GENERATIVE AI FOR THE ENERGY LAW PRACTITIONER

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Synopsis: The emergence of Generative Artificial Intelligence (GenAI) is revolutionizing the practice of energy law, offering tools that streamline and slash the costs of regulatory compliance, contract analysis, and litigation preparation. Unlike traditional legal technologies that merely automate existing workflows, GenAI enables practitioners to synthesize vast regulatory data, draft complex documents, and enhance public participation in permitting processes. Regulatory agencies, including the Department of Energy (DOE) and the Federal Energy Regulatory Commission (FERC), are exploring AI-driven efficiencies in oversight, permitting, and stakeholder engagement. However, the integration of GenAI raises concerns about confidentiality, accuracy, ethical use, and regulatory compliance. Energy practitioners must balance the advantages of AI-driven efficiency with the risks of hallucinations, data security breaches, and lack of explainability in decision-making. Best practices include understanding the capabilities of AI tools, verifying AI-generated legal work, ensuring AI disclosure in regulatory filings, and maintaining professional judgment over AI-assisted outputs. As agencies begin to integrate AI into decision-making, lawyers must advocate for due process protections and transparency in AI-driven decisions. By developing AI competence and implementing ethical safeguards, energy law practitioners can harness the transformative power of GenAI while upholding legal integrity, regulatory fairness, and client trust in an evolving energy landscape. A summary of best practices, based on this article, is provided as Appendix I.

The emergence of GenAI marks an inflection point in legal technology that eclipses predecessor innovations. Unlike incremental technology advances that merely automated existing processes, GenAI's capability to produce original human-like content that outperforms lawyers[1] or expedites completion of various

* This article was prepared with the collaborative assistance of generative artificial intelligence (GenAI) tools, including OpenAI's ChatGPT, Anthropic's Claude, and Perplexity, which were utilized for tasks such as development of an outline, drafting discrete sections of content and edits and revisions. As author, I take full responsibility for the content, including the accuracy of legal analysis and citations, which I have reviewed and verified to ensure compliance with scholarly standards and the ethical obligations of authorship.

As an active practitioner who has previously published four law review articles (including two in the *Energy Law Journal*), I am all too familiar with the steep challenge of squeezing scholarly writing into the cracks of a busy law practice. My use of GenAI in this process reflects the evolving integration of technology into legal scholarship, and serves as an exploration of how it may facilitate production of scholarship by practicing lawyers at the forefront of change.

Finally, a shout out to my late husband Bruce Israel for his early work in artificial intelligence in graduate school in the early to mid 1980's. As with so much of what I've done, this article would not be possible without his contribution.

1. Studies comparing AI and human performance are just emerging, but there are some useful datapoints. For example, ChatGPT scored in the 90th percentile on the bar exam, higher than the majority of test takers. *See,*

tasks[2] represents a shift that will fundamentally reshape legal practice. These proficiencies coupled with rapid adoption rates unprecedented in the slow-grinding legal profession make GenAI magnitudes more transformative than the introduction of computerized legal research in the 1970s.[3]

The advancements heralded by GenAI hold particular significance in the energy and utility sectors where complex regulatory frameworks intersect with rapidly evolving market structures and environmental imperatives. GenAI offers unparalleled assistance in navigating the intricacies of energy law, from decoding sector-specific terminology and inside baseball acronyms to synthesizing the tangled web of state and federal regulations, environmental compliance requirements, and dynamic policy landscapes.[4] In an era where novel challenges to wholesale

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e.g., Debra Cassens Weiss, *Latest version of ChatGPT aces bar exam with score nearing 90th percentile*, ABA J. (Mar. 16, 2023), https://www.abajournal.com/web/article/latest-version-of-chatgpt-aces-the-bar-exam-with-score-in-90th-percentile. A 2018 study by LawGeex found that an AI algorithm for reviewing non-disclosure agreements (NDAs) had a 94% accuracy rate compared to 85% for attorney review. *See also, e.g.*, LAWGEEX, COMPARING THE PERFORMANCE OF ARTIFICIAL INTELLIGENCE TO HUMAN LAWYERS IN THE REVIEW OF STANDARD BUSINESS CONTRACTS 2 (Feb. 2018), https://images.law.com/contrib/content/uploads/documents/397/5408/lawgeex.pdf.

2. *See* Daniel Schwarcz et al., *AI-Powered Lawyering: AI Reasoning Models, Retrieval Augmented Generation, and the Future of Legal Practice* 1 (Minn. Legal Stud. Rsch., Working Paper No. 25-16, 2025), https://ssrn.com/abstract=5162111 (finding that generative AI tools using reasoning models and retrieval-augmented generation significantly improve the quality and speed of legal work, with reasoning models enhancing analytical depth and RAG tools reducing hallucinations); *see also*Trey Williams, *How AI Helped Orangetheory's Legal Team Complete a 6-month Project in Half the Time: 'It's Straightforward Math to See the Cost Savings',* FORTUNE (Nov. 14, 2023), https://fortune.com/2023/11/14/orangetheory-ai-artificial-intelligence-automation-legal-attorneys-contracts/ (describing that GenAI cut the contract update process for Orange Theory Fitness from six months to three months); Jonathan H. Choi et al., *Lawyering in the Age of Artificial Intelligence*, 109 MINN. L. REV. 147 (2024) (finding that law students using Chat GPT completed tasks faster than those who did not).

3. According to a 2024 study, 77% of in-house chief legal officers use GenAI at least once a week. *See 58% of Legal Departments Expect GenAI to Reduce Reliance on Outside Counsel and 25% Already Report Cost Savings, New ACC and Everlaw Survey Reveals*, BUSINESSWIRE (Oct. 7, 2024), https://www.businesswire.com/news/home/20241007789369/en/58-of-Legal-Departments-Expect-GenAI-to-Reduce-Reliance-on-Outside-Counsel-and-25-Already-Report-Cost-Savings-New-ACC-and-Everlaw-Survey-Reveals; *see also AI-Powered Legal Practices Surge: Clio's Latest Legal Trends Report Reveals Major Shift*, CLIO (Oct. 7, 2024), https://www.clio.com/about/press/clio-latest-legal-trends-report/ (AI use by lawyers in private practice jumped to 79% in 2024, up from just 19% the prior year); Ella Sherman, *Lawyers are Adopting Gen AI Fives Times Faster Than the Cloud*, AM. L. MEDIA (Sept. 10, 2024), https://www.law.com/legaltechnews/2024/09/10/lawyers-are-adopting-gen-ai-five-times-faster-than-the-cloud/?slreturn=20250416155101 (A recent report by an e-discovery company found that lawyers' rate of adoption of GenAI was five times faster than the cloud).

4. *See, e.g.*, PPL EnergyPlus, LLC v. Hanna, 977 F. Supp. 2d 372, 375 (D.N.J. 2013) ("The electric energy industry has its own jargon which makes great use of acronyms. With so many acronyms being used, the testimony and briefs become like alphabet soup where all the letters swirl around and may confuse the reader."); Delaware Riverkeeper Network v. FERC, 753 F.3d 1304, 1321 (D.C. Cir. 2014) ("The use of obscure acronyms, sometimes those made up for a particular case, is an aggravating development of the last twenty years. Even with a glossary, a judge finds himself or herself constantly looking back to recall what an acronym means."); Constellation Power v. Select Energy, 467 F. Supp. 2d 187, 190 (D. Conn. 2006) ("For the uninitiated reader, the Court apologizes in advance for the proliferation of acronyms and jargon, which regrettably is unavoidable in this case [involving regional transmission organizations]"); Maine v. FERC, 520 F.3d 464, 466 n.1 (D.C. Cir. 2008) ("It would have been helpful if the parties had actually defined "capacity" before delving into the intricacies of New England's capacity market. Also, the briefs would have been much easier to read if the parties had used fewer acronyms.").

markets increasingly strain decision-making processes,[5] GenAI presents opportunities to introduce new efficiencies and expedite resolution pathways.

GenAI's potential has not gone unnoticed by the energy sector. The *Energy Law Journal* previously published two articles that focused specifically on technical applications: one examining utilities' adoption of AI for internal operations and grid management,[6] and another exploring AI applications for energy market oversight.[7] This article breaks new ground by addressing how GenAI is now expanding beyond these technical use cases into the legal domain of energy practice. Unlike the previous technical focus, we examine how GenAI is transforming law practice, policy-making, and administrative proceedings in the energy sector. Public utility commissioners, administrative law judges, and case intervenors are now leveraging AI to enhance regulatory oversight and improve scrutiny of utility proposals and underlying data.[8] Further ahead, GenAI holds the promise of democratizing access to legal expertise for traditionally marginalized participants — smaller utilities, emerging market entrants, and environmental justice communities — who have historically been excluded by the prohibitive costs of participation in regional transmission organization stakeholder processes and regulatory proceedings.

While acknowledging GenAI's benefits in reducing legal service costs and improving decision-making efficiency, this article also addresses the ethical considerations, potential misuse, and regulatory hurdles that the prior technically-focused articles did not cover. By understanding both the capabilities and limitations of GenAI in legal contexts, energy practitioners can harness this technology responsibly to benefit clients and the broader energy ecosystem.

5. At least two capacity market auctions were delayed in 2024 alone to address newly filed complaints and complicated market design issues. *See e.g.*, Jon Lamson, *FERC Approves Additional Delay of ISO-NE FCA 19*, RTO INSIDER LLC (May 21, 2024), https://www.rtoinsider.com/79102-ferc-approves-additional-delay-iso-ne-fca-19 (NEISO capacity auction delay); Devin Leith-Yessian, *FERC Approves PJM Capacity Auction Delay*, RTO INSIDER LLC (Feb. 26, 2024), https://www.rtoinsider.com/72271-ferc-approves-pjm-capacity-auction-delay/ (PJM capacity auction delay).

6. *See generally* Daniel D. Slate et al., *Adoption of Artificial Intelligence by Electric Utilities*, 45 ENERGY L.J. 1 (2024).

7. *See generally* Eugene Lee & Wesley Leeroy, *How AI Tools Can Help Diagnose Market Dynamics and Curb Market Power Abuse as the Nation's Power Supply Transitions to Renewable Resources*, 45 ENERGY L.J. 25 (2024).

8. Slate et al., *supra* note 6, at 11 n.47.

I. UNDERSTANDING GENERATIVE AI

A. The Basics of GenAI

Unlike previous legal technologies — word processing, cloud document management, and research tools — which lawyers could adopt without ever looking under the hood to understand their operation — GenAI requires practitioners to familiarize themselves with the basics of the technology to ensure both effective and ethical use. Although for many practitioners, GenAI did not become a proverbial household name until late 2022 with OpenAI's release of ChatGPT,[9] artificial intelligence (AI) — broadly machine intelligence that mimics human thinking — has been evolving since the 1950s.[10] Below are some precursors to GenAI.

- **Machine Learning (ML)** allows computers to identify patterns in data and improve without explicit programming. This forms the foundation for many AI applications, including GenAI.[11]
- **Neural Networks (NNs)** are brain-inspired computing models with interconnected nodes that process information. Deep learning uses multi-layered neural networks for advanced AI capabilities.[12]

9. *See generally Introducing ChatGPT*, OPENAI (Nov. 30, 2022), https://openai.com/index/chatgpt/.

10. U.S. DEP'T OF ENERGY, GENERATIVE ARTIFICIAL INTELLIGENCE REFERENCE GUIDE 5 (2024), https://www.energy.gov/sites/default/files/2024-12/Generative%20AI%20Reference%20Guide%20v2%206-14-24.pdf [hereinafter DOE AI REFERENCE GUIDE].

11. Sara Brown, *Machine learning, explained*, MIT SLOAN SCH. OF MGMT. (Apr. 21, 2021), https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained.

12. Larry Hardesty, *Explained: Neural networks*, MIT NEWS (Apr. 14, 2017), https://news.mit.edu/2017/explained-neural-networks-deep-learning-0414.

- **Natural Language Processing (NLP)** helps machines understand and generate human language using linguistic rules and statistical models, which have been incorporated into GenAI.[13]

Many legal professionals, including energy practitioners, have already encountered earlier forms of AI in tools without knowing it — like NLP-powered legal research platforms like Westlaw or Lexis and machine learning-driven predictive coding for e-discovery.[14]

GenAI builds upon natural language processing, machine learning, and neural networks, gaining momentum with the development of Generative Adversarial Networks (GANs) in 2014.[15] GANs, a subset of machine learning, marked a significant breakthrough by enabling AI to generate entirely new content modeled after its training data.[16]

Large Language Models (LLMs) came as the next step in development in GenAI. LLMs are a subset of GenAI specialized in text-based content creation, combining deep neural networks with NLP techniques.[17] Models such as GPT-4 or GPT-4 omni and Anthropic's Claude are types of large language models trained on massive text datasets and function by recognizing linguistic patterns, predicting the most likely next words in a sequence,[18] and generating coherent, contextually relevant responses in response to prompts.[19]

B. What Makes GenAI Different?

GenAI's ability to produce new and original content, rather than simply analyzing existing data, distinguishes it from its precursors[20]:

> Traditional AI systems are primarily used to analyze data and make predictions, while generative AI goes a step further by creating new data similar to its training data. In other words, traditional AI excels at pattern recognition, while generative AI excels at pattern creation. Traditional AI can analyze data and tell you what it sees, but generative AI can use that same data to create something entirely new.[21]

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13. Cole Stryker & Jim Holdsworth, *What is NLP (natural language processing)?*, IBM (Aug. 11, 2024), https://www.ibm.com/think/topics/natural-language-processing.

14. *See generally How to make the e-discovery process more efficient with predictive* coding, THOMSON REUTERS, https://legal.thomsonreuters.com/en/insights/articles/how-predictive-coding-makes-e-discovery-more-efficient (last visited Apr. 14, 2025).

15. DOE AI REFERENCE GUIDE, *supra* note 10, at 5.

16. *Introduction to Generative Adversarial Networks (GANs)*, GOOGLE DEV., https://developers.google.com/machine-learning/gan (last visited Apr. 18, 2025).

17. GenAI can also create images, audio, and video in addition to text. *See, e.g.*, *id.*

18. Adam Pasick, *Artificial Intelligence Glossary: Neural Networks and Other Terms Explained*, N.Y. TIMES (Mar. 27, 2023), https://www.nytimes.com/article/ai-artificial-intelligence-glossary.html.

19. *What is LLM (Large Language Model)?*, AMAZON WEB SERVS., https://aws.amazon.com/what-is/large-language-model/ (last visited Apr. 18, 2025).

20. *Id.*

21. Bernard Marr, *The Difference Between Generative AI And Traditional AI: An Easy Explanation For Anyone*, FORBES (July 24, 2023), https://www.forbes.com/sites/bernardmarr/2023/07/24/the-difference-between-generative-ai-and-traditional-ai-an-easy-explanation-for-anyone/.

GenAI's content creation ability presents a double-edged sword for energy lawyers. On one hand, GenAI can ingest vast volumes of legal documents and generate summaries, deposition outlines and data requests or spot issues for rehearing or appeals. GenAI's creative capacity also enables it to adapt dynamically to novel legal scenarios instead of requiring retraining or reprogramming for new tasks.[22]

On the other hand, GenAI's creative juices and people-pleasing tendencies occasionally run amok,[23] resulting in hallucinations[24]— responses that contain false or misleading information convincingly presented as authority.[25] A 2024 Stanford Law School study found that even commercial GenAI systems specifically designed for lawyers hallucinate 17% to 33% of the time.[26] As one scholar observed:

> [GenAI] may appear to be engaging in legal reasoning, but it is not. Instead, it is using algorithms to duplicate language patterns from the applicable dataset to generate the content it predicts you want. Generative AI "create[s] 'new' content that is statistically similar to what they have seen before." This is a function of language pattern duplication, not legal reasoning or professional judgment.[27]

C. Where is GenAI Heading?

1. Adoption Trends

Almost immediately after its release, ChatGPT captivated users with its ability to generate detailed, articulate responses at unprecedented speed and scale.[28] Within five days, it amassed one million users — whereas Facebook took ten

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22. *The Evolution of Generative AI: Modern Architectures and Legal Implications*, CLAUDE, https://claude.site/artifacts/2bc30e9e-917f-4b63-b35f-4b5823d86d22 (last visited Apr. 18, 2025).

23. James Ju, *Retrieval-augmented generation in legal tech*, THOMSON REUTERS (Dec. 4, 2024), https://legal.thomsonreuters.com/blog/retrieval-augmented-generation-in-legal-tech/ ("As a side effect of their training, LLMs often tend to please, and if they don't know the answer offhand, they may make something up in an attempt to be helpful.").

24. Wadsworth v. Walmart Inc., No. 2:23-CV-118-KHR, 2025 WL 608073, at 5-6 (D. Wyo. Feb. 24, 2025).

25. Fun fact: Claude hallucinated two non-existent articles by prominent energy scholars. *See fake* Emily Hammond & Jim Rossi, *Energy Law and Policy Challenges in the AI Era*, 45 YALE J. ON REG. 1, 15-20 (2023), and Alexandra B. Klass, *AI and Energy Justice: Democratizing Access to Legal Services*, 92 U. COLO. L. R EV. 611, 625-30 (2023).

26. Varun Magesh et al., *Hallucination Free? Assessing the Reliability of Leading GenAI Legal Research Tools*, J. EMPIRICAL LEGAL STUD., Mar. 14, 2025, at 1, https://dho.stanford.edu/wp-content/uploads/Legal_RAG_Hallucinations.pdf.

27. Anna Conley, *Understanding the Duty of Competence for Attorneys Using Generative AI*, STETSON BUS. L. REV. (forthcoming 2025) (manuscript at 9), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5053423 (quoting D.C. Bar, Ethics Op. 388 (2024), https://www.dcbar.org/for-lawyers/legal-ethics/ethics-opinions-210-present/ethics-opinion-388)

28. Thomas Saueressig, *How Generative AI Changes the Way We Work*, FORBES (Oct. 25, 2023), https://www.forbes.com/sites/sap/2023/10/25/how-generative-ai-changes-the-way-we-work/; Andrew R. Chow, *How ChatGPT Managed to Grow Faster Than TikTok or Instagram*, TIME (Feb. 8, 2023), https://time.com/6253615/chatgpt-fastest-growing/.

months to reach the same milestone.[29] As of December 2024, ChatGPT had reached 180 million users, reflecting sustained global interest in GenAI's capabilities.[30]

For legal professionals, GenAI adoption has been steadily increasing, though estimates vary. A 2024 IDC report found that 47% of surveyed lawyers are using GenAI,[31] while other studies indicate that private practice lawyers (79%) and in-house counsel (77%) have integrated GenAI tools into their workflows.[32] Notably, corporate legal departments are pushing for broader adoption, with 58% expecting their outside counsel to use GenAI.[33] Despite this momentum, GenAI's accuracy, data security, and confidentiality concerns continue to temper widespread adoption, with two-thirds of lawyers citing these as primary obstacles.[34]

2. Improvements to Accuracy

Some progress is underway to address GenAI's highly publicized unreliability,[35] which has been a dealbreaker for many lawyers. Recognizing the legal industry's high threshold for reliability, researchers and developers have pursued two complementary strategies — constitutional AI and retrieval-augmented generation (RAG) to mitigate hallucinations and unreliable outputs.

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29. Fabio Duarte, *Number of ChatGPT Users (March 2025)*, EXPLODING TOPICS (Apr. 23, 2025), https://explodingtopics.com/blog/chatgpt-users.

30. Dave Ver Meer, *Number of ChatGPT Users and Key Stats (December 2024)*, NAMEPEPPER (Dec. 1, 2024), https://www.namepepper.com/chatgpt-users.

31. David Horrigan, *New Research Study Predicts Continued Growth for Generative AI in Legal*, RELATIVITY BLOG (Nov. 26, 2024), https://www.relativity.com/blog/new-research-study-predicts-continued-growth-for-generative-ai-in-legal/.

32. *See, e.g.*, BUSINESSWIRE, *supra* note 3; CLIO, *supra* note 3.

33. Zach Warren et al., *2024 Generative AI in Professional Services*, THOMSON REUTERS 3 (2024), https://www.thomsonreuters.com/content/dam/ewp-m/documents/thomsonreuters/en/pdf/reports/tr4322226_rgb.pdf.

34. *Id.* at 17.

35. News reports on hallucinated citations abound. *See generally e.g.*, Benjamin Weiser, *Here's What Happens When Your Lawyer Uses Chat GPT,* N.Y. TIMES (May 27, 2023), https://www.nytimes.com/2023/05/27/nyregion/avianca-airline-lawsuit-chatgpt.html; Benjamin Weiser & Jonah E. Bromwich, *Michael Cohen Used AI in Feeding Lawyers Bogus Cases,* N.Y. TIMES*,* (Dec. 29, 2023), https://www.nytimes.com/2023/12/29/nyregion/michael-cohen-ai-fake-cases.html; Eugene Volokh, *AI Hallucinations in a Self-Represented Litigant's Brief in the Colorado Court of Appels*, REASON (Jan. 24, 2025), https://reason.com/volokh/2025/01/24/ai-hallucinations-in-a-self-represented-litigants-brief-in-the-colorado-court-of-apeals/; Michael A. Delaney, *Fake News In Court: Attorney Sanctioned for Citing Fictitious Case Law Generated by AI*, MCLANE MIDDLETON (Apr. 17, 2024), https://www.mclane.com/insights/fake-news-in-court-attorney-sanctioned-for-citing-fictitious-case-law-generated-by-ai/; John Roemer, *Will Generative AI Ever Fix Its Hallucination problems.* ABA J. (Oct. 1, 2024), https://www.americanbar.org/groups/journal/articles/2024/will-generative-ai-ever-fix-its-hallucination-problem/ (summarizing court cases sanctioning lawyer for hallucinated citations generated by AI).

a. Constitutional AI

Developed by Anthropic (the company behind Claude), Constitutional AI integrates ethical and behavioral guardrails directly into GenAI models.[36] This technique consists of two phases:

- Supervised Learning: The AI is trained using a predefined "constitution," which establishes ethical constraints and guiding principles.[37] The model self-criticizes and refines its responses based on these standards.[38]
- Reinforcement Learning with AI Feedback (RLAIF): Instead of relying solely on human reviewers, the AI itself generates comparisons, further improving its compliance accuracy benchmarks.[39]

Overall, the constitutional AI approach ensures that AI systems operate within defined ethical boundaries while maintaining their utility.[40]

b. Retrieval-Augmented Generation (RAG)

Another technique widely integrated into legal-specific GenAI tools is RAG, which significantly enhances accuracy by grounding AI-generated responses in authoritative sources.[41] Unlike standard LLMs, which generate text purely from pre-trained data, RAG retrieves and incorporates external documents in real-time before formulating responses. This reduces the risk of hallucination and ensures outputs align with verifiable sources.[42] In doing so, output is grounded on authoritative sources. Examples of RAG in legal applications include providing chatbot access to internal company data, sharing a company's contract playbook and templates with a GenAI contract drafting and review platform, or giving factual information only from known sources.

A recent study by a team of University of Minnesota law school professors tested RAG's effectiveness in improving the accuracy of GenAI's results. The study found that tasks completed using Vincent AI (a RAG-enabled legal research tool) had fewer hallucinated citations than those completed without AI and far fewer than those completed with GenAI that did not incorporate RAG.[43]

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36. *See* Yuntao Bai et. al., *Constitutional AI: Harmlessness from AI Feedback*, ANTHROPIC, Dec. 15, 2022, https://arxiv.org/pdf/2212.08073.

37. *Id.* at 2.

38. *Id*. at 5.

39. *Id*.

40. Toloka Team, *Constitutional AI explained*, TOLOKA (Apr. 19, 2024), https://toloka.ai/blog/constitutional-ai-explained/.

41. *See* Ju, *supra* note 23.

42. *What is RAG (Retrieval-Augmented Generation)?*, AMAZON WEB SERVS, https://aws.amazon.com/what-is/retrieval-augmented-generation/ (last visited Apr. 7, 2024).

43. Schwarcz et al., *supra* note 2.

3. AI Agents

Moving ahead, human interaction with GenAI may matter less with the introduction of AI agents, hailed as the 'next big thing' on the horizon.[44] AI agents are "autonomous intelligent systems powered by artificial intelligence and designed to perform specific tasks independently without the need for human intervention."[45] AI agents differ from current GenAI applications in their ability to maintain context across multiple tasks, operate independently over extended periods, and adapt their behavior based on outcomes and feedback. The grand vision for AI agents is a system that can execute a vast range of tasks, much like a human assistant.[46]

In a complex and ever-changing field of energy law, AI agents promise to be a game-changer. For example, AI agents can continuously monitor regulatory filings, court decisions, and policy changes across multiple jurisdictions, automatically generating alerts and analysis for relevant developments, saving clients thousands of dollars. AI agents can be customized to identify infractions like market power abuse and eventually autocorrect irregular compliance activities, reducing the risk of civil penalties.[47] AI agents could even augment FERC's Office of Public Participation by processing, researching and responding to questions from the public much in the way that businesses employ AI agents to enhance customer service.[48]

III. OVERVIEW OF CURRENT GENAI TOOLS

Gen AI tools fall into two buckets: general use tools like ChatGPT designed for broad public consumption and law-specific AI applications like Westlaw's CoCounsel for legal research or Spellbook for contract drafting and review. But these tools are not mutually exclusive. Just as an energy lawyer who uses Lexis to research FERC cases still taps Google to discover information about a regulated company or might cite Wikipedia as a source for explaining a renewable technology, law-specific GenAI and generic GenAI tools are similarly complementary, each serving a specific purpose. While it's impossible to compare every tool on the market, as a general rule, law-specific GenAI tools are more costly, ranging in

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44. Melissa Heikkilä, *What Are AI Agents?*, MIT TECH. REV. (July 5, 2024), https://www.technologyreview.com/2024/07/05/1094711/what-are-ai-agents/.

45. Kinza Yasar, *What are AI Agents?*, TECHTARGET, https://www.techtarget.com/searchenterpriseai/definition/AI-agents (last visited Apr. 25, 2025).

46. Heikkilä, *supra* note 44.

47. A recent article described development of an agent-based monitoring (ABM) that examined how power-sellers, particularly those using battery storage, might manipulate market power under existing rules. *See generally* Lee & Leeroy, *supra* note 7. Although ABM tools rely on a static rules-based computational simulation model to predict conduct, incorporating AI agents would enable the ABM system to function more autonomously. *See also What is Agent-Based Modelling and Why It's Not AI*, LINKEDIN (Sept. 24, 2024), https://www.linkedin.com/pulse/what-agent-based-modelling-why-its-ai-idoba-hrlqc/; *see Compliance Monitoring AI Agents*, RELEVANCE AI, https://relevanceai.com/agent-templates-tasks/compliance-monitoring-ai-agents (last visited Apr. 25, 2025).

48. Amanda Saunders, *Efficiency Meets Personalization: How AI Agents Improve Customer Service*, NVIDIA BLOG (Nov. 21, 2024), https://blogs.nvidia.com/blog/ai-agents-customer-service/.

price from $10/month for a tool like LawDroid.com serving solos to hundreds of dollars for more sophisticated products targeted at in-house counsel and large law firms. At the same time, law-specific applications offer higher levels of confidentiality (a concern discussed in Part VI.A.1), access to a broader database of legal decisions for training and capacity for analysis of larger size documents. On the other hand, the law specific applications cannot generate charts or images or produce casual writing suitable for social media posts or marketing materials.

It also bears noting that some large law firms have started building their own proprietary GenAI tools in-house.[49] While internal solutions are costly, they allow firms to train models on internal documents without concerns over breaching confidentiality. At the same time, home-grown AI solutions are not immune to other infirmities such as inaccuracy. In February 2025, a Wyoming federal district court judge sanctioned a large personal injury law firm for filing a brief with all but one of nine citations hallucinated by an AI platform developed internally by the law firm.[50]

A. Generic Tools

1. General-Purpose AI Platforms

a. OpenAI ChatGPT (GPT-4.5, GPT4-omni)

ChatGPT is a widely-used conversational AI developed by OpenAI. It is based on the GPT series of large language models and can generate text for a broad range of tasks, from answering questions to drafting documents and even producing images. The most advanced version, GPT-4o (omni), has demonstrated strong reasoning and language abilities and represents an improvement over GPT-4, an earlier version which was the first AI to pass a bar exam.[51] A key strength of ChatGPT is its versatility and fluency across many domains due to training on vast internet text data. However, its knowledge is limited to the information in its training data (with a typical cutoff in 2021 for the free model), meaning that the free model may not be aware of more recent developments unless augmented with additional tools or updates.[52] By contrast, the paid versions of ChatGPT crawl the web, which enables them to provide more current results.[53]

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49. *See e.g.*, Tom Davenport*, Early Adopters of Gen AI In Law,* FORBES (June 1, 2024), https://www.forbes.com/sites/tomdavenport/2024/06/01/early-adopters-of-gen-ai-in-law/; *Innovation in Legal Practice: How Two Major Law Firms are Leveraging Generative AI*, LEGAL.IO (Aug. 10, 2023), https://www.legal.io/articles/5439917/Innovation-in-Legal-Practice-How-Two-Major-Law-Firms-are-Leveraging-Generative-AI.

50. *See generally Wadsworth*, 2025 WL 608073 (sanction order).

51. *See* Cassens Weiss, *supra* note 1.

52. *See generally* Antoinette Radford & Zoe Kleinman, *ChatGPT can now access up to date information*, BBC NEWS (Sept. 27, 2023), https://www.bbc.com/news/technology-66940771.

53. *Id.*

b. Google Gemini

Gemini is Google's advanced AI chatbot, replacing Bard. Built on the Gemini model (formerly PaLM 2), it is designed to provide informative and creative responses.[54] A notable feature of Gemini is its deep integration with Google's ecosystem, allowing it to access real-time information and handle complex reasoning tasks, including multimodal capabilities such as interpreting images. Gemini offers advanced reasoning and problem-solving features, making it particularly strong for research, technical queries, and interactive learning experiences. Google continues to refine Gemini, integrating it into its products such as Search, Docs, and Gmail, providing a seamless AI-powered experience across Google services.

c. Microsoft CoPilot

Microsoft 365 Copilot is an AI-powered assistant that helps users complete work tasks through natural language prompts. It generates real-time responses using both internet content and work documents that users have permission to access, all contextually relevant to the Microsoft 365 application being used. Key features include creating and expanding content (like job descriptions with multiple levels), custom agents that connect to organizational data sources and integration across Microsoft 365 apps. Many lawyers default to Microsoft Co-Pilot because it is embedded in the Microsoft suite of tools that they routinely use.[55]

d. Anthropic Claude

Claude is a conversational AI developed by Anthropic, an AI safety-focused company. Similar in purpose to ChatGPT, Claude can engage in general dialogue, answer questions, and assist in writing, but it distinguishes itself through its design for safety and its ability to handle very large amounts of text input. Many attorneys and professionals find Claude better suited for business use because it excels at complex tasks that require nuanced understanding and detailed outputs.[56]

e. Perplexity

Perplexity differentiates itself through its real-time information synthesis capabilities. It specializes in providing up-to-date responses by actively searching and citing sources across the internet. This tool is particularly valuable for research-oriented tasks that can be tickled through references to websites and online resources.[57]

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54. Sundar Pichai & Demis Hassabis, *Introducing Gemini: our largest and most capable AI model*, GOOGLE BLOG (Dec. 6, 2023), https://blog.google/technology/ai/google-gemini-ai/.

55. *See generally Microsoft 365 Copilot overview*, MICROSOFT LEARN (Mar. 6, 2025), https://learn.microsoft.com/en-us/copilot/microsoft-365/microsoft-365-copilot-overview.

56. Ryan Kane, *Claude vs. ChatGPT: What's the difference? [2025]*, ZAPIER (Jan. 22, 2025), https://zapier.com/blog/claude-vs-chatgpt/.

57. Daniela Gomez, *What is Perplexity?*, PERPLEXITY, https://www.perplexity.ai/help-center/en/articles/10352155-what-is-perplexity (last visited Apr. 7, 2025).

f. Transcription Tools

Applications like Fireflies.ai and Otter.ai rely on GenAI to transcribe recordings. As regulatory proceedings, stakeholder meetings, and settlement conferences increasingly take place on YouTube or Zoom, transcription tools can generate highly accurate transcripts in under an hour and at minimal cost.

B. Law Specific Platforms

With dozens of GenAI tools available for law firms, a comprehensive list is impossible. Below is a short list of some of the more well-known GenAI applications for lawyers, with others mentioned in the next section discussing AI use cases for energy practitioners.

1. Thomson Reuters CoCounsel (formerly Casetext CoCounsel)

CoCounsel is a GenAI platform designed specifically for legal professionals. Originally developed by Casetext and now part of Thomson Reuters, CoCounsel is often described as an "AI legal assistant" that can perform a variety of substantive legal tasks. It is built on OpenAI's GPT-4 model but customized with legal knowledge and integrated into legal workflows.[58] CoCounsel offers several specialized skills or modules — for example, it can conduct legal research by querying databases, review large sets of documents for discovery, help prepare deposition questions, draft legal correspondence, and analyze contracts. It quickly performs tasks such as legal research, document review, deposition preparation and summaries, and contract analysis that would typically be time-consuming for attorneys.[59] One of CoCounsel's strengths is that it combines AI with authoritative legal content (Thomson Reuters' resources and Casetext's database), aiming to increase efficiency while maintaining accuracy. Unlike a general chatbot, CoCounsel is marketed for use within law firms and legal departments with an emphasis on data privacy and reliability, serving as a productivity tool to augment lawyers' work rather than a public-facing Q&A bot.

2. Lexis+ AI (with LexisNexis Protégé)

Lexis+ AI is LexisNexis's suite of GenAI features integrated into its legal research platform. A core component of this is Lexis Protégé, a personalized AI assistant introduced by LexisNexis to enhance legal workflows. Lexis+ AI combines the company's vast legal database and search capabilities with GenAI to help lawyers research and draft more efficiently. Protégé uses a mix of extractive AI (finding relevant existing texts from statutes, cases, etc.) and GenAI (creating new

58. *Casetext's CoCounsel, the First AI Legal Assistant, Is Powered by OpenAI's GPT-4, the First Large Language Model to Pass Bar Exam*, PR NEWSWIRE (Mar. 14, 2023), https://www.prnewswire.com/news-releases/casetexts-cocounsel-the-first-ai-legal-assistant-is-powered-by-openais-gpt-4-the-first-large-language-model-to-pass-bar-exam-301771962.html.

59. *See generally McGuireWoods to utilize CoCounsel, Casetext's groundbreaking legal AI platform*, MCGUIREWOODS (Aug. 22, 2023), https://www.mcguirewoods.com/news/press-releases/2023/8/mcguirewoods-to-utilize-cocounsel-casetexts-groundbreaking-legal-ai-platform.

content based on prompts).[60] This means it can answer a legal question by first retrieving on-point authority and then formulating a concise answer or summary. Uniquely, Protégé is designed to learn from a user's behavior and preferences (hence "personalized"), aiming to tailor results to the individual lawyer's needs over time.[61]

In practice, Lexis+ AI can serve as a starting point for research and drafting within the Lexis ecosystem.[62] For example, a lawyer could ask Protégé to draft a brief section on a certain legal issue — the tool would pull relevant cases or references from Lexis and generate a draft text, which the lawyer can then refine. LexisNexis claims that its AI is grounded in verified legal content, and the system is built to cite sources and avoid hallucinations by staying within the known databases.[63]

3. Bloomberg Law AI (Answers and Assistant)

Bloomberg Law has incorporated GenAI into its legal research platform through two features: Bloomberg Law Answers and Bloomberg Law AI Assistant. These tools are tailored to Bloomberg Law's content (which includes legal news, analysis, and a database of laws and opinions). Bloomberg Law Answers uses GenAI to provide users with concise answers directly within the search results, so when a user poses a legal research query in natural language, the system generates a brief answer or summary on the spot.[64] Meanwhile, the AI Assistant is a more interactive, chat-based tool that allows deeper engagement and can generate summaries of legal documents and answer targeted questions about those documents or topics in a conversational format.[65]

4. Harvey (Harvey AI for Law Firms)

Harvey is a startup-developed GenAI platform specifically targeting large law firms and other professional services. It gained prominence as one of the first

60. *See, e.g.*, Bob Ambrogi, *LexisNexis Launches Protégé AI Assistant to General Availability, Promising Autonomous Completion of Legal Tasks*, LAWSITES (Jan. 27, 2025), https://www.lawnext.com/2025/01/lexisnexis-launches-protege-ai-assistant-to-general-availability-promising-autonomous-completion-of-legal-tasks.html.

61. *LexisNexis Bets on Personalization with Protégé GenAI Assistant*, ARTIFICIAL LAW. *(*Aug. 12, 2024), https://www.artificiallawyer.com/2024/08/12/lexisnexis-bets-on-personalization-with-protege-genai-assistant/.

62. *Technology for Legal Practice: Artificial Intelligence*, VILL. UNIV. L. LIB., https://libguides.law.villanova.edu/legaltechnology/ai (last visited Apr. 7, 2025).

63. Serena Wellen, *How Lexis+ Delivers "Hallucination-Free" Linked Legal Citations*, LEXISNEXIS: LEGAL INSIGHTS (May 2, 2024), https://www.lexisnexis.com/community/insights/legal/b/product-features/posts/how-lexis-ai-delivers-hallucination-free-linked-legal-citations.

64. The Geek in Review Podcast, *From Workflow to Innovation: Bloomberg Law Answers and AI Assistant with Bobby Puglia*, 3 GEEKS & L. BLOG (Jan. 20, 2025), https://www.geeklawblog.com/2025/01/from-workflow-to-innovation-bloomberg-law-answers-and-ai-assistant-with-bobby-puglia.html.

65. *Bloomberg Law introduces next-gen AI tools for legal professionals,* BLOOMBERG L. (Jan. 14, 2025), https://pro.bloomberglaw.com/insights/company-news/bloomberg-law-introduces-next-gen-ai-tools-for-legal-professionals/.

AI assistants built on OpenAI's GPT-4 model for legal use,[66] and it has been backed by major investors including the OpenAI Startup Fund. Harvey's platform is often characterized as a kind of "ChatGPT for lawyers," fine-tuned for legal tasks.[67] In practice, Harvey can assist lawyers in drafting documents, conducting legal research, analyzing contracts, and answering legal questions in a conversational manner. Several major law firms (such as Allen & Overy and others) entered partnerships or pilots with Harvey to use its AI across thousands of lawyers in their organizations. For example, one UK firm rolled out Harvey to over 600 lawyers to assist with tasks like research and first-draft generation.[68] Harvey's key strength is its focus on the professional legal domain: it aims to understand legal context, use relevant legal data, and maintain client confidentiality. It often integrates with firms' internal knowledge bases or document management systems, enabling it to pull in precedents or past work product when formulating answers. While not openly available to the public, Harvey represents how GenAI is being tailored to the workflows of big law firms — providing efficiency gains in things like due diligence, contract analysis, and legal drafting, but always with lawyer oversight to refine the AI's output.[69]

5. Descrybe.ai

Descrybe.ai is a specialized GenAI tool for legal research, with a focus on making case law more accessible. It is essentially an AI-driven legal search engine that provides natural-language search over a vast database of court opinions and returns AI-generated summaries of those opinions. A standout feature of Descrybe is that it is a free, publicly available platform — users can search and read summaries of legal cases without any subscription or login, which is unusual in a field dominated by expensive research databases.[70] Descrybe has generated summaries for over 3.3 million judicial opinions across various jurisdictions,[71] allowing students, lawyers, or even the general public to quickly grasp the essence of a case. The system is powered by OpenAI's language model technology and uses the open-source CourtListener database as its source of case texts.[72] Descrybe.ai's differentiating factor is democratizing legal research — anyone can quickly get the gist of a court opinion via an AI summary, which can be a starting point before reading the full text of the opinion if needed.

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66. Sara Merken, *Legal AI race draws more investors as law firms line up,* REUTERS (Apr. 26, 2023), https://www.reuters.com/legal/legal-ai-race-draws-more-investors-law-firms-line-up-2023-04-26/.

67. Michael Spencer & Tobias Mark Jensen, *Top A.I. Startups in the Future of Legal Technology*, AI SUPREMACY (June 27, 2023), https://www.ai-supremacy.com/p/top-ai-startups-in-the-future-of.

68. Sara Merken, *UK law firm is latest to partner with legal AI startup Harvey*, REUTERS (Sept. 21, 2023), https://www.reuters.com/legal/transactional/uk-law-firm-is-latest-partner-with-legal-ai-startup-harvey-2023-09-21/.

69. HARVEY, A NEW ERA FOR TECHNOLOGY ADOPTION IN PROFESSIONAL SERVICES (Aug. 22, 2024), https://www.harvey.ai/blog/a-new-era-for-technology-adoption-in-professional-services.

70. *See About Descrybe.ai*, DESCRYBE.AI., https://descrybe.ai/about (last visited Apr. 7, 2025).

71. *Id.*

72. The Geek in Review Podcast, *Democratizing law with Descrybe.ai's Kara Peterson and Rich DiBona*, 3 GEEKS & LAW BLOG (Nov. 19, 2024), https://www.geeklawblog.com/2024/11/democratizing-law-with-descrybe-ais-kara-peterson-and-rich-dibona.html.

6. Querious.ai (Real-Time Meeting Assistant)

Querious.ai is a GenAI tool designed to assist lawyers during live client conversations and meetings.[73] Branded with the idea of being "curious" (hence the name), it integrates with virtual meeting platforms (such as Microsoft Teams or Zoom) to provide real-time support. The product listens to the discussion (with consent[74]) and can perform tasks like surfacing relevant information, suggesting questions, or taking automatic notes. In essence, Querious acts as a virtual co-counsel in meetings, offering on-the-spot legal insights or follow-up reminders so that attorneys can focus more on the client interaction. For example, if a client asks a spontaneous legal question in a meeting, Querious's AI might quickly pull up an answer or a pertinent case reference for the attorney's reference. It can also transcribe the meeting and generate a summary or action items afterward.[75] The tool is also built with confidentiality in mind (critical for client meetings) and can be configured to comply with privacy requirements.

7. GetGC.ai (GC AI for In-House Counsel)

GetGC.ai (often referred to as "GC AI") is a GenAI platform targeted at in-house legal teams (the "GC" stands for General Counsel).[76] GetGC.ai's strength lies in its focus on in-house legal workflows: providing quick answers and document drafts, keeping counsel updated on legal changes, and enhancing the overall productivity of legal departments.[77] Key features of GC AI include generating fast, customized first drafts of legal documents, providing on-demand legal research or advice on regulatory queries, and reviewing or proofreading documents for issues — essentially serving as an extra set of eyes for the legal team.[78] The tool is also kept current on legal developments; it advertises the ability to give "up-to-the-minute" updates and insights on new laws or regulations.[79] GC AI is built with the needs of a business's legal team in mind, meaning it may integrate with company knowledge bases, FAQs, and templates.

8. Spellbook

Spellbook is an AI-powered contract drafting and review tool designed for legal professionals.[80] It specializes in helping lawyers automate the creation, analysis, and improvement of contracts. The platform leverages GenAI to suggest contract language, flag potential issues, and enhance document consistency. Spellbook integrates with existing legal workflows, allowing users to streamline drafting while maintaining legal precision and risk management.

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73. *See* QUERIOUS, https://www.querious.ai/ (last visited Apr. 7, 2025).

74. *See* discussion *infra* Part VI.C.3 and note 119 (discussing disclosure and consent considerations for AI-transcribed recordings).

75. QUERIOUS, *supra* note 73.

76. GC AI, https://getgc.ai/ (last visited Apr. 7, 2025).

77. *Id*.

78. *Id*.

79. *Id*.

80. *See* SPELLBOOK, https://www.spellbook.legal/ (last visited Apr. 29, 2025).

9. Paxton AI

Paxton AI is an AI-driven legal research and document automation platform designed to make legal work more efficient.[81] It offers features like AI-assisted legal research, contract generation, and case law analysis. Positioned at a lower price point than some enterprise-grade legal AI tools, Paxton aims to provide cost-effective solutions for solo practitioners and small firms. The tool integrates with legal databases to ensure reliable sourcing of information and prioritizes ease of use for lawyers seeking automation in legal drafting and research.

10. Clearbrief.ai

Clearbrief.AI bills itself as a multi-faceted AI tool for every step of the writing journey.[82] Clearbrief's capabilities encompass a range of tasks from summarizing and extracting facts from depositions and other documents to generate timelines, demand letters, and pleadings to generating tables of authority and tables of contents with the ability to cite check documents by viewing them in a side panel without ever leaving the Word application or resorting to dual monitors.

IV. OVERVIEW OF USE CASES FOR GENAI IN ENERGY AND UTILITY LAW PRACTICE

While some energy practitioners have hesitated to adopt GenAI due to concerns about confidentiality and accuracy,[83] others simply have not identified compelling use cases for their work. This section addresses that gap by presenting practical applications of GenAI specifically designed for busy energy professionals.

A. Communications

Communications represent a significant portion of energy practitioners' work, whether with clients, other attorneys, or the general public — and GenAI tools are particularly well-suited for these tasks. For instance, GenAI can efficiently transform brief bullet points about a recent law firm victory into a polished press release or client alert. The technology can also generate concise summaries of appellate cases and FERC orders, which can serve as abstracts or executive summaries for more detailed analyses by humans. GenAI can also aid in presentation. The technology can concisely list the pros and cons of a fifty-page bill for an investor-owned utility or ratepayers side-by-side in a table or even generate images of energy infrastructure.

GenAI can also facilitate communications in high-stress situations. Consider a common scenario: receiving a snide email from opposing counsel. Ordinarily, a lawyer would be inclined to respond with a nastygram which would only escalate tensions or put off responding at all to avoid stress. In such cases, practitioners can utilize GenAI to draft a "toxically positive" reply within a matter of seconds to diffuse the situation.

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81. *See* PAXTON, https://www.paxton.ai/ (last visited Apr. 29, 2025).

82. CLEARBRIEF, https://clearbrief.com (last visited Apr. 7, 2025).

83. *See* discussion *infra* Parts VI.A, VI.B (discussing solutions to address these concerns).

Experimenting with GenAI for less substantive tasks enables lawyers to gain familiarity with the technology for professional purposes at lower risk. Once acclimated to using GenAI for smaller tasks, lawyers can gain confidence to use it for more substantive legal projects as discussed next.

B. Transactional Work

A significant part of energy law practice involves negotiating, drafting, interpreting, and managing a variety of contracts ranging from standard forms to complex bespoke agreements. Already, GenAI can be used as a starting point for drafting contracts,[84] or for analyzing past case law and precedent to provide clauses and language that have been judicially tested.[85] AI can also make sure that contract terms and definitions are consistent across all divisions of a company. In fact, in a recent Thompson Reuters survey, 88% of corporate legal respondents listed contract drafting as being among their preferred GenAI use cases.[86]

GenAI also shows potential for interpreting contracts after the fact. In a recent article, two law professors demonstrated that by taking well-known contracts opinions, and sourcing the actual agreements that they adjudicated, AI models can help factfinders ascertain ordinary meaning in context, quantify ambiguity, and fill gaps in parties' agreements.[87] What's more, these GenAI models can calculate the probative value of individual pieces of extrinsic evidence.[88] And as GenAI is trained on databases of existing energy agreements, its drafting capabilities are only expected to improve.

For transactional tasks like due diligence, GenAI has proven particularly valuable. Most energy deals are rife with regulatory issues across multiple jurisdictions, complex asset portfolios, and environmental compliance concerns that may affect the transaction. GenAI can quickly analyze thousands of documents to identify potential risks, regulatory compliance issues, and unusual terms that warrant closer examination.[89]

GenAI is also facilitating contract lifecycle management (CLM) and procurement. GenAI enables more efficient contract management and execution by converting agreements into data-rich digital documents, helping identify risks, ensuring compliance, and offering insights for strategic decisions. AI-powered CLM software is anticipated to significantly reduce costs and enhance legal efficiency.[90]

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84. *See e.g.*, *Can AI Write Legal Contracts?*, BLOOMBERG L. (Nov. 4, 2024), https://pro.bloomberglaw.com/insights/technology/can-ai-write-legal-contracts.

85. *Speed up your legal transaction research with GenAI*, THOMSON REUTERS, (Jan. 7, 2025), https://legal.thomsonreuters.com/blog/speed-up-your-legal-transaction-research-with-genai/ [hereinafter *Speed up your legal research*].

86. *Generative AI for legal professionals: Its growing potential and top use cases,* THOMSON REUTERS (May 20, 2024), https://legal.thomsonreuters.com/blog/generative-ai-for-legal-professionals-top-use-cases/ [hereinafter *GenAI for legal professionals*].

87. Yonathan Arbel & David A. Hoffman, *Generative Interpretation*, 99 N.Y.U. L. REV. 451 (2024).

88. *Id*. at 455.

89. *Speed up your legal research*, *supra* note 85.

90. *See, e.g.*, Nick Huber, *Generative AI turns spotlight on contract management,* FIN. TIMES (July 3, 2024), https://www.ft.com/content/1026fd13-d7f1-40de-a0d6-9e4843ac3d29; *see also* Press Release, Gartner,

C. Litigation

"Law firms that effectively leverage emerging AI technologies will be able to offer services at lower cost . . . and with higher odds of favorable outcomes in litigation."[91] The impact of GenAI on energy sector litigation has been particularly pronounced in the realm of e-discovery and document review.[92] As energy-related disputes often involve vast amounts of technical documentation, operational data, and regulatory correspondence, GenAI's ability to efficiently process and analyze large document sets has proven invaluable.

In the context of rate cases and regulatory proceedings, GenAI tools can rapidly analyze historical decisions, identify relevant precedents, and help attorneys develop more effective arguments. The technology has shown particular promise in analyzing deposition transcripts and hearing records, identifying key testimonial points and inconsistencies that might otherwise be overlooked in voluminous proceedings.

GenAI is revolutionizing legal practice beyond traditional research and writing tasks. Advanced legal-specific tools offer powerful capabilities: Westlaw's Co-Counsel can draft comprehensive research memoranda for motions, while both Co-Counsel and Lexis AI enhance briefs by identifying relevant missing case law. In complex matters like energy disputes that shuttle between FERC and courts for years, Clearbrief.AI streamlines case management by automatically generating detailed timelines.

General-purpose AI platforms also serve unexpected and novel use cases. When fed opposing briefs, platforms like Claude, ChatGPT, and Perplexity can analyze arguments' strengths and weaknesses and assess likely outcomes. For oral advocacy, ChatGPT can simulate moot court sessions,[93] while Google AI Studio provides detailed feedback on recorded court appearances and presentations.[94] Google Notebook LM can convert a hefty FERC rule into a ten minute, easily digestible podcast.[95]

Gartner Predicts Half of Procurement Management Will Be AI-Enabled by 2027 (May 8, 2024), https://www.gartner.com/en/newsroom/press-releases/2024-05-08-gartner-predicts-half-of-procurement-contract-management-will-be-ai-enabled-by-2027.

91. Natalie A. Pierce & Stephanie L. Goutos, *Why Lawyers Must Responsibly Embrace Generative AI*, 21 BERKELEY BUS. L.J. 469, 509 (2024) (quoting John Villasenor, *How AI will revolutionize the practice of law*, BROOKINGS (Mar. 20, 2023), https://www.brookings.edu/blog/techtank/2023/03/20/how-ai-will-revolutionize-the-practice-of-law/).

92. *AL Asks Secretariat: How Will GenAI Change eDiscovery?,* ARTIFICIAL LAW. (May 17, 2024), https://www.artificiallawyer.com/2024/05/17/al-asks-secretariat-how-will-genai-change-ediscovery/ (e-discovery); *see generally GenAI for legal professionals*, *supra* note 86 (document review).

93. *See* Carolyn Elefant, *Using ChatGPT for Oral Argument Preparation*, LOOM (Oct. 25, 2024), https://www.loom.com/share/ef7047cdccb64e6f8b8b0a06748682da.

94. Mitch Jackson, *3 Surprising Strategies to Elevate Your Pitch and Seal More Deals (With a Boost from AI),* LINKEDIN (Nov. 6, 2024), https://www.linkedin.com/pulse/3-surprising-strategies-elevate-your-pitch-seal-more-ai-mitch-tbb4c/?trackingId=PBt4MZJoS6SMCGRsuE96EQ%3D%3D.

95. *See FERC Order 1920 Notebook*, NOTEBOOKLM, https://notebooklm.google.com/notebook/02ca4446-e05c-4cb8-b1c0-8cbc6bfdbafc/audio (last visited Apr. 7, 2025).

D. Rates, Regulatory and Compliance

GenAI is emerging as a transformative tool for utilities' rate case filing processes, which traditionally take 12-18 months and involve complex regulatory requirements.[96] GenAI streamlines the process by analyzing historical rate case data to extract relevant precedents, quickly responding to regulatory inquiries by identifying and adapting previous responses, and predicting regulatory outcomes based on past decision patterns. As a result, utilities can construct more evidence-backed rate proposals while reducing the workload on legal teams.

The compliance applications of GenAI have become increasingly important as energy and utility companies face an expanding array of regulatory requirements.[97] GenAI can be employed to continuously monitor regulatory changes across multiple jurisdictions and ensure that companies remain current with evolving requirements such as renewable portfolio standards, emissions regulations, and grid reliability standards. Eugene Lee, senior FERC economist, and Wesley Leeroy, an AI developer, recently demonstrated how AI-powered algorithms might be used to diagnose market dynamics and curb market power abuse.[98]

In risk assessment and mitigation, GenAI tools can analyze operational data and compliance histories to identify potential issues before they become problems.[99] GenAI has shown particular promise in environmental compliance and reporting,[100] where it can process vast amounts of operational data to generate required reports and identify potential compliance issues. This predictive capability has proven particularly valuable in environmental compliance, where the technology can help companies anticipate and address potential violations before they occur.

E. Permitting

The role of GenAI in permitting and planning processes is evolving rapidly. In August 2024, the Department of Energy announced a $20 million initiative to build and test AI-powered tools meant to speed up often years-long permitting processes.[101] One core project, Policy AI, will focus on developing AI-powered software to augment federal reviews under the National Environmental Policy

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96. Huzaifah Basrai, *Accelerating utility rate case filings with generative AI*, UTIL. DIVE (Oct. 22, 2024), https://www.utilitydive.com/news/accelerating-utility-rate-case-filings-generative-ai-artificial-intelligence-genai/730551/.

97. Ronan Grobler, *The Power of Gen-AI in Regulatory Compliance*, SCYTALE (Jan. 16, 2024), https://scytale.ai/resources/the-power-of-gen-ai-in-regulatory-compliance/.

98. *See generally* Lee & Leeroy, *supra* note 7.

99. Jay Limbasiya, *Powering the future: How Gen AI and AI illuminate utility companies*, CIO (Oct. 11, 2023), https://www.cio.com/article/655250/powering-the-future-how-gen-ai-and-ai-illuminate-utility-companies.html.

100. *The Role of AI in Ensuring Compliance with Environmental Laws*, GAPER, https://gaper.io/ai-ensuring-compliance-environmental-laws/ (last visited Apr. 7, 2025).

101. *See* Daniel Moore, *AI Tapped by Agency to Speed Permitting of Clean Energy Projects*, BLOOMBERG L. (Apr. 29, 2024), https://news.bloomberglaw.com/environment-and-energy/ai-tapped-by-agency-to-speed-permitting-of-clean-energy-projects.

Act.[102] Already, data scientists at Pacific Northwest National Labs collected and extracted 28,212 documents across 2,917 different NEPA reviews into an AI-ready searchable database,[103] which is publicly available.[104]

GenAI can assist all stakeholders in the permitting process. Project sponsors can use GenAI to generate application materials and summarize environmental and technical reports for regulators. For environmental justice communities, GenAI tools can increase meaningful participation in the permitting processes by analyzing complex technical documents, identifying potential impacts, translating filings into other languages, and generating well-supported comments on proposed projects. GenAI can also be used by FERC's Office of Public Participation or organizations that represent impacted communities to generate videos with AI-generated avatars as narrators to guide viewers through the permitting process.[105]

V. GENAI ADOPTION BY REGULATORY AGENCIES

Federal executive agencies like DOE are increasingly exploring opportunities to implement GenAI in response to Executive Order 14,110,[106] issued by President Biden in October 2023, which encouraged agencies to take an open view towards GenAI rather than impose broad restrictions on its use.[107] Although President Trump rescinded Executive Order 14,110 along with dozens of other executive orders on his first day in office,[108] the DOE Report discussed below implementing the order has been completed and is unlikely to be affected.[109] Understanding how agencies approach AI adoption provides crucial insight into the future of regula-

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102. Jane Edwards, *DOE Advances AI Toll Development to Speed Up Federal Reviews of Historical Environmental Documents*, EXEC. GOV (Aug. 21, 2024), https://executivegov.com/2024/08/doe-advances-ai-tool-development-to-speed-up-federal-reviews-of-historical-environmental-documents/.

103. Karyn Hede, *Faster, More Informed Environmental Permitting with AI-Guided Support*, PAC. NW. NAT'L LAB'Y (Dec. 3, 2024), https://www.pnnl.gov/news-media/faster-more-informed-environmental-permitting-ai-guided-support.

104. Pac. Nw. Nat'l Lab'y & Off. of Pol'y, National Environmental Policy Act Technical Corpus (NEPATEC 1.0) (2024), https://huggingface.co/datasets/PolicyAI/NEPATEC1.0.

105. Louisiana Judge Scott Schlegel endorses use of avatars to explain to pro se litigants what to expect when they appear for a court proceeding. *See* Scott Schlegel, *Modernizing Criminal Courts: Leveraging Technology for Smarter Docket Management*, SCHLEGEL FIFTH CIR. (Aug. 26, 2024), https://judgeschlegel.com/blog/modernizing-criminal-courts-leveraging-technology-for-smarter-docket-management. For an example of an avatar explainer of an energy issue, *see* Carolyn Elefant, *Eminent Domain Test 4*, HEYGEN (OCT. 24, 2024), https://app.heygen.com/videos/440624ffa4324e05a4e7ed1d6bead461.

106. *See generally* Exec. Order No. 14,110, 88 Fed. Reg. 75,191 (Oct. 30, 2023), https://www.govinfo.gov/content/pkg/FR-2023-11-01/pdf/2023-24283.pdf.

107. In contrast to federal agencies, most state public utility commissions have not yet devised or publicized formal GenAI policies; therefore, they are not discussed here.

108. Exec. Order No. 14,148, 90 Fed. Reg. 8,237 (Jan. 20, 2025), https://www.govinfo.gov/content/pkg/FR-2025-01-28/pdf/2025-01901.pdf.

109. *See, e.g.*, Exec. Order No. 14,179, 90 Fed. Reg. 8,741 (Jan. 23, 2025), https://www.govinfo.gov/content/pkg/FR-2025-01-31/pdf/2025-02172.pdf (On January 23, 2025, President Trump issued an Executive Order on Removing Barriers to American AI Leadership which instructs executive agencies to develop plans that will further "the policy of the United States to sustain and enhance America's global AI dominance . . .").

tory governance and compliance in the energy sector and assists energy practitioners in optimizing the benefits of GenAI technology for clients while guarding against possible risks.

A. Department of Energy

In April 2024, DOE released a report titled *AI for Energy: Opportunities for a Modern Grid and Clean Energy Economy.*[110] Prepared pursuant to Executive Order 14110, the DOE Report examines how artificial intelligence can accelerate the transition to a clean energy economy while maintaining grid reliability and resilience.[111] The portions of the report focused on permitting holds particular interest to practitioners who frequently assist clients in securing regulatory authorizations for projects.[112]

The *AI for Energy Opportunities* report found that large language models can streamline administrative processes by automatically "organizing, extracting, [and] consolidating information across Federal, state, and/or local regulations."[113] The Report notes that agencies have been using NLP algorithms for processing public comments for a decade but anticipates that LLMs will improve the accuracy of these models in identifying and extracting comments by topic.[114] Not surprisingly, GenAI can slash the time needed for comment review; a 2021 General Services Administration study estimated that models based on less sophisticated precursors to GenAI could save eight hours per 100 comments received.[115] GenAI can also automate completeness reviews for permitting and interconnection applications.[116] Finally, AI can optimize the "placement of renewable energy and transmission projects" by analyzing multiple data sources to identify suitable locations that minimize environmental impacts while maximizing efficiency.[117]

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110. *See generally* U.S. DEP'T OF ENERGY, AI FOR ENERGY: OPPORTUNITIES FOR A MODERN GRID AND CLEAN ENERGY ECONOMY (Apr. 2024), https://www.energy.gov/sites/default/files/2024-04/AI%20EO%20Report%20Section%205.2g%28i%29_043024.pdf [hereinafter AI FOR ENERGY OPPORTUNITIES].

111. *Id.* at 1. A month before release of *AI for Energy Opportunities*, DOE published a Request for Information seeking public comment on DOE is seeking information on how AI can be used both by government entities at all levels of government (Federal, State, local, etc.) as well as by private actors to improve the planning of the grid and clean energy infrastructure. *See Notice of Request for Information (RFI) Related to DOE's Responsibilities on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*, 89 Fed. Reg. 15,196, 15,196-97 (Mar. 1, 2024), https://www.govinfo.gov/content/pkg/FR-2024-03-01/pdf/2024-04367.pdf. DOE has not taken any further action on the RFI as of this writing.

112. AI FOR ENERGY OPPORTUNITIES, *supra* note 110, at 9, 13 (In addition to permitting, the *AI for Energy Opportunities* Report explores AI applications for improving three other key areas of grid management: planning, operations and reliability, and resilience).

113. *Id.* at 5 tbl. 1.

114. *Id.* at 13.

115. *Id.* at 44 n. 38 (citing CDO COUNCIL, IMPLEMENTING FEDERAL-WIDE COMMENT ANALYSIS TOOLS: CDO COUNCIL SPECIAL PROJECTS FINAL RECOMMENDATIONS (June 2021), https://resources.data.gov/assets/documents/CDOC_Recommendations_Report_Comment_Analysis_FINAL.pdf.

116. AI FOR ENERGY OPPORTUNITIES, *supra* note 110, at 13.

117. *Id.* at 5 tbl. 1.

The *AI for Energy Opportunities* report warns that despite AI's potential benefits, the technology should augment rather than replace human expertise.[118] For that reason, the report stresses the importance of a human-in-the-loop and development of protocols and training for use of such models to ensure that human users do not place too much trust in such models or use their output without further independent individual validation and exercise of professional judgment.[119]

More robust guidance on responsible use of GenAI by DOE staff and contractors followed in June 2024 with DOE's publication of the *DOE Generative AI Reference Guide*.[120] Demonstrating its commitment to prioritizing AI implementation, DOE assembled a special Tiger Team consisting of stakeholders and subject matter experts from across the organization to incorporate diverse perspectives from various roles and functions into the Guide.[121] The Guide identifies several key use cases for DOE, including text functionalities like summarization and analysis, image generation and interpretation, audio processing, and code generation.[122] The Guide also highlights seven areas of when risks may arise in AI use — security and resilience, privacy, confidentiality, intellectual property, safety, fairness and bias, and AI hallucinations[123] — and describes best practices to mitigate these risks which are discussed in Part VI.[124]

B. Federal Energy Regulatory Commission (FERC)

In contrast to DOE, FERC has yet fully explored how GenAI might facilitate permitting or other agency functions or developed guidance on AI use for FERC staff or the companies it regulates. Still, many of the use cases identified by DOE — such as summarization and analysis, permit or interconnection application completeness review — are equally relevant to FERC's mission. In its FY 2025 Budget Request, FERC sought funding to "conduct a series of proof of concepts to harness the generative potential of Artificial Intelligence (AI) in operations," explaining that the utilization of AI promises to enhance efficiencies across various FERC program offices, ultimately leading to substantial benefits in the execution of the Commission's mission."[125] In addition, proposed bill S.4664, introduced in 2024, would have required FERC to initiate a rulemaking to "require

118. *Id*. at 16.

119. In addition to the need for human oversight, AI or algorithmic decision-making raises a host of other concerns such as transparency, potential for bias, and due process. *See* discussion *infra* Section VI.F; *see also* David Freeman Engstrom et al., *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies* 75, 79-80 (N.Y.U. L. Sch., Pub. L. Rsch. Paper No. 20-54, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3551505.

120. *See generally* DOE AI REFERENCE GUIDE, *supra* note 10.

121. *Id.* at 2.

122. *Id.* at 9-11. In 2023, DOE prepared a comprehensive inventory of dozens of AI use cases. *See* U.S. DEP'T OF ENERGY, 2023 AI USE CASE INVENTORY (July 2023), https://www.energy.gov/sites/default/files/2023-07/DOE_2023_AI_Use_Case_Inventory_0.pdf.

123. DOE AI REFERENCE GUIDE, *supra* note 10, at 20.

124. *Id.* at 38-40 (providing a summary checklist of DOE's best practices for AI).

125. FERC, FY 2025 CONGRESSIONAL JUSTIFICATION 10 (Mar. 11, 2024), https://www.ferc.gov/media/fy-2025-congressional-justification.

public utility transmission providers to share and employ . . . queue management best practices with respect to the use of computing technologies, such as artificial intelligence, . . . in evaluating and processing interconnection requests, in order to expedite study results with respect to those request."[126]

As for the potential impact of GenAI on FERC hearings, at least one ALJ, Patricia French, has issued several orders amending FERC's hearing rules to address the use of GenAI to prepare pleadings.[127] The orders acknowledge the growing acceptance of GenAI while expressing concern about potential "hallucinations" or inaccuracies. Under the new requirements, if GenAI is used at any stage in creating a pleading before the record closes, each attorney who signs the pleading must explicitly represent within the document that they have personally verified both the legal reasoning and the reliability of all citations. The order defines "pleading" broadly to include any filing requesting action from the administrative law judge as well as procedural deliverables such as joint statements of issues and briefs. This requirement took immediate effect upon issuance of the order.[128]

VI. KEY RISKS AND BEST PRACTICES FOR GENAI USE IN ENERGY LAW PRACTICE

The integration of GenAI into energy law practice represents both a transformative opportunity and a complex challenge. While the technology offers unprecedented efficiencies in navigating regulatory frameworks, drafting contracts, and managing litigation, its adoption also raises critical questions about confidentiality, accuracy, transparency, and due process in regulatory decision-making, intellectual property (IP) protection, and bias. As energy practitioners and agencies increasingly rely on GenAI to streamline workflows and enhance decision-making, they must also grapple with risks that could undermine client trust, compromise data integrity, or exacerbate existing inequities. This section delves into the many risks associated with GenAI use in energy law and outlines best practices to ensure its responsible deployment, balancing innovation with the energy practitioner's foundational obligations to clients, the public interest, and the legal system.

A. Confidentiality and Privilege

1. Confidentiality

Privacy and confidentiality concerns may arise when AI users input their data into AI models. Data uploaded to AI models for analysis or prompts containing confidential information may be used by some systems for training unless users

126. *See* Department of Energy AI Act, S. 4664, 118th Cong. § 6 (2024).

127. *See Systems Energy Resources,* FERC Docket No. ER22-24 (Feb. 20, 2024); *see also Carolina Gas Transmission*, FERC Docket No. RP24-164 (Feb. 16, 2024).

128. A cursory search on FERC's e-library of the term "generative AI" in dockets ER22-24 and RP24-164, where Judge French's orders issues, did not yield any pleadings with the required disclosure, which suggests that litigants are either not using AI or ignoring the disclosure requirements.

opt out[129] or might materialize in a response to another user's query.[130] In a highly publicized case in early 2023, a Samsung employee leaked proprietary trade data to ChatGPT, where it was publicly accessible.[131] For energy practitioners, confidentiality holds heightened significance because so many proceedings and transactions involve highly privileged information ranging from commercially sensitive or proprietary business documents to critical energy infrastructure information (CEII) which if disclosed could jeopardize a company's competitive advantage or impair the safety and security of the grid.[132]

Still, even with confidentiality concerns, firm or company-wide bans on all GenAI is overkill and deprives practitioners access to beneficial tools. Both ABA Formal Opinion 512 and DOE's *Generative AI Reference Guide* offer recommendations that balance AI use with the need for preserving confidentiality.[133]

Under the ABA Formal Opinion 512, lawyers must take robust precautions to maintain client confidentiality when using GenAI technologies. Before inputting any client information into a GenAI tool, Formal Opinion 512 provides that lawyers must obtain informed consent from clients after providing a clear explanation of the specific risks and benefits.[134] This requires detailing how the client's information could be used, who might access it, and the potential implications of the tool's self-learning capabilities. Generic boilerplate consent language in engagement letters will not suffice — the disclosure must be specific to the actual risks and usage scenarios involved.[135]

Next, lawyers must thoroughly evaluate any AI tool's security measures, data retention policies, and privacy protections before use. This includes reviewing Terms of Service and privacy policies, understanding data storage and deletion practices, and assessing potential vulnerabilities.[136] In many instances, confidentiality concerns can be largely cured by employing the fee-version of GenAI platforms, which allow users to turn on privacy protections, opt out of allowing use of

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129. For example, Claude will not train on user data unless customers opt in, while ChatGPT allows users to opt out of having data used for training.

130. *See* Alice Gomstyn & Alexandra Jonker, *Exploring privacy issues in the age of AI*, IBM (Sept. 30, 2024), https://www.ibm.com/think/insights/ai-privacy (describing data and confidentiality problems).

131. *See* Kate Park, *Samsung bans use of generative AI tools like ChatGPT after April internal data leak*, TECHCRUNCH (May 2, 2023), https://techcrunch.com/2023/05/02/samsung-bans-use-of-generative-ai-tools-like-chatgpt-after-april-internal-data-leak/.

132. CEII encompasses non-classified data about critical electric infrastructure that is provided to or generated by federal agencies and officially designated as CEII by either the Commission or Energy Secretary under Federal Power Act section 215A(d). *See Critical Energy/Electric Infrastructure Information (CEII)*, FERC, https://www.ferc.gov/ceii (last updated Apr. 28, 2025).

133. *See generally* ABA Comm. on Ethics & Pro. Resp., Formal Op. 512 (2024), https://www.americanbar.org/content/dam/aba/administrative/professional_responsibility/ethics-opinions/aba-formal-opinion-512.pdf [hereinafter Formal Op. 512] (discussing generative artificial intelligence tools); *see also* DOE AI REFERENCE GUIDE, *supra* note 10. In addition, as of September 2024, seventeen states have released formal ethics opinions or informal guidance on ethical use of AI which may differ from the ABA. *See also, e.g.*, Greg Siskind, Generative AI Ethics Regulatory Chart, https://docs.google.com/document/d/1sQDlb7CXzvm1OKRLDU1EcCWXnTnOreeGA_JD9dzAaNg/edit?tab=t.0 (last visited Apr. 27, 2025).

134. Formal Op. 512, *supra* note 133, at 7.

135. *Id.* (Not all states impose these stringent disclosure requirements).

136. *Id.*

their data for training, and delete research history. Law firms should establish clear written policies governing acceptable GenAI use and implement training programs to ensure all personnel understand confidentiality obligations.

DOE's Guide advises avoiding input or disclosing protected data or nonpublic information as part of a prompt when using public GenAI tools.[137] For example, a prompt along the lines of "Is [Company Name] liable for FERC civil penalties for misreporting to PJM a forced outage as a maintenance outage?" could publicly expose the company's wrongdoing; whereas, a more general prompt like "Can a civil penalty be assessed for misreporting a forced outages" would not. For that reason, DOE's Guide encourages users to undergo prompt engineering training to learn the best ways to structure prompts without exposing confidential information and to carefully review outputs to ensure any confidentiality issues are identified and addressed.

Traditional confidentiality safeguards prove effective when practitioners maintain direct control over sensitive information and its handlers. But, these protections are inadequate when sensitive information must be provided to third parties — a common occurrence in energy practice. Whether through negotiated agreements or legal mandates, energy industry players frequently share trade secrets, internal documents, and other proprietary information during deal negotiations or litigation discovery, typically under the aegis of non-disclosure agreements (NDAs). Without explicit restrictions on GenAI usage in these NDAs, third-party recipients could potentially compromise confidentiality by processing protected information through unsecured AI platforms. Consequently, practitioners must craft NDAs with specific provisions governing the permissibility and scope of GenAI tools in analyzing confidential materials, establishing clear boundaries for technological engagement with sensitive data. One federal district court judge recently included a restriction on use of AI to analyze NDA-protected materials produced in discovery providing that "No party may upload, share, or use another Party's designated material in any way with any generative artificial intelligence technologies (*e.g.,* ChatGPT), except for litigation support tools."[138] Practitioners should consider a similar approach in their NDAs.

2. Privilege

Are GenAI prompts protected by privilege in discovery? That's yet another novel issue raised by GenAI.[139] Some commenters argue that attorney-client or work product privilege will not protect prompts either because they are stored on

137. DOE AI REFERENCE GUIDE, *supra* note 10, at 28.

138. *See, e.g.*, Protective Order ¶ 35, Headwater Rsch. LLC v. Samsung Elec. Co., No. 2:23-CV-00103-JRG-RSP (E.D. Tex. Dec. 1, 2023), https://storage.courtlistener.com/recap/gov.uscourts.txed.220857/gov.uscourts.txed.220857.65.0.pdf (emphasis omitted).

139. *See* Rose J. Hunter Jones et al., *Generative AI in Discovery: GPT Prompt Preservation and Production Best Practices (Federal),* LEXISNEXIS PRACT. GUIDANCE (2025); *see also* Stephanie Wilkins, *From Input to Evidence: Will Your GenAI Prompts Be Discoverable?*, LEGALTECH HUB (Feb. 5, 2025), https://www.legaltechnologyhub.com/contents/from-input-to-evidence-will-your-genai-prompts-be-discoverable/.

a third-party database and publicly exposed,[140] or because communicating prompts to GenAI does not involve a human which is necessary for privilege to attach.[141] But the more reasonable approach regarding privilege comes from patent attorney Andrew Zajac who explains:

> Given how attorneys routinely use email and cloud storage services for confidential and privileged information and communications, it is difficult to understand why attorneys think that using LLMs is somehow newly problematic. Certainly, prompts for LLMs are going to be more detailed than simple queries provided to web search engines. However, if emails and cloud storage services are sufficiently secure to preserve confidentiality and privilege, then the robust security options provided by Google and OpenAI [to opt out of training or use an enterprise account) should be similarly sufficient to do the same.[142]

That said, where nonlawyers such as an in-house analyst or a utility lineman use GenAI without attorney oversight or involvement, their prompts are not protected from disclosure. If litigation ensues, attorneys must ensure they are properly preserved through a litigation hold:

> GenAI data should be subject to the same retention and preservation procedures as all other documents and data pertaining to the matter in issue. This doesn't mean everything preserved will definitely be produced — that's never the case with litigation holds.[143]

GenAI tools present unique preservation problems due to the dynamic nature of the responses. GPT models generate text responses based on the input prompts, lack of tracking functionality such as prompt logging or archiving. Accordingly, once the duty to preserve is triggered, counsel should maintain comprehensive records of prompt inputs, implement backup, and capture any metadata associated with the prompts.[144]

B. Accuracy and Quality Control Risks

AI hallucinations — defined as an AI-generated response that contains false or misleading information presented as fact[145] — have been described as a feature, not a bug of GenAI.[146] Even commercial GenAI tools developed for lawyers produce fake results as much as one third of the time.[147] This creates risks for lawyers

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140. Owen Wolfe & Eddy Salcedo, *With AI Use, Lawyers Need to Ponder Confidentiality Stipulations*, BLOOMBERG L. (July 1, 2024), https://news.bloomberglaw.com/us-law-week/with-ai-use-lawyers-need-to-ponder-confidentiality-stipulations.

141. Wilkins, *supra* note 139.

142. Alexander Zajac, *AI Prompts Do Not Compromise Attorney Confidentiality Obligations*, IPWATCHDOG (Dec. 28, 2023), https://ipwatchdog.com/2023/12/28/ai-prompts-not-compromise-attorney-confidentiality-obligations/id=171078/.

143. Wilkins, *supra* note 139.

144. Hunter Jones et al., *supra* note 139.

145. *What Are AI Hallucinations?*, IBM (Sept. 1, 2023), https://www.ibm.com/think/topics/ai-hallucinations.

146. Nicholas Mignanelli, *The Legal Tech Bro Blues: Generative AI, Legal Indeterminacy, and the Future of Legal Research and Writing*, 8 GEO. L. TECH. REV. 298, 312 (2024).

147. Magesh et al., *supra* note 26, at 13.

who owe a duty of candor to the courts and have faced sanctions for citing faux case law without any effort to verify for accuracy.[148]

Although hallucinations may be the product of new technology, the failure to detect hallucinations results from the age-old problem of careless lawyering. Just as competent lawyers would not rely on Westlaw headnotes to cite a case without first reading or shepardizing it, the same principle applies for case summaries or citations generated by ChatGPT. Not surprisingly then, ABA Formal Opinion 512 warns that lawyers must independently verify all AI-generated output before relying on it in their legal work.[149] Verification is particularly critical for any legal authority, factual claims, or analysis that will be used in court filings or client advice. While AI can be used as a starting point or foundation for legal work, lawyers may not abdicate their professional judgment and ethical responsibilities by relying solely on AI output. They remain fully responsible for the accuracy and reliability of their work product, regardless of whether AI tools were used in its creation.[150]

In addition to the rather obvious solution of verifying GenAI output,[151] employing strong prompt engineering can improve the quality and accuracy of GenAI output.[152] Law professors Daniel Schwarcz and Jonathan Choi propose a three-part framework for better prompting: providing detailed context, iterating through multiple attempts, and breaking complex tasks into step-by-step processes.[153] Tone matters too; one study showed that polite prompts induce better results.[154]

Yet, even the most carefully crafted prompts cannot overcome GenAI's inherent limitations. Lawyers must recognize the technology's blind spots where it is most likely to err: which include processing of non-OCR documents, performing mathematical calculations, interpreting nuanced contract terms, and analyzing complex legal concepts.[155] Understanding these potential pitfalls allows practitioners to either proceed with heightened caution or choose alternative approaches when encountering these higher-risk scenarios.

Finally, it's worth noting that not every erroneous citation in a brief is the product of GenAI run amok, In a recent federal court case, the defendants' counsel

148. Volokh, *supra* at note 35.

149. Formal Op. 512, *supra* note 133, at 3-4.

150. *Id.* at 4.

151. *See Terms of Use*, OPENAI (Dec. 11, 2024), https://openai.com/policies/row-terms-of-use/ (Even OpenAI's Terms of Use state that "You must evaluate Output for accuracy and appropriateness for your use case, including using human review as appropriate, before using or sharing Output from the Services.").

152. DOE AI REFERENCE GUIDE, *supra* note 10, at 36-37 (listing use of best practices for prompt engineering to reduce risk of hallucination).

153. Mignanelli, *supra* note 146, at 312 (citing Daniel Schwarcz & Jonathan H. Choi, AI Tools for Lawyers: A Practical Guide 5-7 (Mar. 30, 2023) (unpublished manuscript) (on file with the Minnesota Law Review)).

154. Ryan Heath, *Being nice to chatbots pays off*, AXIOS (Feb. 26, 2024), https://www.axios.com/2024/02/26/chatbots-chatgpt-llms-politeness-research.

155. *See* Carolyn Elefant, *Unlocking the Potential of Generative AI for Lawyers: Red Flags and Best Practices*, MY SHINGLE (Jan. 21, 2025), https://myshingle.com/2025/01/articles/artificial-intelligence/unlocking-the-potential-of-generative-ai-for-lawyers-red-flags-and-best-practices/.

discovered several erroneous citations in an opposing brief and without any basis, cried AI abuse — even though it turned out counsel had not used AI at all.[156]

C. AI Disclosure Requirements

1. Disclosure to Decision-Makers

In the wake of *Mata v. Avianca*, the first case imposing sanctions for fake ChatGPT-generated citations,[157] standing orders on AI use of AI in court filings proliferated.[158] Some orders require litigants to certify either that no GenAI was used or that AI-generated content was human-verified for accuracy,[159] some merely warn about the pitfalls of AI but do not mandate disclosure,[160] while others prohibit GenAI use entirely in court filings.[161] More recently, the US Court of Appeals for the Fifth Circuit declined to adopt a rule about lawyers' use of AI "at this time," after many attorneys said that FRCP Rule 11 already guards against false information that could be generated by AI.[162] Given the evolving landscape, practitioners must carefully check local rules and individual judges' standing orders regarding AI use and disclosure requirements before making court or regulatory filings.

2. Client Disclosures

According to ABA Formal Opinion 512, lawyers must disclose AI use in several key scenarios: when directly asked by clients about work methods, when

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156. *See generally* Plaintiffs' Memorandum Showing Cause Why Sanctions Should Not Be Levied, Puerto Rico Soccer League NFP, Corp. v. Federacion Puertorriquena de Futbol, No. 3:23-cv-01203-RAM-MDM (D.P.R. Mar. 21, 2025), https://storage.courtlistener.com/recap/gov.uscourts.prd.176710/gov.uscourts.prd.176710.190.0.pdf (explaining that errors arose from "human oversight under significant time constraints" and not AI.).

157. *See generally* Mata v. Avianca, Inc., No. 22-cv-1461 (PKC), 2023 WL 4114965 (S.D.N.Y. June 22, 2023).

158. *See* Jessiah Hulle, *AI Standing Orders Proliferate as Federal Courts Forge Own Paths*, BLOOMBERG L. (Nov. 8, 2023), https://news.bloomberglaw.com/us-law-week/ai-standing-orders-proliferate-as-federal-courts-forge-own-paths; *see also* ROPES & GRAY, ARTIFICIAL INTELLIGENCE COURT ORDER TRACKER, https://www.ropesgray.com/en/sites/artificial-intelligence-court-order-tracker (last updated Apr. 30, 2025) (listing a full inventory of all court orders on use of AI).

159. *See, e.g.*, *Judge Matthew J. Kacsmaryk — Mandatory Certification Regarding Generative Artificial Intelligence*, U.S. DIST. CT. N.D. TEX., https://www.txnd.uscourts.gov/judge/judge-matthew-kacsmaryk (last visited Apr. 29, 2025); *see also* FERC Docket No. ER22-24, at P 5.

160. *See, e.g.*, U.S. DISTR. JUDGE ARUN SUBRAMANIAN, INDIVIDUAL PRACTICES IN CIVIL CASES, https://www.nysd.uscourts.gov/sites/default/files/practice_documents/AS%20Subramanian%20Civil%20Individual%20Practices.pdf (last updated July 29, 2024).

161. *See generally* Order at 3, Alario v. Knudsen, No. 9:23-cv-00056-DWM (D. Mont. Apr. 11, 2024), https://storage.courtlistener.com/recap/gov.uscourts.mtd.73494/gov.uscourts.mtd.73494.133.0_4.pdf (prohibiting AI use).

162. *See* Jacqueline Thomsen, *Fifth Circuit Won't Adopt AI Rule After Attorney Pushback*, BLOOMBERG L. (June 11, 2024), https://news.bloomberglaw.com/us-law-week/fifth-circuit-wont-adopt-ai-rule-after-attorney-pushback; *see also* U.S. CT. OF APPEALS: FIFTH JUD. CIR., COURT DECISION ON PROPOSED RULE (June 12, 2024), https://www.ca5.uscourts.gov/docs/default-source/default-document-library/court-decision-on-proposed-rule.pdf?sfvrsn=5967c92d_2 (stating "'I used AI' will not be an excuse for an otherwise sanctionable offense.")

required by engagement agreements or outside counsel guidelines, when inputting client information into AI tools (which requires informed consent under Rule 1.6), when AI output will influence significant decisions in representation (such as evaluating litigation outcomes), and when AI use affects fee arrangements.[163]

Beyond these mandatory disclosure scenarios, Formal Opinion 512 emphasizes that lawyers should evaluate disclosure needs on a case-by-case basis, considering factors like client expectations, scope of representation, information sensitivity, and the significance of AI's role in particular tasks.[164] Formal Opinion 512 also notes that engagement agreements can serve as an appropriate vehicle for AI disclosures, though generic boilerplate provisions are insufficient for informed consent.

ABA Formal Opinion 512's disclosure requirements are triggered only where GenAI tools are used in connection with client representation, and do not apply in every circumstance:

> Today, there are uses of self-learning GAI tools in connection with a legal representation when client informed consent is not required because the lawyer will not be inputting information relating to the representation. As an example, if a lawyer is using the tool for idea generation in a manner that does not require inputting information relating to the representation, client informed consent would not be necessary.[165]

Most states' AI disclosure guidelines generally align with Formal Opinion 512, either recommending or requiring attorneys to obtain informed client consent before using AI tools that could potentially access or retain confidential materials.[166]

When discussing AI — whether to clients or in law firm marketing materials — practitioners cannot overstate AI's capabilities or exaggerate the extent of its use. The SEC recently brought an enforcement action and levied substantial civil penalties on two investment companies for falsely touting use of AI tools for investment services, when they did not actually do so.[167] Though not directly applicable to energy practitioners, the SEC's action underscores the importance of accurate disclosure of GenAI use.

3. Disclosing AI Transcription and Recordings

The improved speed and accuracy of AI transcription tools and a surge in online meetings post-COVID has prompted many attorneys to record and transcribe webinars, client conversations and even discussions with parties to a case.

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163. *See, e.g.*, Formal Op. 512, *supra* note 133, at 6-8.

164. *Id.* at 8.

165. *Id.* at 7.

166. *See* ESQUIRE DEPOSITION SOLS., LITIGATORS WEIGH NEED TO DISCLOSE AI USE TO CLIENTS (Oct. 3, 2024), https://www.esquiresolutions.com/litigators-weigh-need-to-disclose-ai-use-to-clients/ (summarizing select disclosure requirements). Practitioners should consult their respective state ethics opinions for specific guidance on AI client disclosure obligations.

167. Press Release, No 2024-36, SEC, SEC Charges Two Investment Advisors with Making False and Misleading Statements About Their Use of Artificial Intelligence (Mar. 18, 2024), https://www.sec.gov/news/press-release/2024-36.

While AI-transcription can offer benefits such as accuracy, efficiency, and transparency, lawyers must understand applicable restrictions to non-consensual recordings.

ABA Formal Opinion 01-422 takes the position that "a lawyer may not . . . record conversations in violation of the law in a jurisdiction that forbids such conduct without the consent of all parties, nor falsely represent that a conversation is not being recorded."[168] The Opinion is "divided as to whether a lawyer may record a client-lawyer conversation without the knowledge of the client, but notes that it is inadvisable to do so."[169]

States' views are mixed, with eighteen states concluding that recording client conversations without permission is not unethical.[170] But advisory opinions in at least nine other states hold that even if legal, it is unethical to record conversations without consent.[171] Finally, one legal scholar argues that secret client recordings are inherently deceitful, and therefore violate Model Rule 8.4.[172]

Ethics rules aside, employing AI-recording or transcription tools without disclosure to and consent from clients is a betrayal of trust of the attorney-client relationship. Regardless of the convenience of an AI-generated transcripts of client conversations, absent client disclosure and consent, AI recordings are a hard stop no. As for conversations with government officials or opposing counsel, other restrictions — such as confidentiality or agency policy — may bar recordings, so in these circumstances, disclosure is non-negotiable.

D. Ethical and Professional Responsibility Risks

In addition to confidentiality, accuracy, and disclosure, GenAI triggers other legal ethics concerns discussed below.

1. Maintaining Competence in AI Use (ABA Model Rule 1.1)

ABA Model Rule 1.1[8] imposes a duty on lawyers to "keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology."[173] To date, forty states have adopted some version of a duty of technology competence.[174] More recently, the ABA and state bars have proposed guidance on what competence looks like for attorneys using GenAI.[175]

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168. ABA Comm. on Ethics & Pro. Resp., Formal Op. 01-422, at 1 (2001), https://myshingle.com/wp-content/uploads/2023/07/01-422.pdf.

169. *Id*.

170. Alberto Bernabe, *Is It Ethical for Attorneys to Record Telephone Conversations?*, UIC L. REV. (Sept. 19, 2019), https://lawreview.law.uic.edu/news-stories/is-it-ethical-for-attorneys-to-record-telephone-conversations/.

171. JUSTIA, RECORDING PHONE CALLS AND CONVERSATIONS UNDER THE LAW: 50-STATE SURVEY, https://www.justia.com/50-state-surveys/recording-phone-calls-and-conversations/ (last updated Sept. 2024).

172. *See, e.g.*, John Bliss, *The Legal Ethics of Secret Client Recordings*, 33 GEO J. LEGAL ETHICS 55 (2020).

173. MODEL RULES OF PRO. CONDUCT r. 1.1, cmt. 8.

174. *See* LAWSITES, TECH COMPETENCE, https://www.lawnext.com/tech-competence (last visited Apr. 11, 2025).

175. Conley, *supra* note 27, at 4.

Ethics opinions recognize the challenges of dealing with rapidly changing technology:

> Competence relative to emerging technology is an evolving concept. Like extractive AI and email, [GenAI] will become commonplace technology for attorneys as it improves and creates increased efficiencies and high-quality work product. In the same way competent lawyers are expected to use email and conduct electronic research, over time competence may require the ability to use [GenAI]. Competence does not require attorneys to "become GAI experts." Instead, current ethics guidance requires that an attorney makes an "informed decision" that using a specific [GenAI] tool for a specific task is in the client's best interest, understanding the available options, benefits, risks, limitations and terms of service.[176]

ABA FO 512 clarifies that technological competence is not a static obligation but rather requires ongoing vigilance given the rapid evolution of GenAI tools, suggesting that lawyers should stay current through methods such as reading about legal technology developments, attending relevant continuing legal education programs, and consulting with those proficient in GenAI technology.[177]

Technological competence includes not just the ability to use AI tools, but also the judgment to evaluate and select appropriate tools for professional use. Before using a GenAI tool, practitioners should acquire a reasonable understanding of that specific tool's benefits and risks. As a baseline measure of competence in tool selection, the practitioners should thoroughly read and understand the Terms of Use, privacy policy, and related contractual terms of any GenAI tool they plan to use.[178]

The biggest hurdle to competent use of GenAI is its lack of explainability, often referred to as the black box phenomenon.[179] As one article described, LLMs "provide no insights into how they built the memorandum. They show only the cases in the memorandum — essentially tell the user, 'Here's the output; we're not telling you how we got there — take it or leave it.'" [180] In a 2023 Resolution, the ABA urged AI developers to "ensure transparency and traceability" in their products,[181] but until that happens, practitioners should be vigilant in testing products and auditing and verifying their output.

2. Supervisory Obligations for AI Tools (ABA Model Rule 5.1)

Practitioners' traditional duty to supervise under Model Rule 5.1 applies to GenAI use in two ways. First, practitioners must supervise the output of GenAI itself. Just as memos and briefs prepared by first-year associates require some degree of oversight before being sent to a client or filed in a court, the same level of oversight applies when the work-product is generated by AI. Second and

176. *Id.* at 4-5.

177. Formal Op. 512, *supra* note 133, at 3.

178. *Id.* at 7.

179. Conley, *supra* note 27, at 10.

180. *Id.* (quoting Damien Riehl, *Integration of artificial intelligence has transformational potential for lawyers*, MONT. LAW., Feb./Mar. 2024, at 16.).

181. *Id.* at 10-11.

equally important, lawyers have a duty to train and supervise subordinate attorneys and nonlawyers who use AI.[182]

An effective supervision strategy begins with mandatory disclosure of AI usage by all attorneys and support staff. Recent research indicates that over 50% of employees conceal their AI use due to job security concerns, creating significant organizational risks.[183] Without proper disclosure and oversight, firms could unexpectedly face malpractice for erroneous research or improper release of privileged attorney-client communications.

ABA FO 512 recommends additional best practices for responsible supervision. These include providing subordinate lawyers and nonlawyers with appropriate training in both the ethical and practical aspects of using GenAI tools relevant to their work,[184] such as the tools' capabilities and limitations, ethical considerations, and strategies for ensuring data security, privacy, and confidentiality.[185] Firms should also establish and implement firm-wide policies governing acceptable AI use.

The duty to supervise continues to apply when firms employ third-party vendors or contractors that use AI to provide services. Practitioners are advised to use due diligence in hiring outside providers, such as checking vendor credentials, understanding security protocols, implementing confidentiality agreements, and confirming the availability of legal remedies for vendor agreement violations.[186] Corporate compliance counsel Christine Uri developed the nine questions below for vetting AI vendors:

- **AI Technology Stack** – Does the vendor develop its own models or rely on third-party AI providers? External dependencies introduce security and governance risks.[187]
- **Explainability** – Can the AI's decision-making process be understood and justified? Transparency is critical for accuracy, fairness, and legal risk management.[188]
- **Training Data** – What data sources were used? AI quality depends on unbiased and reliable data.[189]
- **Data Usage** – Will customer data be used to retrain the model? Enterprise AI solutions should guarantee data isolation.[190]

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182. Formal Op. 512, *supra* note 133, at 10.

183. Sawdah Bhaimiya, *Workers are secretly using AI on important tasks over fears it makes them look replaceable, new Microsoft and LinkedIn research finds*, CNBC: MAKE IT (May 8, 2024), https://www.cnbc.com/2024/05/08/workers-hiding-ai-use-on-important-tasks-over-fears-about-being-replaced-report-.html.

184. Formal Op. 512, *supra* note 133, at 10.

185. *Id.*

186. *Id.* at 11.

187. Christine Uri, *The 9 Essential Questions to Ask Before Choosing a GenAI Vendor*, LINKEDIN (Feb. 2, 2025), https://www.linkedin.com/pulse/9-essential-questions-ask-before-choosing-genai-vendor-christine-uri-3hhre/?trackingId=H06Ut4gTRVSjk1bV37As9g%3D%3D.

188. *Id*.

189. *Id*.

190. *Id*.

- **Bias Mitigation** – How does the vendor detect and address AI bias? Bias testing and fairness audits are necessary to prevent discrimination risks.
- **Compliance Standards** – Does the vendor follow regulatory frameworks (e.g., NIST AI RMF, EU AI Act)? Non-compliance raises legal and reputational concerns.[191]
- **Performance Monitoring** – How is AI accuracy tracked and maintained? Ongoing validation ensures reliability.[192]
- **Human Oversight** – When and how do humans intervene in AI decisions? HITL mechanisms are essential for high-risk applications.[193]
- **AI Failure Response** – What fail-safe measures exist? A responsible vendor should offer a "kill switch" and clear incident response protocols.[194]

3. Reasonable Billing Practices

According to the Walter Klowers' 2*024 Future Ready Lawyer Survey Report*, 67% of corporate legal departments and 55% of law firms expect AI-driven efficiencies to have an impact on the prevalence of the billable hour.[195] After all, when AI can reduce by half the time for tasks like summarizing a deposition transcript or writing a brief, then logically, the revenues based on those hours will decline too. In these circumstances, practitioners might be tempted to bill based on what the task traditionally cost when performed by humans rather than what it actually costs with GenAI.

The ABA's Formal Opinion 512 makes clear that while GenAI tools may provide faster and more efficient ways to deliver legal services, lawyers billing at hourly rates must charge only for their actual time spent. According to Formal Opinion 512:

> the lawyer who has agreed to bill on the basis of hours expended does not fulfill her ethical duty if she bills the client for more time than she has actually expended on the client's behalf.[196]

The opinion offers specific examples to illustrate proper billing practices: if a lawyer spends fifteen minutes inputting information into a tool to draft a pleading, they may bill for those fifteen minutes plus the time spent reviewing and verifying the output's accuracy and completeness.[197] But the opinion firmly states that lawyers cannot charge clients for time spent learning how to use GenAI tools, as this falls under the broader ethical duty to maintain technological competence.

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191. Uri, *supra* note 187.

192. *Id*.

193. *Id*.

194. *Id*.

195. WOLTERS KLUWER, 2024 FUTURE READY LAWYER SURVEY REPORT 8 (2024).

196. Formal Op. 512, *supra* note 133, at 12 (quoting ABA Comm. on Ethics & Prof. Resp., Formal Op. 93-379, at 6 (1993)).

197. *Id*. at 12.

The only exception is when a client specifically requests the use of a particular GenAI tool that the lawyer is not familiar with — in such cases, the lawyer may bill for time spent learning that specific tool, but only after obtaining the client's explicit agreement, preferably in writing.[198]

E. Intellectual Property Risks

1. Copyright

GenAI raises two distinct intellectual property questions: (1) whether liability exists for infringement during the training or output phases of AI platforms, and (2) whether AI-generated content or inventions qualify for copyright protection.

a. Copyright Issues in Training Data and Outputs

Current litigation is testing the boundaries of copyright law as applied to GenAI.[199] Over a dozen lawsuits have been filed against AI companies, with plaintiffs like The New York Times alleging copyright infringement both in the training of these models and in their outputs.[200] The copyright lawsuits against AI companies consist of two main allegations: first, that the GenAI models accessed and used large amounts of original content as input for training without permission, and second, the AI models produce content that is either identical or so similar to the original work that it infringes on copyright.[201]

Individual users would not face liability for training claims since they do not train the models. But lawyers who use GenAI to produce content should be cognizant of the phenomenon of "memorization," where LLMs can reproduce substantial portions of their training data verbatim.[202] Emerging research suggests that LLMs may generate entire copyrighted works with minimal prompting and may even produce copyrighted content without being explicitly asked to do so.[203] While OpenAI describes such reproduction as a "rare bug," even the company acknowledges it can occur, especially when content appears multiple times in the training data — as might be the case with widely-cited legal documents or articles.[204] This creates risk for lawyers who might unknowingly include copyrighted material or plagiarized content in their work product when using these tools. Alt-

198. *Id.* at 14.

199. *See generally* Gil Appel et al., *Generative AI Has an Intellectual Property Problem*, HARV. BUS. REV. (Apr. 7, 2023), https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem.

200. *See* Amy B. Cyphert, *Generative AI, Plagiarism, and Copyright Infringement in Legal Documents*, 25 MINN. J. L. SCI. & TECH. 49, 50 (2024); *see also* Will Oremus & Elahe Izadi, *AI's future hinges on one thorny issue*, WASH. POST (Jan. 4. 2024), https://www.washingtonpost.com/technology/2024/01/04/nyt-ai-copyright-lawsuit-fair-use/ (providing a background summary on copyright litigation); Blake Brittain, *How copyright law could threaten the AI industry in 2024*, REUTERS (Jan. 2, 2024), https://www.reuters.com/legal/litigation/how-copyright-law-could-threaten-ai-industry-2024-2024-01-02/.

201. Cyphert, *supra* note 200, at 60-61.

202. *Id.* at 52-53.

203. *Id.* at 53.

204. *Id.* at 55.

hough AI vendors have promised to indemnify customers sued for copyright infringement resulting from use of the product, coverage is subject to loopholes and other limitations.[205] Plus, a lawyer accused of wholesale copying AI-generated copyrighted material into a brief or publication, even if indemnified for damages, would face embarrassment and reputational harm,[206] not to mention potential ethics or judicial sanctions for plagiarism.[207]

b. Ownership of AI-Generated Work Product

Not only may AI-generated content give rise to infringement claims but it also does not qualify for copyright protection even if it is a wholly original work. The U.S. Copyright Office has long held the position that to qualify as a work of authorship, a work must be created by a human being.[208] Although the Copyright Office issued a Notice of Inquiry in August 2023 to examine whether legal protection for AI-created works is warranted,[209] the Office ultimately concluded that "copyright does not extend to purely AI-generated material, or material where there is insufficient human control over the expressive elements."[210]

c. Best Practices to Avoid Copyright Claims

Lawyers can mitigate the risk of copyright infringement and plagiarism and preserve IP protection for content through the following best practices:

- Employ GenAI for less creative tasks like case summaries or chart-creation or for less-than-final work like first drafts and outlines;

205. Tom Krazit, *AI vendors promised indemnification against lawsuits. The details are messy*, RUNTIME (Jan. 2, 2024), https://www.runtime.news/ai-vendors-promised-indemnification-against-copyright-lawsuits-the-details-are-messy/.

206. In addition to the potential for copyright infringement, lawyers who copy and paste GenAI output without modification may run afoul of OpenAI's ChatGPT terms of use which prohibit users from representing that the output was human-generated when it was not. *See* OPENAI, *supra* note 151.

207. *See, e.g.*, Eugene Volokh, *Sanctions for Lawyer's Plagiarism of Other Opposing Side's Motion*, REASON (Oct. 19, 2022), https://reason.com/volokh/2022/10/19/sanctions-for-lawyers-plagiarism-of-opposing-sides-motion/; *see also* Douglas E. Abrams, *Plagiarism in Lawyers' Advocacy: Imposing Discipline for Conduct Prejudicial to the Administration of Justice*, 47 WAKE FOREST L. REV. 921 (2012) (summarizing cases where plagiarism has given rise to ethics sanctions).

208. *See generally, e.g.*, Letter from Suzanne V. Wilson, Gen. Couns. & Assoc. Reg. of Copy., U.S. Copyright Off. Rev. Bd., to Alex P. Garens, Partner, Day Pitney, LLP (Dec. 11, 2023), https://copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf (rejecting copyright application for work co-authored by AI); *see also* Mark A. Lemley, *How Generative AI Turns Copyright Upside Down*, 25 COLUM. SCI. & TECH. L. REV. 190 (2024) (summarizing history of Copyright Office's "human element" policy).

209. *See* Notice of Inquiry and Request for Comments, *Artificial Intelligence and Copyright*, 88 Fed. Reg. 59,942 (2023); *see also* U.S. COPYRIGHT OFF., COPYRIGHT AND ARTIFICIAL INTELLIGENCE — PART 2: COPYRIGHTABILITY (Jan. 2025), https://copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-2-Copyrightability-Report.pdf [hereinafter COPYRIGHT & AI] (providing that the notice received 10,000 comments from all fifty states and sixty-seven countries).

210. COPYRIGHT & AI, *supra* note 209, at iii.

- Avoid hacking GenAI, *i.e.*, intentionally asking it to produce an article in the style of Hemingway, or to replicate a photo of Joaquin Phoenix as the Joker;[211]
- Never cut and paste generated AI content but instead, inject personalized commentary, spin and unique word choice;
- Disclose use of AI where used to produce substantial portions of work;
- Regularly check AI-generated content for plagiarism with tools like Grammarly.com or other technology solutions;
- Require employees and contractors to disclose the extent to which they relied on AI to avoid liability for their work, and to ensure any works-for-hire they produce are eligible for copyright protection.[212]

F. AI and Administrative Agency Decision-Making

Although FERC and state commissions have not yet integrated AI into their decision-making, "AI algorithms of various kinds are slowly but surely permeating the administrative state."[213] A 2021 study commissioned by the Administrative Conference of the United States reported that 64 of 142 federal departments, agencies, and sub-agencies had experimented with AI and machine learning,[214] with 1,200 additional use cases planned.[215]

Agency AI use cases range from regulatory enforcement, where agencies like the SEC and IRS use AI to detect financial fraud and monitor compliance,[216] to adjudication of benefits, with the SSA and USPTO employing AI for case clustering and decision support,[217] as well as regulatory analysis, with the FDA leveraging AI for data-driven decision-making, public engagement,[218] and internal management and cybersecurity, where AI aids in procurement oversight and cyber threat detection.[219] While AI systems can help cut costs and expedite decision-making, their use may potentially clash with fundamental principles of administrative law, including due process rights to fair hearings, open government operations, reasoned, on-the-record decision-making, and impartial judgment.[220]

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211. *See* Stuart A. Thompson, *We Asked A.I. to Create the Joker. It Generated a Copyrighted Image.*, N.Y. TIMES (Jan. 25, 2024), https://www.nytimes.com/interactive/2024/01/25/business/ai-image-generators-openai-microsoft-midjourney-copyright.html.

212. DOE recommends similar best practices for avoiding copyright issues in AI use by employees and contractor. *See* DOE AI REFERENCE GUIDE, *supra* note 10, at 30.

213. Amit Haim, *The Administrative State and Artificial Intelligence: Toward an Internal Law of Administrative Algorithms*, 14 UC IRVINE L. REV. 103, 105 (2024).

214. Engstrom et al., *supra* note 119, at 6.

215. MICHAEL KARANICOLAS, *Artificial Intelligence and Regulatory Enforcement* 5 (2024), https://www.acus.gov/sites/default/files/documents/AI-Reg-Enforcement-Final-Report-2024.12.09.pdf (report to the Administrative Conference of the United States).

216. Engstrom et al., *supra* note 119, at 25-29.

217. *Id.* at 46-48.

218. *Id.* at 53-55.

219. *Id.* at 70-72.

220. An exhaustive discussion of AI and the administrative state is beyond the scope of this article. For more in-depth coverage, *see generally* Engstrom et al., *supra* note 119; Haim, *supra* note 213; Aram A. Gavoor

1. Due Process and Transparency

Concerns about the implications of automated decision-making for due process predate AI. As Professor Danielle Citron explained back in 2008:

> Automation generates unforeseen problems for the adjudication of important individual rights. Some systems adjudicate in secret, while others lack recordkeeping audit trails, making review of the law and facts supporting a system's decisions impossible. Inadequate notice will discourage some people from seeking hearings and severely reduce the value of hearings that are held. Even if an individual seeks and receives a hearing, a hearing officer's belief that computer decisions are error-resistant increases the likelihood of inaccurate outcomes. Although expert testimony about a computer system's reasoning could combat a hearing officer's presumption that a computer decision is correct, a *Mathews v. Eldridge* cost-benefit analysis would likely deny such additional process due to its extreme cost. As a result, hearings may not provide individuals with opportunities to meaningfully challenge automated decisions. Changes must be made if procedural due process is to be effective in the twenty-first century.[221]

As one court put it, there is an inherent "tension between the understandable secrecy surrounding proprietary algorithms . . . and the Fourteenth Amendment due process protections" against unfair deprivations of rights.[222]

In the context of energy regulation, imagine an AI system automatically adjusting electricity rates or sanctioning a company for grid unreliability. In these scenarios, affected parties must have a way to examine the basis of that action. Without transparency and access to the AI's training data, assumptions, or logic, a litigant cannot challenge rulings in a meaningful way.

Courts and commentators are beginning to grapple with these transparency issues. In *Houston Federation of Teachers v. Houston Independent School District*, a federal court confronted a school system's use of a secret algorithm (developed by a vendor) to terminate employees.[223] The court noted the "realistic threat" to due process when a public agency delegates decisions to a proprietary algorithm that neither the agency nor the affected persons can scrutinize. The algorithm's developer treated its model as a trade secret, refusing to divulge how teachers' performance scores were calculated — leaving teachers effectively unable to challenge or verify the basis of their termination. The court held that this lack of transparency could violate procedural due process rights, since "due process is designed to foster government decision-making that is both fair and accurate."[224] Similarly, in *State v. Loomis*, the Wisconsin Supreme Court reviewed the use of a risk assessment algorithm in sentencing; while ultimately allowing it, the court cautioned that the defendant must have access to the factors considered by the algorithm and

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& Raffi Teperdjian, *A Structural Solution to Mitigating Artificial Intelligence Bias in Administrative Agencies*, 89 GEO. WASH. L. REV. ARGUENDO 71 (2021); Gordon Unzen, Note, *Artificial Intelligence and the Administrative State: Regulating the Government Use of Decision-Making Technology*, 25 MINN. J.L. SCI. & TECH. 209 (2023); Zoe E. Niesel, *Arbitrary and Capricious x Artificial Intelligence,* 25 MINN. J.L. SCI. & TECH. 1 (2024).

221. Danielle Keats Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249, 1254-55 (2008).

222. Houston Fed'n of Tchrs. v. Houston Indep. Sch. Dist., 251 F.Supp.3d 1168, 1171 (S.D. Tex. 2017).

223. *Id.*

224. *Id.* at 1176.

that the tool should not be the sole basis of a decision.[225] These cases underscore a growing judicial insistence that when the government uses AI, basic due process — notice, explanation, and an opportunity to rebut — cannot be sacrificed.

Some protections already exist at the administrative level to compel disclosure of algorithms. In *Portland Cement v. Ruckelshaus*, the D.C. Circuit ruled that the petitioners were deprived of a meaningful opportunity to "comment on the proposed standards due to the absence of disclosure of the detailed findings and procedures of the tests."[226] Although the case did not involve algorithms or AI, it stands for the proposition that transparency about the models that an agency relies on is paramount to due process.

2. On the Record, Reasoned Decision-Making

The Administrative Procedure Act requires agencies to engage in reasoned on-the-record decision-making. A decision based on flawed data or a misbehaving algorithm lacks the sound evidentiary foundation that courts expect agencies to have. Indeed, Ryan Calo and Danielle Citron have catalogued instances of the "automated administrative state" producing "bizarre and unintelligible outcomes"[227] — which can raise questions of accountability in enforcement actions.[228] AI systems may also obscure the rationale behind agency decisions, making it difficult for impacted parties and the courts to assess whether an agency's action was arbitrary or capricious.[229] The onus falls on energy practitioners bringing challenges to insist on sufficient explanations of AI-driven systems, including underlying training and assumptions, to preserve a record of objections for appeal.

Down the line, AI systems may be able to explain their own reasoning. In an experiment with AI-assisted legal analysis, Professor Zoe Niesel conducted a test using ChatGPT. She provided the AI with the *State Farm Motor Vehicles* case along with three additional precedent cases that help establish the "arbitrary and capricious" standard in administrative law.[230] She then asked ChatGPT to develop an analytical framework that judges could use when applying this standard.[231] To evaluate the AI's effectiveness, Niesel had ChatGPT apply its framework to a scenario based on a real case. The AI's analysis reached the same conclusion as the actual court ruling. Notably, ChatGPT provided clear reasoning for its decision, identifying specific elements that supported the agency's position — such as the presence of empirical data supporting the decision and the agency's clear explanation connecting their evidence to their ultimate determination. Practitioners could apply a similar model to test the reasonableness of an agency decision under applicable precedent in advance of bringing a challenge.

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225. *See generally* State v. Loomis, 881 N.W.2d 749 (Wis. 2016).

226. Portland Cement v. Ruckelshaus, 486 F.2d 375, 402 (D.C. Cir. 1973).

227. Ryan Calo & Danielle Keats Citron, *The Automated Administrative State: A Crisis of Legitimacy*, 70 EMORY L.J. 797 (2021).

228. KARANICOLAS, *supra* note 215, at 2.

229. *See, e.g.*, Niesel, *supra* note 220, at 1.

230. *See* Motor Vehicles Mfg. Ass'n v. State Farm, 463 U.S. 29 (1983).

231. Niesel, *supra* note 220, at 18-22.

3. Non-Delegation Doctrine

The non-delegation doctrine presents unique challenges when applied to agency use of artificial intelligence systems. The doctrine, rooted in Article I, Section 1 of the U.S. Constitution, prohibits Congress from delegating its legislative powers without providing an "intelligible principle" to guide the exercise of that delegated authority.[232] AI implementation introduces potential concerns about secondary delegation — from agency to algorithm. As two scholars observed:

> if government actions should be undertaken by humans, then delegation to autonomously learning machines could potentially transfer governmental power outside the bounds that the Constitution permits. Such an objection under the nondelegation doctrine has never been squarely contemplated under previous judicial rulings, but it bears clear conceptual affinity with the spirit and tradition of the nondelegation doctrine.[233]

In other words, when agencies deploy AI for regulatory functions, they may inadvertently create a form of sub-delegation that could violate constitutional principles if the AI makes decisions with insufficient human oversight or operates beyond the bounds of Congressional authorization. The lack of algorithmic transparency compounds this issue, as courts cannot readily determine whether the AI's decision-making process adheres to the "intelligible principle" established by Congress or merely substitutes agency judgment with machine-derived conclusions.[234] To satisfy non-delegation concerns, agencies implementing AI would need to establish robust safeguards ensuring that algorithms merely inform rather than determine agency action. This would require demonstrable human-in-the-loop protocols where responsible officials maintain final decision-making authority and comprehend the basis for AI recommendations. Without such measures, agencies risk running afoul of the non-delegation doctrine.

The need for robust human oversight and transparency in agency use of AI for decision-making is heightened in the wake of Supreme Court jurisprudence reflecting increasing skepticism toward expansive agency authority.[235] This emerging judicial philosophy could lead to additional scrutiny of AI use in administrative decision-making, particularly where algorithms make determinations affecting individual rights or major policy questions. Agencies contemplating AI implementation must therefore consider not only current non-delegation standards

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232. *See* Panama Refin. Co. v. Ryan, 293 US 388, 430 (1935) (finding statute violated the non-delegation doctrine where it granted the President the authority to prohibit the interstate transportation of petroleum produced in excess of state quotas without intelligible principles to guide the President's actions); *see also* A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495, 540 (1935) (finding Section 3 of NIRA an unconstitutional delegation of legislative power because it lacked clear standards or guidelines to limit the President's discretion).

233. Cary Coglianese & David Lehr, *Regulating by Robot: Administrative Decision Making in the Machine-Learning Era*, 105 GEO. L.J. 1147, 1178 (2017).

234. *Id.* at 1205 (discussing the importance of transparency in algorithmic decision-making).

235. *See, e.g.*, Loper Bright Enters. v. Raimondo, 603 U.S. 369 (2024) (overturning Chevron deference to federal administrative agencies); see also Adam Liptak, *Supreme Court Agrees to Hear Fresh Challenge to Agency Power*, N.Y. TIMES (Nov. 22, 2024), https://www.nytimes.com/2024/11/22/us/supreme-court-fcc-agency-power.html (describing recent trend of cases eroding agency authority.

but also anticipate more stringent requirements that may emerge from the Court's ongoing reconsideration of administrative power limitations. The safest approach would involve ensuring AI systems remain strictly advisory, with transparent processes allowing affected parties to understand and challenge both the AI's recommendations and the agency's ultimate reasoning.[236]

4. Bias Risks

Bias in AI can arise if algorithms are trained on historical data that reflect past discrimination or errors.[237] In energy regulation, this might mean an AI enforcement tool that was trained on decades of compliance data could inherit any biases in that data (for example, if historically smaller or newer market entrants were scrutinized more often, the AI might disproportionately flag those entities going forward). Likewise, AI used in resource planning might undervalue feedback from minority communities if the training data underrepresented those populations.

DOE's *AI Reference Guide* offers recommendations for regulators to minimize risk of bias in decisions and policies.[238] The Guide emphasizes that maintaining strong human oversight while using AI as a supporting tool rather than the primary decision-maker is paramount. In addition, agencies and their contractors must build fairness considerations into every stage of the AI lifecycle, from establishing clear metrics and checklists to implementing equitable data management practices that prioritize disadvantaged communities. Organizations should use representative datasets that reflect societal diversity, actively identify and mitigate bias in training data, and maintain human verification of outputs to prevent negative consequences. Continuous monitoring plays a crucial role, with regular checks to ensure systems align with their intended purpose and do not create new biases through correction attempts or feedback loops. Success relies on combining proactive bias prevention through careful design with ongoing monitoring and adjustment, all while keeping human oversight at the center of the process.[239]

236. *See* Coglianese & Lehr, *supra* note 233, at 1180 (discussing non-delegation doctrine in a cyber-age).

237. *See* NAT'L INST. OF STANDARDS & TECH., PUB. NO. NIST AI 100-1, ARTIFICIAL INTELLIGENCE RISK MANAGEMENT FRAMEWORK (AI RMF 1.0) 18 (Jan. 2023), https://doi.org/10.6028/NIST.AI.100-1. According to NIST, AI bias can manifest in three distinct but interconnected forms: systemic, computational/statistical, and human-cognitive biases. *Id.* Systemic bias emerges from institutional practices and societal norms embedded in AI datasets and processes, while computational and statistical biases stem from technical issues like nonrepresentative sampling in datasets and algorithmic processes. Human-cognitive bias reflects how individuals and groups interpret and interact with AI systems throughout their lifecycle, from design to maintenance. *Id.*

238. DOE AI REFERENCE GUIDE, *supra* note 10, at 34-35.

239. *Id.*

G. Authenticity and Admissibility in FERC Evidentiary Hearings

1. Authenticity

Advances in artificial intelligence now enable deep-fakes — hyper-realistic fake images, videos, or audio — that can be very difficult to distinguish from authentic evidence.[240] What's more, the technology for anyone to create convincing deep-fakes from just a snippet of a voice-mail message or a free second of a YouTube video is affordable and requires minimal technical skills.[241] In one widely-reported news story, a Maryland high school principal was placed on administrative leave after someone circulated a fabricated AI-generated audio clip that appeared to capture him making racist comments.[242] Unfortunately, preventive technology has not kept pace; a 2024 NIST Report concluded that while current deep-fake detection technologies provide some level of defense, no single method is fully effective against sophisticated AI-generated media.[243]

The growing spectre of deep-fakes prompted the U.S. Courts' Advisory Committee on the Federal Rules of Evidence to propose reform. The authentication requirement in Federal Rule of Evidence 901(a) states that evidence must be proven to be what it claims to be. The Advisory Committee's proposed changes would expand this rule to specifically address AI-generated evidence in two key ways.[244] First, the amendments would add new requirements for authenticating AI-generated evidence. To introduce such evidence, a party would need to provide documentation about both the AI system's training data and software and demonstrate that the system produced reliable results in the specific instance. Second, a new subsection (c) would establish procedures for challenging evidence suspected of being manipulated by AI (like deep-fakes). This would create a two-part process where the burden of proof shifts between the parties — when one party challenges evidence as being AI-fabricated, either wholly or partially, the other party must respond to that challenge.

Deep-fakes present as much of a challenge for FERC evidentiary hearings as in traditional courts. One can easily imagine a situation where a party might attempt to introduce deep-faked recordings of trader conversations as evidence of market manipulation, or AI-altered videos of post-construction environmental damage. Although FERC's standard for authentication is lower than Rule 901, this "does not completely obviate the necessity of proving by competent evidence

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240. Daniel J. Capra, *Deepfakes Reach the Advisory Committee on Evidence Rules*, 92 FORDHAM L. REV. 2491, 2493-94 (2024).

241. *See, e.g.*, ELEVENLABS, https://elevenlabs.io/ (last visited Apr. 11, 2025) (providing that ElevenLabs.io enables users to clone voices for short recording for a starting price of $5/month).

242. Jaclyn Diaz, *A Baltimore-area teacher is accused of using AI to make this boss appear racist*, NPR (Apr. 26, 2024), https://www.npr.org/2024/04/26/1247237175/baltimore-ai-generated-racist-audio-crime.

243. NAT'L INST. OF STANDARDS & TECH., DRAFT NO. NIST AI 100-4, REDUCING RISKS POSED BY SYNTHETIC CONTENT: AN OVERVIEW OF TECHNICAL APPROACHES TO DIGITAL CONTENT TRANSPARENCY 45 (Apr. 2024), https://airc.nist.gov/docs/NIST.AI.100-4.SyntheticContent.ipd.pdf.

244. *See generally* William M. Carlucci et al., *Changes Proposed to the Federal Rules of Evidence to Address AI Usage*, NAT'L L. REV. (Nov. 15, 2024), https://natlawreview.com/article/changes-proposed-federal-rules-evidence-address-ai-usage.

that real evidence is what it purports to be. . . . absent any such proof, the evidence to be admitted would be irrelevant or immaterial and hence should be excluded from the proceeding."[245] To preserve the integrity of evidence and competently represent their client, practitioners must take precautions against deep-fakes and be prepared to challenge the authenticity of any evidence that lacks proper authentication.

2. Admissibility and AI Generated Evidence

As GenAI evolves, it has become capable of more sophisticated analysis. Even off-the-shelf AI tools like ChatGPT's Deep Research can generate a 9,000-word memo on a complex legal issue in ten minutes.[246] Given the exorbitant costs of expert services in fact-findings, one can envision scenarios where experts might employ AI tools to save time, or where non-experts might use AI-powered products for expert analysis.

To address these scenarios, the Advisory Committee proposed new FRE 707, requiring AI-generated evidence to meet the same criteria for admissibility as expert testimony under FRE 702.[247] When AI is used in place of expert analysis, proponents must demonstrate that the output aids the fact-finder, uses sufficient data, employs reliable methods, and applies these methods appropriately to inputs. Courts would evaluate this by examining input data, ensuring opponents can access the AI system, and verifying the process has been validated in similar contexts. These requirements leave the door open for the imminent new reality of AI-generated evidence while preserving opponent's ability to challenge or object to evidence that is inherently unreliable or opaque.

It is unclear whether proposed FRE 707, if adopted, would affect FERC practice. Currently, FERC's "rule for the admissibility of evidence differs from, and is broader than, Rule 702 of the Federal Rules of Evidence. . . . Rule 509 reflects the administrative nature of the Commission's trial-type proceedings and the presence of a fact finder who can afford appropriate weight to the relevant evidence that is submitted."[248] Regardless of whether FERC revises its evidentiary rules in light of GenAI, practitioners must insist that experts disclose when AI is used to assist in report preparation because AI drafting poses unique risks: the reasoning and wording come from a machine that may introduce errors (like fabricated citations or facts) unbeknownst to the expert.[249]

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245. *See* Gallagher v. NTSB, 953 F.2d 1214, 1218 (10th Cir. 1992); *see also Enbridge Pipelines (KPC)*, 102 FERC ¶ 61,310 at PP 50, 51 (2003) (applying Rule 901 to authenticate documents).

246. Bob Ambrogi, *What Is OpenAI's Powerful New Deep Research Tool Capable Of? I Use It to Analyze the Legality of President Trump's Pause of Federal Grants*, LAWSITES (Feb. 3, 2025), https://www.lawnext.com/2025/02/what-is-openais-powerful-new-deep-research-tool-capable-of-i-use-it-to-analyze-the-legality-of-president-trumps-pause-of-federal-grants.html.

247. Carlucci et al., *supra* note 244.

248. *Energy Transfer Partners, L.P. et al.*, 123 FERC ¶ 61,168 at P 17 (2008).

249. John Connolly, *New Question for Expert Witness: Who Drafted This Report, You Or Your Machine?*, JD SUPRA (Jan. 15, 2025), https://www.jdsupra.com/legalnews/new-question-for-expert-witness-who-7761463/ (recounting exclusion of AI expert who prepared his report with AI that produced hallucinations).

In a recent federal case, these concerns became reality. A Minnesota judge excluded an expert's declaration in a case about AI deep-fakes because the declaration contained AI-generated, false citations.[250] The expert had used an early version of GPT-4 to help write the report, and it "hallucinated" sources. The court found it impossible to trust an expert submission that was not fully vetted by the expert or counsel, pointed out the irony of combating deep-fakes with AI-tainted evidence, and admonished: "verify AI-generated content in legal submissions!"[251] For this reason, transparency regarding expert use of AI is imperative.

VII. CONCLUSION

The adoption of GenAI in energy law practice marks a paradigm shift, offering unprecedented opportunities for efficiency and innovation. From automating complex legal research and contract analysis to streamlining regulatory compliance and permitting processes, GenAI has the potential to revolutionize the way energy practitioners engage with clients, agencies, and the public. At the same time, energy practitioners must approach GenAI with a balanced perspective, recognizing its capabilities while implementing best practices and safeguards described in this article to mitigate risks and protect clients.

Looking ahead, energy practitioners must embrace AI not as a replacement for legal expertise but as a tool that enhances their ability to deliver strategic, efficient, and high-quality legal services. Firms that successfully integrate AI while maintaining professional oversight will be well-positioned to offer competitive and effective legal representation in an increasingly AI-driven energy sector. Most of all, widespread adoption of GenAI may help uncover innovative solutions to legal and regulatory challenges in the energy sector and make energy law more accessible.

APPENDIX I — BEST PRACTICES FOR ENERGY PRACTITIONERS' USE OF AI

Confidentiality and Privilege

- Obtain informed client consent before inputting any client information into AI tools
- Evaluate AI tools' security measures, data retention policies, and privacy protections
- Use fee-based versions of AI platforms with privacy protections when handling sensitive information
- Structure prompts carefully to avoid exposing confidential information
- Include specific AI usage restrictions in NDAs with third parties
- Consider AI prompts potentially subject to same litigation holds as other documents
- Implement prompt logging and archiving systems for legal preservation

Accuracy and Quality Control

250. *Id.*
251. *Id.*

- Independently verify all AI-generated output, especially legal authority, factual claims, and analysis
- Use strong prompt engineering techniques (provide context, iterate through multiple attempts, break complex tasks into steps)
- Recognize AI's inherent limitations in processing non-OCR documents, performing math, interpreting nuanced contract terms, and analyzing complex legal concepts
- Consider different AI tools for different types of tasks (law-specific vs. general-purpose)
- Implement validation procedures for catching hallucinations and errors
- Maintain professional judgment over AI-assisted outputs

AI Disclosure Requirements

- Check local court rules and judges' standing orders regarding AI disclosure requirements
- Disclose AI use to clients when directly asked, when required by agreements, when inputting client information, or when AI output influences significant decisions
- Obtain explicit consent before recording or transcribing client conversations with AI tools
- Be truthful about the extent of AI use in marketing materials and client communications
- Properly disclose AI transcription and recording to all parties involved

Ethical and Professional Responsibility

- Maintain technological competence through ongoing education about AI developments
- Understand specific AI tools' benefits, risks, and terms of service before use
- Establish clear firm-wide policies governing acceptable AI use
- Train and supervise subordinate attorneys and staff on proper AI use
- Vet third-party AI vendors thoroughly using due diligence protocols
- Charge clients only for actual time spent using AI, not for what tasks traditionally cost
- Do not bill clients for time spent learning AI tools unless specifically requested

Intellectual Property Considerations

- Use AI primarily for less creative tasks or first drafts to avoid copyright issues
- Avoid asking AI to replicate specific copyrighted styles or content
- Personalize AI-generated content with original commentary and unique wording
- Regularly check AI-generated content for plagiarism
- Require employees to disclose AI use in their work

- Ensure patent applications with AI assistance have significant human contribution
- Verify and review all AI-drafted patent claims

Agency Decision-Making and Evidence

- Advocate for transparency in AI-driven agency decisions
- Insist on sufficient explanations of AI systems used in regulatory actions
- Build record for appeal of any AI-influenced decisions lacking transparency
- Maintain human oversight in all regulatory decisions involving AI
- Challenge evidence suspected of being AI-manipulated
- Request disclosure when experts use AI in report preparation
- Verify authenticity of evidence that could be subject to deepfakes

Application-Specific Best Practices

- Communications: Use AI for client alerts, case summaries, and presentation materials
- Transactional Work: Employ AI for contract drafting, due diligence, and lifecycle management
- Litigation: Leverage AI for e-discovery, document review, and argument analysis
- Compliance: Apply AI to monitor regulatory changes and assess risk
- Permitting: Use AI to generate application materials and increase community participation

APPENDIX II — HOW I USED AI AS MY WRITING PARTNER FOR THE ENERGY LAW JOURNAL

When I was first approached to write an article for the *Energy Law Journal* on AI for energy practitioners, I had a wild idea — what if AI could write it for me? Having authored five scholarly articles over the course of my career, I know how time-consuming they can be. So, I thought: Couldn't I just push a button, hand over a topic, and have ChatGPT or Claude spit out a polished draft?

Spoiler alert: That didn't happen.

Although AI didn't become my Boswell, it acted as a collaborative research and writing partner. From beginning to end, I employed tools like ChatGPT, Claude, and Perplexity to speed up the organizational process, help me think through ideas, and reinvigorate my writing when I hit the inevitable walls.

To get started, I dispatched ChatGPT to draft an outline for an article on GenAI for energy lawyers and included a couple of sample topics. ChatGPT produced a decent draft which I revised with input from the Journal's editors. As I wrote the content, I discovered that some sections were duplicative and others nonsensical, so I revised as I went. I'd estimate that the structure of the final piece reflects about 70% of the original outline.

I used both ChatGPT and Claude to speed up the laborious process of citation to online newspaper pieces and law review articles. I'd simply upload the article or URL to the AI and demanded "Give me a Bluebook citation." I can't say if the

cites are Bluebook compliant but AI did a better version than I ever could — and besides, cite-checking is what student editors do.

When I got stuck on a sentence or couldn't quite express a thought, I'd paste in the paragraph and ask ChatGPT or Claude to help me rework it. I wasn't using AI to replace my voice, but to refine it. Sometimes just seeing another version of my own idea helped me get unstuck and move forward.

I also relied on AI to help summarize long, dense law review articles I was pulling for research. I'd ask Claude or ChatGPT to break them down into short summaries so I could quickly assess relevance. It was like having a superpowered index system at my fingertips. I also used AI to summarize my article to boil it down into the Best Practices in Appendix I.

One of the more substantive areas where AI played a big role was in helping me draft the section on the non-delegation doctrine. Although appellate energy agency matters are my jam, I must confess that it's been at least a decade since I tackled the somewhat obscure non-delegation doctrine, so I desperately needed a quick refresher. I used Perplexity and ChatGPT deep research to give me a high-level overview, which helped me get reoriented. That said, the citations they offered were often inaccurate or incomplete, so I still had to slog through multiple law review articles and cases to get the details right.

In short, there isn't any section of the article that AI wrote entirely. My dream of a push- button law review article remains a dream. But for me, working with AI was like having an endlessly patient co-author: always available, happy to brainstorm, and never offended when I rewrote everything it suggested. It didn't replace the hard work — but it definitely helped carry the load.