



Gaucher & Associates, Inc.

CASE STUDY

Code Exception Strategy Saves Project Timeline

How rapid code review, exception alignment, and utility coordination eliminated an up-to-48-month transformer upgrade and kept a critical store opening on track.

Project Type	National quick-service restaurant tenant improvement
Client	National restaurant chain
Key Partner	Gaucher & Associates – Utility Project Management
Challenge Window	Mid-2024 (critical path for target-year opening)
Outcome	Code modification approved in ~2 weeks; transformer upgrade avoided

Up to 48 mo	~2 weeks	0	On Track
Transformer Upgrade Lead Time Avoided	Code Modification Approval Cycle	Electrical Service Upgrade Required	Store Opening Timeline Preserved

1. Executive Summary

In mid-2024, a national quick-service restaurant tenant-improvement project in a major metropolitan jurisdiction with progressive energy-code requirements faced an existential schedule risk. Local energy-code provisions for renovations effectively mandated a switch from the original natural-gas rooftop units (RTUs) and water heaters to electric heat-pump equipment. That change drove the electrical service from a planned 400-amp to an 800-amp configuration, triggering a transformer upgrade by the local electric utility provider with an estimated lead time of up to 48 months—far beyond the client's target opening window.

Gaucher & Associates, serving as utility project manager, performed a rapid, targeted review of the applicable energy code, identified potential exceptions for alterations and conditioned-space thresholds, and aligned the project team on a formal code-modification strategy. Working closely with the Permit Consultant, Architect, MEP Engineer, and the client's design and construction leadership, the team secured approval of the code modification from the local Authority Having Jurisdiction (AHJ) within approximately two weeks. The project reverted to the original gas-powered RTUs and tankless water heaters, the electrical service remained at the existing capacity, and the transformer upgrade was entirely avoided—preserving the critical path to the target-year opening.

2. The Challenge: Electrification Mandate vs. Project Timeline

Progressive energy-code and “gas-ban” provisions in the jurisdiction required new or substantially renovated spaces to utilize electric heating and water-heating equipment rather than fossil-fuel appliances. Design documents for the project were revised to show electric RTUs and water heaters. The resulting connected load necessitated an upgrade of the electrical service from the original 400-amp design to 800 amps.

The local electric utility provider indicated that an 800-amp service would require a transformer upgrade. Lead times for such upgrades were quoted as high as 48 months. For a national restaurant chain targeting a near-term store opening, this timeline was a non-starter—effectively a project-killing delay.

Key Risks Identified

- Transformer procurement and installation schedule of up to 48 months.
- Potential need for right-of-way work, street-improvement plans, and additional civil engineering.
- Risk of lost opening window and associated revenue / lease impacts.
- Cascading effects on curb procurement, ductwork, and interior construction sequencing.
- Uncertainty around whether water heaters could remain electric without still forcing a service upgrade.

Michael Bowers of Gaucher & Associates first surfaced the disconnect between the original gas design (still visible in plumbing and mechanical sheets) and the newly issued electric design while coordinating utility service applications and reviewing plans with the General Contractor on site.

3. Gaucher’s Approach: Code Review, Exception Alignment & Rapid Coordination

3.1 Deep Code Review

Gaucher performed a focused review of the local energy-code provisions governing fossil-fuel equipment in alterations and renovations. The analysis identified several potential pathways for an exception or code modification, including thresholds related to conditioned floor area, the nature and extent of the alteration relative to the original building, and specific exception language that the project was close to meeting.

Rather than accepting the electric redesign as inevitable, Gaucher framed the problem as a solvable code-compliance issue that could be addressed through a formal modification request supported by technical justification and cost data.

3.2 Exception Alignment & Documentation Strategy

The team aligned on a strategy to request a code modification from the local Authority Having Jurisdiction (AHJ) that would allow reversion to the original natural-gas RTUs and tankless water heaters. Supporting documentation requirements identified by the mechanical reviewer included:

- AACE Level 3 cost estimate comparing electric vs. gas pathways (including electrical upgrades).
- A decarbonization plan outlining the project’s overall approach to emissions reduction.
- Revised mechanical sheets and a clear narrative describing the requested revision.

Gaucher coordinated with the Architect, MEP Engineer, Permit Consultant, and client stakeholders to assemble the package quickly and keep all parties synchronized.

3.3 Timeline Retrieval Through Parallel Tracking

While the code modification was in process, Gaucher continued utility coordination—monitoring service application status, clarifying transformer implications, and preparing contingency paths (temporary service, possible shut-downs). Simultaneously, the team confirmed that once the exception was granted, the original gas equipment sizing (approximately 12.5-ton and 17.5-ton RTUs) could be reinstated without triggering the higher electrical demand that would have forced the transformer upgrade.

4. Execution & Rapid Approval

Intensive activity occurred over a concentrated two-week period in mid-2024:

Early escalation: Issue formally escalated; code exceptions researched and draft modification strategy developed.

Days 1–6: Team coordination calls; draft letter and supporting materials prepared; initial contact with AHJ mechanical reviewer.

Days 6–13: Code modification request advanced; cost estimates and decarbonization plan elements assembled; reviewer indicated manager review underway.

Day ~15: AHJ approved the code modification. No formal meeting required. Client Design Manager reaction: “YESSSS!!!!!!”

Post-approval: Mechanical revision package (revised sheets + narrative + approved code mod) prepared for formal resubmittal; gas RTU selection confirmed.

Shortly after approval the code modification was formally incorporated into the mechanical plan resubmittal. Permit revisions for mechanical, electrical, and plumbing proceeded on a normal correction-cycle timeline (target 4–5 weeks after submittal), and construction activities—including curb work and interior ductwork—could continue without the multi-year electrical constraint.

5. Results & Impact

The successful code modification delivered measurable, high-value outcomes:

- **Timeline Protected:** The transformer upgrade with a lead time of up to 48 months was completely avoided. The project remained on a path consistent with the client’s target opening objectives.
- **Electrical Scope Contained:** Service remained at the original design capacity. No upgrade of the transformer or associated right-of-way work was required.
- **Equipment Path Clarified:** Design reverted to the original gas-powered RTUs and water heaters, allowing procurement of the correct units (with typical 6–7 week lead times) and continuation of curb and ductwork activities.
- **Cost Avoidance:** Avoided the capital cost of a transformer upgrade, potential civil/ROW work, extended general-conditions costs from a multi-year delay, and the opportunity cost of a postponed store opening.
- **Team Alignment & Process Learning:** The episode highlighted the critical importance of early utility and code coordination before taking possession and mobilizing construction. Client leadership explicitly recognized the value of the research and exception work performed by Gaucher.

“I’d say so Michael, and that was amazing work how you found the code exemption... thankfully, we don’t have to [estimate the savings].”

— Client Design Manager (mid-2024)

6. Key Takeaways

- **Early utility & code surveillance is non-negotiable.** Discrepancies between original gas design and later electric redesign were only fully surfaced once construction was underway. Earlier cross-discipline coordination could have prevented the near-miss.
- **Code exceptions exist—but must be actively researched and advocated.** Passive acceptance of an electrification mandate would have produced a multi-year delay. Targeted code review unlocked a viable path.
- **Speed of alignment multiplies value.** From formal escalation to AHJ approval took roughly two weeks because the team (Gaucher, Permit Consultant, Architect, MEP Engineer, Client) moved in parallel with clear ownership.
- **Utility project managers add unique leverage.** Understanding both the electrical infrastructure constraints and the regulatory landscape allowed Gaucher to frame the problem correctly and drive a solution that pure design or pure construction teams were less positioned to lead.
- **Document and institutionalize the learning.** The client and its partners now have a concrete example of how early utility risk assessment and code-exception capability can protect schedules on future electrification-impacted projects.

7. Closing

This project demonstrates that proactive code review, disciplined exception alignment, and rapid multi-party coordination can convert a potential multi-year utility catastrophe into a short, successful course correction. By ensuring that rooftop units and water heaters did not force an electrical service upgrade, Gaucher & Associates helped protect the client's timeline, capital, and opening goals.

Gaucher continues to invest in specialized environmental, sustainability, and technical review capabilities so that clients facing evolving energy codes and utility constraints can identify and secure practical pathways forward—before those constraints become schedule-killers.

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Utility Project Management

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We deliver consistent results through research and coordination
to eliminate our clients' utility concerns.