Working with Technical Experts: The Insiders' Perspective

By

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I. Introduction

The relationship between a litigator and a technical specialist in a lawsuit involving complex scientific, engineering, or financial issues can be all at once complicated, challenging, and rewarding. As the lawyer strives to understand the technology, so must the expert learn enough about the applicable legal principles to make his or her contribution relevant and useful. And as the expert provides a technical analysis of the pertinent facts, the lawyer must develop a plan for presenting that analysis to a lay judge, jury, or arbitrator in an understandable fashion. This interrelationship of legal and technical concepts presents a challenge unique to the area of technology litigation, but if handled well, it can be used as the basis for powerful advocacy. A lawyer who has made good use of his or her technical expert will present a highly convincing case to the factfinder.

This paper covers a number of the key considerations involved in working with technical experts, including how to find the right expert for the case at hand; why early involvement by the expert is important; whether and when multiple technical experts should be used; the impact of procedural requirements governing expert discovery, expert reports, and expert depositions; and finally, how the effective use of expert demonstratives can assist in case presentation. The authors, who include two litigators and two technical experts, have attempted to provide practical tips for best managing the interaction between attorney and technical expert.

II. How to Find the Right Technical Experts for the Case

Finding and hiring the right technical expert is critical in cases involving complex technologies and requiring detailed factual analysis of technical concepts or situations. Even for an experienced expert, articulating complicated concepts to a general audience can be challenging. If those concepts are fundamental to the case, however, then having the right technical expect is essential and can make all the difference in terms of convincing the decisionmaker to view the facts in the light most favorable to your case.

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The first step in finding and hiring the right technical expert is to identify the precise needs of the case.² Does your case require a damage expert or a schedule expert? Does it require a design expert or a medical expert? Defining the specific technical issues involved in the case is first and foremost. In addition, understanding the scope of these issues and how these issues could potentially affect the case conclusions will allow you to prioritize and organize your technical expert search.

As you search for the right technical expert, it is also important to identify the role of the expert.³ For example, do you need an expert to organize and review technical documentation and break down difficult technical concepts for counsel? Is the expert to perform a claim analysis? Will the expert's role be to assist counsel with discovery and strategy or will he or she assist clients and counsel with negotiation, mediation, arbitration, or litigation? Will the expert be preparing an expert report? Will the expert be expected to testify at deposition or trial? These are all important potential roles that you should understand as you work on locating the right technical expert.

The next step is to search for and identify potential experts.⁴ There are various sources of experts, including internal colleagues, other attorneys, websites, expert search firms, and expert directories. In addition, your clients may have past experiences with experts and can provide additional recommendations. Often, the best of these sources is the internal colleague recommendation. Attorneys whom you know well and who are likely to understand your expert needs can provide first-hand knowledge of the type and quality of work product provided by various experts as well as how they present and testify to this work product.

The third step in finding and hiring a technical expert is the selection process.⁵ Similar to the process of hiring an employee, you should perform some fundamental tasks to verify the qualifications of the expert. Depending on the engagement, you may be working with this expert for years—perhaps longer than some employees. You should carefully review the expert's résumé as well as those of key team members who may assist the expert. Potential experts should also provide non-confidential case examples to demonstrate the expert's experience with similar situations. In addition, the expert should provide references, ideally including other attorneys with whom the expert has worked on similar types of cases. You should thoroughly check and interview those references to verify relevant experience and qualifications as well as client satisfaction with the expert and his or her team. When checking an expert's references, do not only verify the expert's experience level and expertise in the particular technical field; often,

² James G. Zack, Jr., Expert Witness Services in Construction Litigation, AACEI - 44th Annual Meeting, ICEC - 16th Congress; 2nd World Congress on Cost Engineering; Project Management & Quantity Surveying (2000), slide 18.

³ *Id.*, slide 3.

⁴ *Id.*, slide 18.

⁵ *Id.*, slide 19.

finding out whether the expert was able to meet deadlines, communicate well with the attorneys, and stay on budget are equally important considerations.

Once these tasks are performed, you should interview the expert and his or her key team members. Issues to be discussed include the expert's experience and relevant case engagements as well as any previous testimony given in similar cases that is not confidential. You should also ask the expert to give an explanation of his or her typical methodology and approach to similar types of cases.

Further, the expert should understand the specific needs of the case and the potential expert's role in the case. The interview should include an explanation of the information sources available for the expert's review and analysis as well as any key resources that would be available to the expert, such as project personnel or key witnesses. You should question the expert on how he or she would most likely proceed. If possible, try also to find out if the expert has made public statements in other contexts (such as in papers or public testimony) that may contradict the approach that you will likely want the expert to follow in your case.

Finally—and perhaps most importantly—there are some key, overriding qualities to search for in any technical expert. These qualities include⁷:

- Integrity and objectivity
- Preparedness
- Accessibility and responsiveness
- Willingness to provide regular status reports
- Ability to define work scope and budget with accuracy
- Willingness to provide early notice of out-of-scope work
- GOOD COMMUNICATION SKILLS!

III. The Importance of Early Involvement of the Experts in the Case

Although the technical expert may not "surface" in the litigation until expert reports are due, best practices dictate that the expert become deeply and substantively involved in the case

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⁶ James G. Zack, Jr., Expert Witness Services in Construction Litigation, AACEI - 44th Annual Meeting, ICEC - 16th Congress; 2nd World Congress on Cost Engineering; Project Management & Ouantity Surveying (2000), slide 20.

⁷ *Id.*, slide 21.

long before that point. For example, retaining and relying upon a forensic accountant early in a lost profits case provides meaningful insight and direction about the magnitude of the losses, which can in turn inform litigation and settlement strategies. Similarly, involving a scientific expert early in the case can assist the attorney in formulating litigation strategies and "handicapping" the key issues in the case for the client.

In lost profits cases in particular, attorneys often make the mistake of assuming that the determination of such lost profits is a relatively easy and straightforward endeavor. The attorney may be more focused on the causes of the loss and the attendant coverage issues, thus delaying the analysis of the magnitude the loss and the involvement of an accounting expert until late in the process. Different forensic accountants, however, may calculate significantly different damages based on the same set of underlying facts. Understanding how the opposing accounting expert's calculations differ from your own may be integral to preparing interrogatories, creating document requests, identifying other testifying experts, and preparing for and sequencing both fact and expert depositions. These same considerations apply equally to other types of technical experts.

Retaining the right technical expert to provide litigation support early in the case can also streamline case management and assist with strategic case decisions, which ultimately will save a client both time and expense. Technical experts can help the attorneys focus on the strongest arguments and discard arguments that may have seemed appealing to a non-technical person at first glance but will not withstand technical scrutiny. In this manner, in the early stages of a case, technical experts can help counsel focus on developing the key concepts necessary to a resolution.

Once the technical issues in the case are well understood, subtle but important technical nuances may impact legal research tasks, discovery strategy, and overall tactical decisions throughout the course of the litigation. ¹² In complex lost profits cases, for example, counsel may need to be prepared to address multiple revenue streams, multiple locations with upstream and downstream impacts, related party transactions, lengthy or non-recent loss periods, and incomplete or missing accounting records. With the economic damages issues clearly understood, appropriate financial documents can be properly requested and produced, proper questions can be asked during discovery, and key issues relevant to damage quantification will be identified in a timely fashion.

⁸ *Id.*, slide 22.

⁹ James G. Zack, Jr., Expert Witness Services in Construction Litigation, AACEI - 44th Annual Meeting, ICEC - 16th Congress; 2nd World Congress on Cost Engineering; Project Management & Quantity Surveying (2000), slide 23.

¹⁰ *Id.*, slides 24-25.

¹¹ *Id.*, slide 28.

¹² *Id.*, slides 26-27.

Early involvement by technical experts with specific industry experience is also important. A financial expert with a sound understanding of the specific operations of the company, the markets in which the company operates, and the economics of the broader industry can provide guidance that may lead to settlement discussions sooner than would otherwise have been the case. A scientific or engineering expert may also assist in determining the possible ranges of recovery before incurring substantial fees pursuing a claim.

Finally, an early and accurate assessment of key technical issues and economic damages may allow opposing experts to work together to resolve portions of a complex case in which the issues are not in major dispute. This allows counsel to focus research and efforts on the issues that matter to the resolution of the case.

Although early involvement of technical experts in litigation may add somewhat to the upfront expenses, this is a strategy that is almost always worth the investment.

IV. Using Multiple Technical Experts in a Case: Benefits and Pitfalls

One issue that needs to be resolved early in the case is the number of technical experts who will testify. Many courts have the ability to limit the number of expert witnesses called by a party, *see e.g.*, Cal. Evid. Code § 723, so if more than one technical expert is necessary, the attorney should be prepared to explain to the court why that is the case.

Obviously, some cases will require multiple technical experts to cover multiple distinct subject areas. For example, a business interruption insurance case involving the repair and rebuild of a production facility might require a construction expert to testify about how long the construction took, an industry expert to testify about the re-start of the facility, and a forensic accountant to testify about the lost income while the facility was out of operation. In these types of situations, one technical expert for each subject area is expected.

Even when multiple experts are designated in the same subject area, however, courts are unlikely to find their testimony to be impermissibly cumulative as long as the experts are providing different perspectives on the issues. *See, e.g., Royal Bahamian Ass'n., Inc. v. QBE Ins. Corp.*, No. 10-21511-CIV, 2010 WL 4225947, at *2 (S.D. Fla. Oct. 21, 2010) (allowing two experts to testify about hurricane-caused roof damage because one was a licensed roofing contractor and one was a professional engineer such that they would testify from "sufficiently different professional perspectives"); *Wiles v. Dept. of Educ.*, Nos. 04-00442 ACK-BMK, 05-00247 ACK-BMK, 2008 WL 6808425, at *1 (D. Haw. Sept. 22, 2008) (allowing testimony of two expert psychologists on liability and damages issues because their testimony could be limited "only to those areas in which they provided opinions focused on different areas and elements in support of Plaintiffs' case").

On the other hand, attempts to distinguish between the "perspectives" offered by experts who have the same qualifications in the same field, and intend to testify on the same issues in the case, are less likely to be successful. In *Tran v. Toyota Motor Corporation*, the plaintiff attempted to introduce the testimony of two doctors regarding a neck injury on the theory that one of them would testify about the injury from a "micro perspective" and the other would testify

about the injury from a "macro perspective." 420 F.3d 1310, 1314-1315 (11th Cir. 2005). The court excluded the testimony of one of the doctors, however, on the ground that the two doctors had essentially the same qualifications, relied on the same medical evidence, and were planning to testify on overlapping issues. *Id.* at 1315. In these types of situations, courts are generally cognizant of the unfair prejudice that can result from the use of multiple experts to tell the jury essentially the same thing. See, e.g., Energy Drilling, LLC v. Pacific Energy & Mining Co., LLC, Civil No. 14-CV-186-S, 2016 WL 3509329, at *6 (D. Wyo. Apr. 1, 2016) ("Allowing all three experts to testify regarding the identically expected testimony would not only be cumulative and duplicative, but would prejudice Defendant by allowing the jury to hear the same or similar testimony from three different experts, unfairly bolstering the testimony."); but see McLean v. Liberty Health Sys., 430 N.J. Super 156, 166, 62 A.3d 922, 928 (App. Div. 2013) ("We see no reason that expert testimony should be treated wholly differently from factual testimony with respect to vital opinions that go to the heart of the disputed issues in the case. Especially in a case such as this where the jury's truth-finding function required choosing between the opinions of experts, the parties should have been permitted to corroborate the testimony of their experts with other experts who reached similar conclusions.").

Finally, even if multiple technical experts are allowed, the attorneys must make a strategic decision about whether it is wise to present multiple experts with the same or similar expertise at trial, and perhaps even more importantly, for deposition. Even in a situation in which the experts have different perspectives and are planning to testify on different issues, capable opposing counsel may still be able to use their overlapping expertise to undermine their respective opinions. For example, in the case of two different engineering experts, one of whom is designated to testify about the extent of property damage and another of whom is designated to testify about the time necessary to repair the damage, there is nothing to stop the questioning attorney in a deposition from asking the property damage expert about the time that would be needed for repairs. In that situation, if the expert is only prepared on the issues contained in his or her report, there is a significant risk that the expert will end up providing testimony that conflicts with that of the other "designated" expert. For this reason alone, best practices often dictate that the attorneys should designate only one expert in each particular technical field of expertise to testify.

V. Expert Discovery and the Rules of Civil Procedure

In federal court, the scope of expert discovery is governed by FRCP 26(a)(2) and limited by FRCP 26(b)(4). Although not covered in detail in this paper, practitioners should be conscious of and alert to the differences between their State Rules and the Federal Rules governing expert discovery, as the Federal Rules often vary significantly from State Rules and these differences provide ample opportunity for inadvertent but significant errors.

Mandatory Disclosures. FRCP 26(a)(2) requires the disclosure of the identity of any witness a party may use at trial to present evidence under Federal Rule of Evidence 702, 703 or 705. Expert disclosures are subject to the requirements of FRCP 26(e) for supplementing and correcting disclosures. For expert reports, this duty extends both to information included in the report and to information given during the expert's deposition, and the additions and changes

must be disclosed by the time the party's pretrial disclosures are due under Rule 26(a)(3). Generally speaking, the rules relating to expert discovery are geared towards requiring full disclosure of expert opinions and the facts and data used to support them.

Timing. The timing and sequence of expert disclosures may be agreed upon by the parties and/or ordered by the court, but absent stipulation or court order, the disclosures will be made 90 days before the date set for trial or for the case to be ready for trial or, for solely rebuttal evidence, within 30 days after the other party's disclosure. Rule 26(b)(4)(A) permits depositions to be taken of any person who has been identified as an expert, but only after the expert report has been provided.

Reports. FRCP 26(a)(2)(B) requires that the disclosure **must** be accompanied by a written report **prepared and signed** by the expert **if** the expert is "retained or specially employed to provide expert testimony in the case or whose duties as the party's employee regularly involving giving expert testimony." The required report **must** contain: a complete statement of all opinions the witness will express and the basis and reasons for them; the facts or data considered by the witness in forming them; any exhibits that will be used to summarize or support them; the witness's qualifications, including a list of all publications authored in the previous 10 years; a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and a statement of the compensation to be paid for the study and testimony in the case.

If by stipulation of the parties or order of the court a report is not required, the disclosure *must* still include the subject matter on which the witness is expected to testify under Federal Rule of Evidence 702, 703 or 705 and a summary of the facts and opinions to which the witness is expected to testify.

Payment of expert fees. The FRCP provides that the party seeking to depose a testifying expert must pay the expert a reasonable fee for time spend in responding to the request. In addition, if expert discovery is sought under Rule 26(b)(4)(D) from a non-testifying expert employed only for trial preparation purposes, then the party seeking discovery must also pay a fair portion of the fees and expenses reasonably incurred by the other party in obtaining the expert's facts and opinions. Notwithstanding these provisions of the Rules, it is common practice for parties simply to bear the expenses of their own experts rather than pay for the time of the opposing expert. Unless there is a discussion with opposing counsel on this point, you should generally assume that your client will be covering the expenses of your expert during discovery.

Work product protection for attorney-expert communications. With the 2010 revisions to the FRCP, Rule 26(b)(4)(C) incorporated limitations on the disclosure of most attorney-expert communications regardless of the form of the communications. Whereas the previous version of the Rule contemplated broad disclosure of communications between attorneys and expert witnesses, the post-2010 Rule provides that communications between the party's attorney and the expert are protected from disclosure except to the extent the communications relate to certain specific issues: (1) the expert's compensation; (2) an identification of facts or data that the party's attorney provided and that the expert considered in forming the opinions to be expressed;

or (3) an identification of assumptions that the party's attorney provided and that the expert relied on in forming the opinions to be expressed.

Although these three areas in which expert communications are no longer protected are specifically delineated, the range of information that must be disclosed may be broader than would appear upon first glance. In particular, the advisory committee notes to the Rule urge that the phrase "facts or data" should be interpreted broadly to require disclosure of "any material considered by the expert, from whatever source, that contains factual ingredients." This includes discovery of "anything received, reviewed, read, or authored by the expert, before or in connection with the forming of his opinion, if the subject matter relates to the facts or opinions expressed." United States v. Dish Network, L.L.C., 297 F.R.D. 589, 595 (C.D. Ill. 2013) (quoting Euclid Chem. Co. v. Vector Corrosion Techs., Inc., 2007 WL 1560277, at *4 (N.D. Ohio May 29, 2007)). In D.G. ex rel. G. v. Henry, No. 08-CV-74-GKF-FHM, 2011 WL 1344200 (N.D. Okla. Apr. 8, 2011), the court held that highlights and notations of case files were not subject to disclosure, but statutes and policies were discoverable facts or data, and summaries of case files prepared by the expert's assistants were ordered to be produced because they contained factual material considered by the expert. Similarly, in *In re Asbestos Prods. Liab*. Litig. (No. VI), No. MDL 875, 2011 WL 6181334, at *2, "transmittal letters" containing asbestos exposure, medical, and smoking history that plaintiffs' counsel sent to its physician experts were discoverable because they contained empirical facts, data, and assumptions on which the experts relied. And notes prepared by a party and intended for the purpose of assisting her attorney lost their protection when they were provided to an expert because, even though the documents were communications between the party's attorney and the expert, they included facts and data that the expert considered and assumptions on which the expert relied. Fialkowski v. Perry, No. 11-5139, 2012 WL 2527020 (E.D. Pa. June 29, 2012); see also United States v. Veolia Environment North America Operations, Inc., No. 13-mc-03, 2013 WL 5779653 (D. Del. Oct. 25, 2013). However, communications from an expert to counsel advising how counsel might conduct a pilot survey of advertisements were held not to be discoverable because the communications did not include facts, data, or assumptions the expert could have considered in assembling his expert report. Sara Lee Corp. v. Kraft Foods Inc., 273 F.R.D. 416 (N.D. Ill. 2011).

Work product protection for draft reports. The 2010 revisions also incorporated new limitations on the disclosure of draft expert reports. Under Rule 26(b)(4)(B), drafts of any reports or disclosures required under Rule 26(a)(2)(B) are now protected from disclosure, regardless of the form in which the draft is recorded. There is a distinction, however, between "draft reports" and mere "notes" and other written work product. In *Dongguk University v. Yale* University, No. 3:08-CV-00441 (TLM), 2011 WL 1935865, at *1 (D. Conn. May 19, 2011), the court required production of a testifying expert's notes, concluding that notes are neither drafts of an expert report nor communications between the party's attorney and the expert witness. Similarly, in In re Application of the Republic of Ecuador, 280 F.R.D. 506, 513 (N.D. Cal. 2012), the court held that the notes, task lists, outlines, memoranda, presentations, and letters drafted by a testifying expert and his assistants did not constitute draft reports and were not protected work product. By contrast, notes drafted by an expert that included criticism of the opposing expert and that were drafted at the request of counsel to be used by counsel to prepare for the deposition of the opposing expert were held to be protected from disclosure under Rule 26(b)(4)(C) because they did not contain opinions that the expert would provide at trial. *Int'l* Aloe Science Council, Inc. v. Fruit of the Earth, Inc., No. DKC-11-2255, 2012 WL 1900536, at

*2 (D. Md. May 23, 2012); see also Etherton v. Owners Ins. Co., No. 10-cv-00892-MSK-KLM, 2011 WL 684592, at *2 (D. Colo. Feb. 18, 2011) (holding that five pages of mathematical calculations and "working notes" created by the expert in connection with his report were protected as a draft report). In light of these authorities, counsel may decide to instruct a technical expert that he or she should not maintain notes, outlines, or other written work about the case that are not included as part of a document that is clearly and explicitly labeled as a "Draft Expert Report."

Non-testifying trial preparation experts. Except in narrow circumstances, a party may not seek expert discovery by interrogatories or deposition from experts employed only for trial preparation who are not expected to be called at trial. Such discovery is only permitted as to Rule 35(b) experts who have performed a physical or mental examination or on showing of exceptional circumstances under which it is impracticable for the party to obtain facts or opinions on the same subject by other means. To the extent that a non-testifying consulting expert transmits factual matters to a trial expert, however, such communications may be subject to disclosure. In re Methyl Tertiary Butyl Ether (MTBE) Prods. Liab. Litig., No. 1:00-1898, MDL No. 1358 (SAS), 2013 WL 3326799, at *6 (S.D.N.Y. June 28, 2013).

VI. The Technical Expert's Report: How Much May Counsel Assist?

Once the appropriate technical expert has been identified, has evaluated the case, and has formulated his or her opinions, the next step—at least in federal court, in some state court proceedings, and likely in arbitration proceedings—will be the preparation of an expert report.

Federal Rule of Civil Procedure 26(a)(2)(B) provides that a retained expert's testimony be accompanied by a written report "prepared and signed by the witness." Notwithstanding the facial simplicity of this requirement, there has been much litigation over what qualifies as a report "prepared" by the expert, and in particular, what level of attorney involvement in the preparation of the report should be considered acceptable under the Rule.

Because technical experts are just that—experts in a technical field, typically not lawyers or experts in the law, and almost certainly not experts on the requirements of Rule 26—it is common, and often indeed necessary, for the attorneys handling the case to be substantively involved the preparation and drafting of the expert's report. This involvement can take many different forms. In some cases, technical experts who are experienced with litigation will draft reports in their entirety, requiring only minimal editing and input from the attorneys. In other cases, a technical expert may provide his or her opinions in an outline, chart, or bullet point form—particularly if this is the type of format that the expert is accustomed to in his or her technical field—leaving it to the attorneys to fill in the prose necessary to meet the "written report" requirement of Rule 26. In yet another situation, an expert and attorney may meet for lengthy periods of time in person or over the phone and draft the report collaboratively,

discussing the opinions in detail as one or both of them reduces the report to written form. And in yet another case, the expert may provide his or her opinions in a discussion, or many discussions, with the attorneys, after which the attorneys prepare an initial draft of the expert report, to be reviewed and edited by the expert. In almost all cases, the report-drafting process is collaborative to some degree, and the issue is whether there are some forms of collaboration that risk running afoul of Rule 26 or similar requirements.

That some level of collaboration in the drafting process is acceptable and expected is contemplated by the 1993 Advisory Committee Note to Rule 26(a)(2)(B), which states:

Rule 26(a)(2)(B) does not preclude counsel from providing assistance to experts in preparing the reports, and indeed . . . assistance may be needed. Nevertheless, the report, which is intended to set forth the substance of the direct examination, should be written in a manner that reflects the testimony to be given by the witness and it must be signed by the witness.

Courts have generally interpreted this language to mean exactly what it says: "assistance" by the attorneys is acceptable, but wholesale preparation of a report to which the expert only signs his or her name is not. *See, e.g., Crowley v. Chait*, 322 F. Supp. 2d 530, 543 (D.N.J. 2004) ("[P]reparation implies involvement other than perusing a report drafted by someone else and signing one's name at the bottom to signify agreement. . . . Allowing an expert to sign a report drafted entirely by counsel without prior substantive input from an expert would read the word 'prepared' completely out of the rule.") (quoting *Manning v. Crockett*, No. 95-C3117, 1999 WL 342715, at *3 (N.D. Ill. May 18, 1999)); *Kenall Mfg. Co. v. Genlyte Thomas Group LLC*, 413 F. Supp. 2d 937, 943 (N.D. Ill. 2006) (same).

Outside of situations in which experts have simply signed reports that were conceived and prepared entirely by counsel, however¹⁴, courts have been reasonably generous in terms of the type and scope of counsel's assistance that is allowable. Factors that the courts have

¹³ This process of drafting an expert report during a lengthy meeting between the attorney and expert was likely more common before the 2010 amendments to Rule 26(b)(4), which rendered drafts of expert reports non-discoverable. *See* Section V, *supra*.

¹⁴ For examples of situations in which counsel was found to have improperly usurped the role of the expert such that it was the attorneys and not the expert who "prepared" the report, see *Bekaert Corp. v. City of Dyersburg*, 256 F.R.D. 573, 579 (W.D. Tenn. 2009) (report prepared by attorneys prior even to identifying the individual who would sign it, and expert unable to point to any portion that was his testimony); *Stein v. Foamex Int'l, Inc.*, No. CIV.A. 00-2356, 2001 WL 936566, at *5 (E.D. Pa. Aug. 15, 2001) (expert made no claim to have played any substantial role in report's preparation, other than signing it); and *In re Jackson Nat'l Life Ins. Co. Premium Litig.*, No. 96-MD-1122, 2000 WL 33654070, at *1 (court found "undeniable substantial similarities between [expert's] report and the report of another expert prepared with assistance from the same counsel in an unrelated case").

considered in deciding whether an expert report was "prepared" by the expert in compliance with Rule 26(a)(2)(B) include the following:

The type of expert. Technical expert witnesses come from a multitude of different fields, ranging from scientific and engineering fields, to construction, to medicine, to forensic accounting, to automotive, and everything in between. Depending on the nature of the case and the type of expert, an attorney may be working with an expert who has been in more litigation than the attorney him- or herself, or may be working on that expert's very first case. In considering whether an attorney's involvement in the report-drafting process is acceptable, at least some courts have taken into account whether the expert is a "professional expert" or someone who is less familiar with the litigation process and the requirements of Rule 26. See, e.g., Coates v. Powell, No. 2:08-CV-04158-NKL, 2009 WL 1310302, at *3 (W.D. Mo. May 11, 2009) (approving of a process in which an attorney prepared the first draft of an expert report, and the expert subsequently edited it, in light of the fact that the expert was "not a professional expert"); Hoskins v. Gunn Trucking, No. 4:07-CV-72-WCL, 2009 WL 2970399, at *4 (N.D. Ind. Sep. 14, 2009) (finding that counsel "was entitled to, if not obligated to" provide assistance with the report when the expert had never previously provided testimony); Advisory Committee Note to Rule 26(a)(2)(B) (calling out "automobile mechanics" as a type of expert perhaps needing assistance with the preparation of a report); see also Marek v. Moore, 171 F.R.D. 298, 301 (D. Kan. 1997) ("Unlike the attorney, the expert witness more likely preoccupies himself with his profession or field of expertise. He may have little appreciation or none whatsoever for Rule 26 and its exacting requirements for a legally 'complete' report of the expert opinions ").

The nature of changes made by the attorney. When participating in the expert report drafting or editing process, it is important that the attorney not alter the expert's substantive opinions expressed in the report. The Marek court declined to strike an expert witness in part because the changes by counsel to the expert's first draft of the report did not change "[t]he substance of the expert opinions and conclusions, as well as their underlying bases and reasons." Marek, 171 F.R.D. at 300. The court went on to emphasize, however, that an attorney does not have carte blanche to edit an expert's draft report however the attorney may see fit:

Notwithstanding its findings in this instance, the court also emphasizes that in no way does it suggest that attorneys have license to change the opinions and reports of expert witnesses. Any changes in the preparation of a report must be what the expert himself has freely authorized and adopted as his own and not merely for appearament or because of intimidation or some undue influence by the party or counsel who has retained him.

Id. at 302; see also Singer v. Guckenheimer Enters., Inc., No. Civ.A. 03-0026, 2004 WL 1562859, at *6 (E.D. Pa. July 13, 2004) (finding that counsel's request to delete the phrase "I cannot refute Dr. Bruno's opinion" did not alter the substance of expert's opinions).

The expert's testimony about the report preparation process. In preparing a technical expert for deposition, counsel should ensure that the expert is prepared to testify about the report preparation process accurately and confidently. The expert witness in *Kenall* had difficulties on this front: at his deposition, he "did not remember and showed some uncertainty about the

details of the preparation of his Statement." *Kenall*, 413 F. Supp. 2d at 943. Consequently, in response to a motion to strike the expert's testimony, the expert found it necessary to provide a declaration describing the report drafting process in extensive detail, along with copies of his notes, in order to prove that the report was indeed prepared by him. *Id.* Even then, the motion to strike appears to have been narrowly overcome, with the court making the unenthusiastic finding that "the [C]ourt cannot exclude the possibility that the [brief] was drawn from [Brackett's] opinions rather than the other way around." *Id.* (quoting *Solaia Tech. LLC v. ArvinMeritor, Inc.*, 361 F. Supp. 2d 797, 805 (N.D. Ill. 2005)) (alterations in original). Proper deposition preparation on the report drafting process may avoid such problems. *Cf. U.S. ex rel. Jordan v. Northrop Grumman Corp.*, Case No.: CV 95-2985 ABC (Ex), 2003 WL 27366249, at *2 (C.D. Cal. Mar. 10, 2003) (addressing motion to exclude expert based in part on argument that expert "advanced two conflicting explanations for the manner in which the [expert report] was prepared").

Whether the report reflects the views of the expert. Ultimately, courts appear willing to approve of most forms of attorney/expert collaboration in the report drafting process, provided that the opinions and conclusions expressed in the report are truly those of the expert. Even when the majority of the language in the report was drafted by an attorney in the first instance, at least some courts have found that a report complies with Rule 26(a)(2)(B) as long as the opinions contained therein originated with the expert and reflect the analysis of the expert. See, e.g., Hoskins, 2009 WL 2970399, at *1, 4; Shelley v. White, No. 1:09cv-00662-WHA-SRW, 2010 WL 1904969, at *1 (M.D. Ala. May 12, 2010) ("A party's attorney can reduce an expert's oral opinion to writing so long as the report reflects the actual views of the expert.") (quoting United States v. Kalymon, 541 F.3d 624, 638 (6th Cir. 1998)). Accordingly, a process by which the expert conveys his or her opinions to the attorney, the attorney puts them into report format, and the expert then carefully reviews and edits the report should pass muster in most situations.

VII. The Technical Expert's Deposition

When preparing your expert for deposition, it is important to keep in mind that the expert is not an advocate for your case. A technical expert who abdicates the role of technical authority in order to take on a role similar to that of the attorneys risks losing credibility with the factfinder. With this general premise in mind, following these steps will help to ensure that your expert is adequately prepared for deposition:

- Prepare your approach to the preparation session and the deposition before you meet with the expert.
- Obtain and review prior testimony. Review any articles or publications by the expert.
 Discuss with the expert whether any prior testimony or publications are relevant to
 the issues in your case.
- Review the expert's report in depth with the expert. Ask the questions you expect
 will be asked by opposing counsel. Try to find common, everyday explanations for
 complex concepts.

- Address any weaknesses in the expert's qualifications, methodology, or the facts, data
 and assumptions relied upon and plan how the expert will deal with the weaknesses.
 Agree on whether and how certain points will be conceded.
- Have all underlying documents supporting the opinions ready, available and organized.
- Review the deposition process with the expert, particularly if the expert is new to the process. If the deposition will be videotaped, review with the expert appropriate attire, tone, facial expressions, etc. Discuss when the video may begin to roll to avoid awkward video before the official start.
- If appropriate under a protective order, designate the testimony as confidential at the time of the deposition. Waiting until some time after the deposition to designate it as confidential runs the risk that the testimony or video will be made publicly available in the intervening time.

For cases that involve complex technical issues, the deposition of the opposing side's expert is one of the key events in the case. Expert testimony is often the centerpiece of these types of cases, so it is important that you obtain admissions during the expert's deposition that can be used in summary judgment briefing and as the basis for cross-examination at trial. Following these steps will help to ensure that you are well prepared to take the deposition of the opposing expert:

- Make a plan for the deposition that revolves around developing your overall theme for the case. Determine your purpose and goals for the deposition with this theme in mind.
- Become an expert yourself in the expert's area of expertise (as much as possible). Take full advantage of the education and information your own expert can provide.
- Become an expert on the opposing expert, including his or her qualifications, prior testimony, and publications.
- Become an expert on the opposing expert's report, including the facts, data, assumptions, and opinions.
- During the deposition, make sure you have elicited all opinions and the basis for each opinion.
- Take your time. Don't be afraid to ask every question you can think of. You will not get "bad" testimony and you will not appear "foolish."
- Don't argue the technical details. You can't win the argument. If there are details with which you disagree, you can make those points with your own expert's testimony.

- Use a detailed outline that includes questions that are scripted in advance. Particularly on complex technical issues, the specific phrasing of the question will be critical, and it is best to have thought through ahead of time exactly how the question should appear on the record. That said, listen carefully, follow up, and be ready to deviate from the outline in order to do so.
- Have all relevant documents ready and organized.

VIII. The Use of Technical Expert Demonstratives

Technical expert demonstratives are often critical to explaining difficult and complicated technical issues. In this situation, the adage is certainly true that "A picture is worth a thousand words!"

As referenced in A2L Consulting's 2013 paper "How to Build Persuasive and Engaging Visual Presentations":

Visual aids help win cases for many reasons including 1) nearly two-thirds of jurors (and many judges) are visual learners who process visual information far better than information delivered orally; 2) people forget most of what they hear; 3) visual aids simplify cases and speed them up; 4) visual aids are known to increase persuasion.¹⁵

When presenting the analysis and conclusions of a technical expert, presentation demonstratives that can easily articulate the technical expert's points are even more crucial. Not only are they important for the reasons stated by A2L Consulting above, but a technical expert often opines in areas governed by complicated scientific or financial concepts. These basic technical concepts usually must first be explained before any analysis or opinion can be rendered.

This section takes the example of a technical expert in construction planning and offers five reasons why demonstratives are critical to the presentation of this type of testimony. In the case of a construction planning expert, much of the testimony is related to how a complicated structure was planned and built, why the project was delayed according to the plan, and what were the critical issues that delayed the actual completion. Demonstratives can be used to support this testimony as follows:

- *First*, to understand and explain the structure and its purpose.
- Second, to summarize the original plan simply.

 $^{^{15}}$ A2L Consulting, "How to Build Persuasive and Engaging Visual Presentations" (November 25, 2013), page 7.

- *Third*, to demonstrate how the structure was actually built.
- Fourth, to identify the critical activities that delayed the completion of the structure.
- Fifth, to explain the reasons why these critical activities were delayed.

Turning to the first use, it is difficult to articulate verbally, for example, how a manufacturing plant works, or how a complicated building is structured. Therefore, demonstratives such as the examples below are essential to explaining and presenting difficult concepts or structures. Figure 1 simplifies the process of turning ethane into ethylene. This demonstrative illustrates a very complicated process better than could be done using words alone.

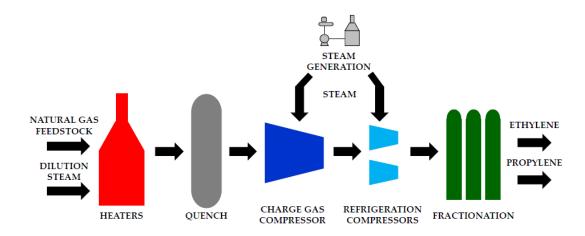


Figure 1 – Simplified Ethylene Flow Diagram

Similarly, Figure 2 below presents a simplified view of a Hi-Rise building during construction and illustrates it as it would exist in a 3-D BIM Model. Figure 2 is useful to demonstrate the status of various activities during the construction of the Hi-Rise. It shows where the cranes are relative to the building, and it demonstrates specific activities in the building such as the concrete structure (identified in dark grey), the status of the MEP (highlighted in green), and the status of the curtainwall (highlighted in purple).

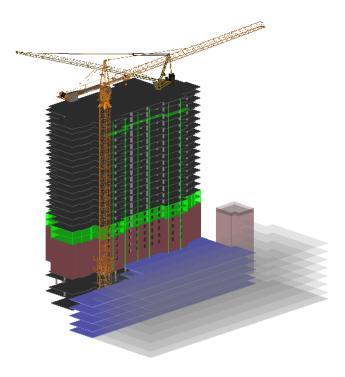


Figure 2 – Simplified 3-D Model Hi-Rise Building During Construction

Turning now to the second use of demonstratives, articulating an original construction plan in a simple manner is also difficult. Describing activities relative to time can be challenging to understand especially if multiple activities are happening concurrently. Demonstratives can help to solve this problem by explaining and summarizing a project's plan. As shown in Figure 3 below, a demonstrative can simplify the steps of building a house as those steps relate to time and to other ongoing activities.

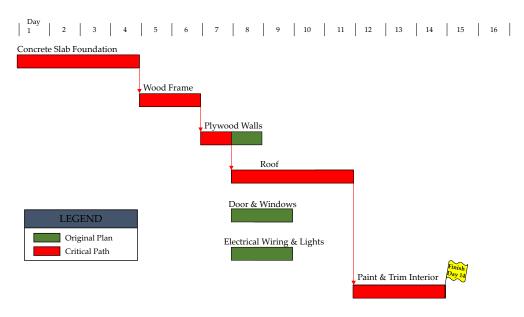


Figure 3 – Simplified Planned Construction Summary

Turning to the third use, demonstratives such as that shown in Figure 4 below can be used to explain and summarize what actually occurred during the construction project, relative the planned schedule.

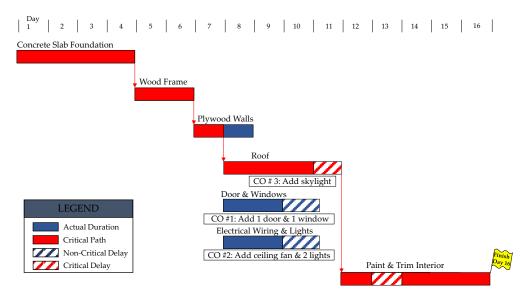


Figure 4 – Simplified Actual Construction

Finally, as to the fourth and fifth uses, demonstratives such as that shown in Figure 5 below can explain and demonstrate the critical activities in the project and the issues that caused the delay of these activities.

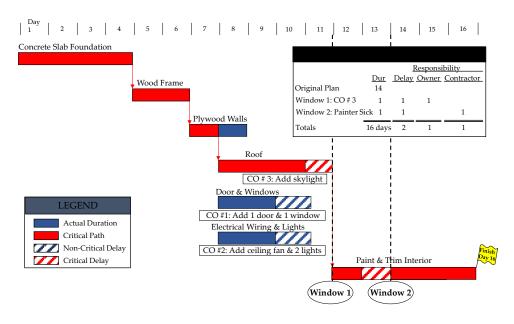


Figure 5 – Summary of Critical Activities and Delaying Issues

Regardless of whether a case is being prepared for trial or arbitration, presentation demonstratives that can easily and understandably articulate a technical expert's analysis, conclusions, and opinions are crucial. Demonstratives such as those shown in the examples above can simplify and explain difficult concepts and analyses and, by doing so, will add to the persuasiveness of the technical expert's opinions.

IX. Conclusion

As discussed in the sections above, there are many considerations governing how litigators and technical experts work together. By following the pointers provided in this paper, the attorney and the technical specialist can each draw on the expertise of the other and together will make a formidable litigation team.