IN THE CIRCUIT COURT FOR MONTGOMERY COUNTY, MARYLAND

MESO SCALE DIAGNOSTICS, LLC Plaintiff, vs. CRESCENDO BIOSCIENCES, INC., Defendant.	:	Case No. 421796-V

MEMORANDUM AND ORDER

On April 2, 2012, the parties in this case entered into a long-term Purchase Agreement[1] with respect to the materials needed for the testing platform of a new test for rheumatoid arthritis, Vectra DA.[2] After a bench trial in 2017, the court ruled that even though the contract had been properly terminated by the defendant, Crescendo Bioscience, Inc. ("Crescendo"), it nevertheless remained obligated under § 10.1 of the Purchase Agreement exclusively to purchase Products and Supplies[3] for Vectra DA from plaintiff Meso Scale Diagnostics, LLC ("MSD"), post-termination.[4] This obligation, the court ruled, was a valid exclusive dealing, requirements

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[1] Purchase Agreement, dated April 2, 2012, Joint Trial Ex. 29 ("Purchase Agreement").

[2] Vectra DA is an advanced blood test for adults with rheumatoid arthritis. The test measures the levels of twelve biomarkers in the blood, which is then scored to indicate the level of disease activity. The scoring algorithm was developed by Crescendo. The platform used to run the test was jointly developed by Crescendo and MSD. MSD's technology is based on electro-chemiluminescence.

[3] Products are the instruments that are used to read the blood samples. Supplies are the plates, analytes, diluents and read buffers that are consumed when running the blood test. The twelve analytes are listed in Exhibit F to the Purchase Agreement. The other components of the test are set forth in Exhibits D and E to the Purchase Agreement. Each test requires three plates (Plate A, Plate B and Plate C).

[4] *Meso Scale Diagnostics, LLC v. Crescendo Biosciences, Inc.*, 2017 MDBT 8 (Nov. 29, 2017).

contract and was in effect for as long as Crescendo sold Vectra DA to the public.[5] Currently, Vectra DA is Crescendo's only commercially available product.

Now, under Count III of its complaint, MSD has asked the court "to declare that the pricing for Products and Supplies following the Initial Term, including following any valid termination, be no less than that set forth in Exhibit C-1 to [the] Purchase Agreement, with an annual increase of: (a) one percent; or (b) the percentage increase in the Consumer Price Index over the previous year, whichever is greater."[6] Exhibit C-1 set out the prices that the parties agreed would be paid under the Purchase Agreement for purchases over and above the "Guaranteed Purchases" Crescendo agreed to make during the term of the contract. In other words, the parties had agreed in advance to the prices Crescendo would pay if, during the term of the contract, Crescendo needed additional Supplies. In MSD's view, the prices listed in Exhibit C-1 is a proxy for a reasonable price of Supplies post-termination.

Crescendo disagrees, and contends that the prices stated in the Purchase Agreement are irrelevant because the agreement has been lawfully terminated. According to Crescendo, if a price is to be set, it must be the reasonable market price, or the fair market value of the Products and Supplies, at the time and place of delivery, and not the prices set back in 2012 when the Purchase Agreement was signed.[7] The relevant time and place of delivery will be well after the contract has been terminated, so Crescendo argues that the contract prices are not germane.

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[5] Requirements and exclusive dealing contracts are generally valid in Delaware. 6 Del. C. § 2-306.

[6] MSD is not seeking any legal relief, *i.e.*, money damages, because there has been no breach of contract. The sole remedy sought by either party in this regard is a declaration of their post- termination rights and obligations under Section 10.1 of the Purchase Agreement.

[7] In paragraph 46 of Count II of Crescendo's counter-claim, Crescendo asked the court to declare, in relevant part, that because the parties could not agree on "material pricing terms for the purchase of Supplies" post-termination "Crescendo is therefore immediately relieved of its obligation to purchase Supplies from MSD exclusively." Crescendo's prayer for relief mirrored the language of paragraph 46.

According to Crescendo, it can, in the near future, create a measurement platform for Vectra DA using a technology licensed from Luminex at a price-per sample of $25, or $1,000 per kit.[8] Crescendo asked this court to use its pricing for the build-out of the Luminex platform as the reasonable price. MSD disagrees because, among other reasons, Luminex is simply not a drop-in replacement for the MSD platform and Crescendo's proposed pricing is not market-based. MSD also asserts that, apart from a conditional contract with Luminex on royalty payments,[9] the price of Crescendo's Luminex platform is wholly speculative, being based largely on intra-company discounts and other non-market pricing.

To perhaps state the obvious, MSD and Crescendo, which expressly agreed to leave the price term for post-termination sales open, have been unable to reach an agreement on price. Because of the parties' failure to agree, it falls to the court to determine a reasonable price. The court held an evidentiary hearing on January 29, 30 and 31, 2018, and received evidence regarding a reasonable price for post-termination Products and Supplies for Vectra DA.[10]

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[8] When commercializing Vectra DA, Crescendo had considered and rejected the Luminex platform, concluding that MSD was the superior product. Although Luminex measures biomarkers, its technology, based on polystyrene beads, is quite different from MSD's. Luminex only came back into the picture after Crescendo was purchased by Myriad Genetics, Inc. ("Myriad") in 2014. Myriad has ties, both professional (one Myriad officer, Ralph McDade, Ph.D., was one of the founders of Luminex) and contractual, with Luminex. To date, Crescendo has spent over $ 3.5 million attempting to transfer the Vectra DA test from the MSD platform to the Luminex platform. Myriad has spent another $500,000. Nevertheless, at this time, the Vectra DA test simply cannot be run clinically – *i.e.*, for real patients -- on the Luminex platform.

[9] Article 12.3 of the August 1, 2017, Agreement between Crescendo and Luminex provides in pertinent part that Crescendo is not obligated at all under that contract "unless and until any and all of Crescendo's obligations to [MSD] are terminated and of no further force nor effect." Crescendo Trial Exhibit 63. Although Myriad is not a party to Crescendo's contract with Luminex, under Article 12.5, it is entitled to receive copies of all notices "required or permitted' under that contract. Under Article 4.5 of that contract, upon giving thirty days' notice, Luminex can raise the royalty rate "in its sole discretion." Any increase is limited to 2.5% per year, with a cap of a total 14% increase until 2025.

[10] Over Crescendo's objection, this matter was tried to the court, not to a jury. The reasons for this decision are set out in the court's order entered on January 22, 2018, which is found at DE # 172.

Governing Legal Principles

The parties in this case chose Delaware law to govern their rights under the Purchase Agreement.[11] Contracts for the sale of goods ordinarily specify a price. At common law, when a contract failed to include a price term, the courts frequently concluded that no contract was formed.[12] Like most states, Delaware has adopted Uniform Commercial Code ("UCC") § 2-305.[13] This provision permits the parties to enter into a binding contract for the sale of goods yet leave the price term open.[14] However, even after the adoption of the UCC, which liberalized the concepts of contract formation,[15] the UCC's "gap fillers" do not come into play unless the parties intended to be bound under a contract despite leaving a material term – price – open.[16]

Earlier in the case, the court concluded that the parties intended to enter into the Purchase Agreement, notwithstanding the omission of a price term for post-termination sales, and that Crescendo must purchase Products and Supplies from MSD, post-termination, for as long as Crescendo has requirements for Vectra DA. The parties were not successful in agreeing upon a

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[11] Purchase Agreement, § 11.6, Joint Trial Exhibit 29.

[12] J. Perillo, CALAMARI & PERILLO ON CONTRACTS §2.9 (5th ed. 2003).

[13] 6 Del. C. § 2-305.

[14] *See Kellam Energy, Inc. v. Duncan*, 668 F. Supp. 861, 877 (D. Del. 1987); *Chemours Co. TT, LLC v. ATI Titanium LLC*, 2016 WL 4054936 at *7-*8 (Del. Super. July 27, 2016).

[15] 6 Del. C. § 2-204(1)("A contract for the sale of goods may be made in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract.")

[16] *See Flowers Baking Co. v. R-P Packaging, Inc.*, 329 S.E.2d 462, 465-66 (Va. 1985); *Computer Network, Ltd. v. Purcell Tire & Rubber Co.*, 747 S.W.2d 669, 673-74 (Mo. App. 1998).

price for post-termination purchases and MSD has requested a declaration as to "a reasonable price" for post-termination sales.[17] Therefore, there is a "gap" in the contract to be filled under UCC § 2-305(1)(b), which provides that "*the price is a reasonable price at the time of delivery*." The question, then, is what constitutes a "reasonable price" for Products and Supplies for Vectra DA to be supplied by MSD to Crescendo after the Purchase Agreement was lawfully terminated by Crescendo.[18]

The parties have not cited, and the court has not located, any cases decided under Delaware law that set out the standards to be applied when filling a "gap" under UCC § 2-305. Further, the court's review of the relatively few reported cases reveals that there is no litmus test to determine a reasonable price under the under this open price provision of the UCC. A fair reading of the few reported decisions suggests that the court must look to the facts specific to the case before it to determine what is commercially reasonable or unreasonable.[19]

The leading treatise on the subject advises:

> When there is a gap, 2-305 directs the court to determine "a reasonable Price," provided the parties intended to contract. Note that the section says a "reasonable price" not "fair market value of the goods." These two would not be identical. For example, evidence of a prior course of dealing between the parties might show a price below or above what could be claimed to be the proper market. Without more, a court could justifiably hold in these circumstances that the course of dealing price is

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[17] Had the parties reached an agreement on price, UCC § 2-305 would not be applicable. *See MEMC Electronic Materials, Inc. v. BP Solar Int'l, Inc.*, 196 Md. App. 318, 361 (2010)("To the extent the parties reached agreement with respect to pricing, *i.e.*, it would be set in October for the following year, that agreement trumps § 2-305.")

[18] Earlier in the case, the court ruled that Crescendo's termination did not amount to an anticipatory repudiation of the contract, and rejected MSD's claim for money damages for breach of contract.

[19] *See Bayer Cropscience LP v. Albemarle Corp.*, 696 Fed. Appx. 617, 621 (4th Cir. 2017)("[T]here is no specific test for what constitutes commercially reasonable action under the open price provision of the UCC, and a court must look to the facts of the case to determine whether conduct is commercially reasonable or unreasonable."

the "reasonable price."[20]

The treatise goes on to say: "In the 'complete' gap cases, the courts use various forms of evidence. If there is sufficient evidence of price based on course of dealing, course of performance, or usage of trade, this will determine 'reasonable price.'"[21] In other cases, and in the absence of such evidence, "the court's duty is to find and choose the fair market price at the time and place of delivery."[22] Sometimes, that price will be the prevailing market price,[23] which may include the price at which the seller sold the same or similar goods to other buyers.[24] In the context of UCC §2-305, however, a reasonable price is not synonymous with the lowest price available in the market.[25] Nor is the concept of a reasonable price the same as fair market value, as that latter term is used in the typical lost profits case.[26] Further, in determining a reasonable price under UCC § 2-305 it is important to make sure that the products or services evaluated are sufficiently similar to warrant comparison.[27] In the case of unique products, or distinct

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[20] J. White & R. Summers, UNIFORM COMMERCIAL CODE § 4:14 (6th ed. Nov. 2017 Update)(footnotes omitted).

[21] *Id.*

[22] *Id.* (footnote omitted). It is not altogether certain whether the terms "reasonable price" and "market price" are necessarily interchangeable under the UCC. *See Lickley v. Max Herbold, Inc.*, 984 P.2d 697, 701 (Idaho 1999). This court believes that they are not.

[23] *Havird Oil Co. v. Marathon Oil Co., Inc.*, 149 F.3d 283, 290-91 (4th Cir. 1998); *see Carey Lithograph Co. v. Magazine & Book Co.*, 127 N.Y.S. 300 (NY Sup. CT, App. Term 1911)("Where the subject of the price is an article commonly dealt in, this price will be fixed in a more or less definite sum by the consensus of all the buyers and sellers dealing in the article.").

[24] *Pulprint, Inc. v. Louisiana-Pacific Corp.*, 477 N.Y.S.2d 540, 542 (NY Sup. Ct. 1984).

[25] *Tom-Lin Enterprises, Inc. v. Sunoco, Inc.*, 349 F.3d 277, 282 (6th Cir. 2003); *Casserlie v. Shell Oil Co.*, 902 N.E.2d 1, 6 (Ohio 2009); *Shell Oil Co. v. HRN, Inc.*, 144 S.W.3d 429, 437 (Texas 2004).

[26] *TCP Industries, Inc., v. Uniroyal, Inc.*, 661 F.2d 542, 548-49 (6th Cir. 1981).

[27] *Spartan Grain & Mill Co. v. Ayers*, 517 F.2d 214, 217 (5th Cir. 1975).

markets,[28] the court's task is manifestly more difficult. In this case, the court is confronted with a unique product; that is, the testing platform for Vectra DA. This platform is unique the court finds, at least insofar as it is the only commercially available platform on which to run the test.

Discussion

MSD contends that the reasonable price for Supplies are those prices set forth in Exhibits C-1 (excess purchase) and C-2 (firm forecast) of the Purchase Agreement. MSD also contends that what is sells to Crescendo is "bespoke," that is, Supplies specially made for a particular customer or user and not an "off-the-shelf" product or a kit. MSD stresses that Crescendo buys components for the Vectra DA test, not "kits." In other words, MSD does not sell "test-kits" to Crescendo, it sells separate component as reflected in the Exhibits to the Purchase Agreement.[29] An internal Crescendo document confirms that pricing for the Vectra DA test under the Purchase Agreement was not intended to be on a "per-test" or "per-kit" basis. Instead, it was based "on Crescendo orders of each of the individual components for the assays."[30]

MSD's General Manager, Dr. James Wilber, testified that the Supplies sold by MSD to Crescendo are sold only to Crescendo.[31] Although MSD does sell products to the market

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[28] *Offices Togolais des Phosphates v. Mulberry Phosphates, Inc.*, 62 F. Supp. 2d 1316, 1326-27 (M.D. Fla. 1999)(The UCC provides "no guidance where the buyer and seller conduct business in two distinct markets").

[29] Notably, although other terms changed, the pricing contained in the final Purchase Agreement never changed throughout the parties' negotiations of that agreement. Crescendo paid the prices set out in the Purchase Agreement, without objection for the duration of the initial five-year term and never during that term asked to pay less.

[30] Joint Trial Exhibit 8.

[31] The Products, which are the instruments used to measure the test samples, along with the maintenance required for those instruments, are sold by MSD to purchasers other than Crescendo. The parties' do not seriously disagree about pricing for Products, and the court finds that a reasonable price is as stated in § 2.1 of the Purchase Agreement, which is list price minus 20% for instruments and list price minus 10%

packaged as kits containing all the necessary components to run a particular test, Crescendo does not purchase kits. The court credits Dr. Wilbur's testimony and finds that there is no credible evidence of pricing in the marketplace for the specific Supplies sold by MSD to Crescendo (to run the Vectra DA test or any test comparable to the Vectra DA test) outside of the parties' performance under the Purchase Agreement. The court finds that Supplies are not sold to Crescendo on a "kit" or "per-test" basis.

In August 2014, Crescendo purchased over $858,000 worth of Supplies (375 each of Plates A, B and C), which were more than its Guaranteed Purchases for that year. MSD billed Crescendo for these additional purchases, made while the Purchase Agreement was in effect, according to the prices set out in Exhibit C-2 to the Purchase Agreement.[32]

Crescendo runs 40 tests for each MSD plate. MSD stresses that this is Crescendo's choice, as each set of Plates (A, B and C) can run 80 Vectra DA tests, but Crescendo has elected to run each human sample twice for each test. If Crescendo elected to run Vectra DA samples only once, it would cut its cost-per-test with respect to Supplies provided by MSD by 50%.[33]

Of particular note, is a portion of the hearing testimony of Crescendo's President, Bernard Tobin regarding what would happen if the court ordered MSD to lower its prices.[34] Mr.

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for maintenance. There is no credible evidence that MSD has ever charged a customer less than these prices, or likely will do so in the foreseeable future.

[32] Plaintiff's Trial Exhibit 2.

[33] Apparently, the reason for running each sample twice is quality control. According to Crescendo's President, the Vectra DA test can be sun in singlicate on the MSD platform. Further, no evidence was introduced by Crescendo that, for any scientific reason, it is unable to run each human sample for the Vectra DA test only once. In other words, Crescendo has chosen, the court finds, to run each sample twice but is not required to do so to run the Vectra DA test. It could cut its per test cost in half, if it elected to do so.

[34] Recall, the court ruled earlier that Crescendo was obligated to deal exclusively with MSD for as long as it sold Vectra DA to the public. Using Luminex as the platform is not really an option, absent a reversal of this court's decision on appeal or a negotiated resolution with MSD.

Tobin told the court that Crescendo wants to pay MSD less for Supplies but not so that Crescendo can lower the price of the Vectra DA test to its customers, *e.g.*, government and private insurance companies.[35] In other words, even if the court agrees with Crescendo, it has no plans to lower its own prices and charge a patient less for a Vectra DA test. Instead, Crescendo would bank the difference and use it to finance the development of other products. The court does not make this observation to criticize Crescendo's business plans, but, instead, simply notes that it is acting like any other good capitalist, seeking to maximize its own financial return.

Crescendo contends that, based on the evidence, the court should use as a reasonable price the price Crescendo eventually would pay to run Vectra DA on the Luminex platform, if it were contractually allowed to do so. According to Crescendo, with the assistance of a sister company, Myriad RBM, it eventually can run Vectra DA on the Luminex platform for $15 to $24 "all-in price per sample." This constructed price, Crescendo says, is the reasonable price it should be required to pay MSD under the UCC. This equates, according to Crescendo, with a total price of $1,000 for all the Supplies that Crescendo would need to purchase from MSD to build one Vectra DA kit.[36]

The court uses the term eventually because even though Crescendo has spent nearly $3.5 million to transfer the Vectra DA test from the MSD platform to the Luminex platform, that test cannot today be run commercially on any platform other than that made by MSD. Myriad has

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[35] According to Crescendo, 68.5% of its revenue is from reimbursements by the government through Medicare and Medicaid. Approximately 31% is from private insurance companies, and less than .5% is from the patients themselves.

[36] Crescendo's proposed total per kit price of $1,000 for Supplies is calculated by multiplying its suggested $25 per sample price by 40, the number of human blood samples that Crescendo currently tests per kit (*i.e.*, using all three plates). According to Crescendo, it has calculated that MSD charged it $60 per sample tested for Supplies purchased during the initial term of the Purchase Agreement. MSD takes issue with this arithmetic, noting, among other things, that it's pricing for what Crescendo bought under the Purchase Agreement was never calculated on a per-kit basis.

spent some $500,000. The court finds that for more than two years, at least nineteen Crescendo and Myriad RBM scientists have been attempting to transition Vectra DA to the Luminex platform. To date, they have not been successful. Among other things, Vectra DA has not been clinically validated on the Luminex platform and the calibration process has not been completed. Further no bridging study has been done, which is an essential step in the process before Vectra DA can be offered to patients on the Luminex platform. In addition, the correlation study presented at the hearing was not a randomized trial. Instead, it was done with only 32 hand-picked samples.

The analytical validity, clinical validity and clinical utility of Vectra DA as run on the MSD platform has been evaluated for patients with rheumatoid arthritis in registries and prospective and retrospective studies.[37] None of this has been done on any other platform, including the Luminex platform. Even as of the date of the hearing, Crescendo has not shown that the Luminex platform is a commercially viable and acceptable substitute for the MSD platform. Although it may be one day, the Luminex platform is not today commercially available to run the Vectra DA test on actual patients, at any price. It is not, therefore, a comparable product for the court to use to determine the reasonable market price at the time and place of delivery of MSD Products and Supplies under § 2-305 of the UCC.

Crescendo has argued that this court would have to find that Crescendo was willing to destroy its own business if Luminex is not really a viable alternative platform. The court disagrees with this sentiment. What Crescendo has done, quite simply, is an attempt to leverage MSD into lowering its prices by "constructing" a hypothetical Luminex price. The court simply

[37] Plaintiff's Trial Exhibit 52.

is not persuaded by the testimony of Crescendo's witnesses that an arm's-length negotiated price for Luminex supplies to run Vectra DA is $ 25 per sample.

The so-called Luminex price has, the court finds, nothing to do with a free market price or a reasonable market price. Crescendo's parent has long-standing ties to Luminex, has been willing to spend substantial sums to "legally break" the MSD contract and has offered Crescendo non-market price support in terms of time, expertise and dollars. No doubt, given enough time, effort and money Crescendo and Myriad RBM can develop an alternative platform on which to run the Vectra DA test. But it has not done so to date. And, not having does so, the court cannot consider Luminex as a viable, much less commercially reasonable price alternative. The court concludes that the only cogent evidence of a reasonable market price in this case is the actual prices that MSD has charged, and Crescendo has paid, for Products and Supplies over the life of their relationship.[38] There is no other credible evidence of market price. In short, the court is not persuaded that Crescendo can run the Vectra DA test for real patients on the Luminex platform for a per-test cost of $15 to $25, today or at any foreseeable point.[39]

Moreover, even if the court looks at pricing on a per-kit or per-test basis, as suggested by Crescendo, the prices proposed by MSD for Products and Supplies, post-termination, are commercially reasonable. According to Dr. Wilber, the most comparable items sold by MSD to

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[38] A court could reach a different conclusion if there were a finding that MSD did not negotiate in good faith with Crescendo over the prices to be paid for Products and Supplies after the termination or expiration of the Purchase Agreement. *See* 6. Del. C. § 2-305, comment 3 (The UCC "rejects the uncommercial idea that an agreement that the seller may fix any price he may wish by the express qualification that the price so fixed must be fixed in good faith."); 6 Del. C. § 1-304 ("Every contract or duty within the Uniform Commercial Code imposes an obligation of good faith in its performance and enforcement.") The court did not find in this case an absence of good faith with respect to those price negotiations.

[39] Crescendo complains that MSD has leverage over it because MSD was and is the only measurement technology that Crescendo fully developed to measure the twelve Vectra DA biomarkers. That may be somewhat true, but is equally true that MSD currently has the only platform capable of running the Vectra DA test for real patients, *i.e.*, outside of the investigational laboratory.

the general market is the V-PLEX line of products. Of that product line, the V-PLEX Vascular Injury 2 product is the most similar to the Supplies for Vectra DA because it measures the same analytes as on the Vectra DA plate B. The catalog pricing of the V-Plex Vascular Injury 2 product is comparable to the pricing for Vectra DA Supplies.

For example, the 25-pack per plate catalog price for Vascular Injury Panel 2 is $591 per plate. In preparation for the hearing, at Crescendo's request, the court ordered MSD to produce pricing data for all sales of more than 50 plates for this test for the years 2015, 2016 and 2017. The average per plate price for those catalog sales was $574 per plate.[40] For the customized version, the price per plate was $938.

At the hearing, Dr. Wilber converted the Vectra DA component pricing to a per plate price, arriving at $777 per plate. Ironically, Crescendo's own analysis, made before trial, was $722 per plate. This analysis arose out of a directive by Myriad's Chief Executive Officer, Mark Capone, who commissioned Crescendo to conduct their own market study of MSD pricing in 2016. Crescendo too selected the V-PLEX Vascular Injury Panel 2 for comparison, the results of which were consistent with the pricing under the Purchase Agreement. That information, however, was deleted from the pricing presentation Crescendo made to MSD in 2016, ostensibly because including it would make the presentation "too cluttered."[41] The court finds that Crescendo intentionally withheld this information from MSD during price negotiations, after realizing that its own attempt at a market price analysis was consistent with what MSD was charging Crescendo under the Purchase Agreement.

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[40] Another potential comparable is MSD's V-PLEX Proinflammatory Panel I 4-Plex, and the 25-pack per plate catalog price is $576 per plate.

[41] Plaintiff's Trial Exhibits 37and 38.

Conclusion

For the reasons discussed above, the price for products is determined to be the list price, minus 20%, as described in § 2.1 of the Purchase Agreement. For hardware and maintenance, the price is the list price minus 10%, as described in § 2.1 of the Purchase Agreement. For Supplies, the pricing is that contained in Exhibit C-1 to the Purchase Agreement for non-forecasted excess purchases and the pricing contained in Exhibit C-2, for forecasted, firm commitment purchases. The court is not persuaded that any automatic price adjustment mechanism, such as the Consumer Price Index, is appropriate in this context.

Counsel are directed to submit a form of Declaratory Judgment, consistent with the decision set out above, within ten days of the date of this decision. It is So Ordered this 22nd day of February, 2018.

Ronald B. Rubin, Judge