

Docket Nos. UE-072300 and UG-072301 (consolidated)

Petition for One-time Suspension of SQI Nos. 6 and 8
Compliance Filing – Order 21

Attachment A: Third-party Review of SQI Survey Methodology and Procedures

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May 30, 2013

Ken Johnson
Director, State Regulatory Office
Puget Sound Energy
P.O. Box 97034
Bellevue, WA 98009

Dear Mr. Johnson,

Accompanying this letter is my report regarding the suitability of a partnership between EMC Research and Pacific Market Research to continue the customer satisfaction surveys that formerly were conducted by Gilmore Research Group. In my opinion, these vendors will produce high quality research at least as valid and reliable as the former vendor.

If you have any questions, please do not hesitate to ask.

Sincerely,



Douglas L. MacLachlan
Emeritus Professor of Marketing

CC: Robert Yetter, Eric Englert, Mei Cass

Survey Methodology and Procedures Review
Puget Sound Energy Service Quality Program

by

Douglas L. MacLachlan, Ph.D.
Emeritus Professor of Marketing
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May 30, 2013

In July of 1997, I prepared a report that evaluated the reliability and validity of a new system employed by Gilmore Research Group to assess customer satisfaction for Puget Sound Energy (PSE) in its Service Quality Program. PSE is required to file its service quality program report semi-annually with the Washington State Utilities and Transportation Commission (WUTC). Gilmore Research Group successfully conducted that survey program until it ceased business operations in February 2013.

In May 2013, I was retained as an expert consultant by PSE to help select and evaluate a new vendor that would be able to conduct a high quality survey of customer satisfaction for its two survey programs: (1) Telephone Center Transactions Customer Satisfaction and (2) Field Service Operations Transaction Customer Satisfaction. Also, I was asked to evaluate the proposed survey methodology of the successful research firm in order to assure PSE and the WUTC that the methodology will result in at least as high quality as the former Gilmore Research Group customer survey program.

I reviewed the RFP that was sent to prospective vendor bidders and the written responses made by six such bidders. In a meeting with a PSE committee, which I attended by phone, the set of potential vendors was narrowed to two, using a formal evaluation procedure plus discussion. The committee, with me involved also, next separately interviewed the two remaining candidate firms, who both had strengths and considerable customer satisfaction survey experience. There was support for both vendors among the committee members and it was ultimately determined that PSE should seek a joint venture between the two candidate vendors, with supervisory and reporting responsibility going to EMC Research and fielding of the survey responsibility to Pacific Market Research. EMC Research impressed the committee with its creativity and passion that would lead to actionable managerial insights and take PSE to the next level in terms of using the information to enhance their customers' satisfaction. Pacific Market Research has fielding expertise, local interviewer presence, and has hired former staff personnel from Gilmore Research Group that are well-acquainted with the past PSE customer satisfaction survey procedures. After talking with principals at each of the firms, I determined that an agreeable and equitable division of the survey responsibility could be workable and that the two firms are determining how best to accomplish that with high quality results.

Any attempt to measure people's attitudes, such as their degree of satisfaction with services, is challenged by various sources of potential error. In survey research, there are two basic sources

of error: bias and precision. Bias involves any systematic differences from true responses that might be caused by improper measurement (e.g., asking the wrong questions, using improper scales, etc.), sampling the wrong population, non-response from important subpopulations, misinterpreting responses, and so forth. Precision is sampling error due to the fact that a sample is used rather than the entire population. Measurement of the latter is done by "standard error" and is controlled by the sample size. In evaluating the quality of survey research procedures used by the proposed vendors, I carefully considered all possible sources of error that might be involved.

Any survey research project is only as strong as its weakest link. Such links in this case include (1) specification of objectives of the survey and target population, (2) development of the questionnaire, (3) sampling design, (4) sample selection and field implementation of the survey, and (5) data tabulation and report of the findings. Each stage provides opportunity for error and potentially misleading results. I have carefully read the two firms' proposals and interviewed the principal executives who are charged with carrying out the project. I am convinced that the same high standard of performance received from Gilmore Research over the past 16 years will be continued by the EMC Research and Pacific Market Research partnership. Given the knowledge gained from these sources about the survey process in question, my opinion is that each stage will be conducted with the highest standard of professionalism extant today in the survey research discipline. That is to say, I have no reason to expect any significant bias or undue sampling error will exist in the survey results provided by EMC Research and Pacific Market Research in the ongoing customer satisfaction surveys they conduct for PSE. I will elaborate on this in the following paragraphs.

The objectives of the surveys are straightforward: to provide PSE and WUTC with reliable and valid measures of customer satisfaction with PSE as a provider of gas and electric services. In particular, customer satisfaction regarding their experiences with call center and field service representatives and the company overall was desired at regular intervals. Additionally, PSE executives desire decision support for their efforts to improve customer satisfaction and positive attitudes toward PSE. To this latter end, going forward, the company wants to explore continuously updated desktop report summaries of data collected, trends, and factors driving customer attitudes broken down by important segments. These are in addition to the continued reports to WUTC as formerly provided. The target populations are, for call center and field representatives, all those customers who have made contact with PSE in the week prior to the survey. The population for the Telephone Center Transactions Customer Satisfaction Monitor survey is the list of all customers who called the Customer Access Center each week. The population for the Field Service Operations Transaction Customer Satisfaction Monitor survey is the list of all customers who have had a Field Service visit to their home or business each week. These are well-defined target populations.

The **Telephone Center** survey is designed to measure and track (1) the primary reasons for contacting a customer service representative, (2) difficulties callers have in reaching a customer service representative, (3) customer service representatives' performance in terms of key attributes such as helpfulness, courtesy, knowledge and ability to help with problems and answer questions, and lastly (5) overall evaluation of PSE and the service provided by PSE service representatives. Only the last items are reported to WUTC. The **Field Service Operations**

survey is designed to measure (1) primary reasons for contacting a service representative, (2) difficulties callers have in reaching a customer service representative, (3) customer service representatives' performance in terms of key attributes such as helpfulness, courtesy, knowledge and ability to help with problems and answer questions, (4) performance and impressions of the field service technicians including timeliness, competence, courtesy, and thoroughness of field visits, and (5) overall evaluations of PSE and the service provided by PSE customer representatives and field service representatives. Again, WUTC only requires the last items to be reported to them.

The questionnaires to be used are those that were developed and validated by Gilmore Research Group over past years. The Telephone Center questionnaire currently has 26 questions, most of which are for diagnostic purposes and not required by WUTC. The comparable questionnaire for the Field Service Operation currently has 46 questions, most of which again are not required by WUTC. Any modifications of these will be carefully tested so as not to impact the continuity of prior assessments of customer satisfaction. Although only a couple of the questionnaire scale items are reported to WUTC, any modification of questions that come before those crucial scales will only be changed with appropriate testing to avoid any potential bias caused by question order sequence. Overall, I find the questionnaires to be well constructed and likely to provide unbiased assessments of customer satisfaction.

PSE provides EMC Research and Pacific Market Research weekly with the complete lists of target populations each week and automated random sampling procedures are employed by them to assure appropriate representativeness of the target populations. In the past for the Telephone Center, approximately 280 surveys each month (70 per week) were completed with callers for a total of 840 completed surveys per quarter and 3,360 per year. For the Field Service Operations, approximately 200 surveys each month (50 per week) are completed with callers for a total of 600 completed surveys per quarter and 2,400 each year. These sample sizes are sufficient to assure that sampling error is within professional standards.

In terms of the fielding procedures, the questionnaires are imbedded in a Computer Assisted Telephone Interviewing (CATI) system and all question branches and skip patterns are thoroughly tested for system logic. The questionnaires are relatively easy to administer and simple for respondents to understand. Pacific Market Research interviewers call Telephone Center customers within 6 to 18 days of their contact with PSE. Interviews are conducted from their telephone call center during the day and evening hours Monday through Saturday. Interviewers call Field Service Operations customers within 5 to 17 days of their contact with PSE. Those interviews are also done by phone during day and evening, Monday through Saturday. Both home and work phone numbers are provided to Pacific Market Research in the latter case. PSE is currently investigating ways to reduce the lag time between customer contact and the survey interviews. They can create daily samples for Telephone Center and Field Service contacts, reducing the delay to a single day. This should provide even better survey response and thus higher quality survey results.

The data collection procedure is computer controlled and timed in accordance with standard instructions over the designated weekly intervals to maximize respondent cooperation and minimize sample bias due to respondent work and household presence patterns. Proper

procedures are in place for reducing nonresponse and assuring interview quality. All selected sample respondents are called up to five times before treating them as nonrespondents. The interviewers are carefully trained and monitored regularly by supervisors. Coding of verbatim responses is also done according to accepted procedures to reduce inter-coder inconsistency.

Data from the interviews are forwarded to EMC Research for analysis and reporting. At the data processing stage, the data file is cleaned and verified, marginal tabulations are examined for consistency before banners and other analyses are performed. Tables of all question responses and selected crosstabulations are prepared.

Reports contain executive summaries (including some conclusions), some specifics of research methodology pertaining to the particular time period, detailed findings including tables and interpretation of their important features, a respondent gender and geographic profile, and appendix containing sample contact attempt/disposition information. These allow readers of the reports not only to refer to and use the information collected in the surveys, but also to assess how generalizable they might be.

EMC Research is planning to develop decision support tools such as dashboards that will bring survey findings to PSE in a timely fashion, enabling managers to creatively address improvements in customer satisfaction. They have also proposed development of a consumer panel that might eventually augment or replace the weekly surveys. Also, as more customers use other modes than phone to communicate with PSE (e.g., email or internet), EMC Research is prepared to add such capabilities to the survey. As other industries have done, in the future PSE might want to experiment with new technologies such as automatic recalling of customer contacts. Such developments would be done carefully, with appropriate testing so as to avoid changing the validity of survey information.

Pacific Market Research interviewers have the capability of communicating with potential survey respondents in other languages than English and they can verbally record responses with their CATI system. Of course, if these capabilities are determined to be useful in the future, care would be taken to see that they do not change the validity of survey information.

Both EMC Research and Pacific Market Research enjoy excellent reputations among firms in the Pacific Northwest for maintaining high standards of professional performance in their survey projects. I found nothing in my evaluation to diminish those reputations. In my opinion, PSE and the Washington Utilities and Transportation Commission can trust the survey findings provided by the partnership between EMC Research and Pacific Market Research as being of high validity and reliability.

BIOGRAPHICAL SKETCH

Douglas L. MacLachlan is Emeritus Professor of Marketing, Department of Marketing and International Business, **Michael G. Foster School of Business, University of Washington**. He retired from UW on December 31, 2012. He has a BA in Physics, MA in Statistics, MBA and PhD in Marketing, all from the University of California, Berkeley. He taught courses ranging from retailing and marketing management to marketing research and statistics. In recent years he taught primarily Marketing Research, Database Marketing and Decision Models, Multivariate Data Analysis, Data Mining and Customer Analytics. In addition to being formerly Vice President of an electronic systems corporation, he has had extensive experience in consulting, marketing research, and management development. He has published over 100 articles in academic and business journals and has presented papers at numerous professional conferences and universities. A past president of the Puget Sound chapter of the American Marketing Association (1978-79), he also has membership in INFORMS, the European Marketing Association, and Puget Sound Research Forum, among other professional organizations. He co-directed the UW Japanese Food Marketing Program from 1975 to 1991, during which time he coauthored two Japanese-English books (a dictionary and a glossary). He was chairman of University of Washington's Department of Marketing and International Business for five terms in his 42+ years with UW. He was Senior Associate Dean for Academic Programs for the UW Business School and Executive Director of UW's Center for International Education and Research between 1996 and 2000. He was the Business School's Faculty Director of International Alliances 2003-2006. He was a Director and Trustee of the University Book Store in Seattle (www.ubookstore.com) 1985-2000 and 2003-2008, chairing its board twice. During 1988-89 he was named Nordstrom Professor in Retail Marketing, he held the Ford Motor Company Professorship during 1989-90, and was the Simpson Timber Faculty Scholar 1992-94. He received the Marion B. Ingersoll endowed professorship in 2007. He was a Visiting Scholar at the European Institute of Business Administration (INSEAD) in Fontainebleau, France (1982-83). He spent a sabbatical leave in 1991-92 as Visiting Professor of Marketing at Catholic University in Leuven, Belgium. He taught in Romania on numerous occasions in UW's joint Executive MBA program with ASEBUSS in Bucharest. While on sabbatical leave throughout 2001, he was Visiting Professor at Koç University in Istanbul, Turkey. Important international travel has included doing research, lecturing and/or presenting scholarly papers in Denmark, Finland, Norway, England, Brazil, Canada, Belgium, France, Germany, Turkey, Greece, Israel, Singapore, Australia, Japan, South Korea, China, Colombia and Russia. He was President of the Pacific Northwest Branch of the Clan MacLachlan Society of Scotland (1995-2009). His extensive contacts with businesses in the Pacific Northwest resulted in his being named Marketing Legend for 2012 by the American Marketing Association.

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