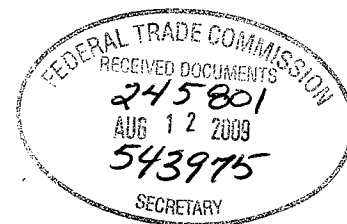


ORIGINAL



UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

_____)
In the Matter of)
) PUBLIC
) Docket No. 9327
Polypore International, Inc.)
a corporation.)
_____)

ERRATA SHEET

This errata sheet provides several attached pages to be replaced in the public version of Complaint Counsel's Post-Trial Findings of Fact filed on July 17, 2009.

<u>Page No.</u>	<u>Finding</u>	<u>Corrections</u>
13	61	Additional <i>in camera</i> information redacted
15	79	<i>In camera</i> label has been removed from PX1791
18	98	PX0922 has been labeled <i>in camera</i>
19	105	RX01519 has been labeled <i>in camera</i>
26	163	PX0920 and PX0033 have been labeled <i>in camera</i>
32	203	PX0782 has been labeled <i>in camera</i>
37	234	Additional <i>in camera</i> information redacted
43	281	Additional <i>in camera</i> information redacted
49-50	323	RX00945 and Simpson Tr. 3438 are labeled <i>in camera</i>
51	336	PX0911 has been labeled <i>in camera</i>
53	347, 350	PX0911 has been labeled <i>in camera</i>
56-57	373	PX0263 has been labeled <i>in camera</i>
62	412	PX has been added to cite 1657
63-64	420, 421	<i>In camera</i> label has been removed from PX1664
77	502	Gillespie, Tr. 3048 has been labeled <i>in camera</i>
84	554	Last cite, PX2112 at 019 is labeled <i>in camera</i>
99	659	<i>In camera</i> label has been removed from PX2241
105	692	PX0922 and PX0263 are labeled <i>in camera</i>
106	695	Additional <i>in camera</i> information redacted
110	717, 724	Additional <i>in camera</i> information redacted
111	729	Additional <i>in camera</i> information redacted
119	770, 771	Additional <i>in camera</i> information redacted
129	827	PX0905 has been labeled <i>in camera</i>
142	918	Gillespie, Tr. 3127 has been labeled <i>in camera</i>
148	950	Additional <i>in camera</i> information redacted
149	956	Gilchrist, Tr. 423-434 has been labeled <i>in camera</i>
154-155	990	<i>In camera</i> label has been removed from PX1124 and

156 997 PX2300
173 1100 *In camera* label has been removed from PX2300
177 1126, 1127 *In camera* label has been removed from PX2301
Axt, Tr. 2251-2252 and Axt, Tr. 2252-2253 have been
labeled *in camera*
181 1156, 1158 Gilchrist, Tr. 454 and PX0089 at 002 have been labeled *in*
camera
191 1221, 1223 PX0920 and PX0923 have been labeled *in camera*
192 1226 PX0913 has been labeled *in camera*
193 1232 PX0924 has been labeled *in camera*

Dated: August 12, 2009

Respectfully Submitted

By: J. Robert Robertson^{SA}

J. Robert Robertson
Federal Trade Commission
Bureau of Competition
600 Pennsylvania Ave., N.W.
Washington, DC 20580
Telephone: (202) 326-2008
Fax: (202) 326-2884

Complaint Counsel

market participants) are the same. (Simpson, Tr. 3174; Kahwaty, Tr. 5294-5295, *in camera*).

59. Such aggregation leads to the following four markets described in the FTC's complaint: deep-cycle, motive, UPS, and SLI. (Simpson, Tr. 3170-3171). Aggregating beyond the markets identified in the FTC's complaint would lead to a loss of detail because one would combine markets where market participants differ and entry conditions differ. (Simpson, Tr. 3175).

60. Daramic recognizes separate product markets for SLI, motive power, Deep-cycle and reserve power. [REDACTED] (Gilchrist, Tr. 458-459, *in camera*; PX0395, *in camera*). At that meeting, attendees agreed that [REDACTED] (Gilchrist Tr. 461-463; PX395, *in camera*).

61. [REDACTED] (PX0265 at 004, *in camera*).

C. Deep-cycle Battery Separators are a Product Market

62. The market for deep-cycle battery separators is a product market. (Simpson, Tr. 3170-3171).

63. Company documents analyze competition in the context of a market for deep-cycle battery separators. (PX0131 at 028-029; PX0506 at 001-003, *in camera*).

1. Product Characteristics

64. A deep-cycle battery is one that is built for long durations of discharge at a lower amperage. (Godber, Tr. 137-138). The construction of a deep-cycle is much different from other types of batteries. (Godber, Tr. 138). Deep-cycle batteries are made with thicker plates so that they can better withstand deep discharges and corrosion of the grid (lead plates pasted with lead oxide) that occurs in a golf cart battery. (Godber, Tr. 138). Further, the active material that is put into the positive plate is a different material than what is used in automotive batteries. (Godber, Tr. 138). The important measurers of a deep-cycle battery are capacity and life. (Godber, Tr. 138).

65. Daramic uses the term "deep-cycle" in its business operations to denote batteries that deeply discharge such as those intended for golf cars and floor scrubbers. (Whear, Tr. 4764).

73. Antimony also is what makes the battery a deep-cycle; if you do not have enough antimony the cycle loses capacity. (Qureshi, Tr. 2001-2002). During the operation of a deep-cycle battery, traces of antimony comes out from the corrosion of particles on the metal grid, which if allowed to migrate to the negative plate will cause the battery to gas more. (Qureshi, Tr. 2002).

74. The deposition of antimony onto the negative plate, sometimes called “antimony poisoning” drastically reduces the cycle life of the battery. (PX1791 at 001; PX1124 at 001).

ii) Need to suppress antimony transfer

75. Antimony poison occurs when the antimony migrates from the positive to the negative plate. (Godber, Tr. 139; *see also* Qureshi, Tr. 2002). Antimony poisoning causes the voltage of the battery to drop, and that causes the charger to charge longer, which creates more gas and more heat leading to increased water loss and corrosion. (Godber, Tr. 139-140).

76. Excessive gassing weakens the battery causing the battery to have a shorter life. (Qureshi, Tr. 2002-2003). Excessive gassing also results in water loss, which requires the battery owner to water the battery more frequently. (Qureshi, Tr. 2002-2003). Daramic’s technical bulletin on golf cart separators has an entire section that explains this antimony effect. (Hauswald, Tr. 663; PX1791 (Technical Bulletin Topic: Golf Car Battery Separators)).

77. Rubber based separators work best at preventing antimony transfer. (Godber, Tr. 140, 150). Rubber based separators reduce the antimony effect. Daramic offers multiple separator products that are designed for golf cart applications and have the “Rubber Effect” to combat antimony. (PX1791 at 001; Hauswald, Tr. 663-664). For the deep-cycle applications the separators are enhanced with latex and rubber additives in order to aid in the suppression of antimony migration and stymie water loss that deep discharging batteries tends to produce. (Whear, Tr. 4682; PX0913 (Whear, Dep. at 052, *in camera*)).

78. East Penn uses Daramic HD separators in its golf cart and floor scrubber batteries in order to reduce antimony transfer in those batteries. (Leister, Tr. 4038-39). [REDACTED] } (PX1514, *in camera*).

a. Pure Rubber (Flex-Sil)

79. In Daramic products like Flex-Sil, the separator is made of natural rubber. (Hauswald, Tr. 664; PX1791 at 001). Flex-Sil includes rubber in a solid form, the rubber makes up about 40% of the separator’s content. (Hauswald, Tr. 673).

more than a flooded battery, and a gel battery costs around 50% more than a flooded battery. (Godber, Tr. 149).

96. Sealed batteries go into deep-cycle applications where there may be a regulation that prohibits a flooded battery such as in an airport or a hospital. (Godber, Tr. 148). Trojan does not produce sealed batteries, but buys some for resell. (Godber, Tr. 148). About one percent of the batteries Trojan sells are sealed. (Godber, Tr. 148).

4. End Use Applications

97. The primary end-use application for deep-cycle batteries is golf carts, but deep-cycle batteries also are used in other applications. (Godber, Tr. 143; *see also* Gilchrist, Tr. 305; Wallace, Tr. 1955-1956; Gillespie, Tr. 2931). The biggest markets for Trojan are golf, floor scrubbers, scissor lifts, and boom lifts. (Godber, Tr. 143).

98. [REDACTED] head of sales and marketing, defines deep-cycle [REDACTED] [REDACTED] batteries. (PX0922 (Roe, IHT at 54, *in camera*)). Similarly, Daramic documents refer to a [REDACTED] [REDACTED] (PX0263 at 004, *in camera*).

99. Daramic's marketing Flex-Sil, CellForce and HD for golf cart batteries. (PX1791 at 001).

i) Original Equipment

100. Exide expects to qualify HD for use in all of its deep-cycle batteries, including those going into OE applications. (Gillespie, Tr. 3091).

ii) After Market

101. Typically, 14-15% of deep-cycle batteries are sold by original equipment manufacturers while the remaining portion of deep-cycle batteries are sold in the aftermarket. (Gilchrist, Tr. 357-358, 608-609).

102. Exide sells golf cart batteries into both OE and aftermarket markets. (Gillespie, Tr. 2932). Approximately 90% of the golf cart batteries that Exide sells are sold into the aftermarket, with the remainder going to OE applications. (Gillespie, Tr. 2932).

5. Demand for Deep-cycle Separators is inelastic

- i) Post Acquisition Price Increases on Deep-cycle Separators have not Induced Switching to non-rubber based separators

103. Since the acquisition, U.S. Battery must single source the separators for its deep-cycle flooded batteries from Daramic. (Wallace, Tr. 1951).
104. Following the acquisition, Daramic increased prices on Flex-Sil, CellForce, and HD. (Roe, Tr. 1218). Despite these price increases, Daramic has not lost any deep-cycle business to any competitor anywhere in the world. (Roe, Tr. 1217-1218). Nor have Daramic's post-acquisition price increases on deep-cycle separators caused any customer to switch from a rubber or hybrid rubber/PE separator to a straight PE separator for use in a deep-cycle battery. (Roe, Tr. 1218).
105. East Penn purchases HD from Daramic for use in its golf cart batteries under a contract that Daramic and East Penn entered into in 2008. (Roe, Tr. 1220-1221; RX01519, *in camera*). East Penn continued to purchase HD for their golf cart batteries despite the 5% price increase that Daramic passed through to East Penn on the HD separators in 2009. (Roe, Tr. 1222-1223).
106. U.S. Battery sought additional suppliers for its deep-cycle separator needs over the years, but was unsuccessful in finding anyone willing or able to do so. (Wallace, Tr. 1943-1944). At one point in the last few years, U.S. Battery sought to persuade Entek to supply these separators, but Entek said it was not interested in entering the deep-cycle separator market. (Wallace, Tr. 1943-1944; 1950-1951).
107. In the last year, U.S. Battery designed two new battery product lines called US 27DC and US 31DC which contained Daramic's HD separators. (Wallace, Tr. 1947-1948). During the design phase, U.S. Battery informed Daramic of these new applications for HD separators. At that time, Daramic did not indicate it would not be able to supply the specified HD separators. After the acquisition and close in time to the production phase, Daramic informed U.S. Battery that it would only supply the Flex-Sil separator, which cost twice as much as the HD separator, for the two new battery lines. (Wallace, Tr. 1948-1950). Dr. Simpson evaluated the critical loss and determined that [REDACTED] } (PX0033 at 006, 012, *in camera*; Simpson Tr. 3169-3172)

ii) Limited Supply of Deep-cycle separators due to Owensboro strike did not cause substitution to non-deep-cycle separators

108. HD supply was limited during the 2008 strike at Daramic's Owensboro manufacturing plant. (Roe, Tr. 1219). Despite the limited availability of HD during the strike, no customers switched from HD to a straight PE product for use in deep-cycle applications. (Roe, Tr. 1219).
109. The Owensboro strike limited the availability of HD for use at Exide. (Roe, Tr. 1223). Because of the HD shortage, Exide was forced to purchase Flex-Sil, which was the only

157. The backweb thicknesses of SLI separators have been reduced in recent years. (Leister, Tr. 4024). This reduction in thickness is meant to reduce the overall cost of the separators. (Leister, Tr. 4024). SLI battery separators are very thin and very strong so as to resist punctures and have mechanical strength. (Brilmyer, Tr. 1829, 1831).

158. { [REDACTED] } is the standard backweb thickness in use in SLI batteries sold in the US. (PX0907 (Kung, Dep. at 75-76, 80), *in camera*).

159. Over 99% of the separators that Daramic tracks that are sold in the automotive market have a backweb thickness between 6 and 10 mils (150-250 microns). (Hauswald, Tr. 677-678).

160. It is very difficult for a separator manufacturer to change the thickness of their PE separator from { [REDACTED] } (PX0907 (Kung, Dep. at 79), *in camera*).

IV. Geographic Market is North America

A. Manufacturers in North America can price discriminate to customers based on geography.

161. Dr. Simpson explained that North America is the relevant geographic market with which to analyze this transaction. (Simpson, Tr. 3183). Because manufacturers of deep-cycle, motive, UPS, and SLI battery separators can set different prices for different geographic regions they can price discriminate based on geography. (Simpson, Tr. 3183).

162. Where sellers can price discriminate based on geographical location, the Merger Guidelines state: "The agency will consider additional geographic markets consisting of particular locations of buyers for which a hypothetical monopolist would profitably and separately impose at least a small but significant and nontransitory increase in price." (Merger Guidelines, Section 1.22). Dr. Simpson concluded from reviewing the testimony of buyers and the documents in this case that a hypothetical monopolist could impose such a price increase on buyers in North America. (Simpson, Tr. 3183).

163. A hypothetical monopolist of all production facilities in North America can price discriminate to North American customers because suppliers ship directly to customers. (e.g., PX0920 (Gilchrist IHT 64-65) , *in camera*; see PX0033 at 005 FN5, *in camera* (Simpson Report); PX2251 at 004 (Simpson Rebuttal Report), *in camera*).

B. Daramic charges different prices in different geographic regions

164. [REDACTED] (Riney, Tr. 4958, *in camera*; Roe, Tr. 1317). [REDACTED] } (Roe, Tr. 1797, 1799, *in camera*).

196. Crown tries to maintain just-in-time delivery of its separator supply. (Balcerzak, Tr. 4130). Having to ship material from overseas would interfere with Crown's just-in-time methods. (Balcerzak, Tr. 4130).
197. Douglas Battery has a preference for local supply because it reduces distance, time, travel, just-in-time opportunities, and enables the supplier to quickly respond if Douglas has problems with their separators. (Douglas, Tr. 4080).
198. Planning for the Rama III project began in 2006. (PX0640). One of the explicit rationales for the Prachinburi expansion was the [REDACTED] (PX0640 at 001; PX0924 (Jensen, Dep. at 56, *in camera*)). [REDACTED] (PX0924 (Jensen, Dep. at 72, *in camera*)).

3. Cost of exporting separators to North America is prohibitively expensive

199. Daramic has not shipped separators from either of its Asian manufacturing plants to customers in North America. (Roe, Tr. 1233-1234).
200. EnerSys would prefer to have a supplier with plants both in North America and in Europe. (Burkert, Tr. 2385). If EnerSys had to have a supplier with two plants in North America and none in Europe, it would be a negative cost to EnerSys. (Burkert, Tr. 2386). EnerSys does not want to stock, pay freight, or worry about supply interruptions. (Burkert, Tr. 2467).
201. [REDACTED] (Burkert, Tr. 2349, *in camera*).
202. EnerSys was forced to ship a container of separators to its Monterrey plant from Daramic's Feistritz facility during the Ownsboro strike at a high freight and time cost. (PX1285).
203. [REDACTED] (PX0782 at 002, *in camera*; PX0912 (Riney, Dep at 240, *in camera*)).
204. If the price of motive separators in North America increased by five percent, Douglas Battery would not look for separator suppliers abroad. (Douglas, Tr. 4082).
205. PE separators that are manufactured in China are subject to added taxes by the Chinese government resulting in higher manufacturing costs for Chinese separator manufacturers. (PX0871 at 002, *in camera*). PE separators exported from China are subject to a value-added tax. (Thuet, Tr. 4404-4405). The value-added tax includes a 12% charge on the

232. [REDACTED] } (PX1248 at 001, *in camera*).

233. [REDACTED] } (Axt, Tr. 2219, *in camera*). EnerSys is working with [REDACTED] } (Axt, Tr. 2219, *in camera*).

b. [REDACTED] }

234. BFR cannot compete on price terms with Daramic and Entek in selling PE separators to customers in the United States – [REDACTED] } (PX0907 (Kung, Dep. at 172-173, *in camera*)). [REDACTED] } (PX0907 (Kung, Dep. at 172-173, *in camera*)).

235. When asked whether BFR can find customers in North America and sell its PE separators to them, Mr. Kung answered: [REDACTED] (PX0907 (Kung, Dep. at 176-177), *in camera*). [REDACTED] } (PX0907 (Kung, Dep. at 176-177, *in camera*)).
Second, [REDACTED] } (PX0907 (Kung, Dep. at 176-177, *in camera*)).

236. When asked how much prices would have to increase in North America for BFR to supply a North American battery manufacturer with PE SLI separators Mr. Kung responded by saying [REDACTED] } (PX0907 (Kung, Dep. at 186-187, *in camera*)).

237. Using Mr. Hall's benchmarking analysis of 2007 costs, [REDACTED] } (PX1522 at 005, *in camera*). [REDACTED] } (PX1522 at 005, *in camera*).

238. [REDACTED] } (Hall, Tr. 2746-2747, *in camera*). [REDACTED] } (Hall, Tr. 2745, *in camera*).

276. Microporous developed CellForce in the mid-1990's to address customer needs for a more flexible separator material that can fold around the battery plates and be sealed along one edge, while retaining the electrochemical attributes of a rubber-based separator. (Gilchrist, Tr. 316-317). Because there were cost advantages for customers to use CellForce that related to sealing and sleeving the separator, Microporous anticipated that its Flex-Sil customers would migrate to CellForce separators for many of its battery applications. (Gilchrist, Tr. 373-374).

3. No Other Suppliers in the World

B. Daramic and MPLP were the only Suppliers of Motive Separators in North America

277. Prior to the acquisition, Microporous participated in the North American motive market with its CellForce product. (Gilchrist, Tr. 300-301).

278. Prior to the acquisition, [REDACTED] } (PX0211 at 001, *in camera*; Hauswald, Tr. 988).

279. As a result of the acquisition, Daramic has "complete control" or more than 97% of the industrial markets for motive power separators world-wide. Amer-Sil in Luxembourg would be the remaining competitor. (PX0076 at 002, Gilchrist, Tr. 422).

280. Sales data from 2007 show that the change in HHI and the post-merger HHI for the motive market far exceeds the thresholds listed in the Merger Guidelines. (Simpson, Tr. 3184-3185). Daramic's acquisition of Microporous increased the [REDACTED] } in the motive market. (Simpson, Tr. 3185; PX0033 at 040, 042 (Simpson Report), *in camera*).

281. In August 2007, Mr. Gilchrist informed the Microporous board that [REDACTED]

[REDACTED] } (PX0080 at 058-059, *in camera*).

[REDACTED] } (PX0077 at 003, *in camera*).

282. Dr. Simpson noted that the 2007 data understates the competition between Microporous and Daramic in this market because the firm with the smaller share was in the process of gaining market share. (Simpson, Tr. 3438, *in camera*). Microporous anticipated that, by the end of 2009, new sales of CellForce to manufacturers of motive batteries would

facilities. (Gaugl, Tr. 4618). Daramic estimated its calender rolls cost up to \$80,000 a piece and it has approximately 100 different ones. (Whear, Tr. 4678).

318. Trojan did not reach out to Entek as a potential supplier of deep-cycle battery separators because Trojan had previously tested Entek separators for golf applications in the mid-90s and the performance was not there. (Godber, Tr. 289). The technology that Entek had available then is the same as Entek has available today. (Godber, Tr. 289). Since the mid-90s, Entek has not called on Trojan for its deep-cycle business. (Godber, Tr. 290).
319. East Penn does not know whether Entek currently sells deep-cycle separators. (Leister, Tr. 4041). East Penn did purchase some deep-cycle separators from Entek in the past, but stopped buying those separators at least three years ago. (Leister, Tr. 3985). At that time, East Penn was paying Entek higher prices for deep-cycle separators than East Penn is currently paying to Daramic for HD separators. (Leister, Tr. 4041).

2. Suppliers outside North America are not Market Participants in North America

320. Amer-Sil, a regional supplier, operates a plant facility in Luxembourg that produces PVC-based separators for motive batteries. (PX0916 (Dauwe, Dep. at 15); Gilchrist, Tr. 306-307; PX0078, *in camera*). Amer-Sil produces PVC separators for lead acid batteries and does not produce PE separators. (PX0916 (Dauwe, Dep. at 14)). Amer-Sil's PVC separators are used in European flooded motive and stationary batteries, but are not used in automotive batteries. (PX0916 (Dauwe, Dep. at 18-19)).
321. There are regional suppliers in India, China, Indonesia and Korea that produce separators for local customers. They include Anpei and BFR, Chinese manufacturers of SLI separators, Korindo, an Indonesian manufacturer of SLI and industrial separators, and Global Industrial, a Korean manufacturer of SLI and industrial separators. (Gilchrist, Tr. 307-308, 424, 430).
322. JCI entered into a three way joint venture in February 2007 with Rising and Fengfang { } to form the joint venture known as BFR. (Hall, Tr. 2715-2716, 2740, *in camera*). JCI does not have a controlling interest in BFR. (Hall, Tr. 2741, *in camera*). JCI has a { } equity share in BFR, while Fengfang's equity share in BFR is { } and Rising's is { } (Hall, Tr. 2740, *in camera*). The principal owner of Rising is { } (Hall, Tr. 2836, *in camera*). Unanimous BFR board approval is required for { } (Hall, Tr. 2826, *in camera*).
323. Dr. Kahwaty estimated market shares for a global PE battery separator market. (RX00945-179, *in camera*). Using these market shares, Daramic's acquisition of Microporous increased the HHI by 189 points to 3920. (Simpson, Tr. 3189). These figures understate the change in HHI because Dr. Kahwaty had erroneously assigned some Daramic sales to Entek. (Simpson, Tr. 3190). Dr. Simpson also testified that the

2007 data understates the competition between Microporous and Daramic in this market because the firm with the smaller share was in the process of gaining market share. (Simpson, Tr. 3438, *in camera*).

VI. Competitive Effects

A. MPLP and Daramic were Closest Competitors in 3 of 4 Markets

324. The acquisition enabled Daramic to increase price unilaterally. (Simpson, Tr. 3192-3194, *in camera*).

325. Mr Seibert, the Vice-President and Business Director for sales, marketing, and technical assistance, [REDACTED]

[REDACTED] (Seibert, Tr. 4287- 4290, *in camera*). [REDACTED]

[REDACTED] (Seibert, Tr. 4288, *in camera*).

326. MPLP's low-priced competition made it a maverick in the separator industry. Historically, there was not an "aggressive rivalry among competitors." (PX0482 at 002). According to Daramic's worldwide VP of sales and marketing, that changed when MPLP entered the market with its PE-based CellForce separators. (PX0482 at 002; Roe, Tr. 1281).

1. Daramic was MPLP's only competitive Constraint in Deep-cycle

327. Flex-Sil has unique properties that differentiate it from other battery separators. (PX0131 at 14). Dr. Simpson explained that because Flex-Sil is differentiated from other products, its owner has market power, and thus would not lose all of its sales if it were to increase price above cost. (Simpson, Tr. 3176). Consequently, in Dr. Simpson's opinion, "the owner of Flex-Sil has the incentive to increase price until it gets to the point where the profit that it loses as sales shift to other products just begins to exceed the additional profit that it gets from getting a higher price on those sales it continues to make." (Simpson, Tr. 3177; PX2251 at 017, *in camera*).

328. Dr. Simpson rejects Dr. Kahwaty's argument that Flex-Sil's pricing is constrained by a long-term contract with Trojan which set its price below the profit maximizing level because MPLP was recently willing to offer concessions to buyers of Flex-Sil and MPLP presumably would be unwilling to lower price further if it already thought that it had set too low a price. (Simpson, Tr. 3181-3182).

329. Daramic HD was the closest independently-owned substitute for Flex-Sil. Thus, if the owner of Flex-Sil were to increase price a little more, some of the sales that would be lost would shift to Daramic HD. (Simpson, Tr. 3177-3178). If Flex-Sil and Daramic HD are owned by the same owner, then the joint owner recovers some of the profit on the lost Flex-Sil sales that shift to Daramic HD. (Simpson, Tr. 3178). “[I]n this way a price increase that would not make sense for an independently owned Flex-Sil (or Flex-Sil and CellForce) would make sense if they also owned Daramic HD.” (Simpson, Tr. 3178, PX2251 at 017, *in camera*; Kahwaty, Tr. 5514-5515, *in camera*).
330. Daramic analyzed the effect of rubber price increases on Flex-Sil versus HD in an effort to gauge the impact of rubber prices on the prices of the two competing products because of MPLP’s new rubber pass-through agreements. (PX0948; Whear, Tr. 4785- 4786).
331. Before the acquisition, Daramic’s pricing for HD was { } than Microporous’s pricing for CellForce and Flex-Sil. (Gilchrist, Tr. 467, *in camera*).
332. None of the Asian battery separator manufacturers are producing a deep-cycle separator containing an antimony suppression additive. (Thuet, Tr. 4396).
333. Exide believes that following Daramic’s acquisition of MPLP, Exide no longer has the same leverage for the purchase of deep-cycle battery separators that it had prior to the acquisition, because now there is only one provider of deep-cycle separators for Exide to negotiate with. (Gillespie, Tr. 2953-2954).
334. Prior to Daramic’s acquisition of MPLP, in addition to offering { } { } golf cart purchases of golf cart separators. (Gillespie, Tr. 2995-2997, *in camera*). Now that MPLP is no longer an independent competitor, Daramic is { } { } (Gillespie, Tr. 2997, *in camera*).
- i) Daramic DC Introduced to Compete with MPLP’s Flex-Sil
335. Daramic spent many years trying to develop a battery separator that would work well in deep-cycle applications. (PX0433 at 001).
336. Daramic made repeated attempts to develop a product to compete with MPLP’s Flex-Sil separators in the deep-cycle market. (PX0433 at 001). Daramic first developed a separator known as DC, a separator for deep-cycle batteries manufactured by combining PE with a hardwood lignan additive intended to suppress antimony transfer and water loss in deep-cycle batteries. (PX0911 (Roe, Dep. at 69-70, *in camera*)).
337. Daramic DC was Daramic’s original deep-cycle separator introduced to the market in 2002. (PX0319 at 003).
338. Daramic DC was specifically designed for the golf cart application. (Whear, Tr. 4776).

344. Beginning in 2003, U.S. Battery began manufacturing deep-cycle batteries with Daramic's DC separator in place of Flex-Sil. (Wallace, Tr. 1945). Prior to purchasing Daramic's separator, U.S. Battery was only buying Flex-Sil for its deep-cycle batteries. (Wallace, Tr. 1945-1946).

345. [REDACTED] } (Whear, Tr. 4840, *in camera*).

ii) MPLP Responded to Competition

346. Prior to purchasing Daramic's DC separator, U.S. Battery was only buying Flex-Sil for its deep-cycle batteries. When Microporous found out that U.S. Battery was additionally buying Daramic's DC separator for its deep-cycle batteries, it lowered its pricing on Flex-Sil separators. (Wallace, Tr. 1945-1946).

iii) Daramic Improved Product and Introduced HD

347. Daramic developed the HD separators to replace its DC separators. (Roe, Tr. 1196). Daramic HD separators are manufactured by combining PE with a latex rubber additive. (Hauswald, Tr. 699-700). HD separators provide improved performance over the DC separators. (Roe, Tr. 1196; PX0911 (Roe, Dep. at 69-70, *in camera*)). HD separators provide better antimony suppression and less water loss in deep-cycle batteries than the old DC separators. (Roe, Tr. 1196). HD separators also provide improved end-of-charge performance over time than standard PE separators. (PX0423 at 002).

348. U.S. Battery tested Daramic HD product and the Microporous Flex-Sil product side by side and determined the two "are very comparable." (Qureshi, Tr. 2033). The main advantage of HD is its cost advantage. (Qureshi, Tr. 2033).

349. Exide had tested previous versions of Daramic separators for deep-cycle batteries and none of the versions prior to HD had passed Exide testing. (Gillespie, Tr. 2937).

350. Daramic HD was developed to compete in the deep-cycle market. (Roe, Tr. 1195-1196; PX0911 (Roe, Dep. at 56, *in camera*); PX1791; PX1744 at 004, *in camera*; PX1071; PX222 at 001, *in camera*).

351. [REDACTED] } (Seibert, Tr. 4304, *in camera*).
[REDACTED] } (Seibert, Tr. 4308-4309, *in camera*).

367. [REDACTED] } (PX0911 (Roe, Dep. at 227, *in camera*)). For example, when HD was introduced to the marketplace with a 12 mill backweb thickness there were problems associated with wrinkling of the separators. (Roe, Tr. 1312-1313). Daramic was subsequently able to overcome this wrinkling problem by increasing the backweb thickness of the HD separators to 13 mill. (Roe, Tr. 1312-1313).
368. Exide understood that Daramic was marketing the HD separators for use in golf cart batteries. (Gillespie, Tr. 2937). When Daramic introduced the HD separators, Mr. Tucker Roe approached Mr. Gillespie and asked that Exide test the HD in golf cart batteries to see how it performs. (Gillespie, Tr. 2937). Daramic wanted to know what it would take for Exide to get HD into Exide's golf cart batteries. (Gillespie, Tr. 2937-2938). [REDACTED] } (Gillespie, Tr. 2996, *in camera*).
369. From Exide's perspective, Daramic's interest in getting Exide's golf cart business was a ten on a scale of one to ten. (Gillespie, Tr. 2938-2939; *see also* PX1071 at 001-002 (May 2006 email from Mr. Roe to Mr. Gillespie "we are aggressively pursuing this market")).
370. When Daramic introduced the HD separators Exide was interested in buying HD for its deep-cycle batteries for performance and commercial reasons. Exide's testing indicated that HD met Exide's performance criteria for deep-cycle batteries. Daramic offered Exide a competitive price on the HD separators. Additionally, Exide received a "double kiss" when buying HD because it also received a credit back from Daramic for every purchase of HD under their contractual agreements. (Gillespie, Tr. 2937-2938).
371. Prior to Daramic's acquisition of MPLP, Daramic was attempting to grow HD's sales in the deep-cycle segment. (Roe, Tr. 1209; PX0736 at 002). In fact, in February of 2006, Mr. Roe informed Exide's head of procurement that Daramic was "aggressively pursuing" sales in the "golf cart/deep-cycle and motorcycle battery business." (PX1071 at 001-002; Roe Tr. 1209-1211). In order to grow HD's market share in the deep-cycle market, Daramic provided HD samples to most of the significant deep-cycle battery manufacturers including Trojan, Exide, US Battery, and Crown. (PX0262 at 003).
372. [REDACTED] } (PX0904 (Seibert, Dep. at 106-107, *in camera*)). Daramic's February 2007 HD Product Strategy Presentation showed that [REDACTED] } (PX0023 at 010, *in camera*).
373. [REDACTED] } (PX0263 at 003-004, *in camera*). [REDACTED] } (PX0263 at

- interested in learning if the HD product had some pricing advantage. (Godber, Tr. 182-183).
409. Trojan discussed the potential of using the Daramic HD separator at an internal meeting on February 21, 2005 because of its “[n]eed for a second source to ensure supply and competitive pricing.” (PX 1651; Godber Tr. 183-184). After February 2005, Daramic’s potential ability to offer a competitive product became a platform for discussions with Microporous regarding price reductions and capacity. (Godber, Tr. 183-184; *see also* PX0429 (email from Rick Godber to Mike Gilchrist: “We now understand that Daramic May have a separator that can compete in performance, and may have cost advantages to Flex-Sil and CellForce.”)).
410. At the 2005 BCI convention, Daramic made a presentation about the HD product, which left people very excited that Daramic had a product that could match Flex-Sil performance. (Godber, Tr. 187-188; *see also* PX1653 (email from Trojan’s technical director stating: “Daramic’s technical presentation at BCI was well received by the people I talked to. . . . Their [Daramic’s] presentation will generate additional interest in HD separators which will make it a common separator for deep-cycle applications in time.). Trojan received samples of and pricing for the HD separator in May 2005. (Godber, Tr. 188). The pricing on the HD separator was, depending on the product line, 10 to 28 percent below what Trojan was currently paying Microporous for Flex-Sil. (Godber, Tr. 188).
411. Trojan tested Daramic’s HD separator and approved it in its Pacer line of golf cart batteries. (Godber, Tr. 171). Today, CellForce, Daramic HD, and Flex-Sil are qualified for use in Trojan’s Pacer batteries. (Godber, Tr. 172).
412. Trojan was able to get Microporous to provide cost reductions based on Trojan threatening to test and switch to Daramic’s HD separator. (Godber, Tr. 190-191; *see also* PX1655 at 001 (email from Trojan to Microporous stating: “[HD] appears to be a fairly immediate replacement for CellForce at a substantial lower cost. Longer term it may work as a Flex-Sil replacement in our products.”)). The cost savings were around \$200,000 to \$300,000, which represents two percent of Trojan’s spend with Microporous at that time. (Godber, Tr. 191-192; PX1659 (“total savings to Trojan will be about \$350,000.”); PX1657 at 001 “As you can see, based on the volumes you gave us there is a potential annual savings of over \$288,000.”).
413. Prior to the introduction of HD separators by Daramic, Microporous did not respond positively to Trojan’s request for price reductions. (Godber, Tr. 199). After the introduction of the Daramic HD separator, however, Microporous told Trojan that it was going to work with Trojan to reduce its costs to alleviate the need for Trojan to start using HD separators. (Godber, Tr. 199-200). Mr. Godber, Trojan’s CEO testified that Daramic HD was mentioned by both him and Microporous’s CEO, Mike Gilchrist, during their discussions relating to Microporous’s price reductions. (Godber, Tr. 200).

414. Mr. Godber testified he does not recall any instance where Trojan successfully used any product other than HD as leverage in price negotiations with Microporous. (Godber, Tr. 223).
415. During the 2005 discussions with Microporous regarding cost reduction related to the threat of switching to Daramic HD, Trojan also was trying to accelerate its ability to use more CellForce since it was less expensive than Flex-Sil. (Godber, Tr. 191). At the time, Trojan was not able to get all the CellForce that it wanted from Microporous because there was limited capacity and a large demand from the motive market. (Godber, Tr. 195).
416. From 2005 to the time of the acquisition, Trojan continually used the threat of buying Daramic HD to get lower prices from Microporous. (Godber, Tr. 200-215). In October 2005, Trojan used the threat of moving business to HD as leverage against Microporous to negotiate down a proposed energy charge from 5.5 percent to 3.75 percent. (Godber, Tr. 200-201).
417. In early 2006, Microporous attempted to increase the prices it charged Trojan by around 6.5 percent for Flex-Sil and by 4.5 percent for CellForce. (Godber, Tr. 202). Trojan did not accept the price increases. (Godber, Tr. 202). Mr. Godber testified that in his negotiations with Microporous, Trojan used the only ammunition it had -- the threat of switching to HD separators -- to reduce the amount of the price increase down to 4.5 percent across the board for all Microporous separators. (Godber, Tr. 202). At the time Trojan was negotiating the price increase, Mr. Gilchrist stated: "We must put the specter of Daramic's [HD] product totally behind us." (PX1660 at 004; Godber, Tr. 203-204).
418. During 2007 pricing negotiations, Trojan threatened Microporous that it would switch to HD separators for its deep-cycle batteries. (Gilchrist, Tr. 371-372, 379, 468, *in camera*, 535, 609-610; PX1789 at 041, *in camera*).
419. In August 2007, Microporous once again proposed a price increase to Trojan on its Flex-Sil and CellForce products of 6.5 and 4.5 to 5 percent, respectively. (Godber, Tr. 204). The price increases covered separators that went into Trojan's OE and aftermarket golf batteries. (Godber, Tr. 293-295). The August 2007 price increase led to heated discussions in which Trojan told Microporous "[y]ou're forcing us to again now go look at an alternative like Daramic HD, which was the only alternative." (Godber, Tr. 204-205; *see also* PX0428 at 004, *in camera* ("appears to be a perception we have no options. . . . I felt they [IGP] needed to understand there are alternatives.")). A Trojan internal email exchange confirms that Trojan was contemplating HD as an alternative on some of its product lines and was also contemplating giving up the exclusive separator design that Microporous provided Trojan in return for its sole source commitment. (Godber, Tr. 206-207; PX1663).
420. Trojan's use of HD as a competitive threat to Microporous effectively constrained Microporous's across the board price increases. { [REDACTED]

[REDACTED] } (Godber, Tr. 214-215; PX1664). By accepting these price increases, Trojan and Microporous agreed that there would be no further price increases available to Microporous on December 1, 2008. (Godber, Tr. 214-215). Thus, the next price increase to { [REDACTED] } could not occur until { [REDACTED] } (Godber, Tr. 235, *in camera*). Mr. Godber testified that { [REDACTED] } and I agreed” that { [REDACTED] } would be allowed no further price increases over and above the signed { [REDACTED] } } (Godber, Tr. 214-215; 235, *in camera*; PX1664).

421. As a result of its 2007 negotiations with { [REDACTED] } lowered its pricing increase for { [REDACTED] } and agreed that it would not increase prices again until after { [REDACTED] } (Gilchrist, Tr. 408-409; PX1664). This compromise occurred in response to Trojan’s threat to switch to HD separators for some of its deep-cycle batteries sold to the replacement market. (Gilchrist, Tr. 410, 526, *in camera*).

422. [REDACTED] }. (PX0950 at 14-16, *in camera*).

423. [REDACTED] }. (PX0950 at 14-16, *in camera*).

424. [REDACTED] }. (PX0950 at 14-16, *in camera*).

d. MPLP Responded to HD with CellForce

425. When MPLP began to recognize the HD threat, Mr. McDonald and his sales force began to offer CellForce at a cost savings as a means of combating the lower cost Daramic deep-cycle separator. (McDonald, Tr. 3949).

426. In response to the competition from Daramic’s HD separator, Microporous developed the CellForce separator and offered to sell it to U.S. Battery. (Wallace, Tr. 1952-1953). Prior to US Battery’s use of HD Microporous had not offered it CellForce for deep-cycle application. (Wallace, Tr. 1953).

427. U.S. Battery approved the purchase of CellForce and planned to purchase this new brand of separators from Microporous. (Wallace, Tr. 1977).

501. Prior to the acquisition, Daramic and Microporous were the only suppliers of separators for reserve power for flooded high-end batteries to North American customers. (Gilchrist, Tr. 305-306; 343).
502. [REDACTED] } (Simpson, Tr. 3193, *in camera*; Gillespie, Tr. 3048, *in camera*).
503. [REDACTED] }
(Axt, Tr. 2216, *in camera*). [REDACTED] } (Axt, Tr. 2216-2217, *in camera*). There is no one other than Daramic who makes UPS separators either in North America or worldwide. (Axt, Tr. 2102-2103).
504. EnerSys planned to shift its separator purchases from a split between Daramic and MPLP to sole sourcing with MPLP. The only component of the plan that had not been achieved was having a replacement for Daramic's Darak product. (McDonald, Tr. 3929-3930; PX0511).
505. Prior to the acquisition, Microporous had made some sales for over a "year and a half" to C&D and had already won a contract with EnerSys that would have given Microporous 40-50% of the North America UPS market. (Gilchrist, Tr. 398-399).
506. There is no other UPS separator technology available to UPS customers for a small but significant and non-transitory increase in price. [REDACTED] } (Axt, Tr. 2220-2222, *in camera*).
507. In its global search for UPS separators, [REDACTED] } (Axt, Tr. 2216-17, *in camera*). As of today, other than Daramic, there is no one in the world that makes a separator that can be used in EnerSys's UPS batteries. (Axt, Tr. 2101).
1. MPLP was in the process of commercializing a UPS separator to address the black scum issue
508. Planning for project LENO began in late 2006 at the approval of the R&D steering committee which included Mike Gilchrist and Larry Travathan, as well as Steve McDonald and Matt Wilhjelm. (Brilmyer, Tr. 1836).
509. The LENO had a variety of people with different areas of expertise from development and sales to finance, in order to keep the R&D developers "based in reality." The finance and sales team members kept the team focused on the market for the new product and the costs associated with its development as well as the price the product could achieve in that market. (Brilmyer, Tr. 1837-1838).

Exide, Voltmaster and several battery manufacturers in the European Union. Several truckloads of material were shipped to Johnson Control's Tampa plant. (Gilchrist, Tr. 312-13, 417-18). Mr. McDonald also talked to East Penn about supplying them PE for SLI. (McDonald, Tr. 3879-3880 *in camera*).

552.

{ [REDACTED] } (Weerts, Tr. 4517, *in camera*).
[REDACTED] }
(Weerts, Tr. 4517, *in camera*).
[REDACTED] } (PX1832 at 026-027, *in camera*).

1. Worked with customers to qualify in SLI
 - i) Work with JCI in 2003 to bring competition to SLI market

553. Johnson Controls ("JCI") is the largest manufacturer of flooded lead acid batteries in the world. (Hall, Tr. 2662-2663). In the United States, JCI is one of "only three major automotive battery manufacturers." (PX0088 at 001)

554.

{ [REDACTED] } (PX2112, *in camera*). The company viewed MPLP as one of three
{ [REDACTED] }
{ [REDACTED] } (PX2112 at 006-019, *in camera*) { [REDACTED] }
{ [REDACTED] } (PX2112 at 019, *in camera*)).

555. As part of JCI's separator sourcing strategy, JCI engaged in discussions with MPLP prior to 2003 in an effort to develop MPLP as a new entrant into the SLI separator business. (Hall, Tr. 2670).

556. JCI tested a sample PE SLI separator manufactured by MPLP in 2003. (Hall, Tr. 2696). The MPLP sample SLI separator was produced off of a production line in MPLP's Tennessee facility that was not set up to run the process; instead MPLP's production line was modified to try to create the requisite SLI sample for JCI. (Hall, Tr. 2696).

{ [REDACTED] } (Hall, Tr. 2696, 2811, *in camera*; PX0672 at 006, *in camera*).

- a. Daramic forced JCI into contract extension that stymied entry

689. Nothing in the mandates would have prevented Microporous management from continuing to work with Exide on possible expansion for the PE SLI separator market. (PX2301 (Heglie, Dep. at 74)). In fact, the Microporous Board was supportive of management's activity with Exide, "[b]ecause it could generate a fair amount of capital, good return on the investment if it worked." (PX2300 (Heglie, IHT at 153)).
690. Microporous management was working in good faith with Exide and that at no point was it working in something other than good faith with Exide on potential expansion for PE SLI separators. (PX2301 (Heglie, Dep. at 75-76)).
691. Mr. Heglie testified that growth opportunities as it relates to customer development would have continued to be a focus of IGP and Microporous absent the acquisition. (PX2300 (Heglie, IHT at 220-221)). In reaching that conclusion, Mr. Heglie had discussions with other Board members from IGP about where they saw Microporous going if there was not an acquisition by Daramic. (PX2300 (Heglie, IHT at 219)). With regard to those discussion, Mr. Heglie provided the following testimony:

[W]e were still moving forward on at least a broad view of the investment thesis in the strategic plan. . . . evaluating growth opportunities with the company, trying to grow the company, trying to grow the cash flow, trying to improve the margins, trying to generate cash to pay down debt.

I'm sure we would have continued attempting to move forward on some of these customer opportunities that we had.

So I don't know that there was a major deviation from the original strategy. . . . But, again, it's really case-by-case, and we had plenty of opportunities on the radar screen, as we talked about.

(PX2300 (Heglie, IHT at 219-220)).

L. Competition between Daramic and MPLP increased in the months preceding the acquisition

692. In 2007, Daramic faced growing competition from MPLP at no fewer than five of its top ten customers. (Roe, Tr. 1307). This included renewed competition from MPLP in both motive and automotive markets. In the automotive market, Daramic understood that MPLP was competing with Daramic for business at JCI, Exide, East Penn and Fiamm. (Roe, Tr. 1303-1307). Daramic during this period viewed MPLP as a viable competitor for automotive separator supply. (Roe, Tr. 1307-1308; PX0922 (Roe, IHT 359-361, *in camera*)). At the same time, MPLP was competing with Daramic for motive business at EnerSys, Exide and East Penn. (Roe, Tr. 1303-1306). Daramic and Microporous continued to compete for deep-cycle customers as well. (PX0263 at 03-04; 08, *in camera*).

693. The threat of increased competition with MPLP was increasing in the months preceding Daramic's acquisition of MPLP. In 2007, Daramic grew concerned about the possible loss of automotive business to MPLP at JCI. (PX2078). At that time, Daramic was supplying about 55 million square meters of separators to JCI on an annual basis. (Roe, Tr. 1296). Daramic also understood that it was JCI's strategy to have multiple suppliers in each geographic region (the Americas, Europe and Asia) in order to exert pressure on PE suppliers. (Roe, Tr. 1296-1298; PX2078).
694. At that time, Daramic considered MPLP to be a competitive threat for JCI's automotive business. (Roe, Tr. 1307). In August 2007, Mr. Roe informed Mr. Hauswald that "one likely scenario" for JCI would include MPLP taking 20-25 million square meters of product in 2009 - product which to date was being supplied to JCI by Daramic. (PX2078; Roe, Tr. 1301). Mr. Roe further believed that MPLP might get an even larger share of JCI's separator business beginning in 2010. (PX2078; Roe, Tr. 1301).
695. The increased competition along with MPLP's expansion plans [REDACTED] without an acquisition of MPLP. (PX0276 at 007, *in camera*).
696. [REDACTED] } (PX0238 at 001; PX0922 (Roe, IHT at 362-63), *in camera*). Mr. Roe responded by stating that "2008 will be the most challenging year ever faced by Daramic." (PX0238 at 001). Mr. Roe noted that Daramic was "finishing 2007 on a down-swing" and was "beginning to feel the real effects" of price competition and Daramic's past performance issues. (PX0238 at 001). Mr. Roe indicated that Daramic had to be the "price leader" and "continue to push/force price increases" even as the competition was lowering prices. (PX0238 at 001).
697. Mr. Roe also emphasized to Mr. Hauswald that 2008 would be a uniquely difficult year for Daramic because of MPLP's ongoing expansion project which was "an element we have not faced in many years." (PX0238 at 001). According to Mr. Roe, "unlike prior years, we have a true legitimate big competitor entering the market (MP) and for sure they will capture volume at whatever it takes." (PX0238 at 001; PX0922 (Roe, IHT at 362-363), *in camera*; Roe, Tr. 1302-1303).

M. The acquisition eliminated capacity expansion plans

698. The fourth PE line was never installed. (Gaugl, Tr. 4560). Some of the equipment for that line is sitting in boxes in Austria and Piney Flats. The extruder is at the supplier in a semifinished stage, and the pinhole detector is being used in Piney Flats. (Gaugl, Tr. 4565).
699. With the acquisition of MPLP by Daramic, "basically the carpet was pulled out from under us" with regard to Exide's strategy of adding separator suppliers to the

717. The manager of the LENO project, Mr. Brilmyer, expected that the new products from the project would generate revenues from commercial sales by the end of 2008 or early 2009. [REDACTED] } (Brilmyer, Tr. 1857-58, 1881, *in camera*).
718. Despite the bright prospects for the new gel battery separator from the LENO project, after the acquisition, Daramic's management was not interested in the further development of a product to replace DARAK, a very high-margin product for Daramic. (Brilmyer, Tr. 1863-64).
719. Of the MPLP innovation projects, only project [REDACTED] is still active in the flooded lead-acid battery arena after having come under Daramic's control. (Whear, Tr. 4736-4752, *in camera*).
720. Project [REDACTED] was patent protected by MPLP. (Whear, Tr. 4814, *in camera*).
721. Project [REDACTED] } (Whear, Tr. 4822-23, *in camera*).
722. Prior to the merger Daramic had innovative projects ongoing that were halted after the merger. (Whear, Tr. 4752-4754, *in camera*). Included in the abandoned projects was project [REDACTED] } (PX0913 (Whear, Dep. at 251), *in camera*).

iii) Innovation competition existed in SLI

723. IGP believed CellForce had applicability in the automotive market because in testing, Microporous "thought that potentially using CellForce you could ultimately reduce the lead content in an automotive battery." (PX2300 (Heglie, IHT at 121)). If CellForce were proven to allow for a reduced lead content in SLI batteries, it would be an attractive product to battery manufacturers: "Lead is a huge component of cost on a lead acid battery, so if you can eliminate some of that lead, you can take cost out of the battery which is very valuable to a battery manufacturer." (PX2300 (Heglie, IHT at 121)). Mr. Heglie, as an IGP Board Member, continued to see value in CellForce for the automotive SLI market throughout IGP's ownership of Microporous. (PX2301 (Heglie, Dep. at 170)).
724. At the time of the acquisition, Microporous was developing several new product ideas for SLI separators. One, called a "smart separator," [REDACTED] allowed for the controlled shrinking or expansion of the separator under certain conditions. (Gilchrist, Tr. 340).

N. Daramic Reaction to the MPLP Expansion – The MP Plan

725. In the fall of 2007, Daramic took active steps to respond to the MPLP threat to Daramic's automotive and motive power business in the US and Europe. Mr. Roe and Mr. Hauswald put together a project known as the { [REDACTED] } (PX0258; PX0255, *in camera*; PX 0911 (Roe, Dep. 173-174), *in camera*). In North America, Daramic identified East Penn, Douglas and Crown as customers whose business Daramic believed was immediately at risk of loss to MPLP in 2008. (PX0258 at 002). At East Penn, Daramic was concerned about the potential loss of automotive and motive power business, while at Crown and Douglas the concern related to potential loss of motive power business. (PX0258 at 002; Roe, Tr. 1303-1304). These customers were specifically identified because Daramic understood that MPLP had submitted proposals to win each of these customers business. (Roe, Tr. 1289-1290).
726. Understanding the threat that MPLP posed, Daramic developed the { [REDACTED] } to offer beneficial terms to customers willing to enter into exclusive or near exclusive long term contracts with { [REDACTED] } (Roe, Tr. 1285-1286; 1291; *see also* PX0258 at 001 ("What do we want to achieve? Secure select [Long term] agreements to fight the [MPLP] threat.")). Under the { [REDACTED] } Daramic offered customers contracts that { [REDACTED] } (PX0255 at 001, *in camera*; Roe, Tr. 1292-1294, 1350-1354, *in camera*). Additionally, the terms offered to customers under the MP Plan further limited Daramic's { [REDACTED] } (PX0255 at 001, *in camera*).
727. With the MP Plan in pocket, Daramic went to certain customers offering beneficial contractual terms in order to secure their business and to prevent erosion of Daramic's customer base. (Roe, Tr. 1290-1291). In addition to beneficial pricing terms, Daramic offered those customers identified as at risk of loss to MPLP guaranteed delivery times, committed inventory stock, rebate schedules and consignment to secure the business with Daramic. (PX0258 at 01; Roe, Tr. 1292). Daramic entered long term contracts with { [REDACTED] } as per the terms of the { [REDACTED] } (Roe, Tr. 1352, *in camera*).
728. Crown signed a { [REDACTED] } (Balcerzak, Tr. 4104, *in camera*; RX00994, *in camera*).
729. { [REDACTED] } (Balcerzak, Tr. 4105, *in camera*). Prior to the most recent contract, the term for the agreement between Crown and Daramic extended only { [REDACTED] } (Balcerzak, Tr. 4111, *in camera*).

[REDACTED]”} (PX0738 at 017, *in camera*). Moreover, the presentation indicated that without an acquisition all customers would benefit because [REDACTED]”} (PX0738 at 017, *in camera*).

770. [REDACTED] } (Hauswald, Tr.784, *in camera*; PX0203 at 086, *in camera*). Microporous had [REDACTED] } (PX0462 at 005, *in camera*; PX0738 at 013, *in camera*; PX0463 at 002, *in camera*). Daramic expected [REDACTED] } (PX0463 at 003, *in camera*).

771. [REDACTED] } (PX0203 at 088, *in camera*; Hauswald Tr. 785-86, *in camera*).

772. Prior to the acquisition, Daramic projected profit and loss scenarios with and without the acquisition of Microporous. (PX0051, PX0095 at 001-002, *in camera*). [REDACTED] } (PX0051). [REDACTED] } (PX0051, PX0095 at 001-002, *in camera*).

ii) Daramic acquired MPLP in order to raise prices

773. Mr. Hauswald explained to the Polypore Board that with the acquisition, Daramic would be able to institute a [REDACTED] } products which would result in [REDACTED] } (Hauswald, Tr. 782, 819-20, *in camera*; PX0203 at 84, *in camera*; PX0738 at 006-007, *in camera*; PX0463 at 008, *in camera*; PX0464 at 004).

774. The Polypore Board documents also stated that Daramic planned to [REDACTED] } (PX0203 at 085, *in camera*; PX0738 at 006, 007, *in camera*; PX0463 at 005, 008, *in camera*; PX0464 at 004, *in camera*). Mr. Hauswald acknowledged that [REDACTED] } (Hauswald, Tr. 819, *in camera*).

how to set the proper conditions of pressure, temperature and speed on the equipment. (Gilchrist, Tr. 394-395).

912. Manufacturers of separators have special know-how obtained in a learning-by-doing fashion. For example, Microporous “learned a lot of lessons, painful lessons, expensive lessons” when initially manufacturing CellForce at Piney Flats. These “expensive lessons” were incorporated into its new production lines in Feistritz. (Gilchrist, Tr. 395-396).
913. Microporous’s manufacturing lines for CellForce use PE technology that it obtained from Jungfer. (Gilchrist, Tr. 563). Depending on the type of calender rolls attached to the line, these manufacturing lines can produce separators for either SLI applications or industrial applications. (Gilchrist, Tr. 562, 569-570).

1. Lack of experience is a barrier to entry:

914. Customers are unlikely to sponsor entry by firms without appropriate flooded lead acid separator experience. [REDACTED] } (Axt, Tr. 2305-2306, *in camera*).
915. [REDACTED] } (PX0265 at 012, *in camera*). EnerSys believes that a viable supplier needs to be a reputable company with financial stability, technical innovation, research capabilities, customer service and support. (Gagge, Tr. 2484).
916. Reputation is an important component for entry into any North American PE market. EnerSys was willing to try MPLP’s CellForce product only after acquiring Hawker and learning from its European operations about MPLP’s reputation and stellar customer focus. (Axt, Tr. 2127).
917. Customers care about their separator suppliers’ reputations for financial stability, technical expertise, manufacturing capabilities, and leadership capabilities. (Axt, Tr. 2107-2108). Technical expertise is important for innovation, weekly support, and monthly support. (Axt, Tr. 2110; *see also* Hauswald, Tr. 784-785, *in camera*).
918. MPLP had a very good reputation in the marketplace. (Gillespie, Tr. 3127, *in camera*).

E. Entek is not likely to enter the deep-cycle, motive or UPS markets

- [REDACTED] } (Hall, Tr. 2881-2882, *in camera*).
948. BFR manufactures PE separators for use in automobiles, motorcycles and trucks. (PX0672 at 002, *in camera*; PX0907 (Kung, Dep. at 85-86, *in camera*)). To date, BFR has not [REDACTED] } (Hall, Tr. 2880, *in camera*). Mr. Hall is not aware of any instance in which [REDACTED] } (Hall, Tr. 2880, *in camera*). The BFR board has [REDACTED] } (Hall, Tr. 2881, *in camera*). Nor has the BFR board approved [REDACTED] } (Hall, Tr. 2881, *in camera*).
949. [REDACTED] } (Axt, Tr. 2218, *in camera*; see also Gagge, Tr. 2499, *in camera*). Even if [REDACTED] } had the appropriate calendar roll, it would still be [REDACTED] } before [REDACTED] } could begin ordering product from them. (Burkert, Tr. 2362, *in camera*; Gagge, Tr. 2498-2499, *in camera*). [REDACTED] } (Gagge, Tr. 2508-2509, *in camera*).
950. BFR has not had [REDACTED] } (Hall, Tr. 2880-2881, *in camera*). [REDACTED] } (PX0907 (Kung, Dep. at 283, *in camera*)).
- I. Epoch and Baotou are less likely to supply to Exide in North America than BFR
951. In Daramic's discussions with [REDACTED] } Daramic learned that [REDACTED] } was having financial difficulties. Daramic had multiple meetings with [REDACTED] } to discuss possible business ventures. (PX0903 (Thuet, Dep. at 58-60, *in camera*)). After the most recent meetings between Daramic and [REDACTED] } in [REDACTED] } Daramic felt that [REDACTED] } was chasing Daramic in order to get into a partnership with Daramic because [REDACTED] } was having financial issues. (Thuet, Tr. 4413-4414, *in camera*).
952. [REDACTED] } (PX0907 (Kung, Dep. at 113, *in camera*)). [REDACTED] } (PX0907 (Kung, Dep. at 113, *in camera*)). [REDACTED] } (PX0907 (Kung, Dep. at 113, 123), *in camera*). [REDACTED] } (PX0907 (Kung, Dep. at 132), *in camera*).

953. Exide believes that supply from [REDACTED] } would carry significant risks. (Gillespie, Tr. 3027, *in camera*; RX00306 at 004, *in camera*). These companies are unable to provide the quality, reliability and technology that Exide requires from a separator supplier. (Gillespie, Tr. 3027, *in camera*; RX00306 at 004, *in camera*). For example, [REDACTED] } which is “pretty bad” according to Mr. Gillespie. (Gillespie, Tr. 3027, *in camera*; RX00306 at 004, *in camera*). [REDACTED] } have the technological capabilities to manufacture six millimeter backweb separators. The very fact that these companies lack the technological capabilities to produce the most common PE SLI separators is of concern to Exide. (Gillespie, Tr. 3025-3026, *in camera*). Additionally, Mr. Gillespie’s experience shows that it is very risky to attempt to [REDACTED] (Gillespie, Tr. 3025-3026, *in camera*).

J. NSG is not an option for supply of PE separators to customers in North America

954. NSG is a separator manufacturer located in Japan. (Gillespie, Tr. 2963). In July 2006, NSG expressed interest in supplying PE separators to Exide, noting that the opportunity was “most interesting to NSG, and be assured we will take this most seriously.” (PX1073 at 001).

955. Subsequently, NSG refused to quote on Exide’s RFP due of NSG’s new relationship with Daramic, despite previous assurances that it wanted to bid on Exide’s PE business. (Gillespie, Tr. 2963-2964; PX1079 at 001-003). In July 2007, NSG informed Exide that it had sold the majority interest of its Tianjin, China facility to Daramic, and suggested that Exide contact Daramic for a quote on supply from Tianjin because according to NSG, “Daramic has the management authority to decide product mix and customer pricing.” (PX1079 at 003). NSG also informed Exide that it did not have the capacity to service new PE separator customers from its manufacturing facility in Japan. (PX1079 at 003). Subsequently, NSG has not approached Exide about possible supply of PE separators. (Gillespie, Tr. 2965).

K. Asian entry would not be sufficient to replace MPLP

956. Mr. Gilchrist explained, aside from Daramic and Entek, there were no other competitors that “could actually do what Microporous was doing in SLI” against Daramic and Entek. (Gilchrist, Tr. 423-434, *in camera*).

957. Asian manufacturers do not have the same engineering know how gained from learning and doing as North American companies like Daramic and Microporous. [REDACTED] } PX0913 at 45-46, *in camera*). For example, in assessing a small SLI battery separator manufacturer in [REDACTED] } Daramic noted that: [REDACTED]

[REDACTED]”}
(Hall, Tr. 2776-2777, *in camera*).

i) Daramic documents recognize that barriers to entry exist

987. [REDACTED]
[REDACTED] } (PX0265 at 004, *in camera*). {
[REDACTED] } (PX0265 at 011, *in camera*).

988. Mr. Graff, chairman of the board of Polypore, was a member of the Warburg Pincus team that conducted the due diligence to determine whether to invest in Polypore. (Graff, Tr. 4851). { [REDACTED]
[REDACTED] } (Graff, Tr. 4900; PX0746 at 002, *in camera*).

989. In order to get money to fund the acquisition of Polypore, Mr. Graff and other managing directors from Warburg Pincus went to banks and various credit rating agencies such as Standard & Poors and Moodys. (Graff, Tr. 4900-01, *in camera*). At the presentations made to the credit rating agencies, Mr. Graff and the other Warburg directors are attributed with providing the “Sponsor Remarks and Investment Considerations” where they stated that “High barriers to entry due to significant upfront capital costs, industry/technical expertise, and high customer switching costs” are among the “[f]avorable market dynamics” that should be considered. (PX0982 at 002, 008; PX1720 at 002, 008; PX1722 at 002, 006).

990. Similar to Warburg Pincus’s findings prior to its investment into Polypore, IGP determined that flooded lead acid battery separator markets are characterized by high barriers to entry. A document prepared by IGP prior to its investment in Microporous gives an “Executive Summary” of Microporous’s including an assessment of its strengths. (PX1124; PX2300 (Heglie, IHT at 119)). Under “strengths,” the document states

High barriers to entry/high switching costs

➤ Major capital costs and know-how required to enter the market. . . .

- Limited market size detracts potential entrants. . . .
- It generally takes 1-2 years within the lead acid battery industry to complete the design-in, full testing and final acceptance of a new separator into a battery.

(PX1124 at 001).

991. Polypore’s CEO recognizes that barriers to entry exist in Daramic’s business. { [REDACTED] } (PX1715, *in camera*; Toth, Tr. 1415, 1458-1459, *in camera*). { [REDACTED] } The e-mail was sent on February 26, 2007 at 11:26 pm. (PX1715 at 001-003, *in camera*; Toth, Tr. 1459, *in camera*).
992. Mr. Dossani’s told Mr. Toth that { [REDACTED] } (PX1715 at 002, *in camera*; Toth, Tr. 1464, *in camera*).
993. Mr. Toth responded to Mr. Dossani on February 27, 2007. (PX1715 at 001, *in camera*). Mr. Toth stated that that he was meeting with his staff that morning and would provide { [REDACTED] } (PX1715 at 001, *in camera*; Toth, Tr. 1467-68, *in camera*).
994. That same day, Polypore held a senior leadership team (“SLT”) meeting. Mr. Toth’s notes on the agenda for the SLT meeting are { [REDACTED] }; “Be clear that price was out in front and consistent with cost escalation ... no more price erosion;” “Barriers to entry – ‘technology’ – global scale/infrastructure, low-cost, grades/product development, and low cost %, but functional.” (Toth, Tr. 1421; PX0485 at 001). Mr. Toth testified that he { [REDACTED] } (Toth, Tr. 1463-65, *in camera*).
995. Polypore had a deck with the title “Initial Public Offering” which Polypore used with a variety of investors in June 2007. (Toth, Tr. 1424-25; PX3015, *in camera*). Investors were able to look at this deck, and Mr. Toth understood that it was very important to be as accurate as possible to investors. (Toth, Tr. 1427-28). { [REDACTED] } (Toth, Tr. 1428-29; PX3015 at 017, *in camera*).

to Microporous in exchange for its agreement to stay out of the SLI separator market. The offer was made to Mr. Gilchrist, Larry Trevathan of Microporous and an attorney representing Microporous. (Gilchrist, Tr., 426-27, 431-32, 575-76; Trevathan, Tr. 3707-3708; PX0077, *in camera*; PX1103 at 001).

1099. Microporous's Michael Gilchrist reported back that at the meeting Daramic "offered us basically all of their industrial business!!! . . . All of that was prefaced by them for us staying out of automotive. Amazing conversation." (PX1103 at 001). In reporting the meeting to Mr. Heglie, Mr. Gilchrist stated that "Daramic is definitely looking for a solution that keeps us out of automotive and/or takes us completely out of the game." (PX1103 at 002).

1100. At its Board of Director's meeting two weeks later, Microporous management reported the August 2 meeting to the full board. (PX1106 at 035). The handout for the board meeting discusses Daramic's offer to give Microporous its deep-cycle and industrial business "all in exchange for MPLP not participating in SLI markets." (PX1106 at 035 (emphasis in original)). Mr. Heglie testified that he was reasonably certain that the Board discussed Daramic's proposal, but that he did not recall anything specific outside of what was written in the Board presentation. (PX2301 (Heglie, Dep. at 81)). He further testified that Daramic's offer "'all in exchange for MPLP not participating in SLI markets,'" does not appear to be limited to a geographic area. (PX2301 (Heglie, Dep. at 81)).

C. Daramic's Latest Effort to Block the MPLP Expansion – the MP Plan

(See CCFOF 725-747)

D. Exclusionary effects on MPLP.

1101. [REDACTED] } (Simpson, Tr. 3209, *in camera*; PX0033 at 030, *in camera*). [REDACTED] } (PX0033 at 025, *in camera*, 030, *in camera*). This delay imposed costs on Microporous. (PX1215).

1102. Michael Gilchrist, Microporous's President at the time, later wrote Mr. Axt: "We [Microporous] are taking a significant hit with the altered dates as our initial profitability and return on our capital is thrown off by almost a year later due to Daramic." (PX1215). [REDACTED] } (PX0092 at 002; PX0089, *in camera*).

- [REDACTED] } (PX1289 at 001, *in camera*).
1123. Mr. Axt compared the competing proposals from Daramic and Microporous, and [REDACTED]. (Axt, Tr. 2166, *in camera*). He then informed Daramic that [REDACTED]. (Axt, Tr. 2166, *in camera*).
1124. EnerSys did not { [REDACTED] }, because [REDACTED]. (Axt, Tr. 2166-2167, *in camera*). In the following months, Mr. Axt continued [REDACTED]. (Axt, Tr. 2166-2167, *in camera*).
1125. In May 2006, [REDACTED]. (Axt, Tr. 2256, *in camera*; PX1200 at 004, *in camera*).
1126. On May 17, 2006, Tucker Roe of Daramic { [REDACTED] } (PX1201 at 002, *in camera*; Axt, Tr. 2251-2252, *in camera*).
1127. EnerSys decided in June 2006 that it would move forward with Microporous. Mr. Axt scheduled a meeting with Daramic officials in Charlotte, North Carolina, because he “felt it important to tell them face to face” that EnerSys had decided to reject Daramic’s proposal. (Axt, Tr. 2252-2253, *in camera*).
1128. At that meeting, which took place on July 6, 2006, EnerSys informed Daramic that certain battery plants then supplied by Daramic would, beginning in 2007, be transferred to Microporous. Specifically, [REDACTED]. (PX0986 at 001; Axt, Tr. 2128-2129, 2148, 2159, *in camera*).
1129. Mr. Roe related this news to Daramic management by email dated July 7, 2006. He concludes his internal communication this way: “Needless to say, this is not acceptable and we will respond accordingly.” (PX0986 at 001).
1130. Daramic management then evaluated various strategies for blocking Microporous from proceeding with its expansion plans for Austria. One scheme was to [REDACTED] at the new plant. (PX0246, *in camera*; Hauswald, Tr. 831-832, *in camera*).

[REDACTED]))).

1. The Impact of the Contract Extension with Daramic

- 1155. [REDACTED] } (Axt, Tr. 2128-2129, 2148, 2159, *in camera*; PX1259, *in camera*).
- 1156. [REDACTED] } (Simpson, Tr. 3230-3231, *in camera*). Without sufficient volume commitments, Microporous could not fully utilize its capacity when the new lines it was building became operational. (Gilchrist, Tr. 454, *in camera*).
- 1157. The force majeure event “delayed several pieces of business that Microporous was going to be granted, the timing of the Mexico business for our backfill, the timing of Italy. The Italian plant for EnerSys was also delayed and parts of the Tennessee business for EnerSys [were] delayed as well.” (Gilchrist, Tr. 413).
- 1158. With the potential for supplying significant PE volumes to EnerSys pushed out to June 2009 and beyond, Microporous needed to find additional customer orders to fill up its two new lines starting in March 2008, particularly the second PE line. (PX0089 at 002, *in camera*). (“The revenue gap will be over \$4,500,000 (approximately 2,800,000 square meters) that will be open until the backfill with EnerSys US can commence in 2009 (approximately fifteen months).”); Gilchrist, Tr. 454, *in camera* [REDACTED] }.
- 1159. To be competitive against Daramic in motive, stationary and SLI applications, MPLP needed to operate its lines at an efficient scale. (Gilchrist, Tr. 422-424; RX00401 at 002 (“[T]he filling of these Austrian lines with solid, profitable business is an absolute requirement for the continued success and financial health of MPLP.”)).
- 1160. Operating at lower volume levels would [REDACTED] } Daramic’s pricing. (Simpson, Tr. 3232-3233, *in camera*). Daramic recognized these economic realities. (Simpson, Tr. 3233, *in camera*; PX0241 at 001-002, *in camera*). Microporous recognized them as well. (Gilchrist, Tr. 508-509, *in camera* [REDACTED] }).
- 1161. At the same time that Daramic was threatening to withhold separators from EnerSys due to Ticona’s European force majeure, Daramic also increased the pressure on C&D, whom

1219. Richard R. Godber is CEO and president of Trojan Battery Company in Santa Fe Springs, California. (Godber, Tr. 133). Trojan Battery is the largest producer of deep-cycle batteries in the world. Trojan Battery has been in business for 84 years and has been producing deep-cycle batteries since 1952. (Godber, Tr. 133). As president and CEO, Mr. Godber is responsible for the overall operation of the company, including strategic planning. (Godber, Tr. 134). Mr. Godber is extensively involved in procurement of the three largest and most expensive parts of a deep-cycle battery, the lead, the plastic, and the separators. (Godber, Tr. 134). Mr. Godber personally negotiates the final pricing and contract terms with battery separator suppliers. (Godber, Tr. 135).
1220. Trojan has been Microporous's largest customer since it began doing business with Microporous a little over 20 years ago. (Godber, Tr. 156-57). At the time of the acquisition of Microporous by Daramic, Trojan was Microporous's largest customer. (Godber, Tr. 157). Microporous told Trojan that it was its largest customer. (Godber, Tr. 157).
1221. Michael Gilchrist was President and CEO of Microporous for about ten years at the time of the acquisition. Prior to becoming CEO he was vice president of sales and marketing and general manager at Microporous. (Gilchrist Tr. 297-298, 301). Following the acquisition, Mr. Gilchrist worked at Daramic as Vice President of Product and Global Strategy. This position gave Mr. Gilchrist a perspective on Daramic's product strategy. (Gilchrist, Tr. 297; PX920 (Gilchrist, IHT at 44-45, *in camera*)). Mr. Gilchrist had professional interactions with Daramic for over twenty years. (Gilchrist, Tr. 298).
1222. Nawaz Qureshi is vice president of engineering and technology at U.S. Battery Manufacturing Company. (Qureshi, Tr. 1990). He has been involved in the battery industry for 42 years and has 23 years of experience in deep-cycle batteries. (Qureshi, Tr. 1990-91). Mr. Qureshi is primarily responsible for product design and development, but he also is responsible for quality control, manufacturing improvement, and customer service. (Qureshi, Tr. 1991). In designing and developing batteries for U.S. Battery, Mr. Qureshi is responsible for selecting and procuring battery separators. (Qureshi, Tr. 1992). In making a decision on what battery separator to use in a particular battery, Mr. Qureshi looks at the price of the battery separator in order to select the most cost-effective separator for that battery. (Qureshi, Tr. 1992).
1223. Pierre Hauswald has been at Daramic since 1981. In 2004, he was promoted to the position of Vice President and General Manager of Daramic. (Hauswald, Tr. at 629-630). Mr. Hauswald is the Chief Operating Officer of Daramic. (PX0923 (Hauswald IHT at 5, *in camera*)). Pierre Hauswald is the Vice President and General Manager of Daramic, LLC, and reports to Mr. Robert Toth. (PX0582 at 011). Mr. Hauswald is the person at Daramic who is principally responsible for strategy and strategic planning. Market intelligence is also a part of his job. (Hauswald, Tr. 630-631; PX0923 (Hauswald IHT at 17, *in camera*)). { [REDACTED]

[REDACTED] } (PX0904 (Seibert, Dep. 148), *in camera*).

1224. Robert Toth is the Chief Executive Officer of Polypore, Inc. (PX0582 at 011). Mr. Bob Toth joined Polypore as CEO in 2005. (Hauswald, Tr. 13-15).
1225. Dr. George Brilmyer is an electrochemist formerly employed by Microporous and subsequently by Daramic. He resigned from Daramic in August of 2008 whereupon he began working for Atraverda Limited, a lead-acid battery manufacturer in the U.K., as VP of Business Development for North America. (Brilmyer, Tr. 1825-1826). Dr. Brilmyer worked for Johnson Controls for 10 years prior to joining Microporous. (Brilmyer, Tr. 1848). Prior to working for Microporous full time, Dr. Brilmyer consulted with Microporous in 1997 through 1998 working on its CellForce project. (Brilmyer, Tr. 1900). While employed by Microporous, Dr. Brilmyer held the position of Director of Research and Development. (Brilmyer, Tr. 1826). [REDACTED] } (Brilmyer, Tr. 1879, *in camera*).
1226. John “Kevin” Whear is the vice president of technology for Daramic. (Whear, Tr. 4659). Along with product development, Mr. Whear is responsible for knowing how the separators Daramic sells are used, including, “applying the right [separators] to the right applications, and then if the customers are having trouble utilizing our products in their application or problems with the batteries, . . . address[ing] those as well.” (Whear, Tr. 4661 (PX0913 at 002, *in camera*)).
1227. John Craig is the Chairman, President and CEO of EnerSys. He is responsible for all functions within EnerSys. Mr. Craig is knowledgeable about the import and export of batteries by EnerSys. (Craig, Tr. 2549).
1228. John Pharo Gagge, Jr. is the Senior Director of Engineering and Quality Assurance at EnerSys and has been with the company for 14 years. (Gagge, Tr. 2481). Mr. Gagge oversees all new product design development, troubleshooting of customer problems, warranty issues, designing new applications, developing batteries for new markets, supplier selection and control (including separators), and quality assurance. (Gagge, Tr. 2482-83).
1229. Larry Michael Burkert is the Senior Procurement Manager for EnerSys and reports to Mr. Axt. Mr. *Burkert* has been working in a purchasing role at EnerSys for 13 years and entered his current position in 1996. Mr. *Burkert*’s responsibilities include support at a corporate level some of the factories in North America, and then globally responsibility for battery separators. He is responsible for negotiating prices with separator suppliers, including Daramic. Prior coming to EnerSys, Mr. *Burkert* worked at East Penn for two years. Mr. *Burkert* has a bachelor's degree from the University of Pittsburgh in mechanical engineering and a master's degree in mechanical engineering from Penn State. (*Burkert*, Tr. 2308-2310)

