

NOT RECOMMENDED FOR FULL-TEXT PUBLICATION
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No. 18-3025

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

PROTECTING AIR FOR WATERVILLE;)
NEIGHBORS AGAINST NEXUS; SUSTAINABLE)
MEDINA COUNTY,)
Petitioners,)
v.)
OHIO ENVIRONMENTAL PROTECTION)
AGENCY, Craig Butler, Director; WADSWORTH)
COMPRESSOR STATION; WATERVILLE)
COMPRESSOR STATION,)
Respondents.)

FILED
Feb 21, 2019
DEBORAH S. HUNT, Clerk

Before: MERRITT, COOK, and LARSEN, Circuit Judges.

LARSEN, Circuit Judge. Three citizen groups, Protecting Air for Waterville, Neighbors Against NEXUS, and Sustainable Medina County, challenge air pollution permits issued to NEXUS Gas Transmission for two natural gas compressor stations along NEXUS's natural gas pipeline. But the citizen groups have not demonstrated standing to challenge the permits. We are therefore required to DISMISS their petition for review for lack of jurisdiction.

I.

The \$2.1 billion NEXUS pipeline project involves the construction, operation, and maintenance of a 257-mile natural gas pipeline system originating in Ohio and running into Michigan. The project also includes the construction and operation of four natural gas compressor

stations along the pipeline. Two of those compressor stations—one located near Waterville, Ohio and another located near Wadsworth, Ohio—are at issue in this case.

Before transporting or selling natural gas, the federal Natural Gas Act required that NEXUS obtain a certificate of public convenience and necessity through the Federal Energy Regulatory Commission (FERC). *See* 15 U.S.C. § 717f(c). In August 2017, FERC granted NEXUS this certificate, subject to several conditions. One condition was that NEXUS obtain the air pollution-control permits required by the federal Clean Air Act. NEXUS had, in fact, already received the necessary permits from the Ohio EPA, which was authorized by federal law to issue such permits. *See* 42 U.S.C. § 7661(4); 40 C.F.R. § 52.1870; 15 U.S.C. § 717b(d)(2). The Ohio EPA Director had issued the permits in September 2016 pursuant to chapter 3745-31 of the Ohio Administrative Code, part of Ohio’s implementation of the federal Clean Air Act. *See* 40 C.F.R. § 52.1870. Before these permits were issued, members of the public had the opportunity to attend public hearings, which were publicized in the local papers, and to submit written comments on the subject; the Ohio EPA made written replies to the submitted comments.

In October 2016, Protecting Air for Waterville and Neighbors Against NEXUS appealed the Ohio EPA’s permit issuance for the Waterville Compressor Station; Sustainable Medina County appealed the Ohio EPA’s permit issuance for the Wadsworth Compressor Station. All three citizen groups appealed to the Ohio Environmental Review Appeals Commission (ERAC), which has jurisdiction to hear appeals from certain actions of the Ohio EPA Director. *See* Ohio Rev. Code §§ 3745.04, 3745.07. In August 2017, while discovery was ongoing, NEXUS filed motions to dismiss the ERAC proceedings for lack of subject-matter jurisdiction, claiming that the Natural Gas Act, 15 U.S.C. § 717r(d)(1), vests jurisdiction over such appeals exclusively with the United States Courts of Appeal. ERAC agreed and dismissed the appeals.

In January 2018, the three citizen groups filed a petition for review in this court. They argued first that ERAC had jurisdiction to hear their appeal and that termination of the ERAC proceedings violated their rights to due process. With respect to these claims, petitioners requested that this court “remand the contested permit issuances to [ERAC] with instructions for them to be fully adjudicated.” In the alternative, petitioners argued that the permits were invalid because the Ohio EPA Director had issued them in violation of Ohio’s “de minimis” exemption and asked that the permits be revoked and the proceedings remanded to the Ohio EPA Director.

II.

Petitioners claim that ERAC erred when it determined that it lacked jurisdiction over their appeal, and that ERAC’s dismissal of their appeal deprived them of due process. These claims are not properly before us. Even assuming statutory authority permitting our review of ERAC’s decision,¹ petitioners have not appealed ERAC’s decision to this court. Petitioners failed to name ERAC as a respondent in this appeal, *see Fed. R. App. P. 15(a)(2)(B)*; and ERAC was not served with a copy of the petition, *see Fed. R. App. P. 15(c)*. The record of the ERAC proceedings was, therefore, never filed in this court, *see Fed. R. App. P. 17(a)*.

After the Ohio EPA pointed out these problems, petitioners stated in their reply brief that they had filed, “contemporaneously to the filing of their Reply Brief,” a motion to name ERAC as a responding party and to expand the record to include the ERAC proceedings. But petitioners did not file this motion with their reply brief, or even shortly thereafter; they instead asked to name ERAC as a respondent nearly three months later, approximately three weeks before oral argument

¹ Petitioners assert that ERAC’s decisions may be reviewed in this court pursuant to Section 19 of the Natural Gas Act, 15 U.S.C. § 717r(d)(1). Nexus and the Ohio EPA contest that assertion, arguing that, under Ohio law, appellate review of ERAC’s decisions lies in the Court of Appeals of Franklin County.

was scheduled in this case. Their motion offered no explanation for the delay. This court denied that untimely motion; ERAC is thus not a party before us and we may not review its decision.

III.

Petitioners next argue that the permits are invalid because they were issued in violation of Ohio’s “de minimis” exemption rule, OAC 3745-15-05 (C)(3) and (4). They ask this court to revoke the permits and remand the proceedings to the Ohio EPA Director. We cannot reach the merits of this claim, however, because petitioners have failed to establish standing.

In *Sierra Club v. EPA*, this court addressed what was then a question of first impression in this circuit: the “manner and degree of evidence necessary to prove standing upon direct [appellate] review” of final² agency action. 793 F.3d 656, 662 (6th Cir. 2015) (quotations omitted). Agreeing with our sister circuits, this court held that to establish standing, “the petitioner carries a burden of production similar to that required at summary judgment.” *Id.*; see also *N. Laramie Range All. v. FERC*, 733 F.3d 1030, 1034 (10th Cir. 2013); *Iowa League of Cities v. EPA*, 711 F.3d 844, 869 (8th Cir. 2013); *Citizens Against Ruining the Env’t v. EPA*, 535 F.3d 670, 675 (7th Cir. 2008); *Sierra Club v. EPA*, 292 F.3d 895, 899 (D.C. Cir. 2002). Our law makes clear, therefore, that “the petitioner [must] present specific facts supporting standing through citations to the administrative record or ‘affidavits or other evidence’ attached to its opening brief, unless

² Although this circuit has not addressed the question, all parties agree that we lack statutory jurisdiction to review the Director’s permitting decisions unless the issuance of the permits constituted “final” agency action. See *Del. Riverkeeper Network v. Sec’y Pa. Dep’t of Envtl. Prot.*, 903 F.3d 65, 71 (3d Cir. 2018) (joining “the First Circuit in holding that the Natural Gas Act provides jurisdiction to review only ‘final agency action of a type that is customarily subject to judicial review’” (quoting *Berkshire Envtl. Action Team, Inc. v. Tenn. Gas Pipeline Co.*, 851 F.3d 105, 111 (1st Cir. 2017))). They dispute whether the Director’s decision was final. We need not decide the finality question. If the Director’s decision was not final, the parties agree that we lack statutory jurisdiction; if the Director’s decision was final, we still lack jurisdiction because petitioners have failed to establish standing for purposes of Article III.

standing is self-evident.” *Tenn. Republican Party v. SEC*, 863 F.3d 507, 517 (6th Cir. 2017) (alteration in original) (quoting *Sierra Club*, 793 F.3d at 662).

As the party invoking federal jurisdiction, petitioners bore the burden of establishing the “irreducible constitutional minimum” of standing: that petitioners “(1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that is likely to be redressed by a favorable judicial decision.” *Spokeo Inc. v. Robins*, 136 S. Ct. 1540, 1547 (2016). Even the first element of standing—*injury in fact*—was far from self-evident in this case. There was no indication, and petitioners did not claim, that their organizations were directly injured. Citizen groups, even if not injured in their own right, can establish standing on behalf of their members. *Sierra Club*, 793 F.3d at 661. Yet such “representational standing” requires a group to show, among other things, that “its members would otherwise have standing to sue in their own right.” *Id.* (quotations omitted). To show *injury-in-fact*, therefore, petitioners were required to “make specific allegations establishing that at least one identified member had suffered or would suffer harm.” *Summers v. Earth Island Inst.*, 555 U.S. 488, 498 (2009). We cannot simply assume that petitioners have members who would be affected by the compressor stations’ emissions; petitioners were required to “present specific facts . . . through citations to the administrative record or ‘affidavits or other evidence’ attached to its opening brief,” *Tenn. Republican Party*, 863 F.3d at 517, demonstrating that identified members of their organizations had, or would imminently, suffer a sufficiently concrete injury.

Yet petitioners failed even to mention standing in their opening brief. They discussed standing only in their reply brief, and only after both NEXUS and the Ohio EPA argued that the citizen groups lacked it. And even the reply brief falls short. Petitioners’ reply brief argued that standing could be “inferred from facts in the administrative record,” that there is no dispute the

compressor stations will produce airborne emissions, that some of those emissions will include “toxic industrial chemicals,” and that some of its unidentified members “will be exposed at some point to those airborne emissions.” Those bare allegations are not enough to show a concrete injury. Petitioners failed to provide evidence that any individual members of their organizations will be harmed by the emissions from the stations. While petitioners alluded to “comments of Petitioners cited by Ohio EPA” suggesting such harm, they did not identify any particular comments. Petitioners thus provided this court with no evidence—by way of record citations, affidavits, or otherwise—that any of their members would suffer concrete and particularized harm from the compressor stations’ emissions.

Petitioners seek to excuse their “supposed failure to demonstrate an injury in fact,” on the ground that they were “deprived of an adjudication at the state agency level and prevented from developing via the adversarial process, evidentiary standing proofs.” But petitioners did not need to utilize an intensive fact-finding process to establish an injury sufficient for Article III purposes. There were many ways petitioners could have established injury without resort to the factfinding proceedings available in ERAC.³ While we will not decide the hypothetical question of precisely what would have sufficed, we note that courts have accepted, for example, affidavits from individual members attesting to fear of health concerns in combination with expert reports detailing the injuries that could follow from exposure. *See, e.g., Am. Canoe Ass’n v. Murphy Farms, Inc.*, 326 F.3d 505, 518–20 (4th Cir. 2003) (finding standing based on member affidavits expressing concerns about water quality in river and creek—which individual members used and which were allegedly affected by certain discharges—and expert testimony demonstrating that

³ To the extent petitioners claim that their lack of access to the ERAC procedures was itself an injury, such a claim cannot, alone, establish injury for Article III purposes. *See Summers*, 555 U.S. at 496 (“[D]eprivation of a procedural right without some concrete interest that is affected by the deprivation—a procedural right *in vacuo*—is insufficient to create Article III standing.”).

those fears were reasonable). The dissent rightly notes that “[i]n other similar proceedings, petitioners filed affidavits alleging ‘aesthetic, recreational, and property injuries.’” A key difference between those cases and this one is that there “petitioners *filed affidavits.*” In other words, they complied with the rule requiring them to “present specific facts supporting standing through citations to the administrative record or ‘affidavits or other evidence.’” *Tenn. Republican Party*, 863 F.3d at 517; *see also Sierra Club*, 793 F.3d at 662. Here, petitioners did not.

We respectfully disagree with the dissent’s conclusion that items in the record, unearthed by the dissent, but not cited by petitioners in support of standing, establish our jurisdiction. The dissent points to: (1) comments submitted to the Ohio EPA; (2) the citizen groups’ briefing before ERAC; (3) written objections made by the citizen groups to the Ohio EPA; and (4) an expert report detailing potential health concerns for nearby residents. These do not suffice. The comments submitted to the Ohio EPA are not sworn and, in any event, do not indicate their authors. It is not enough to assume that “people with medical conditions” or “residents” submitted these comments; and even were we to do so, we would have no way of knowing whether the comment writers were then, or are now, members of the citizen groups. The dissent’s remaining categories fare no better. The petitioners’ legal briefs and written objections contained no sworn testimony from any member, merely allegations regarding the identities and individual concerns of members. But at this stage in the litigation, the petitioners had to provide this court with “affidavits or other evidence.” *Tenn. Republican Party*, 863 F.3d at 517. “Bare allegations are insufficient . . . to establish a petitioner’s standing to seek judicial review of administrative action.” *Sierra Club*, 292 F.3d at 898. Finally, petitioners’ expert report would be relevant only if we had evidence that nearby residents were members of the citizen groups.

We are doubtful of the dissent's claim that we thwart the will of Congress by respecting the Constitution's limits on our jurisdiction. But that is largely beside the point. While we acknowledge the dissent's concern regarding the possible dangers surrounding natural gas pipelines, no such concern would allow us to circumvent the Constitution's restrictions on our power.

* * *

This circuit has established the “‘manner and degree of evidence’ necessary to prove standing upon direct review” of agency action. *Sierra Club*, 793 F. 3d at 663. Petitioners’ fleeting discussion of standing in their reply brief, lacking any evidence to support the claim of injury to their members, fails to meet their burden of establishing standing to invoke this court’s jurisdiction. We accordingly DISMISS the petition for lack of jurisdiction.

MERRITT, Circuit Judge, Dissenting. This complex gas pipeline case asks us to balance the rights of adjacent landowners with the procedures that Congress has set out for Natural Gas Act facilities. When a gas company wants to build a pipeline, it applies for a certificate of public convenience and necessity from the Federal Energy Regulatory Commission (“FERC”). These certificates are issued conditionally: so long as the gas company can obtain the necessary air and water permits from local authorities, the pipeline can proceed. The states have different procedures for issuing the required environmental permits. When the permit issues from the state or local environmental agency, the gas company can begin construction the next day because the issuance of the permit is a “final” action. Once the state permit issues, any “civil action” relating to the pipeline facility must be brought as a lawsuit in the U.S. Court of Appeals. This case concerns air permits issued for two compressor stations by the Ohio EPA. Instead of going to the Court of Appeals, as directed by the statute, the petitioners made one stop at an Ohio environmental administrative appeals panel, which dismissed their claims. They are now in the right Court, but the majority has chosen to dismiss the case for lack of standing. This outcome is inconsistent with the review procedure Congress created and my view of public safety.¹

My colleagues today do not explain what Congress intended to do by vesting in the federal Courts of Appeal the judicial review component of the Natural Gas Act instead of using the normal procedure of starting cases in the District Courts. *See generally Delaware Riverkeeper Network v. Sec'y Pennsylvania Dep't of Envtl. Prot.*, 833 F.3d 360, 372 (3d Cir. 2016) (“[T]he purpose of the provision is to streamline the review of state decisions taken under federally-delegated authority.”); *Islander E. Pipeline Co., LLC v. Connecticut Dep't of Envtl. Prot.*, 482 F.3d 79, 85

¹ Perhaps I am a little too concerned about the frequency of gas pipeline ruptures and explosions. But I read frequently about such accidents and that makes me perhaps less likely to dismiss cases like this on grounds of standing and that adjacent landowners do not have anything to worry about. The *New York Times* has a story this week about a pipeline explosion in Ohio. Two such reports are appended to this dissenting opinion.

(2d Cir. 2006) (discussing the legislative history). 15 U.S.C. § 717r(d)(1) directs the Courts of Appeal to act as courts of first impression for claims objecting to the issuance of environmental permits for natural gas projects. We must set up some system to hear those objections. It is not a reasonable construction of Congressional intent to circumvent the process by relying on standing to get rid of this case. Counsel stated at argument that the public permitting hearing before the Ohio EPA for these compressor stations was the most well-attended in the history of the agency. The local public cared. I do not think that dismissing this petition for lack of standing accomplishes the will of Congress that we provide a forum for review of the objections of adjacent landowners.

The procedures that the Natural Gas Act instructs us to apply suggest that the petitioners have standing. Justice Brennan framed the inquiry simply many years ago: does the party have a stake in the outcome of the case? *Baker v. Carr*, 369 U.S. 186, 204 (1962); *see also Lujan v. Defs. of Wildlife*, 504 U.S. 555, 573, n.7 (1992); *Moreau v. F.E.R.C.*, 982 F.2d 556, 566 (D.C. Cir. 1993) (applying *Lujan* in Natural Gas Act context to conclude petitioners had standing). Of course these petitioners have a stake in the outcome. The very fact that this is the only review process created for a very dangerous activity suggests that the petitioners have standing.

The petitioners have a clear interest in the outcome. They live close to the facilities in question. A leak could cause an explosion. If the proposed facilities are built, their property values may decrease, they may be exposed to air pollution, and their peace and quiet may be disturbed by two noisy factories. In other similar proceedings, petitioners filed affidavits alleging “aesthetic, recreational, and property injuries” they would suffer if the pipeline were built. *See Delaware Riverkeeper Network v. Fed. Energy Regulatory Comm’n*, 895 F.3d 102, 107 (D.C. Cir. 2018) (upholding standing); *Sierra Club v. Fed. Energy Regulatory Comm’n*, 867 F.3d 1357, 1365–66 (D.C. Cir. 2017) (same); *see also Delaware Dep’t of Nat. Res. & Envtl. Control v. E.P.A.*, 785 F.3d

1, 7 (D.C. Cir. 2015) (same); *Sierra Club v. U.S. E.P.A.*, 762 F.3d 971, 978 (9th Cir. 2014) (“Indeed, remedying such injuries is exactly the purpose and function of these particular emissions limits, and more broadly, the Clean Air Act. It is therefore sufficiently clear that judicial review of EPA’s refusal to enforce the relevant regulations will provide Petitioners’ members with redress.”).

The record is replete with exactly the sort of testimonial allegations required to show a concrete injury. [Petitioner’s Appendix (Docket Entry 31) at 196-98, 213-15, 230-32, 269-70]; [Ohio EPA Appendix (Docket Entry 26) at 323-25].² The record also contains the comments submitted to the Ohio EPA by people with medical conditions like asthma that could be aggravated by increased emissions. [Nexus Appendix (Docket Entry 24-3) at A.1004]. The permitting record contains the exact objections that residents submitted to the agency. [Ohio EPA Appendix (Docket Entry 38) at A.726-744]; [Nexus Appendix (Docket Entry 24-3) at A.951-1018]. Thus the majority’s statement that, “Petitioners failed to provide evidence that any individual members of their organizations will be harmed by the emissions from the stations,” is in error.

Even if petitioners cannot secure exactly what they want from us – killing the project – that does not mean they lack standing. *See Sierra Club v. State Water Control Bd.*, 898 F.3d 383, 402

² For example:

“His residence is located less than one-half mile from the proposed site of the Wadsworth Compressor Station, Medina County, Ohio. On his land, Mr. Smith grows organic fruits and vegetables which are a mainstay of his family’s diet...in the course of normal day-to-day operations of the compressor station [Mr. Smith] will be constantly exposed to land and air contamination...” [Petitioner’s Appendix at 196].

“Their residence is located less than 2,000 feet from the proposed site of the Wadsworth Compressor Station, Medina County, Ohio...The Leibold[s] oppose the permit for the compressor station because its operation and emissions will be inimical to their personal health and the physical environment in and about their residence.” [Petitioner’s Appendix at 196-7].

“Ms. Bell opposes OEPA permitting of the compressor station [sic] because of the potential health effects to herself and her family; diminution of the economic value of her residence; and the potential for an explosion or incendiary accident at the compressor station.” [Petitioner’s Appendix at 214].

These are basic and direct allegations of injury subject to common law remedies like nuisance.

(4th Cir. 2018). Counsel for the petitioners also pointed to the notification procedures in the statute as proof that petitioners have a stake in the outcome here. *See* 18 C.F.R. §§ 157.6(d), 157.203(d). Those regulations explicitly state that no notice is required if air quality will be unaffected. 18 C.F.R. § 157.203(d)(3)(iv) (“No landowner notice is required for activities that do not involve ground disturbance or changes to operational air and noise emissions.”). A landowner whose home sits in a pipeline’s direct pathway should have standing, *see generally Gunpowder Riverkeeper v. F.E.R.C.*, 807 F.3d 267, 271–72 (D.C. Cir. 2015), as well as others nearby.

Appendix to Dissent

- 1) *Enbridge Gas Pipeline Explosion Causes Fireball in Ohio*, N.Y. TIMES (Jan. 21, 2019),
<https://www.nytimes.com/reuters/2019/01/21/world/americas/21reuters-enbridge-gas.html>;
- 2) Karen Zraick, *Faulty Work by Gas Company Caused Massachusetts Explosions, Officials Say*, N.Y. TIMES (Oct. 12, 2018), <https://www.nytimes.com/2018/10/12/us/columbia-gas-explosions-boston-ma.html>.

1/23/2019

Enbridge Gas Pipeline Explosion Causes Fireball in Ohio - The New York Times



Enbridge Gas Pipeline Explosion Causes Fireball in Ohio

By Reuters

Jan. 21, 2019

(Reuters) - An explosion of an Enbridge Inc natural gas pipeline in Ohio on Monday created a fireball of flame and damaged homes, prompting the evacuation of nearby residents.

The explosion occurred on Enbridge's Texas Eastern pipeline system and appeared to have destroyed two homes, said Chasity Schmelzenbach, emergency management director for Noble County, Ohio.

"We got reports flames were shooting (up) 80 feet to 200 feet (25-60 meters)," Schmelzenbach said. "You could see it upwards of 10-15 miles (16-24 km) away. Lots of people thought it was in their backyard because it does appear large."

Enbridge later said that two people were injured and two structures damaged in the incident, which occurred at 10:40 a.m. EST (1540 GMT). It said the fire had been contained, but that residents near the incident had been evacuated.

The Calgary-based company said it had "immediately started to shut in and isolate that section of pipeline" and was cooperating with authorities in its response.

The U.S. Pipeline and Hazardous Materials Safety Administration has been notified about the explosion and has dispatched an investigator to the scene, an agency spokesman said.

Enbridge's Texas Eastern pipeline carries natural gas from the U.S. Gulf Coast and Texas to high-demand markets in the mid-Atlantic and Northeast, according to Enbridge's website.

It was not immediately clear if the shut-in would impact customers in some of the most densely populated areas in the United States during a particularly severe cold snap.

A spokesman for Pennsylvania's major power supplier, PECO, said late on Monday it was not experiencing any disruptions related to the explosion.

A fire on an Enbridge gas pipeline in northern British Columbia late last year led to supply disruptions throughout the Pacific Coast, forcing a number of Washington state refineries to temporarily shut or curb operations.

(Reporting by Rod Nickel in Winnipeg, Manitoba, Julie Gordon in Vancouver, Jarrett Renshaw in New York; Editing by Leslie Adler and Sandra Maler)

<https://www.nytimes.com/reuters/2019/01/21/world/americas/21reuters-enbridge-gas.html>

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1/24/2019

Faulty Work by Gas Company Caused Massachusetts Explosions, Officials Say - The New York Times

The New York Times

Faulty Work by Gas Company Caused Massachusetts Explosions, Officials Say

By Karen Zraick

Oct. 12, 2018

A faulty plan to replace aging gas pipes caused sudden explosions and fires in three towns north of Boston last month that killed one person and drove thousands from their homes, the National Transportation Safety Board said Thursday.

Before the accident, on the afternoon of Sept. 13, a crew contracted by Columbia Gas was working on upgrading the natural gas distribution system in south Lawrence. The company had approved the plan to replace century-old, cast-iron pipes, which had sensors to monitor pressure.

But disconnecting the old system disabled the gauges, and the full flow of high-pressure gas into the system — without an accurate read of how high it was — caused the explosions in Lawrence, Andover and North Andover.

The agency's report, which is preliminary as the investigation continues, places the blame squarely with the company.

"Columbia Gas developed and approved the work package executed on the day of the accident," it read. "The work package did not account for the location of the sensing lines or require their relocation to ensure the regulators were sensing actual system pressure. The work was performed in accordance with steps laid out in the work package."

In a statement about the report, Joe Hamrock, the chief executive of Columbia Gas's parent company, NiSource, said the utility was "taking the steps needed to re-earn the trust of our customers, communities and public officials."

Senator Edward J. Markey of Massachusetts said the report raised even more questions about how such a catastrophe could have occurred.

"We need to turn over every stone and shine a light on the workings of this company and the entire industry," he said in a statement.

In addition to the one person killed — Leonel Rondon, 18 — more than 20 people were injured and 131 structures were damaged, most from fires ignited by gas-fueled appliances. Five buildings were destroyed.

1/24/2019

Faulty Work by Gas Company Caused Massachusetts Explosions, Officials Say - The New York Times

A month later, some people remain displaced, and more than 7,500 gas meters are still shut off, leaving residents without heat, hot water or cooking gas. Columbia Gas says it plans to fully restore service by Nov. 19.

The report lays out the chronology of an afternoon that “looked like Armageddon” as the fires burned.

Minutes before the explosions, the Columbia Gas monitoring center in Columbus, Ohio, received two high-pressure alarms for the south Lawrence gas pressure system. One was at 4:04 p.m.; the other came a minute later.

The monitoring center does not open or close valves on its own, but it can advise field technicians. At 4:06 p.m., it notified the group in Lawrence. Just five minutes later, a resident placed the first of many 911 calls.

By the evening, there had been at least 70 reports of explosions, fires and strong gas odors. The three areas are home to more than 100,000 people, and firefighters found themselves putting out one fire, only to find another breaking out nearby. Thousands lost power and traffic jammed the roads out of town.

The Massachusetts Department of Public Utilities is hiring an independent evaluator to examine the safety of natural gas distribution throughout the state. After the release of the report, it ordered Columbia Gas to stop work except for emergency repairs and compliance work until at least Dec. 1.

The department issued a similar order to National Grid this week, pending a review of its safety practices.

A version of this article appears in print on Oct. 12, 2018, on Page A14 of the New York edition with the headline: Faulty Work Caused Blasts Near Boston, Officials Say