

PRESENT: Lemons, C.J., Goodwyn, Mims, McClanahan, Powell, and Kelsey, JJ., and Lacy, S.J.

THE BABCOCK & WILCOX COMPANY, ET AL.

v. Record No. 150830

OPINION BY
JUSTICE D. ARTHUR KELSEY
June 30, 2016

AREVA NP, INC., F/K/A FRAMATOME ANP, INC.

FROM THE CIRCUIT COURT OF THE CITY OF LYNCHBURG
Mosby G. Perrow, III, Judge

This appeal concerns a royalty dispute over the use of nuclear technology, which resulted in a jury verdict in favor of Areva NP, Inc. (“Areva”) against Babcock & Wilcox Company (“B&W”) and affiliated companies (collectively, the “B&W defendants”) for breach of contract and violation of the Virginia Uniform Trade Secrets Act, Code §§ 59.1-336 to -343.

The B&W defendants appeal on various grounds, claiming that the trial court misconstrued the governing agreements and that the alleged use of the nuclear technology did not violate these agreements, properly construed, as a matter of law. The B&W defendants also contend that Areva failed to prove a prima facie violation of the Trade Secrets Act. In one of its two assignments of cross-error, Areva contends that, in the event that we reverse and remand for a new trial, we should correct an alleged error in the finding instruction.¹

I. BACKGROUND

In the trial court, Areva filed a two-count complaint against B&W and three affiliated companies, Babcock & Wilcox Power Generation Group, Inc.; Babcock & Wilcox Nuclear Energy, Inc. (“B&W Nuclear”); and Babcock & Wilcox Canada, Ltd. (“B&W Canada”). This

¹ Areva’s second assignment of cross-error contends that the trial court erred in granting partial summary judgment for the B&W defendants and holding that “the royalty does not apply to gross contract amounts for off site design, manufacture, and sale of ROTSG.” Appellee’s Br. at 47 (altering capitalization). This issue is subsumed within our discussion of the B&W defendants’ assignments of error.

suit was filed on the heels of earlier litigation between the parties in federal court, which the parties settled after the issuance of a preliminary injunction against Areva's parent company in favor of B&W Canada and BWX Technologies, Inc. See Babcock & Wilcox Canada Ltd. v. Framatome ANP, Inc., No. 6:02CV00049 (W.D. Va. Feb. 13, 2003) (Moon, J.) (unpublished opinion granting the B&W affiliates' motion for a preliminary injunction); 9 J.A. at 3465 (2003 Settlement Agreement's recital referencing the federal suit). The present dispute arose primarily out of one of several agreements related to the settlement of the litigation in federal court.

A. COUNT I – BREACH OF SUB-LICENSE

Count I of Areva's complaint alleged that B&W and B&W Canada ("B&W sublicensees") breached a 2004 agreement titled "Sub-License of Nuclear Technology" ("Sub-License"). 19 J.A. at 8507.² According to Areva, the B&W defendants had breached the Sub-License by failing to notify Areva of qualifying contracts under Section II.A and "to pay Areva a [corresponding] royalty of four percent (4.0%) of the gross amount paid under any such contracts." 1 J.A. at 7.

The parties agreed on the relevant terms of the Sub-License. It included several prefatory clauses acknowledging prior agreements between the parties and defining various terms of the Sub-License by reference to these agreements. The first "WHEREAS" clause stated that, in an agreement titled "Technology Transfer Agreement" entered into in 1989 and restated in 1991 ("1991 License Agreement"), B&W had transferred to B&W Nuclear Service Company, Areva's predecessor in interest, "an exclusive license to apply the Once Through Steam Generator

² The Sub-License specifies New York in its choice-of-law provision. The parties have not asserted that New York law differs from Virginia law, and thus, we presume it "to be identical with the law of this state upon the same subject." Norfolk & W. Ry. v. Denny, 106 Va. 383, 400, 56 S.E. 321, 327 (1907); see also Mountain Lake Land Co. v. Blair, 109 Va. 147, 151, 63 S.E. 751, 752 (1909); Restatement (Second) of Conflicts of Laws § 136, cmt. h (1971).

(‘OTSG’) nuclear technology in the field of commercial nuclear services.” 19 J.A. at 8507.³

The second through fourth recitals stated that Areva could sublicense back to the B&W sublicensees “all Nuclear Technology” as that term was understood in the 1991 License Agreement and various other prior contracts between the parties. Id.

Section I of the Sub-License, titled “LICENSE GRANT,” provided that Areva’s predecessor granted to the B&W sublicensees “a perpetual, worldwide, sub-license to practice and use the Nuclear Technology which is exclusive to [Areva] . . . for all purposes, without restriction, in the field of or relating to the supply of commercial nuclear services to OTSG plants.” Id. at 8508. Section II, designated “ROYALTY OF 4% ON GROSS REVENUES,” stated:

For the use as defined in this Sub-License at OTSG plant sites described in Exhibit “A” by a Grantee of the Nuclear Technology, but excluding the first contract, which is covered under paragraph D, below, the Grantee agrees to pay to [Areva] a royalty of four percent (4.0%) of the Grantee’s gross contract amounts to the extent such amounts are actually paid to the Grantee by the Grantee’s customer(s) . . . as calculated and on the terms and conditions as set out below

Id. The “below” terms and conditions included paragraph A, a notice provision, and paragraph B, which clarified that the actual “receipt” of any portion of contract revenue would trigger the obligation to pay “the royalty applicable to such payment.” Id.

In addition, paragraph D recognized a one-time royalty waiver for the “first contract,” which Section II specifically excluded:

[The B&W sublicensees] shall pay [Areva] a one-time only lump sum payment of U.S. \$250,000 within thirty days of the first contract to be entered into by either [B&W sublicensee] greater than U.S. \$100,000 for commercial nuclear service projects

³ Areva was a party to the Sub-License and all other relevant contracts involved in this litigation under its former name, Framatome ANP, Inc. For ease of reading, we substitute Areva for Framatome ANP, Inc. when quoting from these agreements.

performed using the Nuclear Technology as licensed herein at an OTSG site described in Exhibit “A”, or by December 31, 2004, whichever occurs first. If payment is not received by [Areva] by December 31, 2004, this Sub-License Agreement will be considered null and void.

Id.

In their counterclaim for declaratory judgment, the B&W defendants agreed that the Sub-License governed B&W and B&W Canada, see 1 J.A. at 65, 67, but they denied that they had entered into any customer contracts that triggered the royalty obligation. Their customer contracts, they contended, did not require the use of Areva’s exclusive technology or constitute the specific type of use specified in the royalty provision.

B. COUNT II – TRADE SECRETS

Count II of Areva’s complaint alleged that the B&W defendants had misappropriated Areva’s trade secrets by using its exclusive technology, which was “subject to” the Sub-License, without obtaining Areva’s authorization to do so and “without compensating Areva” for the unauthorized use. 1 J.A. at 9-10. In a bill of particulars, Areva added that B&W Nuclear was “neither a signatory to nor a Grantee under” the Sub-License. Id. at 14; see also id. at 27.

In their answer, the B&W defendants denied Areva’s allegation that B&W Nuclear was not a party to the Sub-License. Instead, they claimed, all B&W subsidiaries, including B&W Nuclear, were “authorized under the License and Sub-License Agreements.” Id. at 52; see also id. (“[T]he [Sub-License] allows use of the intellectual property in issue by the referenced parties”).

C. CROSS-MOTIONS FOR SUMMARY JUDGMENT

Both sides of the dispute filed cross-motions for summary judgment. Among the issues in contest was the B&W defendants’ assertion that the royalty provisions of the Sub-License were unambiguous and should be interpreted by the court as a matter of law according to their

plain meaning. The trial court agreed and found, based on the record available upon summary judgment, that the plain meaning of those provisions precluded any royalty liability for customer contracts involving the off-site design, manufacture, and sale of heavy components known as ROTSGs, an acronym for replacement once-through steam generators installed at nuclear power plants. The court held,

as a *matter of law* that the four percent (4%) royalty provisions in Art. II of the [Sub-License Agreement] between the parties is *unambiguous*; that the royalty applies to gross contract amounts involving the use of nuclear technology exclusive to Areva in the field of commercial nuclear services at OTSG plant sites identified in Exhibit A of the Agreement, whether such use was substantial or “insubstantial”; and that *the royalty does not apply to gross contract amounts for off site design, manufacture and sale of ROTSG[s]*.

Id. at 234-35 (emphases added). On this ground, the court granted “Defendants’ Motion for Summary [J]udgment That The Services Sublicense Does Not Apply To Contracts For The Design, Manufacture And Sale Of ROTSGs.” Id. at 236.

D. TRIAL

The case proceeded to a jury trial. In Areva’s opening argument, counsel stated that this was a “*contract case* and [that the B&W defendants] should be paying us 4 percent, and that’s it in a nutshell.” 2 J.A. at 737 (emphasis added). Areva’s counsel later affirmed this position in closing argument, suggesting to the jurors: “[A]s to *every one of these contracts* [listed on the verdict form] the answer that you should give in your jury verdict form is yes” 8 J.A. at 3239 (emphasis added).⁴ Significantly, Areva had taken this position even though two of these

⁴ See also 3 J.A. at 1088-89 (testimony of Areva’s senior vice president, who negotiated the Sub-License, that B&W Nuclear was a “grantee” subject to the royalty obligation); 4 J.A. at 1451-52 (testimony of Areva’s expert that “each of the contracts” addressed in his expert report, including both B&W Nuclear contracts, was “covered under the royalty of 4 percent of the gross revenues”); 5 J.A. at 2104 (testimony of Areva’s manager of nuclear steam supply system

contracts — verdict form contract numbers 10 and 14 — involved *only* B&W Nuclear, which was not specifically identified by name in the Sub-License as a grantee.

The B&W defendants responded by asserting that three of these contracts, which were for the “off site design, manufacture and sale of ROTSG[s],” were excluded from the royalty obligation as a matter of law pursuant to the court’s letter opinion on the cross-motions for summary judgment. *Id.* at 235. All but one of the remaining contracts, they argued, did not involve exclusive technology of Areva and, in any event, did not involve any “use” of such technology “at OTSG plant sites described in Exhibit ‘A,’” as the Sub-License required. 19 J.A. at 8508. In their view, the one contract that would trigger the royalty obligation qualified for the “first contract” exclusion under Section II.D of the Sub-License. *Id.*

At the end of Areva’s case-in-chief and again at the close of the evidence, the B&W defendants moved to strike, arguing that the evidence, when reviewed against the unambiguous contractual terms, did not prove Areva’s claims as a matter of law. “This is the plain language on the face of the contract, your Honor,” B&W counsel argued. 5 J.A. at 2145. “There’s no jury issue here.” *Id.* The trial court took the first motion to strike “under advisement,” noting that it wanted “a complete record” for review on appeal. *Id.* at 2223-24.

Following the B&W defendants’ renewal of their motion to strike at the conclusion of all the evidence, the trial court again took the motion “under advisement” without restating its purpose for doing so. 7 J.A. at 2970. The trial court later clarified its reasoning: “[W]hat I am trying to do, and since we have gone this far for this long, is to get a verdict and then set portions of it aside or not, depending on how I rule on the motions.” *Id.* at 3004. “I want to get it to the

(NSSS) engineering that the Duke Master Services Contract “was subject to the 4 percent royalty obligation . . . even though [B&W Nuclear] isn’t named as a grantee” in the Sub-License).

jury, subject to all the objections. I know the defendants feel like it shouldn't go to the jury at all. And the reasons are well stated on the record.” Id. at 3006.

The jury returned a \$16,075,000 general verdict for Areva against the B&W defendants. The verdict form, which was offered by Areva over the B&W defendants' objection, recorded the jury's finding that on each of the 15 contracts at least one of the B&W defendants owed the contractual 4% royalty under the Sub-License. The jury accepted Areva's argument that all 15 customer contracts triggered the contractual duty to pay royalties. See 1 J.A. at 360-62 (verdict form indicating breach of contract for each of the 15 contracts). The verdict form also indicated that the jury found that the B&W defendants had misappropriated Areva's trade secrets.

The B&W defendants moved to set aside the verdict and filed a written motion for judgment notwithstanding the verdict or, alternatively, a new trial on various grounds. Those relevant to our resolution of this appeal include the contentions that:

- The court should have enforced its ruling on the cross-motions for summary judgment, which, when applied to the facts at trial, categorically excluded three ROTSG contracts from the royalty obligation.
- On all contracts other than one (the Duke Master Services Contract), the evidence failed to prove as a matter of law that the B&W defendants used Areva's exclusive technology “at OTSG plant sites,” as the royalty provision expressly required. 19 J.A. at 8508.
- The court should enter judgment notwithstanding the verdict on Areva's royalty claim applicable to the Duke Master Services Contract because the “first contract” exclusion applied as a matter of law. Alternatively, the court should set aside the verdict on this claim and order a retrial after giving a proper jury instruction.
- Finally, the court erred by submitting the trade secrets claim to the jury because any use of Areva's exclusive technology was governed exclusively by contract (the Sub-License), and no evidence demonstrated a prima facie claim for damages under the Virginia Uniform Trade Secret Act.

See 8 J.A. at 3342-50 (oral motion to set aside the verdict); 18 J.A. 8361-405, 8474-505 (brief and reply brief in support of motion for judgment notwithstanding the verdict). The trial court denied all post-trial motions and entered final judgment on the jury verdict.⁵

II. THE SUB-LICENSE AGREEMENT

To address the principal issues on appeal, we must first determine if the relevant contract provisions have a meaning discernible from the words alone, and if so, whether the trial court correctly interpreted these provisions. On these questions, we do not defer to either the trial court or the jury. “The interpretation of a contract presents a question of law subject to de novo review.” School Bd. of Newport News v. Commonwealth, 279 Va. 460, 467, 689 S.E.2d 731, 735 (2010) (citation omitted).⁶

In this case, Areva and the B&W defendants both assert that the Sub-License’s provisions, while highly technical, have a plain meaning and, thus, should be considered unambiguous.⁷ Even so, they offer very different interpretations favoring their respective views.

⁵ The B&W defendants also assign error regarding the trial court’s refusal to instruct the jury that “B&W’s use of certain computer codes does not trigger a royalty under the Services Sublicense.” Appellants’ Br. at 29. We do not address this issue, however, based on our finding. See infra note 47 and accompanying text.

⁶ See also Joseph M. Perillo, Calamari and Perillo on Contracts § 3-15, at 141 (6th ed. 2009) (“[T]he general rule is that the interpretation of a writing is treated as a question of law for the court.”); 11 Samuel Williston & Richard A. Lord, A Treatise on the Law of Contracts § 30:6, at 92-98 (4th ed. 2012) (“The interpretation and construction of a written contract present only questions of law, within the province of the court, and not of the jury or other trier of fact as long as the contract is unambiguous, and the intent of the parties can be determined from the face of the agreement.”).

⁷ Throughout the lower court proceedings, Areva made numerous assertions along these lines. See, e.g., 2 J.A. at 409 (“[W]e agree that this is a question for the Court to decide. . . . [N]o one argues that [the license grant] is ambiguous.”); 8 J.A. at 3236 (“[E]verybody agrees there’s no special language in here. ‘Use’ means ‘use.’”); id. at 3078-79 (“Both sides proposed” the jury instruction that “words used by the parties should be given their ordinary, usual, and popular meaning unless [they] find that the parties intended such words to have other meanings.”); 13 J.A. at 5350 (“Defendants’ assertion . . . contradicts the unambiguous terms of [the Sub-License.]”); id. at 5354 (“[T]he Subject Contracts fall within the plain meaning of

Their opposing interpretations, however, do not necessarily render the contract ambiguous. Bartolomucci v. Federal Ins., 289 Va. 361, 370-71, 770 S.E.2d 451, 456 (2015). As we have often said, “[a] contract is not ambiguous simply because the parties to the contract disagree about the meaning of its language.” Pocahontas Mining L.L.C. v. Jewell Ridge Coal Corp., 263 Va. 169, 173, 556 S.E.2d 769, 771 (2002). We concede the possibility that the parties’ interpretative deadlock implies the possibility that the correct meaning may be somewhere between the two. Even so, we neither presume this to be the case nor discount the possibility that it might be so.

Turning to the Sub-License and the prior contracts it incorporated by reference, we must first determine whether the plain meaning of the contractual terms can be discerned with sufficient precision to render the Sub-License unambiguous, and, if so, whether that meaning favors the B&W defendants or Areva. We organize our analysis around three contractual benchmarks: (a) the nuclear technology “exclusive” to Areva, which defines the scope of the Sub-License; (b) use of Areva’s exclusive technology “at OTSG plant sites,” which triggers the obligation under the Sub-License to pay royalties; and (c) the “first contract” exclusion, which the Sub-License exempts from any royalty obligation. 19 J.A. at 8508.

Section II.A.”); id. at 5360 (“On its face, the sublicense grant . . . is ‘for all purposes.’”); id. at 5362 (“Defendants have identified no ambiguity as would allow the Court to consider extrinsic evidence.”); 18 J.A. at 8432 (“[T]he plain meaning of [the license grant] belies Defendants’ contention . . .”). Areva maintained this position in its brief on appeal. See Appellee’s Br. at 15 (“The word ‘use’ is not defined in the [Sub-License], but its plain meaning includes ‘to put into action or service.’” (citation omitted)). The B&W defendants similarly argued that the royalty provisions “are not ambiguous and must be interpreted according to their plain and ordinary meaning.” 17 J.A. at 7393; see also 7 J.A. at 2987; 8 J.A. at 3264, 3347, 3388-90; 12 J.A. at 4653, 4667; 17 J.A. at 7387, 7703-05; 18 J.A. at 8395, 8399. But see 7 J.A. at 3036-37 (“[T]he jury should take into account the parties’ intent” because “[t]hey have heard more than one witness testify about what they intended to do when they . . . entered into the [Sub-License].”).

To determine whether these provisions have a plain meaning, “words used are given their usual, ordinary, and popular meaning.” Pocahontas Mining L.L.C., 263 Va. at 173, 556 S.E.2d at 772; see also City of Chesapeake v. States Self-Insurers Risk Retention Grp., 271 Va. 574, 578, 628 S.E.2d 539, 541 (2006). In addition, “when considering the meaning of any part of a contract, we will construe the contract as a whole,” Doctors Co. v. Women’s Healthcare Assocs., 285 Va. 566, 572-73, 740 S.E.2d 523, 526 (2013) (citations omitted), striving not to “place emphasis on isolated terms” wrenched from the larger contractual context, Quadros & Assocs. v. City of Hampton, 268 Va. 50, 54, 597 S.E.2d 90, 93 (2004).⁸

There is a temptation, regrettably natural to the adjudicative task, to allow complex draftsmanship to discourage the search for the plain meaning of words used in technical agreements. But complexity should not be confused with convolution, and agreements are not ambiguous simply because they deal “with a technical subject that may be considered complex to the uninformed lay person who is not familiar with the topic.” Westmoreland-LG&E Partners v. Virginia Elec. & Power Co., 254 Va. 1, 11, 486 S.E.2d 289, 294 (1997) (quoting Doswell Ltd. P’ship v. Virginia Elec. & Power Co., 251 Va. 215, 223, 468 S.E.2d 84, 89 (1996)). As

Professor Costello perceptively said:

As modern life becomes more complex, and commerce becomes increasingly dependent on law, arcane business arrangements will come before the courts in increasing numbers. It will not do that judges be deprived of their control over contracts by the assertions of a party that her technical agreement is ambiguous because she

⁸ See also Williston & Lord, supra note 6 § 32:11, at 765 (“A contract must be construed as a whole and the intention of the parties is to be collected from the entire instrument and not from detached portions. Individual clauses and particular words of the agreement, and all parts of the writing and every word of it, will, if possible, be given effect.”); id. § 32:5, at 692-99 (“A contract will be read as a whole and every part will be read with reference to the whole. If possible, the contract will be so interpreted as to give effect to its general purpose as revealed within its four corners or in its entirety.” (footnote omitted)); John E. Murray, Jr., Murray on Contracts § 88(C), at 481 (4th ed. 2001) (“[A]ll of the different parts of an agreement must be viewed together, i.e., as a whole, and each part interpreted in the light of all of the other parts.”).

says it is, or that her agreement cannot be understood by persons not schooled in her obscure science.

John L. Costello, Virginia Remedies § 18.11[3] (4th ed. 2012).

A. NUCLEAR TECHNOLOGY “EXCLUSIVE TO AREVA”

The Sub-License expressly granted to B&W and B&W Canada, the B&W sublicensees, the right to

use the Nuclear Technology which is *exclusive* to [Areva], for all purposes, including without limitation the supply of Licensed Products and Services as such term is defined in Article 1.13 of the License Agreement and generally for all purposes, without restriction, *in the field of or relating to the supply of commercial nuclear services* to OTSG plants.

19 J.A. at 8508 (emphases added). For the definition of “Nuclear Technology,” a prefatory recital incorporated relevant portions of the 1991 License Agreement, contemporaneous agreements, and “all technology which was at issue in [the federal litigation].” *Id.* at 8507.⁹ Another of the Sub-License’s recitals explained the source and meaning of this “exclusive” technology by recognizing that the 1991 License Agreement granted to Areva “an exclusive license to apply the Once Through Steam Generator (‘OTSG’) nuclear technology in the field of commercial nuclear services.” *Id.*

These prefatory recitals “shed light on the circumstances the parties wished to have considered in the interpretation of the contract.” 2 E. Allan Farnsworth, Farnsworth on Contracts § 7.10, at 289 (3d ed. 2004). So read, the recitals confirmed that the exclusivity of Areva’s original license depended on the terms of the 1991 License Agreement and was limited to the “field of commercial nuclear services.” 19 J.A. at 8507; see also *id.* at 8508. The 1991 License Agreement separated the relevant nuclear technology into three categories: technology exclusive

⁹ The parties do not dispute the meaning of “Nuclear Technology,” as it was defined by the third recital of the Sub-License by incorporating specific definitions from prior agreements. 19 J.A. at 8507.

to B&W, technology shared by B&W and Areva, and technology exclusive to Areva.

The first category, technology exclusive to B&W, included nuclear technology used to “perform the manufacture or Manufacturing Detailed Design of Heavy Components.” 9 J.A. at 3562 (Art. 8.1.3(ii)). This included “the design activities to detail manufacturing drawings, processes, procedures, sequencing, quality control procedures, tolerances, weld location and technology, inspection requirements and any other details needed to manufacture the component to meet the Component Design¹⁰ requirements.” Id. at 3532. Article 8.6 expressly “reserved” to B&W “[a]ll rights in” the nuclear technology that were “not granted” to Areva. Id. at 3566.

In this respect, the 1991 License Agreement maintained B&W’s exclusive right to use the nuclear technology to manufacture and sell “Heavy Components,” which were defined as “complete components for a Nuclear Reactor System,” including “reactor vessels; reactor vessel heads; reactor vessel internals; steam generators or portions thereof which includes tube bundles; primary system heat exchangers; pressurizers; accumulators (core floor tanks); control rod drive mechanisms; and main reactor coolant piping [i.e., hot and cold legs].” Id. at 3531.

The second category, technology shared by B&W and Areva, included functional design of heavy components¹¹ and component design, as well as other activities not at issue here. Id. at 3560-61, 3565; see id. at 3531-32 (defining “Licensed Products and Services”). Functional design included “design activities which establish the design parameters of the component and

¹⁰ “Component Design” refers to “the design activities which translate the Functional Design into general layout drawings, detailed bills of materials, design and stress reports, quality control and quality assurance specifications and any other details needed to fully describe the component for manufacturing.” 9 J.A. at 3528.

¹¹ For B&W, this right was non-exclusive “only with respect to replacement steam generators for which such Functional Design is requested by the customer.” Id. at 3565 (Article 8.2(c)). Areva conceded this point at trial. See, e.g., 3 J.A. at 973 (affirmation by Areva’s negotiator for the Sub-License that “if the customer asked for functional design, it was nonexclusive” because “B&W had a right to do a functional design” of Heavy Components with respect to ROTSGs for which functional design is requested by customers).

the specific applicable design requirements such as design codes, *safety and quality levels*, physical interfaces, working fluids, electrical requirements and *any other parameters needed to define the form, fit and function of an acceptable component.*” Id. at 3529 (emphasis added).

“[C]hange-out of steam generators or other heavy components” was also nonexclusive.

Compare id. at 3565 (Art. 8.2(d) of 1991 License Agreement) with 28 J.A. at 13394 (Section 5.05(f) of BWNS Coordination Agreement).¹²

The third category, technology exclusive to Areva, included the right to “design and sell: (i) Nuclear Reactor Engineering Services; and (ii) Specialized Nuclear Maintenance, Inspection and Field Services” and to “design, manufacture, sell and use: (i) Specialized Service Tools and Inspection Equipment and (ii) Specialized Equipment and Spare Parts.” 9 J.A. at 3559. The two categories relevant to this case are nuclear reactor engineering services and specialized nuclear maintenance, inspection, and field services.

¹² “[C]hange-out” of steam generators involved “taking one out and putting another one in [i.e., installing a replacement]” and, according to Areva’s senior vice president and negotiator of the Sub-License, was a “nonexclusive activity,” hence non-royalty bearing. Id. at 997-98, 1031-32. But see id. at 1159 (contention by same witness for Areva that “designing engineering activities” relating to installation of ROTSGs are Areva’s exclusive technology).

We note that at oral argument on appeal, Areva argued that, to understand § 5.05(f) in the BWNS Coordination Agreement, we should also examine § 5.05(b). That would be true if we were trying to interpret and apply the BWNS Coordination Agreement’s non-compete provisions. But that is not our task. We look to the Coordination Agreement only because the 1991 License Agreement stated that B&W’s license grant to Areva was “nonexclusive with respect to any activity B&W undertakes in exercising its rights to compete pursuant to Section 5.05(f).” 9 J.A. at 3565. Under § 5.05(f), B&W may “engage” in various “activities,” including “change-out of steam generators or other heavy components.” 28 J.A. at 13394. The only reference to § 5.05(b) that subsection (f) makes is to define “the relevant non-competition period,” which is immaterial here because § 5.05(f) expressly permitted these rights (including change-outs) both “*during and after* the relevant non-competition period.” Id. (emphasis added). Moreover, although § 5.05(f) notes that these rights are “subject to whatever restrictions on their use of technology” exist per the 1991 Licensing Agreement, Section 8.2(d) of the 1991 License Agreement makes clear that, whatever those other restrictions may be, B&W’s license of change-outs to Areva “will be nonexclusive.” 9 J.A. at 3565.

Nuclear reactor engineering services were defined as “services for Nuclear Reactor Systems or parts thereof which require a *specialized knowledge* of the functional design, operation, or safety and regulatory requirements of or related to Nuclear Reactor Systems.” Id. at 3533 (emphasis added). Such services consist “of designing, providing requirements for, specifying and procuring equipment for, performing engineering studies . . . relating to, or implementing modifications . . . to, Nuclear Reactor Systems or parts thereof” but expressly exclude the same activities when they “do not require a specialized knowledge of Nuclear Reactor System functional design, operation, safety or regulatory requirements.” Id. at 3533-34. Specialized nuclear maintenance, inspection, and field services were broadly defined as “services for Nuclear Reactor Systems or parts thereof,” when performance of such services requires: “a) specialized knowledge of the functional design, operation or safety of Nuclear Reactor Systems, or b) nuclear related analyses and/or regulatory licensing support, or c) the use of Specialized Service Tools and Inspection Equipment.” Id. at 3538-39.

The 1991 License Agreement appended two exhibits of “illustrative” activities, one describing nuclear reactor engineering services and the other describing specialized nuclear maintenance, inspection, and field services. The illustrations of nuclear reactor engineering services included, among other things, “[c]onduct[ing] safety, reliability and probabilistic risk analyses” and “[d]esign[ing], specify[ing], procur[ing], and provid[ing] regulatory licensing support, for new” — but not replacement — “equipment or components (including Heavy Components), and perform[ing] design/engineering activities for their installation.” Id. at 3605-07. Illustrative specialized maintenance, inspection, and field services included various services for complete nuclear reactor systems, hot and cold legs, and other components. See id. at 3609-12. Some of these services were characterized as “on-site,” others as “off-site,” and others were not designated either way, though it was often implicit in the nature of the work to be done. Id.

The three categories of nuclear technology described in the 1991 License Agreement confirm the B&W defendants' view that Areva's exclusive license was limited, as the Sub-License states, to nuclear technology "in the *field of or relating to the supply of commercial nuclear services*," 19 J.A. at 8508 (emphasis added), and not in the field of manufacture and sale of complete heavy components. Equally clear is that the shared-use category of nuclear technology, when applicable, protected the B&W defendants from any royalty liability under the Sub-License.

A separate category of nuclear technology pertains solely to the TVA Bellefonte plant. Exhibit B to the TVA Agreement, executed one day after the 1991 License Agreement, amended the 1991 License Agreement to include Article 8.1.6, in which B&W granted to Areva an exclusive, "non-assignable license . . . to make, use, sell, design or take any other action (but not including manufacture of Heavy Components) necessary or desirable to perform Bellefonte NSS Completion." 26 J.A. at 12106. By inserting the phrase "but not including manufacture of Heavy Components," *id.*, B&W expressly reserved for itself the exclusive right to manufacture ROTSGs and any other heavy components for the TVA Bellefonte plant.

In sum, read separately and together, these interlocking contractual provisions provided a clear contractual meaning to the Sub-License's grant of "Nuclear Technology which is *exclusive* to [Areva] . . . in the field of or relating to the supply of *commercial nuclear services* to OTSG plants." 19 J.A. at 8508 (emphases added). On the issue of technology exclusive to Areva, therefore, the Sub-License has a plain, albeit intricate and technical, meaning.

B. USE OF AREVA'S EXCLUSIVE TECHNOLOGY "AT OTSG PLANT SITES"

The Sub-License limited royalty liability to use of Areva's exclusive technology "at OTSG plant sites" by the B&W sublicensees. *Id.* The governing paragraph stated:

For the *use* as defined in this Sub-License *at OTSG plant sites* described in Exhibit “A” *by a Grantee* of the Nuclear Technology, but excluding the first contract, which is covered under paragraph D, below, the Grantee agrees to pay to [Areva] a royalty of four percent (4.0%) of the Grantee’s gross contract amounts to the extent such amounts are actually paid to the Grantee by the Grantee’s customer(s) . . . as calculated and on the *terms and conditions as set out below*

Id. (emphases added). The “below” terms and conditions included paragraph A, a notice provision that repeated that the royalty must be paid only for “use” of the technology “*at an OTSG site described in Exhibit A.*” Id. (emphasis added). Also included was paragraph D, which recognized the “first contract” exclusion for “commercial nuclear service projects performed *using* the Nuclear Technology as licensed herein *at an OTSG site.*” Id. (emphases added).

These provisions break down to a simple statement with three essential predicates: No matter the scope of Areva’s exclusive technology, the B&W sublicensees were obligated to pay a 4% royalty only when (i) *they*, not their customers or anyone else, (ii) *used* Areva’s exclusive technology, not shared technology, (iii) *at a covered OTSG site*, not at some off-site location. Thus, under the plain meaning of the royalty provision, no royalty was owed if only the *customers* of the B&W sublicensees used Areva’s exclusive technology at their own OTSG sites. Nor was the royalty owed if the B&W sublicensees used this technology at some non-OTSG, *off-site* location.

We reject Areva’s contrary interpretation, which would impose the royalty obligation whenever the B&W sublicensees used the technology at their own facilities in Canada or, for that matter, when they used the technology for any other reason anywhere in the world — so long as the technology was ultimately put into operational use at an OTSG site by one of their OTSG

customers.¹³ This expansive interpretation not only contradicts, but also renders textually superfluous, the at-OTSG-sites qualification repeated three times in the royalty provision.¹⁴

Areva's dismissal of the on-site/off-site distinction strips the royalty of its plain meaning and dislodges it from the larger contractual context. As noted earlier, the Sub-License expressly incorporated the license grants, reservations, definitions, and illustrative exhibits of the 1991 License Agreement. See id. at 8507. That agreement described technology that, by its very nature, could be performed off-site. See 9 J.A. at 3533 (definition of nuclear reactor engineering services); id. at 3605-08 (illustrative list of nuclear reactor engineering services non-exhaustively including "process[ing] data"; planning and managing "research, development and engineering tests"; performing "safety, reliability and probabilistic risk analyses"; performing various "analyses" and "calculations"; "develop[ing]" and "design[ing]" various programs, services, and studies; and designing, specifying, procuring, and providing "regulatory licensing support" and related engineering activities); id. at 3610 (illustrative list of specialized nuclear maintenance, inspection, and field services including "off-site refurbishment of contaminated Nuclear Reactor System components and parts thereof").¹⁵

¹³ At trial, Areva's expert asserted that in the industry of commercial nuclear services what "at the site" normally means is where the nuclear reactor engineering services are "applied," irrespective of where performed, because work that is done in an office is "applied at the site" and is "inspected by the NRC at the site." 4 J.A. at 1540; see also id. at 1521-22, 1589, 1666.

¹⁴ During oral arguments, counsel for Areva argued that a former Areva executive who testified for the B&W defendants had conceded that "if you are using Areva-exclusive technology, you owe a [royalty]." Oral Argument Audio at 28:38 to 28:55. The record does not support counsel's characterization of the witness's testimony, which Areva's counsel elicited on cross-examination while asking him about the meaning of the word *use* under Section I of the Sub-License. Section I is the "License Grant" provision. That provision, which gave B&W a "perpetual, worldwide, sub-license" to use the technology "for all purposes" was broader than Section II, which established the conditions for the applicability of the royalty. 19 J.A. at 8508.

¹⁵ B&W Canada's manager of component engineering testified at trial that all "nuclear-safety-related" work "must be perform[ed]" off site, at B&W Canada's own facility, because the

It also identified technology that would generally be used to perform tasks “on-site,” i.e., at OTSG customers’ sites. See id. at 3538-39 (definition of specialized nuclear maintenance, inspection, and field services); id. at 3609-12 (illustrative list of specialized nuclear maintenance, inspection, and field services including the provision of “management and/or operation personnel for site management,” performance of “service work” for tube plugs and other components already installed, provision of “steam generator cleaning services,” and performance of “on-site decontamination” of various tools and components).

This latter category included field services, which, as their name suggests, must necessarily be performed *at* OTSG customers’ sites in the “field.” See, e.g., 5 J.A. at 2105 (testimony of Areva’s NSSS manager that “[w]hen we speak of field [services], that means away from your office and typically that means at the site, where the plant and the physical equipment is located”); 6 J.A. at 2240 (testimony of B&W defendants’ witness and former Areva executive that field services describes “all of the services that are provided at the site of the utility after the plant is running”). This on-site/off-site dichotomy, used to describe the technology at issue, belies Areva’s effort to read the distinction out of the royalty provision.¹⁶

Areva seeks to displace this reasoning with the assertion that the meaning of the royalty provision was a question of fact that was properly decided by the jury. See Appellee’s Br. at 19-

engineering personnel and all of the “quality assurance certifications for doing that work” are there, not at customer sites. 6 J.A. at 2531-32; see also 4 J.A. at 1707 (testimony by Areva’s NSSS engineering manager that “safety analysis” is “typically not done at customer sites”). Licensing work is similarly not physically tied to a customer site because it also requires “quality assurance” work. 6 J.A. at 2553-54; see also 4 J.A. at 1707 (testimony by same witness that “regulatory licensing support” is “not done exclusively at customer sites”).

¹⁶ We similarly reject Areva’s reliance on Section II.A of the Sub-License. It was neither a license grant provision nor a royalty provision. Section II.A was simply a notice provision. It neither expanded the scope of the license grant nor broadened the contractual duty to pay royalties. The text of Section II.A, moreover, confirmed that notice was required only when “use of the Nuclear Technology as licensed herein [was] *at an OTSG site* described in Exhibit A.” 19 J.A. at 8508 (emphasis added).

20. Areva made this argument at trial during a dialogue with the trial court over a proposed jury instruction.¹⁷ Areva acknowledged the B&W defendants’ “theory of the case” which, on this issue, was “that none of these contracts are royalty-bearing because [they] did [their] work in the [Canada] office. But that is a fundamental disputed *factual* issue in this case.” 8 J.A. at 3119 (emphasis added). Our answer to this assertion is “yes” in part and “no” in part.

The trial court’s summary judgment order correctly held that the Sub-License’s royalty provision was unambiguous. Its plain meaning was thus a question of law for the court, not a question of fact for the jury. See School Bd. of Newport News, 279 Va. at 467, 689 S.E.2d at 735; Williston & Lord, supra note 6, § 30:6, at 92-98 (4th ed. 2012). Therefore, the court’s interpretation of the on-site/off-site distinction in the royalty provision was not a question of fact for the jury. What was a question of fact was whether the B&W defendants actually used Areva’s exclusive technology on site — that is, “at OTSG plant sites,” 19 J.A. at 8508 — while performing any of the disputed 15 customer contracts.¹⁸

We acknowledge Areva’s contention that it never intended the at-an-OTSG-site qualification to carry a literal meaning. See, e.g., 8 J.A. at 3321 (closing argument by Areva that the scope of “[t]he royalty and the license are the same” because “no honest person could say that [the B&W sublicensees] got a license that was this big but the royalty obligation is only this

¹⁷ This assertion was most directly stated in Areva’s objection to Jury Instruction E, proffered by the B&W defendants. 8 J.A. at 3119. Areva assigns cross-error to the giving of this instruction. Appellee’s Br. at 47. However, given our ultimate conclusion, this assignment of cross-error is moot.

¹⁸ Analogous principles of contract interpretation clarify that extrinsic evidence cannot be “offered first to create an ambiguity and then to remove it.” Stewart-Warner Corp. v. Smithey, 163 Va. 476, 487, 175 S.E. 882, 886 (1934) (quoting Coal River Collieries v. Eureka Coal & Wood Co., 144 Va. 263, 280, 132 S.E. 337, 343 (1926)); accord W.W.W. Assocs., Inc. v. Giancontieri, 566 N.E.2d 639, 643 (N.Y. 1990) (“An analysis that begins with consideration of extrinsic evidence of what the parties meant, instead of looking first to what they said and reaching extrinsic evidence only when required to do so because of some identified ambiguity, unnecessarily denigrates the contract and unsettles the law.”).

big”). That may or may not be so. “[E]ach party to a contract,” however, “has notice that the other will understand his words according to the usage of the normal speaker of English under the circumstances, and therefore cannot complain if his words are taken in that sense.” Oliver Wendell Holmes, *Theory of Legal Interpretation*, 12 Harv. L. Rev. 417, 419 (1899). When courts search for the parties’ intent in an unambiguous contract provision, the search ends where it begins — with the plain, usual, and ordinary meaning of the words themselves.

We have neither the duty nor the inclination to creatively construe an unambiguous contractual phrase “so as to conform it to the court’s notion of the contract [the parties] should have made” under the circumstances. Bentley Funding Grp. v. SK&R Grp., 269 Va. 315, 330, 609 S.E.2d 49, 56 (2005) (quoting Ames v. American Nat’l Bank, 163 Va. 1, 38, 176 S.E. 204, 216 (1934)). We are “aware of the temptation” of courts to “indulge in artificial interpretations or abnormal implications in order to save a party from a bad bargain.” Williston & Lord, supra note 6, § 32:11, at 771-72 (footnotes omitted).

We resist this temptation with the observation that our interpretative task is far simpler: “It is the court’s duty to declare what the instrument itself says it says.” Bentley Funding Grp., 269 Va. at 330, 609 S.E.2d at 56 (citation omitted).¹⁹ “[W]hat the parties claim they might have said, or should have said, cannot alter what they actually said.” Wilson v. Holyfield, 227 Va. 184, 188, 313 S.E.2d 396, 398 (1984).

¹⁹ Along these lines, it should not go unnoticed that the parties in this case have been litigating their disputes for over a decade. See Babcock & Wilcox Canada Ltd. v. Framatome ANP, Inc., No. 6:02CV00049 (W.D. Va. Feb. 13, 2003) (Moon, J.). The Sub-License was itself a product of the litigation settlement that the parties reached to end the federal court proceedings that preceded this suit. See 9 J.A. at 3468 (Section I.C.4 of the 2003 Settlement Agreement providing that “[Areva] agrees to begin negotiation” for the “immediate[] grant on a royalty-bearing basis, such negotiated rights in the licenses in the Technology Agreements which are exclusive to [Areva]”).

C. THE “FIRST CONTRACT” EXCLUSION

Section II.D of the Sub-License recognized a special one-time payment that would serve in lieu of the 4% royalty obligation for a qualifying first contract:

[B&W defendants] shall pay [Areva] a one-time only lump sum payment of U.S. \$250,000 within thirty days of the *first contract* to be entered into by either Grantee greater than U.S. \$100,000 for commercial nuclear service projects performed using the Nuclear Technology as licensed herein at an OTSG site described in Exhibit “A”, or by December 31, 2004, whichever occurs first. If payment is not received by [Areva] by December 31, 2004, this Sub-License Agreement will be considered null and void. . . .

19 J.A. at 8508 (emphasis added). The trial court declined to offer any interpretation of this provision and rejected a request by the B&W defendants to instruct the jury on this issue. See 19 J.A. at 330.

We find no ambiguity in either the text of paragraph D or the role it plays in Section II of the Sub-License. Paragraph D governed the “first contract,” in excess of \$100,000, covered by Section II. 19 J.A. at 8508. Thus, it applied to the first contract between a B&W sublicensee and its customer that required performance using Areva’s exclusive technology at an OTSG plant site. By its plain terms, paragraph D required a one-time payment of \$250,000 within the earlier of two deadlines: within 30 days of any such “first contract” or by December 31, 2004. Id. It was a critical deadline. If missed, the Sub-License would be “considered null and void.” Id. In exchange for that \$250,000 payment, Areva agreed to “exclud[e] the first contract,” no matter its date of execution, from any further royalty obligation. Id.

Areva argues that the \$250,000 lump sum was not in lieu of, but “*in addition to,*” Appellee’s Br. at 40 (emphasis in original), the payment of a 4% royalty for the first contract. We reject this argument as an awkward revision of the plain language of the Sub-License. Section II, which established the 4% royalty, stated that a royalty applied to qualifying contracts

“excluding the first contract, which is covered under [Section II.D].” 19 J.A. at 8508. Section II.D required that the B&W defendants pay Areva “a one-time only lump sum payment of U.S. \$250,000.” *Id.* Read together, as these provisions necessarily must be, see Berry v. Klinger, 225 Va. 201, 208, 300 S.E.2d 792, 796 (1983), “excluding the first contract” means to *exclude the first contract*, and what the first contract is excluded from is payment of the 4% royalty, 19 J.A. at 8508. The \$250,000 lump sum payment was thus in lieu of, not in addition to, a royalty payment for the first contract.

III. THE 15 CUSTOMER CONTRACTS ON THE VERDICT FORM

Applying our interpretation of the governing contractual provisions, we now turn to the B&W defendants’ arguments on appeal contesting the trial court’s failure to enforce its summary judgment ruling regarding ROTSG contracts, its decision to deny the B&W defendants’ motions to strike the evidence as a matter of law, and its refusal to enter judgment notwithstanding the verdict. The jury found the B&W defendants contractually liable for the 4% royalty on each of the 15 contracts listed on the verdict form. See 1 J.A. at 360-62. We address these contracts in three categories: the ROTSG contracts, the commercial nuclear services contracts, and the first contract excluded under Section II.D of the Sub-License.

A. THE ROTSG CONTRACTS²⁰

The undisputed evidence at trial was that the first three contracts on the verdict form involved the manufacture of replacement once-through steam generators (ROTSGs). These included the FirstEnergy Davis-Besse Contract 205S (“Davis-Besse”), the Progress Crystal River

²⁰ This section of our analysis corresponds to the B&W defendants’ Assignments of Error 1 and 5, which contend that the trial court erred by “not granting judgment for B&W on the [ROTSG contracts] as B&W’s use of the OTSG Technology was in its retained field of use, which does not constitute commercial nuclear services, was not performed by B&W at OTSG plant sites, and does not trigger the royalty obligation,” and by “refusing to instruct on its summary judgment ruling that the [Sub-License] did not provide for royalties for off-site design, manufacture and sale of ROTSGs.” Appellants’ Br. at 27-29.

3 Contract 150F (“Crystal River”), and the TVA Bellefonte Contract 230T (“TVA Bellefonte”).²¹

The trial court entered a pretrial summary judgment order holding that the Sub-License was “unambiguous” as a matter of law and that, under its plain meaning, “the royalty does not apply to gross contract amounts for off site design, manufacture and sale of ROTSG[s].” 1 J.A. at 234-35. As discussed earlier, we agree with the trial court on this issue. See supra Part II(B). We do not understand why the trial court allowed these claims to proceed to trial, but at any rate, the B&W defendants made the appropriate motions to preserve the issue for appeal.

In our opinion, the three ROTSG contracts did not trigger the royalty specified in the Sub-License as a matter of law. Given the plain meaning of the license grant and royalty provisions of the Sub-License, (i) no B&W defendant used any nuclear technology exclusive to Areva in performance of the Davis-Besse and Crystal River contracts, (ii) no B&W defendant used the disputed technology at any of the OTSG plant sites identified in the Davis-Besse, Crystal River, or TVA Bellefonte contracts, and (iii) the TVA Bellefonte plant site was never completed, a precondition to any royalty liability for this contract. We thus conclude that the trial court erred in denying the B&W defendants’ motions for judgment as a matter of law on the royalty claims arising out of the three ROTSG contracts.²²

²¹ See, e.g., 19 J.A. at 8523 (contract pertaining to “supply of two Once-Through Steam Generators for Bellefonte Unit 1 Plant”); 21 J.A. at 9594 (contract for the “manufacture and delivery of two (2) steam generators to be delivered to the Crystal River Nuclear Plant” (altering capitalization)); 24 J.A. at 11223 (contract for “once-through steam generator replacement” for Davis-Besse Power Station, Unit 1 (altering capitalization)).

²² The First Energy Hot Legs Contract, although for the manufacture of replacement heavy components, is not considered one of these contracts because hot legs are not steam generators, and thus the B&W defendants did not have the same broad design rights as they did for the ROTSGs, which included functional design when requested by customers. See 6 J.A. at 2480-84 (concession by former B&W Canada president that functional design is only nonexclusive to B&W when it pertains to ROTSGs, but this contract required functional design

1. Areva's Exclusive Technology

In performance of the ROTSG contracts, the B&W defendants used only technology that they either owned exclusively or that they shared nonexclusively with Areva. Technology that they owned exclusively related to the manufacture of heavy components, defined as “*complete components for a Nuclear Reactor System*,” 9 J.A. at 3531, and encompassed related engineering and design work, see id. at 3532 (defining “manufacturing detailed design” as “the *design activities* to detail manufacturing drawings, processes, procedures, sequencing, quality control procedures, tolerances, weld location and technology, inspection requirements and *any other details needed to manufacture the component* to meet the Component Design requirements” (emphases added)).

Technology that they shared with Areva included component design, inclusive of “design activities which translate the Functional Design into general layout drawings, . . . design and stress reports, quality control and quality assurance specifications.” Id. at 3528. Functional design, along with its corresponding engineering activities, was also agreed to be *shared* technology when requested by a customer.²³ According to the 1991 License Agreement, functional design included broad subsets of design activities, including all those necessary to establish “the specific applicable design requirements such as design codes, *safety and quality levels*, physical interfaces, working fluids, electrical requirements and *any other parameters* needed to define the form, fit and function of *an acceptable component*.” Id. at 3529 (emphases added).

Within the ambit of functional design existed various engineering tasks, including those which required “specialized knowledge” of the operations “or safety and regulatory requirements

of hot legs, which was exclusive to Areva).

²³ Compare 9 J.A. at 3560 with id. at 3565; see also supra note 11.

of or related to Nuclear Reactor Systems.” Id. at 3533. Because these activities required such “specialized knowledge,” they consequently qualified as “Nuclear Reactor Engineering Services” as defined by the 1991 License Agreement. Id. Thus, such engineering tasks would have been Areva-exclusive technology but for the fact that B&W had expressly reserved the royalty-free right to perform these tasks when their ROTSG customers asked for it. See id. at 3565 (Article 8.2(c)).

Uncontroverted evidence at trial established that for each of these ROTSG contracts the B&W defendants’ customers had requested functional design. See 6 J.A. at 2389. On appeal, Areva does not dispute this fact. Accordingly, the manufacture of “complete” components, 9 J.A. at 3531, in the context of *replacement* components, necessarily included before-and-after comparative analyses, even those that would otherwise qualify as nuclear reactor engineering services, to ensure the “acceptab[ility]” of the component for the particular nuclear plant at which it would be installed, id. at 3529.

At trial, Areva produced evidence that the contractual scope of the Davis-Besse contract called for B&W Canada to perform various nuclear reactor engineering services. The contract’s scope included the performance of “[a] Loop Nuclear Steam Supply System (NSSS) structural analysis”; “[e]valuations and reanalyses, where required, of plant events and accidents”; and “a Licensing Report for input to Buyer’s 10CFR50.59 Safety Evaluation.” 24 J.A. at 11286; see also id. at 11321 (“Contractor shall provide analyses or evaluations to demonstrate the *acceptability* of the NSSS structural design basis considering the differences between the ROTSGs and the original OTSGs.” (emphasis added)). Areva’s witnesses at trial contended that “several” tasks in the contractual scope of work “are nuclear reactor engineering services as defined in the [1991 License Agreement].” 4 J.A. at 1729-30; see also id. at 1651-53.

Areva fails to acknowledge, however, the uncontested evidence that all of these activities were performed as *part of* the manufacturing detailed design, component design, and functional design of complete, acceptable replacement steam generators. 6 J.A. at 2418-19; *id.* at 2552-54; 7 J.A. at 2748-49. They were not “stand-alone service[s]” but were tasks “required to produce a nuclear steam generator.” 6 J.A. at 2470. Indeed, Areva’s manager of NSSS engineering affirmed the contemporaneousness of these design activities with the manufacture of the ROTSGs, noting that the contract “schedule implies the manufacturing and the licensing report [were] prepared in parallel.” 5 J.A. at 2045; see also 3 J.A. at 973 (testimony of Areva’s senior vice president that there was no “reason to think that the customer didn’t ask B&W for functional design” regarding any of the manufacturing contracts because “functional design would be part of the scope”).

The Crystal River contract similarly required B&W Canada to perform “NSSS RCS Loop Structural Analysis,” 21 J.A. at 9655, and to “provide the support, to the [plant], necessary to ensure licensability,” including “all engineering . . . and plant modifications required as a result of functional differences between [the old and replacement steam generators]” installed, *id.* at 9755. Areva contended that these analyses constituted nuclear reactor engineering services exclusive to Areva. See, e.g., 4 J.A. at 1411-14; 5 J.A. at 2100-01. Here again, however, the undisputed evidence proved that these tasks were performed as “part of the steam generator design process” for manufacturing the replacement heavy component. 7 J.A. at 2749.

Thus, with respect to the Davis-Besse and Crystal River contracts, we agree with the B&W defendants that “B&W’s royalty-free right to perform Functional Design, Component Design, Manufacturing Detail Design, manufacture, and change out of the Heavy Components subsumed all of the uses that AREVA claimed triggered a royalty” regarding the ROTSG

contracts. Appellants’ Br. at 14-15.²⁴ The governing contractual provisions did not obligate the B&W defendants to pay a royalty on contracts for the manufacture or manufacturing detailed design of ROTSGs — exclusive rights B&W had reserved for itself since 1989 and had agreed for the first time to share with Areva in the 2003 Settlement Agreement, for which Areva paid additional consideration and executed a parallel royalty agreement one year later.²⁵

2. Use of Areva-Exclusive Technology “at” OTSG Plant Sites

None of the ROTSG contracts involved actual use of Areva’s exclusive technology *at* any of the OTSG plant sites listed in Exhibit “A” of the Sub-License, an essential predicate for the royalty obligation to apply. See supra Part II(B). Areva produced no evidence at trial that any of the B&W defendants’ personnel had ever gone to any of the TVA Bellefonte, Davis-Besse, or Crystal River plant sites to render on-site services of any kind. See, e.g., 4 J.A. at 1627, 1648, 1658.

The royalty provision required actual — not the mere possibility of — on-site use by the B&W defendants of Areva’s exclusive technology. Any possibility of such use in any of the

²⁴ See, e.g., 3 J.A. at 1032, 1038-39 (testimony of Areva’s negotiator of the Sub-License that the parties did not intend the Sub-License to “appl[y] to manufacturing contracts”); 6 J.A. at 2276 (testimony of B&W defendants’ witness and former Areva executive, who had executed the Sub-License for Areva, that he “never even considered th[e] possibility” that “B&W would pay AREVA a royalty whenever B&W got what has been referred to as an all-in contract to make a [ROTSG]”).

²⁵ The TVA Bellefonte contract requires a different analysis than the other two ROTSG contracts because B&W licensed to Areva exclusive authority to “make, use, sell, design or take any other action (but not including manufacture of Heavy Components) necessary or desirable to perform Bellefonte NSS Completion.” 26 J.A. at 12106. However, this license excluded the right to manufacture ROTSGs and any other heavy components for the TVA plant, a right B&W kept exclusively for itself. See id. Areva correctly points out that Article 8.1.6 of the TVA amendment to the 1991 License Agreement did not expressly incorporate the provisions of the 1991 License Agreement granting B&W the right to use shared nuclear technology in support of B&W’s manufacturing activities. Given our holding in Part III(A)(2) of this opinion, however, we need not address this issue further.

ROTSG contracts, however, was limited to installation or change-out assistance,²⁶ which, as noted earlier, were royalty-free activities contractually reserved by the B&W defendants. See supra note 12 and accompanying text. Areva conceded this point at trial. Its senior vice president and negotiator of the Sub-License, 2 J.A. at 795, acknowledged that the installation of a steam generator would require “a little” on-site work, but he agreed that “[c]hange-out” of heavy components was “nonexclusive” to Areva and thus “[n]o royalty” applied. 3 J.A. at 1031-32. Another Areva corporate witness affirmed that any presence of the B&W defendants at an OTSG site “to be available for questions during installation is not something that would trigger a royalty.” 5 J.A. at 2002-03 (testimony of Areva’s NSSS engineering manager).²⁷

3. The Uncompleted TVA Bellefonte Plant²⁸

With respect to the TVA Bellefonte contract, Areva’s royalty claim runs into a unique, additional contractual obstacle: The plant site was never completed. Exhibit “A” to the Sub-License stated that TVA Bellefonte was an “OTSG plant site to which th[e] Sub-License

²⁶ See 19 J.A. at 8577 (TVA Bellefonte contract provision limiting B&W’s on-site “Field Service support” to “unloading, installation and startup” of the ROTSGs by TVA); 21 J.A. at 9655 (Crystal River contract provision for “[f]ield service support for unloading, installation and start-up up to 240 (man hours of support)”; 24 J.A. at 11268 (Davis-Besse contract provision providing that “[d]uring the steam generator *replacement* outage, [B&W] will provide up to 400 man-hours of engineering support to respond to field deviation requests” and “competent technical personnel to provide advice, assistance and guidance in the unloading of the [ROTSGs]” (emphasis added)).

²⁷ Notably, none of these contracts included installation by the B&W defendants. See 19 J.A. at 8565 (TVA to provide its own “installation of equipment provided by [B&W Canada]”); 20 J.A. at 9063 (B&W Canada to provide “Final Delivery of the ROTSGs” to Davis-Besse for subsequent installation); 21 J.A. at 9729 (“[Crystal River] to receive, store, [and] install” the ROTSGs).

²⁸ This section of our analysis corresponds to the B&W defendants’ Assignment of Error 2, which alleges that the trial court erred by “not granting judgment for B&W on the TVA Bellefonte Contract” as a matter of law because “both the Sublicense and the court’s instructions establishing the law of the case conditioned royalties on completion, and all evidence on the point showed that the Bellefonte facility was not, and may never be, completed.” Appellants’ Br. at 28.

Agreement applies” only “[i]f completed.” 19 J.A. at 8514. All parties agreed at trial that work at this plant had been suspended with no definite plans to resume at any time in the future. Indeed, Areva’s own NSSS engineering manager stated that “completing the plant is an option for [TVA Bellefonte] in the future,” 5 J.A. at 2042 (emphasis added), necessarily conceding that the plant was not yet completed. Because the royalty obligation for work at this OTSG plant arose only if the plant were completed, Areva’s claim for royalties associated with this incomplete plant necessarily fails. See, e.g., 4 J.A. at 1626-27; 5 J.A. at 2042-43; 6 J.A. at 2567-68.²⁹

Areva urges a non-literal reading of the qualifying clause “[i]f completed,” 19 J.A. at 8514, contending that the clause denotes work of any kind in furtherance of completion of the plant site, even though the plant may never in fact be completed. The Sub-License simply cannot bear this counter-intuitive interpretation. Something cannot be both completed and in the process of completion at the same time. As Judge Learned Hand remarked, “there is a critical breaking point beyond which no language can be forced.” Farnsworth, supra, § 7.10, at 290 (alteration and citation omitted). In our opinion, Areva’s interpretation of the “if completed” qualification goes beyond that point.

We are also unpersuaded by Areva’s reliance upon the definition of “Bellefonte NSS Completion” in the 1991 License Agreement. That provision included “any agreement (including an agreement for management of construction, but not for management of the construction workforce) by which TVA . . . contracts with any party for work pertaining to the completion of Bellefonte Units 1 and/or 2.” 9 J.A. at 3542. This definition, however, plainly

²⁹ This indefinite suspension even led to the projected “long-term storage” of B&W Canada’s newly manufactured ROTSGs, which, as of trial, had not been installed at the incomplete plant. 6 J.A. at 2568.

described contracts during TVA Bellefonte’s *completion phase* — not the culmination of that phase in a completed, operational plant site.³⁰

It is chronologically nonsensical for the if-completed qualification to be interpreted as Areva suggests. The qualification appears in the 2004 Sub-License Agreement, not the 1991 License Agreement. By 2004, the construction phase of the TVA Bellefonte plant had already progressed to about 90% completion. See 6 J.A. at 2340. The original steam generators had already been installed. Id. Thus, in 2004, the if-completed qualification could not possibly mean, as Areva claims, any and all aspects of the completion phase because that phase was already about nine-tenths done at the time the parties agreed to the qualification.³¹

Instead, the “if completed” qualification could logically mean only what it literally says: Any royalty associated with this plant would be owed only *if* the plant is *completed* — which can only refer to the future date. Otherwise, there would be no reason to have even used that caveat, for it would have added nothing to the words already in the royalty provision.³²

B. THE COMMERCIAL NUCLEAR SERVICE CONTRACTS

The remaining twelve customer contracts did not involve the manufacture of ROTSGs.³³

³⁰ Moreover, the only time that the 1991 License Agreement mentions Bellefonte NSS Completion is in Article 9, which imposes limitations on Areva’s ability to sub-license intellectual property relevant to completion of the site. See 9 J.A. at 3569-70.

³¹ We do not decide whether the B&W defendants trespassed upon any of Areva’s Bellefonte NSS Completion rights because Areva has not alleged at any point in this litigation a breach of the 2003 Settlement Agreement, nor would the issue be properly before us on appeal. See Appellee’s Br. at 47 (assignments of cross-error limiting appellate review to the trial court’s summary judgment ruling and the finding instruction given to the jury).

³² In interpreting contracts, “[e]ffect should be given to every part of the instrument, if possible, and no part thereof should be discarded as superfluous or meaningless.” CNX Gas Co. v. Rasnake, 287 Va. 163, 168, 752 S.E.2d 865, 867 (2014) (citations omitted); see also Commonwealth v. Squire, 278 Va. 746, 752, 685 S.E.2d 631, 634 (2009); Cook v. Commonwealth, 268 Va. 111, 114, 597 S.E.2d 84, 86 (2004).

³³ This section of our analysis corresponds to the B&W defendants’ Assignment of Error

They did involve, however, use by the B&W defendants of Areva’s exclusive technology in the field of commercial nuclear services. These contracts can be divided into two categories based on the type of nuclear technology they used.³⁴ The first involved the off-site “design and [sale]” of “Nuclear Reactor Engineering Services.” 9 J.A. at 3559. The second related to the on-site “design, manufacture, [sale,] and use” of “Specialized Nuclear Maintenance, Inspection and Field Services.” Id.

1. Off-Site Services

The evidence at trial was sufficient to establish that the B&W defendants used the first category of nuclear technology in the performance of the contracts listed on the verdict form as contract numbers:

- 4 (Duke Contract #00111924)
- 5 (Duke Contract #00119518)
- 6 (Duke Contract #00121611)
- 7 (Duke Contract #00124687)
- 8 (Duke Contract #00127176)
- 9 (Progress Master Services Contract #407670)
- 10 (Duke Contract #00144904)
- 11 (First Energy Hot Legs Contract)
- 12 (First Energy Contract #55111846)
- 13 (Duke Contract #66364)
- 15 (Progress Contract #187562)

3, which asserts that the trial court erred by not granting judgment for B&W as a matter of law on all of the contracts because “royalties are triggered only by B&W’s use of the OTSG Technology ‘at an OTSG site’ and no B&W agent performed any work at any of the OTSG sites involved except on the Duke Master Services Agreement.” Appellants’ Br. at 28.

³⁴ See, e.g., 4 J.A. at 1841-46 (testimony of Areva’s NSSS engineering manager regarding “multiple types of services” and activities that were granted to Areva in the 1991 License Agreement and distinguishing between “inspection, maintenance and field services” and “nuclear reactor engineering services,” noting that all but one of these contracts involved the latter technology).

The scope of work for these contracts included engineering studies of main steam line breaks,³⁵ evaluation of foreign materials in steam generators,³⁶ determination of the impact of replacement generators on tube-wear rates,³⁷ thermal-hydraulic analyses,³⁸ “calculation[s] documenting the finite element single beam model of the [ROTSG],”³⁹ all engineering studies necessary for qualification of ROTSGs for extended power uprate (EPU) conditions,⁴⁰ engineering services required for a License Amendment Request (LAR) write-up for a Measurement Uncertainty Recovery (MUR) power uprate,⁴¹ engineering services related to

³⁵ 26 J.A. at 12263 (Duke Contract #00111924); id. at 12283 (Duke Contract #00127176); id. at 12289 (Duke Contract #00124687); see also 4 J.A. at 1427-28 (testimony of Areva’s expert that in his expert opinion, “AREVA-exclusive nuclear technology was used”); id. at 1778-79 (testimony of Areva’s NSSS engineering manager that “a re-performance and a re-evaluation” of a main steam line break analysis “embodies and incorporates the original [pre-1989] analysis”); 5 J.A. at 2065-66 (testimony of same witness that “this scope of work is not able to be performed without reliance on pre-1989 technology” because a main steam line break “is an accident scenario” designed when the plant was originally constructed).

³⁶ 26 J.A. at 12366 (Duke Contract #00119518); see also 4 J.A. at 1429-30 (testimony of Areva’s expert that in his expert opinion “nuclear reactor engineering services would be required to perform this contract”); 5 J.A. at 2056 (testimony by Areva’s NSSS engineering manager that the evaluation involved reliance on “inputs which are based on the original design basis and AREVA-exclusive technology which is also from before 1989”).

³⁷ 26 J.A. at 12303 (Duke Contract #00121611); see also 4 J.A. at 1430-31 (testimony of Areva’s expert that the contract “require[d] the use of AREVA-exclusive nuclear technology” because the evaluation affected the “licensed level” of the plant, which was licensed before 1989).

³⁸ 25 J.A. at 11897 (Progress Master Services Contract #407670, work authorization number 1).

³⁹ Id. at 11905 (Progress Master Services Contract #407670, work authorization number 2).

⁴⁰ Id. at 11909 (Progress Master Services Contract #407670, work authorization no. 3); see also 4 J.A. at 1823 (testimony by Areva’s NSSS engineering manager that “doing work associated with the base support for the steam generator and/or the upper lateral support for the steam generator is not part of component design for a heavy component and . . . meets the definition of a nuclear reactor engineering service” requiring Areva-exclusive technology because “the analysis that you do in 2010 has to be measured against the analysis of what was done previously”).

⁴¹ 26 J.A. at 12336 (Duke Contract #00144904); see also 4 J.A. at 1435-36 (testimony of

licensing support for replacement hot legs,⁴² engineering analyses of hot legs harvested from an abandoned nuclear plant to determine feasibility of installation elsewhere,⁴³ structural qualification of “tube-to-tubesheet seal welds,”⁴⁴ and services for the procurement of equipment.⁴⁵ The First Energy Hot Legs contract, even though for the manufacture of heavy components (hot legs), involved B&W Canada’s performance of nuclear reactor engineering services that were exclusive to Areva.⁴⁶

Each of these activities fell within the definition of “nuclear reactor engineering services” set forth in the 1991 License Agreement, and many of them were even listed as specific illustrations of such services in an exhibit attached to the 1991 License Agreement. See 9 J.A. at 3605-08. Thus, evidence of the B&W defendants’ performance of the various engineering

Areva’s expert that “this contract required use of AREVA’s exclusive nuclear technology” because “the licensed level of this particular reactor is part of the [original] licensing basis”); id. at 1829 (testimony of Areva’s NSSS engineering manager that the contract specifically called for licensing support, “one of the AREVA-exclusive activities,” specifically, “nuclear reactor engineering services”).

⁴² 27 J.A. at 12982 (First Energy Hot Legs Contract); 24 J.A. at 11039-40 (same); see also 4 J.A. at 1542, 1546-47 (expert’s opinion that the scope of services went beyond manufacture and sale into “engineering”).

⁴³ 26 J.A. at 12028 (First Energy Contract #55111846); see also 5 J.A. at 2068 (testimony of Areva’s NSSS engineering manager that the contract scope was for “an engineering study to evaluate the potential refurbishment of some equipment”).

⁴⁴ 26 J.A. at 12378 (Duke Contract #66364); see also 4 J.A. at 1837-38 (testimony of Areva’s NSSS engineering manager that “the scope of work includes re-evaluating that particular weld for a different load,” which was “performed on an existing component in the plant which then meets the definition of a nuclear reactor engineering service”); 7 J.A. at 2736 (concession by B&W Canada manager that the “tube-to-tubesheet welds were in a steam generator whose design was based very substantially on the pre- or 1989 original once-through steam generator”).

⁴⁵ 27 J.A. at 12867 (Progress Contract #187562); see also 4 J.A. at 1447 (testimony of Areva’s expert that Areva-exclusive technology was required “because it involves the utilization of . . . 10 CFR Part 15, Appendix B, Quality Assurance”).

⁴⁶ Unlike the broad design and manufacture rights that the B&W defendants possessed for ROTSG contracts, B&W defendants were not permitted to perform functional design or corresponding engineering services for heavy components that were not replacement steam generators. See supra note 22.

studies described in the contract scopes was sufficient to establish that the B&W defendants used Areva's exclusive technology in the performance of these contracts.

However, the systemic error in Areva's claim for royalty payments related to these contracts is that none of the B&W defendants used this technology at any of the OTSG sites listed in Exhibit "A" of the Sub-License. As noted earlier, the royalty provision stated — in three separate places — that the royalty obligation was triggered only when the B&W sublicensees used the exclusive technology "at OTSG plant sites" listed in Exhibit "A." 19 J.A. at 8508. At trial and on appeal, Areva contends that the at-OTSG-plant-sites qualification should not be read literally. It was enough, Areva contends, that *customers* of the B&W sublicensees ultimately benefited from the technology and employed it, however they chose to do so, in their plant operations.

As we stated earlier, the plain meaning of the provision refutes Areva's position. See supra Part II(B). Under the royalty provision of the Sub-License, the B&W sublicensees were obligated to pay a 4% royalty only when (i) *they*, not their customers or anyone else, (ii) *used* Areva's exclusive technology (iii) *at an OTSG site*, not at some off-site location. No royalty was owed, therefore, if only the customers of the B&W sublicensees used Areva's exclusive technology at their own OTSG sites. Nor was the royalty owed if the B&W sublicensees used this technology at some non-OTSG, off-site location. The royalty provision, by its unambiguous terms, applied only to on-site services.

Thus, pursuant to the plain language of the royalty provision, verdict form contract numbers 4 (Duke Contract #00111924), 5 (Duke Contract #00119518), 6 (Duke Contract #00121611), 7 (Duke Contract #00124687), 8 (Duke Contract #00127176), 9 (Progress Master Services Contract #407670), 10 (Duke Contract #00144904), 11 (First Energy Hot Legs

Contract), 12 (First Energy Contract #55111846), 13 (Duke Contract #66364), and 15 (Progress Contract #187562) did not trigger the royalty provisions.⁴⁷

2. On-Site Services

The evidence was sufficient for reasonable jurors to have found that B&W Nuclear used the second category of nuclear technology, which required work performed “at OTSG plant sites,” 19 J.A. at 8508, for the Duke Nuclear Steam Generator Inspection & Maintenance Services Agreement (“Duke Master Services Contract”), contract number 14 on the verdict form. The scope of this contract included “eddy current inspection,” “[t]ube plugging and stabilization,” and qualification of “[a]ll plugs and stabilizers . . . for full power operation and transient conditions including design basis accident conditions,” among other things. 26 J.A. at 12120, 12151.

Some of these tasks were specifically listed in the exhibit of illustrative “specialized nuclear maintenance, inspection and field services” attached to the 1991 License Agreement. See 9 J.A. at 3610. Trial testimony further characterized these activities as Areva-exclusive maintenance, inspection, and field services, which also required use of the “technology from the original licensing basis and design basis of the plant.” 4 J.A. at 1849-50; see also 4 J.A. at 1448-49 (testimony of Areva’s expert that, in his expert opinion, “this contract involve[d] the use of AREVA’s exclusive nuclear technology”).

The evidence fully supports the jury’s conclusion that B&W Nuclear’s use of this second category of Areva’s nuclear technology occurred at an OTSG plant site. Field services, by their very definition, involved on-site work. 5 J.A. at 2105; 6 J.A. at 2240; see also 4 J.A. at 1845,

⁴⁷ Based on this finding, there is no need for us to address the B&W defendants’ Assignment of Error 6 regarding the trial court’s refusal to instruct the jury that “B&W’s use of certain computer codes does not trigger a royalty under the [Sub-License].” Appellants’ Br. at 29.

1848-49. Moreover, the B&W defendants concede that the Duke Master Services Contract satisfied the threshold royalty conditions. See, e.g., Appellants’ Br. at 18-19; 4 J.A. at 1598.

C. THE “FIRST CONTRACT” EXCLUSION⁴⁸

Under the Sub-License, any royalty due for the first qualifying contract with a gross contract amount exceeding \$100,000 was covered by the \$250,000 lump-sum payment described in the “first contract” exclusion of Section II.D. 19 J.A. at 8508; see also supra Part II(C). On appeal, the B&W defendants contend that the Duke Master Services Contract was the first contract to qualify for the exclusion as a matter of law.

In response, Areva argues the “first contract” exclusion does not apply as a matter of law because the \$250,000 lump sum was not in lieu of, but “*in addition to,*” the payment of a 4% royalty for the first contract to trigger the royalty provisions. See Appellee’s Br. at 40. As stated earlier, we reject this position as irreconcilable with the plain meaning of the exclusion. Supra Part II(C). Section II imposed the 4% royalty but conspicuously excluded any royalty liability on the “first contract” covered by paragraph D. 19 J.A. at 8508. Nothing in either provision’s text or context supports Areva’s contention that the \$250,000 payment was meant to be in addition to, rather than in lieu of, a royalty payment on the first contract to trigger the royalty provisions.⁴⁹

⁴⁸ This argument corresponds to the B&W defendants’ Assignment of Error 4: “The trial court erred in not granting judgment to B&W on the Duke Master Services Agreement, as the first services contract for greater than \$100,000, or, if it was not the first as a matter of law, in refusing to instruct the jury on the first contract exclusion.” Id. at 28.

⁴⁹ We note that at the end of the trial, the trial court remarked from the bench that the first-contract exclusion was “ambiguous.” 8 J.A. at 3131. In its earlier written order on the cross-motions, however, the court had expressly held that the “royalty provisions in Art. II” — which would include Section II.D’s “first contract” provisions — are “unambiguous.” 1 J.A. at 234. We need not look for a reconciliation of these views, however, because we hold as a matter of law that the provision has a plain meaning that we interpret *de novo*.

One additional aspect of this issue deserves mention. The Sub-License did not expressly identify B&W Nuclear as a grantee. In its initial pleadings, Areva asserted that B&W Nuclear was “neither a signatory to nor a Grantee” under the Sub-License. See, e.g., 1 J.A. at 14. However, in support of its claim for contractual royalties, Areva reversed its position at trial and presented evidence that B&W Nuclear *was* a grantee under the Sub-License.

The first witness Areva put on the stand was the company’s senior vice president who had also negotiated the Sub-License on Areva’s behalf. He was asked on cross-examination: “And it’s your position that [B&W Nuclear] is a grantee under the sublicense, right?” 3 J.A. at 1088. He answered: “Right.” Id. To confirm that there was no misunderstanding, the B&W defendants’ counsel again asked: “And, so B&W, as it is set forth in [the Sub-License] you negotiated, includes [B&W Nuclear], right?” Id. at 1089. Areva’s witness again confirmed: “Yes, Sir.” Id.

Areva’s expert witness made the same assertion, claiming that “each of the contracts” in dispute, including the two in which B&W Nuclear was the only B&W defendant on the contract, were “covered under the royalty of 4 percent of the gross revenues” and, thus, subject to its license grant and royalty provisions. 4 J.A. at 1451-52; see also 5 J.A. at 2104 (testimony of Areva’s manager of its NSSS engineering division that the Duke Master Services Contract “was subject to the 4 percent royalty obligation . . . even though [B&W Nuclear] isn’t named as a grantee” in the Sub-License).⁵⁰

⁵⁰ We do not mean to imply that this concession was unwarranted. The 2003 Settlement Agreement, which imposed on Areva the contractual obligation to “grant on a royalty-bearing basis[] . . . negotiated rights in [Areva-exclusive technology],” acknowledged that the entire context for the cross-licenses was resolution of the federal litigation between B&W, Areva, and their various affiliates. See 9 J.A. at 3464-65. Consequently, the Settlement Agreement expressly stated that its terms were to govern “*all* subsidiaries of [B&W] in which [B&W] has at any time owned . . . or in the future owns . . . a majority interest.” Id. at 3464 (emphasis added).

Areva's counsel argued this position to the jury, see supra Part I(D), and succeeded in obtaining a jury verdict — on a form that Areva drafted and which proceeded “contract by contract” through each of the 15 contracts. 8 J.A. at 3166; 1 J.A. at 360-62. It was undisputed that B&W Nuclear was the only B&W defendant that was party to two of the disputed contracts, the Duke Master Services Contract and Duke Contract #00144904, and the jury's finding in the verdict form that a B&W defendant had “breached the Sub-License” in relation to each of these contracts necessarily indicates that the jury found B&W Nuclear bound by the Sub-License. See 1 J.A. at 360-61; see also Appellee's Br. at 41 (arguing that the Duke Master Services Contract was “subject to notice and royalty provisions” of the Sub-License).

To permit Areva to disavow on appeal the very argument it made at trial would allow Areva to approbate and reprobate. See Wooten v. Bank of Am., N.A., 290 Va. 306, 310 n.1, 777 S.E.2d 848, 850 n.1 (2015). Under settled principles, however, a litigant may not take “successive positions in the course of litigation that are either inconsistent with each other or mutually contradictory.” Lewis v. City of Alexandria, 287 Va. 474, 480, 756 S.E.2d 465, 469 (2014) (citation omitted); Berry, 225 Va. at 207, 300 S.E.2d at 795.

The “doctrine against approbation and reprobation” applies both to assertions of fact and law, Wooten, 290 Va. at 310 n.1, 777 S.E.2d at 850 n.1, and precludes litigants from “playing fast and loose” with the courts, Wilroy v. Halbleib, 214 Va. 442, 445, 201 S.E.2d 598, 601 (1974) (citation omitted), or “blowing hot and cold” depending on their perceived self-interests, United Va. Bank v. B.F. Saul Real Estate Inv. Tr., 641 F.2d 185, 190 (4th Cir. 1981). We thus see no reason to examine further whether B&W Nuclear should receive the benefit, as well as the hoped-for burden, of the Sub-License.

IV. THE TRADE SECRETS CLAIM

Finally, we address the B&W defendants' challenge to the trial court's rulings and the

jury's verdict finding that the B&W defendants misappropriated Areva's trade secrets. See Appellants' Br. at 29 (Assignment of Error 7).

Under Virginia's Uniform Trade Secrets Act (VUTSA), an owner of "trade secrets" may be entitled to damages when it can prove "misappropriation" by another. Code §§ 59.1-336, -338; see also Collelo v. Geographic Servs., Inc., 283 Va. 56, 68, 727 S.E.2d 55, 60 (2012). A "trade secret" is information that "[d]erives independent economic value . . . from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use" and "[i]s the subject of efforts that are reasonable under the circumstances to maintain its secrecy." Code § 59.1-336.⁵¹ Under the VUTSA, "[m]isappropriation" requires:

1. Acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by *improper means*; or
2. Disclosure or use of a trade secret of another without express or implied consent by a person who
 - a. Used *improper means* to acquire knowledge of the trade secret; or
 - b. At the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was
 - (1) Derived from or through a person who had utilized *improper means* to acquire it;
 - (2) Acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use;

⁵¹ The Uniform Trade Secrets Act "codifie[d] the basic principles of common law trade secret protection," substituted "unitary definitions of trade secret and trade misappropriation," and provided "a single statute of limitations for the various . . . theories of noncontractual liability utilized at common law." Uniform Trade Secrets Act § 1 prefatory note (Nat'l Conf. of Comm'rs on Unif. State Laws 1985). However, the VUTSA expressly states that it "displaces conflicting tort, restitutionary, and other law of this Commonwealth providing civil remedies for misappropriation of a trade secret." Code § 59.1-341(A).

- (3) Derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
- (4) Acquired by accident or mistake.

Id. (emphases added).

The B&W defendants dispute that they misappropriated the technology at issue, contending that “B&W owns all of the OTSG Technology, was entitled to access what it did not physically possess, obtained access by lawful means, and is entitled to use all of it *for any purpose* subject only to royalty for certain uses at certain sites.” Appellants’ Br. at 45 (emphasis added). Thus, they assert, “there was no acquisition or use of the trade secrets ‘of another’ by improper means or without consent or ‘unauthorized disclosure or use.’” Id. (citations omitted). Given our interpretation of the Sub-License, we agree with the B&W defendants that they cannot be liable for misappropriating trade secrets as a matter of law.

Section I of the Sub-License gave the B&W sublicensees “a perpetual, worldwide, sub-license to practice and use” Areva’s exclusive technology “for all purposes, without restriction, in the field of or relating to the supply of commercial nuclear services to OTSG plants.” 19 J.A. at 8508. The scope of this license sweeps very broadly, employing such descriptions as “perpetual,” “worldwide,” “for all purposes,” and “without restriction.” Id. Exhibit B to the Sub-License further granted the B&W sublicensees the right to “disclose without prior approval to a third party as subcontractor *or in other relationship* to the extent necessary to qualify a repair product or service” various Areva-exclusive technologies, including reports detailing “[a]ny interfaces required for the rendering of the OTSG commercial nuclear services.” Id. at 8515 (emphasis added).

There can be no misappropriation where acquisition, disclosure, and use of a trade secret have been expressly authorized by contract. See Navar, Inc. v. Fed. Bus. Council, ___ Va. ___,

____, 784 S.E.2d 296, ____ (2016) (finding that the defendant “did not disclose or use the trade secrets in violation of the Trade Secrets Act” because at the time of the contract award, he “was [contractually] authorized to use the information”).⁵² A valid contractual acquisition can hardly be characterized as “improper means,” which the VUTSA defines as “theft, bribery, misrepresentation, use of a computer or computer network without authority, breach of a duty or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means.” Code § 59.1-336.⁵³ A comment to the Uniform Trade Secrets Act specifically lists acquisition “under a license from the owner of the trade secret” as an example of “proper means,” Uniform Trade Secrets Act § 1 cmt. (Nat’l Conf. of Comm’rs on Unif. State Laws 1985), assuming that the contractual relationship is not procured through fraud.⁵⁴

⁵² The District of Columbia and at least 46 states, including Virginia, have adopted the Uniform Trade Secrets Act (“UTSA”). 1 Roger M. Milgrim & Eric E. Bensen, *Milgrim on Trade Secrets* § 1.01 (2016). Under the UTSA, “misappropriation” is a defined term “and includes unauthorized acquisition, use and disclosure.” *Id.*; see also Uniform Trade Secrets Act § 1 (Nat’l Conf. of Comm’rs on Unif. State Laws 1985) (“‘Misappropriation’ means: (i) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or (ii) disclosure or use of a trade secret of another without express or implied consent.”).

Thus, by definition, “misappropriation” of a trade secret can only occur when acquisition, disclosure, or use is not authorized. See, e.g., IAC, Ltd. v. Bell Helicopter Textron, Inc., 160 S.W.3d 191, 199 (Tex. App. 2005) (affirming the trial court’s decision to grant a temporary injunction on the trade secret owner’s misappropriation claim because the owner had produced “evidence that appellants used the [confidential information] without [owner]’s authorization” based on the fact that “the confidentiality agreement expressly prohibited [appellant] from using the [confidential information]”).

⁵³ As we have already observed, Areva asserted at trial that B&W Nuclear was a party to the Sub-License and, indeed, sought and obtained a royalty award associated with the Duke Master Services Contract. See supra Part III(C). Under approbate-reprobate principles, Areva’s contentions on this issue at trial close the door on appeal to any argument that the Sub-License was inapplicable to B&W Nuclear. Supra Part III(C).

⁵⁴ See Restatement (First) of Torts §§ 757 cmt. f, 759 cmt. c (1939) (noting that the term “improper means” generally includes “means which fall below the generally accepted standards of commercial morality and reasonable conduct” and specifically includes obtaining a trade secret through “fraudulent misrepresentations to induce disclosure,” such as entering into a

The royalty provision in the Sub-License was not a limitation on the scope of the right to use Areva's exclusive technology. It was a provision requiring compensation for use of Areva's exclusive technology at specifically identified OTSG plant sites. If the B&W sublicensees had breached their contractual duty to pay royalties for the 15 customer contracts in this case, that fact would not convert Areva's breach-of-contract claim into a statutory right of action for misappropriation of trade secrets.⁵⁵ Areva offers us no persuasive authority to the contrary, and we are aware of none. For this reason, the trial court erred in failing to set aside the verdict on Areva's trade secrets claims.⁵⁶

license agreement that the licensee has no intent to fulfill at the time of execution); Uniform Trade Secrets Act § 1 cmt. (Nat'l Conf. of Comm'rs on Unif. State Laws 1985) (noting that "[i]mproper means could include otherwise lawful conduct which is improper under the circumstances"); *id.* (noting that "[o]ne of the broadly stated policies behind trade secret law is 'the maintenance of standards of commercial ethics'" (quoting Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481 (1974))); *see also* Systems 4, Inc. v. Landis & Gyr, Inc., 8 Fed. App'x 196, 200 (4th Cir. 2001) (recognizing the indeterminate nature of "improper means" but noting that from various jurisdictions' statutory definitions, "one can derive some common characteristics" centering on "intentional conduct involving some sort of stealth, deception or trickery").

⁵⁵ 1 Milgrim & Bensen, *supra* note 52, § 4.02 ("Use of an express contract [to govern trade secrets] may cast an eventual trade secret action as one for breach of contract rather than as one sounding in tort. This could have impact on . . . the available remedy. . . . Similarly, an express contract might impose *narrower* duties and competitive strictures than the relationship between the parties would create in the absence of an express agreement." (footnotes omitted)); *see also* Aktiebolaget Bofors v. United States, 194 F.2d 145, 148 (D.C. Cir. 1951) ("[O]ne who has lawfully acquired a trade secret may use it in any manner without liability unless he acquired it subject to a contractual limitation or restriction as to its use. *In that event a licensee who uses the secret for purposes beyond the scope of the license granted by the owner is liable for breach of contract, but he commits no tort, because the only right of the owner which he thereby invades is one created by the agreement of disclosure.* The owner could not maintain a suit against him for damages arising from unlicensed use without pleading and proving the contract. This being true, the gist of the owner's action is the breach of the licensing agreement." (emphasis added) (footnote omitted)).

⁵⁶ The B&W defendants also challenge Areva's method of calculating statutory damages under Code § 59.1-338(A). *See generally* Cacique, Inc. v. Robert Reiser & Co., 169 F.3d 619, 623-24 (9th Cir. 1999) (interpreting a similar adaptation of the Uniform Trade Secrets Act); American Sales Corp. v. Adventure Travel, 862 F. Supp. 1476, 1479-80 (E.D. Va. 1994) (applying the Virginia Uniform Trade Secrets Act and calculating damages); 4 Milgrim & Bensen, *supra* note 52, § 15.02. Given our holding, we need not address this issue.

V. CONCLUSION

In sum, we hold that the trial court erred in failing to set aside the verdict and enter judgment for the B&W defendants on Areva's royalty and trade secret claims on each of the 15 contracts on the verdict form. Our holding moots Areva's assignments of cross-error. For these reasons, we reverse and enter final judgment dismissing Areva's claims.

Reversed and final judgment.