

PRECEDENTIAL

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 18-3126, 18-3127

UGI SUNBURY LLC,
Appellant

v.

A PERMANENT EASEMENT FOR 1.7575 ACRES, AND
TEMPORARY CONSTRUCTION AND ACCESS
EASEMENT FOR 2.956 ACRES IN LIMESTONE
TOWNSHIP, MONTOUR COUNTY, PENNSYLVANIA
TAX PARCEL NO. 5-10-19; DAVID W. BEACHEL, JR.;
JOY L. BEACHEL; THE TURBOTVILLE NATIONAL
BANK; MONTOUR COUNTY TAX CLAIM BUREAU;
COMMONWEALTH OF PENNSYLVANIA, Department of
Highways, PA Department of Transportation;
PENNSYLVANIA DEPARTMENT OF REVENUE, Bureau
of Compliance; ALL UNKNOWN OWNERS

On Appeal from the United States District Court
for the Middle District of Pennsylvania
(D.C. No. 3:16-cv-00788)
District Judge: Honorable Matthew W. Brann

UGI SUNBURY LLC,
Appellant

v.

A PERMANENT EASEMENT FOR 0.4308 ACRES, AND
TEMPORARY CONSTRUCTION AND ACCESS
EASEMENT FOR 0.4577 ACRES IN THE BOROUGH OF
SHAMOKIN DAM, SNYDER COUNTY,
PENNSYLVANIA TAX PARCEL NO 16-04-059;
DONALD D. PONTIUS, Co-Trustees of the Donald D. and
Georgia A. Pontius Living Trust; GEORGIA A. PONTIUS,
Co-Trustees of the Donald D. and Georgia A. Pontius Living
Trust; BOROUGH OF SHAMOKIN DAM;
COMMONWEALTH OF PENNSYLVANIA, Department of
Transportation; ALL UNKNOWN OWNERS

On Appeal from the United States District Court
for the Middle District of Pennsylvania
(D.C. No. 3:16-cv-00794)
District Judge: Honorable Matthew W. Brann

Argued September 19, 2019

Before: KRAUSE, MATEY, *Circuit Judges*, and
QUIÑONES ALEJANDRO,* *District Judge*.

* Honorable Nitza I. Quiñones Alejandro, District
Judge, United States District Court for the Eastern District of
Pennsylvania, sitting by designation.

(Opinion Filed: February 11, 2020)

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OPINION

MATEY, *Circuit Judge*.

“An intelligent evaluation of facts is often difficult or impossible without the application of some scientific, technical, or other specialized knowledge.” Fed. R. Evid. 702 advisory committee’s note to 1972 proposed rules. But not all specialized knowledge can claim the label of reliable science. So trial courts must guard against “expertise that is *fausse* and science that is junky.” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 159 (1999) (Scalia, J., concurring). And for more than twenty-five years, federal courts have looked to the familiar framework of Federal Rule of Evidence 702 to fulfill their “responsibility of acting as gatekeepers to exclude unreliable expert testimony.” Fed. R. Evid. 702 advisory committee’s note to 2000 amendments.

Despite the complex factual and procedural setting of this consolidated appeal, this matter turns on a simple question: what is the standard for the admissibility of expert testimony in a condemnation proceeding under the Natural Gas Act? Rule 702 supplies the answer and requires reliable expert testimony that fits the proceedings. That standard recognizes that “[t]he more tightly law is bound to good science, the more orderly and predictable the legal process will become.” Peter W. Huber, *Galileo’s Revenge: Junk Science in the Courtroom* 215 (1991). By contrast, the expert testimony presented here is bound only to speculation and conjecture, not good science or other “good grounds.” *Karlo v. Pittsburgh Glass Works, LLC*, 849 F.3d 61, 81 (3d Cir. 2017) (quoting *In re TMI Litig.*, 193 F.3d 613, 665 (3d Cir. 1999)). So we will vacate the District Court’s judgments and remand these cases for new valuation proceedings.

I. BACKGROUND

A. UGI Obtains Easements to Build a Natural Gas Pipeline

UGI Sunbury, LLC builds natural gas pipelines. In accordance with the Natural Gas Act, 15 U.S.C. §§ 717 *et seq.*, it obtained authorization to construct and operate an underground pipeline along a 34.4-mile stretch of land in Pennsylvania. The pipeline crosses underneath properties owned by David W. Beachel, Jr. and Donald D. and Georgia A. Pontius.¹ The Landowners rejected UGI’s offers of

¹ The Beachel property is a dairy and poultry farm encompassing 96.2988 acres in Limestone Township,

compensation for rights of way, so UGI filed complaints seeking orders of condemnation. UGI prevailed, winning temporary and permanent easements over the Landowners' properties to construct the pipeline.²

B. Determining Just Compensation

With the easements awarded, only the amount of compensation remained. To aid the District Court's calculation, UGI and the Landowners retained valuation experts. The Landowners both offered Don Paul Shearer who produced reports on the effect of the easements.³ Shearer

Pennsylvania and includes a single-family home, a barn, and several agricultural outbuildings. The Pontius property is a commercial strip covering 1.6050 acres in Shamokin Dam, Pennsylvania and includes two buildings. Donald D. and Georgia A. Pontius are trustees of the Donald D. and Georgia A. Pontius Living Trust. We refer to owners of both the Beachel and Pontius properties as "the Landowners."

² In the Beachel matter, the District Court awarded UGI a permanent easement of 1.7575 acres and a temporary easement of 2.9560 acres. In the Pontius matter, the District Court awarded UGI a permanent easement of 18,766 square feet and a temporary easement of 19,937 square feet. UGI challenges neither award in this appeal.

³ Shearer has testified frequently in valuation disputes. Frequent too are decisions critical of his findings. *O'Neal v. Dep't of the Army*, 852 F. Supp. 327, 334 (M.D. Pa. 1994) (describing Shearer's testimony as "conjecture"); *In re McElwee*, 449 B.R. 669, 675–76 (Bankr. M.D. Pa. 2011) (ascribing "less weight" to Shearer's valuation because of "the relative weakness" of the data "he considered in arriving at his

estimated the before-taking value of the land by comparing properties in the area and opining on what each is worth relative to the market. UGI does not challenge this approach.

As for the post-taking property values, Shearer's reports rely on his own "damaged goods theory," drawing on his experience working in his grandfather's appliance shop. Shearer rounded out this model by studying the impact on real estate values from the Three Mile Island nuclear incident in 1979, the *Exxon Valdez* Alaskan oil spill in 1989, and assorted leaking underground storage tanks. Not only do Shearer's reports contain only passing reference to these studies, they include no data relating to those incidents. Indeed, he did not attach his prior studies to his reports.

As applied, Shearer's "damaged goods theory" holds that markets treat real estate near actual, or even perceived environmental contamination, as a damaged good. Shearer opined that "based on public perception of natural gas pipelines that are in close proximity to any real estate, the subject property does and will continue to have some long-term stigma on the overall marketability and market value." (App. at 132; *accord* App. at 702.) As a result, it "will be treated as damaged goods now and in the permanent future." (App. at 132; *accord* App. at 702.) Shearer further offered that "any serious potential purchaser is going to discount the price(s) offered for the property based on the stigma and damaged goods aspects of the property after the taking and existence of the natural gas

opinion of value"); *In re DeFacto Condemnation & Taking of Lands of WBF Assocs.*, 972 A.2d 576, 586 (Pa. Commw. Ct. 2009) (affirming exclusion of Shearer's valuation testimony). UGI has not appealed the District Court's findings on Shearer's qualifications.

pipeline[.]” (App. at 132; *accord* 702.) Using this theory, Shearer concluded that the total compensation for the taking was \$386,000 for the Beachel property (a 40 percent reduction in value) and \$456,000 for the Pontius property (a 60 percent reduction in value).

C. The District Court Admits and Relies on Shearer’s Testimony

UGI moved *in limine* to exclude Shearer’s testimony for failure to meet the standards required by Rule 702. The District Court recognized Rule 702’s parameters but noted its “wide discretion when deciding whether those requirements have been met.” (App. at 150–51; *accord* App. at 795.) The District Court added that “[b]ecause the upcoming trial is a bench—not jury—trial, because there is a ‘strong preference for admission’ of expert testimony, and because this Court believes that ‘hearing the expert’s testimony and assessing its flaws [is] an important part of assessing what conclusion [is] correct,’ this Court will admit the testimony of both parties’ experts.” (App. at 151 (internal footnotes and citations omitted); *accord* App. at 795–96.)

Shearer’s trial testimony did not expand on his theory or offer other supporting data. For example, during the Beachel trial, when asked whether there was “data either way to say that a pipeline across the property diminishes the property or has no effect [on] the property,” Shearer responded, “Not yet. I’m prognosticating.” (App. at 333.) When asked “where in [his] report is [any] support that the entire property . . . [is] a high consequence area?,” Shearer stated, “It’s not in my report.” (App. at 385.) And when pressed to explain how he valued the depreciation using his “damaged goods theory[.]” Shearer replied that the pipeline necessarily attaches a stigma so future

buyers are simply “going to pay less. How much less? Who knows.” (App. at 332.)

Likewise, during the Pontius trial, Shearer agreed with the District Court’s characterization that “there is at least some leap of logic” necessary to correlate the incident at Three Mile Island or an ocean oil spill to the UGI easements. (App. at 821.) Ever candid, Shearer agreed “that there is an element of subjectivity or even speculation in [his] approach.” (*Id.*) The Pontius trial also incorporated testimony Shearer provided at a previous valuation hearing involving UGI and another landowner. There he explained his methodology: “I said to myself five or ten? I thought more than that. Forty? Nah. Nah, it’s—25? I know this sounds kind of crazy.” (App. at 1040.)

The District Court found this compelling, stating that it was “inclined to agree with Mr. Shearer that some form of ‘stigma’ attaches to the property as a whole.” (App. at 19; *accord* App. at 34.) Indeed, that qualified, tentative endorsement of Shearer’s theory was the only factual analysis supporting the valuation awards. And on that basis, the Court found the value of the Beachel property was reduced by 15 percent, not the 40 percent recommended by Shearer, and awarded Beachel \$126,932.48 for the permanent easement, temporary easement, prejudgment interest, and an offset already paid to a co-owner of the property. The Court’s reasoning on the Pontius property was virtually identical, concluding the easements reduced the value by 30 percent, rather than the 60 percent estimated by Shearer. The District Court awarded \$254,228.39 for the value of the permanent easement, temporary easement, and prejudgment interest.

II. JURISDICTION AND THE STANDARD OF REVIEW

The District Court had subject matter jurisdiction under 28 U.S.C. § 1331 and under the Natural Gas Act, 15 U.S.C. § 717f(h), authorizing eminent domain actions. We have jurisdiction under 28 U.S.C. § 1291. We review the admissibility of expert testimony for an abuse of discretion. *United States v. 68.94 Acres of Land*, 918 F.2d 389, 392 (3d Cir. 1990). It is a narrow standard satisfied “only when the decision rests upon a clearly erroneous finding of fact, an errant conclusion of law or an improper application of law to fact.” *Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003) (internal quotation marks omitted). If we find abuse, “we review de novo whether that error was prejudicial or harmless.” *United States v. Schneider*, 801 F.3d 186, 200 (3d Cir. 2015). In contrast, we review fact finding during the bench trial for clear error. *Nat’l Sec. Sys., Inc. v. Iola*, 700 F.3d 65, 81 (3d Cir. 2012).

III. THE EXPERT TESTIMONY LACKED RELIABILITY AND THE THEORY OF VALUATION FAILED TO FIT THE CASE

UGI advances two arguments on appeal. The first hinges on the gatekeeping requirement under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). UGI contends that Shearer’s opinion was not reliable and did not fit the facts of these cases, and so the District Court abused its discretion in denying UGI’s motions to exclude his testimony. The second centers on Federal Rule of Civil Procedure 52, which governs actions tried on the facts without a jury. UGI argues that the District Court clearly erred both in relying on Shearer’s unreliable testimony and in articulating no factual foundation for its damages findings. The Landowners fight back on both fronts,

insisting that Shearer’s testimony was not fatally subjective and that the District Court’s findings were supported by competent evidence.

A. Federal Rule of Evidence 702 Applies to Bench Trials

In a pipeline condemnation proceeding, valuing the condemned property is a first step to calculating the compensation owed to the landowner. *Tenn. Gas Pipeline Co. v. Permanent Easement for 7.053 Acres*, 931 F.3d 237, 243–44 (3d Cir. 2019). And given the technical nature of that question, expert testimony “acquires special significance in an eminent domain proceeding where the sole issue is the value of condemned property.” *68.94 Acres*, 918 F.2d at 393. UGI contends Shearer’s expert testimony did not satisfy Rule 702 because it was not reliable and did not fit the facts of these cases, so the District Court abused its discretion in denying UGI’s motions to exclude the testimony. The Landowners insist that Shearer’s testimony was not fatally subjective and that the District Court was within its discretion to rely on his testimony. The answer centers on the gatekeeping obligation imposed on trial courts under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

We start with a clarification about the role Rule 702 plays in bench trials. As we have explained, “a trial judge acts as a gatekeeper to ensure that any and all expert testimony or evidence is not only relevant, but also reliable.” *Pineda v. Ford Motor Co.*, 520 F.3d 237, 243 (3d Cir. 2008) (internal quotation marks omitted). As gatekeeper, a trial judge has three duties: (1) confirm the witness is a qualified expert; (2) check the proposed testimony is reliable and relates to matters

requiring scientific, technical, or specialized knowledge; and (3) ensure the expert's testimony is "sufficiently tied to the facts of the case," so that it "fits" the dispute and will assist the trier of fact. *Daubert*, 509 U.S. at 591 (quoting *United States v. Dowling*, 753 F.2d 1224, 1242 (3d Cir. 1985)). The text of Rule 702 contains no exception to these requirements, so if they are not satisfied, an expert cannot testify before the "trier of fact." Fed. R. Evid. 702.

Rule 702 applies whether the trier of fact is a judge or a jury. By using the term "trier of fact," rather than specifying judge or jury, Rule 702 does not distinguish between proceedings. Contrast that language with Federal Rule of Evidence 403, permitting a court to "exclude relevant evidence if its probative value is substantially outweighed by a danger of . . . misleading the jury." Fed. R. Evid. 403. Given that Rule 702 was "amended in response to *Daubert* . . . and to the many cases applying *Daubert*, including *Kumho Tire*," and its text continues to employ the broad "trier of fact" instead of the more specific "jury," district courts must apply Rule 702 to assess an expert's qualifications, reliability, and fit before weighing the expert's opinions to decide a triable issue. Fed. R. Evid. 702 advisory committee's note to 2000 amendments ("The trial judge in all cases of proffered expert testimony must find that it is properly grounded, well-reasoned, and not speculative before it can be admitted."); *see also* Fed. R. Evid. 1101(a) (applying the Federal Rules of Evidence to proceedings before district courts).

Of course, district courts do retain "latitude" to decide "how" to apply those requirements in a bench trial. *Kumho Tire*, 526 U.S. at 152. So a district court has leeway about "whether or when special briefing or other proceedings are needed to investigate" the facts relevant to qualification and

admissibility of expert testimony. *Id.* Or it may conditionally admit the expert testimony subject to a later Rule 702 determination. *Cf. In re Unisys*, 173 F.3d 145, 155-58 (3d Cir. 1999) (“When the role of the gatekeeper to admit or exclude evidence (the judge) and the role of the factfinder to assess and weigh the evidence that was admitted (the jury) are one and the same, the judge who becomes the factfinder as well as the gatekeeper must be given great deference by this Court[] and . . . should not be required to waste judicial time.”). But that “is not discretion to abandon the gatekeeping function” or “perform the function inadequately. Rather, it is discretion to choose among *reasonable* means of excluding expertise[.]” *Kumho Tire*, 526 U.S. at 158–59 (Scalia, J., concurring). That is why the failure to conduct any form of “assessment” of an expert and the proposed testimony before admitting the testimony is an abuse of discretion. *Daubert*, 509 U.S. at 592–93; *see Padillas v. Stork-Gamco, Inc.*, 186 F.3d 412, 418 (3d Cir. 1999). Here, in sidestepping Rule 702 altogether and declining to perform any assessment of Shearer’s testimony before trial, the District Court ignored the rule’s clear mandate. *Daubert*, 509 U.S. at 592.⁴

⁴ Some courts go further and suggest that *Daubert*’s requirements are “relax[ed]” in the context of bench trials. *David E. Watson, P.C. v. United States*, 668 F.3d 1008, 1015 (8th Cir. 2012) (citation omitted); *see also, e.g., United States v. Brown*, 415 F.3d 1257, 1268 (11th Cir. 2005) (holding that Rule 702’s requirements are “more relaxed in a bench trial situation, where the judge is serving as factfinder and we are not concerned about dumping a barrage of questionable scientific evidence on a jury” (internal quotation marks and

B. The District Court Abused Its Discretion by Failing to Exclude Shearer’s Testimony at Trial

After the bench trials, the District Court denied UGI’s renewed requests to exclude Shearer’s testimony. In doing so, it abused its discretion, as Shearer’s testimony lacked both the reliability and fit required under Rule 702. We address each of these requirements in turn.

1. Reliability

Rule 702’s reliability threshold requires expert testimony to be “based on the methods and procedures of science, not on subjective belief and unsupported speculation.” *Karlo*, 849 F.3d at 80–81 (quoting *In re TMI Litig.*, 193 F.3d at 703–04). Courts look for rigor, not mere “haphazard, intuitive inquiry.” *Oddi v. Ford Motor Co.*, 234 F.3d 136, 156 (3d Cir. 2000). Yet admissibility is not based on whether an

citation omitted)). That proposition arguably fights the text of Rule 702, which applies to all “trier[s] of fact” and imposes conditions on whether an expert “may testify,” Fed. R. Evid. 702. And it ignores the reality that we “judges lack the scientific training that might facilitate the evaluation of scientific claims or the evaluation of expert witnesses who make such claims.” Stephen Breyer, Introduction to Comm. on Sci., Tech., and Law, in Reference Manual on Scientific Evidence 4 (3d ed. 2011). We have yet to address this issue and, especially as the parties have not raised it, we need not today. Because even cases applying a “relaxed” standard in bench trials agree that Rule 702’s requirements of “relevance and reliability . . . must nevertheless be met.” *E.g.*, *Seaboard Lumber Co. v. United States*, 308 F.3d 1283, 1302 (Fed. Cir. 2002). And here, without question, they were not.

expert's "opinion has the best foundation, or even whether the opinion is supported by the best methodology or unassailable research." *Karlo*, 849 F.3d at 81. Rather, "the court looks to whether the expert's testimony is supported by 'good grounds.'" *Id.*

Both the Supreme Court in *Daubert* and this Court in many decisions have explained that whether "good grounds" support an expert's potential testimony depends on many factors, including:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Pineda, 520 F.3d at 247–48 (citing *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 n.8 (3d Cir. 1994)). While no one is dispositive, some analysis of these factors is necessary. *Id.* at 248. Here, none occurred.

Take the reports. They lack any suggestion that the "damaged goods theory" has been subject to peer review or enjoys general acceptance. Nor do they contain any analysis of a known or potential rate of error. Or any standards controlling the theory's application. Each, instead, comes from Shearer's

anecdotal experience in his grandfather's appliance shop, where he worked as a sales representative during his high school and college years. There, Shearer "took part in many 'scratch and dent' sales" of goods that "had been slightly damaged" but were otherwise "as good as any other equal model that was not affected with any scratch or dent." (App. at 113; *accord* App. at 689.) Drawing on this experience, Shearer observes that "the obvious appraisal question is, [d]id my grandfather get more, the same, or less for the 'scratch and dent' models than the undamaged models and items?" (App. at 114; *accord* App. at 689.) He concludes that "the answer is equally obvious. We all learn early on that consumers will automatically discount most if not all items and merchandise that is either damaged in some way or is 'perceived' to be damaged in some way." (App. at 114; *accord* App. at 689.) All of which may be true. But "it is impossible to test a hypothesis generated by a subjective methodology because the only person capable of testing or falsifying the hypothesis is the creator of the methodology." *In re TMI Litig.*, 193 F.3d at 703 n.144.

Above all, it is the speculative and subjective nature of this testimony that severs the necessary relationship to "methods which have been established to be reliable." *In re Paoli*, 35 F.3d at 742 n.8. Shearer blends his observations on consumer habits in the appliance market with far-flung examples of environmental accidents involving nuclear power and oil transportation. But the two principles—that consumers prefer undented appliances and property values declined near the Three Mile Island catastrophe—meet only by assumption. And it isn't clear whether the theory rests on analogy to buying preferences generally, or in the real estate market specifically. Nor is it clear that Shearer's conclusions that property value

decreased near Three Mile Island and the *Valdez* spill trace to consumer perception rather than actual, irremediable harm, because Shearer presented no quantifiable data to explain or clarify his assumptions. But in any case, there is no data supporting the application of Shearer’s theory to the Landowners’ properties.

Instead, as Shearer explained, “I put this all in my little mixing bowl and I come up with what I thought was common sense reasonable[.]” (App. at 336.) His theories on the effect of stigma on value, he concedes, “can’t be proven. That’s the problem.” (App. at 985.) We agree that is the problem, and his testimony is unsupported by “good grounds.”⁵

⁵ Much of the briefing grappled with “stigma damages”—damages based on fears of environmental harms that “decreas[e] the market value of the property,” *United States v. 14.38 Acres of Land*, 80 F.3d 1074, 1078–79 (5th Cir. 1996)—in gas pipeline condemnation actions. One amicus urges us to hold that expert opinions related to stigma damages are admissible only if based on a particular (and often unavailable) type of comparative sales data. (Br. of Interstate Nat. Gas Assocs. of Am. at 18.) But we have no occasion to reach those broader questions today. UGI concedes that “both state and federal law provide for such damages as long as there is competent expert testimony to support them,” UGI’s Letter Brief at 2, *UGI Sunbury LLC v. A Permanent Easement for 1.7575 Acres*, No. 18-3126, and *UGI Sunbury LLC v. A Permanent Easement for 0.4577 Acres*, No. 18-3127 (3d Cir. Sept. 4, 2019), and that stigma damages are “part of appraised value in condemnation cases,” Recording of Oral Argument at 02:30, so long as they satisfy the rigor and fit Rule 702

2. Fit

To determine whether an expert's testimony "fits" the proceedings, this Court asks whether it "will help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a); *Karlo*, 849 F.3d at 81. "'Fit' is not always obvious, and scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes." *Daubert*, 509 U.S. at 591. "Thus, even if an expert's proposed testimony constitutes scientific knowledge, his or her testimony will be excluded if it is not scientific knowledge *for purposes of the case.*" *Paoli*, 35 F.3d at 743 (emphasis in original).⁶

Whatever the relevance of Shearer's theory generally, it does not fit the facts here. Consider a colloquy during the Pontius trial. Shearer agreed his report contained "no examples of properties whose value actually decreased after installation of a natural gas pipeline." (App. at 820.) He agreed his findings relied partly on properties impacted by radiation leaks and oil spills, not the installation of a pipeline. He agreed that his

requires. Shearer's testimony does not, so we leave for a more appropriate case the question of how future litigants might successfully prove that claim.

⁶ Another amicus urges us to hold that to be admissible under Rule 702, evidence of stigma damages "must have a requisite nexus to the fair market value of the property at issue." (Br. of Marcellus Shale Coalition at 8 (emphasis omitted).) During oral argument, counsel for UGI could perceive no difference between the "nexus" requirement urged by amicus and Rule 702's existing "fit" requirement. Neither can we.

report contains leaps of logic, elements of subjectivity, and even speculation.⁷

Aptly, we considered similarly constructed expert testimony two decades ago in a case arising out of the actual Three Mile Island accident. There, we explained the “speculative character” of testimony based on “assumption” where the expert acknowledged, “I just don’t have enough of a database to prove details of this.” *TMI Litig.*, 193 F.3d at 670 (emphasis omitted). Shearer’s testimony offers a familiar echo, explaining “Come back five years from now and I may not agree with my own opinion. If we find properties that sell with pipelines down the middle of a farm and sold for the same as an identical farm down the road, I’m wrong today. But we don’t have the data.” (App. at 332.) At best, Shearer offered “the beginning of a discussion and not the end.” *TMI Litig.*, 193 F.3d at 670. His proposed testimony will not assist the trier of fact and does not fit the proceedings as the Federal Rules required.

Taken together, Shearer’s testimony lacked reliability and did not fit the case, contravening the mandatory requirements of Federal Rule of Evidence 702 applicable in both bench and jury trials. But here the District Court declined to analyze Shearer’s expert testimony for reliability or fit before or after trial. And the District Court relied on that mistakenly admitted evidence to UGI’s detriment in calculating the compensation owed to the Landowners.

⁷ Although this exchange occurred during the Pontius trial, the reports and testimony in both cases are nearly identical.

C. These Errors Were Not Harmless

Finally, one set of landowners urges us to hold that any Rule 702 errors were harmless. They are not. Excusing a misapplication of the rules of evidence requires a showing that “it is highly probable that the error did not affect the outcome of the case.” *GN Netcom, Inc. v. Plantronics Inc.*, 930 F.3d 76, 88 (3d Cir. 2019). Or, put another way, we must have a “sure conviction” that an error did not change the outcome. *Id.*

Here, there is no doubt the District Court “agree[d] with Mr. Shearer that there was an overall decrease to the value of the property . . . at least in part . . . due to the ‘stigma’ of being located so close to a natural gas pipeline.” (App. at 34; *see also* App. at 19 (“[T]his Court is inclined to agree with Mr. Shearer that some form of ‘stigma’ attaches to the property as a whole.”).) That alone shows Shearer’s faulty testimony affected UGI’s “substantial right[s].” Fed. R. Evid. 103(a). So the admission of that testimony cannot be said to have been harmless, and we must vacate the judgments.

IV. REMAINING ARGUMENTS

Our conclusion that the District Court abused its discretion under Rule 702 means we must vacate the judgments and remand for more factfinding. We briefly address the parties’ remaining arguments because they are relevant for future proceedings.

First, we reject UGI’s argument that on remand, the District Court may consider “only the competent evidence in the [existing] record.” (Appellant’s Br. at 41.) Our appellate jurisdiction includes the authority to remand for “such further proceedings . . . as may be just under the circumstances.” 28

U.S.C. § 2106. Particularly where “confusion and uncertainty exist[s] as to . . . the correct standard,” it may be “just under the circumstances” to remand for a new valuation hearing. *Augusta Power Co. v. United States*, 278 F.2d 1, 5 (5th Cir. 1960). Such is the case here. Although a district court’s duties under Rule 702 are well settled, how those duties are applied in a gas pipeline condemnation bench trial is not. So we instruct the District Court on remand to allow the parties a reasonable opportunity, if requested, to produce new valuation evidence. Evidence subject, of course, to Rule 702 and the other rules of evidence and procedure.

Second, while this appeal was pending we held in an unrelated case that state rather than federal common law determines just compensation in Natural Gas Act condemnation proceedings brought by private entities. *Tenn. Gas*, 931 F.3d at 255. UGI argues that *Tennessee Gas* makes no difference in these appeals. We find that assertion doubtful, as we have recognized that Pennsylvania law permits recovery of categories of damages which federal common law does not, *id.* at 244, including the “professional fees and expenses” claimed by at least one set of landowners below. (App. at 951.) But “[w]e deem it desirable that the District Court, in the first instance, evaluate the effect of that intervening decision.” *Patterson v. Warner*, 415 U.S. 303, 307 (1974) (per curiam).

Finally, we reject the Landowners’ argument that the District Court’s findings can satisfy Federal Rule of Civil Procedure 52. Rule 52(a)(1) imposes a “mandatory requirement,” *In re Frescati Shipping Co.*, 718 F.3d 184, 196 (3d Cir. 2013), that trial courts “make clear factual findings to support its conclusions,” *Sabinsa Corp. v. Creative Compounds, LLC*, 609 F.3d 175, 182 (3d Cir. 2010). Conclusory pronouncements are not enough. Rather, a

conclusion must clearly state the appropriate “subordinate factual foundations” supporting a decision. *Id.* (citation omitted); *see also H. Prang Trucking Co. v. Local Union No. 469*, 613 F.2d 1235, 1238 (3d Cir. 1980). Otherwise, reviewing courts are left without “a clear understanding of the basis of the decision,” which is “necessary to the intelligent and orderly presentation and proper disposition of an appeal.” *In re Frescati*, 718 F.3d at 196 (internal quotation marks and citations omitted).

While the District Court provided factual findings and legal conclusions, the compensation awards were conclusory, rather than clear, and lacked “factual foundations.” *Sabinsa*, 609 F.3d at 182; *accord H. Prang Trucking*, 613 F.2d at 1238. The District Court determined “[p]art of that decrease in value was due to the ‘stigma’ associated with having a natural gas pipeline installed on the property.” (App. at 19, 22, 34, 36.) But the only basis for a “stigma” decrease is Shearer’s opinion, testimony the District Court did not fully embrace. As a result, the findings “render impossible a clear understanding of the basis of the decision, and those findings are obviously necessary to the intelligent and orderly presentation and proper disposition of an appeal.” *Frescati*, 718 F.3d at 196 (internal quotation marks and citation omitted).

V. CONCLUSION

The District Court abused its discretion in admitting and relying on Shearer’s testimony, and its conclusory valuation of just compensation in both cases lacks a clearly stated basis. We will vacate the judgments and remand for further proceedings consistent with this Opinion.