

FOR PUBLICATION

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

UNITED STATES OF AMERICA,
Plaintiff-Appellee,

v.

WALTER LIEW,
Defendant-Appellant.

No. 14-10367

D.C. No.
4:11-cr-00573-JSW-1

UNITED STATES OF AMERICA,
Plaintiff-Appellee,

v.

USA PERFORMANCE
TECHNOLOGY, INC.,
Defendant-Appellant.

Nos. 14-10384

D.C. No.
4:11-cr-00573-JSW-4

OPINION

Appeals from the United States District Court
for the Northern District of California
Jeffrey S. White, District Judge, Presiding

Argued and Submitted November 16, 2016
San Francisco, California

Filed May 5, 2017

Before: Mary M. Schroeder, Kim McLane Wardlaw,
and John B. Owens, Circuit Judges.

Opinion by Judge Owens

SUMMARY*

Criminal Law

The panel affirmed in part, reversed in part, vacated in part, and remanded, in a case in which Walter Liew and his company USA Performance Technology, Inc. were convicted of multiple offenses including conspiracy and attempt to commit economic espionage and theft of trade secrets, possession of misappropriated trade secrets, and conveying trade secrets related to E.I. du Pont de Nemours and Company chloride-route technology for producing titanium dioxide (TiO₂).

The panel held that the district court did not commit reversible error in giving a jury instruction regarding compilations; or in rejecting a public-disclosure instruction, an instruction regarding disclosure to a single recipient, and reverse-engineering/general-knowledge instructions.

The panel held that the defendants waived their right to obtain review of their arguments that the district court's conspiracy and attempt instructions constructively amended the indictment and erroneously allowed the jury to convict

* This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

without finding that the trade secrets involved were in fact trade secrets. The panel held that even if the issue were reviewable, *United States v. Nosal*, 844 F.3d 1024 (9th Cir. 2016), establishes that the conspiracy and attempt instructions were legally correct and did not constructively amend the indictment; and that any error was harmless.

The panel rejected the defendants' sufficiency-of-the-evidence challenges relating to substantive trade secret counts. The panel explained that the government was not required to prove that no disclosures of DuPont's TiO₂ technology occurred; instead, it needed to establish that DuPont took reasonable measures to guard that technology. The panel held that the defendants failed to show that the sale of an Ashtabula, Ohio factory was unreasonable, particularly under the Economic Espionage Act's then-requirement that trade secrets not be generally known to "the public." The panel concluded that a rational juror could have found that the high-grade ore technology used at the Antioch, California and Ashtabula plants was not part of the trade secrets covered by Counts 6–9, which involved low-grade ore technology; that DuPont took reasonable measures to protect its technology; and that such technology was not readily ascertainable by or generally known to the public.

The panel reversed the defendants' convictions for conspiracy to obstruct justice by agreeing to file a false answer in civil litigation with DuPont. The panel wrote that the statement in the defendants' answer – that they "never misappropriated any information from DuPont or any of its locations" – tacked too close to a general denial to constitute obstruction of justice.

The panel reversed Liew's conviction for witness tampering. The panel wrote that standing alone, evidence that Liew told a witness not to mention anything about former DuPont employees who worked for USA Performance Technology because doing so would not be good for the witness or his family was insufficient to prove beyond a reasonable doubt that Liew intimidated, threatened, or corruptly persuaded the witness to prevent the use of his testimony in the DuPont lawsuit.

The panel held that the district court erred by not requiring the prosecution to disclose the FBI's interviews with a deceased co-conspirator, where the defendants produced a declaration by the co-conspirator's attorney that supported an inference that the rough notes contained favorable material. The panel remanded for in camera review of the material to determine whether disclosure might have affected the outcome of the trial.

COUNSEL

Dennis P. Riordan (argued), Donald M. Horgan, Gary K. Dubkoff, and Matthew C. Dirkes, Riordan & Horgan, San Francisco, California, for Defendants-Appellants.

Merry Jean Chan (argued), Assistant United States Attorney; Barbara J. Valliere, Chief, Appellate Division; Brian Stretch, United States Attorney; United States Attorney's Office, San Francisco, California; for Plaintiff-Appellee.

OPINION

OWENS, Circuit Judge:

Defendants Walter Liew and his company USA Performance Technology, Inc. (“USAPTI”) appeal from their eight counts of conviction under the Economic Espionage Act of 1996 (“EEA”) for conspiracy and attempt to commit economic espionage and theft of trade secrets, possession of misappropriated trade secrets, and conveying trade secrets related to E.I. du Pont de Nemours and Company (“DuPont”) chloride-route technology for producing titanium dioxide (“TiO₂”). Defendants also appeal from their convictions for conspiracy to tamper with witnesses and evidence, and Liew appeals from his conviction for witness tampering, which arose out of Liew’s conduct in a civil lawsuit filed by DuPont. We affirm in part, reverse and vacate in part, and remand for resentencing and in camera review of potential *Brady* material.

FACTUAL BACKGROUND

A. DuPont and Titanium Dioxide Production

If you wanted to learn about the secretive and lucrative world of titanium dioxide production, then this was the trial for you. TiO₂ is a white pigment extracted from ore and used in a wide variety of products, from paint to the filling in Oreo cookies. In the 1940s, scientists developed a chloride process to manufacture TiO₂, which was less labor intensive and costly, produced less waste, and resulted in a better product than the sulfate process originally used to produce TiO₂. Production plants in the United States now exclusively use the chloride process, while plants in Europe and Asia

(including China) continue to use the less efficient sulfate process.

Since the 1940s, DuPont has been a leader in the TiO₂ industry and the chloride process. It opened its first chloride plant in Edgemoor, Delaware (“Edgemoor”) in 1948, and its second in New Johnsonville, Tennessee (“Johnsonville”) in 1958. It opened its Antioch, California plant in 1962. While the Edgemoor and Johnsonville plants were designed to use “a wide range of ores,” the Antioch plant used only high-grade ore (ore with high levels of titanium), so it lacked some of the features of the Edgemoor and Johnsonville plants.

In 1967, DuPont agreed to build a plant for Sherwin-Williams in Ashtabula, Ohio, modeled after the Antioch high-grade ore plant. Sherwin-Williams agreed that it and any successor would maintain the confidentiality of DuPont’s chloride-route technology for fifteen years. Sherwin-Williams sold the Ashtabula plant in the 1970s.

During the following decades, DuPont expanded existing facilities and built new ones, including the Kuan Yin plant in Taiwan. Kuan Yin, an entirely new “greenfield” facility, was designed to process ore at lower grades than those used at the Antioch or Ashtabula plants.

Starting in 2000, DuPont took steps to build a TiO₂ plant in Dongying, China. By 2007, DuPont had obtained a number of governmental approvals required for the project, but by 2008, the project had stalled because DuPont could no longer get in touch with government officials and “couldn’t get any information” about the status of the project. During this time, DuPont met with the Pangang Group (“Pangang”), a Chinese company, to discuss purchasing ore, but DuPont

later determined that Pangang's ore was "totally unsuitable" for the planned facility.

DuPont remains the world's largest TiO₂ producer, and has the most competitive chloride process, in part due to its ability to use lower-grade ore. Its TiO₂ chloride-route technology is both "unique" and "very valuable" to DuPont.

B. Liew and His China Campaign

Liew is a U.S. citizen with a master's degree in electrical engineering. In the early 1990s, Liew started his company LH Performance ("Performance Group"). During this period, Liew designed an acrylic resin plant in China.

In the early 1990s, the Chinese government attempted to buy TiO₂ technology from DuPont so it could build its own plant. But because DuPont was charging \$75 million to license its technology, the Chinese government instead decided to go with a molten-salt chlorination process developed in the former Soviet Union. In 1991, Liew attended a banquet hosted by high-ranking Chinese officials who thanked Liew "for being a patriotic overseas Chinese who [had] . . . provided key technologies" to China. At the banquet, the Secretary General of China's State Council gave Liew "directives" regarding what he could continue contributing to China, and Liew later received a list of "key task[s]" that highlighted chloride TiO₂ production as "one of the more important projects."

In the years that followed, Liew tried to obtain the resources necessary to design a TiO₂ facility. In 1997, he met Robert Maegerle and Tim Spitler, two former DuPont employees with experience at TiO₂ facilities: Maegerle as a

project engineer and Spitler as a chemical engineer. Upon their retirement from DuPont, both Maegerle and Spitler certified that they had returned all “secret or confidential” materials to DuPont and agreed “not to use or divulge . . . any secret or confidential information” without DuPont’s permission. Liew hired them both as consultants. While their initial work for Liew was limited, their involvement increased in the 2000s.

In 2004, Liew wrote a letter to the chairman of Pangang explaining that after learning of China’s need for “titanium white by chlorination technology,” his company had performed “many years of follow-up research and application” and now had “mastery of the complete DuPont way of titanium white by chlorination.” He boasted that his company employed “experts” who had worked “for companies like Dow Chemical, DuPont . . . et cetera,” and that his company possessed “its own proprietary technologies which are transferable.” And while Dupont had “the most advanced [TiO₂ chloride process] technology,” its “technology has always been highly monopolized, and absolutely not transferable,” whereas his company now possessed chloride-route technology that was “transferable without involving intellectual property rights issues.”

In November 2005, Pangang and Performance Group signed a \$6.18 million contract. Performance Group would upgrade the Chinese molten-salt plant into a chloride process facility. While Liew hired seven to ten employees to work on this project, none had any experience with TiO₂ technology. Maegerle, the former DuPont employee, served as the “in-house expert,” despite referring to himself as “an oxidizer man, not a chlorinator man” and stating that the TiO₂ chloride process “was not his process.”

In January 2009, Liew filed for bankruptcy on behalf of Performance Group, but did not disclose the molten-salt upgrade project, or any patents or trade secrets.¹ In February 2009, Liew formed USAPTI and operated it out of the same building as Performance Group, with many of the same employees.

In May 2009, USAPTI signed a \$17.8 million contract with Pangang to build a TiO₂ chloride facility in Chongqing, China. Pangang retained two third-party consulting firms to review the project, and their 2009 report concluded “that DuPont is the source of the [project] technology” and “that the technology has come from the Edgemoor plant at DuPont headquarters.” The consultants recommended that Pangang seek “legal counsel to avoid any possible delays.”

Despite these concerns, Liew’s company continued to work on both projects and rely on Maegerle and Spitler as consultants. Liew paid Maegerle \$370,000 between 2004 and 2011 for his consulting work. And Liew took notes of his conversations with Spitler, where they discussed how a TiO₂ plant would fail “without . . . startup people and maintenance experienced people,” “[e]ven with the best technology with stolen prints.” Liew also obtained documents from Spitler, including a “reference sheet” against which Liew checked numbers. According to Liew, Spitler told him that there was “a very small problem to use your knowledge [of TiO₂ processes] within 5 years after you left DuPont. After

¹ Liew’s conduct in these bankruptcy proceedings formed the basis for his two convictions for making false statements in bankruptcy proceedings and his additional conviction for making a false oath in bankruptcy proceedings. He does not challenge these convictions on appeal.

5 years, you are a free man as far as DuPont [is] concern[ed.]”

C. The DuPont Investigation and Civil Suit Against Liew and USAPTI

In 2009, DuPont learned that USAPTI might be using DuPont information, and in August 2010, DuPont received an anonymous letter about USAPTI employee John Liu, who also worked for Chevron. The letter stated that Liew and Liu had “embezzled DuPont technology and sold it to China.” DuPont began investigating and contacted Chevron, which interviewed Liu and searched his work computer.

On March 30, 2011, a DuPont investigator went to Liu’s house to interview him. Coincidentally, Liew and his wife Christina Liew (“Christina”) were having dinner at Liu’s house that same night. Liew hid in the basement, and during the interview, Christina told Liu in Mandarin that he “shouldn’t let people come into [his] house.” After the investigator left, the Liewes told Liu that he “should not really tell other people’s name[s]” to the investigator. The next day, the Liewes returned to Liu’s home and helped him draft a letter to Chevron complaining that Chevron gave DuPont his home address. Liu never sent the letter. Liew also told Liu that he should not allow “strange people” to enter his house, and that he should never speak with anyone without consulting a lawyer. The Liewes continued to visit Liu and speak with him about the investigation, and they discussed forming a new company with Liu.

In April 2011, DuPont sued Liew, USAPTI, and Liu for trade secret misappropriation. Shortly after the lawsuit was filed, Christina Liew drove Liu to meet with a lawyer, and

several days later Liew met with Liu to discuss the case. During that meeting, Liew told Liu not to reveal the names of Maegerle and Spitler (who were not named in the lawsuit), and that it would not be “good for anybody, not even good for [Liu’s] family” if Liu revealed their names. And while the civil action was pending, Liew asked other USAPTI employees to erase DuPont-related files from company servers and compile lists of patents related to TiO₂. During an interview with a DuPont investigator, Liew said that had he wanted to use DuPont technology, he “would have hired former DuPont employees,” and not Chevron employees. He failed to mention his possession of DuPont materials or his work with former DuPont employees Maegerle and Spitler.

In May 2011, Liew and USAPTI filed their answer to the trade secret complaint. The answer stated that they never “wrongfully obtained or possess[ed] any” DuPont trade secrets related to its TiO₂ chloride process or “misappropriated any information from DuPont or any of its locations.” A few weeks later, DuPont again interviewed Liu. Although DuPont had agreed to dismiss the lawsuit against Liu if Liu cooperated, Liu told the DuPont investigator that he had not seen any stolen DuPont materials and again did not mention Maegerle or Spitler. He later explained that he did this to “honor [his] promise” to Liew.

D. The Criminal Investigation and Indictment

The FBI began investigating whether USAPTI and Liew stole DuPont’s trade secrets and sold them to China. Through search warrants, agents located materials relevant to DuPont’s trade secrets and USAPTI’s dealings with Pangang (1) in a safe deposit box, (2) at Liew and Maegerle’s residences, and (3) at the USAPTI offices. Found at Liew’s home was a

binder labeled “Tim” that contained handwritten notes of Liew’s conversations with Spitler. A typed document called “Notes from Tim Spitler” was discovered on a hard drive in the safe deposit box. Both documents contained Liew’s note that “[e]ven with [the] best technology with stolen prints,” experienced personnel were needed for a successful facility.

After two initial indictments, a grand jury returned a second superseding indictment (“indictment”) in March 2013. It charged Liew, his wife Christina, Maegerle, and USAPT² in Counts 1–3 and 5–9 with various espionage charges, and alleged five different trade secrets that Liew and his co-defendants had stolen.³ Count 10 charged a conspiracy by

² The indictment also named several other defendants, including Pangang and its subsidiaries. These defendants are not parties to this appeal.

³ Count 1: conspiracy to commit economic espionage in violation of 18 U.S.C. § 1831(a)(5); Count 2: conspiracy to commit theft of trade secrets in violation of 18 U.S.C. § 1832(a)(5); Count 3: attempted economic espionage in violation of 18 U.S.C. § 1831(a)(2) and (4); Count 5: attempted theft of trade secrets in violation of 18 U.S.C. § 1832(a)(2) and (4); Counts 6, 7, and 9: possession of trade secrets in violation of 18 U.S.C. § 1832(a)(3); and Count 8: conveying of trade secrets in violation of 18 U.S.C. § 1832(a)(2).

The five trade secrets were described as: (1) Trade Secret 1, “[t]he DuPont chloride-route process to manufacture TiO₂,” which included Trade Secrets 2 through 5; (2) Trade Secret 2, DuPont Drawing No. W1245258, titled Edge Moor Plant Oxidation W/RPS System Drawing; (3) Trade Secret 3, DuPont Accession Report No. 18135, titled “Improved Mixing Correlation for the TiC14 Oxidation Reaction Computer Model;” (4) Trade Secret 4, DuPont Flow Sheet No. EK2411, titled “Edge Moor Pigments Plant Flow Sheet – Reaction Area; and (5) Trade Secret 5, Dupont Document EM-C-8510-0148, titled “60,000 Metric Tons Per Year Scope/Basic Data” (“Basic Data Document”).

Maegerle, Liew, and USAPTI to violate 18 U.S.C. § 1512(c) by obstructing an official proceeding in violation of 18 U.S.C. § 1512(k), as they agreed to file an answer to DuPont’s civil complaint that contained false statements—specifically, the assertion that defendants “never misappropriated any information from DuPont or any of its locations.” Count 11 charged Liew with witness tampering in violation of 18 U.S.C. § 1512(b)(1) for advising Liu that he should not discuss the former DuPont employees at USAPTI because “it would not be good” for Liu or his family.⁴

E. The Trial

Liew, USAPTI, and Maegerle went to trial. Spitler, who was not originally indicted with defendants, was scheduled to enter a guilty plea to similar charges but committed suicide the week that he was scheduled to sign the plea agreement. Spitler met several times with the prosecution team, and an FBI report summarizing those interviews (“302 report”) was produced to the defense in discovery. The agents’ rough notes of these interviews were not produced.

At trial, the parties sharply disagreed over the appropriate jury instructions. Relevant to this appeal, defendants proposed three instructions: (1) a public disclosure instruction stating that “[i]nformation is ‘known to the public’ when it is published in [a] patent, textbook, periodical, or other publicly available source” and is “‘readily ascertainable’ if the

⁴ Counts 12–22 of the indictment are not at issue in this appeal. Those counts charged Liew and Christina with additional acts of witness and evidence tampering, with making false statements, and with filing false tax returns, in addition to the bankruptcy-related charges discussed *supra* n.1.

information could be easily calculated or derived”; (2) a reverse engineering instruction providing that it does not constitute trade secret misappropriation to develop a process independently or “by working backwards from publicly available materials”; and (3) a general knowledge instruction providing that employees may “change employers or start their own companies relying on the general knowledge, skills, and experience obtained” through previous employment. The district court rejected these proposed instructions, finding that some of them were “not appropriate[ly] . . . phrased” and that “all of the aspects of the defenses” raised were adequately “captured by the overall instructions.”

Defendants also objected to the inclusion of “a special instruction on compilations and combinations,” arguing that it would allow “individuals to vouch for the DuPont process’ uniqueness without presenting any evidence of what actually constitutes each and every part of that process.” Defendants requested that any instruction on compilations be given as part of the general trade secrets definition instruction. The district court overruled defendants’ objection, but did include the compilation instruction within the general trade secret instruction rather than separately. The given instruction incorporated the trade secret definition used by the EEA at the time the offenses were committed and at the time of trial, 18 U.S.C. § 1839(3) (2008), and further provided that trade secrets “can include compilations . . . of public information . . . when combined or compiled in a novel way,” even if a portion or “every individual portion” of that compilation “is generally known.” Additionally, the given instruction informed the jury that an employee’s “personal skills, talents or abilities . . . are not trade secrets” and that “facts and information acquired” during employment can only be trade secrets if they meet the given definition.

Defendants did not, however, object to the district court's instructions regarding the conspiracy and attempt charges. The district court instructed the jury that with respect to Counts 1 and 2, it was "not necessary for the government to prove that the information . . . that the alleged conspirators intended to convert was, in fact, a trade secret"; instead, the government was required to prove only that the conspirators "knowingly converted information that they reasonably believed was a trade secret[,] . . . because a defendant's guilt or innocence on this charge depends on what he believed the circumstances to be, not what they actually were." With respect to Counts 3 and 5, the district court instructed the jury that the government was "not required to prove that Trade Secret 1 was, in fact, a trade secret" but was "required to prove the defendant reasonably believed that the information the defendant intended to convert was a trade secret." Defendants objected to these instructions only to the extent that they did not also require defendants' reasonable belief to be "firm."

During closing arguments, both parties focused on the issue of whether the DuPont technology qualified as trade secret material. The government argued that the trade secrets were compilations of "information put together in a unique way" and therefore constituted trade secrets, even though some parts of them were "in the public domain." The government also argued that the trade secrets remained protected despite DuPont's sale of the Ashtabula plant because disclosure to a single competitor did not make information generally known to "the public," and because DuPont's other facilities involved more advanced low-grade ore technology than was used at Ashtabula. In contrast, defendants argued that DuPont had not taken reasonable measures to protect its technology, particularly because

DuPont had sold the Ashtabula plant, and that the technology was generally known or readily ascertainable, as Liew had developed USAPTI's technology through "years of research of patents and textbooks and articles."

In addition to arguing that the government had failed to prove that DuPont's technology remained protected as trade secret material, defendants argued that the evidence did not support convictions on Counts 10 and 11. Defendants argued that Liew was "an ordinary man . . . not used to search warrants or his world getting turned upside-down," and that although he had "probably use[d] the wrong words" when speaking to Liu or answering the civil complaint, it is "not a crime to assert defenses or constitutional rights." For Count 10 in particular, defendants argued that the charge was "outrageous," because "[i]t's not obstruction of justice to oppose the government" or "to oppose DuPont" and the civil answer simply reflected "the gist of [defendants' and Maegerle's] defense."

The jury convicted defendants on all counts. After the verdict was returned and before sentencing, defendants requested an evidentiary hearing on loss and also that the government produce the rough notes from the FBI's interviews of Spitler. Defendants submitted a declaration from Spitler's former attorney, David Houston, in which he averred that Spitler made statements during the interviews that were not reflected in the 302 report. In particular, Houston claimed that Spitler consistently denied "knowing involvement in a criminal conspiracy" and told the agents that when he retired, DuPont shipped him the boxes of documents that he later sold to Liew, so Spitler considered them to be valueless. Accordingly, defendants argued that the rough notes potentially contained *Brady/Giglio* material and could

“reflect favorably on Mr. Liew’s culpability.” The district court summarily denied defendants’ request for production of the rough notes. Defendants made the request again in response to the government’s sentencing memorandum, but the district court did not directly address this renewed request and instead proceeded to sentence defendants without conducting an evidentiary hearing.

At the sentencing hearing, the parties disputed the amount of loss attributable to defendants. DuPont informed the court that it could not determine lost profits because the stolen technology had not yet been used and that it also could not calculate the exact cost of developing its trade secrets without immense effort, but that the cost of the stolen secrets likely totaled “hundreds of millions of dollars.” Defendants argued that the loss to DuPont “was zero or negligible.” The district court adopted the Probation Office’s calculations of gain as an alternative measure, finding that “the only reasonable way to calculate loss [was] to use the defendants’ gain” of either \$22.5 million with expenses deducted or \$28 million with expenses. Because either amount would result in the same enhancement, the court applied a 22-level enhancement for DuPont’s loss.

Based on these enhancements and others that are not disputed on appeal, Liew’s guideline sentencing range was 210 to 262 months. The district court imposed a sentence of 180 months’ imprisonment and sentenced USAPTI to five years’ probation.⁵

⁵ Maegerle was sentenced to 30 months’ imprisonment. Christina pled guilty to conspiracy to tamper with evidence in violation of 18 U.S.C. § 1512(k), and was sentenced to three years’ probation.

STANDARD OF REVIEW

We review the formulation of jury instructions for abuse of discretion, but review *de novo* whether those instructions correctly state the elements of the offense and adequately cover the defendant’s theory of the case. *Peralta v. Dillard*, 744 F.3d 1076, 1082 (9th Cir. 2014) (en banc); *see also United States v. Whittemore*, 776 F.3d 1074, 1077–78 (9th Cir. 2015). “The ‘relevant inquiry is whether the instructions as a whole are misleading or inadequate to guide the jury’s deliberation.’” *United States v. Hofus*, 598 F.3d 1171, 1174 (9th Cir. 2010) (quoting *United States v. Frega*, 179 F.3d 793, 806 n.16 (9th Cir. 1999)).

We review *de novo* whether sufficient evidence supports a conviction and must determine “whether, ‘viewing the evidence in the light most favorable to the prosecution, *any* rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt.’” *United States v. Chung*, 659 F.3d 815, 823 (9th Cir. 2011) (quoting *Jackson v. Virginia*, 443 U.S. 307, 319 (1979)). “Under a sufficiency of the evidence inquiry, circumstantial evidence and inferences drawn from it may be sufficient to sustain a conviction, but mere suspicion or speculation cannot be the basis for creation of logical inferences.” *United States v. Lindsey*, 634 F.3d 541, 552 (9th Cir. 2011) (quoting *United States v. Bennett*, 621 F.3d 1131, 1139 (9th Cir. 2010)) (internal quotation marks and alterations omitted).

We review *de novo* both a district court’s ruling on a prosecutor’s duty to produce evidence under *Brady v. Maryland*, 373 U.S. 83 (1963), *United States v. Si*, 343 F.3d 1116, 1122 (9th Cir. 2003), and a denial of a motion for a new trial based on alleged *Brady* violations, *United States v.*

Antonakas, 255 F.3d 714, 725 (9th Cir. 2001).⁶ Challenges to convictions based on alleged *Brady* violations are also reviewed de novo. *United States v. Ross*, 372 F.3d 1097, 1107 (9th Cir. 2004).

When an issue is raised for the first time on appeal, we review for plain error, under which the court may reverse only if the appellant shows that there was (1) an error that (2) was clear or obvious and not subject to reasonable dispute that (3) affected the appellant’s substantial rights by affecting the outcome of the proceedings and (4) seriously affected the fairness, integrity, or public reputation of judicial proceedings. *United States v. Walls*, 784 F.3d 543, 546 (9th Cir. 2015).

DISCUSSION

A. EEA Background

“The EEA became law in October 1996 against a backdrop of increasing threats to corporate security and a rising tide of international and domestic economic espionage.” *United States v. Hsu*, 155 F.3d 189, 194 (3d Cir.

⁶ The government cites *United States v. Alvarez*, 358 F.3d 1194, 1210 (9th Cir. 2004), for the proposition that the Ninth Circuit “reviews discovery questions, including alleged rulings about *Brady*, . . . for abuse of discretion.” The district court’s ruling here, however, was not a discovery ruling like the ones discussed in *Alvarez*. Instead, it was made post-trial and was ostensibly related to a request (albeit not a formal motion) for a new trial. Accordingly, the correct standard of review for the *Brady* issues raised here is de novo. See *United States v. Doe*, 705 F.3d 1134, 1149–53 (9th Cir. 2013) (evaluating discovery rulings for abuse of discretion and then separately evaluating the material covered in those rulings de novo for alleged *Brady* violations).

1998). In “the absence of any comprehensive federal remedy” directed at trade secret theft, businesses were losing billions in stolen intellectual property, and prosecutors were forced to find creative ways of prosecuting these crimes. *Id.* The EEA was therefore intended to provide a “systematic approach” to combatting economic espionage. *Id.* at 194–95 (internal quotation marks omitted).

Relevant to this appeal, the EEA punishes both (1) “[e]conomic espionage,” which involves trade secret misappropriation intended to or done with the knowledge that it will “benefit any foreign government, foreign instrumentality, or foreign agent,” 18 U.S.C. § 1831; and (2) “[t]heft of trade secrets,” where the trade secret “is related to a product or service used in or intended for use in interstate or foreign commerce” and is knowingly converted “to the economic benefit of anyone other than the owner” with the intent or knowledge that the conversion “will[] injure any owner of that trade secret,” 18 U.S.C. § 1832. Although these provisions are very similar, § 1832 “is a general criminal trade secrets provision” requiring that the benefit be “economic,” while § 1831 “is designed to apply only when there is evidence of foreign government sponsored or coordinated intelligence activity” and may involve “any manner” of benefit. *Hsu*, 155 F.3d at 195–96 (internal quotation marks omitted).

At the time of the indictment and criminal trial at issue, the EEA defined trade secrets as “all forms and types of financial, business, scientific, technical, economic, or engineering information” where: “(A) the owner thereof has taken reasonable measures to keep such information secret; and (B) the information derives independent economic value, actual or potential, from not being generally known to, and

not being readily ascertainable through proper means by, the public.” 18 U.S.C. § 1839(3) (2015).

In 2016, the latter part of this definition was amended. The EEA now provides that to qualify as a trade secret, the information must “derive[] independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.” 18 U.S.C. § 1839(3) (2016); Defend Trade Secrets Act of 2016, Pub. L. No. 114-153, § 2(b)(1)(A), 130 Stat. 376, 380 (2016). This amended definition more closely tracks the Uniform Trade Secrets Act’s (“UTSA”) definition. *See* UTSA § 1(4).

This amended definition was not in effect at the time of defendants’ indictments, trial, and convictions. Therefore, this opinion only applies to the version of the EEA then in effect. We do not address any impact the 2016 amendments may have on subsequent EEA prosecutions.

B. Jury Instructions

Defendants challenge (1) the district court’s given instruction regarding compilations, and (2) its rejection of defendants’ proposed instructions. For the first time on appeal, defendants argue that the compilation instruction was erroneous because it omitted reference to a “limiting principle” they take from a statement in *UniRAM Tech., Inc. v. Taiwan Semiconductor Mfg. Co.*, 617 F. Supp. 2d 938, 942–44 (N.D. Cal. 2007), that a compilation cannot constitute a trade secret if “one skilled in the art could view the nonsecret elements and replicate the combination without undue difficulty.” This argument was never made to the

district court; however, it essentially mirrors defendants' argument that the court improperly excluded their proposed instructions, as does defendants' contention that the error in giving the compilation instruction was compounded by the omission of the other instructions. Those contentions will be addressed below.

With respect to the given compilation instruction, defendants fail to show that the instruction was incorrect, misleading, or inadequate. Defendants' argument that the instruction would allow the jury to think "that nearly anything can be a trade secret," is defeated by the plain language of the instruction, which requires that any compilation meet the requirements of the trade secret definition to be deemed a trade secret. Defendants do not dispute this statement of law, and in fact suggested language that was used verbatim by the district court in this instruction. Accordingly, the district court did not err in giving the compilation instruction.

The real dispute is whether the district court erred in excluding defendants' proposed instructions, particularly the combination of the reverse engineering and general knowledge instructions. "A defendant is entitled to have the judge instruct the jury on his theory of defense, provided that it is supported by law and has some foundation in the evidence," but a defendant is "not entitled to the instructions of his choice." *Whittemore*, 776 F.3d at 1078, 1080. On appeal, the defendant must show: "(1) that his theory has some foundation in evidence; (2) that it is supported by law; and (3) that the given instructions did not adequately encompass his theory." *Id.* at 1078. Defendants challenge the rejection of three proposed instructions but treat them as two issues.

The first issue is the public disclosure instruction, the omission of which defendants argue could have led the jury to believe that information published in a patent or “obscure trade publication” would not qualify as being “generally known to the public.” As the government argues, although defendants’ proposed instruction was legally correct, it was superfluous, as the given instructions adequately covered this issue by informing the jury that generally known or readily ascertainable information could not qualify as trade secret material.

Moreover, it was undisputed at trial that disclosure in patents and textbooks would destroy trade secret protection, with the government acknowledging during closing arguments that both patents and textbooks are “publicly available.” Instead, the dispute at trial was whether the material available in TiO₂-related patents and textbooks was the same material DuPont claimed as its trade secrets and whether the information in those patents and textbooks would enable an individual to design a TiO₂ chloride-route plant. For example, the government argued that “[t]he [necessary] information is not in textbooks” and that “textbooks and patents . . . don’t help you design a titanium dioxide plant.” Accordingly, the issue of whether patents and textbooks are generally known to the public was not contested and was adequately covered by the given instruction.

Defendants further argue, without citing any authority, that it was error not to instruct the jury that disclosure “to even a single recipient who is not legally bound to maintain [a trade secret’s] secrecy” destroys trade secret protection because, absent such instruction, the government was able to argue that the Antioch/Ashtabula technology remained a trade secret. To the extent that defendants now argue that the

district court should have given an additional disclosure instruction stating that disclosure to a single competitor destroys trade secret protection, this claim is subject to plain error review. *Walls*, 784 F.3d at 546. This omission did not constitute plain error, because under the EEA’s then-current definition of trade secrets, it was not “clear” or “obvious” that disclosure to a single competitor made information “generally known to” or “readily ascertainable” by “the public.” *Chung*, 659 F.3d at 824–25 (quoting 18 U.S.C. § 1839(3) (2011)) (stating that “[t]here is some conflict between circuits as to whether [the EEA’s definition] alters the ‘readily ascertainable’ analysis” as compared to the UTSA and declining to resolve the issue); *see also Walls*, 784 F.3d at 546 (under plain error standard of review, the error must be “clear or obvious, rather than subject to reasonable dispute”).

Defendants’ reliance on *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986 (1984), does not change this result. Defendants contend that under *Monsanto*, DuPont’s sale of the Ashtabula plant destroyed the trade secret status of its chloride-route technology, and the jury should have been instructed accordingly. *Monsanto* does not speak to when a trade secret becomes “generally known to” or “readily ascertainable” by “the public” according to the EEA. Instead, *Monsanto* establishes that trade secrets are property for the purposes of the Takings Clause of the Fifth Amendment but that a taking does not occur when a party discloses its trade secrets to the Environmental Protection Agency (“EPA”) knowing that the EPA can use that information without permission after ten years, because such use does not interfere with the party’s “reasonable investment-backed expectations.” *Id.* at 1004–07. *Monsanto* therefore does not speak to the specific issue of whether disclosure to one competitor makes information generally known under the EEA, and defendants

cite no authority suggesting otherwise. Without any clear or controlling authority addressing this question, the district court's omission of an additional disclosure instruction did not constitute plain error.

The second issue is the district court's rejection of the reverse engineering and general knowledge instructions, which defendants argue would have permitted the jury to find that Maegerle permissibly "work[ed] back" from non-secret Ashtabula technology and could have made fair use of the "general knowledge" he gained through his employment at DuPont to replicate the TiO₂ technology, including "all the information and experience involved in building the Kuan Yin plant." The parties' arguments on this point are primarily ones regarding the sufficiency of the evidence supporting defendants' trade secret convictions and therefore overlook the only relevant question: whether the given instructions adequately covered the defense theory. They did. The instructions told the jury that individuals can independently develop technology through proper means and that someone like Maegerle is free to leave an employer and use non-trade secret information and skills gained through that employment. The given instructions as a whole were neither "misleading [n]or inadequate to guide the jury's deliberation." *Hofus*, 598 F.3d at 1174 (quoting *Frega*, 179 F.3d at 806 n.16).

Accordingly, the district court's rulings on these jury instructions are affirmed.⁷

⁷ Defendants argue for the first time in their reply brief that "principles of law critical to the defense . . . were not addressed at all" by the jury instructions, including the principle that "carelessness" can destroy trade secret protection. This argument is waived. *See United*

C. Conspiracy and Attempt Instructions

Defendants contend that the district court’s given instructions regarding the conspiracy and attempt charges—Counts 1, 2, 3, and 5—constructively amended the indictment and erroneously allowed the jury to convict on those charges without finding that the trade secrets involved were in fact trade secrets. Defendants waived their right to have this argument reviewed, as they were aware of the case law they now seek to distinguish or rely on, but they nonetheless agreed to the given instructions. Because defendants were “aware of the omitted element” in the instructions (the purported requirement that the trade secret status be proven), they “relinquished [their] right to have it submitted to the jury.” *United States v. Perez*, 116 F.3d 840, 845–46 (9th Cir. 1997) (en banc) (“If the defendant has both invited the error, and relinquished a known right, then the error is waived and therefore unreviewable.”).

Even if this issue were reviewable, an intervening Ninth Circuit decision resolved it. While this appeal was being briefed, we issued our decision in *United States v. Nosal*, 844 F.3d 1024 (9th Cir. 2016).⁸ Defendants essentially concede that *Nosal* establishes that the attempt and

States v. Bentson, 947 F.2d 1353, 1356 (9th Cir. 1991) (“Legal issues raised for the first time in reply briefs are waived.”). Moreover, this issue was adequately covered by the given instruction that trade secret owners must take “reasonable measures” to protect trade secrets.

⁸ The original opinion was filed in July 2016, see *United States v. Nosal*, 828 F.3d 865 (9th Cir. 2016), and was then amended and superseded by the opinion filed in December 2016. *Nosal*, 844 F.3d at 1028. The portions relevant to the EEA and to this appeal were not changed in the amended opinion.

conspiracy instructions were correct, and rightly so, because the decision speaks directly to the question raised here. In *Nosal*, the jury was instructed that for an EEA conspiracy charge “the government need not prove the existence of actual trade secrets and that Defendant knew that the information in question was a trade secret,” but instead “must prove that Defendant firmly believed that certain information constituted trade secrets.” *Id.* at 1044 (internal quotation marks omitted). The defendant argued that this instruction “constructively amended the indictment because the indictment allege[d] theft of actual trade secrets while the jury instruction did not require proof of actual trade secrets.” *Id.* We rejected this argument, finding that the instruction “reflects our circuit’s precedent on conspiracy charges,” under which “a conviction may be upheld even where the object of the crime was not a legal possibility.” *Id.* at 1045.

We therefore “agree[d] with the other circuits that have applied this same principle to trade secrets,” citing the circuit court decisions on which the district court and the government relied in the instant litigation. *Id.* (citing *United States v. Yang*, 281 F.3d 534, 544 (6th Cir. 2002); *United States v. Martin*, 228 F.3d 1, 13 (1st Cir. 2000); *Hsu*, 155 F.3d at 204). Finally, *Nosal* held that because the jury had found theft of actual trade secrets, any error was harmless. *Id.*

Nosal establishes that the conspiracy and attempt instructions given here were legally correct and did not constructively amend the indictment. Moreover, Trade Secret 1, the main trade secret referenced in the conspiracy and attempt charges, included Trade Secrets 2 through 5, all of which the jury found to be actual trade secrets. Because we find the jury’s convictions on the substantive trade secret

charges to be supported by sufficient evidence, *see infra*, any error in the conspiracy and attempt instructions was harmless.

D. Sufficiency of Trade Secret Evidence

Defendants argue that there was insufficient evidence to support their convictions on the substantive trade secret counts because the government failed to prove that Trade Secrets 1 through 5 were in fact trade secrets. Although defendants' arguments sweep broadly, they relate only to Trade Secrets 2 through 5 and to Counts 6, 7, 8, and 9, not to Trade Secret 1 or the conspiracy and attempt convictions, because those convictions can survive without proof that Trade Secret 1 was in fact a trade secret.

Defendants repeatedly refer to what they call “the *Monsanto* rule” in arguing that the government was required to “prove a negative” that DuPont’s trade secrets were not disclosed. There is no “*Monsanto* rule” requiring the government to prove nondisclosure. As discussed above, *Monsanto* does not stand for the principle that disclosure of trade secret information to a competitor who is not required to protect it destroys trade secret protection, nor has any court read *Monsanto* as establishing this principle. *See Monsanto*, 467 U.S. at 1006–07. Defendants mischaracterize the holding in *Monsanto* by quoting its statement that “[i]f an individual discloses his trade secret to others who are under no obligation to protect the confidentiality of the information, or otherwise publicly discloses the secret, his property right is extinguished.” *Id.* at 1002 (citing *Harrington v. Nat’l Outdoor Advert. Co.*, 196 S.W.2d 786, 791 (Mo. 1946) and 1 R. Milgrim, *Trade Secrets* § 1.01[2] (1983)). This language was part of the decision’s discussion of whether a trade secret should be considered property for the purposes of the Takings

Clause—it was not its holding and does not control the issue at hand. Defendants’ reliance on *United States v. Wise*, 550 F.2d 1180 (9th Cir. 1977), is similarly misplaced, as that decision dealt with the “first sale doctrine” for the purposes of criminal copyright infringement but did not establish an analogous doctrine for EEA prosecutions. *Id.* at 1188–90.

Contrary to defendants’ assertions, the government was not required to prove that no disclosures of DuPont’s TiO₂ technology occurred. Instead, it needed to establish that DuPont took reasonable measures to guard that technology. Defendants fail to show that the sale of the Ashtabula factory was unreasonable, particularly under the EEA’s then-requirement that trade secrets not be generally known to “the public.”

Furthermore, defendants’ focus on the purported “*Monsanto* rule” ignores the government’s primary theory of prosecution, which focused on distinguishing DuPont’s low-grade ore trade secrets from the TiO₂ high-grade ore technology used at Antioch/Ashtabula to persuade the jury that the Ashtabula sale had no impact on whether those trade secrets remained protected. In particular, the government distinguished the TiO₂ technology used at DuPont plants like Edgemoor, Johnsonville, and Kuan Yin from the technology involved at Antioch/Ashtabula. The government argued that the case was “all about Kuan Yin,” the greenfield plant designed more than two decades after Antioch/Ashtabula, and “really [did not] have anything to do [with] Ashtabula,” and it highlighted differences in the types of ores processed by Antioch/Ashtabula as opposed to those used at DuPont’s other facilities. Pursuant to the government’s theory, the low-grade ore chloride-route technology used at these other plants was the relevant trade secret material, and it was different

from and more advanced than the high-grade ore technology used at Antioch/Ashtabula, meaning the Ashtabula sale had no bearing on whether that material remained protected.

Sufficient evidence supported this theory. In particular, the government presented evidence that (1) Antioch was designed to run on high-grade ore and therefore lacked many of the features used at Edgemoor or Johnsonville, (2) the other DuPont facilities are designed to use “many ores,” (3) Antioch was closed due to the high cost of high-grade ore and it became more cost effective to use the plants designed for lower-grade ores, (4) Sherwin-Williams and not DuPont designed the chlorinator at Ashtabula, (5) Kuan Yin was designed to use lower grade ore than used at Antioch/Ashtabula, (6) the Kuan Yin design was not based on the Antioch/Ashtabula design, and (7) the “other [DuPont] plants have technology beyond the Antioch process.”

The government also presented evidence demonstrating that Trade Secrets 2, 3, and 4 did not relate to Ashtabula technology and instead concerned the Edgemoor facility and technology developed after Ashtabula was sold. With respect to Trade Secret 5, the 407-page document referenced the Antioch/Ashtabula technology but also referred to DuPont’s other facilities. Because the primary purpose of Trade Secret 5 was to make all of DuPont’s years of experience available in one document that would enable DuPont to build the best new plants possible without undergoing the “same learning curve” every time, its scope extends far beyond one facility’s technology.

In contrast to the arguments defendants present for the first time on appeal, the evidence at trial demonstrated that defendants and Maegerle understood this distinction. In fact,

they attempted to defend against the civil lawsuit by arguing that they used only purportedly public Ashtabula technology and did not misappropriate any Kuan Yin technology. Based on the evidence demonstrating the differences between the DuPont trade secrets and the Antioch/Ashtabula technology, as well as defendants' awareness of those differences, a rational trier of fact could have found beyond a reasonable doubt that the Ashtabula technology, whether disclosed or not, was not the trade secret protected in Trade Secrets 2 through 5.

Ample evidence also rebutted defendants' arguments that non-Ashtabula technology was disclosed or generally known through use of contractors and patents. With respect to patents, witness testimony established that Trade Secrets 2 through 5 contained information that was not publicly available and that the drawings and documents themselves are not patentable and are better protected as trade secrets. The evidence showed that Liew searched for TiO₂ patents after the civil suit was filed, rather than using them from the start, and defendants' expert witness conceded that he had not found the specific documents that made up the trade secrets or specific information within those documents in the public domain.

With respect to DuPont's use of contractors, the evidence established that DuPont's "secure eyes contractors" were (1) carefully selected based on long-term working relationships that demonstrated they were "trustworthy," (2) required to sign confidentiality agreements, (3) given information on a "need to know only basis," and (4) not given flow sheets like Trade Secrets 2 and 4 or otherwise allowed to keep materials related to DuPont's TiO₂ technology. Defendants emphasize one witness's testimony regarding

increased use of contractors and the length of confidentiality agreements; however, that testimony demonstrated that the time periods for confidentiality agreements varied according to the contractor's work and "the purpose of the agreement." Without more, this testimony did not require the jury to conclude that DuPont failed to take reasonable measures to guard its trade secrets.

Furthermore, the evidence supported the jury's conclusion that the specific details of DuPont's chloride-route technology were not generally known to the public. Although "the basic concept of chlorination, oxidation, and finishing is the same" at Ashtabula as at other chloride-route TiO₂ facilities, it was the minute details and data involved in DuPont's technology that merited trade secret status, not the "basic concept" of the chloride process. Based on the evidence presented at trial, a rational juror could have found that the Antioch/Ashtabula technology was not part of Trade Secrets 2 through 5, that DuPont took reasonable measures to protect its technology, and that such technology was not readily ascertainable by or generally known to the public. Defendants' convictions on Counts 6, 7, 8, and 9 are therefore affirmed.

E. Counts 10 and 11

Defendants challenge their Count 10 convictions for conspiracy to obstruct justice in violation of 18 U.S.C. § 1512(c)(2), namely by agreeing to file a false answer in the civil litigation with DuPont.⁹ This issue turns on whether the

⁹ 18 U.S.C. § 1512(c) provides that anyone who "(1) alters, destroys, mutilates, or conceals a record, document, or other object . . . with the intent to impair the object's integrity or availability for use in an official

aim of the conspiracy was to file a factual falsehood or simply to make a general, legal denial of guilt. Defendants argue that the filing of an answer in a civil case can *never* constitute obstruction of justice or conspiring to do so. This argument may go too far. It is possible, for instance, that a misrepresentation of a material fact in a civil answer might violate section 1512(c). “A civil judicial proceeding is designed, in part, to determine the truth of what occurred between the parties in a dispute. If witnesses were free to lie whenever they believed a plaintiff’s allegations were false, it would totally undermine the crucial mediating role of the courts.” *United States v. Burge*, 711 F.3d 803, 812 (7th Cir. 2013) (false interrogatory answers made during civil discovery process constitute obstruction of justice under 18 U.S.C. § 1512(c)(2)).

The better argument is that the statement in defendants’ answer—that they “never misappropriated any information from DuPont or any of its locations”—is tantamount to a general denial of legal liability. While drawing the line between a factual false statement in an answer and such a general denial can be difficult at times, we believe that the statements at issue here tacked too close to a general denial to constitute obstruction of justice. The answer could still be relevant to other charges (such as evidence of the ongoing

proceeding; or (2) otherwise obstructs, influences, or impedes any official proceeding, or attempts to do so” shall be subject to criminal penalties. 18 U.S.C. § 1512(k) provides that the same penalties shall apply to anyone who “conspires to commit any offense” under § 1512.

conspiracy to hide the theft of trade secrets). But it cannot alone support an obstruction conviction.¹⁰

Count 11, which charged Liew with witness tampering in violation of 18 U.S.C. § 1512(b)(1), suffers from a similar problem. The statute proscribes “knowingly us[ing] intimidation, threaten[ing], or corruptly persuad[ing] another person, or attempt[ing] to do so, . . . with intent to— (1) influence, delay, or prevent the testimony of any person in an official proceeding.” 18 U.S.C. § 1512(b). The indictment alleged that Liew sought to influence, delay, or prevent Liu’s testimony in the DuPont civil lawsuit when he told Liu not to mention anything about any former DuPont employees who worked for USAPTI because doing so would not be good for Liu or Liu’s family. The government introduced evidence that Liew made such a statement.

This evidence was admissible to support the trade secret charges, as “[a]n attempt by a criminal defendant to suppress evidence is probative of consciousness of guilt and admissible on that basis.” *United States v. Wagner*, 834 F.2d 1474, 1484 (9th Cir. 1987) (alteration in original) (citation omitted) (internal quotation marks omitted). However, this evidence, standing alone, was insufficient to prove beyond a reasonable doubt that Liew intimidated, threatened, or corruptly persuaded Liu to prevent the use of his testimony in the DuPont civil lawsuit as charged in Count 11. Viewed in its

¹⁰ The government argues that the focus on the civil answer is a “red herring” because the answer was only one “result of the agreement, not . . . its sole object.” In light of the indictment’s focus on Maegerle’s emails and the filing of the answer, as well as the district court’s instruction highlighting the filing of the answer as the crux of the charge, this argument is unpersuasive.

most damning light under *Jackson*, 443 U.S. at 319, the evidence shows that Liew provided the same advice that many criminal attorneys would in that situation—to not discuss the matter with anyone, and to risk otherwise could have bad effects on one’s family. Sometimes the best advice for a potential criminal defendant is not to talk to anyone about anything, and Liew’s words appear little more than that. Accordingly, we reverse defendants’ convictions on Count 10 and Liew’s conviction on Count 11.

F. Spitler Notes Issue

Finally, Liew argues that the district court erred by not requiring the prosecution to disclose the rough notes of the FBI’s interviews with deceased co-conspirator Tim Spitler. While “mere speculation about materials in the government’s files” does not require a court to make the materials available for defense inspection, *United States v. Mincoff*, 574 F.3d 1186, 1200 (9th Cir. 2009) (citation omitted) (internal quotation marks omitted), Liew had more than mere speculation—he had the declaration of Spitler’s attorney, David Houston. In light of this declaration, defendants carried their “initial burden of producing some evidence to support an inference that the government possessed or knew about material favorable to the defense and failed to disclose it.” *United States v. Price*, 566 F.3d 900, 910 (9th Cir. 2009).

Although the errors and inconsistencies in the declaration provided by Houston cast some doubt on the declaration’s reliability, defendants’ burden was a low one, and the declaration sufficed to “support an inference” that the rough notes contained favorable material. *Id.* Because the prosecution did not disclose the rough notes, it did not meet its burden of demonstrating that it “satisfied [its] duty to

disclose all favorable evidence known to [it].” *Id.* Furthermore, if the rough notes referenced the statements that Houston averred Spitler made during the interviews, that material could be “sufficient to ‘undermine confidence’ in the verdict.” *Wearry v. Cain*, 136 S. Ct. 1002, 1006 (2016) (per curiam).

Therefore, we vacate the district court’s order denying defendants’ request for production of the rough notes and remand to the district court for in camera review of the material “to determine whether disclosure of the notes might have affected the outcome of the trial.” *United States v. Dupuy*, 760 F.2d 1492, 1503 (9th Cir. 1985) (remanding for in camera review of prosecutor’s notes that she believed to be *Brady* material). We express no view on whether the notes, in fact, contain any exculpatory, impeaching, or even admissible or relevant material—we leave that to the district court to decide in the first instance.¹¹

**AFFIRMED IN PART, REVERSED IN PART, and
VACATED AND REMANDED IN PART**

¹¹ Because this matter must be remanded for resentencing in light of the reversed convictions, we do not reach the issue of whether the district court erred in calculating loss for the purposes of sentencing. Instead, we vacate the sentence imposed and remand for resentencing.