

What an Expert Witness Is - and what one is not

*Duties, qualification, and the experience that actually matters -
in arbitration and in litigation.*

The expert does not decide. The expert enables the tribunal to decide well.

The modern starting point is *Folkes v Chadd* (1782). The engineer John Smeaton's opinion on whether a sea-bank had caused the silting of Wells harbour was rejected at trial; the Court of King's Bench held it admissible and ordered a new trial. He was received not as an advocate, but as a source of specialised knowledge the court did not possess.

Almost two and a half centuries later the rationale is unchanged. A tribunal determines what a contract requires. An expert explains how a transmission network operates, how a turbine commissioning programme is sequenced, whether a delay was technically foreseeable, or whether a storage system performed to accepted engineering standards.

The function is evidential and educational at once. Its value has never been access to information. It is the application of independent judgement, experience and specialised knowledge to information the tribunal cannot reasonably be expected to evaluate unaided.

Learned Hand put it in 1901: how can the jury judge between two statements, each founded upon an experience confessedly foreign in kind to their own? They cannot, which is why who the expert is matters as much as what the expert says.

Folkes v Chadd (1782) 3 Doug KB 157; 99 ER 589

L Hand, 'Historical and Practical Considerations regarding Expert Testimony' (1901) 15 Harv L Rev 40, 54

One duty. Owed to the tribunal. Personal to the expert.

The duty of independence is long established at common law. The classic modern restatement is *The Ikarian Reefer*: the expert provides independent assistance to the tribunal and should never assume the role of an advocate. The six duties below are distilled from the *Ikarian Reefer*, CPR Part 35 and Article 5 of the IBA Rules on the Taking of Evidence.

1 Independent in substance

The opinion is the expert's own, uninfluenced as to form or content by the exigencies of litigation or the preferences of the party paying for it.

2 Never an advocate

Where the duty to the tribunal and the instructing party's interests diverge, the duty to the tribunal always prevails.

3 Confined to the expertise

Opinion is given within the expert's own field. Legal questions reserved to the tribunal are not answered by assumption.

4 Explicit about its limits

Where data is insufficient, where an assumption came from counsel, or where the analysis cannot carry the conclusion, the report says so.

5 Willing to revise

An opinion changed on better evidence demonstrates independence and is communicated to the other side without any delay.

6 The Opinion is Non-delegable

The expert alone must direct, verify and adopt every opinion expressed in the report. The expert signs the report and is examined on every conclusion in it.

Whitehouse v Jordan [1981] 1 WLR 246, 256 (Lord Wilberforce)

National Justice Compania Naviera SA v Prudential Assurance Co Ltd (The Ikarian Reefer) [1993] 2 Lloyd's Rep 68, 81

IBA Rules on the Taking of Evidence (2020), Article 5.

CPR 35.3

The line is not subtle. It is simply not always held.

AN EXPERT IS

- Independent in fact, not merely in the declaration
- Directly and currently experienced in the system actually in dispute
- Transparent in method, reasoning a tribunal can follow and test
- Explicit about which assumptions were supplied by counsel
- Willing to concede the points that cannot honestly be held
- Prepared to give the opinion that does not help the instructing party

AN EXPERT IS NOT

- × An advocate who happens to hold a technical vocabulary
- × A generalist borrowing authority from adjacent experience
- × A conduit for conclusions drafted by counsel or generated by a tool
- × Someone who agrees with everything in the instructions
- × A decider of the legal questions reserved to the tribunal
- × A reputation hired to lend weight to a position already chosen

An expert who merely adopts the instructing party's position without independent analysis risks acting as an advocate, rather than an independent expert.

Three attributes. Each scarce alone. The intersection scarcer still.

Expert selection has traditionally emphasised professional qualifications, industry standing and prior testifying experience. Those remain relevant. But none substitutes for expertise directly matched to the issue in dispute.

01 Issue-specific technical knowledge

Deep, current, and directly relevant to the technology, system and regulatory environment actually in dispute, not to the sector in general.

02 Demonstrable independence

A record, not a declaration. No relationship or commercial dependence that compromises, or reasonably calls into question independence, with disclosure of prior appointments.

03 Evidential capability

A report that survives adversarial testing, and the ability to defend it orally, under sustained cross-examination, unaided.

THE OPERATIVE QUESTION HAS SHIFTED

Not “does this person understand infrastructure?”

But “does this person understand this infrastructure, in this jurisdiction, under these regulatory conditions, at this point in the technology cycle, and hold direct, first-hand experience of the matter in issue?”

Adjacent experience is not issue-specific expertise.

For parties and their lawyers, selecting the wrong expert is rarely just an evidential problem. It affects pleadings, settlement leverage, cross-examination strategy and, ultimately, the prospects of success.

Conventional thermal generation → **Battery energy storage**

Degradation modelling, round-trip efficiency and duty-cycle assumptions form a separate discipline, not an extension of rotating plant experience.

Mature OECD transmission → **Frontier-market network operation**

Dispatch behaviour, curtailment allocation and grid code enforcement are jurisdiction specific, and frequently only partially codified.

Mastery of project controls → **Grid integration and commissioning**

Expertise in delay analysis does not, without separate qualification or experience, establish expertise in SCADA architecture, any more than SCADA expertise establishes expertise in critical-path analysis.

The pathways into expert practice should widen. Project directors, commissioning managers, operations specialists and network engineers hold experience that maps precisely onto the disputes now entering arbitration yet sit outside the conventional expert pool. I have an obvious interest in that argument; it stands on its own terms.

Direct operating experience is the attribute that is hardest to acquire late.

Expert evidence fails at the retainer, not the hearing.

The sequence is consistent enough to be treated as a forensic mechanism rather than an accident:

- 01** The expert misunderstands the institutional purpose of the appointment.
- 02** Instructions are treated as a mandate to support the party's case.
- 03** Alternative assumptions and methodologies are not adequately tested.
- 04** Limitations are omitted or understated.
- 05** The report becomes advocacy rather than independent analysis.
- 06** Expert conferencing exposes the absence of genuine engagement.
- 07** Cross-examination reveals unsupported assumptions and selective treatment.
- 08** The tribunal discounts the evidence - or appoints its own expert.

*Most of these failures are correctable early.
By the hearing, many are not.*

AI has lowered the cost of looking like an expert.

The principal risk is not that AI replaces experts. It is that AI lets people without genuine expertise produce outputs that resemble expert analysis at a time when genuinely sector-specific expertise can be difficult to source.

AMPLIFICATION

Genuine expertise extended by the tool.
More material processed, more hypotheses tested, faster and with the judgement retained to recognise when the output is wrong.

SIMULATION

Expertise the practitioner does not hold, generated by the tool. Fluent, well-structured, superficially authoritative and unable to move beyond what the tool produced once questioning begins.

Superficially, the two may appear difficult to distinguish. Under cross-examination they are not. The question is not whether the expert used AI, but whether the expertise exists independently of it. In *Ferlito v Harbor Freight Tools*, the court declined to exclude an expert who used AI. He wrote from decades of experience first and used the tool only to verify.

*If the AI produced the wrong answer, would you know?
If the honest answer is 'probably not', the AI should not be
relied upon in the workflow.*

Ferlito v Harbor Freight Tools USA, Inc, 2025 WL 1181699 (EDNY, 23 Apr 2025)

The Academy of Experts, Guidance for Expert Witnesses on the use of AI (FS-26-01, 30 January 2026)

Civil Justice Council, Use of AI for Preparing Court Documents — Interim Report (February 2026)

The same tool. The opposite outcome.

Ferlito is only half the picture. Where the expert could not account for what the tool had done, the evidence has not survived, and disclosure is now reaching the prompts themselves.

EXCLUDED IN FULL

Kohls v Ellison — a declaration drafted with GPT-4o cited two academic articles that did not exist. Excluded entirely; the fabrications shattered the expert's credibility.

REJECTED AS UNRELIABLE

Matter of Weber — the expert also said he used AI only to check his figures, but could not recall his prompts or explain the sources. Valuation rejected.

What matters is not whether the tool was used to verify. The experts in *Ferlito* and in *Weber* both said exactly that. It is whether the expert can account for what was done. That is now a disclosure question as much as an admissibility one: in *Conservation Law Foundation v Shell*, the court treated AI prompts as potentially discoverable aspects of expert methodology, although the scope of that obligation remains under judicial review.

*Assume your AI prompts may one day be disclosed.
Keep the record you would be content to produce.*

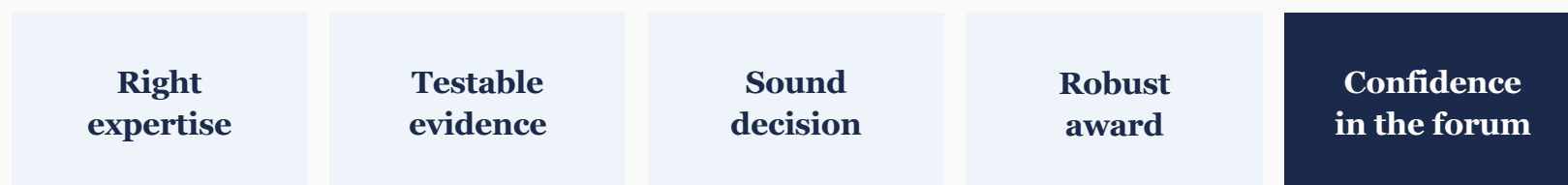
Kohls v Ellison, 2025 WL 66514 (D Minn, 10 Jan 2025)

Matter of Weber, 85 Misc 3d 727 (NY Sur Ct 2024)

Conservation Law Found., Inc. v Shell Oil Co, No 3:21-cv-00933 (VDO), ECF No 970 (D Conn, 18 May 2026) (Farrish MJ) — expert's AI prompts held discoverable as part of methodology; stayed pending Rule 72(a) objection

Mismatched expertise is not a presentational problem.

The quality of a decision on a technical dispute can rise no higher than the quality and relevance of the expert evidence on which it rests. That is the whole of the argument.



A ceiling, not a chain: each stage is capped by the one before it.

Arbitration's authority rests on party consent and on confidence in the quality of its awards. Where the evidence underpinning an award is materially mismatched to the issues, that confidence erodes, and with it the legitimacy the forum depends on. It is fundamentally a decision-quality problem and ultimately a confidence problem for the arbitral process.

The obligation does not sit with tribunals alone. It sits with everyone who selects, instructs, or agrees to be named as an expert. And with every expert who declines an instruction outside their genuine field.

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