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Electronic Discovery: Not Your Father's Discovery.

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ELECTRONIC DISCOVERY: NOT YOUR FATHER'S DISCOVERY

HOWARD L. SPEIGHT* LISA C. KELLY*

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"Now that the key issues have been addressed and national standards are developing, parties and their counsel are fully on notice of their responsibility to preserve and produce electronically stored information." 1

I. Introduction

This stern warning is from a recent opinion in a case that has spawned as many decisions concerning electronic discovery as there are Star Wars movies. In Zubulake I,² Zubulake II,³ Zubulake III,⁴ Zubulake IV,⁵ Zubulake V,⁶ and Zubulake VI¹—all arising from the same case and all issued in the last two years—Judge Scheindlin, of the Southern District of New York, set out her vision for the management of electronic discovery. It is a sobering vision, with clarified responsibilities for counsel; increasing the role of electronic information will likely result in additional up-front expenses as law offices will need to acquire the ability to facilitate electronic discovery. Yet, the above quote relays the importance of providing for the discovery of electronic information in today's litigation, and adherence to such notice has the potential to reduce

^{1.} Zubulake v. UBS Warburg LLC, 229 F.R.D. 422, 440 (S.D.N.Y. 2004) (emphasis added).

^{2.} Zubulake v. UBS Warburg LLC (Zubulake I), 217 F.R.D. 309 (S.D.N.Y. 2003).

^{3.} Zubulake v. UBS Warburg LLC (*Zubulake II*), No. 02 Civ. 1243(SAS), 2003 WL 21087136 (S.D.N.Y. May 13, 2003).

^{4.} Zubulake v. UBS Warburg LLC (Zubulake III), 216 F.R.D. 280 (S.D.N.Y. 2003).

^{5.} Zubulake v. UBS Warburg LLC (Zubulake IV), 220 F.R.D. 212 (S.D.N.Y. 2003).

^{6.} Zubulake v. UBS Warburg LLC (*Zubulake V*), 229 F.R.D. 422 (S.D.N.Y. 2004). Judge Scheindlin issued another opinion in the *Zubulake* matter; however, the decision did not concern electronic discovery. *See* Zubulake v. UBS Warburg LLC (*Zubulake VI*), No. 02 Civ. 1243(SAS), 2005 WL 266766, at *4 (S.D.N.Y. Feb. 3, 2005) (denying UBS's motion to amend its answer to include additional affirmative defenses).

^{7.} See Zubulake v. UBS Warburg LLC (Zubulake VII), 382 F. Supp. 2d 536, 546-47 (S.D.N.Y. 2005) (discussing the defendant's failure to preserve backup tapes in the context of a motion in limine). Judge Scheindlin issued another opinion in the Zubulake matter; however, the decision did not concern electronic discovery. See Zubulake v. UBS Warburg LLC (Zubulake VI), No. 02 Civ. 1243(SAS), 2005 WL 266766, at *4 (S.D.N.Y. Feb. 3, 2005) (denying UBS's motion to amend its answer to include additional affirmative defenses).

the frequency and intensity of discovery disputes concerning electronic information.8

Judge Scheindlin accurately noted that "[t]he subject of the discovery of electronically stored information is rapidly evolving." While some states, including Texas, have procedural rules governing such discovery, both federal and state courts are just now looking at similar additions and modifications to the Federal Rules Civil of Procedure. The interpretation of new and revised Federal Rules has, of course, not yet begun. However, even without revisions to the Federal Rules, courts are beginning to fashion constructs to govern electronic discovery.

This Article discusses recent developments in several areas of electronic discovery, including spoliation, cost shifting, and form of production. It will then discuss recent developments in case law, the Texas Rules of Civil Procedure, revisions to the Federal Rules of Civil Procedure and local rules, and recommendations of the American Bar Association regarding electronic discovery.

II. Scope of Discovery

It should come as no surprise that the scope of discovery has expanded to include electronic information. For years, discovery requests in state and federal cases have defined "document" to include data and other information stored magnetically. The Texas Rules of Civil Procedure include electronic information as part of the "documents and tangible things" discoverable in a lawsuit.¹¹ Federal Rule of Civil Procedure 34(a) was amended to make the definition of document explicit and to include "other data compilations from which information can be obtained."¹²

^{8.} See generally David K. Thornquist, Electronic Discovery Is Rewriting the Due Diligence Rules, Cyberspace Law., June 2004, at 9 (explaining the process to achieve due diligence in electronic discovery). The increased emphasis on electronic discovery may also impact the way that due diligence is performed. Id.

^{9.} Zubulake V, 229 F.R.D. at 440.

^{10.} See Tex. R. Civ. P. 192.3 (pertaining to the scope of discovery); Tex. R. Civ. P. 196.4 (providing rules relating to discovery of electronic or magnetic data).

^{11.} Tex. R. Civ. P. 192.3; see also Tex. R. Civ. P. 166b (1990) (repealed 1998) (noting that Texas's inclusion of such information is not recent).

^{12.} FED. R. CIV. P. 34(a) (stating that documents would include: "writings, drawings, . . . and other data compilations from which information can be obtained").

Just what types and sources of information are covered by these various rules and requests remains unclear; for example, are backup tapes included? In some circumstances, requiring a company to search its backup tapes for information could bring the company's operations to an abrupt halt. Generally, the backup tapes would need to be laboriously restored onto a computer system mirroring the on-line system—when in most cases, no such system exists. Furthermore, would producing parties be required to search all computer hard drives used by every employee of the company that might contain relevant information? Are files deleted but otherwise recoverable from those same hard drives included as well?

At least in Judge Scheindlin's court, the answer is "yes"—all of the above examples would be discoverable electronic information.¹³ At the outset of the *Zubulake* litigation, Judge Scheindlin identified five types of electronic data, all of which she held as discoverable:

- 1. Active, on[-]line data: "On-line storage is generally provided by magnetic disk. It is used in the very active stages of an electronic records [sic] life—when it is being created or received and processed, as well as when the access frequency is high and the required speed of access is very fast, i.e., milliseconds." Examples of on[-]line data include hard drives.
- 2. Near-line data: "This typically consists of a robotic storage device (robotic library) that houses removable media, uses robotic arms to access the media, and uses multiple read/write devices to store and retrieve records. Access speeds can range from as low as milliseconds if the media is already in a read device, up to 10-30 seconds for optical disk technology, and between 20-120 seconds for sequentially searched media, such as magnetic tape." Examples include optical disks.
- 3. Off[-]line storage/archives: "This is removable optical disk or magnetic tape media, which can be labeled and stored in a shelf or rack. Off-line storage of electronic records is traditionally used for making disaster copies of records and also for records considered 'archival' in that their likelihood of retrieval is minimal. Accessibility to off-line media involves manual intervention and is much slower than on-line or near-line storage. Access speed may be minutes, hours, or

^{13.} Zubulake v. UBS Warburg LLC (*Zubulake I*), 217 F.R.D. 309, 318-19 (S.D.N.Y. 2003).

even days, depending on the access-effectiveness of the storage facility." The principled difference between near[-]line data and off[-]line data is that off[-]line data lacks "the coordinated control of an intelligent disk subsystem," and is, in the lingo, JBOD ("Just a Bunch Of Disks").

- 4. Backup tapes: "A device, like a tape recorder, that reads data from and writes it onto a tape. Tape drives have data capacities of anywhere from a few hundred kilobytes to several gigabytes. Their transfer speeds also vary considerably . . . [.] The disadvantage of tape drives is that they are sequential-access devices, which means that to read any particular block of data, you need to read all the preceding blocks." As a result, "[t]he data on a backup tape are not organized for retrieval of individual documents or files [because] . . . the organization of the data mirrors the computer's structure, not the human records management structure." Backup tapes also typically employ some sort of data compression, permitting more data to be stored on each tape, but also making restoration more time-consuming and expensive, especially given the lack of uniform standard governing data compression.
- 5. Erased, fragmented or damaged data: "When a file is first created and saved, it is laid down on the [storage media] in contiguous clusters . . . [.] As files are erased, their clusters are made available again as free space. Eventually, some newly created files become larger than the remaining contiguous free space. These files are then broken up and randomly placed throughout the disk." Such broken-up files are said to be "fragmented," and along with damaged and erased data can only be accessed after significant processing.¹⁴

Under these definitions, virtually all forms of electronic information, from the highly accessible to the relatively inaccessible, are discoverable.¹⁵ Although Texas has addressed some aspects of

^{14.} Id. (second, eighth, and ninth alterations in original) (footnotes omitted).

^{15.} See Stephen M. Prignano & Stephen J. MacGillivray, Managing Instant Messenger Litigation and Discovery, INTELL. PROP. TODAY, Feb. 2005, at 14-15 (discussing how broad the scope of discovery is under these definitions; for example, the discovery of electronic "instant messaging" transcripts is allowed). The informal feeling of "conversations" held over instant messaging programs is often the attraction to users but could be the downfall for litigators faced with producing instant messenger transcripts containing possibly flippant remarks on sensitive corporate information. Id. at 14; see also Memorandum from the Ninth Circuit Advisory Board on Proposed Model Local Rule on Electronic Discovery to the Ninth Circuit and District Courts in the Ninth Circuit (May 26, 2004), http://www.krollontrack.com/library/9thCirDraft.pdf (containing recommendations relating to electronic discovery from the Ninth Circuit Advisory Board, a group of attorneys that advises the Ninth Circuit) (on file with the St. Mary's Law Journal). The Board suggested a "Proposed

electronic discovery in its Rules of Civil Procedure, Texas courts have yet to provide an in-depth analysis on what types of information are covered under the Rules. As Texas courts delve deeper into these and other issues surrounding the discovery of electronic information, they may look for guidance to Judge Scheindlin's comprehensive *Zubulake* opinions.

III. Preserving Electronic Information to Avoid Spoliation

A. Responsibilities of Counsel Under Zubulake V

Imagine the following situation: in-house counsel at your client company tells you that the company has a reasonable apprehension that it is about to be sued for infringing upon a competitor's patent. You immediately ask the in-house counsel to send an e-mail to all company personnel who might have information potentially relevant to the patent claim, instructing them to retain the potentially relevant information, including relevant electronic information. Counsel complies, and the two of you follow up on three separate occasions. Nevertheless, in defiance of your request, company employees destroy relevant, potentially liability-proving documents. After the discovery period closes, you become aware that some employees have maintained their own archives of electronic information and, though the production is late, you produce relevant information from those archives. Further still, you discover that inhouse counsel's instructions were not sent to the information technology (IT) people running the backup process, and several tapes

Model Local Rule on Electronic Discovery," which has a narrower definition of discoverable electronic information:

Rule 2: The obligation to search for electronic data and documents shall be limited to a search of active data that admits of efficient searching and retrieval. The preservation or searching of non-active data and information such as disaster recovery backup tapes; deleted, shadowed, fragmented or residual data or documents; or any source other than active information shall not be required absent an order of the court upon motion by the requesting party demonstrating a need for such preservation or searching, the likelihood that relevant information not available from other sources will be found in such media, and that the relevance of such information and data outweighs the cost, burden, and disruption of retrieving and processing the data from such sources.

Id. at 5.

containing potentially relevant, liability-proving information were written over during the backup process.

Based on facts similar to these, Judge Scheindlin in Zubulake V^{16} found that the defendant had willfully destroyed potentially relevant information and, because the spoliation was willful, the lost information was presumed to be relevant.¹⁷ The court levied a number of sanctions, including (1) an adverse inference, and (2) a requirement that the defendant pay both the costs of additional discovery rising out of the spoliation, and the costs and attorneys' fees for the making of the discovery motion.¹⁸ Obviously, such sanctions should be avoided.

The Zubulake V court set out specific "steps that counsel should take to ensure compliance with the preservation obligation." According to the court, counsel must communicate with the information technology personnel to understand the company's overall data storage and archiving procedures. Counsel must also work with the key players in the dispute, whom are most likely the people identified in the party's initial disclosures, to ascertain their data storage and archiving procedures in the case that they are different or go beyond those of the company.²⁰

^{16.} Zubulake v. UBS Warburg LLC (Zubulake V), 229 F.R.D. 422 (S.D.N.Y. 2004).

^{17.} Id. at 436.

^{18.} Id. at 436-39; see Mosaid Techs., Inc. v. Samsung Elecs. Co., 348 F. Supp. 2d 332, 338-39 (D.N.J. 2004) (holding that an adverse inference instruction will be read to the jury, and imposing a monetary sanction of \$566,839.97 on a defendant that failed to impose a "litigation hold" on regular destruction of electronic documents once litigation began); Coleman (Parent) Holdings, Inc. v. Morgan Stanley & Co., No. CA 03-5045 AI, 2005 WL 674885, at *9-10 (Fla. Cir. Ct. Mar. 23, 2005) (opining that Morgan Stanley's conduct during the discovery process provides an instructive example of the perils of electronic discovery). Coleman, of camping equipment fame, sued Morgan Stanley for aiding, abetting, and conspiring with Sunbeam Corporation in perpetuating a fraud. Id. at *1. Coleman alleged Morgan Stanley, as Sunbeam's financial advisor, disguised Sunbeam's financial health in a deal to sell Coleman's parent corporation's 82% share in Coleman to Sunbeam. Id. Florida state court Judge Elizabeth Maass authorized the issuance of an adverse inference instruction against Morgan Stanley as a result of its failure to produce e-mails in response to discovery requests and a court order. Id. at *9-10; see also Susanne Craig, How Morgan Stanley Botched a Big Case by Fumbling Emails, WALL St. J., May 16, 2005, at 1 (discussing the judgment issued against Morgan Stanley); Landon Thomas, Jr., A Jury Assesses Morgan Stanley \$604 Million, N.Y. Times, May 17, 2005, at A1 (reporting the findings against Morgan Stanley).

^{19.} Zubulake V, 229 F.R.D. at 433.

^{20.} Id. at 432.

It is not enough for counsel to simply initiate the litigation, hold, and then hope that employees comply. "Counsel must take affirmative steps to monitor compliance so that all sources of discoverable information are identified and searched."²¹ Furthermore, counsel must communicate²² with the client to ensure: "(1) that all relevant information (or at least all sources of relevant information) is discovered[;] (2) that relevant information is retained on a continuing basis; and (3) that relevant non-privileged material is produced to the opposing party."²³

Judge Scheindlin summarized these requirements as follows:

First, counsel must issue a "litigation hold" at the outset of litigation or whenever litigation is reasonably anticipated. The litigation hold should be periodically [reissued] so that new employees are aware of it, and so that it is fresh in the minds of all employees.

Second, counsel should communicate directly with the "key players" in the litigation, i.e., the people identified in a party's initial disclosure and any subsequent supplementation thereto.

Finally, counsel should instruct all employees to produce electronic copies of their relevant active files. Counsel must also make sure that all backup media which the party is required to retain is identified and stored in a safe place.²⁴

^{21.} *Id*.

^{22.} See id. at 434 (according to Judge Scheindlin, "[o]ne of the primary reasons that electronic data is lost is ineffective communication with information technology personnel").

^{23.} Id. at 432.

^{24.} Zubulake V, 229 F.R.D. at 433-34 (footnotes omitted); see Convolve, Inc. v. Compaq Computer Corp., 223 F.R.D. 162, 175-76 (S.D.N.Y. 2004) (stating that with "electronic data, the preservation obligation is not limited simply to avoiding affirmative acts of destruction. Since computer systems generally have automatic deletion features that periodically purge electronic documents such as e-mail, it is necessary for a party facing litigation to take active steps to halt that process."); see also Memorandum from the Ninth Circuit Advisory Board on Proposed Model Local Rule on Electronic Discovery to the Ninth Circuit and District Courts in the Ninth Circuit (May 26, 2004), http://www.krollontrack.com/ library/9thCirDraft.pdf (noting that the Ninth Circuit Proposed Model Local Rule includes a duty to investigate, a duty to notify, and a duty to meet and confer) (on file with the St. Mary's Law Journal). The Proposed Model Local Rule imposes: (1) a Duty to Investigate (Rule 1(A)), which requires counsel to "investigate their client's information management system" no later than twenty-one days prior to a Federal Rule 26(f) conference; (2) a Duty to Notify (Rule 1(B)), which imposes a duty requiring a party to notify the opposing party that it is "seeking discovery of computer-based information" and "the categories of information which may be sought" no later than twenty-one days prior to the Rule 26(f) conference; and (3) a Duty to Meet and Confer (Rule 1(C)), which requires the parties to discuss electronic discovery at the Rule 26(f) conference. Id. at 4.

These are significant new responsibilities, and counsel should be aware of them, especially when practicing before the Southern District of New York. Texas courts have not yet issued a detailed written opinion on a party's duty to preserve electronic information. Again, however, courts in many jurisdictions—including state courts—might look to Judge Scheindlin's opinions for direction when formulating their own rulings.

B. Responsibilities of Counsel Under the ABA Civil Discovery Standards

The American Bar Association's (ABA's) Civil Discovery Standards pertaining to the preservation of documents apply the following duties to counsel:

When a lawyer who has been retained to handle a matter learns that litigation is probable or has been commenced, the lawyer should inform the client of its duty to preserve potentially relevant documents in the client's custody or control and of the possible consequences of failing to do so.²⁵

C. Types of Electronic Data That Must Be Preserved Under the ABA Civil Discovery Standards

Additionally, the ABA's Civil Discovery Standards provide comprehensive lists of the many possible sources of electronic information and the various devices used to store such information.²⁶ Under this standard, electronic data subject to preservation "may include data that ha[s] been deleted but can be restored."²⁷ In addition to all of the traditional locations, this standard also includes the electronic information that may be found in cell phones, personal digital assistants, pagers and other electronic devices. Once the electronic information type is identified and its source is found, the question becomes how the information should be produced.

^{25.} ABA CIVIL DISCOVERY STANDARDS, Standard 10 (Aug. 2004), http://www.abanet.org/litigation/discoverystandards/2004civildiscoverystandards.pdf (on file with the St. Mary's Law Journal).

^{26.} See Appendix A (containing excerpts from the ABA Civil Discovery Standards).

^{27.} Id. at Standard 29(a)(iii).

IV. Form of Production of Electronic Information

As technology continues to evolve, traditional notions of handing over documents in response to requests from opposing counsel become significantly more complicated. Modern computing capabilities allow a responding party to provide electronic documents in many different forms. For example, a document could be a simple image file—what amounts to a digital photocopy of a document (such as a PDF). On the other hand, a document could be a proprietary database-type file that requires specialized software or code to decipher it. Additionally, electronic documents may contain "hidden" data, known as metadata, that provide certain information—date, author, revision history, etc.—connected with the document. However, this information is typically not available in hard copy documents. Modern courts have, to varying degrees, addressed these issues, and modern litigants need to be informed of their importance.

Form-of-production issues are not merely a phenomenon of the twenty-first century. Rather, courts have struggled with these issues for several decades. Although the modern business world increasingly relies on a "paperless" model, form-of-production issues have raced to the forefront of e-discovery law in recent years. Whereas previous form-of-production issues involved relatively niche conflicts, current rules and case law deal with issues familiar to most, if not all, potential litigants.

A. The Texas Rules of Civil Procedure

Texas Rules of Civil Procedure 192.3 and 196.4 explicitly address the production of electronic information. Rule 192.3(b) allows a party to "obtain discovery of the existence, description, nature, custody, condition, location, and contents of documents and tangible things (including papers, books, accounts, drawings, graphs, charts, photographs, electronic or videotape recordings, data, and data compilations) that constitute or contain matters relevant to the subject matter of the action."²⁸

Although the Texas Supreme Court adopted Rule 192.3 in 1998, parties in Texas courts could previously obtain discovery of elec-

^{28.} Tex. R. Civ. P. 192.3(b); see Tex. R. Civ. P. 196.4 (delineating the rule for request for production of electronic or magnetic data).

tronic records under Rule 192.3's former version, Rule 166b.²⁹ The Texas Supreme Court revised the definition of "documents and tangible things" to clarify that a party may discover "things relevant to the subject matter of the action . . . regardless of their form."³⁰ At least one Texas court has interpreted the "electronic . . . recordings, data, and data compilations" language in Rule 192.3 to include backup tapes.³¹

Rule 196.4 sets out the burdens of the parties seeking and responding to requests for electronic discovery and explicitly requires a court to shift costs for "extraordinary steps" taken in responding to discovery to the requesting party:

To obtain discovery of data or information that exists in electronic or magnetic form, the requesting party must specifically request production of electronic or magnetic data and specify the form in which the requesting party wants it produced. The responding party must produce the electronic or magnetic data that is responsive to the request and is reasonably available to the responding party in its ordinary course of business. If the responsible party cannot—through reasonable effort—retrieve the data or information requested or produce it in the form requested, the responding party must state an objection complying with these rules. If the court orders the responding party to comply with the request, the court must also order that the requesting party pay the reasonable expenses of any extraordinary steps required to retrieve and produce the information.³²

Thus, a party seeking electronic information must not only serve a request seeking relevant information but must also explicitly

^{29.} Tex. R. Civ. P. 166b(2)(b) (repealed 1998). Rule 166b, in relevant part, allowed a party to:

obtain discovery of the existence . . . and contents of any and all documents, (including papers, books, accounts, drawings, graphs, charts, photographs, electronic or videotape recordings, and any other data compilations from which information can be obtained and translated, if necessary, by the person from whom production is sought, into reasonably usable form) and any other tangible things which constitute or contain matters relevant to the subject matter in the action.

Id.; see City of Dallas v. Ormsby, 904 S.W.2d 707, 710-11 (Tex. App.—Amarillo 1995, writ denied) (affirming sanctions for failure to produce the relevant record, in response to a request for production, by supplying the requested information in a handwritten note instead of securing a computer printout).

^{30.} Tex. R. Civ. P. 192 cmt. 2.

^{31.} See In re CI Host Inc., 92 S.W.3d 514, 516-17 (Tex. 2002) (concluding that the trial court did not abuse its discretion in ordering the production of backup tapes).

^{32.} Tex. R. Civ. P. 196.4.

specify that electronic data be searched and produced, and must specify the form of production.³³ The Texas Supreme Court's comments to the rule also suggest that the requesting party must specify the "extraordinary steps" necessary for retrieval and, if necessary, translation.³⁴ While "extraordinary steps" do not include retrieval of documents available in the ordinary course of business, the additional steps which qualify as "extraordinary" remain to be seen.

B. The Federal Rules of Civil Procedure

Under the Federal Rules of Civil Procedure, two rules govern the production of electronic documents: Rule 26 and Rule 34(a). The initial disclosure requirements of Rule 26 provide that:

Except... to the extent otherwise stipulated or directed by order, a party must, without awaiting a discovery request, provide to other parties...(B) a copy of, or a description by category and location of, all documents, data compilations, and tangible things that are in the possession, custody, or control of the party and that the disclosing party may use to support its claims or defenses, unless solely for impeachment.³⁵

The Advisory Committee notes to Rule 26 state, in part:

Subparagraph (B) is included as a substitute for the inquiries routinely made about the existence and location of documents and other tangible things in the possession, custody, or control of the disclosing party. Although, unlike subdivision (a)(3)(C), an itemized listing of each exhibit is not required, the disclosure should describe and categorize, to the extent identified during the initial investigation, . . . computerized data and other electronically-recorded information

While Rule 26(a)(1)(B) does not require a responding party to provide copies of the electronic data—the explicit "or" allows for a mere description—it does allow the adverse party to know what documents are potentially available.³⁷ Parties can then request these documents through Rule 34(a), which provides that "[a]ny

^{33.} Id.

^{34.} Tex. R. Civ. P. 196.4 cmt. 3.

^{35.} FED. R. CIV. P. 26(a)(1)(B).

^{36.} FED. R. CIV. P. 26 advisory committee's note.

^{37.} FED. R. CIV. P. 26; FED. R. CIV. P. 26 advisory committee's note.

party may serve on any other party a request . . . to produce . . . any designated documents (including writings, drawings, graphs, charts, photographs, phonorecords, and other data compilations from which information can be obtained, translated, if necessary, by the respondent through detection devices into reasonably usable form)."

Since 1970, courts have interpreted the broad definition of "document" to include electronic documents. Furthermore, the 1970 Rules Advisory Committee's notes explained:

The inclusive description of "documents" is revised to accord with changing technology. It makes clear that Rule 34(a) applies to electronics [sic] data compilations from which information can be obtained only with the use of detection devices, and that when the data can as a practical matter be made usable by the discovering party only through respondent's devices, respondent may be required to use his devices to translate the data into usable form. In many instances, this means that respondent will have to supply a print-out of computer data.⁴⁰

From the above discussion, it seems clear that electronic documents are fair game for discovery requests. Again, the question remaining is whether these documents must be provided.

C. Electronic or Paper?

As discussed above, Rule 196.4 of the Texas Rules of Civil Procedure does not give the responding party the luxury of deciding the form in which it will produce electronic information.⁴¹ Requesting parties can now state in their requests that a responding party should produce all responsive documents in electronic form and may choose to do so in part because the responding party keeps such records in electronic format in the ordinary course of its business.

At least one Texas court has recognized the value of receiving information in the electronic format used in the ordinary course of business. In a prescient decision under the predecessor rule to

^{38.} FED. R. CIV. P. 34(a).

^{39.} See, e.g., Nat'l Union Elec. Corp. v. Matsushita Elec. Indus. Co., 494 F. Supp. 1257, 1262 (E.D. Pa. 1980) (recognizing that the 1970 Advisory Committee Notes view the term "documents" to include electronic data).

^{40.} Id. (quoting the 1970 Federal Rules Advisory Committee's notes).

^{41.} Tex. R. Civ. P. 196.4.

Texas's current rules on electronic discovery, the Texas Court of Appeals in Amarillo affirmed sanctions against the defendant, the City of Dallas, for failing to produce computer records of a city inspector's field notes on a roadway that was the scene of a fatal car accident at issue in the case.42 The court noted that Rule 167(1)(f) of the Texas Rules of Civil Procedure (now Rule 196.3(d)) required the city to produce documents as kept in the "usual course of business."43 Thus, the city's production of a memorandum summarizing the city's search of its inspection records was insufficient when the city ordinarily kept such records in an electronic database.44 In particular, the memorandum failed to explain the codes used by the city in grading roadways, thereby disguising the inspector's poor rating for the roadway.⁴⁵ As electronic discovery becomes more common, Texas courts might follow this line of reasoning and rely upon the "usual course of business" requirement to bolster decisions requiring production in electronic form over a responding party's objection.

Federal courts generally seem concerned not with the exact form of the data but with the ability of the requesting party to make use of it. Responding parties in federal court generally have the option of producing the data in either electronic or paper form, or both. Sometimes however, parties are specifically interested in the data in electronic form. For example, in National Union Electric Corp. v. Matsushita Electric Industrial Co., 46 the responding party provided the requesting party with printouts of the requested data. 47 The requesting party, claiming that the paper version of the data was overly difficult to analyze, moved to compel the production of the data in electronic form. 48 The court reasoned that although the paper version of the data was "reasonably usable"—and indeed, the requesting party conceded that it could manually create a database from the printouts—electronic data was the preferred

^{42.} City of Dallas v. Ormsby, 904 S.W.2d 707, 712 (Tex. App.—Amarillo 1995, writ denied).

^{43.} Id. at 710.

^{44.} Id. at 710-11.

^{45.} Id. at 710.

^{46. 494} F. Supp. 1257 (E.D. Pa. 1980).

^{47.} Nat'l Union Elec. Corp. v. Matsushita Elec. Indus. Co., 494 F. Supp. 1257, 1258 (E.D. Pa. 1980).

^{48.} Id.

method of production, because this method would allow the data to be directly readable by the requesting party's computers.⁴⁹ As such, the court ordered the responding party to produce a computer-readable tape containing electronic versions of the data that had already been provided in paper form.⁵⁰

Similarly, in American Brass v. United States,⁵¹ the responding party produced computer printouts of the requested data, but did not provide the electronic analogues.⁵² The court, after emphasizing that "data released in an unusable form are . . . the equivalent of no data at all,"⁵³ concluded that providing thousands of pages of computer printouts was an unreasonable way of responding to a discovery request and that the responding party was obligated to instead provide the data in a form readable by the requesting party's computers.⁵⁴

National Union involved statistical data regarding monthly sales figures, model numbers, and production numbers.⁵⁵ The distinction between paper and electronic, however, is not limited to number crunching. Electronic versions of data are not only easier to decipher (as is the case with large amounts of numerical data), but they are often less expensive to produce. In In re Bristol-Myers Squibb Securities Litigation,⁵⁶ the requesting party had agreed to a per-page price for photocopies of the relevant data.⁵⁷ It turned out that the responding party did not disclose the fact that it had scanned the documents in preparation for trial, and was producing the data in paper form for less money than it would take to produce photocopies.⁵⁸ Mindful of the desire for the "just, speedy,

^{49.} *Id.* at 1262; *see also* Am. Bankers Ins. Co. of Fla. v. Caruth, 786 S.W.2d 427, 436 (Tex. App.—Dallas 1990, no writ) (reiterating that electronic data is the preferred medium for producing data when the paper version is overly difficult to analyze). On appeal, the court upheld the trial court's sanctions against the defendant for its defiance of an order to produce information from an active computer database, rather than simply pointing the plaintiff to over 30,000 boxes of paper residing in a warehouse. *Id.*

^{50.} Nat'l Union, 494 F. Supp. at 1262.

^{51. 699} F. Supp. 934 (Ct. Int'l Trade 1988).

^{52.} Am. Brass v. United States, 699 F. Supp. 934, 935 (Ct. Int'l Trade 1988).

^{53.} *Id.* at 936 (quoting Timken Co. v. United States, 659 F. Supp. 239, 240 n.3 (Ct. Int'l Trade 1987)).

^{54.} Id. at 936-38.

^{55.} Nat'l Union, 494 F. Supp. at 1262.

^{56. 205} F.R.D. 437 (D.N.J. 2002).

^{57.} In re Bristol-Myers Squibb Secs. Litig., 205 F.R.D. 437, 439 (D.N.J. 2002).

^{58.} Id. at 439.

and inexpensive determination of every action,"⁵⁹ the court held that the requesting party was only required to pay the lower, "blow-back" rate for the paper documents, not the higher "photocopy" rate to which it originally agreed.⁶⁰ The court noted that Rule 26 requires the responding party to disclose the existence of electronic versions of the document.⁶¹ The responding party had not done so, and the court held it was not unfair to lessen the originally agreed-on rate for per-page production.⁶² More importantly, the court required the responding party to provide electronic versions of the requested documents.⁶³

Drawing on the precedent established in *National Union*, courts have focused on the costs and efforts associated with the distinction between paper and electronic documents. In other words, in seeking just, speedy, and inexpensive resolution to disputes, courts have been willing to require production of electronic records in lieu of, or in addition to, paper versions of the same data.⁶⁴ Conversely, some courts have been reluctant to require the production of electronic documents in the absence of a demonstrable need.⁶⁵

Additionally, requesting parties may occasionally prefer having data in paper form, especially when the electronic versions are overly complex, difficult to read, or both.⁶⁶ In these situations, courts will again evaluate the burdens and costs associated with

^{59.} Id. at 441.

^{60.} Id.

^{61.} Id.

^{62.} In re Bristol-Myers, 205 F.R.D. at 441.

^{63.} Id. at 444.

^{64.} See, e.g., Storch v. IPCO Safety Prods., No. 96-7592, 1997 U.S. Dist. LEXIS 10118, at *6 (E.D. Pa. July 16, 1997) (holding that a responding party who does not provide "sufficient reasons [for] why it can not provide [the requested data] on [a] disk" can be required to provide electronic versions).

^{65.} See Williams v. Owens-Ill., Inc., 665 F.2d 918, 932-33 (9th Cir. 1982) (denying a request for computerized data to supplement paper production because mere claims of difficulty and expense do not, by themselves, warrant the compelling of electronic data when paper versions have already been provided), modified on other grounds, No. 79-4110, 1982 WL 308873 (9th Cir. June 11, 1982); McNally Tunneling Corp. v. City of Evanston, No. 00 C 6979, 2001 WL 1568879, at *14-15 (N.D. Ill. Dec. 10, 2001) (mem.) (refusing to require a producing party to provide electronic data because the requesting party's claim that electronic data would "be better" was not a compelling or well-reasoned justification for the motion to compel).

^{66.} See Sattar v. Motorola, Inc., 138 F.3d 1164, 1171 (7th Cir. 1998) (noting that the appellant sought printouts of over 200,000 pages of e-mails after the respondent provided electronic versions in a difficult-to-read four-inch tape).

requiring paper production.⁶⁷ In Sattar v. Motorola, Inc.,⁶⁸ the court gave the parties three options.⁶⁹ Specifically, Motorola could: (1) supply Sattar with machinery and software to read the tapes; (2) provide the documents in a more accessible format such as a CD-ROM; or (3) split the costs of paper production with Sattar.⁷⁰ In adopting this common sense approach to form of production, the court was more concerned with ensuring a just, speedy, and inexpensive result than with the form of the data.⁷¹

The form of production is not always a requesting party's prerogative. For example, Rule 196.4 of the Texas Rules of Civil Procedure allows a party to object to the form of production, forcing the requesting party to seek judicial intervention.⁷² Similarly, some federal courts have stressed that "neither the letter nor the spirit of Rule 34 mandates that a party is entitled to production in its preferred format."⁷³ In Northern Crossarm Co. v. Chemical Specialties, Inc.,⁷⁴ the responding party produced approximately 65,000 pages of e-mails in paper form, after which the requesting party asked for electronic versions.⁷⁵ Because the responding party's attorneys reviewed the documents in paper form prior to handing them over, the court held that paper production was a reasonable method and denied the motion to compel.⁷⁶

^{67.} See Gregory S. Johnson, A Practitioner's Overview of Digital Discovery, 33 Gonz. L. Rev. 347, 352-58 (1997) (discussing court decisions regarding the practicality of paper versus electronic discovery).

^{68. 138} F.3d 1164 (7th Cir. 1998).

^{69.} Sattar v. Motorola, Inc., 138 F.3d 1164, 1171 (7th Cir. 1998) (proposing the parties settle their discovery method dispute by agreeing on one of three solutions created by the court).

^{70.} Id.

^{71.} Id. The court placed more emphasis on a reasonable resolution than how the parties exchanged discovery data. Id.; see Nat'l Union Elec. Corp. v. Matsushita Elec. Indus. Co., 494 F. Supp. 1257, 1263 (E.D. Pa. 1980) (requiring that actions be "just, speedy, and inexpensive" (quoting FED. R. Civ. P. 1)).

^{72.} Tex. R. Civ. P. 196.4.

^{73.} N. Crossarm Co. v. Chem. Specialties, Inc., No. 03-C-415-C, 2004 U.S. Dist. LEXIS 5381, at *2 (W.D. Wis. Mar. 3, 2004).

^{74.} No. 03-C-415-C, 2004 U.S. Dist. LEXIS 5381 (W.D. Wis. Mar. 3, 2004).

^{75.} N. Crossarm Co. v. Chem. Specialties, Inc., No. 03-C-415-C, 2004 U.S. Dist. LEXIS 5381, at *2 (W.D. Wis. Mar. 3, 2004).

^{76.} See id. at *1-5 (denying the plaintiff's motion to compel the electronic form of documents upon finding that the defendant had provided documents in an appropriate paper format).

D. Native or Generic?

Once there has been a determination that the electronic version of documents must be produced, the next issue comprises what form those electronic documents will take.⁷⁷ On one end of the spectrum are imaged files of electronic documents.⁷⁸ In their most common embodiment, these files are in PDF or TIFF format.⁷⁹ Generally, these documents are not text-searchable and are essentially electronic photocopies.⁸⁰ Non-searchable documents can present particular challenges to requesting parties because finding relevant information among masses of paper printouts can be unduly cumbersome without the ability to search the documents using keywords.⁸¹ Typically, a responding party has an obligation to provide a "meaningful and detailed document index" when it supplies a mass of electronic, non-searchable (or paper) files.⁸² As compa-

^{77.} See Steven C. Bennett, E-discovery by Keyword Search, 15 PRAC. LITIGATOR 7, 9 (2004) (addressing the difficulties encountered in controlling the electronic form of records).

^{78.} See 5 Jack B. Weinstein & Margaret A. Berger, Weinstein's Federal Evidence § 900.01[3], at 9 (Joseph M. McLaughlin ed., Matthew Bender 2d ed. 2005) (explaining the relevance of imaged documents in electronic discovery).

^{79.} See Adobe, http://www.adobe.com/products/acrobat/adobepdf.html (last visited Oct. 12, 2005) (explaining the invention, utility, and purpose of Portable Document Formats (PDF files)) (on file with the St. Mary's Law Journal); The TIFF Image File Format, Introduction http://www.ee.cooper.edu/courses/course_pages/past_courses/EE458/TIFF/ (last visited Oct. 12, 2005) (explaining the invention, utility, and purpose of Tagged Image File Formats (TIFF files)) (on file with the St. Mary's Law Journal).

^{80.} See 5 Jack B. Weinstein & Margaret A. Berger, Weinstein's Federal Evidence § 900.01[3], at 9, 13 (Joseph M. McLaughlin ed., Matthew Bender 2d ed. 2005) (discussing the nature and capabilities of such file formats). Note, however, that PDFs created from Microsoft Word documents often have text-searchable capabilities, and also that many "image" files can be converted via optical character recognition (OCR), into text-searchable formats. *Id.*

^{81.} See Steven C. Bennett, E-discovery by Keyword Search, 15 Prac. LITIGATOR 7, 11 (2004) (noting the problems accompanying a text search through numerous documents and the inherent benefits of the keyword search capability).

^{82.} See Fed. R. Civ. P. 34 (requiring parties to produce documents in the form of the usual course of business or to organize or label them as requested); In re Lorazepam & Clorazepate Antitrust Litig., 300 F. Supp. 2d 43, 46 (D.D.C. 2004) (quoting plaintiff's motion to compel discovery, which stated that defendants owed plaintiffs a "meaningful and detailed document index"); 5 Jack B. Weinstein & Margaret A. Berger, Weinstein's Federal Evidence § 900.01[3], at 9 (Joseph M. McLaughlin ed., Matthew Bender 2d ed. 2005) (describing the complexity and difficulty involved in sorting through voluminous amounts of computer-based data).

nies begin to expand their use of electronic data,⁸³ and consequently decrease their reliance on paper production, they will begin to rely less on detailed indices and filing processes and more on the ability of computers to search for keywords.⁸⁴ Courts have apparently recognized the benefits of electronic data storage and adapted their jurisprudence accordingly.⁸⁵

While ease of searching alone may not be a compelling enough reason to compel production of electronic documents versus paper,⁸⁶ it may present a convincing argument for producing a searchable electronic document versus a non-searchable one, especially if the information is stored in a searchable format in the normal course of business.⁸⁷ Federal Rule 34(b) of the Federal Rules of Civil Procedure provides that "[a] party who produces documents for inspection shall produce them as they are kept in the usual course of business or shall organize and label them to correspond with the categories in the request."⁸⁸ As applied to electronic doc-

^{83.} See Gregory S. Johnson, A Practitioner's Overview of Digital Discovery, 33 Gonz. L. Rev. 347, 352-58 (1997) (illustrating the ever-increasing use of computers and electronic data among businesses and individuals). In 1998, some estimated that one-third of a typical modern American enterprise's business and technical data is stored in electronic form and never becomes printed; in recent years this figure has likely increased considerably. Id. at 348.

^{84.} See generally Steven C. Bennett, E-discovery by Keyword Search, 15 PRAC. LITIGATOR 7, 7 (2004) (discussing the future propensity of the keyword search).

^{85.} See Nat'l Union Elec. Corp. v. Matsushita Elec. Indus. Co., 494 F. Supp. 1257, 1262-63 (E.D. Pa. 1980) (recognizing the need for courts to adapt to increasing use of electronic discovery); Gregory S. Johnson, A Practitioner's Overview of Digital Discovery, 33 Gonz. L. Rev. 347, 352-53 (1998) (stating that the court granted the defendant's request to receive the electronic version of documents that the defendant already had in hard copy form (citing Nat'l Union, 494 F. Supp. at 1260-61)); 5 Jack B. Weinstein & Margaret A. Berger, Weinstein's Federal Evidence § 900.01[3], at 18 (Joseph M. McLaughlin ed., Matthew Bender 2d ed. 2005) (noting the continuous evolution of legal procedures and practice in order to maintain effectiveness in an advancing technological environment).

^{86.} See McNally Tunneling Corp. v. City of Evanston, No. 00 C 6979, 2001 WL 1568879, at *3 (N.D. Ill. Dec 7, 2001) (discussing electronic production versus paper production).

^{87.} See Zakre v. Norddeutsche Landesbank Girozentrale, No. 03 Civ. 0257 (RWS), 2004 U.S. Dist. LEXIS 6026, at *3 (S.D.N.Y. Apr. 9, 2004) (holding that the defendant fulfilled its production obligations when it provided over 200,000 e-mails in electronic, text-searchable format, especially since the e-mails were being provided in the same format in which they were kept "in the usual course of business").

^{88.} FED. R. CIV. P. 34(b).

uments, this provision may require a responding party to supply text-searchable copies of e-mails and other documents.⁸⁹

There are some issues to contend with under Rule 34(b). Data stored "in the usual course of business" sometimes incorporates proprietary software or database systems. Responding parties may be reluctant to hand over these proprietary systems to requesting parties for fear of losing trade secrets or other intellectual property. For example, in In re Honeywell International, Inc. Securities Litigation, 91 the defendant provided over 60,000 hard copies of documents that were produced from data contained in the defendant's proprietary computer systems.92 In finding the paper production insufficient, the court stressed that the defendant did not produce the documents in the manner in which they were usually kept.93 The court rejected the defendant's argument about preserving proprietary technology because adequate measures could be or had been implemented to ensure the protection of the intellectual property.94 The court also gave the defendant the option of converting the information into a format that would be accessible with commercially available software.95

The main issue in *Honeywell* seems to have been the ability of the requesting party to access and decipher the produced documents. The court implied that the primary concern was the ability of the requesting party to *find* the relevant information contained in over 60,000 documents. The defendant in *Honeywell* did not provide a meaningful index to the documents and had instead given "hieroglyphic indices that render[ed] the workpapers essentially incomprehensible." While emphasizing that providing the documents in an electronic, searchable form would cure such a de-

^{89.} See Zakre, 2004 U.S. Dist. LEXIS 6026, at *3 (finding a party who provided thousands of documents on a CD-ROM in a text-searchable format satisfied its discovery obligations).

^{90.} FED. R. CIV. P. 34(b).

^{91.} No. M8-85 WHP, 2003 U.S. Dist. LEXIS 20602 (S.D.N.Y. Nov. 18, 2003).

^{92.} *In re* Honeywell Int'l, Inc. Secs. Litig., No. M8-85 WHP, 2003 U.S. Dist. LEXIS 20602, at *2-5 (S.D.N.Y. Nov. 18, 2003).

^{93.} Id. at *5.

^{94.} Id. at *8 n.1.

^{95.} *Id.* at *5 (implying the defendant could have produced PDF documents that would have protected the integrity of the information, although the court did not explicitly rule on this issue).

^{96.} Id. at *6.

fect, the court held that the defendant was "obligated to produce its workpapers in electronic form" so that the requesting party could find the relevant information. 98

At the other end of the spectrum—the "opposite" of image files—are situations where the requesting party is given access to the responding party's computer systems. As in *Honeywell*, responding parties may dislike such an arrangement for fear of losing trade secrets or other proprietary software. They may also fear disclosure of privileged or confidential information. Some courts have come to the aid of responding parties by holding that an order granting access to a party's computer system "must define parameters of time and scope and must place sufficient access restrictions to prevent compromising . . . confidentiality and to prevent harm to the computer and databases."

Another issue associated with producing electronic information in its native format is that the producing party is unable to police the produced documents in the manner that Bates-numbered paper documents or TIFF images can be policed. When documents are produced in native format as opposed to a stable, unalterable format such as TIFF images, the potential for inadvertent or purposeful alteration arises. In a deposition, how would counsel know when his client is confronted with a Microsoft Excel spreadsheet printed by opposing counsel from a produced native file that it is a "true and correct copy" of what was produced? The same holds true for trial exhibits, especially spreadsheets or other large data compilations. For example, a formula could be changed in the background of a spreadsheet to show a different result on a calculation in the courtroom than would have been the case with the unaltered document. Counsel would be well advised to consider these issues when negotiating whether electronic information should be produced in native format.

^{97.} In re Honeywell, 2003 U.S. Dist. LEXIS 20602, at *5.

^{98.} Id.

^{99.} S. Diagnostics Assocs. v. Bencosme, 833 So. 2d 801, 803 (Fla. Dist. Ct. App. 2002) (per curiam) (quoting Strasser v. Yalamanchi, 669 So. 2d 1142, 1145 (Fla. Dist. Ct. App. 1996)).

V. The Role of Metadata

Metadata is commonly known as "data about data." It is information stored as part of the file that provides details such as who authored or edited a document, as well as when and what revisions have been made. As software becomes more advanced, increasing amounts of metadata are being generated, causing numerous headaches for unwitting professionals. Though there are many ways to "clear" documents of their metadata, many people do not take such steps, and the default setting in Microsoft Word is such that this potentially revealing data is generated automatically.

Very few courts have addressed the issue of when metadata has to be preserved during litigation. One court that addressed the issue held that "when a party is ordered to produce electronic documents as they are maintained in the ordinary course of business, the producing party [has an obligation to produce] metadata intact, unless that party timely objects to production of metadata, the parties agree that the metadata should not be produced, or the producing party requests a protective order." Commentators suggest that courts will not require production of metadata unless "a particularized need is shown."

^{100.} See Michael Faulkner & Eric Goldman, The Battle over UNIX: SCO v. Linux, AIX and the Open Source Community, Cyberspace Law., June 2004, at 3 (noting that an enterprising journalist analyzed the metadata from a file associated with a lawsuit filed by Caldera Systems, Inc., doing business as The SCO Group, against DaimlerChrysler in which "it was discovered that SCO initially planned to sue Bank of America instead of DaimlerChrysler"); Bradley J. Fikes, Attorney General Parrots Music Industry, N. County Times, Mar. 23, 2004, http://www.nctimes.com/articles/2004/03/23/news/columnists/silicon_beach/3_23_046_30_27.txt (discussing how the California attorney general was recently embarrassed when it was discovered that a letter he had written that railed against peer-topeer (p2p) networks had metadata that indicated the letter might have actually been written by a representative from the Motion Picture Association of America) (on file with the St. Mary's Law Journal).

^{101.} Williams v. Sprint/United Mgmt. Co., No. Civ.A.03-2200-JWLDJW, 2005 WL 2401626, at *11 (D. Kan. Sept. 29, 2005). But see Momah v. Albert Einstein Med. Ctr., 164 F.R.D. 412, 418 (E.D. Pa. 1996) (requiring the production of information regarding the dates that certain documents were created because it was reasonably calculated to produce evidence that was relevant to the plaintiff's employment discrimination suit); Munshani v. Signal Lake Venture Fund II, LP, 13 Mass. L. Rptr. 732 (Super. Ct. 2001) (admitting an expert's report that indicated the plaintiff had fabricated e-mails and defrauded the court).

^{102.} Anthony J. Marchetta et al., Electronic Data Production - Courts Begin to Set Parameters - Part I, Metropolitan Corp. Cours., Jan. 2004, at 8; see also The Sedona Principles: Best Practices, Recommendations & Principles for Addressing Electronic Document Discovery 41 (Sedona Conference Working Group Series 2004), available at http://

VI. REVISIONS TO THE FEDERAL RULES AND THE CIVIL DISCOVERY STANDARDS

The Federal Rules of Civil Procedure may be amended to require that the form of production be a subject of the Rule 26(f) discovery conference.¹⁰³ In the May 17, 2004 Civil Rules Advisory Committee Report, the Committee suggested amending Rule 26(f) to require the parties to discuss "any issues relating to the disclosure or discovery of electronically stored information, including the form in which it should be produced."¹⁰⁴

Further, the ABA's Civil Discovery Standards include a comprehensive outline of the topics to be discussed during a discovery conference.¹⁰⁵ The outline directs practitioners to confer concerning the scope of electronic discovery that will be necessary during litigation. This discussion should be specific regarding the subject matter, time periods, and identification of persons or groups from whom discovery may be sought. The outline also provides a detailed list of the types of responsive electronic data that could be covered by a discovery request, including e-mail, graphics,

www.thesedonaconference.org/content/miscFiles/SedonaPrinciples200401.pdf (suggesting there should not be a duty to preserve or produce metadata unless it is known to be relevant).

103. See FED. R. CIV. P. 26(f) (providing the rules for party conferences for the purpose of developing a discovery plan).

104. Memorandum from the Honorable Lee H. Rosenthal, Chair, Advisory Committee on Federal Rules of Civil Procedure to the Honorable David F. Levi, Chair, Standing Committee on Rules of Practice & Procedure (May 17, 2004), at 24, http://www.uscourts. gov/rules/comment2005/CVAug04.pdf (on file with the St. Mary's Law Journal); Memorandum from the Ninth Circuit Advisory Board on Proposed Model Local Rule on Electronic Discovery to the Ninth Circuit and District Courts in the Ninth Circuit (May 26, 2004), at 4, http://www.krollontrack.com/library/9thCirDraft.pdf (on file with the St. Mary's Law Journal). See generally 28 U.S.C. § 2071 (1988) (explaining how the public comment process on proposed amendments works); 28 U.S.C. § 2073 (1994) (stating that should the Standing Committee approve the amendments, the next step will be to submit the rules to the Judicial Conference for approval); see also U.S. Courts, Federal Rulemaking, http://www.us courts.gov/rules/#judicial0905 (noting that the Judicial Conference met on September 20, 2005, and approved both the recommendations of the Committee on Rules of Practice and Procedure (the "Standing Committee") and the proposed amendments to Rules 26, 34, and 45, among others) (on file with the St. Mary's Law Journal). Next in the rule amendment process, the "proposed amendments will be transmitted to the Supreme Court with a recommendation that they be approved." Id. Specific information on these pending rules and the status of other amendments can be found by selecting the "Pending Rules Amendments Awaiting Final Action" hyperlink in the upper left corner of the web page. Id.

105. See Appendix A (containing excerpts of the technology section of the ABA Civil Discovery Standards).

voicemail and a host of other possible sources of information. Access is a critical component of the outline, and it is suggested that practitioners discuss where responsive electronic data may be found, such as databases, networks, servers, archives, and a variety of other locations.

As mentioned above, the Civil Rules Advisory Committee suggested amending Rule 34(b) of the Federal Rules of Civil Procedure¹⁰⁶ to allow the requesting party to "specify the form in which electronically stored information is to be produced."¹⁰⁷ The Committee also suggested revising Rule 34(b) to provide that if the requesting party does not specify the form in which electronically stored information is to be produced, the producing party "must produce it in a form in which the producing party ordinarily maintains it, or in an electronically searchable form."¹⁰⁸

Similarly, the ABA's Civil Discovery Standards include provisions regarding the form of production of electronic information.¹⁰⁹ The amendment suggests that a party should specify the format in which they wish to receive the information, whether it be in hard copy, electronic form or both. Moreover, the amendment includes a discussion regarding the request of metadata, as well as the software necessary to retrieve and understand the electronic data.

^{106.} FED. R. CIV. P. 34(b).

^{107.} See Memorandum from the Honorable Lee H. Rosenthal, Chair, Advisory Committee on Federal Rules of Civil Procedure to the Honorable David F. Levi, Chair, Standing Committee on Rules of Practice & Procedure (May 17, 2004), at 40, http://www.uscourts.gov/rules/comment2005/CVAug04.pdf (containing the proposed amendment) (on file with the St. Mary's Law Journal).

^{108.} *Id.* at 41; see also Memorandum from the Ninth Circuit Advisory Board on Proposed Model Local Rule on Electronic Discovery to the Ninth Circuit and District Courts in the Ninth Circuit (May 26, 2004), at 5, http://www.krollontrack.com/library/9thCirDraft.pdf (stating that Local Rule 3 requires "[e]lectronic documents [to] be produced in electronic form (including metadata) absent specific objection, agreement of parties, or order of the court") (on file with the St. Mary's Law Journal). Additionally, Local Rule 4 requires that "[e]ach response to a discovery request that includes data and documents recovered by such an electronic search shall include a statement identifying the electronic media searched; the selection criteria; the methodology incorporated; and the technologies (including the identity of the software) utilized." *Id*.

^{109.} See Appendix A (containing excerpts of the technology section of the ABA Civil Discovery Standards).

VII. PAYING FOR DISCOVERY OF ELECTRONIC INFORMATION: Cost Shifting

The presumption under both the Federal Rules of Civil Procedure and the Texas Rules of Civil Procedure is that the responding party bears the expense for the cost of producing requested discovery. This presumption can sometimes seem unfair, especially when the electronic information being sought is difficult to retrieve or is voluminous. The costs of conducting such discovery can be significant. In fact, corporate counsel have reacted to this concern in a survey on discovery of electronic information conducted by the ABA, wherein approximately 10% of the 326 corporate counsel responding reported settling a case rather than incurring the costs associated with electronic discovery. 111

In cases involving particularly onerous electronic discovery requests, federal courts, applying balancing techniques provided by the Federal Rules of Civil Procedure, sometimes apportion the costs between the parties using a procedure called "cost shifting" under which some or all of the cost of production is shifted to the requesting party. The proper way to request cost shifting is through a motion for protective order, including a particularized showing of the cost to be shared.

^{110.} FED. R. CIV. P. 26; TEX. R. CIV. P. 196.6; see Oppenheimer Fund Inc. v. Sanders, 437 U.S. 340, 358 (1978) (interpreting Rule 26 of the Federal Rules of Civil Procedure).

^{111.} See Jason Krause, Some Cases Settle to Avoid E-Discovery Costs, ABA J. E-Rep., Mar. 25, 2005, at 4 (reporting the surprising results of ABA's survey on e-discovery costs); see also Greg Lederer, Proposed Amendments to the Federal Rules of Civil Procedure: E-Discovery Is Not Limited to "Big" Lawsuits, E-DISCOVERY STANDARD, Winter 2005, at 4, 9 (commenting on the disproportionate economic impact that electronic discovery has on small businesses).

^{112.} See Hagemeyer N. Am., Inc. v. Gateway Data Scis. Corp., 222 F.R.D. 594, 601-03 (E.D. Wis. 2004) (discussing the various methods used by federal courts to address the issue of cost shifting).

^{113.} Id. at 599 (treating an affirmative argument for cost shifting in response to a motion to compel as a motion for protective order).

^{114.} See Thompson v. United States Dep't of Hous. & Urban Dev., 219 F.R.D. 93, 99 (D. Md. 2003) (describing other measures, limited only by "the court's own imagination," that it could take to lessen the burden of discovery). The *Thompson* opinion reads:

The court can, for example, shift the cost, in whole or part, of burdensome and expensive Rule 34 discovery to the requesting party; it can limit the number of hours required by the producing party to search for electronic records; or it can restrict the sources that must be checked. It can delay production of electronic records in response to a Rule 34 request until after the deposition of information and technology personnel of the producing party, who can testify in detail as to the systems in place, as

According to one court, "the most typical case in which electronic or digital discovery disputes arise involves the expense associated with compliance, and the issue to whom that expense, if production is ordered, should properly be allocated." To that end, Texas Rule of Civil Procedure 196.4 explicitly requires a court to shift the costs "of any extraordinary steps required to retrieve and produce information" to the requesting party in any case in which the court orders a responding party to produce electronic data over the responding party's objection. 116

As mentioned in Part IV, the question of what activities qualify as "extraordinary steps" under Rule 196.4 remains unresolved at the time of this writing. Also unresolved is the question of whether a court may shift attorneys' fees incurred by the responding party in the process of completing any "extraordinary steps." However, a recent case from the Texas Court of Appeals in Houston suggests that courts may be inclined to answer "no." In BASF Fina Petrochemicals Limited Partnership v. H.B. Zachary Co., 117 BASF sought reimbursement from H.B. Zachary Company for the costs of producing documents in response to a subpoena. 118 BASF was not a party to the underlying litigation and claimed that pursuant to Rule 203.5(f) of the Texas Rules of Civil Procedure, H.B. Zachary Company was obligated to compensate BASF for the reasonable costs of its production—including its attorneys' fees. 119 The court of appeals affirmed the trial court's refusal to shift BASF's attorneys' fees, noting, "Texas courts have consistently maintained that, in the absence of any authority explicitly authorizing an award of attorneys' fees, such an award is not recoverable,

well as to the storage and retention of electronic records, enabling more focused and less costly discovery. A court also can require the parties to identify experts to assist in structuring a search for existing and deleted electronic data and retain such an expert on behalf of the court.

Id

^{115.} Cornell Research Found., Inc. v. Hewlett Packard Co., 223 F.R.D. 55, 74 (N.D.N.Y. 2003).

^{116.} Tex. R. Civ. P. 196.4.

^{117. 168} S.W.3d 867 (Tex. App.—Houston [1st Dist.] 2004, pet. filed).

^{118.} BASF Fina Petrochemicals Ltd. P'ship v. H.B. Zachary Co., 168 S.W.3d 867, 869-70 (Tex. App.—Houston [1st Dist.] 2004, pet. filed).

^{119.} See id. at 871-72 (describing how BASF argued that Rule 205.3(f) demanded Zachary to reimburse all of BASF's reasonable costs of production, because BASF was a nonparty); see also Tex. R. Civ. P. 205.3(f) (noting that "[a] party requiring production of documents by a nonparty must reimburse the nonparty's reasonable costs of production").

either against an opposing party or as a 'cost of production.'"¹²⁰ Like Rule 203.5(f), Rule 196.4 does not "explicitly authoriz[e] an award of attorneys' fees," and the *BASF* decision almost certainly paves the way for a similar prohibition on shifting the costs of attorneys' fees incurred in the process of extraordinary measures taken to produce electronic information.¹²¹ Such a ruling would almost undermine the benefit of cost shifting, as attorneys' fees will generally be far and away the greatest cost of producing electronic information.

To understand the basis for cost shifting under the federal rules, it is useful to review the rules governing production of electronic information. Rule 26(b)(1) defines the scope of discovery "regarding any matter, not privileged, that is relevant to the claim or defense of any party Relevant information need not be admissible at the trial if the discovery appears reasonably calculated to lead to the discovery of admissible evidence." 122

This broad scope of discovery is tempered by Rule 26(b)(2), which provides:

The frequency or extent of use of the discovery methods otherwise permitted under these rules and by any local rule shall be limited by the court if it determines that: (i) the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive;

^{120.} BASF Fina, 168 S.W.3d at 873.

^{121.} But see id. at 873 (leaving at least a narrow opening for a responding party to distinguish the case for shifting attorneys' fees for extraordinary electronic-production measures from the situation in BASF). The court's opinion noted:

[[]A]lthough [BASF], albeit prudently, sought legal advice regarding potentially privileged or confidential documents, the expense of obtaining this advice was incurred to protect the interests of [BASF], not to facilitate compliance with Zachary's subpoena and the actual production of the documents in question. Such attorneys' fees were not, strictly speaking, 'costs of production.'

Id. at 874. Because the law surrounding electronic discovery is so undeveloped, a responding party seeking reimbursement for attorneys' fees under Rule 196.4 of the Texas Rules of Civil Procedure might argue that advice of counsel is necessary to ensure compliance with document requests seeking electronic information. Id. One could possibly counter this argument, however, by again pointing to the court's strict adherence to the precedent that a rule must specifically provide for shifting attorneys' fees. See id. at 872-73 (noting that attorney's fees cannot be recovered unless a contract between the parties or a statute allows for such recovery); cf. id. at 874 ("We must presume that, had the Texas Supreme Court intended for nonparties to recover their attorneys' fees as 'costs of production,' it could have expressly provided for the recovery of such fees").

^{122.} FED. R. CIV. P. 26(b)(1).

(ii) the party seeking discovery has had ample opportunity by discovery in the action to obtain the information sought; or (iii) the burden or expense of the proposed discovery outweighs its likely benefit, taking into account the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the litigation, and the importance of the proposed discovery in resolving the issues. The court may act upon its own initiative after reasonable notice or pursuant to a motion under Rule 26(c).¹²³

Additionally, Rule 26(c) provides that a court "may make any order which justice requires to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense."

Federal courts have "attempted to fashion reasonable limits that will serve the legitimate needs of the requesting party for information, without unfair burden or expense to the producing party." The courts have developed a number of analytical approaches. 125

The courts of the Southern District of New York have recently considered both the issue of the proper analysis under the Federal Rules of Civil Procedure for determining whether cost shifting should be applied, and if so, the amount of cost that should be shifted. The Zubulake I court developed a new construct for analyzing cost shifting for the production of electronic information by applying the cost-shifting provisions from Rule 26.¹²⁶ In Zubulake I, the plaintiff had promulgated a document request for "all documents... by or between" the defendant's employees and the plain-

^{123.} FED. R. CIV. P. 26(b)(2).

^{124.} Thompson v. United States Dep't of Hous. & Urban Dev., 219 F.R.D. 93, 97-98 (D. Md. 2003).

^{125.} See id. (citing McPeek v. Ashcroft, 202 F.R.D. 31 (D.D.C. 2001) (applying the Federal Rule 26(b)(2) balancing factors and discussing other methods such as the "marginal utility" analysis). The Ninth Circuit Proposed Model Local Rule 5 provides another cost-shifting construct:

Rule 5: Absent a specific objection, agreement of the parties or order of the court, the reasonable costs of retrieving and reviewing electronic data and documents from active data files shall be borne by the responding party. Absent special circumstances, the costs of retrieving and reviewing electronic data and documents from non-active sources shall be borne by the requesting party.

Memorandum from the Ninth Circuit Advisory Board on Proposed Model Local Rule on Electronic Discovery to the Ninth Circuit and District Courts in the Ninth Circuit (May 26, 2004), at 5, http://www.krollontrack.com/library/9thCirDraft.pdf (on file with the St. Mary's Law Journal).

^{126.} FED. R. CIV. P. 26.

tiff.¹²⁷ The defendant responded by producing a few hundred pages of documents.¹²⁸ The plaintiff was not satisfied with this production, and after a heated dispute, the defendant agreed to search for additional e-mails for selected individuals.¹²⁹ The defendant did not produce any additional e-mails, insisting that the 100 pages of e-mails that it had already produced were the complete production.¹³⁰ The defendant did not, however, search for responsive e-mails on its backup tapes,¹³¹ and explained that it had not done so because "the cost of producing e-mails on backup tapes would be prohibitive (estimated at the time at approximately \$300,000.00)."¹³² The plaintiff, knowing that additional responsive e-mails must exist, objected to the defendant's non-production,¹³³ and the court was faced with just the sort of analysis that Rule 26(b)(2) contemplated.

The Zubulake I court's analysis was in two parts: First, should discovery of the defendant's electronic data be permitted? Second, should cost shifting be considered?

- A. Determining Whether Discovery of the Electronic Information Should Be Permitted
 - 1. Determining Whether the Requested Electronic Information Is Covered by Rule 34(a)

First, the Zubulake I court considered whether Rule 34(a) contemplates the discovery of electronic information and determined that it does.¹³⁴

^{127.} Zubulake v. UBS Warburg LLC (*Zubulake I*), 217 F.R.D. 309, 312 (S.D.N.Y. 2003).

^{128.} Id. at 312-13.

^{129.} Id. at 313.

^{130.} Id.

^{131.} Id.

^{132.} Zubulake I, 217 F.R.D. at 313.

^{133.} Id.

^{134.} Id. at 316-17 (quoting Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421 (S.D.N.Y. 2002)).

2. Determining Whether the Requested Electronic Information Is Relevant

Second, the Zubulake I court considered whether the requested e-mails from the backup tapes were relevant to the plaintiff's claims. The court determined that they were.¹³⁵

3. Determining Whether Any Arguments Against Production Prevail

Finally, the Zubulake I court considered the producing party's arguments against production. Generally, the arguments of the producing party can be grouped under the factors listed in Rule 26(b)(2). Rule 26(b)(2) provides that a court may limit discovery if "the [d]iscovery [s]ought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive." 137

In Zubulake I, the defendant attempted to make the "cumulative or duplicative" argument, claiming that it had already produced all of the responsive e-mails. The court rejected this argument because: (a) the defendant admitted that it had not searched the backup tapes and had no way of knowing whether they contained additional responsive e-mails; and (b) the plaintiff, an ex-employee of the defendant's, produced hundreds of responsive e-mails from her own records that should have appeared in the defendant's records as well.¹³⁸

Similarly, in Rowe Entertainment, Inc. v. William Morris Agency, Inc., 139 another cost-shifting case, the producing parties argued that important e-mails were printed out and saved in files that had already been produced for inspection. 140 The court rejected this argument on the grounds that: (a) "nearly one-third of all electronically stored data is never printed out"; (b) the producing parties did not allege that they had a corporate policy defining which electronically stored data are "important" and should be

^{135.} Id. at 317.

^{136.} Cf. Tex. R. Civ. P. 193.1, 193.2(b), 193.3(a), 196.4 (detailing the procedures concerning requested discovery, including responding and objecting to discovery requests).

^{137.} FED. R. CIV. P. 26(b)(2)(i).

^{138.} Zubulake I, 217 F.R.D. at 317.

^{139. 205} F.R.D. 421 (S.D.N.Y. 2002).

^{140.} Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421, 428 (S.D.N.Y. 2002).

printed out; and (c) it was unlikely that any electronic document that would be relevant to the requesting party's cause of action, which had to do with "discriminatory or anti-competitive practices," would be printed out and stored in a file.¹⁴¹

In Cornell Research Foundation, Inc. v. Hewlett Packard Co., 142 a patent case, the responding party argued that it "would be unduly cumulative" to produce electronic discovery because it had gone to great expense to: (a) "produce the requested information in tangible, hard copy format," and (b) "answer any questions and alleviate any concerns regarding missing information or unreadable specifications by responding to supplemental requests directed at such problems." The court agreed that Hewlett Packard had "indeed gone to great expense and effort to provide the plaintiffs with the sought-after information in a format which is understandable and complete." Nevertheless, the court decided that some of the requested information should be produced because it was "critical to the question of infringement." 145

Federal Rule of Civil Procedure Rule 26(b)(2) also provides that a court may limit discovery when "the party seeking discovery has had ample opportunity by discovery in the action to obtain the information sought;¹⁴⁶ or the burden or expense of the proposed discovery outweighs its likely benefit."¹⁴⁷

The producing parties in *Rowe* attempted to avoid production under the above rule, claiming that a search of their e-mails would be unlikely to produce responsive information because their employees did little business by e-mail. The court rejected this argument as "undocumented and . . . contradicted by data proffered by" the same producing parties, both of whom offered indications of substantial use of e-mail.

^{141.} *Id.*; *accord* Murphy Oil USA, Inc. v. Fluor Daniel, Inc., No. Civ.A. 99-3564, 2002 WL 246439, at *5 (E.D. La. Feb. 19, 2002) (discussing the balanced approach that courts have applied and the factors considered).

^{142. 223} F.R.D. 55 (N.D.N.Y. 2003).

^{143.} Cornell Research Found., Inc. v. Hewlett Packard Co., 223 F.R.D. 55, 74 (N.D.N.Y. 2003).

^{144.} Id.

^{145.} Id.

^{146.} Fed. R. Civ. P. 26(b)(2)(ii).

^{147.} FED. R. CIV. P. 26(b)(2)(iii).

^{148.} Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421, 428 (S.D.N.Y. 2002).

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The producing parties in Rowe also argued that the requested production violated the privacy rights of the corporate producing party because the privacy rights of the corporation should outweigh the right of the requesting party to discovery. The court rejected this argument, reasoning that the privacy rights of the corporate producing party were adequately protected by the confidentiality order issued in the case.149

Additionally, the producing parties in Rowe argued that the requested production violated the privacy rights of the employees within the corporate producing party. The court rejected this argument as well, reasoning that: (a) the privacy interests of employees are "severely limited"; (b) the producing parties had made no effort to exclude from production paper records that invoked the same privacy concerns; and (c) "an employee who uses his or her employer's computer for personal communications assumes some risk that they will be accessed by the employer or by others."150

The producing parties in Rowe, Zubulake I, and other cases also argued that the cost of the requested production would be prohibitively expensive, claiming respective costs of \$395,944,¹⁵¹ $$247,000,^{152}$$ $$395,000,^{153}$$ $$403,000,^{154}$$ $$300,000,^{155}$$ and $$249,000.^{156}$ The Rowe court, Zubulake I court, and other courts have dealt with the concern over production costs through cost shifting.

Determining Whether Cost Shifting Should Be Considered В.

Is the Producing Party Requesting Cost Shifting?

Typically, the answer to this question is clear. The requesting party requests production of electronic information, and the pro-

^{149.} Id.

^{150.} Id.

^{151.} Id. at 425.

^{152.} Id.

^{153.} Rowe, 205 F.R.D. at 426.

^{154.} Id.

^{155.} Zubulake v. UBS Warburg LLC (Zubulake I), 217 F.R.D. 309, 313 (S.D.N.Y. 2003).

^{156.} Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 570 (N.D. Ill. 2004) (involving an original cost estimate of \$46,000 to \$61,000 to produce documents that was subsequently revised to \$249,000).

ducing party asks the court to shift some or all of the cost of production to the requesting party.¹⁵⁷

In a less obvious example, the producing party offered to make available the requested electronic information at its facility, complete with an index and an engineer to help with the production. The requesting party objected that the producing party was attempting to improperly shift the cost of production. The court agreed, ruling that "requiring [the requesting party] to travel to [the producing party's] facilities to extract and copy the requested [electronic information] amounts to cost-shifting in that . . . (the requesting party) would bear the cost of production."¹⁵⁸

2. Rowe: Cost Shifting Should Always Be Considered

Rowe has been read to require that cost shifting be considered when discovery of electronic data is involved.¹⁵⁹ The court rejected the bright-line rules that cost shifting should never be applied and that it should always be applied.¹⁶⁰ Instead, it adopted a balancing approach based on an eight-factor test that the court created.¹⁶¹

^{157.} *Id.* at 571-72 (explaining that cost shifting does not describe shifting the costs to the producing party, as the producing party is presumed to bear the cost of responding to discovery requests).

[[]The responding party] discusses each factor in terms of whether it weighs in favor of cost-shifting to itself. The presumption is, of course, that the responding party pays for discovery costs, so the question for this [c]ourt is whether [the responding party] has met its burden to prove that the factors weigh in favor of shifting costs to [the requesting party].

Id. at 575 n.16.

^{158.} OpenTV v. Liberate Techs., 219 F.R.D. 474, 476 (N.D. Cal. 2003).

^{159.} See Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421, 429 (S.D.N.Y. 2002) (suggesting that the retaining party should not "necessarily bear the cost of producing" electronic information); cf. Zubulake v. UBS Warburg LLC (Zubulake I), 217 F.R.D. 309, 318 (S.D.N.Y. 2003) (citing Murphy Oil USA, Inc. v. Fluor Daniel, Inc., No. Civ.A. 99-3564, 2002 WL 246439, at *3 (E.D. La. Feb. 19, 2002)) (noting that other courts have interpreted Rowe to mean that cost shifting should always be applied). But see Multitechnology Servs., L.P. v. Verizon Sw., No. Civ.A. 4:02-CV-702-Y, 2004 WL 1553480, at *1 (N.D. Tex. July 12, 2004) (explaining that Zubulake I "is a district court opinion without binding authority"). The Multitechnology court applied the Zubulake I analytical construct in determining whether cost shifting should be done. Id. at *2.

^{160.} Rowe, 205 F.R.D. at 429.

^{161.} Id.; see infra text accompanying note 173 (listing the eight factors Rowe considered).

3. Zubulake I: Cost Shifting Should Be Considered Only When Data Is Inaccessible

The Zubulake I court followed a different course. The court shifted the focus back to the Federal Rules of Civil Procedure, holding that:

[C]ost-shifting should be considered *only* when electronic discovery imposes an "undue burden or expense" on the responding party. The burden or expense of discovery is, in turn, "undue" when it "outweighs its likely benefit, taking into account the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the litigation, and the importance of the proposed discovery in resolving the issues." ¹⁶²

The Zubulake I court ruled that "whether production of documents is unduly burdensome or expensive turns primarily on whether it is kept in an accessible or inaccessible format (a distinction that corresponds closely to the expense of production)," 163 and that "[w]hether electronic data is accessible or inaccessible turns largely on the media on which it is stored." 164

The court then identified five different categories of data:

- 1. Active, on[-]line data;
- 2. Near-line data;
- 3. Off[-]line storage/archives;
- 4. Backup tapes; and
- 5. Erased, fragmented, or damaged data. 165

The court reasoned that the first three categories are typically identified as accessible and the last two as inaccessible, where:

The difference between the two classes is easy to appreciate. Information deemed "accessible" is stored in a readily usable format. Although the time it takes to actually access the data ranges from milliseconds to days, the data does not need to be restored or otherwise manipulated to be usable. "Inaccessible" data, on the other hand, is not readily usable. Backup tapes must be restored using a process similar to that previously described, fragmented data must

^{162.} Zubulake v. UBS Warburg LLC (*Zubulake I*), 217 F.R.D. 309, 318 (S.D.N.Y. 2003) (citing Fed. R. Civ. Proc. 26(c) and 26(b)(2)(iii)) (footnotes omitted).

^{163.} Id.

^{164.} Id.

^{165.} Id. at 318-19.

be de-fragmented, and erased data must be reconstructed, all before the data is usable. That makes such data inaccessible. 166

Another court ruled that data is inaccessible when: (a) it is necessary for the requesting party to inspect the data at the producing party's facilities; and (b) the process of extracting each of 100 instances of requested electronic information would require "between 1.25 and 1.5 hours," amounting to "between 125-150 hours of work." The court found "such time requirements to be unduly burdensome and potentially expensive, and thus contrary to Rule 26(b)(2)(iii)," and consequently that "the requested electronic data is stored in an inaccessible format for the purposes of discovery." 168

The Zubulake I court ruled that it is appropriate to consider cost shifting only if the electronic information is inaccessible.¹⁶⁹ This holding might be seen as analogous to the limited mandate in Rule 196.4 of the Texas Rules of Civil Procedure to shift costs for "extraordinary steps" taken for data retrieval. However, Texas courts presumably retain discretion to shift costs for ordinary steps taken for data retrieval when they deem such a move appropriate.¹⁷⁰

C. Applying the Cost-Shifting Analysis

1. Rowe Analytical Construct

The *Rowe* court was the first to create a construct to apply to cost shifting. *Rowe* rejected the theory that the party that chooses the method of storing data should be required to pay the cost of retrieving that data. The court rejected the syllogism that the party retaining information does so because that information is useful to it, as demonstrated by the fact that it is willing to bear the costs of retention, reasoning that:

With electronic media, however, the syllogism breaks down because the costs of storage are virtually nil. Information is retained not be-

^{166.} Id. at 320 (footnote omitted).

^{167.} OpenTV v. Liberate Techs., 219 F.R.D. 474, 477 (N.D. Cal. 2003).

¹⁶⁸ *Id*

^{169.} Zubulake I, 217 F.R.D. at 320. See generally Xpedior Creditor Trust v. Credit Suisse First Boston (USA), Inc., 309 F. Supp. 2d 459, 465 (S.D.N.Y. 2003) (noting that previously accessible data can become inaccessible).

^{170.} See Tex. R. Civ. P. 196.6 (permitting the court to order otherwise for good cause).

cause it is expected to be used, but because there is no compelling reason to discard it. And, even if data is retained for limited purposes, it is not necessarily amenable to discovery. Back-up tapes, for example, are not archives from which documents may easily be retrieved. The data on a backup tape are not organized for retrieval of individual documents or files, but for wholesale, emergency uploading onto a computer system. Therefore, the organization of the data mirrors the computer's structure, not the human records management structure, if there is one.¹⁷¹

The court also rejected the bright-line rule that the requesting party should pay the cost of production because, it concluded, such a rule flies in the face of the well-established rule that the producing party should pay the costs of production, which might prevent poor plaintiffs from seeking relief.¹⁷²

Thus, under *Rowe*, the factors to be considered in determining which party should pay the cost of production are:

- (1) the specificity of the discovery requests;
- (2) the likelihood of discovering critical information;
- (3) the availability of such information from other sources;
- (4) the purposes for which the responding party maintains the requested data;
- (5) the relative benefit to the parties of obtaining the information;
- (6) the total cost associated with production;
- (7) the relative ability of each party to control costs and its incentive to do so; and
- (8) the resources available to each party. 173

2. Zubulake I Analytical Construct

The Zubulake I court found "that there is little doubt that the Rowe factors will generally favor cost-shifting." The court reasoned that the Rowe analysis would be made more balanced by including factors "specifically identified in the Rules." In particular, the court ruled that the Rowe factors did not consider "the amount in controversy, the parties' resources, the importance of

^{171.} Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421, 429 (S.D.N.Y. 2002) (citation omitted).

^{172.} Id.

^{173.} Id.

^{174.} Zubulake I, 217 F.R.D. at 320.

^{175.} Id. at 321.

the issues at stake in the litigation, and the importance of the proposed discovery in resolving the issues."¹⁷⁶

The Zubulake I court also took issue with the Rowe court's consideration of "the resources available to each party," holding that the consideration should instead be "the total cost of production as compared to the resources available to each party."¹⁷⁷

Additionally, the Zubulake I court held that two of the Rowe factors should be eliminated. The court combined the "specificity of the discovery request" factor with "the likelihood of discovering critical information" factor. Further, the court discarded the "purposes for which the responding party maintains the requested data" as being "typically unimportant." 178

Accordingly, the Zubulake I court stated its own construct—a modified Rowe construct—finding that "the following factors should be considered, weighted more-or-less in the following order":179

- (1) "The extent to which the request is specifically tailored to discover relevant information"180
 - Cost shifting is not favored if the requests are appropriately tailored.¹⁸¹
- (2) "The availability of such information from other sources" 182
 - Cost shifting is not favored if the requested information is not available from another source. 183
- (3) "The total cost of production, compared to the amount in controversy "184

^{176.} Id. (citing Fed. R. Civ. P. 26(b)(2)(iii)).

^{177.} Id.

^{178.} Id.

^{179.} Zubulake v. UBS Warburg LLC (*Zubulake I*), 217 F.R.D. 309, 324 (S.D.N.Y. 2003).

^{180.} Xpedior Creditor Trust v. Credit Suisse First Boston (USA), Inc., 309 F. Supp. 2d 459, 465 (S.D.N.Y. 2003) (quoting *Zubulake I*, 217 F.R.D. at 324).

^{181.} Id. at 465-66.

^{182.} Id. at 466.

^{183.} Id.

^{184.} Id.

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- Cost shifting is not favored if the "cost of production is relatively insignificant in comparison" to the amount in controversy.¹⁸⁵
- Cost shifting is favored when the cost is "several hundred thousand dollars for one limited part of discovery." 186
- (4) "The total cost of production, compared to the resources available to each party" 187
 - Cost shifting is not favored if the assets of the producing party "clearly dwarf" the assets of the requesting party. 188
 - Elements of this analysis may include an individual party's "financial wherewithal to cover at least some of the cost of restoration" and the fact that "it is not unheard of for plaintiff's firms to front huge expenses when multi-million dollar recoveries are in sight." 189
 - Cost shifting is not favored where the "recovery in [the] case is potentially high," and the producing parties' "resources are large compared to the total cost of production." ¹⁹⁰
- (5) "The relative ability of each party to control costs and its incentive to do so" 191
 - This factor is neutral if the cost is fixed, and therefore known, and the requesting party has promised to work with the producing party to minimize costs.¹⁹²
 - This factor is neutral because the producing party selected the electronic discovery vendor, and the requested information was stored in an organized fashion so that no further focusing

^{185.} Xpedior, 309 F. Supp. 2d at 465; see also Zubulake v. UBS Warburg LLC (Zubulake III), 216 F.R.D. 280, 287-88 (S.D.N.Y. 2003) (indicating that factor was found to disfavor cost shifting in a multimillion dollar case when the cost of production was \$165,954.67); Multitechnology Servs. L.P. v. Verizon Sw., No. Civ.A. 4:02-CV-702-Y, 2004 WL 1553480, at *2 (N.D. Tex. July 12, 2004) (finding that this comparison did not favor cost shifting when the amount in controversy was \$1.6 million and the cost of the requested discovery was \$60,000).

^{186.} Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 575 (N.D. Ill. 2004).

^{187.} Xpedior, 309 F. Supp. 2d at 466.

^{188.} Id.

^{189.} Zubulake III, 216 F.R.D. at 288 (finding, nevertheless, that this factor weighed against cost shifting).

^{190.} Wiginton, 229 F.R.D. at 576.

^{191.} Xpedior, 309 F. Supp. 2d at 466.

^{192.} See id. (explaining why the bankrupt company will work with the solvent company to minimize the solvent company's costs of production).

- of the discovery request could be done by the requesting party.¹⁹³
- This factor weighs slightly in favor of cost shifting because the requesting party's "search must necessarily be broad, due to the nature of the information for which [the requesting party is] searching." 194
- (6) "The importance of the issues at stake in the litigation" This factor "will rarely be invoked." 195

For example, if a case has the potential for broad public impact, then public policy weighs heavily in favor of permitting extensive discovery. Causes of this ilk might include toxic tort class actions, environmental actions, so-called 'impact' or social reform litigation, cases involving criminal conduct, or cases implicating important legal or constitutional questions.¹⁹⁶

- In such cases, this factor would weigh in favor cost shifting.
- However, when "issues of important social concern" do not predominate, such as issues related to manipulation of the securities market in a contract dispute or racial or gender equality issues in a discrimination case, this factor is neutral.¹⁹⁷
- In a patent-infringement case, this factor was found to be neutral because there was "no indication that [the] case present[ed] novel issues." ¹⁹⁸
- (7) "The relative benefits to the parties of obtaining the information"199
 - Generally, the producing party does not benefit by obtaining the information.²⁰⁰

^{193.} See Zubulake III, 216 F.R.D. at 288 (stating that even though a less expensive restoration company might have been found, once selected, the costs are not within either party's control).

^{194.} Wiginton, 229 F.R.D. at 576.

^{195.} Zubulake v. UBS Warburg LLC (Zubulake I), 217 F.R.D. 309, 321 (S.D.N.Y. 2003).

^{196.} Id.

^{197.} See Xpedior, 309 F. Supp. 2d at 466 (asserting that a contract dispute does not implicate public policy issues that suggest cost shifting); see also Zubulake III, 216 F.R.D. at 289 (providing that the factor was found to be neutral where the case "revolves around a weighty issue[,]" but does not present "a particularly novel issue").

^{198.} OpenTV v. Liberate Techs., 219 F.R.D. 474, 479 (N.D. Cal. 2003).

^{199.} Zubulake I, 217 F.R.D. at 321.

^{200.} See Xpedior Creditor Trust v. Credit Suisse First Boston (USA), Inc., 309 F. Supp. 2d 459, 466-67 (S.D.N.Y. 2003) (stating that it is rare for both parties to benefit from production of the information).

- The producing party may benefit, however, if the same information must be produced in a related litigation.²⁰¹ In such a case, the factor is neutral.
- This factor favors cost shifting if the requesting party "stands to benefit far more [than the producing party] from the requested" electronic information, in spite of the fact that the requested information would be useful to the producing party in another aspect of the case.²⁰²
- In cases in which the producing party receives no benefit, such as when, "absent an order, [the producing party] would not restore any of [the requested] data of its own volition," the factor weighs in favor of cost shifting.²⁰³

"The first two factors—comprising the marginal utility test—are the most important." In Zubulake III, the court analyzed these two factors together, determining that the "marginal utility test tips slightly against cost-shifting" in light of the following considerations: (a) the requests in question were narrowly tailored; (b) direct evidence of the offense in question might only be available through costly reconstruction of electronic information; and (c) the existence of the evidence was speculative. ²⁰⁵

"Requiring the responding party to restore and produce responsive documents from a small sample of backup tapes will inform the cost shifting analysis laid out above." Indeed, one court has

^{201.} See id. (commenting that requesting party benefits more unless the producing party is involved in related litigation).

^{202.} OpenTV, 219 F.R.D. at 479 (presenting patent case in which the requesting party argued that the requested electronic information would be useful to the producing party in making noninfringement arguments).

^{203.} Cf. Zubulake v. UBS Warburg LLC (Zubulake III), 216 F.R.D. 280, 289 (S.D.N.Y. 2003) (describing requesting party's argument that producing party will benefit from restoring the data).

^{204.} Zubulake I, 217 F.R.D. at 323.

^{205.} See Zubulake III, 216 F.R.D. at 287 (requiring that the producing party prove that cost shifting is warranted especially when the utility of data restoration is potentially high); see also Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 575 (N.D. Ill. 2004) (indicating that while the discovery request was focused, the "search also revealed a significant number of unresponsive documents").

^{206.} Zubulake I, 217 F.R.D. at 324; see Hagemeyer N. Am., Inc. v. Gateway Data Scis. Corp., 222 F.R.D. 594, 603 (E.D. Wis. 2004) (concluding that the court should use a sampling of restored data from backup tapes to balance the burden versus the benefit); cf. Toshiba Am. Elec. Components, Inc. v. Super. Ct. of Santa Clara County, 21 Cal. Rptr. 3d 532, 541 (Ct. App. 2004) (acknowledging the trial court's discretion to set the amount of the demanding party's reasonable expenses).

ruled that the analysis of the first factor changes "the likelihood of discovering critical information" after a test case is run:

When the matter is initially brought to the court's attention, the extent to which the request appears to be specifically tailored to discover relevant information may help the court weigh this factor. . . . If a test run is ordered, as in this case, the actual results of the test run will be indicative of how likely it is that critical information will be discovered.²⁰⁷

The Zubulake I court continued its ranking of factors three through seven, finding that:

The second group of factors addresses cost issues: "How expensive will this production be?" and, "Who can handle that expense?" These factors include: (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[,] and (5) the relative ability of each party to control costs and its incentive to do so. The third "group"—(6) the importance of the litigation itself—stands alone and, as noted earlier, will only rarely come into play. But where it does, this factor has the potential to predominate over the others. Collectively, the first three groups correspond to the three explicit considerations of Rule 26(b)(2)(iii). Finally, the last factor—(7) the relative benefits of production as between the requesting and producing parties—is the least important because it is fair to presume that the response to a discovery request generally benefits the requesting party. But in the unusual case where production will also provide a tangible or strategic benefit to the responding party, that fact may weigh against shifting costs.²⁰⁸

The analysis of the seven factors "is not merely a matter of counting and adding; it is only a guide." In Zubulake III, the court found that "[b]ecause some of the factors cut against cost[shifting, but only slightly so—in particular, the possibility that the

Since it may be impossible to determine in advance whether or to what extent the backup tapes will yield relevant material, the court should encourage the parties to meet and confer about translating a sample of the tapes and to otherwise develop information in order to inform the analysis of the extent to which [the requesting party] should bear the expenses [the producing party] has claimed.

Id. at 541-42 (citation omitted).

^{207.} Wiginton, 229 F.R.D. at 573 (citations omitted).

^{208.} Zubulake I, 217 F.R.D. at 323; see also Zubulake III, 216 F.R.D. at 287-89 (referring to Zubulake I and weighing factors three through seven).

^{209.} Zubulake III, 216 F.R.D. at 289.

continued production will produce valuable new information—some cost-shifting is appropriate . . . although [the producing party] should pay the majority of the costs."²¹⁰

The producing party, which presumptively bears the cost of responding to a discovery request, bears the burden of proving "that the factors weigh in favor of shifting costs to" the requesting party.²¹¹

3. An Eighth Factor for the Zubulake I Test

One court ruled that an eighth factor should be added to the seven-part Zubulake I analysis recited above. The court in Wiginton v. CB Richard Ellis, Inc.,²¹² ruled that "the relative benefits to the parties of obtaining the information" should be added because it was "explicitly set forth in Rule 26(b)(2)(iii)" that "the importance of the requested discovery in resolving the issues at stake in the litigation" should be considered in the analysis.²¹³

4. ABA Analytical Construct

The ABA, in its Civil Discovery Standards, sets out a much more expansive list of factors for determining whether to compel production of electronic information and how to allocate the costs.²¹⁴

D. The Share of the Costs That Should Be Shifted

Rule 196.4 of the Texas Rules of Civil Procedure mandates that Texas courts shift to the requesting party all of the costs incurred by the responding party in taking "extraordinary steps" to retrieve electronic information.²¹⁵ For other costs, however, the rule is less clear. In Judge Scheindlin's court, the determination of "how much of the cost should be shifted" is "a matter of judgment and

^{210.} *Id*.

^{211.} Wiginton, 229 F.R.D. at 575 n.16.

^{212. 229} F.R.D. 568 (N.D. III. 2004).

^{213.} Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 576 (N.D. Ill. 2004).

^{214.} See Appendix A, at 29(b)(iii) (containing excerpts of the ABA Civil Discovery Standards, and listing the factors a court should consider when resolving a motion to compel or protect against the production and allocation of costs of discovery for such electronic information).

^{215.} Tex. R. Civ. P. 196.4.

fairness rather than a mathematical consequence of the seven factors," and is a matter of discretion for the court.²¹⁶

In Zubulake III, the court ruled that 25% of the costs should be shifted to the requesting party in that case because (a) the "seven factor test requires that [the producing party] pay the lion's share," meaning that the requesting party's share should be less than 50%, and (b) "the success of the search is somewhat speculative." 217

Another court shifted 50% of the costs to the requesting party because doing so "balance[d] the benefit of the discovery for [the requesting party] and provide[d] [the producing party] with incentive to manage the costs it incurs in answering [the requesting party's] interrogatories."²¹⁸

E. The Costs That Should Be Shifted

Federal courts, and the Texas Supreme Court (as expressed in the Texas Rules of Civil Procedure), appear to generally agree that not all costs of production are "shiftable" to the requesting party. Again, Texas Rule of Civil Procedure 196.4 requires only that a court shift the cost of "extraordinary steps" taken to retrieve data—and only after the court has ordered production over the responding party's objection.²¹⁹ Consequently, the production of inaccessible (and therefore cost-shiftable) electronic data generally falls into the following steps:

- (a) restoration;
- (b) search;
- (c) reviews (for privilege and confidentiality); and
- (d) printing (including Bates numbering).²²⁰

In Zubulake III, the court ruled that "only the costs of restoration and searching should be shifted."²²¹ Restoration should be shifted because it "is the act of making inaccessible material accessible."²²² Because searching is "intertwined with the restoration

^{216.} Zubulake v. UBS Warburg LLC (Zubulake III), 216 F.R.D. 280, 289 (S.D.N.Y. 2003).

^{217.} Id.

^{218.} Multitechnology Servs. L.P. v. Verizon Sw., No. Civ.A. 4:02-CV-702-Y, 2004 WL 1553480, at *2 (N.D. Tex. July 12, 2004).

^{219.} Tex. R. Civ. P. 196.4.

^{220.} Zubulake III, 216 F.R.D. at 289-90.

^{221.} Id. at 290.

^{222.} Id.

process," it too should be shifted.²²³ The court ruled, however, that the responding party should always bear the cost of reviewing and producing electronic data once it has been converted to an accessible form because "the producing party has the exclusive ability to control the cost of reviewing the documents," and "the producing party unilaterally decides on the review protocol."²²⁴

F. Zubulake I's Summary of Cost Shifting

This excerpt from Zubulake I nicely summarizes the cost-shifting exercise under the Federal Rules:

First, it is necessary to thoroughly understand the responding party's computer system, both with respect to active and stored data. For data that is kept in an accessible format, the usual rules of discovery apply: the responding party should pay the costs of producing responsive data. A court should consider cost shifting *only* when electronic data is relatively inaccessible, such as in backup tapes.

Second, because the cost-shifting analysis is so fact-intensive, it is necessary to determine what data may be found on the inaccessible media. Requiring the responding party to restore and produce responsive documents from a small sample of the requested backup tapes is a sensible approach in most cases.

Third, and finally, in conducting the cost-shifting analysis, the following factors should be considered, weighted more-or-less in the following order:

- 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

^{223.} Id.

^{224.} *Id.*; see also Wiginton v. CB Richard Ellis, Inc., 229 F.R.D. 568, 577 (N.D. Ill. 2004) (holding that "the discovery costs of restoring the tapes, searching the data, and transferring it to an electronic data viewer" should be split 75/25 without the requesting party bearing the largest percentage). Each of the parties was required to bear the costs of "reviewing the data and printing documents," where necessary. *Id.*

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7. The relative benefits to the parties of obtaining the information.²²⁵

VIII. PROTOCOLS FOR PRODUCING ELECTRONIC INFORMATION

Another important consideration in the production of electronic information is what the *Rowe* and *Zubulake* courts called the "protocol" for producing electronic information. For example, how does a party ensure that the electronic information that it produces does not get altered by the other party, intentionally or accidentally, and then used at a deposition or at trial? The use of Bates numbering provides some protection with paper documents. If a party suspects that a document has been altered, the party can compare the copy of the document with the copy produced at the deposition or trial. However, such protections are not readily available with electronically produced information unless the parties take appropriate steps early in discovery.

Further, given the volume of electronic information that may be produced in a given case, the question arises as to whether it is necessary for the producing party to inspect all electronic information for privilege and confidentiality before allowing the requesting party to inspect. Again, this issue can be dealt with by agreeing on a protocol for discovery of electronic information.

A. Rowe's Electronic Discovery Protocol

In *Rowe*, the court ordered the following electronic discovery protocol:

- The producing party was to designate an e-mail production expert to isolate the e-mails and prepare them for production.
- The requesting party was given an opportunity to object to any designated expert.
- The technical personnel of the producing party were to assist and cooperate in providing the expert a "mirror image" of the electronic information. The requesting party was to be allowed the choice of reviewing all of the electronic information or only a sample.
- The requesting party was to formulate a search procedure and notify the producing party of the procedure.

^{225.} Zubulake v. UBS Warburg LLC (Zubulake I), 217 F.R.D. 309, 324 (S.D.N.Y. 2003).

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- The producing party was to be provided an opportunity to object to the search procedure.
- The expert was to execute the search.²²⁶

At that point, the court provided two alternatives. In the first option, the requesting party was to review all the documents and the producing party was to review only the documents the requesting party requested for privilege and confidentiality.²²⁷ In the second option, the producing party was to review all the documents for privilege and confidentiality and produce only non-privileged documents already marked with a confidentiality designation. The choice between the alternatives was left to the producing party.²²⁸

One disadvantage of the *Rowe* court's protocol is that, in the end, the electronic information is exchanged in hard-copy form. Such hard-copy productions are not searchable, which defeats one of the major advantages of discovery of electronic information. One court addressed this problem by requiring the producing party to produce not only Bates-numbered hard copies, but also the backup tape from which the hard copies were made.²²⁹

Another problem with the *Rowe* court's protocol is the possibility that the producing party will challenge the authenticity of any documents produced in this fashion at trial.²³⁰ This problem would seem to be even greater when the information is produced electronically.

^{226.} Rowe Entm't, Inc., v. William Morris Agency, Inc., 205 F.R.D. 421, 433 (S.D.N.Y. 2002).

^{227.} Id.

^{228.} Id. The alternatives available to the producing party included: (1) The requesting party was to perform an "attorneys'-eyes-only" review of the documents in the form that it chose (hard copy or on a screen) and provide copies of documents to be produced to the producing party in hard-copy with Bates numbers; then the producing party was to review the documents for confidentiality privilege. Id. (2) The producing party was to review the electronic information identified by the requesting party and produce responsive documents marked with confidentiality designations as appropriate and with privileged material redacted. Id. The producing party was also to produce a privilege log. Id.

^{229.} Murphy Oil USA, Inc. v. Fluor Daniel, Inc., No. Civ.A. 99-3564, 2002 WL 246439, at *8 (E.D. La. Feb. 19, 2002). Note that some document-handling vendors provide a software package that allows e-mails, and perhaps other electronic documents, to be electronically Bates labeled.

^{230.} See OpenTV v. Liberate Techs., 219 F.R.D. 474, 478 (N.D. Cal. 2003) (noting that the producing party offered to authenticate the electronic information produced).

B. ABA Civil Discovery Standards' Electronic Discovery Protocol

The ABA Civil Discovery Standards propose a protocol for the discovery of electronic information:

Attorney-Client Privilege and Attorney Work Product.

To ameliorate attorney-client privilege and work product concerns attendant to the production of electronic data, the parties should consider stipulating to the entry of a court order:

- a. Appointing a mutually-agreed, independent information technology consultant as a special master, referee, or other officer or agent of the court such that extraction and review of privileged or otherwise protected electronic data will not effect a waiver of privilege or other legal protection attaching to the data.
- b. Providing that production to other parties of attorney-client privileged or attorney work-product protected electronic data will not effect a waiver of privilege or work product protection attaching to the data. In stipulating to the entry of such an order, the parties should consider the potential impact that production of privileged or protected data may have on the producing party's ability to maintain privilege or work-product protection vis-à-vis third parties not subject to the order.
- c. Providing that extraction and review by a mutually-agreed independent information technology consultant of attorney-client privileged or attorney work-product protected electronic data will not effect a waiver of privilege or work product protection attaching to the data.
- d. Setting forth a procedure for the review of the potentially responsive data extracted under subdivision (a), (b), or (c). The order should specify that adherence to the procedure precludes any waiver of privilege or work product protection attaching to the data. The order may contemplate, at the producing party's option:
 - i. Initial review by the producing party for attorney-client privilege or attorney work product protection, with production of the unprivileged and unprotected data to follow, accompanied with a privilege log; or
 - ii. Initial review by the requesting party, followed by:
 - A. Production to the producing party of all data deemed relevant by the requesting party, followed by
 - B. A review by the producing party for attorney-client privilege or attorney work product protection. Before agreeing to this procedure, the producing party should consider the potential impact that it may have on the producing party's abil-

ity to maintain privilege or work-product protection attaching to any such data if subsequently demanded by non-parties. The court's order should contemplate resort to the court for resolution of disputes concerning the privileged or protected nature of particular electronic data.

- e. Prior to receiving any data, any mutually-agreed independent information technology consultant should be required to provide the court and the parties with an affidavit confirming that the consultant will keep no copy of any data provided to it and will not disclose any data provided other than pursuant to the court's order or parties' agreement. At the conclusion of its engagement, the consultant should be required [to] confirm under oath that it has acted, and will continue to act, in accordance with its initial affidavit.
- f. If the initial review is conducted by the requesting party in accordance with subsection (d)(ii), the requesting party should provide the court and the producing party an affidavit stating that the requesting party will keep no copy of data deemed by the producing party to be privileged or work product, subject to final resolution of any dispute by the court, and will not use or reveal the substance of any such data unless permitted to do so by the court.²³¹

IX. RETURNING INADVERTENTLY PRODUCED PRIVILEGED ELECTRONIC INFORMATION

The problem of inadvertently-produced privileged documents has always plagued the discovery process. A party that inadvertently produces a privileged document is in danger of having the privilege associated with the documents, and potentially the subject matter of the documents, waived. The *Rowe* and ABA protocols both recognize the risk, and the *Rowe* protocol allows the producing party to choose between reviewing documents for privilege prior to inspection by the requesting party or after the requesting party has identified the documents it wishes copied.²³² In recent years, parties to the litigation have mitigated those risks by agreeing that if either party inadvertently produces privileged docu-

^{231.} ABA CIVIL DISCOVERY STANDARDS, Standard 32 (Aug. 2004), http://www.abanet.org/litigation/discoverystandards/2004civildiscoverystandards.pdf (containing the approved amendments to Standard 32) (on file with the St. Mary's Law Journal).

^{232.} Rowe Entm't, Inc., v. William Morris Agency, Inc., 205 F.R.D. 421, 433 (S.D.N.Y. 2002).

ments, the documents can be retrieved under certain circumstances.

These risks become even greater with the discovery of electronic information. The increased volume of material and the difficulty associated with reviewing the documents using the current technology make inadvertent production of privileged information even more likely. Recognizing this risk, the Civil Rules Advisory Committee proposed a revision to Rule 26(b)(5), requiring the production of a privilege log that provides for the return of inadvertently produced privileged information. Such provisions are now commonly referred to as "snap-back" or "claw-back" provisions:

(B) Privileged information produced. When a party produces information without intending to waive a claim of privilege [the party] may, within a reasonable time, notify any party that received the information of its claim of privilege. After being notified, a party must promptly return or destroy the specified information and any copies. The producing party must comply with Rule 26(b)(5)(A) with regard to the information and preserve it pending a ruling by the court.²³³

X. PRACTICE TIPS

Based on the preceding analysis, the following practice tips are offered to assist practitioners and their clients with potential electronic discovery issues.

A. Document Retention

- 1. Create a document retention policy for electronic information (not just e-mail) and police it.
- 2. Establish an ongoing working relationship between in-house counsel and IT personnel. Learn the basics about the electronic systems the company uses so that you can educate the court. Educate the IT personnel about any ongoing legal matters and the need for preservation.
- 3. Consult with IT personnel when you are negotiating the terms of document preservation and production. Know what is possible

^{233.} Memorandum from the Honorable Lee H. Rosenthal, Chair, Advisory Committee on Federal Rules of Civil Procedure to the Honorable David F. Levi, Chair, Standing Committee on Rules of Practice & Procedure (May 17, 2004), at 27, http://www.uscourts.gov/rules/comment2005/CVAug04.pdf (containing proposed changes to Rule 26(b)(5)(B)) (on file with the St. Mary's Law Journal).

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and what is not possible, and make sure that IT understands the need to preserve promptly.

- 4. Outline a detailed protocol to preserve electronic documents in the event of a claim, as well as a specific plan for suspension and recycling of backup tapes if necessary.
- 5. Train an IT representative to act as a Rule 30(b)(6) witness to present when electronic data storage and retention may be an issue.
- 6. Encourage clear communication among IT, in-house, and outside counsel.

B. Ensuring Compliance with Preservation Obligations

- 1. Respond as soon as possible to document preservation letters (informing of a possible claim and the necessity to preserve documents) and be clear about what you will and will not do. Document all communications in writing.
- 2. As soon as a reasonable apprehension of litigation exists, issue a litigation hold and follow up to make sure that it is being followed. Document the litigation hold and the follow up.
- 3. Identify and interview key players to understand their data storage and archiving practices. Start with the people that will be identified in the initial disclosures. Remind them of all the places where such information might be stored (cell phones, personal digital assistants, etc.).
- 4. Contact IT immediately to preserve potentially relevant data upon receipt of a document preservation letter or similar notice. Document this contact as well.
- 5. Document all efforts to identify responsive material. It may be needed in an affidavit to show the good faith efforts undertaken in the review/collection process.
- 6. Consider and offer alternatives to onerous document requests, such as sampling. This makes you look like the reasonable party if a dispute goes to the judge.
- 7. Anticipate problems in gathering information that might come from retired hardware, obsolete programs, switched hard drives, and cubbyholes where "pack rats" of the IT (or paper) variety might hide documents.
 - 8. Periodically reissue the litigation hold.

C. Rule 26(f) Conference

- 1. Consider sending a notice to your opposing counsel, well before the Rule 26(f) conference, that you intend to discuss discovery of electronic information.
- 2. Consider using the ABA Civil Discovery Standards electronic discovery topics as the agenda for discussing the discovery of electronic information.
- 3. Consider agreeing on a protocol for the discovery of electronic information.

D. Document Requests

- 1. Consider specifying the form of production in your requests for production.²³⁴
- 2. Tailor your discovery requests to discover relevant information.

E. Burdensome Document Requests

- 1. Consider moving for protective order requesting cost-shifting.
- 2. If you are in a Texas state court, be sure to follow the procedures set out in Rule 196.4 to object to discovery requests seeking documents not accessible in the ordinary course of business.²³⁵
- 3. If a response to a document request appears to result in cost-shifting for accessible or active data, consider moving for a protective order asking the court to prohibit the cost-shifting.

F. Inadvertent Production of Privileged Documents

Consider including a "snap-back" or "claw-back" provision in the protective order governing the production of confidential information.²³⁶

^{234.} See Tex. R. Civ. P. 196.4 (indicating that a requesting party must specify the format for production when seeking discovery of electronic information).

^{235.} See id. (explaining that the party responding to a discovery request must state an objection if they are unable to retrieve the data requested, through reasonable efforts).

^{236.} See generally Kenneth K. Dort & George R. Spatz, Discovery in the Digital Era: Considerations for Corporate Counsel, 20 Comp. & Int'l Law. 11 (2003) (providing additional practice tips).

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XI. CONCLUSION

As Judge Scheindlin observed, "[t]he subject of the discovery of electronically stored information is rapidly evolving."²³⁷ The many new insights recited in the *Zubulake* cases, the *Rowe* case, the Report of the Civil Rules Advisory Committee, the ABA's Civil Discovery Standards, and the other materials recited herein are likely just the beginning of the efforts of the bar and the courts to gain control of the discovery of electronic information. Litigation counsel should watch for these developments as they will likely further define procedures for managing the discovery of electronic information.

^{237.} Zubulake v. UBS Warburg LLC (Zubulake V), 229 F.R.D. 422, 440 (S.D.N.Y. 2004).

APPENDIX A

ABA CIVIL DISCOVERY STANDARDS (Aug. 2004), http://abanet.org/litigation/discoverystandards/2004civildiscovery standards.pdf (relating to electronic discovery).

VIII. TECHNOLOGY

- 29. Electronic Information.
 - a. Identifying Electronic Information. In identifying electronic data that parties may be called upon, in appropriate circumstances, to preserve or produce, counsel, parties and courts should consider
 - i. The following types of data:
 - A. Email (including attachments);
 - B. Word processing documents;
 - C. Spreadsheets;
 - D. Presentation documents;
 - E. Graphics;
 - F. Animations;
 - G. Images;
 - H. Audio, video and audiovisual recordings; and
 - I. Voicemail.
 - ii. The following platforms in the possession of the party or a third person under the control of the party (such as an employee or outside vendor under contract):
 - A. Databases;
 - B. Networks;
 - C. Computer systems, including legacy systems (hardware and software);
 - D. Servers;
 - E. Archives;
 - F. Back up or disaster recovery systems;
 - G. Tapes, discs, drives, cartridges and other storage media;
 - H. Laptops;
 - I. Personal computers;
 - J. Internet data;
 - K. Personal digital assistants;
 - L. Handheld wireless devices;

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- M. Mobile telephones;
- N. Paging devices; and
- O. Audio systems, including voicemail.
- iii. Whether potentially producible electronic data may include data that have been deleted but can be restored.
- b. Discovery of Electronic Information.
 - i. Document requests should clearly state whether electronic data is sought. In the absence of such clarity, a request for "documents" should ordinarily be construed as also asking for information contained or stored in an electronic medium or format.
 - ii. A party should specify whether electronic information should be produced in hard copy, in electronic form or, in an appropriate case, in both forms. A party requesting information in electronic form should also consider:
 - A. Specifying the format in which it prefers to receive the data, such as:
 - I. Its native (original) format, or
 - II. A searchable format.
 - B. Asking for the production of metadata associated with the responsive data i.e., ancillary electronic information that relates to responsive electronic data, such as information that would indicate whether and when the responsive electronic data was created, edited, sent, received and/or opened.
 - C. Requesting the software necessary to retrieve, read or interpret electronic information.
 - D. Inquiring as to how the data are organized and where they are stored.
 - iii. A party who produces information in electronic form ordinarily need not also produce hard copy to the extent that the information in both forms is identical or the differences between the two are not material.
 - iv. In resolving a motion seeking to compel or protect against the production of electronic information or

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related software, or to allocate the costs of such discovery, the court should consider such factors as:

- A. The burden and expense of the discovery, considering among other factors the total cost of production in absolute terms and as compared to the amount in controversy;
- B. The need for the discovery, including the benefit to the requesting party and the availability of the information from other sources;
- C. The complexity of the case and the importance of the issues;
- D. The need to protect the attorney-client privilege or attorney work product, including the burden and expense of a privilege review by the producing party and the risk of inadvertent disclosure of privileged or protected information despite reasonable diligence on the part of the producing party;
- E. The need to protect trade secrets, and proprietary or confidential information;
- F. Whether the information or the software needed to access it is proprietary or constitutes confidential business information;
- G. The breadth of the discovery request;
- H. Whether efforts have been made to confine initial production to tranches or subsets of potentially responsive data;
- I. The extent to which production would disrupt the normal operations and processing routines of the responding party;
- J. Whether the requesting party has offered to pay some or all of the discovery expenses;
- K. The relative ability of each party to control costs and its incentive to do so;
- L. The resources of each party as compared to the total cost of production;
- M. Whether responding to the request would impose the burden or expense of acquiring or creating software to retrieve potentially responsive electronic data or otherwise require the responding party to render inaccessible electronic information

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- accessible, where the responding party would not do so in the ordinary course of its day-to-day use of the information;
- N. Whether responding to the request would impose the burden or expense of converting electronic information into hard copies, or converting hard copies into electronic format;
- O. Whether the responding party stores electronic information in a manner that is designed to make discovery impracticable or needlessly costly or burdensome in pending or future litigation, and not justified by any legitimate personal, business, or other non-litigation related reason; and
- P. Whether the responding party has deleted, discarded or erased electronic information after litigation was commenced or after the responding party was aware that litigation was probable and, if so, the responding party's state of mind in doing so.
- v. In complex cases and/or cases involving large volumes of electronic information, the court may want to consider using an expert to aid or advise the court on technology issues.
- vi. The parties are encouraged to stipulate as to the authenticity and identifying characteristics (date, author, etc.) of electronic information that is not self-authenticating on its face.

. .

31. Discovery Conferences.

- a. At the initial discovery conference, the parties should confer about any electronic discovery that they anticipate requesting from one another, including:
 - i. The subject matter of such discovery.
 - ii. The time period with respect to which such discovery may be sought.
 - iii. Identification or description of the party-affiliated persons, entities or groups from whom such discovery may be sought.

- iv. Identification or description of those persons currently or formerly affiliated with the prospective responding party who are knowledgeable of the information systems, technology and software necessary to access potentially responsive data.
- v. The potentially responsive data that exist, including the platforms on which, and places where, such data may be found as set forth in Standard 29(a).
- vi. The accessibility of the potentially responsive data, including discussion of software, hardware or other specialized equipment that may be necessary to obtain access.
- vii. Whether potentially responsive data exist in searchable form.
- viii. Whether potentially responsive electronic data will be requested and produced:
 - A. In electronic form or in hard copy, and
 - B. If in electronic form, the format in which the data exist or will be produced
- ix. Data retention policies applicable to potentially responsive data.
- x. Preservation of potentially responsive data, specifically addressing (A) preservation of data generated subsequent to the filing of the claim, (B) data otherwise customarily subject to destruction in ordinary course, and (C) metadata reflecting the creation, editing, transmittal, receipt or opening of responsive data.
- xi. The use of key terms or other selection criteria to search potentially responsive data for discoverable information.
- xii. The identity of unaffiliated information technology consultants whom the litigants agree are capable of independently extracting, searching or otherwise exploiting potentially responsive data.
- xiii. Stipulating to the entry of a court order providing that production to other parties, or review by a mutually-agreed independent information technology consultant, of attorney-client privileged or attorney work-product protected electronic data will not effect a waiver of privilege or work product protection.

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xiv. The appropriateness of an inspection of computer systems, software, or data to facilitate or focus the discovery of electronic data.

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- xv. The allocation of costs.
- b. At any discovery conference that concerns particular requests for electronic discovery, in addition to conferring about the topics set forth in subsection (a), the parties should consider, where appropriate, stipulating to the entry of a court order providing for:
 - i. The initial production of tranches or subsets of potentially responsive data to allow the parties to evaluate the likely benefit of production of additional data, without prejudice to the requesting party's right to insist later on more complete production.
 - ii. The use of specified key terms or other selection criteria to search some or all of the potentially responsive data for discoverable information, in lieu of production.
 - iii. The appointment of a mutually-agreed, independent information technology consultant pursuant to Standard 32(a) to:
 - A. Extract defined categories of potentially responsive data from specified sources, or
 - B. Search or otherwise exploit potentially responsive data in accordance with specific, mutually-agreed parameters.

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