CHR Reports



When the Lights
Went Out:

Hotel Managers' Perceptions of the Blackout of '03

by Robert J. Kwortnik, Ph.D.

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CHR Reports: When the Lights Went Out: Hotel Managers' Perceptions of the Blackout of '03

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When power failed late in the afternoon of August 14, 2003, hotels in the northeastern United States and southern Canada were left without electricity for as long as two days. To assess the lodging industry's response to the event, a study of hoteliers was conducted by surveying selected participants in the Smith Travel Research database. Of the 147 respondents, 93 were from hotels that lost power and 54 were from hotels that retained power during the blackout. On average, the blackout lasted 16 hours for the responding hotels—meaning that guests at half the hotels being studied spent an entire night without electricity.

While all the hotels had the code-required emergency power for exit lights, such power failed at half of the hotels, mostly when the batteries died. Half of the hotels had generators, and 85 percent of those kept their emergency lights on for the duration. Only one of four hotels had auxiliary power for other than emergency circuits (e.g., for HVAC or guest room lights), and one-quarter of those systems failed before the blackout ended. Despite these problems, and contrary to media reports of hotels' putting guests on the street, all of the hoteliers in this study reported accommodating guests, including walk-ins and people from the vicinity who abandoned or could not reach their homes.

Key operating systems were shut down at most hotels, including HVAC, guest room lights, computer networks, cooking and refrigeration systems, and elevators. Some hotels completely lost access to a potable water supply—including running water for sanitary facilities.

Hotel managers and staff members operated as many systems as possible—often manually. That included escorting guests to their rooms, carrying buckets of water for sanitary purposes, and handing out flashlights and light sticks. Some hotels that lost the use of their F&B equipment set up barbecues on the premises, set up cold food buffets, and sometimes gave away food rather than allow it to spoil. To offset the loss of PBX service, telephone service was provided by cellular phones or, in some cases, by direct land lines not connected to the PBX.

Overall, the respondents said that their chief concerns were guest and employee safety and guest comfort and satisfaction. Some had no written plan covering the blackout and had to improvise. In the wake of the blackout, hoteliers reported plans to stock up on emergency supplies, but some 40 percent of the respondents said nothing additional had been done for emergency preparedness.

On balance, the respondents believed that they had maintained their service at reasonable levels, with only 10 percent stating that they had fallen short. They credited a strong effort by managers and staff members for maintaining service. In view of employees' extraordinary effort, most managers also believed that their guests were satisfied with their hotel stay during the blackout, perhaps because their expectations were lowered.

Many managers considered the Blackout of '03 to be an aberrant event. Nevertheless, hotel managers should review their emergency plans and stockpiles of emergency supplies. The relatively high incidence of facilities failures and process problems calls into question managers' perceptions of the service quality provided during the blackout. Whether guests' perceptions match those of managers is a critical open question and one that deserves future research—ideally, before the lights go out again.

When the Lights Went Out:

Hotel Managers' Perceptions of the Blackout of '03

by Robert J. Kwortnik, Ph.D.

E'LL LEAVE THE LIGHT ON FOR YOU." MOTEL 6'S ADVERTISING SLOGAN is one of the most memorable in the lodging industry and a catchphrase of reliability. But shortly after 4:00 PM on August 14, 2003, the lights went off at a number of Motel 6 properties—as well as thousands of other hotels—across northeastern United States and southern Canada following the largest power failure in North American history. Some 50 million

electricity customers were affected by the outage, which lasted less than an hour in some areas and as long as two days in others. The "Blackout of '03" was not only surprising in its suddenness, but also unsettling in its scope. In addition to the many questions it raised about the electric grid itself, the blackout exposed a range of vulnerabilities in hotel service delivery beyond just the inability to keep the lights on.

No sooner had power been restored and hotel operations returned to normal than images of the event emerged in the media, images that tended toward the unfavorable, such as hotel guests sleeping on the sidewalk in New York City's Times Square because they were not permitted into their rooms. The industry quickly

responded with a different set of images—those of staff members hiking up dozens of flights of stairs to attend to guests' needs or working through the night to distribute flashlights, bottled water, and emergency supplies. At least one hotel chain countered negative media with a press release offering examples of extraordinary service during the blackout and praising employees for their efforts to ensure guest safety and comfort.¹

It was these disparate views of the hotel industry that prompted this study. Much of what we know about the effects of the blackout is anecdotal and based on stories from a handful of hotels, in particu-

¹ Business Editors/Travel Writers, "Hilton Family of Hotels Shine During Recent Power Blackout," Business Wire, New York (August 21, 2003), p. 1.

lar a few high-profile New York City properties that faced difficulties in dealing with the power outage. The question I sought to answer was, were these cases the norm or the exception? This study is an effort to develop a better picture of what happened during the blackout across different lodging sectors and what the impact of this was on hotel operations and the guest experience.

Although some managers viewed the blackout as an extraordinary event, one unlikely to be repeated, a variety of recent events offer reason to think otherwise. For example, only one month after the blackout, six million electricity customers lost power-many for a week or more-when Hurricane Isabel slammed into the mid-Atlantic coast.² In late October 2003 the wildfires that swept through San Diego County nearly led to rolling blackouts in Southern California as an electricity transmission line went down. Fortunately, only minor power outages occurred.³ Although wide power outages have not been recorded in the winter months of 2003 and 2004, ice storms have knocked out power in the past, as was the case in Oklahoma in January 2002, when severe storms took down power systems for days.⁴ Finally, there is the rising incidence of manmade threats to the power system, from sabotage to mismanagement of electricity supply and demand, as illustrated by the California energy crisis in 2001 that led to rolling blackouts throughout the state.⁵ In summary, managers should reconsider their risk perceptions and ability to tolerate sudden and sometimes extended losses of inputs such as electrical power that are vital to the hotel operation.

Findings from the survey data presented in this report suggest that the hospitality industry coped with the blackout, but not necessarily well. Though lodging was most always provided to guests and even to non-guests, a lack of basic amenities—from emergency lighting to functioning toilets—was all too common, especially as the duration of the power outage extended beyond a few hours. Fortunately, service providers and customers adapted to the circumstances, sometimes in remarkable ways. Thus, the effect of the blackout on hotel operations and the guest experience can be described as facilities failure and service success. However, even this summary masks the fact that overall service quality was compromised by shortcomings in the physical dimension of the hotel service offering. Many facilities failures could have been mitigated, if not avoided entirely, with better planning and investment in auxiliary power-generation systems. The result would be a significant improvement in service reliability and safety-key dimensions of service excellence expected of hospitality providers in a post-9/11 world.

In the next section of this report, I briefly describe the methods used to examine what happened to hotel service during the blackout. Subsequent sections of the report describe data analysis and findings across five main areas: (1) effects of the blackout on the service delivery system; (2) contingency planning before the blackout and management action during the event; (3) the critical role played by service personnel; (4) effects of the blackout on the guest experience; and (5) effects of the blackout on key hotel performance indicators. I close the report with discussion, implications, and recommendations. Throughout this report are found the comments of hotel managers who experienced firsthand the Blackout of '03.

² www.cbsnews.com/stories/2003/09/22/national/main574398.shtml.

³ ktla.trb.com/news/local/la-me-power28oct28,0,3714782.story.

⁴ Gary D. McManus, "January 28–30, 2002: Oklahoma Ice Storm," *Oklahoma Climatological Survey*, March 11, 2009

⁵ See "Hackers Hit Power Companies" at www.cbsnews.com/stories/2002/07/08/tech/main514426.shtml; and "Chronology of California's Power Crisis" at www.sfgate.com/cgi-bin/article.cgi?file=/news/archive/2001/04/06/state1705EDT0232.DTL.

SURVEY RESPONSES BY STATE AND PROVINCE

	Full response set (N = 147)	Percentage of full response	Blackout responses (n = 93)	Percentage of blackout responses
Connecticut	5	3.4	0	0
Massachusetts	7	4.8	0	0
Michigan	30	20.4	22	23.7
New Jersey	12	8.2	7	7.5
New York	29	19.7	26	28.0
Ohio	20	13.6	11	11.8
Pennsylvania	11	7.5	0	0
Vermont	2	1.4	0	0
Ontario	31	21.1	27	29.0

EXHIBIT 2

SURVEY RESPONSES CATEGORIZED BY HOTEL

SCALE AND CHAIN AFFILIATION

STR scale (chain affiliation)	Percentage of hotel census	Blackout survey responses	Percentage of blackout responses
Chains			
Upper Upscale	3.5%	17	18.3%
Upscale	4.7%	20	21.5%
Midscale with F&E	9.7%	12	12.9%
Midscale, no F&B	14.0%	22	23.7%
Economy	20.5%	5	5.4%
Independent	47.7%	17	18.3%
Total	100%	93	100%

Methodology

Data for this study were collected with an online survey using e-mail addresses for 1,495 hotel managers in the U.S. states and Canadian province affected by the blackout (Connecticut, Massachusetts, Michigan, New Jersey, New York, Ontario, Ohio, Pennsylvania, and Vermont).⁶ Responses to the survey were received from 147 hotel managers, 93 (63%) of whom experienced electrical-power failure and 54 (37%) of whom did not, for response rate of 9.8 percent.⁷ Because the 93 responses from managers who experienced the blackout were the focus of the study, a more relevant response rate was derived from a subset of the full sample that included only those areas directly affected by the blackout.8 The final blackout sample contained 667 email contacts. Thus, the effective response rate for the study was 13.9 percent (93/ 667). As shown in Exhibit 1, most responses came from managers in Detroit (17), New York City (15), and Toronto (10). The frequency of these responses relative to the overall response set is consistent with news reports about areas that were most affected by the blackout.

Exhibits 2, 3, and 4 provide other demographic information about the hotels in this study. Comparison of these characteristics with the North American hotel population as tabulated by Smith Travel Research (see column 2 in each table)

⁶ This study marks the first time that an online survey instrument was used for research sponsored by The Center for Hospitality Research (CHR). The online contact method was made possible by Smith Travel Research (STR), a datasharing partner of the CHR and independent research firm that tracks lodging performance for most major North American hotels. STR provided e-mail addresses for hotel managers across the blackout region, as well as demographic data for each hotel, such as city, state, and market area, quality scale and chain affiliation (e.g., upscale chain-affiliated hotel, independent), and location (e.g., urban, highway). To protect the anonymity of its data providers, STR did not give brand names for the chain affiliation or exact hotel location.

⁷ Four responses, two from each response subset, were eliminated due to missing-data problems.

⁸ This was determined by: www.platts.com/features/poweroutage/timeline.pdf; www.cnn.com/2003/US/08/15/power.outage; and abclocal.go.com/kgo/news/print_081503ap_nw_northeast_power_affected_areas.html.

reveals that the sample overrepresents chain-affiliated hotels at the upper end of the quality scale, hotels in urban locations, and hotels with more than 75 rooms. As a consequence, the findings and conclusions are actually conservative and underestimate the severity of the impact of the blackout on the lodging industry. This is because hotels that are underrepresented in this study (that is, small, highway, economy properties) tended to fare worse during the blackout than did upper-tier hotels that are overrepresented.

Data Collection and Analysis

In addition to media reports, exploratory interviews with hotel managers suggested that the effects of the blackout and management's response to it varied greatly. Obtaining a revealing picture of the effects of the blackout demanded a flexible means for data collection, one that would enable respondents to provide descriptions of their experiences during the event. Thus, the survey developed for this study had 14 open-ended questions, as well as "comments" dialogue boxes appended to many of the 40-plus closed-ended questions. This mixed-question design netted considerable detail (more than 60 pages of single-spaced text data) in the stories, examples, and insights provided by respondents.

Respondents were recruited for the study via an e-mail letter sent September 25, 2003, with a follow-up letter sent to non-responders on October 1 that asked for a response later that day, after which data collection was closed. The e-mail explained the purpose of the study and provided a clickable hyperlink to the online survey and a specific password for each respondent. As an incentive to participate and a sign of appreciation for doing so, completed surveys were entered into a lottery, with five respondents chosen at random to receive complimentary one-year subscriptions to the Cornell Hotel and Restaurant Administration Quarterly.

Ехнівіт З

SURVEY RESPONSES CATEGORIZED BY HOTEL LOCATION

STR location category	Percentage of hotel census	Blackout survey responses	Percentage of blackout responses
Urban	11.4%	22	23.7%
Suburban	38.0%	37	39.8%
Airport	6.8%	9	9.7%
Highway	39.1%	23	24.7%
Resort	4.7%	2	2.2%
Total	100%	93	100%

EXHIBIT 4

SURVEY RESPONSES CATEGORIZED BY ROOM COUNT

Number of rooms	Percentage of hotel census	Blackout survey responses	Percentage of blackout responses
Less than 75	57.7%	10	10.7%
75 to 149	29.9%	43	46.2%
150 to 299	9.1%	28	30.1%
300 to 499	2.3%	6	6.5%
More than 500	1.0%	6	6.5%
Total	100%	93	100%

About the Sample

SMITH TRAVEL RESEARCH HOTEL SAMPLE

STR scale (chain affiliation)	Hotel census	Percentage of hotel census	STR participation	Percentage of scale category	Number with e-mail address	—— P e r e-mail scale category	c e n t a g e-mail sample	e o f— blackout responses
Chain								
Upper Upscale	1,699	3.5%	1,636	96.3%	1,542	90.8%	14.9%	18.3%
Upscale	2,253	4.7%	2,217	98.4%	2,019	89.6%	19.0%	21.5%
Midscale w/ F&B	4,610	9.6%	3,347	72.6%	1,028	22.3%	9.9%	12.9%
Midscale w/o F&B	6,775	14.0%	6,606	97.5%	2,954	43.6%	28.1%	23.7%
Economy	9,907	20.5%	6,796	68.6%	1,991	20.1%	19.2%	5.4%
Independent	22,996	47.7%	1,541	6.7%	942	4.1%	9.0%	18.3%
Total	48,240	100%	22,143	45.9%	10,476	21.7%	100%	100%

The Smith Travel Research hotel database is arguably the most comprehensive source for lodging performance data in North America. Of a total census of more than 48,000 hotels, 46 percent are STR data participants (see columns 2 through 5 of the accompanying table), representing 64 percent of all room inventory. Although STR collects data from a remarkable 96 percent or more of chain-affiliated hotels in the upper end of the industry and of midscale hotels without F&B facilities, coverage is lower in other categories, especially independents, 6.7 percent of which report data to STR. Moreover, as revealed in columns 6 and 7 of the accompanying table, STR has e-mail addresses for roughly 22 percent of the hotel population, with the most complete coverage again at the upper end of the industry.

What this means is that the present study, which samples from the STR e-mail database, overrepresents upscale and upper-upscale chain-affiliated hotels and underrepresents other categories, especially economy and independent hotels. In analyzing its syndicated lodging data, STR corrects for this sample imbalance using a weighting system, thereby mitigating concerns about the generalizability of results to the broader hotel population. For the present study such a system could not be used; thus, generalizing results to the broader hotel population is not possible.—*R.K.*

Data analysis primarily used summary statistics, frequencies, cross tabulations, and statistical tests of differences between categories of respondent hotels. In addition, qualitative comment data were content analyzed, most often by grouping similar comments into categories to determine the frequency of certain events, actions, and opinions. These data were also examined for patterns of responses that indicated shared meanings and experiences for these respondents. Finally, the comments were explored for enlightening examples of the effects of the blackout and how managers responded to it.

Effects of the Blackout on the Service Delivery System

A hotel's service delivery system (SDS) consists of the physical plant, processes, and people who provide the hospitality service to guests, as well as the guests themselves who co-produce their experience. Because these elements form a system, failure of one element to perform up to standard affects other elements of the system and the service experience overall. The blackout underscored these interrelationships and how fragile the system is when faced with the loss of a critical and taken-for-granted input—in this instance, electrical power.

Power Problems

Hotel managers who responded that their properties lost electrical power during the blackout reported outage durations ranging from under 30 minutes to as long as 52 hours, with an average of 16 hours and a median of 13.5 hours. As indicated above, the power failure occurred shortly after 4:00 on a Thursday afternoon, and the sun set in the blackout region just before 8:00. Thus, for half of the hotels, power was out through the night until early morning—and many were out much longer. In fact, only 10 percent of the hotels had primary power reconnected before nightfall. Roughly one-

quarter of the hotels were without primary power for 24 hours or more, and 10 percent of the hotels had to deal with a second night without power. Especially hard hit were hotels in the Detroit and Cleveland areas.

Emergency power. The duration of the blackout is important to assess because of the time of day when power failed and also because of the minimum length of time that hotels are required to have some type of backup power available to support emergency systems. Provisions in the National Electrical Code (NEC) aim to ensure that emergency systems such as elevators, fire detection and suppression, and egress lighting for stairs, hallways, and exit signs are operable long enough to prevent panic and facilitate a safe exit. 9 Which systems are needed and for how long depends upon state, municipal, or other codes for the area in which the hotel is located, as well as specific characteristics of the facility (e.g., its height). However, the generally accepted standard is that emergency systems should be powered for a minimum of two hours. For example, if a hotel uses storage batteries for emergency power, these must be able to support a full emergency system power load for at least 90 minutes before voltage to the load drops below 87.5 percent. If a generator driven by an internal combustion engine is used, there must be at least a two-hour on-site fuel supply to power the full emergency system.

Clearly, code provisions of this kind were designed to deal with different circumstances than those presented by the blackout. Specifically, the NEC code was intended to ensure that hotels have minimal power going to emergency systems in the event of a fire, flood, or some other disaster for which life safety is a concern.

⁹ The main source used here is the NFPA 70, National Electrical Code, specifically, Article 700, Emergency Systems, and NFPA 110, Standard for Emergency Standby Power Systems.

Nature of emergency power system by type of hotel

Battery-only	Generator (or generator and battery)
2	15
11	9
6	6
19	3
5	0
2	15
45	48
	2 11 6 19 5

Note: Emergency power denotes relatively restricted systems intended to power only such appliances as emergency lights, elevators, and fire-detection systems. This is distinct from standby power, which is intended to be longer lasting and more widely distributed.

The code was not written to ensure power to emergency systems in the event of an extended electrical outage. As a result, even those hotels that abide by the NEC's standards were unlikely to have functioning emergency systems within a few hours of the blackout and with nightfall looming—despite the safety issues this presented.

Nonfunctioning emergency systems were a major problem during the blackout. Survey results reveal that nearly half (48%) of the hotels did not have emergency power for the duration of the outage. Analysis showed a relationship between the type of emergency power system used – battery versus generator—and whether emergency systems were functional throughout the event. Only 16 percent of battery-backup emergency systems lasted, whereas 85 percent of generator-driven systems remained powered. Significantly, too, only 52 percent of the hotels had emergency systems powered by generators. These hotels were far more likely to be upper-upscale chain hotels or independents. Upscale chain and midscale chainwith-F&B hotels were equally likely to have

generator or battery emergency systems. Midscale chain hotels without F&B and economy hotels were more likely to have only battery-powered emergency systems (see Exhibit 5). Analysis also revealed that generator-backed emergency systems were most likely to be found in urban hotels and in hotels with more than 200 rooms.

Standby (auxiliary) power. A distinction was made in the survey between emergency backup power and standby or auxiliary backup power. Whereas emergency power is that needed to keep the essential emergency systems operational, auxiliary power runs presumably nonessential systems such as guest room lighting and air conditioning or heat. (Note: Some codes require standby systems if power failure hinders fire fighting or rescue.) Only one out of four hotels had available standby power. In most cases, such standby power was part of an automatic transfer system that went live almost immediately after primary power failed. However, even welldesigned auxiliary systems were far from foolproof. In fact, 24 percent of the hotels' standby power systems failed before the blackout ended.

Basic Accommodations

Despite the many challenges hotels faced during the blackout, lodging was one essential customer need that was satisfied. In fact, all of the hotels in this study were able to provide accommodations in guest rooms, and some even provided lodging to guests and non-guests in public areas within the hotel. None of the managers reported having to ask guests to vacate their rooms during the blackout. Thus, media reports of people being forced to sleep on the street outside the hotel reflected extraordinary circumstances and not the norm.

The most common approach to room rentals during the blackout was to provide guest-room lodging both to customers with reservations and to walk-ins—in other words, business as usual (75 percent

of hotels). One in ten hotels provided guest-room lodging to guests with reservations only (no walk-ins), typically because the properties were sold out. Finally, 12 percent of hotels opened their doors to anyone seeking refuge. In those cases, paying customers had guest-room access, and others were offered shelter in public areas, such as lobbies, meeting rooms, and libraries. One sold-out hotel set up cots in two meeting rooms, "one for guys and one for gals," to accommodate people arriving without reservations. Another sold-out hotel made space in the lobby for guests who had checked out of the hotel the morning of the blackout, but who returned later that day after their flights were cancelled. Finally, a city hotel took in a high school group that was unable to get back to its reserved place of lodging, letting the visitors sleep in the restaurant at no charge.

Facilities Failures and Serviceprocess Challenges

Although hoteliers did their best to make sure that there was "room at the inn," they often found it difficult to give overnight guests much else. The inability of nearly half of the surveyed hotels to provide basic emergency power throughout the blackout and the even more limited availability of standby power suggested that managers faced considerable problems in maintaining hotel operations and guest services. This was no doubt worsened by increasing reliance on electricity for such operations and processes as computerized check-in and checkout, automated voicemail, PBX phone systems, and room-key codingmany of which formerly were operated manually.

Managers were asked to describe the extent to which hotel facilities and systems were affected by the blackout (not at all, somewhat, very, or completely). The findings, summarized in Exhibit 6 (next page), reveal just how pervasive the effects of the blackout were. Of the operational

items, three out of four were at least somewhat affected and half were completely affected or nonfunctional in a majority of the hotels. Interference with air conditioning systems and guest room lighting, for instance, was almost universal. In the next several sections, these opera-

> "Always be prepared for an emergency and make sure your associates know the game plan and can execute it in an instant by having an emergency plan book in each area of the hotel."

tional areas are examined more closely using managers' comments that reveal how managers handled specific problems—or were unable to do so.

Air conditioning. Given the power demands of the typical HVAC system, the blackout's wide ranging effects on the air conditioning systems are not surprising. Managers at 85 percent of the hotels reported a complete shutdown of their air conditioning. Only a few described any means for coping with the problem, which typically involved opening windows, when this was possible. Not surprisingly, too, lack of air conditioning was a top source of guest dissatisfaction, according to managers' comments, as afternoon temperatures in the blackout region ranged from the mid-80s to low 90s (Fahrenheit). One manager noted that the lack of AC and having to keep doors and windows open was a problem because it was a humid night and there were mosquitoes out. Another manager commented, "Due to lack of ventilation, the wedding guests in our Penthouse found it very warm...."

Lighting. The lack of lighting in guest rooms was also a considerable concern during the blackout, with all but a few managers reporting at least some lighting problems and 87 percent of them stating

that lighting was completely out. This difficulty was exacerbated by the emergency lighting failures discussed earlier. One manager succinctly described the issue: "We didn't have enough emergency lighting. Once the batteries drained in our hallway lights the hotel literally went black." Insufficient lighting was also a major source of guest dissatisfaction. Another manager commented, "While most [guests] understood we could not provide air conditioning and were thrilled to still have hot water, they wondered why more lighting was not [connected to] emergency generators."

The most common management response to the lack of guest room lighting was to provide flashlights, if these were available or obtainable. One hotel gave away penlight key chains with the hotel logo that had been bought for another purpose. Another manager described the following approach to the lighting problem:

Emergency lighting failed within two hours. All guest rooms were completely black.... I purchased flashlights at a local Home Depot that was open as they had a generator. I distributed flashlights to all guests...as well as to those checking in.... I called in a security guard for extra safety as there was such uncertainty with [the length of] time we would be down. Guests were understanding of the situation and surprised that we distributed flashlights free and told them to keep them at checkout as a souvenir that they survived the blackout.

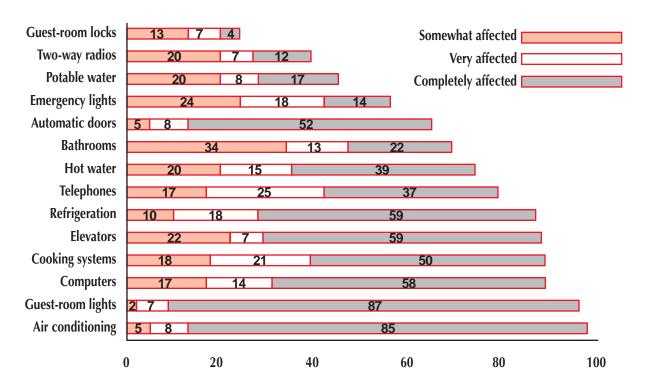
Hotel managers also distributed glowsticks, battery-operated lanterns, and even candles. The latter option, though, was used by only a few managers and was a cause for concern among others due to the potential fire hazard.

Elevators. Another frequently cited source of guest dissatisfaction was limited elevator service. This was a problem in nine out of ten hotels, and two-thirds of the

responding properties were without any working elevators. This meant guests and employees had to use the stairs, even when carrying luggage. Fortunately, no emergency situations were reported as a result of grounded elevators, though the blackout revealed the potential for such an eventuality. For example, a guest was locked in an elevator at one hotel, though was extricated by the staff "within seconds." At another facility, guests in wheelchairs lost their access to upper-floor rooms, so rollaway beds were placed in the cafeteria for makeshift accommodations. Although high-rise hotels are usually required to keep at least one elevator on emergency or standby generator power, the eventual—and in a few instances immediate—failure of these systems at some hotels meant these facilities were particularly vulnerable to nonfunctioning elevators. This vulnerability created not only logistics problems that staff had to solve, but also added to customers' inconvenience.

Computers. In describing facilities challenges and how these were handled, one element that was infrequently mentioned by managers was computer systems—despite data that showed that computers at most hotels were at least somewhat affected by the blackout, and systems at more than half of the surveyed hotels were completely down. This is because property management systems critical to guest check-in checkout were either on some form of uninterruptible power supply (UPS) or were shadowed by manual systems ("Back to the rack sheet and bucket!!!!," said one manager). Two-thirds of the hotels implemented a system for manual check-in and checkout, either in total if power was out through the night and into the morning checkout, or in part if power returned during the night, thereby enabling the run of night audits. Several managers noted that their use of manual systems in place of computers was well practiced, because the computers often go

EFFECT OF THE BLACKOUT ON HOTEL FACILITIES AND PROCESSES



Note: Numbers represent the percentage of managers responding that the systems in their hotel were affected. Percentages do not add to 100 because "no response" or "not affected" percentages are not shown.

down. Stated one manager: "Manual systems are already in place in our emergency plan, and we all used them well. We are a hotel, and we acted as a hotel did when computers did not exist."

Manual check-in and checkout generally involved backup or downtime reports that were run when power first failed but before computers went down, and manual registration cards to which F&B or sundry-item billing was recorded and placed with associated guest records in the bucket. Credit card information was collected using "old fashioned" manual imprint machines, and bills were tabulated by hand or using calculators. Folios were handwritten or sent out later by mail, fax, or

e-mail when power returned. One manager described using the hotel-room map indicator to keep track of available rooms by color coding rooms to indicate in house, vacant but clean, vacant but dirty, reserved, and out of order. Few managers described problems with manual processes, and several expressed pride that things ran smoothly. One manager commented that going manual was, "...like when I first entered this business. It was enlightening for our staff."

Guest-room locks. One element of the check-in process that proved troublesome for one-quarter of the hotels in this study was guest-room locks. The locks themselves, if electronic, were typically

battery operated and not directly affected by the power failure. The challenge, instead, was how to make keys when electric key encoders failed, either immediately, or after battery backup drained. A manager explained: "If a guest was checked into the hotel prior to the blackout, that person's key worked. However, new arrivals had to be escorted to their rooms each time by the bell staff. We were unable to make new keys because the key machine is electronic." Said another manager who experienced a similar situation, "We had to escort the guests to their rooms with a master key to let them in. (We got our exercise that day!)"

Most of the hotels that experienced problems with making keys coped with this by using emergency master keys. A few hotels made additional keys if key encoders were on backup power. For example, one hotel made enough failsafe keys before the key encoder no longer operated that it could place a staff member with a key on each floor by the elevator and stairwell. At check-in, guests were given key packets with their room numbers written on them, and these numbers were checked by the staff members holding the master keys before the guests could enter their rooms. One of the more thorough approaches to dealing with the room-locks problem is illustrated by the following manager's insight:

One of our early contingency plans was to cut a key for every single blocked and vacant room in the hotel. The doors work on battery but the key cutter is on a battery back-up. We wanted to make sure we could provide rooms and sell rooms even if we lost the key cutter. We also pre-checked-in all arrivals before we shut the generator off

A defining feature of this solution was that potential key-making difficulties were accounted for in contingency plans, thereby reducing the actual effect of the problem when it arose.

Automatic doors. Although hotels routinely test emergency and backup power systems (or should do so), it is far less common—and for hotels that experience few slow periods, almost impossible—to test backup power systems under normal load conditions for an extended period of time without disrupting the guest experience. As a result, managers and staff, especially if new to a property, may be surprised by vulnerabilities in the service delivery system during a blackout. For example, automatic exit doors may freeze open or shut at the moment of power failure—a problem experienced by more than half of the hotels in this study. Although these doors can be operated manually, this requires someone on site who knows how to do this quickly to avoid panic or egress problems in the event of a fire or other emergency.

Two-way radios and telephones.

When primary power fails, critical communications systems may also go down at some point. For example, more than onethird of managers reported that two-way radio communications were at least somewhat affected during the blackout. Although radios are battery operated, the battery charger and the repeater (if used to increase the range of radio signals) require electrical power. Thus, an extended power failure can also black out communication channels between key hotel departments. One manager dealt with the loss of two-way radios by establishing a meeting spot for hourly reviews and information exchange. This was supplemented by the use of cellular phones as a substitute for radios.

Cellular phones also proved to be an important communications link to parties outside the hotel when internal telephone systems failed. Surprisingly, inoperable phone systems were common, with more than 60 percent of the hotels reporting phones that were very or completely affected by the power failure. The problem was not so much the telephone service coming into the hotel as it was the hotel's

PBX systems, which require electricity to function. Although telephones are often one of the systems on emergency or backup (UPS) power, when the blackout duration exceeded the two-hour threshold for powering emergency systems, telephones began to fail along with other critical systems.

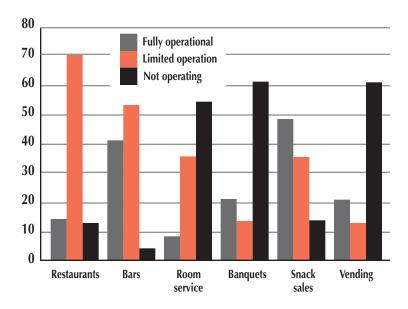
Loss of telephone service was one of the top five sources of customer dissatisfaction, according to managers' comments. Fortunately, guests had alternatives to inroom phone service, including payphones, access to individual phone lines that were not part of the hotel PBX system, fax lines, and cellular phones. Comment data suggest that cellular phones were important to reducing the inconvenience—and guests' displeasure—associated with lack of phones. Hotel employees on site made their personal cellular phones available to guests, and employees coming on duty were asked to bring in cellular phones for dedicated use as guest phones. Despite the safety net cast by cellular phones, this solution was not ideal in part because cellular service was also affected by the blackout in some areas, including jammed phone circuits due to extraordinarily high call volume.

F&B operations. Cooking systems were very or completely affected at 70 percent of the hotels with F&B operations—a situation made worse by nonfunctioning refrigeration systems at 75 percent of these hotels. Thus, F&B managers were faced with the dual problem of the inability to cook food and the inability to keep it. Even hotels with gas-fired stoves were affected because the range hoods needed for venting cooking exhaust were electrical and would no longer function.

Managers were asked to describe whether F&B services, from banquets to vending machines, were fully open and operational during the blackout, of limited availability or operations, or closed or not operational. As revealed in Exhibit 7, F&B operations were variously affected. Bars

EXHIBIT 7

EFFECT OF THE BLACKOUT ON F&B SYSTEMS



Note: Numbers on the Y axis represent the percentage of managers responding that a specific F&B service was affected completely, partially, or not at all.

and restaurants continued to function at least with limited service. On the other hand, room service and banquets were shut down at more than half of the hotels. Vending machines were not operational at more than 60 percent of the hotels, but nearly half of the hotels had shops open to sell snacks and sundries.

Providing F&B was a challenge, but not an insurmountable one. One manager described feeding about 1,000 people without utilities. Another said the F&B team put together a wedding reception for 150 people in under 24 hours. Yet another manager fed a convention of 300 people by candlelight and emergency lighting. Based on analysis of managers' comment data, whether an F&B service was shuttered completely or at least of limited availability was as much a function of managerial judgment as it was of whether the appliances functioned. Hotel managers were

creative in how they delivered F&B during the blackout. This was driven by the fortunate convergence of necessity (with spoilage imminent, managers had to either use it or lose it) and the needs of guests who had little other option for food and drink than to rely on the hospitality provided by their hoteliers.

Rather than let food go to waste, many managers chose to give it away. They set up complimentary continental breakfasts and cold buffets for dinner, providing sandwiches, snacks, fruit, yogurt, and even ice cream and desserts. Noted one manager: "We served complimentary wine and cheese in a candlelit sitting area for all inhouse guests; we placed the radio in there so all could stay abreast of the situation at hand. Everyone was grateful! The next day, we served a complimentary continental cold breakfast for all guests."

Despite the inability to use the usual cooking equipment, roughly one-third of the hotels with F&B managed to serve a hot evening meal, typically by ordering out or heating up the grill. Pizza made in gas or wood-fired ovens was a common food purchased by managers for guests. Explained one manager:

We provided pizza for all as the store next door has gas ovens. So we ordered 80 pizzas for guests to share.... We made 150 sandwiches by hand using on-hand items in refrigerators.... We provided comp food for [the] entire 24 hours.... We allowed them to use [the] entire mini bar in [the room] for free as well.

Interestingly, the use of outdoor grills was the most frequently mentioned substitute for closed kitchens. Nearly one-quarter of the hotels hosted barbeques, and several managers described the atmosphere as festive, with pool-side or patio parties ensuing. According to one manager, the availability of outdoor grills meant that meals were not delayed and chefs were able

to provide a relatively normal menu.

Another manager of a hotel without F&B facilities recounted the satisfaction of guests who did not expect a "lodging only" establishment to feed them:

Restaurants in the area closed during the blackout, and this caused a major problem for [those] who had no gas for their vehicles and nowhere to eat. My staff found a supermarket that hadn't closed down and purchased bulk hot dogs and hamburgers as well as condiments and bottled water. They barbequed...and also served sandwiches at the desk, much to the pleasure of our "stranded" guests.... That is why I'm very proud of the above-and-beyond performance of my staff, who are not cooks or food-service employees.

Many hotels also gave out free beverages during the blackout, especially bottled water, juice, and soda. Some managers comped beer and wine, as well (one manager noted: "no hot food, [but] lots of cold beer"; another manager said that a main source of dissatisfaction for guests was the decision *not* to open the bar). If vending machines were the only source of F&B, several managers opened the machines and gave away snacks and soft drinks. To keep food and drinks cold without functioning refrigerators, onpremises ice machines were used for storage.

Although hotels generally managed to provide at least limited food service during the blackout and in some cases gave guests a delightfully different F&B experience, the data from this study also reveal another side to the story. That is, only 15 percent of hotels had fully operational restaurants, only 8 percent offered full room service, and only 22 percent ran banquet functions. Thus, the F&B component of the guest experience was heavily curtailed or altered. Moreover, just one manager commented

that the hotel kitchen was on standby generator power. Not surprisingly, this manager also reported that no problems were experienced in F&B operations. Though giving away food no doubt pleased guests, that action also meant giving away F&B dollars. Had the blackout lasted longer than it did, hotels' inability to store or prepare food could have produced serious negative consequences for guests.

Water supply. One particularly unpleasant surprise for many hotels, especially those in Cleveland, Toronto, and the Detroit vicinity, was the disruption in the supply of water. For some hotels this meant only that there was no hot water because electric boilers were not operational or electric pumps were out and no water could be moved to upper floors. At worst this meant no running water at all. In fact, the supply of potable water was at least somewhat affected by the blackout at almost half of the hotels, with 17 percent of the hotels without any running water. For two out of three hotels, bathroom facilities were at least somewhat affected by the blackout, with 22 percent being completely affected. Finally, for nearly three out of four hotels, hot water was at least somewhat affected, with almost 39 percent of the hotels completely losing hot water.

The consequences of the watersupply problem were often disagreeable for both guests and employees. In addition to cold showers and rationed water for drinking, brushing teeth, and the like, toilets had to be flushed manually at many facilities. One manager instructed guests to use only toilets in public bathrooms, which were flushed using water from the fire hose (water in a roof-top water tower was held in reserve for the fire sprinkler system). A more common source of water for manual toilet flushing was the hotel swimming pool. Described one manager:

Due to one flush only and no water at all after that, the [maintenance] dept and I used the water from the swimming pool (17,500 gallons) five gallons at a time, going door to door and manually pouring the water in the toilet to flush away the waste materials (we coined the term "super-flushes"); in addition we rented upscale port-a-potties and placed [them] outside for the quests to use.

Interestingly, one manager suggested that manual flushing of toilets was a source of guest satisfaction during the blackout; that is, guests were impressed that hotel staff would go to such efforts to provide service. On the other hand, another

"It was a never-before experience from which we learned of our deficiencies and also how many dedicated "team players" we have on property. We could not have handled it much better had we planned for it.

Everybody in the hotel stepped up to the plate and went above and beyond!"

manager described manual flushing of toilets as a source of guest dissatisfaction.

For many hotel managers, the lack of running water was a greater problem than the lack of electricity (one hotel was without electricity for two days and without water for five days). Fortunately, most hotels had a sufficient supply of bottled water on hand or were able to obtain a supply to satisfy drinking needs, at least for a day. However, a number of managers noted that they plan to increase their supply of bottled water, and a few managers said they plan to tie water pumps into the standby power system. One manager who described running a temporary power line to the

¹⁰ Other hotels may have had their kitchens on generator backup, given that 15 percent of the hotels had fully operational restaurants. However, there is no evidence for this in the data.

water pump was able to keep water flowing to guest bathrooms, even if it was only cold water.

The Effects of Having Backup Power

One would expect that hotels having a generator delivering standby power would fare better in maintaining services and service standards than hotels without a generator. Empirical support for this assumption is important, though, for an investment in standby power is not insignificant. Costs can range from a few thousand dollars for a portable generator set that can power a few critical systems to millions of dollars for a permanent generator capable of keeping a large hotel facility running

"I found it interesting that many local people looked at this hotel as an oasis. Some people honestly did not understand why we had no power. Some came in asking what they should do. I guess the interesting part to me was that these individuals did not go to their neighbors or relatives, they came to the hotel. I will take it as a compliment that we are so highly considered during an emergency."

seamlessly when primary power goes down. Thus, in light of the experience of hoteliers during the blackout, and given the peculiarities of this event compared to other power failures, it is important to assess which facilities failures were mitigated by standby power systems.

To assess this, the data on facilities problems were cross-tabulated in terms of the presence or absence of a standby power system at the hotel and management perceptions of the impact of the blackout on hotel facilities and processes. The results of this analysis are striking and show

the importance of standby power in the event of a blackout, especially one of extended duration. As detailed in Exhibit 8, there is a significant relationship between a hotel's having standby power and mitigated effects of the blackout on that hotel's air conditioning, computers, elevators, emergency lighting, guest-room lighting, hot water, refrigeration, and telephone systems. On the other hand, there is no relationship between standby power and the effects of the blackout on automatic doors, bathrooms, cooking systems, guest-room locks, potable water, and two-way radios. The latter finding shows where hotel operations were generally most vulnerable, even when standby power was available. It further suggests that certain systems (e.g., kitchen cooking and refrigeration, water supply, air conditioning and guest-room lighting) should be evaluated for addition to the standby power load.

Managers' comments underscored the importance of standby power. For example, one manager said that success in dealing with the blackout was at least partly due to the ability to keep the hotel's generator running continuously for 23 hours: "We were able to do this as our corporate office and laundry had a diesel tank and was able to keep us and our sister Manhattan properties' diesel tanks topped up." Another manager stated, "Our hotel is four years old, and [the blackout] was the first major event we had as a hotel in the area, and we came out with flying colors. Guests were impressed with the fact we had a generator with 100-percent capacity." Another revealing observation is offered by this respondent:

Although we missed the August 14 blackout, we lost power for 10 hours on September 19 during hurricane Isabel. Fortunately, our generators and backup systems allowed us to operate during a nearly sold-out night, without a dime of revenue lost. Although we do not provide backup power for

RELATIONSHIP BETWEEN STANDBY POWER AND OPERATION OF HOTEL FACILITIES

	Backup power available	Percentage of hotels re Not at all or somewhat affected	porting system status Very or completely affected	Significant relationship	Chi-square (<i>p</i> -value)
Air conditioning	No Yes	1.5 20.0	98.5 80.0	Yes	10.23 (p = .001)
Automatic doors	No Yes	35.7 50.0	64.3 50.0	No	1.17 (p = .280)
Bathrooms	No Yes	62.7 76.0	37.3 24.0	No	1.44 (p = .229)
Computers	No Yes	17.9 56.0	82.1 44.0	Yes	15.82 (p = .000)
Cooking systems	No Yes	27.7 33.3	72.3 66.7	No	0.246 (p = .620)
Elevators	No Yes	19.6 68.0	80.4 32.0	Yes	17.87 (p = .000)
Emergency lights	No Yes	56.7 100.0	43.3 00.0	Yes	15.80 (p = .000)
Guest room lights	No Yes	03.0 16.0	97.0 84.0	Yes	5.06 (p = .025)
Guest room locks	No Yes	89.6 92.0	10.4 08.0	No	0.12 (p = .725)
Hot water	No Yes	38.8 64.0	61.2 36.0	Yes	4.66 (p = .030)
Potable water	No Yes	71.6 84.0	28.4 16.0	No	1.48 (p = .223)
Refrigeration	No Yes	17.7 36.0	82.3 64.0	Marginal	3.36 (p = .067)
Telephones	No Yes	22.4 80.0	77.6 20.0	Yes	25.64 (p = .000)
Two-way radios	No Yes	79.2 87.0	20.8 13.0	No	0.64 (p = .426)

Note: Significant differences are noted for systems where having backup power made the difference between operation and failure.

every guest room, other than lighting, nearly all the guests complimented us on the ability to run the public and food-service areas.

Despite these benefits provided by backup power, few hotel managers said they planned to buy a standby generator, increase the capacity of existing systems, or evaluate the capacity of their hotel's standby power generator or for reallocating power to different functions. For example, only a few managers reported plans to add air conditioning, computers, telephones, voicemail, high-speed internet access, kitchen range hoods, water pumps, or hot

EXHIBIT 9

ITEMS MANAGERS WOULD HAVE HAD ON HAND IF THE BLACKOUT WERE ANTICIPATED

- Flashlights and batteries
- Glowsticks
- · Lanterns and other hallway lighting
- Bottled water
- Fuel for backup generator
- Emergency room keys
- Nonperishable foods
- Games to keep children occupied; battery operated radio; television for the lobby; ice; diapers; baby formula; medicines; refrigeration truck; cellular phones; tools (especially for elevators and doors)

Note: Items are listed in order of the frequency each item was mentioned in manager comment data. The final set in the list represents items mentioned only once.

Ехнівіт **10**

FACTORS INFLUENCING MANAGERS' DECISIONS DURING THE BLACKOUT

Factor	Influence score
Guest safety	4.86
Employee safety	4.67
Guest comfort	4.51
Guest satisfaction	4.39
Liability	4.24
Hotel image	4.11
Emergency plans	3.68
Hotel profits	2.73
Occupancy	2.71
Superiors or corporate owners	2.57
Media coverage	2.06

Note: Influence score is based on a scale of 1 = no influence to 5 = a great deal of influence.

water to the standby generator. None mentioned adding guest room lighting, elevators, or refrigerators. In contrast, more than half of the respondents either did not respond to a question regarding changes made to emergency plans since the blackout or said that no changes would be made.

Planning, Preparation, and Emergency Management

One process that was not directly affected by the blackout, but which surfaced as a problem, was managing the blackout itself, that is, planning for an event of this type and then actually implementing the plan. Hotel managers were asked a variety of questions related to their perceptions of the level of service quality delivered during the blackout and the degree to which they were prepared to deal with service demands. Most managers stated that their hotels provided quality service and even exceeded typical service levels. However, when asked whether they agreed with the statement, "We were prepared to deal with service demands during the blackout," a different picture emerged. The mean score on this question was significantly lower than all similar questions that asked about dimensions of service quality, such as whether guests were provided with reliable service or personalized attention. In fact, 10 percent of respondents said that they were not prepared. Again, managers were significantly more likely to say they were prepared for service demands if their hotel had standby power than if it did not.

Winging It

To examine how prepared hotels were to deal with the blackout, managers were asked about emergency supplies and plans and the nature of their decision making during the event. Nearly all hotels had a sufficient supply of pillows and blankets, beds, and food and snacks. The supply of bottled water was less plentiful, with 9 percent of hotels running short (which

required rationing in a few cases). An inadequate supply of emergency lighting was a more prevalent problem-and a source of guest dissatisfaction. One out of three hotels did not have enough flashlights and batteries, and more than half of hotels did not have enough glowsticks. Several managers who did have a sufficient supply of these items—especially enough for every guest room-described how pleased guests were that these were made available. One manager commented: "They were amazed that we gave them flashlights! They thought it was above the level of service and readiness we would be able to provide under the circumstances." Ensuring a better supply of these items topped the list of things managers would have done differently to prepare for the blackout (see Exhibit 9). Indeed, stocking up on flashlights, batteries, glowsticks, lanterns, and candles was the most frequently mentioned change to emergency plans made after the event, according to manager comment data.

The issue of contingency planning was addressed by asking managers whether their hotels have written emergency plans, whether these plans were followed, and if not, why this was so. It is notable that one out of five managers reported that their hotels either did not have formal plans or they were not sure whether such plans existed. Of those managers who did respond that their hotels have emergency plans, nearly two out of three said they still made the majority of their decisions during the blackout based on judgment as opposed to the plans. In fact, 10 percent of these managers did not use the plans at all, relying instead on their own judgment for all decisions. Instead, concerns about guest safety, employee safety, guest comfort, and guest satisfaction (in that order) were rated as having more influence on decision making. As shown in Exhibit 10, emergency plans even had less influence on decision making than did concerns about hotel image.

To better understand why emergency plans were not used during the blackout, managers were asked to provide a rationale for their decision strategy. Most responses suggested that existing emergency plans did not apply to situations like an extended power failure. Several managers noted that their emergency plans cover mostly what to

"It was actually fun. No reports, no budgets...just looking after staff and guests."

do with equipment in the event of fire, bomb threats, floods, or evacuations. Other managers noted that they have procedures for temporary power failures, but not for a blackout of such duration and geographic scope. A few managers questioned whether the blackout was really even an emergency, as opposed to merely an inconvenience. One manager replied, "Was it really an emergency? I mean, what was emergent about it? Hurry up and wait for the power to come back on. ... We followed procedures as they pertained to the basics [and] after that we winged it."

This need to "wing it," to improvise and adapt as conditions changed, was a common theme. Respondents referred to the lack of running water or the loss of F&B as unexpected problems that required immediate action. One manager said, "We followed all emergency plans, but there were circumstances not anticipated in the plan which were necessary to deal with. This was not a function of life-safety issues missing from the plan, but more in-themoment guest-satisfaction decisions." Another manager explained:

Emergency plans are a road map, but at times [there] are detours necessary. As an example, when the elevators' switches were heating, we took a portable AC unit to the control room and connected it to the emergency power to cool the switches down to a safe operating temperature and restored service. As the ovens could not be used, we grilled shrimp, chicken, and beef on the roof.

Summing up the challenges that managers faced during the blackout were these comments from two respondents: "I had to adapt to every guest situation and complaint. We did not have a manual to do this"; and "We found when we needed to follow [the plans], they were of little help in the actual situation. We have since changed them."

Although some hotel managers suggested that the nature of the blackout precluded the event from coverage by emergency plans, another segment of managers saw the need to reexamine the emergency-management process and to enhance or design procedures for handling longer-duration electrical power failures (see Exhibit 11). This planning review and revision was complemented by actions taken to rebalance the generator load to include systems such as some air-conditioning or heating capability, telephones, and kitchen cooking units. The blackout also encouraged managers of some hotels to address deficiencies in backup-power capacity by pricing or buying new generator sets, servicing existing generators, or increasing their capacity.

Some managers also described training efforts as a change made to emergency plans. Such efforts included performing drills for emergency management and training new hires and retraining management and key staff on emergency procedures as well as on manual processes, such as for check-in, checkout, and billing. Several of the elements described as part of this training emerged directly from the blackout experience, such as making sure key personnel know which phone lines should work, whom to call (e.g., which

managers or vendors), how to check standby power and equipment, and where to find flashlights and other critical supplies.

Despite these initiatives for better emergency management, the most common change to emergency plans was no change at all. In fact, 40 percent of the managers who responded to this question said that nothing had been done, and only a few of these managers said this was because existing plans worked well when dealing with the blackout. Furthermore, those managers whose hotels were not affected by the blackout were almost twice as likely to say they had made no changes to emergency plans following the blackout as those managers whose hotels were affected. This was the case even though there were no significant differences in the perceptions of managers in the two groups of the likelihood of an emergency event similar to the blackout happening again in the next 12 months. As shown in Exhibit 12, on average, managers believe that there is just less than an even chance of another blackout-type event in the near future, though one out of three managers believe that a similar emergency event is somewhat or highly likely.

Service Recovery by People

With electrical power down, hotel managers relied on a different type of power to compensate for facilities failures and process problems—the power of people. This included both the contribution of service staff, from housekeepers to managers, as well as the cooperation of guests. In terms of the former, data indicate that managers were overwhelmingly pleased with and proud of their employees for making a difficult situation far less so. The reasons for this can be summed up by a simple statement offered by one manager: "Employees went above and beyond the call of duty to ensure our guests' safety and comfort. They put 'service above self.'"

Managers' Perceptions of Service Levels

Managers were asked to rate how the level of service that hotel staff members provided to guests during the blackout compared to typical service levels. Nearly twothirds of the respondents said that staff service levels exceeded the norm, and half of these managers believed service levels were greatly exceeded. Only 10 percent of respondents felt that service levels fell short. There were no differences in the perceptions of managers regarding service levels based on whether their hotels had standby power available or not, or based on the number of hours that the hotels were without power. However, managers at the midscale and economy hotels were significantly more apt to feel that typical service levels were exceeded during the blackout, whereas managers at upscale and upperupscale hotels were more apt to feel that service levels fell short.

Analysis of service-level perceptions across geographic areas suggests that managers based their ratings of service not so much on the actual level provided as on the effort required to provide it. For example, at the hotels in southern Michigan where both power and water failed. employees had to go to great lengths to provide guests with the essentials to produce a hospitality experience that would otherwise be the norm. For example, one Detroit-based manager noted: "The entire staff mobilized to cater to our guests' needs, and I mean basic needs, like food and water. All of the restaurants in the area closed during the blackout and this caused a major problem for guests who had no gas for their vehicles and nowhere to eat."

Doing normal things well when things are not normal. With power out, extra staff and management attention was often required to maintain service delivery and ensure a safe, calm hospitality environment. One manager at an 80-room midscale hotel

EXHIBIT 11

CHANGES MADE TO HOTELS' EMERGENCY PLANS SINCE THE BLACKOUT

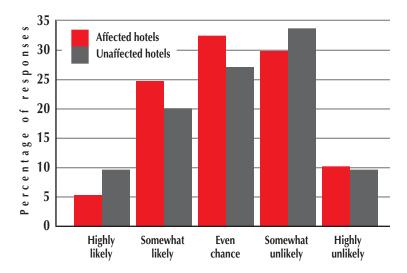
- Stocked up on flashlights, batteries, glowsticks, lanterns ... 21.1%

- Trained management, key staff, or new hires on emergency procedures or manual hotel systems, including conducting drills
- Purchased a supply of emergency items (e.g., bottled water, medical kit), and created a location for this "blackout box" ... 5.9%
- Made more emergency room keys; increased water supply; developed better reports for front desk; and so forth 4.6%

Note: Changes are listed in descending order based on the number of times each item was mentioned by managers in response to the question: "Since the black-out, what changes have been made to your hotel's emergency plans?" Percentages associated with these data do not compare to the overall response data, because they are based on the total number of comments, in which some managers offered multiple comments.

EXHIBIT 12

HOTEL MANAGERS' EXPECTATIONS OF ANOTHER BLACKOUT



commented, "Normally one person can run the entire hotel; in a blackout situation, the demand is 10-fold." Processes most affected in this regard were food service and guest check-in. Check-in became especially time and labor intensive, with guests needing room escorts, help carrying luggage up stairs if elevators were inoper-

"This is a limited-service facility, and we were able to provide emergency housing for those affected. This happens often during storms, etc. My recommendation to the owner is to install a system that will keep us running even in the event of a widespread blackout, enabling us to offer a place of safety. We are two hours from the nearest affected area and picked up many room-nights during the emergency."

able, and someone to unlock doors if room keys were unavailable. Despite the additional labor required to keep hotels running, though, most managers felt they were adequately staffed. In fact, less than 10 percent of managers reported that they were understaffed.

When asked to give examples of employee behavior that reflected the service levels provided during the blackout, some managers described extraordinary service that "went the extra mile." For instance, there was the employee who siphoned gasoline from the hotel van to supply a guest whose car was on empty with enough fuel to get to a service station. An employee of another hotel rode his bicycle 12 miles to work to lend his support even though he was not scheduled to work. Managers at several hotels staved up through the night to see to guests' needs and ensure their safety and comfort. However, managers' comments reveal that

it was not so much the extraordinary efforts of employees that typified service during the blackout as it was the accumulation of little things—from escorting guests to rooms to being empathetic to the basic needs of stranded travelers.

Content analysis of managers' descriptions of employee behavior during the blackout produced 120 examples of things that hotel staff did to keep the service system running. This analysis suggests that employee behavior can be grouped into five categories that managers felt were important: (1) being there; (2) professionalism; (3) personal attention; (4) food service; and (5) communication. It is notable that no single category stood out as dominant in terms of comment frequency. This suggests that managers felt that employee actions represented by these categories were of equal importance in maintaining service levels.

The importance of being there.

Managers clearly valued that employees simply were there—that callouts were not a problem, but instead members of the "team" came in early, stayed late, or stayed over, and often without having to be asked. This physical presence was all the more appreciated given the challenges some people faced in getting to work. One manager noted, "All employees present at the time of the blackout stayed to help out wherever needed. No employees went home at the end of their shift or until they were not required. All departments jumped in and worked as team helping wherever needed." Said another manager, "Employees came in several hours early for shifts to help out. All managers moved into [the] hotel for the day. Staff and managers walked halls to reassure guests: staff rode elevators with guests nervous about backup power." Finally, another manager explained, "Sales staff and management staved all night and walked around public areas to speak with guests and attend to any of their needs and requirements. Spa staff

stayed to provide complimentary back and neck massages to guests."

As suggested by these comments, "being there" also meant being visible to guests to provide personal assistance or just assurance. Staff members mingled with guests in the lobby, used lanterns to direct guests in parking garages, or shared meals with guests, which created a "family environment." Several managers described instituting regular patrols on guest floors, or having staff positioned on each floor to answer questions, attend to needs, and provide guest room access. Respondents felt that additional management coverage was especially important for reassuring guests about their care and safety and for assisting at the front desk with check-in and escorting guests to their rooms.

The importance of professionalism.

Managers praised employees for a high level of professionalism during the blackout. This professionalism was exhibited in myriad ways, though three main categories emerged: (1) exhibiting professional demeanor; (2) fostering team spirit; and (3) working flexibly.

Exhibiting professional demeanor. Managers commented on the importance of continuing to play hospitality roles well, even though the blackout produced a considerable change to the service-delivery script. Employees were lauded for being friendly, positive, helpful, and dignified, and for "keeping a cool head on their shoulders," despite having to work in hot conditions and perform tasks that were often unpleasant. Actions in support of this professional manner included following procedures, willingness to help guests with most any request, and frequent and frank communication with guests. One manager gave this example:

Fortunately, almost all managers were on site when the power went out. We met and created a plan that included ensuring that a senior member of our team was in the

lobby at all times to answer questions, provide assistance, and ensure that panic did not set in. All managers were calm, which meant all staff were calm. Everyone maintained a sense of humor which set the tone for the guests.

Fostering team spirit. Managers also lauded the team spirit of their employees: "My entire staff pitched in during the blackout"; "All did a fantastic job to help all of our guests"; "All departments jumped in and worked as team, helping wherever needed"; and "A cheerful and committed team." One manager developed this idea: "Like any crisis, this was a great test of our team's ability to come together and perform at a higher level than normal, and it's also a great opportunity to interact with guests and show them how we can respond to problems and challenges." Such comments were supported by numerous illustrations of sacrifice and of willingness to perform whatever tasks were needed to meet guest needs.

Working flexibly. Managers were particularly impressed with staff members who broke the bounds of their job descriptions to work in departments other than their own or who changed "the way we do things around here" because circumstances demanded it. Examples of such behavior included managers performing "regular duties," such as housekeeping or assisting bellmen by carrying guests' luggage, and front desk clerks cooking hamburgers on gas grills to feed guests. Commented one manager, "Every employee did way beyond what was necessary to ensure the safety and welfare of the guests and coworkers. Housemen served ice water to guests in the lobby, bellmen helped make up cots with room attendants, and so forth."

In addition to flexibility in job roles and tasks, employees were flexible in thinking about how to perform jobs. This meant coming up with solutions to failed processes and facilities. This also meant working hard and working differently. One manager described having to relocate an inprocess group meeting from a room without light to one with natural light coming through windows: "This involved a significant amount of materials and happened very quickly. We provided options to continue the AV portion of the meeting by using a power circuit on the emergency generator." A second manager described using banquet rooms for another important purpose—to keep children occupied: "Banquet rooms were opened and supervised kids activities were conducted.... Kids' movies were played using backup power."

The importance of personal attention. Hotel staff provided a high level of personal attention to guests during the blackout, the positive effect of which was magnified by empathy for "stranded" guests. One manager said, "We had employees working during that timeframe that shared a genuine concern for the needs of not only the hotel, but of our guests. We were on the other side of the counter with our guests and tried to be as understanding as possible."

Managers' comment data suggested that the most common act of personal attention provided during the blackout was room escorts. One manager remarked, "All guests needing to walk upstairs were personally escorted to their rooms. All associates [were] given master keys should individual guests' keys fail. [Corridor] monitors offered assistance if needed. Personal attention was the key." Another manager told a similar story: "My employees were extremely helpful, positive, and very focused on making our guests feel comfortable and safe. The bell persons and managers in general did a lot of walking the stairwells with guests and their luggage as well as completing safety tours of the building every 45 minutes."

Hotel employees also provided doorto-door deliveries of news, luggage, and supplies. Extra staff was often dedicated to these tasks, as well as to visiting each guest room to ensure that everything was all right. Several managers described giving one-to-one attention to those guests who most needed it, such as people with disabilities, the elderly, and guests traveling with children. One hotel assigned a manager specifically to attend to such guests. At another hotel, management assured that "...our handicap-room guest was called on at least every four to five hours."

Managers provided numerous examples of considerate, personalized efforts by hotel employees on behalf of guests. For example, one manager offered the following list:

Escorting guests to their rooms with flashlights. Calling airlines throughout the night to check on specific flights while guests slept. "Wake up knocks" instead of "wake up calls." Driving guests to the airport because taxis did not want to use their gasoline. Guests charging their cell phones off associates' cars.

No doubt more instances of empathetic, personalized attention took place during the blackout that were not observed by management. Though such behavior may seem trivial as individual actions, it is unlikely that hotel guests perceived such attention as unimportant.

The importance of food service.

Hotel managers frequently referred to the ability to provide F&B as indicative of the level of service delivered during the black-out. Food service is labor intensive, and without electrical power, for hotel employees to offer even something basic required effort and creativity. F&B outcomes may have been ordinary relative to typical hotel hospitality, but given the lack of inputs to the process, that F&B was available at all was perceived by managers to be extraordinary. Noted one respondent:

We held a barbeque for all our guests for free outside by our pool

area. We provided candles and flashlights to all our staff and guests. We gave all guests free drinks including liquor. We had a party and the guests loved it. The comment cards sent to [the corporate] office were fantastic.

The importance of communication.

During the blackout, hotel guests were left in the dark—literally and figuratively. Without power for phones, televisions, and computers, news of the event was hard to come by. The importance of communication was described by managers as a prime example of how employees were responsive to guests' needs—in this case, the need for news. Employee communication took on a variety of forms, but broadly can be categorized as communication with guests within the hotel or facilitating guests' communication outside the hotel. Key to the latter was allowing guests to use personal cellular phones, as mentioned above.

For communications within the hotel, employees came up with a variety of creative solutions in the effort to provide news updates for guests. For example, one manager said, "We announced on a bullhorn...the status of [the] blackout as reported to us from news updates, and provided radios throughout lobby so all could hear the latest updates themselves.... We also used PA system which went to all rooms." Some other means of communicating news to guests were:

- electronic news updates conveyed by a laptop computer at the front desk;
- a radio that was rigged to broadcast in public areas;
- intercom updates on the outage and its impact;
- paper updates that were slid under guests' doors twice per day;
- televisions in public spaces tuned to informational channels;
- telephone information provided to guests due to arrive in a blackout destination;

- telephoned news updates made to guest rooms (while phones were operable);
- management greeters in the lobby, who were relayed news by staff listening on car or portable radios or information gathered by cell phone;
- door-to-door communication of news by a staff member; and
- table-to-table news updates during dinner provided by the managers.

"The event was exhausting, but [it was] exciting to see what we were capable of doing."

Providing guests with access to current news and information offered the benefits of less uncertainty for them and a sense of greater control over their situation, as well as reduced chance that guests would blame the hotel for their predicament, which would affect their satisfaction with their stay. Managers at 85 percent of the hotels said that guests most often attributed blame for inconveniences experienced at the hotel to a third party (typically, the electric utilities or the government). In contrast, managers at less than 9 percent of the hotels said guests were blaming hotel management or staff. In all likelihood, this hotel-focused attribution of blame would have been higher had guests not received timely information about the blackout.

The Guest Experience

Most managers believed that their hotels provided a positive guest experience during the blackout. Some examples of these perceptions:

Many guests told us we were operating at a level of service of a 4-star, even though we are a 2-star economy hotel. We made an impression on our guests that I know they will remember and, I hope, [will] gain us their repeat business.

Managers' perceptions of service quality during the blackout

Service-quality factor

Mean score

During the blackout, we:

 showed a sincere interest in solving guest problems 	. 6.82ª
• inspired confidence and trust in guests	6.70 b
helped make guests feel safe	. 6.68 b, c
gave guests personalized attention.	. 6.57 c, d
• responded to guest requests in a timely manner	. 6.54 ^d
• provided guests with reliable service	6.44 d
• were prepared to deal with service demands	. 5.62 e

Note: Mean scores are based on individual managers' agreement with the statements using a scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Undecided, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree. Superscript letters a through e indicate items that are significantly different at p < .05, based on a paired samples t-test. Items with different letters are significantly different, while items with the same superscript are not significantly different.

I received a great amount of guest feedback. All guests emphasized what a great job we all did to handle the blackout. I even played football in the parking lot with some guests. It was an unusual circumstance that we made the best of.

Employees went beyond standards when it came to customer service during the black out. We received numerous outstanding customer comment cards.

The actions of the staff during the power outage greatly enhanced the comfort of our guests that evening and have resulted in many positive comments from guests. Due to our location we had many customers check-in from the city hotels that were not able accommodate the needs of their guests.

In addition to believing that service levels exceeded the norm during the blackout, managers believed that service quality was high overall. Results reported in Exhibit 13 show that managers especially thought that the hotel organization (management and staff) showed "sincere interest in solving guest problems," "inspired confidence and trust in guests," "helped make guests feel safe," and "provided personalized attention."

Managers' Perceptions of Guests' Satisfaction

Managers were asked how satisfied they thought guests were with their hotel stay during the blackout. None of the respondents thought guests were "very dissatisfied," and only two managers thought guests were somewhat dissatisfied. In contrast, 95 percent of the respondents believed that their guests were at least "somewhat satisfied," and three out of four managers said that guests were "very satisfied." When asked about the basis of this evaluation, most managers said they relied on informal guest feedback (73%) or

guest letters and comment cards (61%). Relatively few managers (15%) said formal customer satisfaction data collected by a third party was a source of their guest-satisfaction judgment.

Managers were asked to describe what aspects of the hotel or its service were most satisfying to guests or, in a separate question, most dissatisfying. The results of a content analysis of these data are presented in Exhibit 14. Several interesting patterns can be seen. First, sources of dissatisfaction were nearly all examples of facilities or process problems. In contrast, sources of satisfaction were primarily described in terms of the service behavior of management and staff. In fact, except for isolated complaints, service is not even mentioned by managers as a source of guest dissatisfaction. Managers were also more inclined to describe hotel or service delivery aspects that satisfied guests than aspects that dissatisfied guests.

Managers' Perceptions of Guests' Expectations

Considering the facilities failures and process problems reported throughout this study, managers' perceptions of customer satisfaction may reflect a positivity bias. That is, under the circumstances hotel managers might have thought that guests were more satisfied with the hotel's performance during the blackout than was actually the case. Though such a bias cannot be ruled out, there is another plausible explanation for the beliefs managers expressed about guest satisfaction. The other explanation is that, on balance, guests were satisfied with their hotel stays during the blackout because their expectations for the experience were lower than normal.

Most hotel managers believed that lowered expectations were common among guests during the blackout. Nearly one out of four managers agreed with the statement, "Expectations were much lower than

EXHIBIT 14

Managers' perceptions of the sources of guests' satisfaction and dissatisfaction

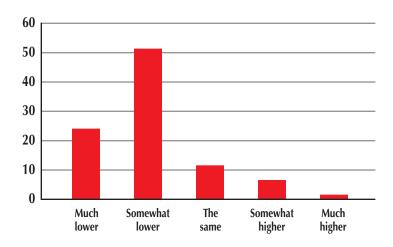
Sources of dissatisfaction	Sources of satisfaction
Air conditioning11	Service—personal, caring attention
Backup power out or limited 11	Service—staff professionalism:
Lights or substitute lighting (e.g., flashlights out or limited)11	attitude, helpfulness, friendliness, accommodating nature, accessibility, understanding, willingness 17
Elevators inoperable 9	 Food and beverages
Water unavailable for drinking or bathing9	available16
Telephones out 6	 Management of the situation— managers present; prepared- ness of the hotel; business
Television out 4	as usual; minimal service
Bathroom conditions 3	interruption 16
Food unavailable 3	 Service—general customer service, responsiveness, and
Internet connections out 2	anticipating and meeting needs
 Bar not open; news updates too infrequent; reservations confused; room rates under 	• Information updates and communication 10
the circumstances; schedules disrupted; voicemail out	• Reassurance—safety and security needs met 10
Nothing11	• Food and beverages— complimentary 7
No response 10	• Flashlights 3
	• Elevators worked 2
	 Backup power for duration; bar open; bathrooms—manual flushes; emergency lighting worked, ice machines; room rates reduced; transporta- tion—airport pickup
	• Nothing 0

Figures represent the number of times each item was mentioned by a manager in response to the question: "What aspects of your hotel or service delivery were quests most satisfied or dissatisfied with during the blackout?"

• No response 2

EXHIBIT 15

Managers' perceptions of guests' expectations during the blackout



Note: Expectations during the blackout are in comparison to expectations during normal operation.

usual—guests were happy with a place to sleep and minimal amenities." Half of the managers agreed with the statement, "Expectations were somewhat lower than usual—guests were willing to accept less comfortable accommodations and some reduced services and amenities." Less than 10 percent of respondents thought that guest expectations were higher than usual (see Exhibit 15). In addition, most managers felt that guest expectations were reasonable, given the situation and the accommodations and services that the hotel could realistically provide. In fact, only 5 percent of managers thought guest expectations were unreasonable.

These findings suggest that lowered guest expectations may have reduced the service-quality bar, thereby making guest satisfaction easier to attain. One manager observed:

When guests are traveling during a time of a blackout or even during a storm that takes out power, the inconvenience of [the] power outage is slim when needing a place to stay for warmth and safety. Guests were so understanding when we experienced the power outage for 8 hours.

Another manager offered a more specific explanation:

Expectations were flexible—guests expected accommodations, but understood that air conditioning and lighting were not operational. They expected to be fed, but were amenable to a limited menu. Guest expectations regarding communication to them was high.

The last point made by this respondent highlights the importance of management access to up-to-the-minute news during an emerging situation and frequent communication of any news to guests. Flow of information can help managers to shape guests' expectations in the early stages of an

emergency and better control guest perceptions of service delivery and promote guest satisfaction. Moreover, information flow from hotel management to guests can help to dispel rumor and quell panic. A few managers noted that some guests feared a terrorist attack when power first failed. The importance of guests' expectations are revealed in the comments of one respondent who stated, "For the most part, guests understood the large effect [of the blackout] on our part of the country; however, some, especially at the beginning of the loss of power, were very demanding, almost violent."

Although guests' expectations may have been generally reduced, and although some managers were able to shape expectations and redirect attribution of blame for the blackout away from the hotel by relaying information about the event to guests, there is also evidence in the data to suggest that some managers may have overestimated guests' tolerance. The following manager comment is revealing is this regard: "Guests were complimentary about how we handled things but still complained a lot about basic amenities that were missing." Another respondent pointed out: "Guests expected that we would have a generator that would keep our power running just as if nothing was going on in the world. I explained even with a generator we would only power emergency systems. They felt otherwise."

It is unlikely that hotel guests knew what kind of emergency power or standby power systems hotels actually had or are required to have. A more important question is, what do guests *expect* hotels to have? Commented one manager, "A lot of the guests did expect us to have a generator for backup but we do not. We explained that we have never felt the need to have a generator because we are only two levels, but we may consider getting one now." Grumbled another manager:

Some guests do not seem to understand the fact that the hotel and its staff can't control every situation. Especially those that are influenced by outside events. We are sometimes thought of as being above human beings and being able rectify every situation. There are also those who will take every advantage of a situation to get a discount or something for free.

Though this manager's comment may be accurate to a degree, it misses the point: when a guest is experiencing an uncomfortable situation, it may not matter to the guest who is to blame or who is in control. All that matters is that there is discomfort that needs to be reduced or a problem that needs to be solved. Moreover, it is reasonable for the guest to expect the hotelier to be the one to at least try to find a solution.

Guests' needs, wants, demands, and expectations can never be taken for granted. Some requests may stretch the bounds of what a hotelier can be reasonably expected to provide. Exclaimed a respondent, "Guests wanted us to supply them with gas for their cars??!!!??" Regardless, as this comment suggests, guests' expectations became a moving target during the blackout, and not all expectations were diminished.

The Guest Experience during the Blackout: A Co-production

An essential characteristic of services such as lodging is that they are co-produced experiences. Although the service provider may often control production of the experience, there are times when the consumer becomes a more active participant and directly influences his or her own satisfaction with the experience. The blackout was one of those times.

Managers recounted examples of increased interaction between staff and guests and among the guests themselves during the blackout. For example, the

lobby at many of the affected hotels became a meeting place where information about the blackout was shared. One manager noted that guests stayed in the lobby playing games with other guests until they went to bed. A few managers also told of guests who were eager to lend a hand. Said one respondent:

I have been through many encounters in the hotel industry the past 17 years. I can honestly say that except for...one guest [most others] were asking me if they could help and what they could do for the hotel. I think since no one really knew what had happened it was nice to see everyone pull together. All my employees were in on time and even stayed after. A great job done on a tough day.

The willingness of guests to do things differently and to reframe their expectations in light of the circumstances helped to improve their own experience. One manager stated, "I would like to acknowledge not only the amazing service my staff rendered, but [also] the amazing attitude of our guests who as a whole helped us to help them maintain safety and security." Herein rests an important reason why the effects of the blackout were not as bad as they might have otherwise been: many guests simply made the best of it, and in so doing, contributed to the positive experience of others, both guests and hotel staff. Open communication between management and guests appears to have facilitated this positive co-production.

The Bottom Line

The blackout's effects necessarily extended to the hotels' bottom line. When the power failed, some hotels gave away rooms, some gave away F&B, some gave away flashlights, and some gave away nothing at all. But even those hotels that minimized costs lost revenue as F&B operations were shuttered, meetings were canceled, and guest rooms went unoccupied. In contrast, other hotels

saw an increase in occupancy and RevPAR. The question examined in this section is, what did hotel managers see as the net effect of the blackout on the bottom line? More specifically, how did the event affect short-term performance measures, such as occupancy, average daily rate (ADR), and profit or loss? Furthermore, what did managers see as potential long-term effects of the blackout, such as the impact on their hotel's image or on consumer confidence in the lodging industry?

Short-term Performance Effects of the Blackout

Managers were asked to estimate what impact the blackout had on a set of standard performance measures for the month of August 2003. To simplify the task, respondents were asked only to estimate whether the blackout had a positive effect (e.g., increase in occupancy), a negative effect (e.g., decrease in occupancy), or no effect. Because there might be differential effects on performance of hotels that were or were not affected by the blackout, answers from all 147 managers who responded to the survey were used, with analysis focusing on differences between those hotels that lost power and those hotels that did not.

Occupancy. Managers at a little more than half of the hotels in the full sample estimated that the blackout had no effect on occupancy (see Exhibit 16). However, roughly one out of six hotels saw an increase in occupancy, whereas one out of four hotels saw a decrease. More important, though, is that any occupancy swing differed significantly depending on whether the hotel experienced a loss of primary power during the event or not. Nearly 30 percent of hotels that retained power saw an occupancy increase, and only 13 percent of those saw an occupancy decrease. In contrast, only 9 percent of hotels that lost power saw an occupancy increase, whereas 36 percent saw a decrease. Noted one

manager fortunate to be at a hotel that had power:

A blackout is a terrible thing in either heat or cold. This day happened to be very hot, and it left people in an uncomfortable climate. Luckily, New Jersey had power, and we were able to capture Staten Island, Manhattan, and Brooklyn business. We did not inflate rates, and we accommodated the guests the way [corporate] taught us to. Great service, great value and return, happy guests.

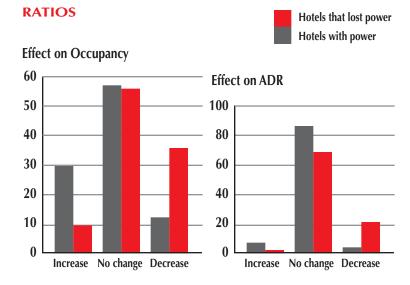
On average, then, the blackout had a negative effect on occupancy for those hotels that lost primary power.

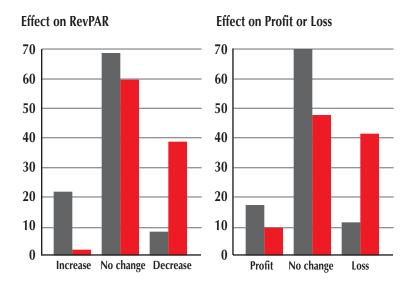
ADR. A similar pattern of effects, though less pronounced, was found for the impact of the blackout on hotels' average daily rate. Managers at nearly four out of five hotels in the full sample reported no ADR change due to the blackout (87 percent of hotels with primary power versus 73 percent of hotels without primary power). Less than 5 percent of hotels reported positive effects on ADR due to the blackout (9 percent of hotels with primary power versus 2 percent of hotels without primary power). However, 17 percent of hotels reported a decrease in ADR due to the blackout, with the decrease more often reported for hotels without power (25%) than for those with power (4%), a difference that is statistically significant.

To explore further the blackout's effects on room rate, managers at hotels that lost power were asked to describe the approach they took for room pricing. The majority of the respondents (62%) reported that their rate policies were unaltered. Commented one manager, "Guests were told up front what the rates were and that there was nothing in the rooms except a bed and working bathroom. If they decided to stay they would have to pay." If a discount was given, it was most often offered only if the guest asked for compensation

EXHIBIT 16

EFFECTS OF THE BLACKOUT ON OPERATING





 $\it Note$: Graphs show percentage of responses based on an $\it N$ of 147, including both hotels that lost power and those that did not.

EFFECT OF THE BLACKOUT ON HOTEL PROFIT OR LOSS

1		reportin or loss	g Minimum amount reported	Maximum amount reported	Mean	SD
			Hotels that re	tained power		
	Profit	9	\$1,000	\$23,000	\$6,000	6,980
	Loss	6	-\$1,000	-\$5,000	-\$3,500	1,760
Ī	Total	53			\$623	3,879
	Hotels that lost power					
	Profit	8	\$1,000	\$15,000	\$6,500	5,980
	Loss	36	-\$1,000	-\$70,000	-\$13,810	16,610
	Total	92			-\$4,837	12,818

Note: "Total" figures include respondents who estimated no profit or loss. SD equals the standard deviation in the figures. See note 11 at right for a further discussion of these data.

(31 percent of respondents). The remaining managers (6%) stated that they offered a uniform discount, but not a full refund, to all guests.

Managers were also asked to estimate the average size of the discount offered to guests. The range of discounts was 10 percent to 100 percent off the originally quoted rate, with a mean discount of 35 percent. When the hotels that lost primary power but did not offer a discount are added to the set, the mean discount across the 93 hotels is 13.7 percent. This finding helps to explain the significantly greater decrease in ADR reported for hotels that lost primary power versus those that did not. It is important to consider, too, that most hotels without power offered some form of compensation instead of or in addition to rate discounts. Typically this was reduced price or free meals, snacks, or beverages. In a few instances, managers comped alcoholic beverages or offered vouchers for free room-nights. In general, then, these findings show that the blackout had a negative effect on ADR for those hotels that were without power.

RevPAR. Consistent with findings for occupancy and ADR, there were significant differences in managers' estimated effects of the blackout on RevPAR, depending upon whether the hotel did or did not have primary power. Overall, 63 percent of managers estimated that RevPAR for the month of August 2003 was unaffected by the blackout (69 percent of hotels with power versus 60 percent of hotels without). One out of nine managers estimated a positive impact on RevPAR due to the blackout; however, most of these managers were from hotels that did not lose power. Only 3 percent of the managers who experienced primary power failure estimated a positive effect of the event on RevPAR, as compared to 24 percent of managers from unaffected hotels. In contrast, one out of four managers overall said that the blackout resulted in a RevPAR decrease. Managers at 37 percent of the hotels that lost power estimated a negative effect of the event on RevPAR, versus only 7 percent of managers at hotels that did not lose power.

P&L. Managers also estimated the impact of the blackout on total profit or loss from rooms, F&B, and other sources. Once again, these estimates differed significantly depending upon whether the respondent's hotel lost power or not. Whereas managers in hotels that did not lose power estimated that the profit impact was negligible (70 percent said there was no effect, 17 percent saw a profit, and 13 percent reported a loss), managers in hotels that lost power generally fared worse, with 44 percent estimating a loss due to the blackout, and only 9 percent estimating a profit. The remaining 47 percent estimated no effect.

Those managers who said that the blackout produced a profit or loss were also asked to provide a dollar estimate, as reported in Exhibit 17. The first three rows of data in the top section of that table show the aggregate profit or loss figures for hotels that did not lose power, and the three rows of data in the bottom section report the same figures for hotels that lost power. Reported mean profit attributable to the blackout for hotels with power was \$6,000, with a range of \$1,000 to \$23,000. These figures are similar to the mean profit for hotels without power, which reported a mean profit of \$6,500 and a range of \$1,000 to \$15,000. The loss estimate for hotels with power was \$3,500, with a range of \$1,000 to \$5,000. The loss estimate for hotels without power was \$13,810, with a loss range of \$1,000 to \$70,000.11 Taken

together, hotels that lost primary power also lost money on average—an estimated \$4,837. In contrast, hotels that did not lose power showed a small estimated average profit of \$623. This difference was statistically significant. In sum, these profit-andloss findings show that the blackout had a negative effect on the bottom line of those hotels that lost primary power during the event.

Standby Power: Not the Outcome One Might Expect

Given the potentially large investment required for a standby power system, an important question is whether those hotels with standby systems fared better in terms of the bottom line than those hotels without backup power. Regression analysis revealed that standby power was not a significant

Said one Canadian manager: "All Tim Hortons should be blackout proofed for everyone's sanity."

predictor of profit or loss attributable to the blackout. Although this finding could be due to noise in the data (e.g., imprecision of managers' profit or loss estimates or the omission of other factors that drive revenue, such as the cancellation of a large group function due to transportation problems), it does not support the expectation that standby power systems can significantly mitigate financial losses in the event of a large-scale power failure.

Long-term Performance Effects of the Blackout

In addition to possible negative effects of the blackout on the near-term bottom line, there are more long-term effects, especially in the wake of negative media reports about hotel service delivery. Managers were asked

¹¹ Inspection of boxplots of the data and standard deviation estimates revealed the influence of outliers, in particular the estimated loss of \$100,000 by a manager whose hotel did not lose power and an estimated loss of \$200,000 by a manager whose hotel did lose power. Although these estimates are feasible, given the size of the hotels (500 and 860 rooms, respectively) and if losses attributable to F&B and meetings business are factored into the estimate, these two hotels were dropped from the dataset.

to assess those effects across three dimensions: image of their hotel, consumer choice for their hotel, and consumer confidence in the lodging industry overall. Findings suggest that despite the many problems hotels faced during the blackout, most managers felt that the event would have little long-term negative impact.

Hotel image. When asked about the blackout's likely effects on hotel image (positive, negative, or none), only one manager thought the impact would be

"It was a valuable experience, as I have gone through many emergencies in my 15 years as a hotel GM, but the magnitude of the areas affected brought thoughts of potential terrorism to the minds of many, including my own. It just helps us as a nation be better prepared for future emergencies and the reality that they can happen here."

negative. The remaining respondents were evenly split in their belief that the blackout would have either no impact or would improve their hotel's image. Even more interesting is that managers were significantly more likely to predict a positive effect on their hotel's image if they had lost power during the blackout than if they had not. More than two-thirds of managers from hotels that lost power anticipated a boost to the hotel's image from the blackout, versus only 22 percent of managers from hotels that did not lose power. Managers' comments suggest that such optimism is based on the belief that guests were impressed with how these hotels handled the event. One manager stated, "Our staff rallied around the challenge, improving our image with those guests who were here"; said another manager, "Several guests said they hope they get 'stuck' with us if it happens again."

Consumer choice. Managers were similarly asked what they thought the effect of the blackout would be on the traveling public's choice of their hotel for lodging. Only two managers (1.5%) thought the blackout would diminish the likelihood that a guest would again choose their hotel. On the other hand, 43 percent of the managers thought the impact on choice would be positive, and 56 percent of the managers predicted no effect. Once again, there were significant differences in opinions on the choice question depending on whether the respondent's hotel had lost power. Roughly one out of four managers of hotels that were not affected by the blackout predicted a positive effect of the event on choice of their hotel; more than half of managers from hotels that lost power during the blackout predicted the same. Noted one manager in the latter group, "We took care of guests, and they knew we went above and beyond to provide for their needs."

Consumer confidence. Finally, managers were asked about the blackout's effect on consumer confidence in the lodging industry as a safe, comfortable, and convenient source of overnight accommodations. Responses to this question were also positive, but less so than the responses about hotel image and choice. A relatively small percentage of respondents (7.5%) thought the effect of the blackout on consumer confidence in hotels would be negative, 41 percent thought the effect would be positive, and the remaining 51 percent predicted no effect. However, unlike the hotel image and choice questions, there were no significant differences in predictions about consumer confidence between managers from hotels that lost power during the blackout and managers from hotels that did not lose power. Interestingly, managers from hotels that lost power became less positive—and some even more negative—in their predictions about consumer confidence when compared to their predictions about hotel

image and consumer choice. The opposite pattern occurred for managers from hotels that did not lose power—that is, they became more positive with regard to consumer confidence than they had been on image and choice.

Comment data associated with the consumer-confidence question suggest that one reason for this shift in opinion was that managers at hotels which lost power believed their hotel performed well during the blackout, but that "other hotels" did not. The most common targets for this blame were the "big boxes" in New York City. One manager said there was "too much publicity on the...hotel in New York forcing its guests onto the street. People assume this kind of activity is widespread." Another manager was more optimistic, believing the effect on consumer confidence in the lodging industry would be negligible, except perhaps in the New York City and Cleveland areas where problems were more severe. Finally, a few managers felt that it was too difficult to predict what the effect of the blackout would be on consumer confidence in the lodging industry because, as one respondent commented, "This was only a one-time deal."

Discussion

When electrical power first went down across northeastern North America in the afternoon of August 14, 2003, most hotel managers had little about which to be concerned. It was still daylight, and the weather was warm. In all likelihood, they must have reasoned, power would be restored quickly. In the meantime, emergency backup power would support basic lighting, fire control, and other essential systems, at least for a few hours. Staff and customers could make do.

However, the blackout took an unexpected course, and as the findings reported here show, managers had much about which to be concerned. Despite the resulting challenges, hotels mostly dealt effectively with the blackout. None of the managers who responded to this survey was forced to put guests out on the street. Though some F&B services, typically room service and banquets, were shuttered, most hotels managed to provide some type of sustenance, from takeout pizza to candlelight dining and barbequed fare.

In some ways, hotels were fortunate that the blackout occurred in August instead of in January. Although nonfunctioning air conditioning was a source of guest and employee discomfort, the situation could have been far worse if the blackout had occurred in the winter. The high incidence of failed AC systems would most likely be duplicated in a winter blackout by inoperable heating systems, especially those driven by electric heat pumps and fans.

The duration of the power failure put hotel facilities and processes to the test. If judged primarily on the ability to provide overnight lodging during the event, hotels merit a score of excellent. However, if hotels are evaluated on the total guest experience, a different score is due. Simply put, facilities failures and process problems were common, and the resulting guest experience was sometimes poor and unpleasant. Beyond the matter of guests' comfort and convenience is the core issue of safety, especially in view of the fact that some hotels experienced a shutdown of emergency systems after a few hours. The failure of emergency systems and, in some cases, standby power suggests that powering to minimum standards outlined in electrical codes may not be enough to ensure guest safety. In general, though, having backup power-generating capability improved hotel operations and promoted guest safety.

There was considerable learning value for many managers who experienced the blackout and its effects on service systems and processes at their hotels. Only a minority of respondents contended that they were *well* prepared for the blackout.

Even though many hotels have improved their emergency response plans, the most common planning action reported by respondents to this study was to do nothing at all. The causes for this inaction vary, though the findings suggest that managers tended to believe that the event was one that could not be planned for and instead required managerial judgment as contingencies emerged. That attitude is even more unsettling when one considers that 20 percent of the respondents to this survey had no emergency plans—or were unsure whether such plans even existed.

There should be little question that an emergency manual or a formal contingency plan is important for managing service delivery during extraordinary circumstances like a blackout, rather than relying on the manager's ability to improvise and "wing it." Although the blackout was unusual and its time and geographic scope were relatively extensive, the effects of a power outage of this type *can* be foreseen and mitigating responses *can* be prepared, even if it is not possible to anticipate every operational contingency or guest request.

Fortunately, hotel managers were able to rely on their people to make up for shortcomings in planning, processes, and the physical plant. Researchers in the area of services marketing stress the importance of service employees to the customer experience by arguing that employees are the service, the brand, and the organization in the eyes of customers.¹² The blackout provided a context that strongly supports this view. In the aggregate and at the level of individual action, this employee service orientation was arguably one of the defining elements of the service delivery system that not only did not falter, but that hotel managers believe compensated for serious shortcomings in other areas.

The evidence offered by managers illustrating "service above self," as well as reports of positive customer feedback, suggests that managers' perceptions of service levels provided during the blackout are on target. However, service as perceived by the customer is multidimensional and not just a function of the interaction with service providers.¹³ Customer-defined service quality also incorporates perceptions of service reliability and tangibility (i.e., the physical environment, which suffered greatly during the blackout). By analogy, the overall service experience at a restaurant for which the meal is undercooked and served on unclean dishes will not be perceived favorably by the customer, regardless of how good the table service is. What remains to be seen is how the guests themselves viewed the service.

The critical questions to be determined by future research are whether guests felt as managers believed they did about service during the blackout and whether guests adjusted their expectations and satisfaction evaluation based on the situation. Even though managers thought guests were satisfied, some reported that guests complained about facilities problems, from the lack of air conditioning to the lack of internet access. Reasonably or not, some guests expected hotels to have generator power and, at the very least, emergency lights. Knowing what customers expect even in an extraordinary situation such as the blackout is important, because delivering anything short of this can produce dissatisfaction, lost return business, and negative word of mouth.

Even the examples of standout service present two faces. One manager described

¹² See: Valarie Zeithaml and Mary Jo Bitner, Services Marketing: Integrating Customer Focus Across the Firm, third edition (New York: McGraw-Hill Irwin, 2003).

¹³ K. Michael Brady and J. Joseph Cronin, Jr., "Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach," *Journal of Marketing*, Vol. 65, July 2001, pp. 34–49; A. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry, "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, Vol. 64, Spring 1988, pp. 12– 40

the manual flushing of guestroom toilets as a source of customer satisfaction, but then again another manager described the same thing as a source of dissatisfaction. Indeed, guests may simultaneously have held both positive and negative views of this service glad that the service was provided, but displeased that manual flushes were needed in the first place. The same can be said about other services, such as providing flashlights to illuminate otherwise dark hallways and guest rooms. Analysis of both managers' ratings of perceived service quality and their comments about the sources of guest satisfaction and dissatisfaction suggests that, on average, managers may have overweighted the effects of good customer service, while underweighting the negative effects of facilities problems.

The findings reported in this study also suggest that those hotels which were able to maintain service delivery and standards at pre-blackout levels had the chance to stand out just by doing what they do every day. If guests' expectations truly were lowered, hotels could delight customers simply by providing basic amenities and functioning with few service disruptions. Most surely, the hotel that was able to leave the lights on—not to mention the air conditioning—was in an enviable position during the blackout.

Also ripe for future study is the managers' general belief that the long-term effects in terms of hotel image, hotel selection, and traveler confidence in the lodging industry would be at worst negligible and possibly positive. Managers whose hotel lost electrical power were especially likely to think the long-term effects of the blackout would be positive. Such an assessment seems ironic, given the high incidence of problems—especially the lack of basic amenities and inoperable emergency systems—that those hotels experienced. Still, that conclusion is also understandable in light of managers'

positive evaluation of the level of service provided by hotel staff and the belief that this dimension of service quality more than made up for failures in the physical environment.

The delicate matter of standby power. Given that many guests expected that hotels

Given that many guests expected that hotels would somehow have standby power for all services, managers might consider whether there would be a positive return on the

A critical question to be determined by future research is whether guests were as satisfied by the hotels' performance during the blackout as managers believed they were.

investment in a standby power generator. A fundamental premise of return on quality is that quality improvements have a cost, and not all improvements will yield benefits that make the investment worth it.¹⁴ For example, it may be worthwhile to buy enough flashlights to make sure that every guest room has one in the event of a power failure, but it may not be worth it to retrofit a hotel to install a backup generator that is capable of carrying the entire operational load should primary power fail. Unfortunately, data to support the argument that having a standby power generator would have protected the bottom line are not found in this study. Although I believe that this has more to do with "noise" in the data, it is not possible to rule out the chance that it really made no difference whether a hotel had backup power or not and that the effect on the bottom line was essentially the same in either situation.

¹⁴ Roland T. Rust, Anthony J. Zahorik, and Timothy L. Keiningham, "Return on Quality (ROQ): Making Service Quality Financially Accountable," *Journal of Marketing*, Vol. 59, April 1995, pp. 59–72.

Recommendations

Some managers argued that the Blackout of '03 was an aberration that wrought effects which were largely out of their control. Even if that is true, the findings provided in this study suggest that there was much that hotel managers could have done then or could do now to prevent pervasive facilities and process problems in the event of an extended power failure. Based on the analysis of this study's data, the following are some recommendations for hospitality managers.

Facilities and Process Management

- Know where you are vulnerable if power goes down. Create a checklist of all components of the service delivery system. Facilities and processes should be examined for their susceptibility to power loss, both short term and long term.
- Document this examination of the service delivery system. Hotels need more than just an oral history of what happened and how management responded during events such as the blackout. GMs and hotel engineers can have different pictures of what happens during a power failure. A written document that describes the effects of electrical power loss on facilities and processes helps to minimize confusion and can lead to better preparation.
- Perform "what if" scenarios, simulations, or drills, and plan appropriate responses. What if power failed, for instance, during the bitter cold of January 2004? What if power was out for two days or more? What if running water was not available? Although it is not possible to imagine all scenarios, the Blackout of '03 shows that the unexpected can happen.

- If your hotel does not have standby power, price out a generator set. If your hotel does have a standby power generator, price out expanding its capacity. According to the vice president of engineering at an upscale hotel chain, the few properties in the chain that did not have auxiliary power "stuck out like a sore thumb" during the blackout—and threatened the brand's image. Consequently, the chain immediately looked into plugging that gap, even if the costs approached or exceeded a million dollars. However, according to the director of property operations at another upscale chain, providing some degree of backup power need not cost millions. For a few thousand dollars, portable generators can be purchased that will provide enough electricity to supply some critical systems.
- Provide support beyond the NEC for emergency systems. The National Electric Code is intended to provide *minimum* standards for emergency systems. The blackout showed that minimum standards are inadequate for ensuring guest comfort and guest safety in a protracted blackout. Guests who experienced the blackout expected that emergency lights, elevators (at least one), and telephones would work.
- Know which systems are on emergency or standby power and which are not. Hotel managers should be aware of what systems will run on backup power, and for how long. This way, plans can be devised to deal with failing systems before it becomes a last-minute scramble.
- Investigate adding at least some air conditioning and lighting functionality to standby systems. The loss of AC

and lights was a glaring problem during the blackout and a considerable source of guest dissatisfaction. For those hotels with standby power capacity, it is realistic to cool or heat and illuminate at least a few public rooms.

- Locate and mark phone lines that are not susceptible to the loss of electrical power. When PBX systems went down, typically after battery backup failed, hotel managers were thankful to have a few functioning telephone lines that are powered by the telephone company's network—assuming these lines could be found. Another option: obtain at least one cellular phone for the hotel.
- Keep the tools needed to ensure the functionality of manual facilities and processes in a failsafe box. Have available credit card imprint machines, registration cards, and telephones, and tools and instructions for opening automatic doors and elevators, plus battery operated calculators. Make sure to have a backup supply or a way to make key cards for electronic locks.

Emergency Planning and Management

• Formulate or reformulate emergency plans. If your hotel does not have emergency plans, write them. If your hotel does have plans, make sure these are current and are reviewed regularly (every six months). If plans do not account for extended power outages, new plans are necessary. Good plans minimize risk by detailing procedures to follow in the event of an emergency. The plan should explain what to expect (e.g., what backup systems become functional when power fails and what systems

will go down), when to expect it, what to do, and how and who should do it.

- Run drills and tests. By running regular emergency drills with staff, you not only help to ensure that emergency plans are current and appropriate, but you surface potential unpleasant surprises, such as faulty backup systems.
- Train and re-train staff on emergency **procedures.** Sometimes the problem with emergency plans is not the facilities or processes needed for implementation, but the people doing the implementing. Staff may not know what to do during an emergency. Turnover is one cause of this, but so is inadequate or infrequent training. As illustrated by the critical role played by staff at all levels of the organization during the blackout, this training should be viewed as an investment in the service delivery system that is just as important as upgrades to facilities.

• Stock up on emergency supplies.

Perhaps the simplest and least expensive action in support of emergency planning and preparation is developing a checklist of needed emergency supplies and ensuring that these supplies are always in stock. Supply items include the obvious needs revealed by the blackout: flashlights and batteries, glowsticks, lanterns, bottled water, and nonperishable food items. Some unexpected needs reported by respondents were gasoline and baby products (diapers and formula). Keep in mind that emergency supplies are a provisional fix. Ideally, emergency plans should be designed to eliminate the need for these supplies in the first place, for example, by ensuring that lights do not go out. However, for hotels on a

budget, stocking up on emergency supplies provides a ready solution. In addition, as one study respondent noted, there may be promotional benefits, such as by placing in each guest room a flashlight that features the hotel's name.

• Consider convenience and comfort.

- Other items worth stocking in the hotel "blackout box" are battery-powered fans, chemical heat packs, and battery-powered radios and televisions. Radios and TVs are also important for helping to keep staff members and guests informed during an emergency. In addition, though hotels did not report supply problems with pillows and blankets, the situation might have been different in cold weather.
- **Keep cooking**. Buy a grill for cooking and keep the propane tank full. Even hotels without F&B should consider an on-site grill for food preparation. Another option: identify area restaurants that can function without electrical power and contract with them to be a supplier.
- Buy extension cords. One of the problems with portable generators is venting exhaust. Thus, if the generator is placed away from hotel doors and windows (as it should be), extension cords will be needed to bring the power back in. This is particularly important if the recipient of the power is a guest on medical equipment.

People Management

• Help service providers perform even better in their roles. This first involves acknowledging service successes and promoting those actions. It also involves recognizing the stress and discomfort the blackout placed on the staff members as they strove to

- compensate for facilities and process problems. One of the best ways for hotel owners and managers to let employees shine is to give them the tools for this and to reduce the impediments.
- Use staff input to determine how problems experienced during the blackout could be minimized. Employees on the front lines are your best resource for developing solutions to service difficulties. Use their input to diagram service processes for determining where fail points and bottlenecks most often occurred.
- Train key staff members on manual processes. In our information society, the knowledge embedded in automated processes is easy to lose.
 During the blackout, the staff's ability to implement manual processes for tasks such as guest check-in and billing helped to minimize service disruption in these areas.
- Cross-train staff members on key processes and skills. Cross training offers numerous benefits, and these were on display during the blackout. Foremost is the ability to reallocate staff resources to operational areas in need. Equally important, though, is the sense of perspective this gives employees as they wear the hats of coworkers and pull together as a team.
- Reward professionalism and "service above self." Outstanding employee behavior exhibited during the blackout sets an example for a customer orientation that most hospitality organizations seek. Rewarding these behaviors can help to solidify a true service culture.

Customer Management

 Determine expectations. The biggest risks managers can take are to assume that they know what customers expect

and to believe that management perceptions of service quality and guest satisfaction are the same as that of customers. Managers should survey target customers to determine what guests expect in terms of the service offering, even during extraordinary circumstances. For example, data from this study suggest that guests expected hotels to have both emergency lighting (a reasonable expectation) and full standby power (perhaps not so reasonable). As a consequence, some guests expressed dissatisfaction with the lack of guest room lighting, air conditioning, telephone service, and elevators, because they expected these facilities to be operational, even during a power failure.

 Measure customers' perceptions of service quality and satisfaction.

Service quality is determined by the receiver of the service. Most hotel managers believed that service quality was high during the blackout, but they based this assumption primarily on interactions with their own service personnel. While the staff may have a good idea of what guests are thinking, it's important to find out directly from guests.

 Investigate how to facilitate the coproduction of the service experience by employees and guests during emergency situations. Several managers described the important role played by guests during the blackout in remaining calm, being understanding, and creating a positive environment for other guests. This role can and should be guided, first by managing expectations and providing news and information to guests, and second by devising roles and scripts for guests. These can be integrated into emergency plans. For example, if having guests gather in the lobby

during an emergency helps with information flow and reducing panic, this should be documented so staff can direct guests to perform this behavior.

Conclusion

The Blackout of '03 was a wake-up call for the lodging industry. Most hotels are ready to handle a relatively brief power failure, but few are well-prepared for an extended power failure—especially one that covers a lot of ground and that takes down such critical systems as running water and air conditioning or heat. While a dedicated, service-oriented, and empathetic staff can at least partially compensate for failures along other dimensions of the service delivery system, the objective for hospitality providers should not be service recovery, but good or excellent service in the first place.

Achieving service excellence demands more than just the outstanding efforts of service personnel in satisfying customer needs. Service excellence is a system. The physical plant, service-delivery processes, and formal plans, are the foundation of the system. This structure must be in place to enable employees to do their jobs well and guests to co-produce their experience. Unfortunately, the foundation is often overlooked until some event reveals a crack. For example, we have come to expect reliable electrical power and telephone systems and computer networks. It's not until one of these supporting elements fails that vulnerabilities in our systems become evident.

How well the lodging industry did during the blackout is still an open question, in part because this study lacks feedback from the real judges—the guests themselves. We need to know better what guests expected and what they thought about the hoteliers' efforts. What we may find is that there is a considerable difference between what we "have to do" as

formally reflected in code requirements for guest safety during an emergency, and what we "should do" to ensure guests' comfort, convenience, and reassurance. Given travelers' anxiety and concerns about safety when away from home, those hotels that can position based on service reliability, safety, and security can build a competitive advantage. That way when the lights go out or some other event like the blackout occurs, as is almost certain, your hotel will be one that shines.

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