Discovery in a Digital Age: Electronically Stored Information and the New Amendments to the Federal Rules of Civil Procedure

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INTRODUCTION

Following the lead of the global business community, commercial law has adapted over the past two decades to the conversion from a paper-based economy to one based on electronic records. Board of directors’ presentations prepared in PowerPoint, business financial records kept in Excel spreadsheets, memoranda written in Microsoft Word, communications via e-mail or Blackberry, voice mail messages saved within a phone system—the paper trail of a business has become an electron trail, saved on servers and backup tapes in a company’s information technology department. Whether it was prompted by revisions to the Uniform Commercial Code recognizing electronic commerce or the Uniform Electronic Transactions Act giving electronic signatures and records legal validity and enforceability commensurate with that of paper records, commercial law has responded to the avalanche of electronic materials that businesses generate daily.¹
The adaptation has not been so seamless in the area of data preservation and electronic discovery. Rather than offering clear guidelines to corporate counsel in the Federal Rules of Civil Procedure (the “Rules”), federal e-discovery law was left for many years to develop through the complex, and sometimes conflicting, processes of the common law, as individual courts decided how to address the individual cases before them. \(^2\) Partly as a result, discovery of electronically stored information came to be viewed as a treasure trove—or ticking time-bomb—for 21st century litigators and corporate counsel. Accordingly, it became essential that the Federal Rules of Civil Procedure provide clear and uniform national standards for discovery relating to electronically stored information.

In 2006, the U.S. Supreme Court acted on recommendations from the Judicial Conference’s Advisory Committee for the Federal Rules of Civil Procedure and approved amendments to the Rules addressing the proper conduct of electronic discovery. Those amendments to the Federal Rules (the “Amendments”) took effect on December 1, 2006.

In this article, we discuss both the substance of the Amendments and the Amendments’ implications for the business community, including what to do when faced with litigation and how to structure a business’s electronically stored information systems with an eye towards best practices for potential (and perhaps inevitable) litigation. In Part I, we look at the amendments to Rule 26(b)(2) and explain how Rule 26(b)(2)(B) creates two classes of electronically stored information: readily accessible data, which must be produced, and information that is not reasonably accessible because of undue cost or burden, which may be withheld from discovery unless the court finds good cause for its production. Part II discusses the new process found in Rule 26(b)(5)(B) for asserting privilege during the production of electronic materials.

In Part III, we turn to the newly amended Rule 34, which provides important new standards governing the “form or forms” of

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1 A 1999 study estimated that 93% of all information was being generated in digital form, and the number is almost surely higher today. In re Bristol-Myers Squibb Securities Litigation, 205 F.R.D. 437, 440 n.2, 51 Fed. R. Serv. 3d 1212 (D.N.J. 2002).

production; as we discuss below, Rule 34 makes great strides in allowing parties to request electronic data in its most useful and litigation-relevant form. Part IV addresses amended Rule 37(f) and explains how litigators need knowledge of electronic information retention systems in order to avoid spoliation of discoverable materials and potential sanctions. Part V discusses several other changes included in the new amendments. We conclude with some broader advice on successfully navigating the landscape of the new federal rules governing discovery.

I. Rule 26(b)(2)(B)—Reasonably Accessible vs. Not Reasonably Accessible Electronically Stored Information

Notwithstanding all of the changes made in the recent amendments, the new Federal Rules of Civil Procedure on discovery of electronically stored information are conspicuous for something they do not do—namely, define what electronically stored information is. The Committee Note to Rule 34(a), rather than the Rule itself, comes closest to defining “electronically stored information,” noting that electronically stored information “may exist in dynamic databases and other forms far different from fixed expression on paper” and is “information that is fixed in a tangible form and … is stored in a medium from which it can be retrieved and examined.” That discussion—which, as we shall see, draws from a definition used widely in other statutes—might have been placed helpfully in the amended Rules themselves, rather than being hidden within the commentary to the Rules. However, the Committee elected not to define “electronically stored information” in the text of the Rules, deciding instead that “[t]he wide variety of computer systems currently in use, and the rapidity of technological change, counsel against a limiting or precise definition of electronically stored information.”

The Advisory Committee’s choice of the term “electronically stored information” stands in sharp contrast to the use of the term “record” in both the Uniform Commercial Code and the Uniform Electronic Transactions Act (UETA) to denote stored information, irrespective of the storage medium, electronic or otherwise. Both UCC § 1-201(31) (2004) and UETA § 2(13) (1999) define a record as “information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.” As Patricia Brumfield Fry has noted, a “‘record’
may be on paper, on a disc or cassette, or stored in digital memory” and “[a]s new technologies come onto the market, a record might be stored in bubble memory or holograms or new media not yet conceived.” By introducing “electronically stored information” instead of the more inclusive “record,” the Advisory Committee and Supreme Court may have set up a need to further amend the Federal Rules down the road, as new technology may lead to more advanced, nonelectronic media for storing information. In Professor Fry’s words, “record” would have been a better term because “[t]he process of drafting and adoption [of new rules] is too expensive and time consuming to permit change every time a new technology appears.”

In addition to the UCC and UETA, the Uniform Rules of Evidence (which have been adopted in whole or part by 38 states) also uses the term “record” throughout its text, defining “record” in Rule 1001 in identical terms to those found in the UCC and UETA: “information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.” Even the Federal Rules of Evidence uses the term. The 2000 amendments to the Federal Rules of Evidence, which added Rules 902(11) and 902(12), allow certified domestic and foreign “records” to be self-authenticating. The drafters of those rules apparently recognized that the term “record” concisely and clearly delineates a broad and medium-neutral scope, which the preceding term, Rule 1001’s definition of “writings and recordings,” lacked.

Comparing the two terms makes it clear that “record” includes all materials that would fall within the ambit of “electronically stored information,” so the new term does not pick up anything that inadvertently fell outside the definition of “record.” Both “records” and “electronically stored information” include all mate-

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5 Federal Rule of Evidence 1001, enacted in 1972 and revised in 1974, defines writings and recordings as “letters, words, or numbers, or their equivalent, set down by handwriting, type-writing, printing, photostating, photographing, magnetic impulse, mechanical or electronic recording, or other form of data compilation.”
rial materials “fixed in a tangible” and “retrievable” form. As applied to commercial transactions today, both terms are comprehensive:

The entire sales cycle, from bid solicitation, purchase order and acceptance, through shipment and delivery of goods and payment for them, can be effected without the need to produce a single piece of paper. A record of the transaction, from inception through closure, may be stored electronically in a reliable, enduring manner…. The dictionary definitions of the word “record” include the idea of “writing” something down or placing the information in some permanent or durable form. The word also embraces the idea of a number of other media, including phonographs, tapes and compact discs. Thus, the connotations borne by the word “record” suggest the desired media neutrality.6

In short, the term “record” encompasses as many materials relevant to commercial disputes, if not more, than “electronically stored information,” the term that the Amendments adopt for the Rules.

Further, the lost benefit of harmonizing the Federal Rules of Civil Procedure with the UCC and UETA in the use of “record” should not be overlooked. Uniform terminology in the law enhances predictability for businesses and legal practitioners both horizontally across state lines and vertically as between state and federal court systems.7 The use of the common term “record” in many sources of the law would allow corporate counsel to develop document retention policies with greater confidence that the Rules would be interpreted consistently with the UCC, UETA, and Uniform Rules of Evidence. Similarly, using “record” rather than “electronically stored information” would allow businesses that operate simultaneously in multiple jurisdictions to consider electronic document-retention pol-

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icies in light of one universal discovery standard rather than multiple, potentially conflicting standards. Likewise, the use of “record” instead of “electronically stored information” would have allowed courts to construe the Rules harmoniously with the UCC, UETA, and Uniform Rules of Evidence.8

Although electronically stored information is not expressly defined in the Amendments, Rule 26(b)(2)(B) categorizes electronically stored information into two classes. Rule 26(b)(2)(B) states:

A party need not provide discovery of electronically stored information from sources that the party identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the party from whom discovery is sought must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

Rule 26(b)(2)(B)’s effect, therefore, is to create two separate categories of electronically stored information, each of which places different duties upon the responding party.

First, as the Committee Note to Rule 26(b)(2) notes, “a responding party should produce electronically stored information that is relevant, not privileged, and reasonably accessible, subject to the [Rule 26] (b)(2)(C) limitations that apply to all discovery.” This means that, upon being served with a discovery request, a responding party must be prepared to produce all of the “reasonably accessible” electronically stored information that is responsive to the request, such as: electronically stored information from active com-

8 For some examples of courts using this common definition of “record” in case decisions, see, e.g., In re Clayson, 341 B.R. 137, 140, 46 Bankr. Ct. Dec. (CRR) 85, 59 U.C.C. Rep. Serv. 2d 341 (Bankr. W.D. N.Y. 2006) (holding that a check was an authenticated “record” under the UCC because it was “inscribed in a tangible medium”); In re C.T., 100 Cal. App. 4th 101, 111, 121 Cal. Rptr. 2d 897, 907 (4th Dist. 2002) (holding that typed notes by a court reporter of a phone conversation were a “record” under California evidence law since the “reporter’s transcripts are tangible mediums and are retrievable”); BM Electronics Corporations v. LaSalle Bank, N.A., 59 U.C.C. Rep. Serv. 2d 280 (N.D. Ill. 2006) (holding that waivers to a letter of credit by state law must be issued in a “form that is a record” and thus must be “inscribed on a tangible medium or… stored in an electronic or other medium [that] is retrievable in perceivable form”).
puter servers; files on regularly accessed shared network drives; computer data saved to the hard drives of individual computers; and e-mails stored in currently accessible folders or mailboxes. This list is by no means exhaustive. As the Committee Notes state, parties are expected to produce materials from “information systems… [that] provide ready access to information used in regular ongoing activities,” and the rules require the producing party to demonstrate good faith in producing reasonably accessible electronically stored information, since “[e]lectronic storage systems often make it easier to locate and retrieve information,” and “[t]hese advantages are properly taken into account in determining the reasonable scope of discovery in a particular case.”

The second category of electronically stored information under Rule 26(b)(2)(B) is electronically stored information that is “not reasonably accessible because of undue burden or cost.” Electronically stored information in the second category includes archival materials, backup tapes, or other materials in a “system [that] may retain information on sources that are accessible only by incurring substantial burdens or costs.” In other words, the greater the burden of producing a given type of electronic information, the less likely it is that a party will be required to produce that data.

However, litigators and corporate counsel cannot ignore electronically stored information that is “not reasonably accessible.” Rather, according to the Committee Notes, they “must also identify, by category or type, the sources containing potentially responsive information that [the producing party] is neither searching nor producing,” along with “enough detail to enable the requesting party to evaluate the burden and costs of providing the discovery and the likelihood of finding responsive information on the identified sources.” Furthermore, the producing party still may have statutory and common-law duties to preserve evidence that is “not reasonably accessible electronically stored information.”

Moreover, a producing party must pay careful attention to “not reasonably accessible” electronically stored information because, under Rule 26(b)(2)(B), such data must still be produced if the requesting party “shows good cause” that the information is relevant and valuable to the litigation. How is a requesting party to show that electronically stored information that is not reasonably accessible is nonetheless so important that it should be produced despite the cost and burden involved? According to the Committee Notes
to Rule 26(b)(2), considerations for a court in such a situation may include any or all of seven criteria:

(1) the specificity of the discovery request; (2) the quantity of information available from other and more easily accessed sources; (3) the failure to produce relevant information that seems likely to have existed but is no longer available on more easily accessed sources; (4) the likelihood of finding relevant, responsive information that cannot be obtained from other, more easily accessed sources; (5) predictions as to the importance and usefulness of the further information; (6) the importance of the issues at stake in the litigation; and (7) the parties’ resources.

If the requesting party can show that its need for the discovery of the electronically stored information outweighs the burden of producing it, a court may order production of the electronically stored information, even though it is not reasonably accessible.

The seven criteria from the Committee Notes to Rule 26(b)(2) closely track the criteria that the U.S. District Court for the Southern District of New York laid out for the production of archived backup tapes in *Zubulake v. UBS Warburg LLC (Zubulake I).* \(^9\) In *Zubulake I*, the district court used seven criteria to decide that a limited production of electronically stored information from burdensome backup tapes was appropriate:

1. The extent to which the request is specifically tailored to discover relevant information; 2. The availability of such information from other sources; 3. The total cost of production, compared to the amount in controversy; 4. The total cost of production, compared to the resources available to each party; 5. The relative ability of each party to control costs and its incentive to do so; 6. The importance of the issues at stake in the litigation; and 7. The relative benefits to the parties of obtaining the information. \(^10\)

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\(^9\) *Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309, 322, 91 Fair Empl. Prac. Cas. (BNA) 1574 (S.D. N.Y. 2003). This similarity presumably is not coincidental, as the Honorable Judge Shira A. Scheindlin, who authored the landmark *Zubulake* decisions, served as a member of the Advisory Committee on Civil Rules that proposed the amendments.

\(^{10}\) *Zubulake I*, 217 F.R.D. at 322.
The criteria that a court is to consider before ordering production of “not reasonably accessible” electronically stored information are not the only aspects of *Zubulake* that Rule 26(b)(2)(B) has borrowed. Rule 26(b)(2)(B) also allows the court to “specify conditions for the discovery,” following the ruling in *Zubulake I* that allowed sampling of a portion of backup tapes for responsive materials\(^{11}\) and the ruling in *Zubulake III* that allowed cost sharing for the production between the requesting party and the producing party.\(^{12}\) Lawyers should pay special attention to the possibility of sampling data (which is specifically allowed under amended Rule 34(a)) since it may offer a lower cost and less burdensome approach under which the parties “peek” at a sample of the “not reasonably accessible” data in order to discern whether a full production would be advisable or a waste of effort. Counsel for producing parties, meanwhile, may want to suggest cost-sharing measures if an opponent seeks production of burdensome or high-cost electronically stored information.

Overall, amended Rule 26(b)(2)(B) exemplifies many of the common themes that weave their way through the Amendments. Litigators and corporate counsel need to be familiar with their clients’ electronically stored information and the costs and burdens that would be involved in producing those materials. Counsel for both requesting parties and producing parties should communicate with each other extensively during discovery and should specifically address all aspects of producing electronically stored information in these discussions. Finally, both sides to litigation should be aware of the tools, such as sampling and cost sharing, that may be employed in appropriate cases when discovery involves the production of electronically stored information that is “not reasonably accessible.”

### II. Rule 26(b)(5)—Privilege in the Electronic Discovery Era

Amended Rule 26(b)(5) effectively represents an acknowledgement of the practical difficulties involved in producing huge vol-

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\(^{11}\) *Zubulake I*, 217 F.R.D. at 324.

umes of electronically stored information, in this instance with respect to privilege. Under Rule 26(b)(5)(B):

If information is produced in discovery that is subject to a claim of privilege or of protection as trial-preparation material, the party making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has and may not use or disclose the information until the claim is resolved. A receiving party may promptly present the information to the court under seal for a determination of the claim. If the receiving party disclosed the information before being notified, it must take reasonable steps to retrieve it. The producing party must preserve the information until the claim is resolved.

The language of the new Rule tacitly recognizes that, when parties have to deal with the extraordinary volumes of electronically stored information stored in contemporary computer systems, there is a greater likelihood that documents containing privileged communications or work product will inadvertently be produced. The Rule represents a step towards addressing that problem.

The Committee Notes to Rule 26(b)(5)(B) explicitly observe that “the risk of privilege waiver, and the work necessary to avoid it, add to the costs and delay of discovery. When the review is of electronically stored information, the risk of waiver, and the time and effort required to avoid it, can increase substantially because of the volume of electronically stored information and the difficulty in ensuring that all information to be produced has in fact been reviewed.” New Rule 26(b)(5)(A) is identical in language to the former Rule 26(b)(5) and deals with the manner in which privilege is asserted. New Rule 26(b)(5)(B) deals with post-production assertions of privilege. Both subsections are designed to be practical responses to the difficulties inherent in assessing and asserting privilege over the vastly increased volume of materials now preserved as electronically stored information.

Rule 26(b)(5)(B) effects three changes in discovery practice. First, as the Committee Notes state, Rule 26(b)(5)(B) creates a mechanism for producing parties “to assert a claim of privilege or trial-preparation material protection after information is produced in discovery in the action,” reducing the danger that a party will
waive the privilege inadvertently. In order to assert privilege over previously produced materials, the producing party must give notice of the assertion of the privilege in writing to the other party (unless the assertion occurs under circumstances, such as during depositions, which preclude assertion of the privilege in writing). In response, the receiving party may then challenge the privilege assertion, in which case the court would look first at whether the materials were indeed privileged and then at whether any claimed privilege had been waived due to the delay in asserting the privilege after production. Second, Rule 26(b)(5)(B) effectively requires parties who receive discovery materials to keep track of those materials (and any copies of the materials), so as to be able destroy or segregate any of those materials that later become the subject of a claim of privilege; counsel should note that the potential need to comply with Rule 26(b)(5)(B)’s procedures for handling information subject to a claim of privilege extends to third parties, as well as litigants themselves. Third and finally, Rule 26(b)(5) works, in conjunction with newly amended Rules 26(f) and 16(b), to require that parties confer early in the discovery process concerning privilege issues that may arise and to permit the court to include and consider the terms of any discovery agreements between the parties in any orders it issues on privilege issues. Parties should thus: (1) know the methods under Rule 26(b)(5)(B) for asserting a post-production privilege; (2) keep careful track of discovered materials (especially electronically stored information) in case privilege is later asserted and they must be sequestered or destroyed; and (3) confer early and as often as necessary in the discovery process to deal with privilege issues as they arise and to minimize the extent to which such problems require decisions by the court.

III. Rule 34—The “Form or Forms” of Production

Businesses rely on the ability constantly to update, edit, and manipulate business information through electronic means. Accordingly, business data has evolved so that it exists in forms that are not readily reducible to paper printouts. For example, information contained in an Excel spreadsheet can be virtually useless in paper form, divorced from the electronic ability to sort, update, manipulate, and calculate on a computer screen. Businesses no longer keep paper ledgers, so it makes little sense to continue producing
financial data (or other forms of data, for that matter) in paper. As
the Advisory Committee realized, if the true goal of discovery is to
produce data in a form that litigating parties may reasonably use, it
made little sense for costly (and comparatively less useful) paper
documents to represent the default form for discovery production.

The amended version of Rule 34 attempts to more closely align
the discovery procedures with the facts of 21st century business.
First, under Rule 34(a), the former term, “data compilations,” has
been eliminated and replaced with “electronically stored informa-
tion,” which the Committee Notes point out “confirm[s] that dis-
covery of electronically stored information stands on equal footing
with discovery of paper documents” and that “a Rule 34 request
for production of ‘documents’ should be understood to encompass,
and the response should include, electronically stored information
unless discovery in the action has clearly distinguished between
electronically stored information and ‘documents.’” Second, Rule
34(1) also requires that electronically stored information be “trans-
lated, if necessary, by the respondent into reasonably usable form,”
although this does not extend to translating from one human lan-
guage to another, according to the Committee Notes.

Even more noteworthy is Rule 34(b), which dictates the proce-
dure for producing electronically stored information. First, under
the rule, a requesting party “may specify [in its request] the form
or forms in which electronically stored information is to be pro-
duced.” As other commentators have noted, “that is a lolapalooza
of a change” because a requesting party can receive both the actual
electronic file as well as “all the lovely metadata that is not avail-
able in any other form.” In other words, the freedom to specify in
a production request “the form or forms” of production of elec-
tronically stored information provides a powerful tool to parties
seeking discovery: not only can they obtain electronically stored
information in a form that is more searchable and thus more con-
ductive to review than paper printouts, but the ability to receive the
actual files increases a requesting party’s ability to manipulate raw
data into a useful form for litigation. Furthermore, obtaining na-
tive-format computer files allows a requesting party to mine useful
insights from the metadata attached to the file—seeing, for exam-
ple, edits the producing party may have made in creating the elec-

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tronic document, the times at which a given file was accessed, or hidden or locked numbers in an Excel spreadsheet. As the Committee Note succinctly states, “[s]pecification of the desired form or forms may facilitate the orderly, efficient, and cost-effective discovery of electronically stored information.”

Rule 34(b) offers new tools for parties who are responding to discovery requests as well. Producing parties will appreciate the new Rule’s “recognition that different forms of production may be appropriate for different types of electronically stored information,” as any one case might require a party “to produce word processing documents, e-mail messages, electronic spreadsheets, image or sound files, and material from databases.” Requiring that diverse types of electronically stored information be produced in the same format (such as paper printouts or tiff files) could prove unwieldy or even impossible in some cases, and certainly would increase the cost and burdens of producing and using the information. Providing a broader palette of options for producing electronically stored information should prove more efficient and economical for everyone involved.

Furthermore, while a requesting party may choose the form or forms of production, Rule 34(b) also establishes a standard for situations in which the requesting party does not specify a form for the production of responsive materials—in that case, “a responding party must produce the information in a form or forms in which it is ordinarily maintained or in a form or forms that are reasonably usable.” That rule accommodates the producing party’s efficient production of electronically stored information in the “form or forms in which it is ordinarily maintained” and also will guide judges charged with determining whether or not a production request is unduly burdensome. Presumably, the greater the extent to which a discovery request asks for electronically stored information to be altered from its regularly maintained state, the more likely it is that a court will find the request unduly burdensome. Rule 34(b) further provides a producing party with 30 days in which to object to any category of materials requested, or to object to the form or forms of electronically stored information that are requested, and also states that the producing party “need not produce the same electronically stored information in more than one form.”

What implications does amended Rule 34 carry for business disputes? First, Rule 34’s “form or forms of production” provisions
will help to align the practice of electronic discovery with the broader goal that discovery be efficient and economical. Parties to discovery under the newly amended Rule 34 should expect the electronically stored information they receive in discovery to be in useful, litigation-friendly forms. Beyond that, a requesting party should generally take advantage of Rule 34’s new provisions and request that electronically stored information be produced in its native format, with metadata intact. Second, corporate counsel and litigators need to become familiar with the forms in which relevant electronically stored information may be stored in a given case and may want to consult in-house and outside experts when planning or responding to discovery requests in order to ensure that electronically stored information materials are requested or produced in forms that are most advantageous. Third, both producing parties and requesting parties may anticipate cost savings from the new Rule 34: producing parties from the less-costly and more efficient process of producing electronically stored information in the “form or forms in which it is ordinarily maintained” and requesting parties from the labor costs saved by having searchable, usable electronic files to review as opposed to storerooms full of paper productions. Fourth and finally, Rule 34—in conjunction with Rules 16 and 26(f)(3)—reinforces that parties should meet and confer to discuss the production of electronically stored information early in the litigation process and, in particular, attempt to resolve any differences regarding the form or forms of production of electronically stored information without the intervention of the court.

IV. Rule 37(f)—Spoliation and “Good Faith” Retention of Electronic Materials

Spoliation has become one of the most hotly contested aspects of electronic discovery. Although the definition of spoliation as the destruction of discoverable evidence in violation of a duty to preserve that evidence applies to all forms of evidence, spoliation is a particularly acute problem when the evidence is electronically stored information, given, for example, the frequency with which e-mail messages are deleted or backup tapes are reused. Indeed, the routine operation of a large company’s information technology department may cause the destruction of huge numbers of elec-

tronic files every day, some of which might be relevant to subsequent litigation. Litigation in this field frequently has pitted a party seeking electronic materials that were vitally important to its case against a company who had deleted the files in accordance with an electronic information retention policy, with the court left to decide what sanctions, if any, should be assessed for the spoliation.  

The amended Rule 37(f) codifies some of this case law in a manner that could trap those who are unwary or uninformed about the Rule’s meaning. Rule 37(f) states that “[a]bsent exceptional circumstances, a court may not impose sanctions under these rules on a party for failing to provide electronically stored information lost as a result of the routine, good-faith operation of an electronic information system.” While appearing on the surface to give broad protection to parties who inadvertently destroy electronically stored information, the Rule actually is intended to be fairly narrow in scope, according to the Committee Notes. The important question is what sorts of events that destroy data can fairly be characterized as taking place as part of the “routine, good-faith operation” of a computer system.

As the Committee Note to Rule 37(f) states, the Rule “applies only to information lost due to the ‘routine operation of an electronic information system’—the ways in which such systems are generally designed, programmed and implemented to meet the party’s technical and business needs” and “includes the alteration and overwriting of information, often without the operator’s specific direction or awareness.” Furthermore, Rule 37(f) “applies to information lost due to the routine operation of an information system only if the operation was in good faith,” which “may involve a

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15 See, e.g., 3M v. Pribyl, 259 F.3d 587, 59 U.S.P.Q.2d 1705, 57 Fed. R. Evid. Serv. 802, 50 Fed. R. Serv. 3d 534 (7th Cir. 2001) (case upholding a negative-inference instruction based on defendant’s spoliation of computer evidence by repeatedly downloading the same song onto his computer until relevant information was deleted); Four Seasons Hotels and Resorts B.V. v. Consorcio Barr, S.A., 267 F. Supp. 2d 1268 (S.D. Fla. 2003), aff’d in part, rev’d in part without opinion, 138 Fed. Appx. 297 (11th Cir. 2005) (case imposing an adverse inference based on the deletion and fabrication of computer files, and doubling compensatory damages to redress defendant’s intentional hacking attempts directed at the plaintiff’s computer system); Metropolitan Opera Ass’n, Inc. v. Local 100, Hotel Employees and Restaurant Employees Intern. Union, 212 F.R.D. 178, 171 L.R.R.M. (BNA) 2897 (S.D. N.Y. 2003), adhered to on reconsideration, 175 L.R.R.M. (BNA) 2870, 2004 WL 1943099 (S.D. N.Y. 2004) (case granting plaintiff’s motion for a judgment of liability as a sanction for the defendant’s repeated, flagrant discovery violations, including the destruction of computer records).
party’s intervention to modify or suspend certain features of that routine operation to prevent the loss of information, if that information is subject to a preservation obligation.”

So what is the “routine operation of an electronic information system”? As an initial matter, it is important to note that, as part of its normal operations, a computer system constantly creates, saves, deletes, and overwrites information, both in the computer’s RAM memory and in the form of temporary files. Every keystroke, even every automatic action by the machine, changes the state of the computer’s RAM memory or storage media. Given the constant overwriting and deleting of such memory locations and files “without the operator’s specific direction or awareness,” no party can be expected to design or maintain mechanisms for permanently retaining all relevant information—indeed, it would be virtually impossible to design a computer system that never, ever overwrote or deleted potentially relevant data.

Entirely separate from the internal reshuffling of every computer’s memory and storage media, many businesses routinely create and destroy in another form—through the use of emergency backup tapes. Many businesses maintain such emergency backups as part of their information technology system. Such tapes typically are kept as a safeguard against disaster, and they provide an ability to restore a system to the point at which the backup was made if some calamity renders the information in the active computer system unusable. In keeping with their “emergency only” purpose, such backups often are kept on tapes that can hold large amounts of data but which cannot be accessed like ordinary computer memory—such tape systems make “mirror image” copies of a computer’s memory in sequential order and can be restored only by being recopied onto a system identical (or nearly identical) to that from which the backup was copied in the first place. Normal practice with such backup tapes is to use each tape many times, and recycle tapes in a scheduled rotation, replacing old “copies” of an entire system with more current copies every day, week, or month. Under Rule 37(f), the operation of such an emergency backup system, including the recycling of backup tapes, is permitted and endorsed.16

The Committee Note to Rule 37(f) tracks distinctions that Judge Scheindlin of the U.S. District Court for the Southern District of New York made in Zubulake v. UBS Warburg LLC (Zubulake IV).17 In Zubulake IV, the court noted that:
Once a party reasonably anticipates litigation, it must suspend its routine document retention/destruction policy and put in place a “litigation hold” to ensure the preservation of relevant documents. As a general rule, that litigation hold does not apply to inaccessible backup tapes (e.g., those typically maintained solely for the purpose of disaster recovery), which may continue to be recycled on the schedule set forth in the company’s policy. On the other hand, if backup tapes are accessible (i.e., actively used for information retrieval), then such tapes would likely be subject to the litigation hold.

However, it does make sense to create one exception to this general rule. If a company can identify where particular employee documents are stored on backup tapes, then the tapes storing the documents of “key players” to the existing or threatening litigation should be preserved if the information contained on those tapes is not otherwise available. This exception applies to all backup tapes.\(^{18}\)

Thus, to comply with Rule 37(f), a party to litigation must (1) have a routine operating protocol for the storage and destruction of its electronically stored information, (2) not delete files potentially re-

\(^{16}\) New Rule 37(f), like the case law to date, has not made clear what types of backup recycling systems are preferred. Opinions discussing backup tapes tend to address any backup systems only after the court has concluded that a party has deleted or failed to preserve responsive electronic information in its active electronic files. Such cases often fault a party who has deleted or written over a backup tape after also deleting the original file. See, e.g., Wiginton v. Ellis, 2003 WL 22439865 (N.D. Ill. 2003) (finding defendant’s failure to halt its “Grandfather-Father-Son” backup tape recycling system constituted spoliation when the defendant had deleted responsive files elsewhere in its system and was on notice that the backup tapes may need to be preserved); Landmark Legal Foundation v. E.P.A., 272 F. Supp. 2d 70 (D.D.C. 2003) (holding EPA in contempt and ordering it to pay sanctions in the amount of plaintiff’s legal fees for failing to halt its 90-day backup tape recycling system after failing to maintain copies of other responsive files and e-mails, and having been on notice that the backup tapes likely contained electronic information relevant to the suit). The Rule and cases suggest, nonetheless, that a system that regularly recycles emergency backup tapes is permitted so long as information relevant to a lawsuit is captured at least once somewhere. Backup tapes cannot be recycled or written over; however, if doing so would delete the last remaining copy of relevant data—in other words, if the party has not retained a copy of all relevant electronic information in some other location or format.


\(^{18}\) Zubulake IV, 220 F.R.D. at 218.
sponsive to litigation in any manner inconsistent with its protocol, and (3) suspend the destruction protocol with respect to any backup tapes or other storage devices that contain files it knows may be relevant to a dispute likely to result in litigation. If, and only if, a company fulfills those conditions can it be confident that it will not commit spoliation by destroying additional copies of relevant electronically stored information.

Furthermore, Rule 37(f) appears to follow recent case law in requiring that counsel go beyond simply issuing a rote “litigation hold” to satisfy the preservation duty. In *Zubulake v. UBS Warburg LLC (Zubulake V)*, the U.S. District Court for the Southern District of New York held that counsel may not merely place a “litigation hold” on materials to satisfy its duty but must also “oversee compliance with the litigation hold, monitoring the party’s efforts to retain and produce the relevant documents.”\(^1\) As the court noted, a party and its counsel must “become fully familiar with her client’s document retention policies, as well as the client’s data retention architecture,” “communicate directly with the ‘key players’ in the litigation” regarding their electronic file retention duties, and “instruct all employees to produce electronic copies of their relevant active files... [and] make sure that all backup media which the party is required to retain is identified and stored in a safe place.”\(^2\) The Committee Note to Rule 37(f) endorses all of those duties as part of what a party must do to fall within the safe harbor applicable to the “routine, good-faith operation of an electronic information system.”

What should corporate counsel do to stay on the safe side of Rule 37(f)? First, as mentioned above and as *Zubulake V* stresses, lawyers should familiarize themselves with the mechanisms of their clients’ information technology retention policies and actively seek out the assistance of a company’s information technology professionals early in the course of litigation to ensure that responsive electronic information is retained and protected from destruction. The employment of expert consultants (as well as lawyers with backgrounds in information technology fields) may be necessary to comply with Rule 37(f). It is vital for any party facing like-


\(^2\) *Zubulake V*, 229 F.R.D. at 432-34.
ly litigation to capture one copy of everything in its computer system that potentially may be relevant if litigation materializes.

Second, a “best practices” approach would suggest that businesses adopt information retention and destruction systems and policies that are flexible enough to accommodate the ability to preserve at least one copy of all nonidentical communications and files relating to matters as to which the business reasonably may anticipate litigation. Setting up an accessible archive for such information, rather than relying on the successful restoration of tape backups, will reduce the risk that important information will be lost. In addition, preserving the “electronic universe” of transaction-specific electronic information will allow a party to avoid the costs involved in either restoring backup tapes or using new tapes instead of recycling old ones. Therefore, a business keeping relevant transaction information in some permanent electronic format that will not be recycled will be able to respond quickly and in a cost-effective manner to discovery requests and can be assured of the ability to tell their story of a given transaction in litigation occurring sometimes years later. The golden rule for electronic discovery is to keep, and to be able to produce, or at least to maintain the ability to capture one copy of everything that may be deemed to be relevant.

Third, corporate counsel should be aware that the amended Rule 37(f) memorializes prevailing common-law standards regarding when the duty to preserve electronic materials attaches. According to the Committee Notes to Rule 37(f), “[a] preservation obligation may arise from many sources, including common law, statutes, regulations, or a court order in the case.” Numerous courts have noted that “[t]he duty to preserve evidence includes any relevant evidence over which the… entity had control and reasonably knew or could reasonably foresee was material to a potential legal action.” The key term here is “potential” legal action. If a business knows or reasonably should have known that there was a potential for litigation on a certain matter, then a duty to preserve evidence from spoliation exists, even if a lawsuit has not been filed. As the Committee Notes to Rule 37(f) state, “[w]hen a party is under a

21 As one recent case noted, one company’s backup tapes each cost $50, meaning it would cost $12,500 per day to not overwrite old backup tapes. Wiginton, 2003 WL 22439865 at *3.
duty to preserve information because of pending or reasonably anticipated litigation, intervention in the routine operation of an information system is one aspect of what is often called a ‘litigation hold.’” When a business reasonably anticipates that a transaction is likely to result in litigation, the business must prevent any electronic materials pertinent to that transaction (such as e-mails, PowerPoint presentations, and Excel spreadsheets, among many others) from being destroyed.

Finally, in light of the draconian consequences and sanctions that may be imposed for failing to preserve relevant information, corporate counsel should be proactive to ensure that any business facing possible litigation will be able to satisfy the standards laid out in Rule 37(f). Rule 37(f) leaves undisturbed the full range of sanctions available to a court for use against a party whose bad-faith or reckless management of document retention policies causes the spoliation of responsive electronic materials. To deal with spoliation and parties who engage in it, courts have issued partial default judgments; held parties in contempt; and required parties to pay costs and attorney’s fees relating to the spoliation. Beyond all of that, spoliation of evidence can constitute a tort under the laws of some states.

22 China Ocean Shipping (Group) Co. v. Simone Metals Inc., 1999 WL 966477 at *3 (N.D. Ill. 1999). See also Melendez v. Illinois Bell Telephone Co., 79 F.3d 661, 671, 70 Fair Empl. Prac. Cas. (BNA) 589, 67 Empl. Prac. Dec. (CCH) P 43996, 34 Fed. R. Serv. 3d 1324 (7th Cir. 1996); Rowe v. Albertsons, Inc., 116 Fed. Appx. 171, 174 (10th Cir. 2004) (holding that the duty to preserve evidence occurs when the party “had notice of both of the potential claim and of the evidence’s potential relevance”); Boyd v. Travelers Ins. Co., 166 Ill. 2d 188, 185, 209 Ill. Dec. 727, 652 N.E.2d 267 (1995), as modified on denial of reh’g, (June 22, 1995) (stating that a party has a duty of due care to preserve evidence “if a reasonable person in [his or her] position should have foreseen that the evidence was material to a potential civil action”).


V. Other Amendments to the Federal Rules of Civil Procedure

Although the amendments to Federal Rules of Civil Procedure 26(b)(2)(B), 26(b)(5), 34, and 37(f) represent the major changes to the Federal Rules that went into effect on December 1, 2006, there are also other changes related to electronic discovery. Rule 26(a)(1)(B), for example, adds electronically stored information to the categories of materials supporting a party’s claims or defenses that each party must provide to other parties at the outset of a case. Thus, if a party’s claim or defense is based in whole or part on electronically stored information, the party must disclose those files (presumably in the form they are normally maintained) to its opponent in the litigation.

Similarly, Rule 33(d) permits a party to provide electronically stored information in lieu of answering an interrogatory when the information sought in the interrogatory would be readily ascertained by reviewing the electronic file. As the Committee Note suggests, however, “[s]pecial difficulties may arise in using electronically stored information, either due to its form or because it is dependent upon a particular computer system,” so a party wishing to answer an interrogatory with electronically stored information “must ensure that the interrogating party can locate and identify it ‘as readily as can the party served.’” Thus, when using electronically stored information to respond to an interrogatory, it may be necessary to provide a “combination of technical support, information on application software, or other assistance.”

Amended Rule 45 adds electronically stored information to the list of information that a subpoena can be used to seek. Furthermore under Rule 45, as the Committee Notes suggest, “if the subpoena does not specify the form or forms for electronically stored information, the person served with the subpoena must produce electronically stored information in a form or forms in which it is usually maintained or in a form or forms that are reasonably usable.”

Finally, Rules 16(b) and 26(f) incorporate electronically stored information into the topics to be covered at the pretrial conference, as well as any scheduling and discovery planning conferences during the course of a lawsuit. Like the other amendments to the Rules, amended Rules 16(b) and 26(f) reinforce the Amendments’ goal of encouraging discussion, planning, and cooperation between litigating parties during discovery, thus conserving judicial
resources and, it is hoped, leading to more complete and efficient—and less contentious—discovery of relevant materials.

CONCLUSION

The new Amendments to the Federal Rules of Civil Procedure offer some pragmatic lessons for corporate counsel. First, litigators and corporate counsel must become familiar with information technology and how the businesses they represent use, store, and preserve electronically stored information. Parties requesting the production of electronically stored information must know the forms in which that will be most useful in context and how to use the electronically stored information they actually receive. Parties responding to discovery requests, meanwhile, must have comprehensive electronic file retention policies that allow them to preserve materials when litigation is occurring or foreseeable and must know the relative costs and burdens associated with producing the pertinent sources of electronically stored information. In many cases, counsel will need to consult with in-house or outside experts as well as with the client’s information technology staff to master the information relevant to the specific case. In summary, the Amendments place electronically stored information on an equal footing with regular paper materials—parties in all cases must preserve and produce, and can discover, electronic documents to the same extent as paper documents. The more knowledgeable a lawyer is concerning how to use and discover electronic materials, the greater an asset the attorney will be to his or her client.

Second, the amended Rules emphasize communication and cooperation between parties to litigation, in the hopes of avoiding discovery disputes and resolving difficult electronic discovery issues early in litigation and away from the interference of the court. Parties should confer early and often during litigation concerning the form or forms for producing electronically stored information; how privilege should be asserted over electronic materials; and what electronically stored information is most likely to produce responsive materials without undue burden or costs.

Third, the amended Rules offer some comfort—they do not represent wholesale changes in existing practice, but rather codification and specific implementation of existing duties and case law regarding electronic discovery matters. Litigators who carefully followed and adhered to the rules set forth in the Zubulake cases,
for example, will find that the amended Federal Rules of Civil Procedure leave their practice largely unchanged; if anything, experienced litigators can take comfort that the practices that have been accepted in the wake of Zubulake now have been codified on a national level in the Amendments.

Fourth and finally, on a cautionary note, litigators and corporate counsel should note that the new Amendments to the Rules are exactly that—new amendments—and thus open to interpretation and implementation by the federal courts. Although the Amendments recognize the ever-changing nature of electronically stored information, that very mutability will require courts to remain attentive to the underlying purposes of the Rules as business technologies continue to evolve. Lawyers must continue to remain abreast of developments as courts interpret and flesh out the Rules.

Information in the electronic age moves quickly and in staggering volumes; the Amendments concerning electronic discovery take important steps to enable parties to litigation to deal with this information avalanche, and they provide valuable guidance to commercial lawyers for dealing with electronic materials. By becoming well-versed in how electronic information is stored and can be used in litigation and by mastering the requirements of the Rules, litigators and corporate counsel can learn to surf the digital wave of 21st century business.