STATE OF NEW YORK

Office of the Inspector General
Metropolitan Transportation Authority

Response to LIRR Service Disruptions, Winter 2007

Barry L. Kluger
Inspector General
### Table of Contents

Pages

Structure of the Report ........................................................................................................ i

Introduction ......................................................................................................................... ii

**PART I: Summary of OIG Findings and Response by LIRR**

Long Island Power Authority Infrastructure Concerns ....................................................... 1

Communication Problems Identified .................................................................................. 2

LIRR Movement Bureau Needs Support ............................................................................. 6

Site Responders Need Clarity and Coordination ............................................................... 10

CONCLUSION ....................................................................................................................... 12

**PART II: Response to LIRR Service Disruptions, Winter 2007**

Downed LIPA Wires Cause Disruptions ........................................................................... 13

  *February 2, Valley Stream* ............................................................................................. 13

  *February 14, Seaford Station* ....................................................................................... 20

  *February 20, Far Rockaway* ......................................................................................... 21

LIPA’s Response and Actions to Date ............................................................................... 21

Fatalities on the Right-of-Way .......................................................................................... 22

  *January 5, Rego Park* .................................................................................................. 23

  *March 2, Bethpage* ...................................................................................................... 30

CONCLUSION ..................................................................................................................... 30

**PART III: Documents of Action**

  Exhibit A: LIPA’s PowerPoint presentation to LIRR on the status of repairs as of February 11, 2007
  Exhibit B: LIRR/LIPA Memorandum of Understanding, Emergency Action Plan
  Exhibit C: LIRR Incident Command, Notice 20-07
  Exhibit D: LIRR Operations Incident Management Checklist
  Exhibit E: LIRR Communication Procedures with Non-Platformed Standing Trains, Notice 19-07
  Exhibit F: LIRR TIMACS Inserts for Rescue Trains, Notice 04-07
  Exhibit G: MTAPD Department Manual, Train Service Disruptions, Section # 15-02
STRUCTURE OF THIS REPORT

Long Island Rail Road responded to five service disruptions in early 2007 caused by downed power lines and Right-of-Way fatalities. While various response procedures were successfully implemented, there were significant aspects of the Railroad’s response that failed to meet expectations. The incidents spurred MTA Executive Director/CEO Elliot G. Sander to request that Inspector General Barry L. Kluger work with the Long Island Rail Road (LIRR), the Long Island Power Authority (LIPA), and the Metropolitan Transportation Authority Police Department (MTAPD) to evaluate emergency response procedures and recommend ways to strengthen them, where necessary. These parties worked cooperatively. Information analyzed by the Office of MTA Inspector General (OIG) was shared throughout the review with LIRR, LIPA and MTAPD to expedite the resolution of critical issues allowing the agencies to accelerate their corrections and improvements. As a result, the Railroad has reported a comprehensive series of initiatives regarding emergency response, communications and management of unplanned incidents instituted under the leadership of President Helena E. Williams. MTAPD and LIPA have also reported new response and communication protocols. In accordance with its statutory mandate, OIG will continue to monitor both the implementation of these initiatives and, once the parties have had experience with the new management and communication procedures and protocols, test the effectiveness of their efforts.

Part I is designed to highlight the actions taken by LIRR, LIPA and MTAPD to plan for and address disruptions as they occur. To accomplish this goal, OIG first identifies a problem and summarizes its relevant findings. OIG then affords LIRR the opportunity to articulate what LIRR, LIPA and/or MTAPD have done, alone or together, to respond to that problem.

Part II presents the complete findings of the OIG regarding the five service disruptions in winter 2007, with primary focus on the two most serious of these disruptions.

Part III is a compilation of documents evidencing the agreements, procedures, action plan and other initiatives resulting from the cooperative work of the LIRR, LIPA, MTAPD and OIG to date.
INTRODUCTION

At the request of the MTA Executive Director/CEO, the Office of the MTA Inspector General (OIG) reviewed five unplanned disruptions in LIRR service which occurred during the winter of 2007. Three of the incidents did not cause major service disruptions because they occurred either outside of the AM/PM rush or did not affect a critical portion of the system. LIRR handled these incidents without significant problems. However, the other two events, a right-of-way fatality on January 5, 2007 and a downed LIPA power wire on February 2, 2007, caused major delays impacting more than 100,000 customers.

The fatality on January 5 occurred when a teenager trespassing on LIRR tracks was struck and killed by an eastbound train in the neighborhood of Rego Park, Queens. Since power was cut to facilitate a police investigation, six trains were stranded between stations and other customers had to wait at stations up to four hours. A month later, on February 2, a LIPA power line came loose and fell across tracks near LIRR’s Valley Interlocking in the Village of Valley Stream, halting service in both directions along the Long Beach, Far Rockaway, Montauk, Atlantic, and West Hempstead Branches. Fourteen trains were stranded that evening while passengers at stations waited at least three hours for service. This event revealed significant maintenance problems with LIPA’s infrastructure and deficiencies regarding their response protocols. Both events showed the limitations of LIRR’s ability, at that time, to respond to sudden large scale disruptions during the evening rush.

In the aftermath of these occurrences, LIRR and MTA officials sought to learn from the experiences in order to improve their responses to such disruptions. OIG carefully analyzed the January 5, and February 2, incidents to determine the facts, ascertain the causes and assess the impact of the disruptions on passengers. The OIG evaluated the Railroad’s response in terms of timeliness, effectiveness and efficiency. OIG also questioned whether LIPA adequately protects LIRR tracks from unnecessary disruptions and sufficiently responds to emergencies along the right-of-way. OIG collected information by studying recorded communications and by interviewing numerous individuals involved, including passengers, train crews, LIRR management, LIPA officials, communications personnel, and first responders such as MTAPD. To facilitate and expedite modification and improvement, OIG shared this information with the others throughout its review.

On January 5 and February 2, the staffing level for LIRR’s command center proved to be insufficient as it struggled to handle the unanticipated, large scale disruptions that occurred. LIRR’s ability to give timely and consistent information to both customers and employees broke down. Adding to the problems on January 5, the command structure at the site was never clearly established undermining the coordination of LIRR and local responders, and hampering the information flow to Railroad management. Resolution of the February 2 incident was hampered by LIPA protocols that restricted its employees from giving information to others at the site. LIPA also did not provide for an immediate response commensurate with the level of emergency that was occurring.

---

1 Those incidents occurred on February 14, February 20 and March 2, 2007.
Throughout this review process, OIG and LIRR have focused on ways to improve LIRR’s response to disruptions. Guided by OIG observations and by their own internal evaluations, LIRR, LIPA and MTAPD have taken specific actions to improve their response capabilities. These actions should significantly improve the capability of LIRR and associated entities to effectively and efficiently respond to disruptions, evaluate conditions, make decisions and restore service, while keeping its customers and employees fully informed about each situation.
PART I

SUMMARY OF OIG FINDINGS
AND RESPONSE BY LIRR
PART I – SUMMARY OF OIG FINDINGS AND RESPONSE BY LIRR

Below is a summary of the OIG findings, together with LIRR’s statements regarding actions taken by LIRR, LIPA and MTAPD in response to facts developed by the OIG, and the independent “lessons–learned” reviews conducted by the various agencies. In some cases the response by the Railroad goes beyond OIG specific recommendations and addresses broader issues, some of which affect other MTA agencies (i.e., MTA Metro-North Railroad and MTA Staten Island Railway).

LONG ISLAND POWER AUTHORITY INFRASTRUCTURE CONCERNS

Fundamental to resolving an emergency involving power is a coordinated and well-managed response with effective communication and cooperation between the LIRR and LIPA. The rapid deployment of personnel to repair damaged or down power equipment is critical so that service can be restored as expeditiously as possible. Meanwhile it is essential that accurate information regarding the status of the incident scene and the restoration of power be communicated to customers, employees and emergency personnel during service disruptions to keep them fully informed and to protect their safety.

This level of coordination and communication between LIRR and LIPA was not evident during the February 2 incident.

OIG Findings:

- LIPA acknowledged that its routine inspections had failed to identify the deterioration that had occurred in some of the equipment along the right-of-way resulting in wires falling across railroad tracks three times in the winter of 2007.

- LIPA did not recognize the potential significance of the initial event and time was lost in getting the right equipment and personnel to the site.

- LIPA’s internal communication protocols restricted the flow of information to site responders and LIRR staff making decisions on train movement.

- After the second incident, LIPA promptly inspected maintenance issues along the LIRR right-of-way and made emergency repairs. LIRR and LIPA have developed a joint protocol for emergency response.

In response to their own lessons-learned process and OIG findings, LIRR and LIPA provided the following statement as to the actions they have taken.

LIRR’s and LIPA’s Response to Problems Identified:

After the first two downed wire incidents in February, LIPA inspected its equipment and concluded that its inspection protocols were inadequate. Past practice involved inspecting power lines annually using infrared technology that only identifies weaknesses detectable from below.
After the February incidents, LIPA decided to inspect its entire system from above using a helicopter equipped with special photography equipment. This inspection generated seven immediate critical repairs and replacements. An estimated 140 other deficiencies were identified, 95 percent of which were repaired by the end of 2007.\textsuperscript{2} Other less serious repairs also are being addressed.

LIRR and LIPA also assessed site response procedures, identifying several opportunities for improvement. The culmination of this effort was the development of a new joint LIPA/LIRR Emergency Action Plan (EAP).\textsuperscript{3} The EAP establishes systematic procedures for addressing emergency incidents involving LIPA facilities along the LIRR right-of-way. Its immediate goal is to minimize service disruptions by safely expediting both the timely removal of obstructions and the restoration of both train service and the integrity of LIPA’s electrical system. Key components of the EAP include:

- Creation of a unified command structure for emergency response.
- Clear definition of the various levels of emergencies.
- Establishment of notification and employee call-out procedures.
- Outline of the process for disseminating vital information.
- Identification of responsibilities for communicating whether power is on or off and when it is safe for personnel to be near the track.
- Development of repair plans.
- Establishment of a formal “lessons-learned” process.

Though it was not formally signed until February 2008, the EAP was in place through much of 2007, and both the LIRR and LIPA agree that these changes have improved coordination and response. To further this collaboration, the two entities have formed a joint task force that meets quarterly to discuss incident response protocols and other issues of mutual concern.

**COMMUNICATION PROBLEMS IDENTIFIED**

One of the most critical components of emergency response is the effective and timely communication of accurate and helpful information to customers who are already on board trains, as well as to those who are waiting to embark at stations. The ability to convey this information assists customers in making informed travel decisions and also reduces the likelihood of even more dangerous situations. When incomplete, inaccurate or inconsistent information is provided, customers are more likely to misperceive the severity of an emergency, and exacerbate or create dangers by taking matters into their own hands.

During the disruptions on both January 5 and February 2, LIRR’s communications were deficient, causing confusion and frustration among passengers and employees of the Railroad.

\textsuperscript{2} See Part III. Exhibit A: LIPA’s PowerPoint presentation to LIRR on the status of repairs as of February 11, 2007.

\textsuperscript{3} See Part III. Exhibit B: LIRR/LIPA Memorandum of Understanding, Emergency Action Plan.
OIG Findings:

- LIRR communications with passengers, which originated from multiple sources, were contradictory and not always current.
- Train crews were not given information on what was happening, thereby frustrating passengers and employees. Without specific information, train crews made generic announcements, which further frustrated passengers.
- Public Affairs staff and station personnel did not always receive comprehensive and timely information, making them less effective in dealing with the public.
- Customers at stations were frustrated by a lack of information about travel alternatives.

LIRR instituted changes to its communications protocols last summer as part of an initiative begun by its President in light of an internal review. LIRR significantly expanded these protocols after OIG shared its preliminary findings. LIRR provided the following statement about the changes it has made, or expect to make, which are designed to significantly improve not only its response to sudden service disruptions, but its daily communications with passengers as well.

LIRR’s Response to Problems Identified:

In order to address these emergency response issues and to improve the customer experience during routine operations, the LIRR began to develop a comprehensive Customer Communications Initiative in the summer of 2007. Many components of this initiative have already been completed, while others will be introduced shortly.

Establishment of the Public Information Office:

One of the most significant and beneficial improvements in emergency response procedures that the LIRR has implemented over the last 12 months is the establishment of the Public Information Office (PIO), which was activated in October 2007. Modeled in part on a similar office at the New York City Fire Department, the PIO is located in the Movement Bureau on the second floor of the Jamaica headquarters building - the nerve center of LIRR train operations. Staffed with employees from both the Transportation and Public Affairs departments, the PIO will obtain real-time service information from the Incident Commander. Combining the expertise of these two disciplines with recently announced plans to replace jargon and non-specific language with clear, informative language (referred to as “PlainSpeak”), the PIO will provide customers, the press and the public with consistent, accurate and helpful information in a more timely fashion. For the duration of each operational incident, the information disseminated will be progressive in that each new piece of information will build upon information reported previously.

Currently, the PIO is staffed weekdays from 4 AM – 9 PM, and on weekends when there are major track work programs. By mid-2008, it will become a 24-hour operation, with an Assistant Station Master and Public Affairs Manager on duty at all times. The PIO generates updates on service disruptions that are sent to customers via e-mail, posted on the LIRR website as service
alerts, posted on the new Pennsylvania (Penn) Station Message Boards (see description below) and communicated to traffic & weather reporting services as well as major media outlets, including television, radio, wire services and newspapers.

Introduction of “PlainSpeak”:

One of the first initiatives President Helena Williams launched after joining the LIRR was “PlainSpeak.” Introduced in July 2007, the “PlainSpeak” initiative is designed to provide LIRR customers with accurate, timely and useful information that is easy to understand, particularly to those already aboard trains. The communication style uses brief, concise and conversational language without hard-to-understand technical details or railroad industry jargon to describe the impact and length of service disruptions. “PlainSpeak” offers useful information that allows customers to evaluate alternate travel options. The LIRR believes that this type of communication will be effective in minimizing customer frustration. As of today, 63 employees identified as responsible for public address announcements have received formal training in PlainSpeak, including 45 Transportation Department and 18 Public Affairs personnel.

Customer E-Mail Notification Improvements:

The LIRR Customer E-mail Notification System has been operational since March 2005. Since that time the LIRR has seen steady growth in the volume of customers subscribing to this system. By February 2008 there were approximately 25,000 customer accounts, up from only 8,000 in January 2006.

Several deficiencies were identified in early 2007 due to a large number of old, erroneous e-mail addresses that contributed to delayed delivery of messages and system-wide delivery problems. These issues were compounded when numerous messages were sent within short periods of time. In addition, some external company e-mail domains and Internet Service Providers (ISP’s), such as Yahoo, AOL and Optimum were mistakenly blacklisting the LIRR’s e-mail messages as spam due to the fact that they are bulk mailings.

By the end of 2007, the LIRR’s Information Technology (IT) Department made the following improvements to enhance & redesign, increasing the capability and versatility:

- Cleaned up erroneous e-mail addresses.
- Changed the interval for automated cleanup of all undeliverable messages to every hour instead of once per day.
- Implemented changes in the system design to improve upon the overall reliability, effectiveness and performance of the system.
- Implemented an e-mail confirmation process, which sends a confirmation e-mail to each new customer to verify and validate the mail address being subscribed.
- Added a link to the end of each message to allow the customer to change their advisory preferences including the ability to unsubscribe from the service.
- Redesigned the system to include other new functions described below.
The LIRR is also working closely with the MTA on plans for text message alerts and web site upgrades. A member of the LIRR’s IT staff is on the MTA selection committee for the proposed text messaging service.

**Introduction of E-Mail Announcements to Ushers:**

During and prior to the service disruptions that occurred in early 2007, LIRR ushers who make public address announcements at key terminals such as Penn Station and Flatbush Avenue received updates on service problems through faxes from the Movement Bureau in Jamaica. It became clear that a more efficient way to get updates to the ushers was needed. By October 15, 2007, employees in the newly established PIO were using a computer to e-mail well-written announcements to the ushers. Ushers at all key terminals now simultaneously receive consistently worded announcements at their workstations about the latest service conditions and the impact on customers. The e-mailed announcements are sent via the new, more robust Customer E-Mail system.

**Installation of Message Boards and Destination Monitors:**

On October 18, 2007, the LIRR launched a new customer communications initiative in Penn Station. Six large, flat-screen message boards were installed at key locations throughout the terminal. These message boards display detailed, real-time information about service disruptions. During times when service is running normally, information about planned track work programs, extra holiday service, service to special events and customer safety reminders is displayed.

**Publication of Alternative Travel Plans:**

An often overlooked yet vitally important tool for assisting customers in adapting to service disruptions is the public dissemination of information on alternative means of travel. There are situations when, despite a service disruption, riders still have the flexibility to identify an alternative route that will ultimately get them to their destination and avoid the problem area. In order to address this need, the LIRR has bolstered its public information effort. New brochures are available to customers at both Penn Station and Jamaica Station. They contain useful telephone numbers and internet website addresses for accessing service disruption information. They also detail specific alternative directions on how customers can reach intermediate locations should LIRR service be disrupted. The LIRR is reviewing customer response to this campaign and considering expanding brochure distribution to other locations.

**Cellular Telephone Deployment to Train Personnel:**

LIRR customers need timely, accurate and meaningful information while they are onboard trains. During service disruptions this information is even more valuable, because it enables them to have a fuller understanding of what is happening, the estimated duration of the incident and the availability of alternate options.

To better address this need, the LIRR recently reached an agreement with the United Transportation Union to provide approximately 1,200 cellular telephones to train crew members. The phones will enable two-way communication between train crews and the PIO in order to
convey the latest train status information to customers. Reflecting the importance of this initiative, on February 14, 2008 the LIRR deployed 20 cellular phones with train crew personnel to test new protocols and assess performance. The deployment of the remaining phones will be completed and the system will be fully operational by the end of April 2008.

**LIRR MOVEMENT BUREAU NEEDS SUPPORT**

The nerve center of the LIRR is the Movement Bureau’s Operation Center (Movement Bureau) which is located on the second floor of the Jamaica Headquarters Building. Its basic daily functions include dispatching personnel and trains, monitoring train movement, disseminating vital information from towers, outside agencies and field locations. Even on the most routine of days, the flow of the entire Railroad system is dependent on the Movement Bureau. When a crisis occurs, such as the emergency incidents discussed in this report, the importance of the Movement Bureau grows exponentially as do the demands on its limited resources.

The early 2007 incidents highlight the potential negative impacts of an overburdened staff that is forced to manage too many tasks simultaneously.

**OIG Findings:**

- The Movement Bureau could not efficiently manage the sudden disruptions of January 5 and February 2 where the demands overwhelmed the staff on duty.

- Communication within the Movement Bureau and to those in the field sometimes broke down as a result of people from different departments being involved and the lack of clear lines of responsibility.

- Passenger needs are not adequately represented in the decision-making process when staff is trying to focus on equipment and schedule concerns.

In response to our findings and its own lessons-learned process, LIRR officials provided the following statement about how they have redistributed staff, instituted new procedures and are developing an overall incident response protocol. These actions, LIRR officials believe, provide the resources and structure needed to improve handling of emergencies.

**LIRR’s Response to Problems Identified:**

It is essential that the structure governing the Movement Bureau emergency response procedures be clear, consistent and comprehensive, with a particular focus on the defining roles of participants in the crisis response.

As a result of its own comprehensive review of the incidents that occurred in 2007 and after consulting with the IG’s Office, the LIRR has either already implemented or is in the process of implementing several significant revisions to its emergency response procedures that it expects
will dramatically improve its ability to protect public safety and more rapidly restore regular train service.

**Formal Incident Response Structure for the Movement Bureau’s Operations Center:**

The key ingredient of an effective incident response is the existence of a coordinated organizational structure that can be adapted to any event of significant duration that could have an effect on safety, on-time performance or train movement. The structure must clearly define roles and chain of command.

Most components of an incident response structure are already in place. By the end of 2008, LIRR will have a formal incident response structure for the Movement Bureau that is coordinated with the external partners involved in site response. It will identify the following individuals:

- **Site Incident Supervisor:** the first manager to arrive at the scene of the incident, who establishes a centralized location near the incident scene to oversee and coordinate the forces necessary to correct and/or control the incident, and who provides frequent updates to the Movement Bureau as to progress in the field.
- **Transportation Incident Commander:** the highest-ranking Movement Bureau official at the Operations Center or the employee designated by that official.
- **Operations Chief:** assigned by the Incident Commander to manage the incident and oversee operations protocols.
- **Customer Advocate:** a Movement Bureau employee assigned to establish contact with each standing train, constantly communicate with them, maintain a record of the nature of these conversations and assess customer needs until those trains reach their destinations.
- **Jamaica and New York Liaisons:** the respective superintendents on duty or designees of the Operations Chief, who is assigned to oversee the operations of their specific areas.
- **Rescue Operations Chief:** the Superintendent of Engine Service or a designee of the Operations Chief who is responsible for evacuation and rescue operations.

**Creation of the Operations Incident Management Checklist:**

While most personnel are well aware of the various tasks that must be accomplished before decisions can be made during emergency incidents, as part of its “lessons-learned” process the LIRR determined that it would be helpful to create a formal incident management checklist designed specifically for this purpose. The checklist, which was created in May 2007, is maintained in the Movement Bureau by the Supervisor of Train Movement and serves as a reminder that all appropriate tasks have been completed before decisions are made.

---

4 See Part III. Exhibit C: LIRR Incident Command, Notice 20-07.
5 See Part III. Exhibit D: LIRR Operations Incident Management Checklist.
Additional Movement Bureau Staffing during the PM Peak:
One of the most significant findings of the review of the incidents of early 2007 was that the staffing level at the Movement Bureau is sometimes inadequate to manage the overwhelming amount of activity. In the specific incidents reviewed, personnel were handling the emergency and at the same time distracted by fielding inquiries that had absolutely nothing to do with the incident.

In response, the LIRR decided to adjust work schedules so that there will be an additional position available to assist the Movement Bureau during the PM peak. On any given day, either the Superintendent of Engine Service or a Lead Road Foreman will provide this assistance and will be able to respond to incidents in the field, if necessary.

Additional Passenger Services Support at Mineola and Jamaica during the PM Peak:
A visible presence at station platforms and terminals is important for the LIRR to provide customer assistance during critical emergencies. Employees so deployed can assist passengers boarding and disembarking trains, maintain safety on the platforms, provide up-to-date status on emergency response and offer passengers with alternative travel options.

As a result of its lessons-learned exercise, the LIRR decided to deploy an additional passenger services manager at both the Mineola and Jamaica stations during the evening peak (until 7 PM).

Strengthened Communication with Halted Trains:
There are occasions when, as a result of an emergency incident, a train is halted along the right-of-way and is not adjacent to a station platform. As the OIG review revealed, conditions on these non-platformed trains can get uncomfortable and potentially dangerous if not handled properly. If train personnel are not thoroughly updated on the status of the incident and its expected duration, they can lose the confidence of passengers and the ability to control the situation.

On December 7, 2007, the LIRR issued Superintendent of Train Movement (STM) Notice 19-07 which formalized procedures for communication with trains halted at locations that are not platformed. It directs that the highest-ranking official in the Movement Bureau will assign the Customer Advocate (referred to in the Incident Response Structure discussed above) to establish contact with each standing train, constantly communicate with them, maintain a record of the nature of these conversations and assess customer needs until those trains reach their destinations.

Rule 262 Revisions: Reverse Train Moves:
There are occasions when the Movement Bureau determines that the best option is to reverse a halted train. This decision has far-reaching ramifications, as it affects how long it will take passengers to reach their ultimate and intermediate destinations, and train movement logistics. As might be expected, the initiation of a reverse train movement can have a profound effect on

---

6 See Part III. Exhibit E: LIRR Communication Procedures with Non-Platformed Standing Trains, Notice No. 19-07.
the behavior and disposition of passengers, and experience has shown that the public announcement of such a move has been the single most common catalyst for passengers to attempt dangerous self-evacuations.

Under past practice (Rule 262), reverse moves were only permitted after written authorization was documented and received from each train conductor/engineer. One can only imagine how time-consuming this process can become, particularly if more than one train needs to be reversed. In response to the lessons-learned process, the LIRR revised Rule 262 to allow reverse moves as long as verbal approval is granted by the Section Dispatcher in the Movement Bureau, the Block Operator in the field, and the train conductor/engineer.

In order to address the extremely serious issue of self-evacuations, and based on a thorough safety analysis and review that included law enforcement personnel, the LIRR has established a new protocol regarding reverse train movements and instructed Transportation Department personnel on the changes. To ensure the safety of customers and to facilitate the service recovery process, the train announcement of a reverse move will not be made until after the move is already underway. A precise language for this announcement has been developed: “Ladies and gentlemen, it is necessary for this train to make a reverse move to [insert station name], where alternative service will be provided.”

**Relocating One Reserve Engine to Jamaica Yard E:**

On occasion, the LIRR may stage reserve or “protect” engines in strategic locations to reduce deployment time in case it is necessary to couple up to a disabled train and provide propulsion for movement. One such engine is always positioned in Harold Interlocking (the area east of the East River Tunnels) for the AM and PM rush.

Following the early 2007 incidents the LIRR conducted a thorough review of its reserve engine deployment practices and decided to relocate an additional engine from Morris Park Yard to Jamaica Yard E. Although this Jamaica protect engine would not have been used in the January 5 or February 2 incidents, the LIRR lessons-learned approach indicated a potential benefit of this relocation. The more central Jamaica location raises the potential to reduce response times for rescue engine deployment by as much as 30 minutes.

**Clear Identification of Evacuation Trains:**

If an evacuation train or rescue engine has been assigned, it is critical that all LIRR personnel are aware of its status. If not, it can be accidentally directed to the wrong location, again increasing the duration of the incident, inconveniencing customers and introducing further train movement logistical problems.

Issued March 2007, STM Notice 04-07 requires the Train Dispatcher to identify an evacuation train or rescue engine as such in the Train Information Management and Control System (TIMACS) prior to its departure to assist a halted train.

---

7 See Part III. Exhibit F: LIRR TIMACS Inserts for Rescue Trains, Notice 04-07.
Strengthened Review of Movement Bureau Procedures:

As with any procedures, the LIRR’s ability to ensure a safe, effective and timely reaction to emergency incidents requires regular review and evaluation of incidents. Providing reliable train service is a complicated undertaking even under routine conditions, let alone during emergencies when resources are stretched to the limit. In order to conduct this oversight, in December 2007, the Transportation Department established the full-time and permanent position of Superintendent of Operations – Protocols and Planning. It is the responsibility of this individual to regularly review and revise operational protocols, when necessary, based on the “lessons-learned” process. The LIRR already has benefited from the work of the Superintendent, who was instrumental in coordinating the review of emergency procedures stemming from the 2007 incidents covered by this OIG review.

SITE RESPONDERS NEED CLARITY AND COORDINATION

There are numerous personnel who respond to a crisis in the field, most notably those of the LIRR Transportation Department, the MTA Police Department and other local law enforcement and emergency response agencies. Clear coordination among them is crucial to maintaining safety and minimizing the duration of a service disruption.

OIG found confusion within the MTAPD and LIRR in responding to and exerting control over the January 5 incident, resulting from circumstances that could occur again.

OIG Findings:

- LIRR and MTAPD site responders experienced difficulty finding and accessing the site.
- LIRR and MTAPD staffs were confused about who was in charge of the incident site and the responsibilities of different responders, partly as a result of some responders’ lack of experience.
- Passenger self-evacuations significantly delayed the resumption of service.
- MTAPD communications are made through its own command center, rather than the Movement Bureau, further complicating the sharing of information with those on site and with those in the Movement Bureau in charge of rescue plans and attending to passenger needs.

After discussion with the OIG on our preliminary findings, LIRR and MTAPD worked on improving procedures, resulting in MTAPD instituting new rules for its officers system-wide. LIRR and MTAPD officials expect that the changes will clarify their mutual responsibilities and improve coordination. The LIRR and MTAPD provided the following statement.
LIRR’s and MTAPD Response to Problems Identified:

The LIRR Transportation Bureau has committed to applying the principles of Incident Command (a nationally recognized model for addressing emergency situations) at the site of all incidents that meet two criteria: 1) the incident is not of short duration; and 2) it could have an effect on safety, on-time performance and/or the movement of trains. As discussed previously, the LIRR is developing a formal incident response structure for the Movement Bureau that will include how the MTAPD will interface with LIRR personnel.

In direct response to its experience during the incidents that occurred in early 2007, the MTAPD has, for the first time, codified its patrol supervision and patrol officer responsibilities into one document. The lessons-learned from reviewing MTAPD response to LIRR disruptions has also been applied to the other properties served by the MTAPD, namely Staten Island Railway and Metro-North Railroad. In October 2007, the MTAPD conducted roll-call training on these responsibilities for seven consecutive days. It will repeat this regimen of training each year. The key components of this document are as follows:

**Patrol Supervision Responsibilities:**

- Coordinate with District #3 supervisors and ensure that an MTA Police Supervisor (or a qualified MTA Police Officer) responds to the LIRR Movement Bureau to coordinate efforts between the Movement Bureau and MTA Police Central Communications (PCC).
- Respond immediately to the incident location and establish contact with LIRR representatives and other emergency officials.
- Establish a Unified Command Post.
- Identify an Incident Commander and relay his/her identity to PCC and the Movement Bureau.
- In cases where a local police or fire agency has train orders in effect, review those orders and coordinate with outside agencies and the Transportation Bureau.
- Notify PCC of the Command Post location and a telephone number if available.
- Ensure that PCC makes necessary command staff notifications.
- Coordinate with adjoining districts to access available personnel.
- Maintain communication with adjoining District Supervisors regarding crowd conditions.
- Ensure that patrol officers allow access for emergency vehicles to incident locations.

**Patrol Officer Responsibilities:**

- Advise PCC of the estimated length of the delay.
- Update PCC at regular intervals.
- Board disabled trains and walk their entire length to ensure order and passenger safety.
Additionally, MTAPD issued revisions to the Metropolitan Transportation Authority Police Department Manual.\textsuperscript{8}

\section*{CONCLUSION}

While the emergencies occurring in the winter of 2007 caused serious disruptions in train service, resulting in major frustration and inconvenience, they have also been a catalyst for change. Promptly thereafter, the OIG carefully analyzed the incidents to determine the facts, ascertain the causes and assess the impact of the disruptions on passengers and employees. Throughout its review process, OIG shared its findings with LIRR, LIPA and the MTAPD to facilitate and expedite the resolution of critical issues on an ongoing basis.

The actions taken by LIRR, LIPA and MTAPD address many issues raised by the OIG regarding response protocols, communications and management needs for effectively and efficiently handling service disruptions. When emergencies occur, customers of the LIRR should benefit from the initiatives, which are designed to provide more information about problems, and to enable the Railroad to recover and resume service more quickly.

All those involved in these events and their aftermath recognize that disruptions are inevitable and that the new management and communication procedures and protocols are a work-in-progress. Given the importance of these changes to the proper functioning of the Railroad, and the well-being of its riders, the OIG will continue to monitor the implementation of these changes, test their effectiveness over time, and make ongoing recommendations as necessary and appropriate.

\begin{itemize}
  \item While on board trains, ensure train crews are making timely announcements to passengers.
  \item Assist LIRR personnel with staging alternate transportation options for passengers.
  \item Assist responding non-police agencies with transporting equipment needed to resume service.
\end{itemize}

\textsuperscript{8} See Part III. Exhibit G: MTAPD Department Manual, Train Service Disruptions, Section #15-02.
PART II

RESPONSE TO LIRR SERVICE DISRUPTIONS,
WINTER 2007
This fact-finding report on LIRR service disruptions during the winter of 2007 was produced by the Office of the MTA Inspector General after extensive fact-finding and consultation with Long Island Railroad. This document served to facilitate further discussion at the end of 2007 on how to remedy problems identified by the OIG’s review throughout 2007. A series of meetings had previously been held with LIRR officials to discuss the OIG’s preliminary findings as early as June 2007. During these meetings, the respective staffs shared information discussed the OIG’s observations and the Railroad’s new initiatives, and considered additional solutions.

The information in this report was gathered through numerous interviews, reviewing recorded communications, customer complaints and LIRR’s documents relating to the incidents. LIRR staff, management, LIPA and MTAPD officials provided their full cooperation during this review.

DOWNED LIPA WIRES CAUSE DISRUPTIONS
February 2, 14 and 20

Three times in February 2007, LIPA electrical wires came down across LIRR tracks disrupting service. The first incident at the interlocking in Valley Stream caused the most significant problems and was the major focus of our review and discussions with LIPA. Immediate steps taken by LIPA identified the causes for these disruptions and the actions taken by LIPA since have significantly reduced the likelihood of similar incidents occurring in the future. LIRR and LIPA have both established new protocols for their joint response to problems that can disrupt service.

A complicating factor in handling the service disruption on February 2 was the unauthorized self-evacuation of passengers aboard trains stranded between stations. The actions of these passengers caused LIRR personnel to focus their resources on ensuring the safety of these passengers, resulting in significantly increased delays. While the disruption was caused by circumstances beyond the control of LIRR, the Railroad’s response to the initial downed wire revealed weaknesses in LIPA’s and LIRR’s response protocols and communications procedures.

February 2, Valley Stream

On Friday, February 2, 2007, LIPA’s sensors detected a “locked out line” and three “tripped” lines at 6:33 p.m. At 6:50 p.m., three LIPA service trucks began a patrol of the transmission circuits and at 7:10 p.m. found a LIPA wire down across 4 tracks at LIRR’s Valley Interlocking, affecting both east- and west-bound service.

9 Interviews were conducted with affected train personnel, train crews, Movement Bureau staff, power personnel, Towers staff, communications personnel, LIRR management, and first responders including Metropolitan Transportation Authority Police Department.
LIRR was already aware of the problem by that time. Around 6:35 p.m. the tower radios at Valley Interlocking became inoperable. The Valley Tower Operator could see the sagging wire and reported to LIRR’s Movement Bureau that an electrical power wire was hanging low on the tracks. A block was immediately established, de-energizing power on the Atlantic, Montauk, Far Rockaway, West Hempstead, and Long Beach branches. Fourteen trains carrying 5,000 passengers became stranded as power was cut in the interlocking. For safety reasons, power was removed from a minimum of two rail sections east and west of the affected area, effectively suspending service on the five branches. Ultimately, 107 trains were delayed or canceled with 38,000 customers affected.

The downed LIPA wire was a static wire used for lightning protection and was not carrying a current before it fell. However, once one end fell to the ground, it came in contact with a live 32,000 volt high tension wire below. LIPA concluded that the line could not be pulled off the track without jeopardizing live lines, and a 107-foot bucket truck was needed to ground the high tension wire and to cut the line down from above.

During this time, LIRR consulted with LIPA and decided that power could be temporarily restored while waiting for the LIPA equipment. With power restored, the stranded trains on Montauk 2 could be reversed away from the wire and backed to Jamaica Station. By 7:33 p.m., the plan was set in motion and all personnel were cleared from the right-of-way. Contact had just been made with the Movement Bureau to restore power when reports were received that passengers were outside the trains and self-evacuating. Approximately one hour into the delay, passengers began to self-evacuate from 2, or possibly 3, trains by squeezing through the space between paired cars. Later, passengers engaged the emergency releases, exiting the trains through the opened doors.

There were reports that cars were stuffy and that while most passengers remained calm, some became very agitated. Transmission tapes and interviews with train crews indicate that passengers aboard train #1064, for example, were upset, becoming disorderly in attempting to leave the train. Some were even described as belligerent. Train #1064 experienced an unauthorized evacuation of approximately 200 passengers from the fourth and fifth cars alone. Taped transmissions recorded the conductor’s report to the Movement Bureau that a number of passengers had threatened him with bodily harm unless they were permitted to leave the train. The trains that experienced evacuations were within site of commercial buildings and roads, and LIRR officials speculate that evacuation seemed viable to some agitated passengers who did not weigh the significant safety risks involved. Unfortunately, if these passengers had waited, within minutes power would have been restored and trains would have begun to move.

MTA police and other LIRR Transportation personnel already onsite had to restore order and make sure that all passengers were removed from the tracks and the right-of-way. It was not until 8:22 p.m., an hour after LIRR was prepared to move trains back to Jamaica Station that MTA Police cleared the area and the plan to reverse trains could be put into effect. Power was restored and trains were allowed to reverse at reduced speeds. The LIPA bucket truck arrived at 9:39 p.m. and power was again de-energized to allow LIPA to carry out its work. Power was fully restored and service resumed at 10:04 p.m.
What was Happening with Onsite Response from LIRR, MTAPD and LIPA

Those responding to the scene included members of the MTAPD, LIRR Transportation personnel and representatives from LIPA. Once notified that a wire was down at Valley Interlocking, MTAPD and LIRR Transportation officials were on the scene within 25 minutes. An Incident Command Center was quickly set up near the downed wire, manned by representatives from the MTA Police and LIRR Transportation, facilitating communications between the MTAPD and LIRR management. However LIPA personnel were not included in the onsite response structure. Restricted by their own protocols, the initial LIPA personnel on the scene were not authorized to make an official determination or assessment of the problem, nor were they allowed to pass information on to LIRR personnel at the site. LIPA’s policy at the time was that communications must come from senior personnel or the central office. The intention was to avoid sharing of inaccurate information or making promises that might not be possible because those on site do not have a full picture of what is occurring elsewhere in the system.

At 7:45 p.m. the Movement Bureau received the first of several reports that angry passengers were self-evacuating from three trains. This required the redeployment of LIRR and MTAPD personnel to stabilize and clear the right-of-way. It is estimated that approximately 400 passengers evacuated from stranded trains. Those who remained on the trains faced extended additional delays as it took more than thirty minutes to clear tracks near train #1064 which experienced the largest passenger self-evacuation.

Tapes of phone calls into the Movement Bureau indicate that three trains were reporting self-evacuations. However according to train crews, no MTAPD officer or Transportation Manager was seen near two of the trains that supposedly had evacuations. MTAPD records on the matter are not definitive. It would have been a serious breach of protocol if no one checked the areas near the reported self-evacuations to be sure passengers were safely off the right-of-way before power was restored.

Communicating with LIPA: LIPA crews initially responding to the scene could not resolve the problem without additional support and equipment. However the equipment needed was not located near Valley Stream and LIPA representatives onsite were not authorized to give LIRR time estimates as to the length of time to bring the necessary equipment to the site. LIPA service crews must contact the central offices in Hicksville, which in turn must contact LIRR’s Movement Bureau that then contact LIRR personnel onsite with the information from LIPA. Due to this circuitous communication, the LIRR Incident Commander at Valley Interlocking also could not confirm with LIPA that the downed wire was not carrying a charge. Only when LIRR’s Chief Engineer arrived at the scene, according to the Incident Commander, was he able to cut through the red tape of LIPA’s protocols.

Misinformation regarding LIPA’s plans that night was circulating both at the site and at the Movement Bureau. There were different versions being reported as to what type of equipment was needed, from where the equipment had to come, how long it would take to arrive, and whether LIRR could use its own equipment. LIPA’s communication protocols were believed by LIRR officials to have significantly delayed the resolution of the problem and hampered LIRR’s ability to develop alternate service options.
The Experience of Train #1064 and Self-Evacuations: Upon receiving notification of self-evacuations from train #1064, the Movement Bureau immediately informed LIRR management already at the scene. Recorded transmissions captured the conductor’s description of a volatile situation in which riders activated “fireman’s pulls” to open doors, and warned the conductor to ‘stay out of their way’ when he attempted to stop the evacuations. At 7:54 p.m., the conductor reported that he did not have the evacuation under control, to which the Movement Bureau requested his location in order to dispatch police officers to the scene. At 8:07 p.m., the conductor received permission to descend to the tracks to speak with police officers who had arrived. Between two and four officers were dispatched to train #1064 and, upon arrival, were overwhelmed by the number of evacuees. Greatly outnumbered, officers abandoned their efforts to dissuade evacuees from leaving the train and instead decided to assist customers by clearing the right-of-way. By 8:25 p.m., the conductor reported that supervisors had arrived. As they became aware of self-evacuation reports, a senior and mid level manager left the site of the downed wire and proceeded to train #1064. According to one manager’s report, when they arrived on the scene, the MTAPD had the situation under control.

In discussing the difficulty of controlling self-evacuations, the Assistant Deputy Chief for MTAPD stressed the need for preventive actions to discourage passengers from leaving stranded trains and said they are working on new procedures.

What was Happening Aboard Stranded Trains?

Once power was de-energized, there was a total of fourteen stranded east and west bound trains located throughout the Valley Interlocking on February 2. Approximately 5,000 passengers, some standing, were aboard. Because there was no power, there was no heat or functioning facilities on some trains.

Details were not Given to Crews about the Delay: OIG staff interviewed the train crews who were stranded that day. They stated they were frustrated by having lost communication with Valley Tower. Only by listening to radio communications between other parties were train crews able to learn what had happened with the LIPA wire. Although some train crews were able to reach the Movement Bureau to get information, most others could not.

Crew members say they made announcements about delays regularly over the train Public Address (PA) systems but acknowledged that the messages were general in nature. While train crews are required to make preapproved general announcements at specific intervals when disruptions occur, announcements at that time contained only “stock” language and did not provide specific information about current circumstances.

Communications Regarding Rescue Plans: Some trains did receive specific messages regarding response plans and conveyed the information to their riders. In those cases OIG was able to review, the messages sometimes added to the confusion and frustration felt by passengers. For example, passengers who were on Montauk track 2 heading to Babylon were informed that they would be brought back to Jamaica Station either by their train reversing or by having them evacuate to a rescue train. Passengers became upset with this plan which would get them no closer to their destinations, but instead would bring them back to Queens after they had already been stranded for two hours. At one point, per instructions from the Movement Bureau, the crew of #1158 informed passengers of a plan to evacuate them to a diesel train which would take them
back to Jamaica Station. However, a diesel train could not be secured and the plan was abandoned. Once the passenger self-evacuation occurred elsewhere, distracting LIRR personnel, the fact that the plan was dropped was never communicated to the crew and passengers.

Upon their return to Jamaica Station, passengers aboard certain stranded trains were informed that a connecting train would be available to take them to Hicksville, the first part of a multipart plan to provide customers access to the Babylon line. The Movement Bureau is heard on transmission tapes instructing trains #1158, #160 and others to make “appropriate announcements” regarding the plan. Once stranded trains arrived at Jamaica, however, numerous passengers complained that there was neither a waiting train nor anyone to meet them with instructions on completing their trip. As we learned, compounding the problem was that few LIRR personnel were available to staff station platforms, provide connecting information and assist passengers during emergencies. Those LIRR employees who could be called back into work were instructed to report directly to the Valley Stream site, not to Jamaica Station.

**What was Happening in the Movement Bureau?**

During the service disruption of February 2, the Movement Bureau was managing this crisis with the assistance of Train Dispatchers, the Supervisor Train Movement, the Chief Train Dispatcher, and the Assistant to the Chief. Additionally, the Superintendent of Jamaica Station PM Operations, provided assistance by answering telephone calls. Most management staff had already left for the day so the Movement Bureau was limited in its resources. Managers who could be reached at home or enroute to their homes responded to the site of the downed wire and were critical to the field response, facilitating communications with LIPA and assisting with evacuees. However the staffing of the Movement Bureau was inadequate for effectively handling the size of the service disruption that occurred that night.

The demands on the Movement Bureau on February 2 were overwhelming and those present that night received much praise from LIRR executives for the job that was done. After the evening rush hour, the Movement Bureau becomes the hub of railroad activity outside of Penn Station. Decisions on incident response, train movement and equipment, as well as passenger communications originate with the Movement Bureau. During the period in question, staff was occupied with train movements on the unaffected lines, while trying to deal with the emergency at the same time. Decisions had to be made regarding the stranded trains as well as accommodating those passengers who were left at stations, including providing train service via alternate branches and possible rescue trains for stranded passengers. Since communications were down between Valley Tower and train crews, the Movement Bureau also received calls from both the train crews and site responders regarding the incident.

**Movement Bureau was Fielding too Many Calls:** While Movement Bureau staff was being inundated with calls during the service disruptions, many unrelated calls came over the lines. Recorded transmissions showed Movement Bureau personnel fielding requests unrelated to the crisis, e.g., a retired employee seeking information for a traveling spouse. These calls apparently interfered with priority work at hand. In one instance, the Customer Communication Coordinator, who sits behind the Bridge in order to update a communal whiteboard with a sequential record of train operations, lost track of what was occurring. The Coordinator erroneously reported on the whiteboard that train #876 would proceed west once reverse moves were underway. During this period, the Coordinator was engaged in five separate exchanges to
were underway. During this period, the Coordinator was engaged in five separate exchanges to locate a conductor for a purpose that was not a priority that night. Fortunately, a public affairs employee notified him of his mistake.

Clearly, only work related calls should be coming in over the land lines in the Movement Bureau, especially during emergencies. Train crews were unable to get through to the Movement Bureau to find out what was happening and what they should tell passengers. This was the case not only on February 2, but also on January 5. The crew’s manual, Appendix C, “On-Train Announcements of the Contingency Operating Guidelines,” explicitly holds conductors responsible for ascertaining the cause and length of a delay and for promptly communicating the information to passengers; yet neither the Movement Bureau nor Towers are under the same explicit obligation to ensure that such information is made available to crews. LIRR Officials have acknowledged this disparity and have agreed that greater efforts are needed to structure the flow and content of information provided to train crews in their interaction with riders.

What was Happening at Stations?

Based on the 2006 ridership data provided by LIRR, we determined that on February 2, 38,000 passengers were affected by the disruption. Of these, approximately 25,000 were impacted directly by cancelled or delayed trains on the five affected branches. Major stations such as Penn Station and Jamaica Station have dedicated ushers to make announcements, while outlying stations use public address systems where announcements originate in the Movement Bureau. During this emergency, there was confusion caused in part by the making of contradictory announcements.

Pennsylvania Station: At Penn Station, announcements created by the Assistant Station Master informed passengers, “Ladies and Gentlemen, May I have your attention please: Because of downed power lines in the Valley Stream area service has been temporarily suspended on the Montauk, West Hempstead, Far Rockaway, and Long Beach branches. Please listen to my announcements as information becomes available. Customers are advised to use the Mainline at this time.” This announcement referencing “Mainline” was repeated 17 times from 6:52 p.m. until 7:58 p.m. The Assistant Station Master mistakenly assumed that customers are familiar with LIRR terminology such as “Mainline.” This problem was first identified by LIRR during its lessons-learned exercise.

At Penn Station, there is only one usher who interacts directly with the public. The usher is located in the waiting area where crowds tend to gather during a disruption but has no way to obtain information. The usher typically references trains sheets listing predetermined track information and/or the message board located across the waiting room to answer customer inquiries. The usher has no computer, telephone or other communication devices to receive or request information. The Assistant Station Master must make her way through the crowds from her office across to the waiting area to provide the usher with new information. Similar to other functional areas discussed in this report, the level of information available to the usher may be satisfactory during a routine day, but during this large scale disruption, it was woefully inadequate.
Jamaica Station: Thousands of people were stranded at Jamaica Station as they were unable to travel either east or west of the Valley Interlocking. When four trains returned to Jamaica, approximately 2,500 additional passengers were brought back into the station. Comment cards, e-mails, and personal letters provided by passengers described the crowded conditions they experienced. While police were reportedly on the platforms, there were no other Transportation or Customer Assistance Program (CAP) personnel available to provide assistance.

In addition to an absence of visible personnel at Jamaica Station, communication from the ushers’ booths was problematic. One passenger complained that “The announcer repeated the same announcement over and over again…They could not even suggest how customers could connect with LI Buses in Jamaica.” The dissemination of information was further hampered by malfunctioning microphones located in the usher booths. According to both east and west bound ushers, microphones become inoperable when a diesel train is in the station. Ushers theorize that the vibration caused by the loud engines vibrate the usher’s booth and “locks the microphone off.” Ushers explained that they have been instructed not to open windows to speak to passengers because of safety concerns that arise when the foot path near the booth is obstructed by inquiring passengers. According to the ushers, the malfunction reportedly lasts about 1-2 minutes during which passengers are asked to “hold on” or ushers attempt to read lips. The volume of customers in need of information on February 2 far outweighed the usher’s normal capacity to provide answers to individual questions. The problem was compounded by equipment that did not work.

By 7:52 p.m., the LIRR offered a special run known as the “Z-train maneuver” to transport those passengers wishing to access stations along the southern branch. This trip required passengers to travel to Hicksville and across the central branch aboard a diesel train to Babylon, then catch a train at Babylon to destinations along the southern branch. Three such trains were made available but provided assistance only to some passengers who were already at Jamaica Station. Others had to continue to wait or seek alternative transportation.

Outlying Stations: Customers at many outlying stations are limited in their ability to speak with LIRR personnel since some booths close as early as 1:30 p.m. Approximately 40 percent of 124 stations are staffed with ticket agents. A PA Console Operator, working out of the Movement Bureau, can make announcements to all the outlying stations, but on February 2, this occurred infrequently. Customers at outlying stations heard the following announcements, “Due to track condition, all service is temporarily suspended on the Babylon branch, Long Beach branch, West Hempstead and Far Rockaway. Please stand by for further announcements.” The PA Console Operator issued this announcement at 6:46 p.m. repeating it at 8:28 p.m. and again at 9:32 p.m. with no explanation that the track condition was due to a downed wire, or with the information that trains were being returned to Jamaica. The content of the information was both untimely and unnecessarily vague, leaving passengers with little information on which to make other plans.

Little Information Provided on Substitute Means of Travel: Passengers traveling through Jamaica to the five affected branches were advised to seek other means of travel, but no details were forthcoming to help customers find such other means. Announcements made by the ushers at Penn Station and Flatbush Avenue did not provide any more information than that provided at Jamaica.
No bus service was provided for passengers stranded at Jamaica Station. Taped conversations from the conductor on train #867 to the Assistant Train Director at Valley Tower revealed that an inquiry was made as to whether buses were available for passengers who, according to the conductor, were becoming angry. The Assistant Train Director then contacted the Movement Bureau with this inquiry and the Section B Train Dispatcher responded that “he did not know and was not the one to ask about buses.” No further steps were taken to address the request nor were any commitments made to obtain the information by the Train Dispatcher. Buses were eventually requested by a different Train Dispatcher at 7:59 p.m., almost an hour and twenty minutes after the disruption occurred. No private buses were available and, eventually, LIRR secured five buses from Long Island Bus around 8:15 p.m. These buses, however, were dispatched to the Valley Stream Station and not to Jamaica Station, which had the greatest passenger need.

In order to accommodate commuters stranded at Jamaica Station, LIRR might have suggested that their customers take one of several Long Island Buses originating from Jamaica or buses connecting to various locations along LIRR’s routes. This would have taken passengers to points east where they could have either been picked up or taken a taxi or other means of public transportation. In the summer of 2007, LIRR developed a useful alternative-travel brochure for Penn Station customers. This type of information is what is needed at more sites to allow passengers to make their own arrangements.

Electronic Notification Failed: A senior Public Affairs executive explained that she was alone on February 2 when she learned of the downed wire about 15-20 minutes after it had occurred. She assigned one off-duty employee to notify various media outlets as she prepared the e-mail alerts. The executive indicated that she assumed that her initial e-mail message had been transmitted, and continued to issue e-mail updates every 30-40 minutes. At approximately 10 p.m., the official was told that a customer had called the Travel Information Center to complain about the absence of e-mail alerts regarding the disruption. Upon checking her personal e-mail, which is registered with LIRR’s notification system, she discovered that her messages had not been delivered.

Although the Public Affairs Executive had sent these e-mail messages, there was no confirmation system in place to ensure that the transmission of these messages was successful. According to a senior LIRR IT official, the server became bogged down by the volume of automated notifications to invalid e-mail addresses. The IT department was reportedly not informed of the problem until 11:26 p.m., and did not resolve it until 8 a.m. the following morning.

February 14, Seaford Station

A significant winter storm was forecast for February 14, and unlike February 2, LIRR was on alert. Additional staff was on hand to assist with the expected disruptions to service, and office workers in LIRR’s Customer Assistance Program were available to inform and assist customers at the major stations.

At approximately 3:15 p.m., while the storm was located over Long Island, a LIPA power line came down across Seaford Station. Train #2743 struck the wire but sustained no damage to the equipment since power was immediately tripped-off when the wire came in contact with the
track. Based on later examination, LIPA concluded that the wire had likely been damaged by lightning during an earlier storm and came down during this new storm. Given the time of day and the location, ten trains were cancelled or delayed and service resumed approximately three hours later. LIRR staff and responders credit the involvement of senior management in arranging for LIPA to make repairing any downed wire a priority. Since a storm was forecast, it is also important to note that both the Railroad and LIPA were on alert and staffed to handle disruptions.

**February 20, Far Rockaway**

For a third time in a month, a LIPA power line fell across LIRR tracks, coming down on the Far Rockaway line at 11:15 p.m. Since it was late at night, only a few hundred customers were affected, and LIRR provided for these customers by using buses to shuttle around the site of the problem.

A LIRR transportation manager was called at his home to respond to the site. He stated that when he arrived, things were already progressing well. MTAPD officers were on the street level dealing with traffic issues and a LIPA foreman was already on site. He explained that this situation was different from that on February 2, because in this case, the lines came down across Sunrise Highway, railroad tracks, and a parking lot, and that LIPA realized that clearing these lines was a priority. LIPA was already present with a bucket truck, and cleared the line restoring power just after 2 a.m., well before the morning rush. LIPA was in the process of repairing sections of its infrastructure that were at risk and had just not gotten to this area prior to February 20. The maintenance issues in this area have now been resolved.

**LIPA’s RESPONSE AND ACTIONS TO DATE**

The February 2 and 20 incidents involved electrical transmission structures built by LIRR, and turned over to LIPA in 1972. These transmission lines have a less “robust” design than other LIPA transmission lines. The lines that have this older design run along LIRR tracks between the Nassau County border and the Babylon Station, the West Hempstead, Far Rockaway and Long Beach branches, as well as a short section of the Port Washington Line.

A LIPA executive stated that when power lines come down, it is usually due to weather conditions. Thus, the occurrence of two non-storm related incidents within one month was significant, and LIPA realized that its inspection protocols for the older equipment were inadequate. Specifically, LIPA’s transmission lines had been inspected annually using infrared technology that identifies weaknesses by sensing spots in the lines with increased heat. This type of inspection, which involved looking up at the wires, did not identify weaknesses in static lines or reveal problems only visible from above.

After the February incidents, a decision was made to inspect the entire system using a helicopter equipped with special photography equipment. This inspection revealed a number of problems including seven critical repairs and replacements that were carried out immediately. In addition, 140 less serious repairs and upgrades on the older sections were identified, and LIPA
reported that 95 percent of those repairs were complete by the end of 2007. Finally, LIPA identified an additional 100 less serious repairs spread throughout the rest of the system. LIPA’s crews are currently performing this work.

Emergency Action Plan Developed

LIPA and LIRR officials have met on a number of occasions to discuss the lessons-learned from the February incidents, and have drafted an Emergency Action Plan to correct previous shortcomings. Progressive levels were defined that categorize the seriousness of incidents so that both LIPA and LIRR can respond in an appropriate manner. For example, an emergency during rush hour and/or on a critical branch of the Railroad is considered top priority from the time the problem is first reported. The plan also includes protocols addressing communications, response supervision, appropriate equipment and staff needed to make timely repairs. The overall goal of the plan is to establish a joint incident command structure in order to minimize the length and severity of future service disruptions.

LIPA has agreed to immediately send a first and second level supervisor to an incident site when LIRR service is affected. This will allow one LIPA manager to coordinate the repairs and a second to act as a liaison with LIRR so that all information, including the timing of a repair and the necessary staffing required, will be shared in a timely fashion. In addition, LIPA has agreed to dispatch a line construction crew along with an emergency service crew when it is not clear from the damage description that the problem can be resolved by the emergency servicemen. These commitments, among others, are designed to minimize the future impact of downed power lines. LIPA and LIRR officials stated that the protocol was tested in September during a fire, and that both agencies agreed that the new plan worked well.

In general, it is the impression of LIRR managers that LIPA has been responsive and has demonstrated a willingness to make improvements to avoid problems in the future. LIPA states that it intends to continue performing more comprehensive inspections of its transmission lines located on LIRR property and the work described above represents a $3.3 million dollar capital investment on LIPA’s part. The bulk of LIPA’s investment, $2.5 million worth of repairs and equipment replacements, was completed in 2007. As to future capital investments, LIPA has indicated that its normal inspections and performance reviews will result in capital investments as needed.

FATALITIES ON THE RIGHT-OF-WAY
January 5 and March 2

Fatalities are, tragically, not uncommon occurrences along a railroad right-of-way. There were ten such tragedies in 2007 alone. Most fatalities are suicides but regardless of the cause, the challenge for the Railroad and MTAPD is to conduct the necessary investigation, provide for passengers who become stranded as a result, and return service to normal as soon as possible. On January 5, 2007, a tragic incident occurred in which a teenager was struck and killed by a LIRR train. The response to this incident was slow and was complicated by the weather.
conditions in the area. The incident and LIRR’s response attracted the attention of both public officials and the news media. OIG’s review of LIRR’s response identified many operational problems which occurred that day, as well as a number of areas for improvement in LIRR’s response protocols.

January 5, Rego Park

On Friday, January 5, at approximately 5:40 p.m., the engineer of train #1726 bound for Huntington Station sounded the whistle and applied the emergency brake after an individual suddenly appeared in front of his train. On this foggy night, a teenage boy painting graffiti along the right-of-way was struck and instantly killed.

The engineer radioed in to say he believed someone was just struck on the tracks. Power was shut down to the four Main Line tracks between Jamaica and Harold Interlocking, stopping all train movement both east and west. Over 6,500 passengers aboard six trains in this area were stranded when the trains came to a halt. Local responders arrived to investigate and secure the scene, and MTAPD arrived to conduct an investigation. Service was ultimately suspended for approximately four hours. Passengers on the incident train #1726 were eventually evacuated to another train, #1715, and taken all the way back to Penn Station, instead of reversing for a short distance and then proceeding to Jamaica Station. Other stranded passengers were eventually able to proceed east once power was restored.

What was Happening During the Onsite Response?

The initial response was delayed because responders were given inaccurate and vague information regarding the location of the incident. Responding parties were first told the incident occurred “west of Forest Hills.” Initially, the Assistant Train Dispatcher informed responders that the location was ‘just west of Forest Hills – west of the first overpass.” As he continued to describe the location, he reverted to the vaguer ‘just west of Forest Hills.’ Every responder interviewed first reported to the Forest Hills Station, climbed to the station platform, looked westward and saw nothing. They then traveled parallel to the Railroad tracks attempting to find the incident. This continued to occur even after responders located the accident site and radioed its location back to MTAPD Central.

The Incident Commander at the scene, a Deputy Inspector, was occupied with assisting the passengers and crew members aboard the incident train and was rarely, if at all, seen by other responding personnel at the site. Responders interviewed by OIG describe the scene as dark, foggy and chaotic. Local law enforcement and fire department personnel, relatives and news media quickly arrived at the site. In addition, the incident site was 100 yards long and police needed to examine the entire area while, at the same time, containing the crowds that had gathered. The chaotic nature of the site was compounded by the fact that the incident had occurred at the height of the rush hour.

In order to assist the MTAPD with incident command, and to provide the Movement Bureau with knowledge of what was occurring, a member of LIRR’s Transportation Department typically responds to incidents that disrupt service. On January 5, a LIRR Road Foreman stationed at the Jamaica Station Wheelhouse was notified shortly after 5:40 p.m. that a pedestrian was struck ‘just west of Forest Hills.’ Initially, LIRR management decided to send a Road
Foreman working at Penn Station who was to travel to the site by taking a regularly scheduled train in passenger service. This plan remained in place for 30 minutes until LIRR officials realized that the Penn Station Road Foreman could not get to the scene by scheduled train, since no trains were running – the power had been shut down on all tracks. At 6:10 p.m., the Road Foreman in Jamaica was finally dispatched by car, only to proceed erroneously to the Forest Hills Station. The Road Foreman finally arrived at the correct site 90 minutes after the incident occurred.

In responding to a fatality where the MTAPD has assumed control of the Incident, the responsibilities of a responding Transportation Department representative are to coordinate with the MTAPD Incident Commander to facilitate the resumption of service, and to advise him as to relevant train movements. A Transportation manager or another Transportation representative is responsible for facilitating the restoration of service, while the police official is focused on the investigation and crowd control at the site. Road Foremen may represent Transportation management at an incident site. They are also qualified to operate a train if the engineer is unable to do so, and to perform a download of the event recorder. Due to inexperience, the responding Road Foreman simply focused on his responsibilities for checking on the condition of the engineer and downloading the event recorder. He remained onboard the incident train with the engineer, never identifying himself to the Incident Commander nor working with him to address critical issues such as restoring power to the unaffected tracks.

As a result of the Road Foreman not arriving at the scene for 90 minutes and then remaining onboard the train, the Movement Bureau staff had to attempt to get information from the Incident Commander. The Movement Bureau wanted to restore power to some of the tracks or to pursue other alternatives to assist the stranded passengers. The Movement Bureau staff, however, wrongly assumed an MTAPD Sergeant was the Incident Commander and, when he could not provide authorization to restore power or discuss alternative plans, then became frustrated.

**What was Happening on the Stranded Trains?**

With power shut off, some trains became hot and stuffy. Crews contacted the Movement Bureau requesting permission to open the storm doors to allow air circulation in the cars. The bathrooms were not working, some passengers were intoxicated, and others expressed concern about having to take needed medication.

Interviews with train crews revealed that on January 5, as on February 2, information was difficult to obtain from the Movement Bureau. Train #2068 was repeatedly heard on transmissions requesting information and the train crew expressed concern that passengers would begin to self-evacuate. The conductor of train # 2868 could also be heard requesting updates but in most instances, Bridge personnel in the Movement Bureau provided no additional information.

The Evacuation of Incident Train #1726: Passengers aboard train #1726 were impacted by repeated communication mistakes. The conductor of incident train #1726, a railroad veteran, decided to share the duties of monitoring the radio with her brakeman. The brakeman overheard
from police that a “rescue train”\(^{10}\) could be sent from Penn Station. The conductor stated that it was only when she saw the evacuation train\(^{11}\) approaching the incident site that she knew this was, in fact, the plan. With no instructions from the Movement Bureau, the conductor directly contacted the crew of evacuation train #1715 to determine the actual evacuation plan. Fortunately, the evacuation went smoothly. The incident train conductor informed passengers that it was to be an orderly evacuation with each customer crossing one at a time to train #1715.

Passengers were advised that the train would travel west to a certain point and then proceed east. According to the evacuation train crew, once the passengers were transferred, the crew did not “walk the train” nor did it make further announcements about the travel plans. The crew acknowledged that they did not announce the change in plans when signals erroneously directed the rescue train back to Penn Station. When passengers began to realize that the train would not be returning east, many in the brakeman’s car became angry. The brakeman, on the job for approximately one month, retreated into his cab and remained there until arrival at Penn Station.

There also appears to have been a communication problem among the rescue train crew itself. The conductor, responsible for his crew, did not speak with his brakeman during the approximate 25 minute return to Penn Station. Although he had assigned another crew member to assist the brakeman, the conductor was unaware that this crew member had left the brakeman alone. With the brakeman confined to his cabin and the conductor electing to remain in the engineer’s cabin, there was no communication with passengers who were both confused and angry.

When passengers finally arrived at Penn Station, they quickly left the train and sought to take the next eastbound train to Huntington. LIRR personnel were unprepared to receive them. Police and LIRR management reported to the track only after learning that the train had arrived in the station. The next available train was scheduled to depart at 8:43 p.m. but already having passengers aboard, had no room for passengers from the incident train. A second train was quickly added and departed at 8:50 p.m. Both trains arrived in Huntington after 10 p.m., with passengers delayed for more than four hours. Most stranded passengers on trains that were not evacuated experienced the very same four hour delay.

**Ripple Effects Further Strain the System:** Once the police cleared the site, power was restored and trains were allowed to proceed. However train #2868, the third train behind incident train #1726, experienced mechanical problems. Through troubleshooting with the Movement Bureau, the train was able to proceed and arrived at Jamaica around 9:41 p.m., where a determination was made that the passengers needed to be switched to a new train. However, the replacement train at Jamaica was not ready and no transportation personnel were on site to assist with the transfer of passengers. As a result, while the engineer prepared the replacement train, the conductor and brakeman had to manage the transfer of passengers on their own. Additionally, they had to walk through train #2868 to ensure that all passengers had been removed. This added significantly to the already previously mentioned four-hour delay. The passengers’ plight did not end there as a decision was made to have the train proceed to Far Rockaway and to make

\(^{10}\) A “rescue train” is a distinct term used by LIRR which involves physically moving a stalled train with or without its customers onboard, using a locomotive or a second train.

\(^{11}\) An evacuation train allows for the safe transfer of passengers from a disabled train to an operable train. The evacuation train can be positioned at either end of the disabled train or along an adjacent track.
all local stops. This further infuriated passengers since its first stop is usually Valley Stream and none of the passengers would be getting off at the local stops of Locust Manor, Laurelton, or Rosedale. Train #2868 did not arrive in Far Rockaway until 10:20 p.m., approximately five hours over schedule.

When there is an evacuation of passengers from one train to another, LIRR has procedures that require personnel to be present to assist in the safe transfer of people from one train to the other. This standard is one that recognizes the need to assist passengers and can apply in the situation that occurred with #2868. However, at this point LIRR staff was overextended by responding to the fatality, dealing with the incident train and now there were the ripple effects in the system. Out of perceived necessity, the staff focused on the incident train and restoring the schedule, and did not monitor affected passengers all the way to their destinations.

Although train #2868 may have experienced the longest delay, its conductor received numerous commendations from passengers. In analyzing the actions taken by this conductor and comments made by his riders, there were actions he took which likely improved the situation on this train that night. The conductor reportedly:

- Walked through the train, “not hiding in his cabin;”
- Opened connecting doors to allow for ventilation;
- Kept riders informed of “what was…being done;”
- Allowed individuals to charge their cell phones so they could contact family and friends;
- Calmed riders down, informing them that exiting the train was dangerous;
- Periodically checked that passengers were “OK;”
- Approached riders “one-on-one in a professional and calm manner; and
- Prepared, on his own time, a verbal apology he delivered over the PA on the following business day to his evening rush hour passengers.

The conductor’s actions, along with his familiarity with the riders on this his regular run, provide insight into why his passengers, who experience the longest delay that night, remained calm.

What Was Happening in the Movement Bureau?

During the January 5 incident, the Movement Bureau was staffed at its normal capacity with Train Dispatchers, Chief Train Dispatcher (Chief), Assistant to the Chief Train Dispatcher, and the Supervisor of Train Movement. The Superintendent of P.M. Operations, the Customer Communications Coordinator, PA Console Operator and an MTA Police Officer were also present. Those working in the Movement Bureau that night stated that they were understaffed for the level of the disruption they faced, and tried to do what they could with the little information they received from the field.
Conditions in the Movement Bureau: Calls flowed in and out of the Movement Bureau continuously, regarding both the incident and the resulting service delays. There were, however, calls unrelated to the fatality or its aftermath which were also being attended to. As a result, the Bureau staff was forced to juggle the response to the incident with its normal train movement functions. Since there was no dedicated Incident Commander, all decisions were handled by the Supervisor of Train Movement and the Superintendent of P.M. Operations. There was no clear delineation of which individual should manage which functions. The effects were captured in the recorded call from the Penn Station Superintendent to the Movement Bureau. Following several attempts to obtain incident updates, the Superintendent finally reached the Assistant Chief Train Dispatcher who apologized for forgetting to let her know that power had been restored, information necessary for the resumption of service out of Penn Station. Personnel at the incident site, also called the Movement Bureau, would often deal with one individual and then be forced to wait while their questions were posed to the Supervisor of Train Movement or the Superintendent of PM Operations.

The Decision to Cut Power: LIRR’s Engineering System Operations Reference Manual governs removal of third rail power and provides guidelines on required steps by Movement Bureau personnel to ensure safety. Those guidelines state that instructions concerning specific tracks and areas of concern must be clearly understood by all persons involved before any action is taken. Additionally, the location specified for the removal of third rail power must be as specific as possible, indicating track number and any important physical characteristics of the area. Train dispatchers are instructed to ascertain the exact locations where it is necessary to remove power. OIG found that on January 5, the train dispatcher requested third rail power be removed on all four Main Line tracks from Kew Gardens to Forest Hills, believing this was the instruction given him by the Chief, his supervisor. When the train dispatcher later confirmed that power on all four tracks had been removed between these markers, the Chief said he had only wanted the power on Main Line One shut off. In their next phone conversation, the Chief expressed frustration that power was cut off only between Kew Gardens and Forest Hills, and extended the territory to include Main Line One from Harold Interlocking to Forest Hills. The MTAPD would eventually request that power be removed from all tracks.

Overall, the confusion over which tracks, and between which points, power should be shut off lasted sixteen minutes. During this lapse in time, the Movement Bureau was unable to confirm the removal of power to either the MTAPD or train conductor who requested this information. This had serious safety implications because during this time, emergency response personnel were arriving on the scene. Moreover, the manner in which power decisions were handled indicates that protocols were not followed as the person requesting the removal of power did not have a clear understanding of the proper location or track.

Location of Trains Unknown: Since the Movement Bureau is responsible for train movement, it relies on towers as well as a tracking system known as Time Monitoring and Control System Information (TIMACS) to establish train location. During normal operations, having a general idea of where trains are located is sufficient. During a service disruption, knowing the location of trains presents a challenge as there is no system in place to ascertain the exact location of trains. On January 5 when power was removed between Jamaica and Penn Stations, the

---

12 LIRR Power Department – October 2000 – Updated April 2002
Movement Bureau had to rely on Penn Station Central Command (PSCC) to assist in identifying train locations. The PSCC has an electronic board that displays trains and locations for those trains leaving and entering Penn Station. PSCC initially was able to provide train location information after the incident occurred. When power was restored on the unaffected tracks by the Movement Bureau, some of those trains were able to move and their locations changed. At this point, MTAPD was on the scene and requested that train movement be suspended. PSCC could no longer be reached and the Movement Bureau had no way to determine where trains were at this point. Three trains traveling on Main Line Four were stranded somewhere between the incident site and Woodside. By not having a clear location of these trains, the Movement Bureau was unable to reroute them and avoid having the passengers further inconvenienced.

**Decision to use Evacuation Train #1715:** As previously discussed, LIRR has written policies and procedures on the use of rescue and evacuation trains. Rescue trains assist in the movement of a disabled train to a location at which passengers can de-board. Evacuation trains, on the other hand, allow for the transfer of passengers from one train to another operable train. LIRR’s policies and procedures require that evacuation trains be readied within thirty minutes of initial notification of a disabled train. On January 5, evacuation trains were prepared within the required time by both Penn and Jamaica Stations. The Movement Bureau eventually decided to utilize the evacuation train at Jamaica Station, as it was closer to the site of the incident.

The decision to evacuate passengers on #1715 was made by Movement Bureau personnel without the benefit of full information. The Supervisor of Train Movement stated that he was frustrated with the lack of information he received from the Incident Commander. He stated he could not get information from the field and was forced to make decisions, such as utilizing the evacuation train, without necessary information from the site. For example, he was not made aware of how long the police investigation would take, or for how much longer the train crew and the passengers would be stranded. The Supervisor of Train Movement was communicating with an MTAPD Officer whom he mistakenly thought was the Incident Commander and, consequently, this officer was unable to answer the Supervisor’s questions. The MTAPD Officer was also unable to obtain the answers to the Supervisor’s question from the Incident Commander. As a result, the Movement Bureau never received the information needed.

Once the Movement Bureau made the decision to evacuate the incident train, the Movement Bureau found the path of the evacuation train #1715 blocked by another train which was stranded on Main Line Two. Train #1715 was forced to proceed east and reverse to Jamaica Station. This maneuver took an additional twenty minutes. It is clear that when power was de-energized, the Movement Bureau did not know that train #865 was on Main Line Two and as a result, there was no fall back plan. The train dispatcher attempted to work with Jay Tower to have this train moved once the situation became clear, but was unable to do so. There was also no one at the Power Director’s Office available to manually restore power on that section of track.

Ultimately, as discussed previously, passengers on train #1726 were evacuated in a safe and timely manner. Rescue boards were set up and personnel stood on each side of the train ensuring that passengers evacuated the train without any problems. Train #1715 left the site at 8:09 p.m.

---

13 The electronic board belongs to Amtrak and is shared with LIRR since they share track space.
Main Line One and Three were restored at 8:28 p.m. and trains #2068 and #2868 were cleared to travel at this point. The evacuation train left the incident site only nineteen minutes earlier than the stranded trains.

What Was Happening at Stations

Based on the 2006 Ridership data provided by LIRR, the OIG determined that on January 5, 72,000 passengers were affected by the disruption. Approximately 56,000 riders were affected directly by cancelled or delayed trains originating from Penn Station. Train service was suspended at Penn Station, and the station was shut down to alleviate crowding conditions. Passengers were eventually advised to take the subway to Jamaica where they could board eastbound trains. Those passengers electing to remain at Penn Station gathered in the waiting area or sat in empty trains.

At Jamaica Station, there were severe crowding conditions as passengers emerged from the subway as well as from trains traveling into Jamaica from Brooklyn. While the crowding increased, the escalators continued to operate, creating a serious safety hazard. One passenger described the scene as a “near riot.” LIRR Transportation did not have personnel on the platforms to assist passengers, but simply maintained the usual number of ushers making announcements over the PA system instructing passengers to seek alternative means of travel. Ushers stated that they are not provided with any information as to how to direct passengers, nor do they have any materials to assist passengers to find alternative means of transportation. Thus sometimes they use their own knowledge to advise passengers how to travel to various locations. As discussed previously, LIRR has issued an Alternative Travel Information brochure for passengers traveling through Penn Station. We learned that neither Flatbush Avenue nor Jamaica Station has a similar brochure for passengers to refer to in case of a disruption.

Jamaica Station was managed from the Wheelhouse where the Assistant Station Master, Lead Transportation Manager, Road Foreman, and Transportation Manager are located during rush hour. Personnel in the Wheelhouse rely on screens to view the platforms of Jamaica Station. During this incident, staffing in the Wheelhouse was reduced to the Assistant Station Master and Transportation Manager, as the Lead Transportation Manager and Road Foreman were dispatched to the incident site. As a result, there was no one available to manage the passenger influx into the station or onto the platforms.

Alternative Means of Travel: At Penn Station, announcements began at 5:48 p.m. indicating there had been an accident at Forest Hills, and instructing passengers not to descend to platforms until trains were actually posted. While confirmation that NYC Transit was accepting LIRR passes was secured by the Movement Bureau within three minutes of the accident, it is unclear when this information was conveyed to Penn Station. At 5:58 p.m., customers were advised to seek alternate means of transportation. Rush hour customers continued to enter Penn Station with no additional information. On at least one occasion, a LIRR agent incorrectly informed a rider that the entire system was shut down and that there was no service out of Jamaica or

---

14 Train #2868 left the site around 8:41 p.m. after experiencing mechanical problems.
15 LIRR informed OIG that it cannot control the escalators at Jamaica Station, which are operated by the New York/New Jersey Port Authority.
Flatbush Stations. Many customers remained in Penn Station awaiting additional instructions. At 6:17 p.m., the first announcement was made that LIRR tickets would be accepted at subways, “…Customers may take the 2 or 3 train downtown to Atlantic Avenue or the E train to Jamaica.” The first such announcement was not made to customers until 34 minutes after NYC Transit agreed to honor LIRR tickets. Subsequently, LIRR Public Affairs received numerous complaints from passengers who remained at Penn Station believing that service was not available at the other hubs. Passengers were never advised that they could take the #7 subway to Woodside and then take the Port Washington branch to Flushing Main Street, Great Neck, or Port Washington where they could either be picked up or transfer to Long Island Bus.

Ideally, if there were someone advocating for passengers and enough staff to evaluate options, perhaps creative alternatives for travel could be identified. For example, on January 5, perhaps the Lower Montauk track, which uses diesel service, could have been used to shuttle passengers between Penn and Jamaica Stations, thereby avoiding the affected tracks.

March 2, Bethpage

At 5:10 p.m. a young woman was struck by an eastbound train arriving at Bethpage Station. Since the train was partially platformed at the time, passengers were able to walk through the front cars and exit onto the platform. MTAPD responded within twenty minutes and was able to conduct the investigation from the side of the tracks, allowing service to resume just over an hour later at 6:18 p.m.

Service was able to be resumed more quickly after this incident for a number of reasons. The incident occurred at a station where first responders were able to locate the victim immediately. Since the incident train was partially platformed, passengers were asked to evacuate through the train and out to the platform. Train service was also still running on neighboring track since power was not shut off. An experienced MTAPD Officer was quickly on site and assumed the role of Incident Commander. Other senior LIRR personnel also responded quickly, and there was clear communication across disciplines. The decision was later made to keep the incident train in service and allow passengers back on the train to continue east.

CONCLUSION OF OIG REVIEW

Three of the incidents in our review did not cause major service disruptions, either because they did not affect a critical portion of the system or because they occurred outside of the AM/PM rush. LIRR handled these incidents without significant problems. The other two events, that of a downed LIPA power wire on February 2, 2007 and a fatality on January 5, 2007, caused major delays. These two events showed the limitations of LIRR’s ability to respond to sudden large scale disruptions during a rush period.

In the winter of 2007, the two largest disruptions did not happen in isolation; instead multiple problems were occurring simultaneously throughout the Railroad, each demanding attention from Transportation management and MTAPD. While each of the two events presented its own unique circumstances, there were problems regarding the maintenance of LIPA’s infrastructure, the communication flow between LIRR personnel, customers and LIPA, and inadequate resources to cope with major disruptions during the evening rush.
LIPA Maintenance and Response Problematic

On three occasions in February 2007, electrical wires owned by LIPA came down alongside or across LIRR tracks and disrupted service. According to LIPA officials, two of the three service disruptions resulted from deterioration that LIPA’s routine maintenance did not identify along certain sections of LIRR’s Right-of-way. LIPA stated that because this problem had not previously been experienced it was unaware of the extent to which these sections had degenerated. The third wire incident was likely caused by lightning. LIPA acknowledged its responsibility and conducted a full inspection of the affected equipment. All high risk sections were inspected by June 2007, with additional repairs, replacements and inspections continuing on an accelerated schedule.

Valuable response time was lost on February 2 when LIPA, failing to recognize the potential significance of the event, did not dispatch repair crews and equipment immediately to the site. LIRR personnel responded quickly and in force but had to wait for information from LIPA before initiating a response plan. LIRR and LIPA have since developed and implemented an emergency action plan to address such events in the future. The plan provides for improved communication in the field and should accelerate LIPA’s response and the Railroad’s consequent ability to restore service. Improved response by LIPA and improved communication between the two entities were already apparent in the second and third incidents in February 2007.

Communication can be Improved

Communications problems also impeded the effectiveness of LIRR’s response to the major service disruptions reviewed by the OIG. The Railroad utilizes various methods to communicate with its riders but problems arose with those means on January 5 and February 2. Critical e-mail notices alerting customers to problems failed to reach passengers. Announcements in stations and trains were made, but since they originated from different sources, they were, at times, inconsistent. Radios used for tower and/or crew communications failed, or were not used in a timely fashion, to disseminate instructions and update train crews. During interviews with train crews who were stranded between stations, some pointed out that they had less information about the disruptions than passengers who could access public news reports on the internet through a BlackBerry or similar device.

The lack of timely and useful information also hampered passengers’ ability to make alternative travel arrangements once they arrived at stations. Customer feedback, collected by the Public Affairs Department, revealed that most customer comments related to inadequate information about the expected duration of the incident, and what alternative means of travel were available.

During normal operations, the LIRR appears able to manage the internal communication needs required to deal with the situation. However, during a sudden, large scale disruption, such is not the case. Additional personnel are needed during these disruptions to deal with the increase in call volume in order to minimize distractions to employees involved in decision-making. Train crews, which represent the face of LIRR to customers, need timely information during these incidents. Other LIRR employees who also interact directly with customers, such as Public
Affairs and stations personnel, must be given comprehensive, timely and consistent information. Communication during a service disruption needs to be clear and to emanate from one central source.

The Movement Bureau Needs More Support

During the normal work day, the Movement Bureau is responsible for train movement, but after hours this group assumes a wider range of operational responsibilities. The Movement Bureau is staffed at a level sufficient to handle routine service needs as well as those smaller incidents that arise daily. When there is an anticipated disruption (such as a forecasted storm) the usual level of staffing in the Movement Bureau is supplemented by additional managers and staff who can assist with the increased workload. A separate command structure may also be put in place for major disruptions.

On the two nights in question, the incidents occurred without warning and had a major impact on service. By the time these incidents occurred, most managers had already left for the day. Most office workers, who are trained to assist with passenger needs at stations, were also on their way home at that time. During the January 5 and February 2 service disruptions, the LIRR Movement Bureau staff was responsible for managing the incidents, communicating with stations and train personnel and providing alternative travel options, while still performing its normal day-to-day tasks for the areas that were unaffected. There were simply not enough people available to manage a major service disruption efficiently.

The demands placed on the Movement Bureau during a major disruption are significant. Train crew members stated they often could not get through to Movement Bureau staff on January 5. Recorded transmissions indicate that staff was busy responding to telephone and radio requests. Normal inquiries such as train connections, trouble-shooting requests for mechanical difficulties or work hour questions from staff that are customary during normal operating schedules, compete with crisis-related inquiries for the attention of Movement Bureau personnel.

During these major service disruptions, we noted that the phones were answered by a variety of people, resulting in disjointed sharing of information. Based on our review of the tapes and interviews, information sharing between staff in the Movement Bureau also seemed ad hoc. Key information was often just “overheard” when listening to the conversations of other parties or to someone on the phone. As a result, it becomes difficult for train crews and other staff directly involved with the incident to obtain substantive and complete information. On January 5 and February 2, this meant that vital information did not always reach passengers in an accurate and coherent manner. The Movement Bureau is designed (both in staffing and layout) to handle routine train movement work and does not appear equipped to serve as a command center for large scale emergencies.

After a blizzard in February 2006, LIRR conducted a “lessons-learned” process which resulted in a report analyzing how well the Railroad managed that storm, and argued for the establishment of an “Operations Center.” Specifically, the report stated:
The establishment of command and control protocols…must form a structure that forms the “Operations Center,” which at this time does not exist, into an integrated function during emergencies…. All train movement information, snow fighting information, customer information, and storm data should channel through the command structure at this location.

The report further recommended additional staffing in the Movement Bureau to address the overwhelming workload and the extended nature of weather related disruptions.

We are unable to keep up with the high volume of communication and the need to instantly coordinate and convey information…. Not being able to keep up with the flow of information adversely impact customer communication, assessments, and responses….

These observations are consistent with OIG’s conclusions regarding the large scale disruptions covered by our review. Although employees worked diligently to provide an effective response to the two major events, the Movement Bureau and other response systems were overwhelmed. A defined structure and clearly delineated responsibilities would improve the ability of site responders to coordinate with the Movement Bureau to resolve problems, identify options, and estimate the time needed to complete any investigation and restore service. Additional support to the Movement Bureau during the PM rush, or additional staff on call if major disruptions occur, would assist with the high volume of calls as well as other communication needs.

**Customer Advocate Needed in the Movement Bureau**

LIRR’s response to the emergencies which took place on January 5 and February 2, 2007 suggests that customers would benefit if the Railroad were to make passenger needs a primary focus of its emergency response protocols. Decisions made during service disruptions are primarily directed at getting trains moving and back on schedule. Obviously these goals are fundamental and are directly related to assisting passengers. However, they do not address all passenger needs. Making passenger advocacy a focus of the Railroad’s incident response should include addressing passenger needs even after service resumes. LIRR should consider new protocols allowing trains between stations to reach a station before shutting off power – the protocol followed by NYC Transit’s subway system. Such a protocol would often cause fewer passengers to be stranded. Moreover, assisting passengers to make alternative plans during major service disruptions is also a fundamental element of an effective emergency plan. A review of customer satisfaction forms for the events reviewed, as well as interviews of ushers, announcers, and train crews, demonstrated that LIRR needs to make significant improvements in this area.
PART III

DOCUMENTS OF ACTION
EXHIBIT A: LIPA PowerPoint Presentation to LIRR on Status of Repairs as of February 11, 2007

Page 1 of 6
## Packages Complete

<table>
<thead>
<tr>
<th>Work Pkg</th>
<th>Work Location</th>
<th>Type of Work</th>
<th>Division</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Work Performed By</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rosedale - Valley Stream</td>
<td>Crossarms, Static and Pole</td>
<td>1</td>
<td>06/18/07</td>
<td>08/17/07</td>
<td>Contractor</td>
<td>Complete</td>
</tr>
<tr>
<td>3</td>
<td>Valley Stream - Cedarhurst</td>
<td>Crossarms, Hardware and Pole</td>
<td>1</td>
<td>07/27/07</td>
<td>09/28/07</td>
<td>Contractor</td>
<td>Complete</td>
</tr>
<tr>
<td>4</td>
<td>Lynbrook - Rockville Centre</td>
<td>Crossarms and Hardware</td>
<td>1</td>
<td>11/19/07</td>
<td>11/30/07</td>
<td>Contractor</td>
<td>Complete</td>
</tr>
<tr>
<td>5</td>
<td>Lynbrook - Rockville Centre</td>
<td>Crossarms and Hardware</td>
<td>1</td>
<td>11/12/07</td>
<td>11/16/07</td>
<td>Contractor</td>
<td>Complete</td>
</tr>
<tr>
<td>13</td>
<td>North Bellport - SW# 554</td>
<td>Crossarms and Poles</td>
<td>4</td>
<td>10/22/07</td>
<td>12/21/07</td>
<td>EDC</td>
<td>Complete</td>
</tr>
<tr>
<td>16</td>
<td>Orchard - Locust Valley</td>
<td>Wire on Arm</td>
<td>2</td>
<td>---</td>
<td>---</td>
<td>EDC</td>
<td>Complete</td>
</tr>
<tr>
<td>25</td>
<td>Eastport - SW# 545</td>
<td>Crossarm</td>
<td>4</td>
<td>12/05/07</td>
<td>12/14/07</td>
<td>EDC</td>
<td>Complete</td>
</tr>
<tr>
<td>26</td>
<td>West Yaphank - William Floyd Southold 13kV Distribution Crossing</td>
<td>Hardware and Poles</td>
<td>4</td>
<td>11/12/07</td>
<td>12/14/07</td>
<td>EDC</td>
<td>Complete</td>
</tr>
</tbody>
</table>

**EXHIBIT A, Continued**

**Page 3 of 6**
### 1st & 2 Quarter Packages

<table>
<thead>
<tr>
<th>Work Pkg</th>
<th>Work Location</th>
<th>Type of Work</th>
<th>Division</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Work Performed By</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Bellmore - Sterling</td>
<td>Crossarms and Hardware</td>
<td>2</td>
<td>12/03/07</td>
<td>01/31/08</td>
<td>Contractor</td>
<td>67% Complete. Hawkeye left L1 for storm assist and clearance issues. Carryover value is $50k</td>
</tr>
<tr>
<td>14</td>
<td>Great Neck - Port Washington</td>
<td>Crossarms, Hardware, Poles and Tree Trim</td>
<td>2</td>
<td>11/12/07</td>
<td>02/29/08</td>
<td>EDC</td>
<td>25% Complete. Need LIRR to set 3 poles. Carryover value is $250k</td>
</tr>
<tr>
<td>2</td>
<td>Valley Stream - Cedarhurst</td>
<td>Crossarms, Hardware and Pole</td>
<td>1</td>
<td>07/16/07</td>
<td>03/31/08</td>
<td>EDC</td>
<td>85% Complete. Clearance needed for 2 poles. Far Rockaway has to be on line for clearance. Weather has to be warm to run Far Rockaway. Carryover value is $50k</td>
</tr>
<tr>
<td>6</td>
<td>Rockville Centre - Bellmore</td>
<td>Crossarms and Hardware</td>
<td>1</td>
<td>06/09/08</td>
<td>06/11/08</td>
<td>Contractor</td>
<td>Reviewed by EDC</td>
</tr>
<tr>
<td>7</td>
<td>Rockville Centre - Bellmore</td>
<td>Crossarms and Hardware</td>
<td>1</td>
<td>06/12/08</td>
<td>06/16/08</td>
<td>Contractor</td>
<td>Reviewed by EDC</td>
</tr>
<tr>
<td>15</td>
<td>Glen Head - Orchard</td>
<td>Pole</td>
<td>2</td>
<td>06/23/08</td>
<td>06/30/08</td>
<td>EDC</td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT A, Continued**

**Page 4 of 6**
<table>
<thead>
<tr>
<th>Work Package</th>
<th>Work Location</th>
<th>Type of Work</th>
<th>Division</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Work Performed By</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Valley Stream - Oil City</td>
<td>Crossarms, Hardware and Pole</td>
<td>1</td>
<td>07/17/08</td>
<td>07/30/08</td>
<td>EDC</td>
<td>Reviewed by EDC</td>
</tr>
<tr>
<td>9</td>
<td>Bellrose - Floral Park</td>
<td>Crossarms, Hardware and Poles</td>
<td>1</td>
<td>07/28/08</td>
<td>09/05/08</td>
<td>EDC</td>
<td>Reviewed by EDC</td>
</tr>
<tr>
<td>21</td>
<td>Syosset - Locust Grove</td>
<td>Hardware</td>
<td>2</td>
<td>09/15/08</td>
<td>09/17/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Barret - Island Park</td>
<td>Hardware</td>
<td>1</td>
<td>09/08/08</td>
<td>09/18/08</td>
<td>EDC</td>
<td>Reviewed by EDC</td>
</tr>
<tr>
<td>20</td>
<td>Newbridge Road - Locust Grove</td>
<td>Hardware</td>
<td>2</td>
<td>09/17/08</td>
<td>09/19/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Valley Stream - Oil City</td>
<td>Hardware</td>
<td>1</td>
<td>09/19/08</td>
<td>09/23/08</td>
<td>EDC</td>
<td>Reviewed by EDC</td>
</tr>
<tr>
<td>18</td>
<td>Glenwood - New Cassel</td>
<td>Crossarms, Hardware and Poles</td>
<td>2</td>
<td>09/08/08</td>
<td>09/26/08</td>
<td>EDC</td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT A, Continued**

Page 5 of 6
# 4th Quarter Packages

<table>
<thead>
<tr>
<th>Work Pkg</th>
<th>Work Location</th>
<th>Type of Work</th>
<th>Division</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Work Performed By</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Stewart Manor - SW# 536/537</td>
<td>Crossarm and Poles</td>
<td>1</td>
<td>09/24/08</td>
<td>10/07/08</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Sterling - Lindenhurst</td>
<td>Hardware and Pole</td>
<td>2 &amp; 3</td>
<td>09/30/08</td>
<td>10/08/08</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Syosset - New South Road</td>
<td>Poles</td>
<td>2</td>
<td>09/22/08</td>
<td>10/10/08</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Bayport - Great River Watson - Sayville</td>
<td>Crossarms and Pole</td>
<td>3</td>
<td>10/13/08</td>
<td>10/17/08</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Sperry - Herricks &amp; New Hyde Park LIRR</td>
<td>Poles</td>
<td>1</td>
<td>10/08/08</td>
<td>10/23/08</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>West Hempstead - Lakeview West Hempstead - Malverne</td>
<td>Hardware and Pole</td>
<td>1</td>
<td>10/27/08</td>
<td>10/29/08</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Stony Brook - Port Jefferson</td>
<td>Pole</td>
<td>4</td>
<td>09/15/08</td>
<td>10/31/08</td>
<td>EDC</td>
<td>Job on Hold - ED&amp;C needs for Transmission Eng. To decide on additional work.</td>
</tr>
</tbody>
</table>

*EXHIBIT A, Continued*

*Page 6 of 6*
MEMORANDUM OF UNDERSTANDING
EMERGENCY ACTION PLAN
LIPA INCIDENTS ALONG LIRR RIGHT OF WAY

This Memorandum of Understanding ("MOU") is between The Long Island Rail Road Company ("LIRR"), a New York State public benefit corporation with its principal office at Jamaica Station, Jamaica, New York 11435, and the Long Island Power Authority ("LIPA"), a New York State public authority with its principal office at 333 Earle Ovington Boulevard, Uniondale, New York 11553 (LIRR and LIPA being hereinafter referred to collectively as the "Parties," unless otherwise noted).

WITNESSETH

WHEREAS, LIRR operates a commuter rail system in the City of New York and Nassau and Suffolk Counties that transports over 86 million people annually, many of whom reside or do business in such Counties; and

WHEREAS, LIPA owns and operates an electric transmission and distribution system that serves over 1 million people in Nassau and Suffolk Counties and a portion of Queens County known as the Rockaways; and

WHEREAS, the LIRR Right of Way is used by LIPA to host its electrical facilities used for both the transmission and distribution of power throughout Nassau and Suffolk Counties and the Rockaways in Queens County;

WHEREAS, LIPA power lines which range in voltage from 13kv to 138kv are supported by steel towers and/or wood poles located on the LIRR Right of Way and LIRR 2200 volt signal power lines are generally located on said support structures;

WHEREAS, a failure with any of these lines and/or supporting structures has the ability to affect LIRR train service and the delivery of electric service to LIPA customers;

WHEREAS, the parties desire to avoid and/or minimize service disruptions in an expeditious and safe manner;

WHEREAS, the purpose of this Memorandum of Understanding is to formalize an Emergency Action Plan developed by the Parties, which establishes specific procedures to address emergency incidents involving LIPA facilities along the LIRR Right of Way that either affect train movements or have the ability to affect train movements;

NOW THEREFORE, in consideration of the benefits accruing to each of the Parties as recited herein and as set forth in the Emergency Action Plan annexed hereto as Exhibit "A" and made a part hereof (the "Plan"), the parties do mutually agree as follows:

1. The Parties hereby adopt and agree to abide by the terms of the Plan;
2. The Plan shall be effective on the date this MOU has been fully executed
by the Parties.

3. The MOU or the Plan may only be amended or modified by written instrument signed
by both of the Parties hereto.

4. Any notices hereunder or under the Plan which are required to be in writing
shall be addressed as follows: if to the LIRR, to Long Island Rail Road Company, Hillside
Facility, 93-59 183rd Street, Hollis, NY 11423, Attention: Chief Engineer, with a copy to Long
Island Rail Road Company, Jamaica Station, Jamaica, NY 11435, Attention: Mark D. Hoffer,
General Counsel; if to LIPA, to the Office of General Counsel, with a copy to Michael Hervey,
Vice President - Operations. Either Party may change its address for notices by giving written
notice of the change to the other Party.

5. This MOU and the Plan may be terminated by either Party upon one hundred twenty
(120) days’ written notice to the other party. In the event of any such termination, the Parties
agree to negotiate in good faith towards reaching agreement on a successor emergency action plan
governing their coordinated response to emergency incidents of the types covered by the Plan.

IN WITNESS WHEREOF, the Parties have caused this Memorandum of Understanding
to be executed by their duly authorized representatives on the dates written below.

THE LONG ISLAND RAIL ROAD COMPANY

By: [Signature]
Title: [President]
Date: 2/13/08

Attest: [Signature]
[VP, General Counsel]

LONG ISLAND POWER AUTHORITY

By: [Signature]
Title: [ ]
Date: [ ]

Attest: [ ]
EXHIBIT A

EMERGENCY ACTION PLAN
LIPA INCIDENTS ALONG LIRR RIGHT OF WAY

I. Purpose:

The purpose of this Emergency Action Plan ("Plan") is to establish procedures for addressing emergency incidents involving Long Island Power Authority ("LIPA") facilities along the MTA Long Island Rail Road ("LIRR") Right of Way ("ROW") that either affect train movement or have the ability to affect train movement. The Plan has been developed to ensure that coordinated and organized actions will be taken to protect all persons and property, including the public, emergency responders, and LIPA and LIRR personnel. The immediate goal of the plan is to minimize LIRR service disruptions by expediting the safe and timely removal of obstructions; and, where service is suspended, expedite the safe restoration of both train service and the integrity of the LIPA electric system.

II. Scope:

These procedures were developed by LIPA and LIRR and shall be used in the event of a service disruption or potential service disruption of LIRR service or to LIPA electric customers attributed to a LIPA incident, including but not limited to a broken pole or a downed wire on or near the LIRR ROW.

III. Overview:

The LIRR ROW is used by LIPA to host its electrical facilities used for both the transmission and distribution of power throughout Nassau and Suffolk Counties and parts of Queens County. The typical voltage ranges of these lines vary between 13kv and 138kv and are supported by steel towers and/or wood poles. LIRR 2200-volt signal power lines are generally located on these same supporting structures. A failure with any of these lines and/or supporting structures has the ability to affect LIRR service and the delivery of electric service to LIPA customers. The intent of the Plan is to avoid and/or minimize these disruptions in an expeditious and safe manner.
IV. Components of Emergency Action Plan:

A. Creation of a “Unified Command Structure”;
B. Determination of the level of Emergency Operational Incident (hereinafter defined);
C. Notification and callout procedures;
D. Dissemination of vital information;
E. Determination of time estimate to clear LIRR tracks and restore LIPA facilities;
F. Development of repair plan and making temporary/permanent repairs; and
G. Lessons learned review.

A. Unified Command Structure:

1. “Unified Command” is an application of the incident command system used when an incident involves the jurisdiction of more than one (1) agency. Representatives from each agency with jurisdiction over the incident will work together at a single incident command post to establish and carry out a common set of objectives and strategies and a single site-specific incident action plan.

2. The goals of the Unified Command are to:

   A. Prioritize incident objectives;
   B. Identify agency-specific responsibilities for incident mitigation;
   C. Manage the incident under a single unified approach;
   D. Coordinate inter-agency communications at all levels
   E. Share vital information among agencies;
   F. Define and coordinate incident objectives for each agency;
   G. Understand resources availability and capabilities of each agency;
   H. Recognize limitations of each agency; and
   I. Develop a single site-specific incident action plan.

B. Emergency Operational Incident:

An “Emergency Operational Incident” is defined as one that is either affecting train movement or has the potential to affect train movement along the LIRR ROW. The severity of such an incident shall be classified in the following manner, in order of most serious to least serious:
Level 1: LIRR service on a branch is completely suspended or restricted just prior to or during LIRR peak period or a train is stranded between stations regardless of time of day.

Level 2: LIRR service is suspended or restricted on a branch during a non-peak period without trains stranded between stations.

Level 3: No impact to LIRR service is expected.

C. **Notifications and Call Out of Personnel:**

1. **LIRR Responsibilities:**

   A. LIRR System Operations Office shall first report the situation to the LIPA Electric Power System Control Room. The LIRR Systems Operating Office shall classify the Emergency Operational Incident and will also provide this information to LIPA when reporting the incident.

   B. LIRR System Operations Office shall notify the LIRR Movement Bureau, Chief Engineer, Assistant Chief Engineer Power, Principal Engineer Power and Engineer ET of the Emergency Operational Incident. In addition, during off hours, an LIRR High Tension crew shall be called out. The appropriate LIRR Power Department management representative shall respond immediately to the incident site.

   C. LIRR Movement Bureau shall notify the LIRR Transportation Manager on duty who shall either immediately respond to the incident site or assign another Transportation Manager to respond to the incident site. The on-site Transportation Manager shall be designated the Incident Commander for incidents where the Police or Fire Department have not assumed this role. The LIRR Movement Bureau will also notify appropriate Transportation Management and MTA Police of a Level 1-3 Emergency Operational Incident. The LIRR Sr. Vice President - Operations and Chief Transportation Officer will be notified only of Level 1-2 Emergency Operational Incidents.

   D. Additional LIPA management representation shall respond and shall be requested through the LIRR Systems Operations Office, when deemed necessary by the LIRR Power Department Manager at the incident site.
E. The Public Affairs Department, or the equivalent, in each agency will communicate with each other and coordinate efforts prior to releasing public press releases regarding the incident.

2. **LIPA Responsibilities:**

   A. If LIPA becomes aware of the incident first, they shall notify LIRR Systems Operational Office. LIPA shall then follow the internal procedures as outlined below.

   B. Upon being notified or after giving notice to the LIRR Systems Operations Office of the occurrence of an Emergency Operational Incident, District Operators in the LIPA Electric Power System Control Room shall immediately request an emergency serviceman to be dispatched to the site for Level 1, 2 or 3 Emergency Operational Incidents. The District Operator(s) shall mobilize any additional resources necessary to address an emergency operational incident based on the information provided by the LIRR Systems Operations Office. For example, if it is not clear from the damage description that the problem can be resolved by a serviceman, a line construction crew would be "called out" concurrently with the dispatch of the emergency serviceman. The purpose for these actions is to provide appropriate personnel to the incident location in the fastest time possible to determine the equipment that will be needed to resolve the situation and to affect repairs.

   C. Upon being notified by or after giving notice to the LIRR Systems Operation Office of the occurrence of an Emergency Operational Incident, the LIPA District Operator(s) shall make appropriate notifications throughout their organizations including, but not limited to, notifying the Director of Electric Design & Construction and the Manager of Electric Power Supply of the occurrence of a Level 1, 2 or 3 Emergency Operational Incident. In addition, Level 1 Emergency Operational Incidents require notification of the LIPA Vice President of Operations and the LIPA Vice Presidents of Transmission and Distribution. Moreover, Level 1 Emergency Operational Incidents require first and second level supervisors be sent as soon as possible to the incident site to coordinate repairs and become part of the incident command structure. Level 1 Incidents, depending upon the circumstances, may also require a more extensive LIPA incident response. Additional LIPA management representation shall respond and shall be requested through the LIRR Systems Operations Office, when deemed necessary by the LIRR Power Department Manager at the incident site.
D. The Public Affairs Department, or the equivalent, in each organization will communicate with each other and coordinate efforts prior to releasing press releases regarding the incident.

**D. Dissemination of Vital Information:**

1. At the time of initial notification, the following information shall be provided to the LIPA/National Grid District Operator:
   
   A. Location of the incident;
   B. Detailed description of the incident;
   C. Whether trees are involved and their approximate size;
   D. Identification of all LIPA/LIRR wires or facilities affected;
   E. Identification of circuits involved (transmission or distribution);
   F. Equipment needed to access incident location (i.e., bucket truck); and
   G. Location of the incident Unified Command post

2. After initial notification, as new information is obtained, the new information shall be provided to the LIPA District Operator up until the time the incident Unified Command Structure has been established.

Note: The arrival of extended reach line trucks or other equipment at an incident location can often be delayed due to traffic or adverse weather conditions. When necessary, LIPA will reach out to local authorities and/or local police to facilitate clearing of roads or providing escorts to expedite equipment delivery to the site of a downed wire or damaged LIPA facility during Level 1 Incidents. The LIRR shall also, at the request of LIPA, ask for MTA Police assistance to expedite equipment delivery or to provide escorts for equipment.

**E. Determination of Time to Clear LIRR facilities:**

LIPA supervisor(s) responding to an incident location shall communicate with the LIPA District Operator(s) regarding the extent of the damage and the equipment needed to clear LIRR facilities. The LIPA supervisors responding to the site will often need to arrange for special equipment to affect repairs and/or arrange for line clearances to assure the safety of personnel working on the lines. The transportation of special equipment and the issuance of line clearances are not directly under the field supervisor’s control, therefore, all estimates for the time to clear facilities are to be given by the LIPA Electric Power System Control Room District Operator or the LIPA Senior System Operator who will have the information needed to determine the most reliable
time estimate to clear LIRR facilities. The LIPA supervisor working with the incident Unified Command Structure will provide this information, including updates, as soon as available.

F. Development of Repair Plan and Making Temporary / Permanent Repairs:

Incident priorities are determined by the Incident Commander. The first priority of any Emergency Operational Incident along the LIRR ROW is the safety of the public and LIPA/LIRR personnel. In addition, the highest priority shall be given to the safe restoration of LIRR train service and maintaining the integrity of the LIPA electric system. This may require the removal of a downed line across LIRR tracks in which no repairs or temporary repairs are made. While these actions make the LIPA and LIRR facilities safe and allow the expedited restoration of train service, permanent repairs shall be made as quickly as possible. When these situations occur, LIPA and LIRR personnel shall work together to expedite the line clearance for LIPA facilities and any attendant LIRR track outages or flagging support that may be necessary to support the safe and timely completion of permanent repairs to LIPA facilities.

G. Lessons Learned Review:

1. Within seven (7) days of the conclusion of any Level 1-2 Emergency Operational Incident, the Incident Commander shall convene a joint lessons learned review which will determine which procedures worked and which procedures need modification.

2. Joint reports shall be submitted to the LIRR Sr. Vice President – Operations and to the senior operations officials designated by LIPA, detailing the handling of a Level 1-2 Emergency Operational Incident and any recommendations for changes developed during the lessons learned review.
EXHIBIT C
LIRR Superintendent Train Movement Notice 20-07

DATE: December 7, 2007
TO: All Train Movement Personnel
FROM: George R. Farrell, Superintendent – Train Movement
SUBJECT: Incident Command

Superintendent-Train Movement Notice 20-07 supersedes Superintendent-Train Movement Notice 19-06 dated September 1, 2006. Employees maintaining copies of Superintendent-Train Movement Notices must write on Notice 19-06 “Superseded by STM Notice 20-07.”

Incident Command is needed for any incident, which is not of short duration and could have an effect on safety, on-time performance and/or the movement of trains.

The first manager to arrive at the incident will be the Rail Road Employee in Charge. The Movement Bureau will page out the name of the Rail Road Employee in Charge. If another manager arrives at the scene and it is determined that manager should be Rail Road Employee in Charge, the Movement Bureau will page out the name of the new Rail Road Employee in Charge. If it is determined that another agency (i.e. MTA Police and/or fire personnel) will be the Incident Commander, the Rail Road Employee in Charge will be the liaison between such agencies, other railroad employees at the scene and the Movement Bureau.

The Rail Road Employee in Charge will establish a centralized location near the scene to oversee and coordinate the forces necessary to correct, control and/or oversee the incident. This location will be called the Forward Command Post. The Rail Road Employee in Charge will remain at the Forward Command Post and work with any other responding agencies. The Rail Road Employee in Charge will give frequent updates to the Movement Bureau as to the progress of the incident. The Rail Road Employee in Charge will review all relevant protocols with the Senior Manager in the Movement Bureau and be governed by those instructions. All information being disseminated from the scene should go through the Rail Road Employee in Charge.

Thank you for your cooperation. Any questions should be directed to a Supervisor-Train Movement at ext. 7501.
## EXHIBIT D

### Long Island Rail Road

**OPERATIONS INCIDENT MANAGEMENT CHECKLIST**

**DRAFT**

**DISABLED AND STANDING TRAINS**

<table>
<thead>
<tr>
<th>Incident Overview</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Block Established</td>
<td>- Senior Management</td>
</tr>
<tr>
<td>- Third Rail Power De-Energized</td>
<td>- MTA PD</td>
</tr>
<tr>
<td>- Consist Type:</td>
<td>- MofE</td>
</tr>
<tr>
<td>- DC Link Discharge</td>
<td>- MofE Mobile Units Enroute</td>
</tr>
<tr>
<td>- Number of Cars in Consist:</td>
<td>- Engineering</td>
</tr>
<tr>
<td>- Disabled and Standing Trains White Board Enabled</td>
<td>- GO Teams</td>
</tr>
<tr>
<td>- TIMACS / Hold Times</td>
<td>- NYC Transit Authority</td>
</tr>
<tr>
<td>- Diversion Plans</td>
<td>- Notification Sheet Completed</td>
</tr>
<tr>
<td>- Rule 262 / Returning a Train(s)</td>
<td>- Outside Agencies Involved</td>
</tr>
</tbody>
</table>

**Incident Command**

- Manager on Scene:
- Time on Scene:
- Incident Commander:
- Incident Command Location:
- MVB Operations Chief

**Customer**

- On-board Announcements
- PA Announcements
- Terminal Announcements
- AVPS System
- Public Affairs / eMail System
- Updated Announcements
- Special Customer Needs
- Disabled Customers
- On-Board Conditions
- Weather Conditions
- Buses

---

[Guidelines: Appendix B, STM 35-06 (Time Trigger Guidelines), STM 04-07 (TIMACS Inserts)]

---

[Guidelines: STM 19-06 (Incident Command)]
DATE: December 7, 2007

TO: All Movement Bureau Personnel

FROM: George R. Farrell, Superintendent-Train Movement

SUBJECT: Communication Procedures with Non-Platformed Standing Trains

Due to recent events that have led customers to self-evacuate from standing trains, the following procedures must be complied with when communicating with train crewmembers on trains that are unable to platform and allow their customers to detrain:

- The highest-ranking official in the Movement Bureau will assign a Movement Bureau employee to contact each standing train via radio and instruct a crewmember to call the Movement Bureau on the telephone. The assigned Movement Bureau employee will be known as the Customer Advocate.

- When the crewmember from the standing train calls the Movement Bureau, the Customer Advocate will ask for the crewmember’s name and cell phone # and give that crewmember all pertinent information regarding the service disruption, the length of delay, the operational plans for their customers and the Railroads response for the event. The crewmember will be asked to update their customers with the information provided. The Customer Advocate will document the time and content of the phone conversation on the Customer Advocate log. This process will be followed for each standing train that is unable to move to a platform.

- The Customer Advocate will be responsible for calling back each crewmember in five-minute intervals, when practicable, updating them with the status of the situation. The Customer Advocate will continue to document the time and content of the phone conversations on the Customer Advocate log. This process will be repeated until the standing train is able to move to a platform, the service disruption has been cleared up, or the customers have been evacuated from the train.

This procedure will give crewmembers on standing trains accurate and timely information, which is critical to the overall safety of our customers and employees.

Thank you for your cooperation. Any questions should be directed to a Supervisor-Train Movement at ext. 7501.
DATE: March 30, 2007

TO: All Train Movement Personnel

FROM: George R. Farrell, Superintendent – Train Movement

SUBJECT: Timacs Inserts for Rescue Trains

In case a disabled train requires the assistance of an Evacuation Train, Rescue Engine or Rescue Train, a Timacs insert identifying the Evacuation Train, Rescue Engine or Train must be made by the Train Dispatcher prior to the train or engine departing to assist the disabled train.

The Timacs insert must include the follow designation:

Evacuation Train ---- EVAC

Rescue Engine ------ RESENG

Rescue Train -------- RESC

If the train or engine had been operating under a previous Timacs insert or regular schedule prior to being utilized for a rescue or evacuation, the original schedule must be cancelled in Timacs by the Train Dispatcher. Tower personnel will then time the rescue or evacuation train or engine insert in Timacs, when moving the Evacuation Train, Rescue Engine or Rescue Train.

If you have any questions, please contact a Supervisor-Train Movement.
EXHIBIT G

I. PURPOSE

To establish procedures to safely restrict, suspend, and restore train service and to outline measures to manage significant delays within the LIRR, MNR and SIRTOA service areas.

II. POLICY

To complete police functions and coordinate with the affected railroads, outside agencies and emergency responders to manage service disruption incidents and restore train service as soon as safely possible.

For specific emergency evacuation procedures Members shall refer to the appropriate District/Unit Procedure Guides.

In regard to the procedure set forth below as it relates to dispatching, notifications and requests for resources, Members assigned to the SIRTOA system shall be primarily dispatched to assignments by the St. George Command Center and such Members should make initial notifications and requests through the St. George Command Center. Secondary notifications should be made to CU as soon as practical.

III. DEFINITIONS

Power Off Order
The removal of third rail or catenary power.

Stop and Proceed Order
Trains will be directed to stop at a specific location and proceed on hand signals from a qualified designated person on the ground at a specific speed to a point beyond a specific location.

Stop and Protect Order
Trains will be directed to stop prior to a specific grade crossing and proceed over the crossing on hand signals from a train crewmember or a qualified designated person on the ground and at a specific speed to a point beyond a specific location.
Stop Order/Hold Order/Block Order
The suspension of all train movement in a specific area or on a specific track.

Restricted Speed Order
A speed, not exceeding 15 mph, at which a train can be stopped within one-half the range of vision; short of the next signal, another train, an obstruction, a broken rail, a non-functioning crossing gate, or an improperly aligned switch.

Slow Order
Trains proceed at a specific reduced speed as directed by the Rail Traffic Controller/Movement Bureau.

Service Disruption
Any action that delays or has the potential to delay train service, including but not limited to Power Off, Stop and Protect, Stop Order, Restricted Speed, and Slow Orders.

Rail Traffic Controller (RTC)
The personnel responsible for coordinating train movement on the Metro-North Railroad.

Movement Bureau (also known as 204)
The personnel responsible for coordinating train movement on the Long Island Rail Road except that area controlled by Penn Station Central Control.

St. George Command Center (Command Center)
The personnel responsible for coordinating train movement on the Staten Island Rapid Transit System. Until further notice, the command center also functions as the primary dispatcher of MTAPD Members assigned to the SIRTOA system.

Penn Station Central Control (P.S.C.C.)
The department responsible for coordinating train movement (Long Island Rail Road, Amtrak, and New Jersey Transit) from immediately west of signal bridge 23 (within Harold Interlocking) to Penn Station, including all station tracks and East River tunnels.

Chief Train Dispatcher
For the purposes of the Section, the Rail Traffic Controller, Movement Bureau, Penn Station Central Control, or the St. George Command Center as applicable.
IV. Procedure

When train service is suspended or significant delays are anticipated due to a service disruption, the Communications Unit Supervisor shall coordinate with supervision at Districts 3, 4, 5, and/or 9 (depending on the agency affected) and arrange for a police liaison at the appropriate railroad management center (i.e. 204, P.S.C.C., RTC Situation Room, St. George Command Center). A supervisor should function as the liaison, but in the event a supervisor is not available, a qualified police officer may be assigned.

When a Member or outside agency makes a request for a service disruption, the following procedures shall apply:

A. Communications Unit Personnel

1. Determine specifically:
   a. Type of emergency/reason for the request.
   b. What type of service disruption is required (power off, block, etc.)
   c. Exact location of the emergency (specific track, if known).

2. Record the name, title, agency, and contact number of caller.

3. Advise the requesting Member or agency not to enter upon railroad property until the appropriate Chief Train Dispatcher (RTC/Movement Bureau/Command Center) has confirmed the request.

4. Immediately notify the appropriate Chief Train Dispatcher of the request, and record name of person notified.
   a. Requests for service disruption in the area controlled by the P.S.C.C. may be made to the Movement Bureau.

5. Dispatch a MTAPD unit and a patrol supervisor to the location.
   a. If the MTAPD response will be delayed, request the local law enforcement agency to respond.

6. Notify the Communications Unit Supervisor of the situation.

7. After receiving confirmation from the appropriate Chief Train Dispatcher that the specific service disruption is in effect, notify the requesting agency and the responding MTAPD units.

8. Record the times of all notifications, requests and confirmations in the Department Incident Report.
9. Make other notifications and follow guidelines as outlined in the Communications Unit (CU) Procedure Guide.

B. Member

1. Upon arrival, assess the situation and notify the CU of the details.

2. Request additional resources as necessary.

3. Implement critical incident procedures when appropriate (refer to Section 15-04—“Critical Incidents”). Notify CU of the location of the Temporary Command Post (TCP).

4. Advise CU of the estimated length of the service disruption.

5. As soon as safely possible, board disabled train and walk the entire length to ensure order and passenger safety. Coordinate with train crews to confirm passengers are notified of the reason and estimated length of the delay.

6. Update the CU at regular intervals.

C. Communications Unit Supervisor

1. Ensure appropriate notifications are made (e.g., EMS, Chief Train Dispatcher).

2. Depending on the agency affected, coordinate with supervision at Districts 3, 4, 5, and/or 9 and arrange for a police liaison at the appropriate railroad management center (see paragraph under IV Procedure above).

3. Ascertain if there are any trains stranded outside of stations and dispatch police to such locations in order to prevent unsafe conditions such as self evacuations.

4. Closely monitor the incident and coordinate any assistance necessary to safely complete police functions and restore service as soon as possible.

5. When service is disrupted, notify the appropriate District Commanding Officer (or Duty Captain in his/her absence) and send a group page to command staff.

6. Follow additional procedures as outlined in the Communications Unit Procedure Guide.

7. Update the Chief Train Dispatcher at regular intervals.
D. Patrol Supervisor

1. Assess the situation at the scene of the incident and update the CU of the condition.

2. Implement Critical Incident procedures when appropriate, (refer to Section 15-04 —“Critical Incidents”).

3. Confirm CU makes notification to the appropriate District Commanding Officer (or Duty Captain in his/her absence) and that a command staff group page is sent.

4. If a request for service disruption was made by an outside agency, locate the person at the scene who made the initial request and, when practical, have the authority to restore service transferred to you by having the requesting agency notify the Chief Train Dispatcher.

5. Coordinate activities with railroad personnel and associate agencies at the scene to restore train service as soon as safely possible.

6. Coordinate the response of additional resources (personnel and equipment) through CU.

7. Monitor conditions at the scene and ensure all personnel are clear from the affected area prior to authorizing restoration of train service.

E. General Information:

1. Restricted Speed or Slow Orders should be given priority consideration over Stop Orders/Hold Orders/Blocks whenever safely possible to reduce impact on train service.

2. Stop Orders/Hold Orders/Blocks should be limited to only those tracks affected by an incident.

3. Members must familiarize themselves with all rail lines within their patrol assignment, including but not limited to, track numbers, catenary poles, control points, grade crossings, bridges, cross streets, signal bridges, tunnels, etc.

4. The person at a scene who makes the initial request for the service disruption is the only person authorized to request that service be restored. The exception to this rule is when the Chief Train Dispatcher has been notified that such authority has been transferred from the person who made the initial request to another person at the scene.
5. Electric/Power:
   a. All personnel should exercise extreme caution when working near electric sources and should treat them as “live” even when power has been confirmed “off.” Electric sources may be considered safe only when a qualified employee of the railroad power department is on the scene and has declared that all lethal voltage has been removed and the area is safe.
   b. Catenary wires pose a significant danger to emergency personnel because they retain voltage. Electrocution may occur even if direct contact is not made with the wire. All personnel must remain clear of wires until a qualified class “A” employee of the railroad power department responds to the scene and declares that the catenary wire is safe.
   c. All Diesel/Electric and “Dual Mode” locomotives are to be considered “live” at all times even when there has been a complete shutdown of the locomotive and/or removal of third rail or catenary power. Locomotives store high voltage in their electrical systems even when they appear to be shut down or not in an electric mode.
   d. The undercarriage of any passenger car should be considered “live” at all times. Passenger cars may be energized through the train line connection to the locomotive and/or through the connection to other cars that may bridge the connection between an area of track that has been de-energized to an area of track that still has power.
   e. Removal of power does not stop all train traffic from traveling through a location because some trains operate on diesel power. When it is necessary to stop all train movement at a scene, a Stop Order, Hold Order, or Block should be requested.
   f. If “Power Off” is required, advise Communications Unit personnel that third rail, catenary, or both need to be shut off.
   g. Members should be aware that making contact with a rail car when all of its wheels are derailed and still connected to power may result in electrocution. Under these conditions evacuation of passengers should not be attempted until power removal has been confirmed.

6. Stop and Proceed/Stop and Protect:
   a. All personnel on the scene must be accounted for and notified that this order is being placed into effect.
   b. Communication must be maintained between the person directing train movement at the scene and all other personnel in the area.
DEPARTMENT MANUAL

TRAIN SERVICE DISRUPTIONS

SECTION # 15-02

PAGE 7 of 10

7. Stopping Trains in an Emergency

Due to the dynamics of train operation, a moving train may travel a great distance after emergency brakes have been applied. Depending on the speed of the train and other factors, an engineer may require over one mile to stop a moving train in an emergency. When an emergency exists and Members are unable to request Stop/Hold/Block Orders by radio or phone:

a. Safely deploy personnel (preferably uniformed emergency responders) at least 1½ miles from the scene in both directions along the track and direct them to signal an approaching train to stop by either:
   i. Waving any object (preferably a flashlight, red flag, or flare) from side to side across the body while standing at a safe distance next to the affected track; or
   ii. Place a burning flare between the running rails or on the right of way near the affected track. Be aware that when an engineer stops a train in response to a burning flare, he/she may then continue at a reduced speed unless otherwise directed by emergency personnel.

b. In the event of a fire or other emergency conditions within a tunnel, the first responsibility of the train crew is to remove the train from the tunnel as quickly as possible. Trains must not be stopped unless there is a reason to believe a derailment or other personal injury may result.

8. Park Avenue Tunnel Emergency Exits, Communications, and Alarm System

a. Emergency exits accessible from all four tracks are located at 59th Street, 72nd Street, and 86th Street. For other emergency exit locations and additional information, refer to the Park Avenue Tunnel Memo Book insert.

b. Emergency telephones are located at all emergency exits and at passageways between tracks 1 and 3 at every city block. All numbers are direct dial, no prefix is required. The first two numbers are always 61; the last two are the street location.

c. The tunnel alarm system consists of a series of horizontal cables mounted along the tunnel wall of each track attached to alarm boxes. The boxes are red and designated with three numbers on the front. The first number is the track and the second and third numbers are the street location.
   i. To activate the alarm, a Member must pull the cable. This will de-energize only that track from 60th Street to 110th Street instantaneously.
   ii. A Member activating an alarm must:
      • Immediately notify the Chief Train Dispatcher by dialing 2050 using a tunnel emergency telephone.
      • Notify the Communications Unit as soon as possible.
Extreme caution must be exercised if third rail power has been removed using the tunnel alarm cable. A train stopped as a result of this action could “bridge” between the de-energized portion of third rail and a section still with power. This could cause the de-energized section to become energized. Members are reminded that trains may still continue to operate unless a Stop Order, Hold Order, or Block Order has been requested.

9. East River Tunnel Emergency Exits, Communications, and Alarm System
   a. Communication safety station boxes, which include emergency telephones, power shutoffs, and fire alarms located on the north and south sides of each tunnel alternating every 400 ft.; identified by blue lights. For Emergency exit locations and additional information, refer to the Atlantic Avenue/East River Tunnels Memo Book insert.
   b. Each safety station box is numbered inside and contains one “DC” (third rail power only) disconnect and five (5) communication buttons; Push for Help, Power Director, Push for Dial Tone, Maintenance, and Page:
      i. The “Push for Help” button is used to contact P.S.C.C. directly. Either the handset or the speakerphone may be used.
      ii. The “Power Director” button is used to contact the Amtrak power director. The handset must be used when activating this button.
      iii. The “Push for Dial Tone” button is used to connect to an Amtrak system line. This button will permit calls to be made to Amtrak’s New York extensions. LIRR extensions are not available from these phones.
      iv. The “Maintenance” button is used to connect the party line with other maintainers in the tunnel. This button may also be used by emergency responders as a conference line during emergencies.
      v. The “Page” button is used to activate the PA system to broadcast information within the vicinity of the communication safety station. To activate this system the “Page” button must be depressed while using the handset.
      vi. The “DC” button is used to de-energize third rail power in the vicinity of the communication box. To de-energize third rail power the “DC” and “Power Director” buttons must be depressed simultaneously. This will have no effect on the overhead catenary power. At this time, telephone communication will automatically be established with the power director. Until confirmation is received from the power director the power must be considered live. If no confirmation is received the power will be re-energized without warning. Notify the Communications Unit as soon as possible.
Extreme caution must be exercised if third rail power has been removed. A train stopped as a result of this action could "bridge" between the de-energized portion of the third rail and a section still with power. This could cause the de-energized section to become energized.

10. Flatbush Avenue/Atlantic Avenue Tunnel Emergency Exits, Communications, and Alarm System:
   a. Fire alarm and power disconnect boxes are located on the bench walls north of track 1 and south of track 2 under a blue light and spaced approximately 1500 ft. apart. The boxes are painted orange with a blue "T" and number on the front cover. Each box is equipped with a fire pull switch (red lamp), power pull switch (blue lamp), and a telephone. The telephone has a Power Director line, block line, central line, and dial extension line. For Emergency Exit locations and additional information, refer to the Flatbush Avenue/Atlantic Avenue/East River Tunnels Memo Book insert.
   b. To Activate Fire Alarm
      i. Pull switch mounted under red fire lamp. (Fire alarm will automatically be sent to Power Director).
      ii. Red fire lamp will flash.
   c. To Deactivate Power
      i. Pull switch mounted under blue power lamp. (Power disconnect alarm will automatically be sent to Power Director). When power switch is pulled it will automatically trip the circuit breaker controlling that section of third rail.
      ii. The blue lamp will flash.
         • Call the Power Director over power director telephone line to verify alarm, inform Power Director of the "T" box number and request confirmation that power has been removed.

Do not consider third rail de-energized until you have received confirmation from Power Director.
d. Use of Telephone
   i. Power Direct Line—depress power director line button.
      Lamp will glow brighter and unit will automatically call
      Power Director).
   ii. Block/Central Lines—depress block or central line button.
       Lamp will glow brighter. Use crank generator located below
       fire and power alarms to make calls. Bells mounted on bottom
       of box are not in use.
   iii. Dial Extension—depress extension (lamp glows brighter).
       Dial and use as normal telephone.

e. Notify the Communications Unit as soon as possible.

Extreme caution must be exercised if third rail power has been removed using either lever. A train
stopped as a result of this action could “bridge” between the de-energized portion of third rail and
a section still with power. This could cause the de-energized section to become energized.

Related Manual Sections:  Section 15-01—Train Accidents
                          Section 15-04—Critical Incidents

Related Policy:          Interim Order # 07-04-Code Bravo Response Plan