."* Need to defer the PPM on the air handlers to next quarter to save cash? *"Sure thing."*
Six months later, the truth surfaced. Dave's grumbling had prevented us from installing incompatible lighting drivers that would have failed within a year. Simon's agreeableness, however, resulted in three AHU motors burning out simultaneously because the belts hadn't been tensioned in nine months. The cost to repair was triple the savings we'd made.

The "Yes Man" hadn't solved the problem; he had merely hidden it under a rug of artificial harmony until it became a crisis.

Why We Fear the Challenger
It is human nature to avoid friction. In a service industry, we are wired to please. We want to say yes to the client, yes to the stakeholders, and yes to the C-suite. When a team member puts up a roadblock, it feels personal.

But in the technical world of hard services, physics doesn't care about your mood. A pump doesn't care about your quarterly targets. If a deadline is unrealistic, saying "yes" won't make the work happen faster; it will just ensure the work is done dangerously or poorly.

The "conflictive" employee the one who challenges you is often the one who cares the most.

- They care enough to tell you that the vendor is cutting corners.
- They care enough to argue that the health and safety risk isn't "negligible."
- They have the technical integrity to refuse to put a plaster on a gaping wound.
- They are the guardians of the asset. Their "no" is not insubordination; it is **protection**.

The Anatomy of the 'Yes'
Why is the "Yes Man" so dangerous in FM?

- **They mask reality:** You cannot manage what you cannot see. If your team tells you everything is fine, you are flying blind until you hit the mountain.
- **They kill innovation:** If everyone agrees with your first idea, you never find the second, better idea. Innovation is born from the friction of differing viewpoints.
- **They create a culture of burnout:** The "Yes Man" overcommits not just themselves,

but the entire team. They agree to timelines that force everyone else to work weekends, destroying morale and leading to high turnover.

I remember walking into a plant room once and finding a junior technician bypassing a safety interlock. When I stopped him, terrified, he said, *"Well, the manager said the power had to be back on by 10 AM, no matter what."*

That "yes" nearly cost someone their life.

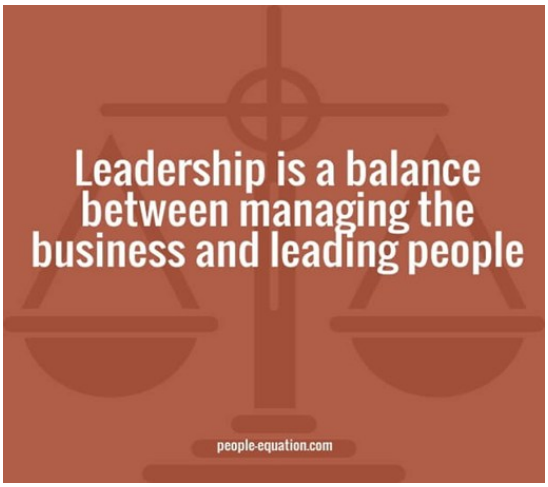
Flipping the Script

So, how do we fix this? How do we stop viewing challengers as problems and agreeableness as a virtue?

1. interrogate the 'Yes' When someone agrees to a complex request immediately, pause. Don't just take the dopamine hit of a problem solved. Ask them: *"How exactly will you achieve that? what resources will you need? What will drop off the list to make room for this?"* Make them prove the 'yes'.

2. Reward the 'No' This is uncomfortable, but vital. When a team member points out a flaw in your plan, thank them publicly. *"Dave, good catch on the voltage compatibility. We almost made a huge mistake there."* signal to the team that psychological safety is more important than blind obedience.

3. distinguish between 'Toxic' and 'Passionate' There is a difference, of course. Someone who is rude, aggressive, or obstructs progress for the sake of ego is toxic. That's a disciplinary issue. But someone who argues because they want the building to work? That is passion. Learn to translate their frustration into data.



The Bottom Line

We manage buildings, but we lead people. Buildings are logical; people are emotional.

It is easy to surround yourself with people who validate your ego. It feels good. It feels efficient. But in our line of work, entropy is the enemy. Things break. Systems fail.

You don't need a choir singing your praises. You need a team that isn't afraid to tell you there is a gas leak, even if you are in the middle of a board meeting.

So, next time someone on your team pushes back, don't write them off as "conflictive." Listen to the rhythm of their argument. They might just be the only one in the room telling you the truth.

And for the one who always says yes? Keep a close eye on them. They are the ones who will leave you with the lights out.

What's your take?

I'm sure many of you have managed a "Dave" or a "Simon." Have you ever been burned by someone who agreed to a deadline that was pure fantasy? Or perhaps you've been the "difficult" one trying to stop a disaster?

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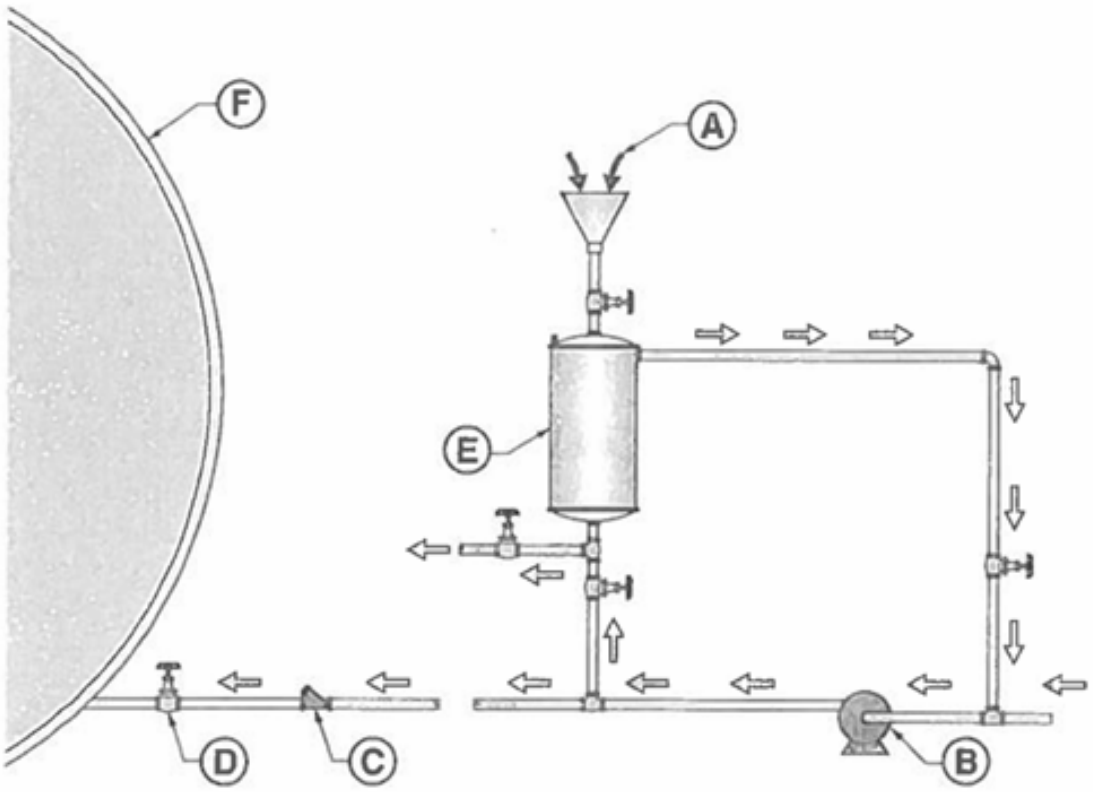
Bypass Feeder

Label the feeder:



_____ 1. Bypass feeder tank

_____ 2. Feedwater pump

_____ 3. Stop valve

_____ 4. Water treatment chemicals added

_____ 5. Check valve

_____ 6. Boiler

Answers on page 32

The Urgency Trap: Why Strategic Leadership, Not Heroics, is the True North for Facility Management

Juan Carlos LaGuardia Merchán

It's a scene most of us in Facility Management know all too well. The phone rings, *again*. Another **HVAC system** failure, a leaking roof that needs *immediate* attention, or perhaps a sudden compliance audit. In a matter of minutes, our carefully constructed plan for the week is completely derailed. We jump into action, coordinating the **M&E** technicians, liaising with contractors, and soothing the anxiety of building occupants. We are, for all intents and purposes, the **Incident Commander**, the person saving the day.

And we become quite good at it, don't we?

There's a subtle, almost addictive satisfaction in being the one who swoops in and fixes the critical issue. This **firefighting** approach can certainly feel productive in the moment; it gives a rush of accomplishment. However, if this scenario is playing out daily, weekly, or even monthly, it's not a sign of a high-performing team it's a stark, blinking warning light of a broken system. The simple, yet profound, concept remains: **If everything is urgent, then nothing is strategic.**

The High Price of Heroism in the Built Environment

When urgency becomes the default setting for our **Building Operations**, our leadership subtly shifts from being **visionary** to being merely **reactive**. We stop asking, "How can we optimize this entire building's energy consumption over the next five years?" and start asking, "How quickly can we source a replacement pump?"

This reactive stance has a devastating impact on our highly valued **multidisciplinary teams**. Imagine the **FM**

technicians who are constantly pulled off crucial **PPM (Planned Preventative Maintenance)** tasks, the very activities designed to prevent these emergencies to handle yet another crisis. They feel fragmented, frustrated, and ultimately, less effective. Their morale suffers, and the quality of their routine work invariably declines. This creates a vicious cycle: poor preventative maintenance leads to more failures, which demands more heroic intervention.

The "hero leader" who thrives on putting out fires, while seemingly dedicated, is inadvertently fostering an environment of perpetual crisis. They become indispensable not because they built a robust operation, but because they are the only ones capable of navigating the self-inflicted chaos. Frankly, that's not leadership; that's just managing a poorly governed system.

Strategy: Building the Walls, Not Just Dousing the Flames

High-impact leadership in FM must be built from the foundation of **strategy**, not the flimsy structure of fleeting urgency. To truly move the needle on **asset lifecycle management**, occupant comfort, and operational efficiency, we must replace the rush of the crisis with the calm, steady rhythm of **predictive governance**.

This means establishing **rules**, clear operational **SOPs (Standard Operating Procedures)**, and robust data-driven **KPIs (Key Performance Indicators)** that act as the structural steel of our operation.

Consider the difference between two scenarios:

- **The Heroic Approach:** A critical piece of **plant equipment** breaks down because its service interval was consistently deferred due to "more urgent" repairs. The FM swoops in, works 18 hours straight, spends a fortune on express shipping for a part, and eventually gets it running. Everyone claps. The facility limps on.
- **The Strategic Approach:** The FM leader implements a strict, non-negotiable **condition -based monitoring** program. Sensors track the **vibration analysis** and temperature of the equipment. Weeks before the failure point, the **CAFM (Computer-Aided Facility Management)** system flags a deviation. A work order is automatically generated for a scheduled, non-disruptive, **proactive replacement** during a quiet period. There is no drama. The equipment never fails. The operation runs seamlessly.
- Which leader delivers more long-term value? The answer is obvious. The strategic leader prioritizes the systematic, often less glamorous, work of maintaining the machine over being the person who repairs it only when it’s shattered. They

understand that a well-ordered system, supported by clear **delegation** and **accountability**, is far more powerful than any single individual's heroic efforts.

Shifting the Mindset: From Reaction to Foresight

Moving away from the urgency trap requires a deliberate and often difficult change in organizational culture. It demands that we, as leaders, have the courage to say 'no' to the immediate, tempting, quick-fix solution if it compromises the long-term, strategic objective.

Here are the non-negotiables for this strategic shift:

- **Implement Iron-Clad PPM Schedules:** These are not suggestions; they are **governance**. They must be protected from ad-hoc disruptions. If a crisis threatens the PPM, the leader must weigh the cost of *deferring* the maintenance against the cost of the *inevitable failure* it is designed to prevent.

- **Invest in Digital Tools:** Leverage **BIM (Building Information Modelling)** data and **IoT (Internet of Things)** sensors. These tools give us the **foresight** to move beyond reactive repair and into **predictive maintenance**. They allow us to anticipate the problem instead of waiting for the complaint.

- **Empower the Team with Rules:** Define clear **escalation protocols** and decision-making authority within the team. This removes the leader as the single, overwhelmed bottleneck. When the rules are clear, the team knows exactly when to act independently and when to escalate turning them from frantic followers into capable, autonomous contributors.

Ultimately, the true measure of a powerful FM leader is not how many crises they personally resolve, but how few crises occur on their watch. It's about creating an environment where the building runs itself smoothly, and the leader's time is freed up to focus on real strategic imperatives: **optimizing space utilization, driving energy efficiency, and enhancing the overall occupant experience.** That's where the lasting impact lies. That's the true definition of leadership in the built environment.

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Tool Time:

Test Your Knowledge on Wrenches

Take this 14-question exam on wrenches and see how you do. You may be surprised by the results.

WRENCH QUIZ

1. If you borrow your buddy's wrench and it breaks is this proof that you did something wrong?

Answer: No. The wrench may already have had a small crack as a result of being overloaded in the past. It is possible the wrench was badly worn or deformed from heavy use. Wrenches that are badly worn are weaker than new wrenches. It is always a good idea to carefully inspect a wrench before using it — even your own.

2. What is the difference between a shear bolt and a tension bolt? Why is this important?

Answer: A tension bolt is a bolt that is loaded in such a way that it tends to stretch the fastener. A shear bolt is loaded with the load crosswise to the fastener. A shear bolt needs to only be tightened enough so it does not work loose, or it may be secured with a cotter pin. A shear bolt must be tightened to the correct amount, neither too much nor too little, or it is liable to break. Some joints have a combination of crosswise and lengthwise loading. These should always be considered tension bolts and carefully tightened.

3. Is it better to over-tighten or under-tighten a bolted joint?

Answer: Both over-tightening and under-tightening of bolts is bad. Most bolts have additional load put on them after they have been put in use. If they have been over-tightened, this additional load may cause the bolt to break. If it has been under-tightened, the addition of a varying load may be enough to cause a slight gap in the joint assembly. At this point in time, there is no load on the bolt. The tension oscillates from no load to a

substantially higher than the tightening load. This high percentage of cyclic loading can cause a “fatigue” failure after a number of cycles, which can be as few as two or three or as much as a million. The answer to the question is that bolts should be tightened to the specified tension or torque, no more and no less.

4. If I can’t turn a bolt by hand would it be better to use a cheater bar, a slugging wrench, or an impact gun?

Answer: An impact gun is the safest and best way of removing a very tight bolt. Not only is it much safer than a cheater bar, but the pulses produced by an impact gun are more effective than a steady pull. If an impact gun or power to run a gun is not available, a slugging wrench is a good choice. They are particularly useful for large fasteners.

5. When do you need to know the grade of a fastener?

Answer: There is no need to know the grade of a fastener to remove it. If you need to replace it, you should replace it with a fastener of the same or higher grade. If you are installing it, it is best to have an engineered recommendation. If that is not available, you can look into a handbook for a recommendation. To do this, you need to know the grade of the bolt to avoid either under-tightening or over-tightening.

6. Is a worn wrench as strong as a new wrench?

Answer: A worn wrench is never as strong as a new wrench. A worn wrench on a worn fastener is even more likely to break. Also, a worn wrench is more likely to damage the corners of a fastener. When this happens, it may not be possible to remove the fastener with a brand new wrench.

7. What fasteners should never be reused?

Answer: Fasteners in high strength applications should never be reused even if they look to be in good shape. Fasteners not only get worn but accumulate internal microscopic damage as a result of cyclic fatigue. Therefore, fasteners used in transportation which could cause loss of life in their failure should never be reused.

8. What problems do 12-point fasteners present?

Answer: Most 12-point fasteners are used in aerospace where it is always important that the fastener not fail. Twelve-point fasteners are always designed to have smaller heads than normal which means they require a higher load on the wrench than a six-point fastener would impose on a wrench. At the same time, they are higher strength at least 180,000 psi and sometimes higher. This requires the best rate of wrenches in good condition. Wright Tool makes spline wrenches which have been designed to turn either 12-point or 12 spline fasteners.

9. Does it make any difference what sequence you tighten lug bolts in Canada?

Answer: Yes. If you do it the wrong way, you are in violation of the law. For any joint with multiple fasteners, it is important that the fasteners be equally tight which can occur only if tightened in the proper pattern because increasing the load on one fastener can reduce the load on another fastener. If the fasteners are unequally loaded, the fastener with the extra load may fail putting an additional load

on the remaining fasteners. Then the most heavily loaded of the remaining fasteners will break putting higher load on the remaining fasteners, and so forth until they are all broken or disaster occurs first.

10. Why don't fastener manufacturers put a suggested torque value on their packaging?

Answer: The correct torque or fastener depends on factors beyond the manufacturer's control. Is it going to be used on a shear joint or a tension joint? Are the threads it engages with well formed? Is the joint lubricated at the time of assembly? If a torque wrench is used, is the torque wrench in calibration?

11. Why don't wrench manufacturers put a suggested maximum torque for their wrenches?

Answer: The maximum torque that a wrench will transmit to a fastener without breakage or damage to the fastener depends not only on the wrench but also on the fastener's wrenching areas. Are they under size or rounded or rusty, oiled or dry?

12. Is penetrating oil worth using?

Answer: Penetrating oil is always a help in loosening fasteners. There are some situations where oil is not permitted.

13. What's the best wrench for a tubing fitting?

Answer: An open end type of wrench is normally required. There are special open end wrenches with a narrow gap so as to make contact with six sides of the fastener. These reduce the chance of squeezing a fastener which may cause leakage. Ordinary open end wrenches should not be used because they make contact on two corners and tend to deform the fastener. However, special designs of open end wrenches such as WRIGHTGrip® contact at four points on the fastener and do it in a controlled fashion that reduces damage to the fastener yet allows higher torque.

14. Is a box wrench or an open-end wrench fastener stronger?

Answer: On combination wrenches, the open end is usually about a third of the strength of the box end, and, therefore, should not be used for high torque. Not only can the wrench break, but the fastener is more likely to be damaged. The WRIGHTGrip open-end wrench has a patented profile that applies force to the fastener in a very controlled manner, is as strong as a box wrench, and does less damage.

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KenKen Puzzle

How to solve the Kenken puzzle:

(Answers on page 34)

- Fill in the numbers from 1 –6
- Do not repeat the number in any row or column
- The numbers in each heavily outlined set of squares, called cages, must combine (in any order) to produce the target number in the top corner using the mathematical operation indicated
- Cages with just one square should be filled in with the target number in the top corner
- A number can be repeated within a cage as long as it in the same or column

8		5	2					9
	1	9			4		7	6
	4		8		1		5	
	7		9					
5		1	7	6		2	9	
9				1			8	3
	9	4						8
			6	4			3	
7	6	8	3		9	4	1	

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please note this does not include the ABSA exam
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TEST YOUR OPERATOR IQ ANSWERS
Answers: 1)d 2)c 3)e 4)b 5)b
TESTING LOW WATER FUEL CUTOFF ANSWER
1)D 2)B 3)A 4)E 5)C
BYPASS FEEDER PICTURE ANSWERS
1)E 2)B 3)D 4)A 5)C 6)F

Kenken Puzzle Answer

8	3	5	2	7	6	1	4	9
2	1	9	5	3	4	8	7	6
6	4	7	8	9	1	3	5	2
4	7	3	9	8	2	5	6	1
5	8	1	7	6	3	2	9	4
9	2	6	4	1	5	7	8	3
3	9	4	1	5	7	6	2	8
1	5	2	6	4	8	9	3	7
7	6	8	3	2	9	4	1	5

Just for laughs!

JOIN US:

TUESDAY JANUARY 13, 2026 AT 5PM FOR OUR MONTHLY MEETING

TITLE: **Water Treatment Fundamentals**

PRESENTER: **Chris Moore**
Liberty Chemicals Inc.

LOCATION:

Thorncliffe Greenview Community Association & Recreation Centre Boardroom
5600 Centre St N, Calgary, AB T2K 0T3

About Chris Moore

Chris Moore is a second-generation water treatment specialist who grew up in the industry, following in the footsteps of his father, who dedicated his entire career to the field. Inspired by that example, Chris built his own path with a clear vision: to create a water treatment company rooted in true partnership, fairness, and consistency—where every customer is valued equally, regardless of profitability.

Chris first established a highly successful branch in Lethbridge, built on service-first values, transparent communication, and dependable support. That same model has now been brought to Calgary, where the focus remains on long-term relationships, not short-term sales.

With years of hands-on experience, Chris understands how important it is for operators to have a solid foundation in water treatment fundamentals. He believes that when operators understand the "why" behind their systems, everything runs safer, smoother, and more efficiently.

Today, Chris continues to champion a collaborative, education-forward approach, working side by side with customers to protect equipment, improve system performance, and build lasting trust.

TOPIC:

Water Treatment Fundamentals
In this session, we'll cover the key pillars of effective water treatment:

- **Corrosion Control:** How to prevent the degradation of system components caused by chemical reactions with water.
- **Scale Control:** Understanding how to reduce and prevent mineral deposits (such as calcium carbonate) that reduce efficiency and can lead to equipment failure.
- **Fouling Control:** Identifying and managing suspended solids, silt, and debris that restrict flow and heat transfer.
- **Biological Control (Biofouling):** How to control bacteria, algae, and other microorganisms that can pose health risks, damage materials, and contribute to fouling.

This will be an open and informal presentation. Depending on the group's interest, we can also explore specific applications including closed loops, cooling towers, and steam boilers.

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