

Market Area Analysis

61. In order to determine which Shell stations compete with which other Shell stations, and thus which stations are harmed by discrimination in RTW and MTW prices, and by direct competition from Shell company-operated stations, I have analyzed a sample of individual monthly credit card statements drawn from the population of Shell customers over the years relevant to this case. From the hundreds of millions of statements available in microfiche form, a representative sample of 36,876 statements was selected by Prof. Harnett for my review. The original sample was further reduced by focusing only on those monthly statements of individuals who live in central Indiana, and who can be thought of as the natural customers of the Shell stations in question. This reduced the number of records to be examined to about 10,000 credit card statements which were copied and each individually examined by me. On the basis of my examination, I chose approximately 2,200 monthly credit card statements which displayed one or more pairs of gasoline purchases at Shell stations ranging at a considerable distance from each other during a given month. Exhibit 1 records each of these station pairs for your examination. They cover purchases from Lafayette and Muncie on the north to Bloomington and

Columbus on the south, and from Plainfield and Lebanon to Shelbyville to Greenfield. I did not analyze the other pairs of transactions at stations in close proximity to each other since it is a given that such stations **do** compete with each other. Rather, the question I sought to address was whether other more distant stations also compete with each other, and, if so if the competition is substantial. In my judgment, the data show that they do, and that the interaction is substantial.

62. I have summarized my findings in Exhibit 2. For example, of the 2,230 statements analyzed in detail, 606 involved pairs of transactions by a single customer during a given month at stations located north of 38th Street and south of the center-city all the way to Edinburgh. There were 149 pairs of transactions between Shell stations in the northern suburbs and Shell stations in Plainfield and others to the near west. There were 144 pairs of transactions between stations to the north and stations in Anderson, Kokomo and Muncie. There were 146 pairs of transactions between stations east of the city and those to the north. There were even 87 pairs of transactions involving Bloomington Shell stations and Shell Stations on the north side of Indianapolis. 52 transactional pairs

involved purchases during a given month between Shell stations in Bloomington and Shell stations in Martinsville. Stations in the north of Indianapolis shared 86 customers with Shell stations in Lafayette, and so it goes. 47 Shell credit card customers purchased gasoline in both Martinsville and on the south side of Indianapolis. The market for Shell gasoline is much wider than the narrowly defined PAD's that Shell has designed to facilitate its price discrimination strategy. These credit card records show that a substantial number of Shell customers are driving back and forth across the larger market on a regular basis and that they are violating Shell's PAD boundaries left and right. The obvious conclusion is that Shell's PAD boundaries are not true market boundaries, and that the larger metro market should be the market area for purposes of this case. It is my judgment that Shell stations throughout the central Indiana market compete with each other for many of the same customers, and that price favoritism to stations in one PAD harms competition with Shell stations in other PAD's who do not receive the lower price.

63. Similarly, Shell's company-operated stations compete not only with Shell dealer stations nearby, but they also compete for the business of regular Shell customers with Shell dealer stations all over the greater metro market. For example hundreds of the pairs of transactions involve one of the many Shell company operated stores. A quick glance at Exhibit 1 shows that the Shell company stores at 9599 N. Meridian and 1203 S. Rangeline Rd. appear in a disproportionate number of transactal pairs clear across the market. Just in the case of Ms. Becher's station at 514 E. Thompson Rd., she shared 31 customers with these two company operated stations. If you add in the other company operated stations the number of shared customers becomes substantial. Clearly, even these distant company operated stores impact her business.

64. In conclusion, it is my considered judgment that the relevant market for purposes of evaluating the claims in this case is the larger metropolitan market stretching out along major highways from Lebanon to Bloomington and from Plainfield to Greenfield. Further, I believe the sample of credit card records shows that all Shell stations in this area vie for many of the same customers who drive back and forth across this market, and who are sensitive to the

price of Shell gasoline in different parts of the market. I also believe that the data shows that the number of such customers is not insignificant.

I affirm, under the penalties for perjury, that the foregoing representations are true.

James M. Patterson