

CONTINUITY OF OPERATIONS PLANNING

EXECUTIVE SUMMARY

At the present Chairman's urging, we reviewed the Commission's preparations for responding to contingencies that could affect the Commission's operations or securities markets including natural or man-made disasters, operational difficulties, and market volatility.

During our audit, Commission staff were updating the Commission's draft Continuity of Operations (COOP) Plan and working on several continuity-related initiatives to enhance the Commission's ability to prepare for and respond to emergencies. The incoming Chairman hired a full-time senior staff member to coordinate these efforts from the Office of the Chairman (OC). We commend the Chairman and the Commission for their significant efforts to strengthen the Commission's continuity planning.

Consistent with these efforts, we are making several recommendations including designating a permanent COOP coordinator, ensuring adequate COOP staffing, making enhancements to the Market Watch rooms, testing backup generators, training Commission essential staff, redirecting phone lines so staff can be contacted more efficiently at alternate locations, and enhancing the Commission's Occupant Emergency Plans (OEP).

We discussed our preliminary observations with a number of Commission officials throughout the audit. In many instances, we found that they were already aware of and performing a considerable amount of work that needed to be done. As a result, several of the report's recommendations refer to work in progress, while others refer to tasks that still need to be addressed.

OBJECTIVES AND SCOPE

Our objectives were to determine if improvements were needed in the Commission's contingency planning efforts and Occupant Emergency Plans (OEP). The audit was initiated soon after the incoming Chairman requested that the audit be conducted as quickly as possible so its results could help guide the development of the final Continuity of Operations (COOP) Plan.

During the audit, we interviewed Commission staff, reviewed the draft written COOP plan and other available documentation, and observed operations in the

Commission's MarketWatch room and backup Market Watch room. We also reviewed COOP staffing levels, redundant communications, COOP planned training, testing of equipment, and backup of vital records, and assessed COOP needs.

We also held discussions with officials at the Federal Reserve Board (FRB), the Federal Communications Commission, the Federal Deposit Insurance Corporation (FDIC), the Commodities Futures Trading Commission (CFTC) and the Transportation Security Agency to learn about their COOP plans and possible best practices. We did not conduct detailed audit testing to confirm the comprehensiveness and resiliency of OIT's backup of electronic data.

The audit was performed from October 2005 to March 2006 in accordance with generally accepted government auditing standards.

BACKGROUND

The Commission's COOP plan is designed to ensure the continued performance of essential Commission functions during and after an emergency, disaster or other disruption of normal business operations. COOP is defined as the activities of individual departments and agencies and their sub-components to ensure that their essential functions will be performed in the event of a disruption. These activities include plans and procedures that delineate essential functions, specify lines of succession and the emergency delegation of authority, provide for the safekeeping of vital records and databases, identify alternate operating facilities, provide for interoperable communications and validate capability through tests, training and exercises.

Federal Preparedness Circular 65 (FPC 65), issued by the Federal Emergency Management Agency (FEMA), provides guidance to Federal agencies for developing viable and executable contingency plans for the continuity of operations.

Approximately 280 Commission staff have been designated by their division and office heads as "essential." These employees are expected to be able to implement a contingency plan and/or be available to carry out essential operations during a COOP event. Such staff may be required to work from an alternate location.

The Commission's Occupant Emergency Plans (OEP) provide for the evacuation or shelter-in-place of Commission employees. Activities under the OEP may precede a COOP event.

AUDIT RESULTS

At the initiation of the audit, COOP efforts were languishing. There was no central COOP coordinator, and the written COOP plan had never been finalized and was outdated. However, the incoming Chairman was dedicated to enhancing the Commission's COOP status. In December 2005, the Chairman hired a full-time senior staff person to coordinate the agency's overall continuity efforts and provide guidance on the Commission's COOP plan and its implementation.

Reflecting the new Chairman's priority interest in continuity-related matters, the Commission made a number of COOP-related enhancements during the audit. For example, the Commission updated its written COOP plan (although it was still designated a "draft" at the completion of the audit field work),¹ engaged in a multi-agency training exercise, trained staff to access the Commission's network applications from remote locations, worked toward enhancing communication systems to ensure redundancy, and made arrangements with other agencies to procure temporary space for the Chairman, Commissioners, and limited staff in the event that the Commission's headquarters building (Station Place) becomes uninhabitable.

The Commission's written COOP plan generally complied with the guidance in FPC 65, with some exceptions relating to vital records backup and tests and training, as described below. OEPs at headquarters and the field offices varied by office and some needed improvements.

As a result of the Commission's significant efforts to strengthen its COOP program, several of this report's findings summarize work in progress while others discuss tasks that still need to be performed.

COOP STAFFING AND OPERATIONS

Permanent Coordinator

The Executive Director has overall responsibility for COOP, but he has numerous other responsibilities.²

The Office of the Chairman (OC) hired a senior employee in December 2005 to oversee the development and implementation of the Chairman's overall continuity assurance effort (both internal, including COOP, and external). This person currently works full-time on continuity-related matters, but once the COOP plan is finalized and COOP policies and training are in place, this person may have substantially less direct involvement with the COOP plan.

After the draft plan is finalized, much ongoing work will remain such as updating the plan, training staff, tracking new and departing staff, carrying out mock exercises, ensuring policies are followed, testing equipment, and staying abreast of the type of threats that could trigger the implementation of a COOP event.

The Commission does not currently have a permanent, full-time COOP coordinator. Without a permanent COOP coordinator, the Commission faces the risk that COOP efforts could languish, as they did in the past.

¹ As stated in the "Objectives and Scope" section above, the Chairman requested that this audit be conducted as quickly as possible, so that its results could help guide the development of the final COOP plan.

² The Office of the Executive Director supervises the Office of Administrative Services, the Office of Filings and Information Services, the Office of Financial Management and the Office of Human Resources.

Recommendation A

The Office of the Executive Director, in consultation with the OC, should designate a qualified COOP coordinator within OED, and ensure that the position remains filled.

Staffing

The Office of Administrative Services (OAS) has three staff members currently assigned to update the COOP plan and ensure continuity of essential operations in a contingency. Two of these employees currently devote most of their time to COOP, and the third devotes up to half of his time to COOP activities. In the future, however, only one OAS staff member expects to be able to continue to devote a significant portion of his time to COOP.

Staff in Market Regulation (MR) work on continuity-related initiatives, focusing on how a COOP event could affect the markets. Staff in other divisions and offices have been assigned continuity-related duties, in addition to their regular duties.

While many staff dedicate a portion of their time to continuity-related initiatives, the Commission lacks a core of trained people whose primary function is to support COOP initiatives and operations. Other financial regulators such as the FRB, Treasury, and FDIC have trained staff, who are primarily responsible for carrying out COOP operations.

Without additional trained staff whose primary focus is continuity planning, COOP initiatives could languish.

Recommendation B

The OED, in consultation with the OC, should determine its permanent COOP staffing needs and ensure adequate COOP staffing. In doing this, the OED and OC should consider adding permanent COOP responsibilities to the responsibilities of certain existing Commission staff.

Operations

The Chairman's office is generally a policy-setting and oversight office for the entire range of Commission components and activities. Recognizing this, the Chairman's office has considered the need to clarify which staff organization is best suited to administer COOP activities in the future, and subject to what reporting structure.

In considering what organization should be responsible for COOP activities in the future, the Chairman has a variety of reasonable options from which to choose, including leaving the responsibility with OAS, which is responsible for the Commission's security operations, and running the program directly from the OED.

Recommendation C

The Chairman should determine which division or office should have primary responsibility for COOP internal continuity activities and determine appropriate reporting lines, where those lines are not already clearly established.

COMMAND CENTER AND SCIF

Some Commission staff have expressed the opinion that a Command Center is needed. The Command Center would serve as an alternate location for the Commission's senior leadership to work and convene in the event they had to evacuate their offices, but did not have to evacuate the headquarters building. A Command Center should be on a floor where the senior leadership would choose to be during a crisis, but away from outside windows. It should be configured with a redundant suite of communications equipment necessary to link the Commission's senior leadership with that of its peer agencies, staff, and private sector entities under highly stressed operating conditions. A Command Center could consist of one or more rooms, perhaps including an interior room for the Chairman and a few key staff, with an adjoining room for additional members of the Chairman's crisis team. There are no particular security standards applicable to the construction of a Command Center.

Some Commission staff have also expressed the view that the Commission needs a Sensitive Compartmented Information Facility (SCIF). A SCIF is a secure room in which all levels of classified and compartmented information may be received, stored, and discussed. SCIFs are built to externally imposed national security standards and are not available for general use. Staff with the appropriate national security clearance could, for example, use a SCIF as a place to analyze classified information they needed to know in order to meet their official responsibilities. A SCIF could be built adjacent to the Command Center to ensure that those working in the Command Center had a convenient place to receive and discuss classified information. A SCIF could, but need not, be equipped to receive classified reports disseminated electronically directly from agencies such as the Central Intelligence Agency and Federal Bureau of Investigation.

Some staff said that having a SCIF would better ensure that the Chairman received timely and accurate information to make well-informed decisions in an emergency. For example, if an incident occurred near the Station Place building, the Chairman would need to learn about it as quickly as possible, in order to facilitate decisions regarding whether to send staff home, relocate staff, or shelter-in-place. It would be most appropriate and convenient to receive briefings and conduct discussions of all relevant information, including classified information, in a SCIF. (Note, however, that it seems very unlikely that, under crisis conditions, an intelligence agency would decline to provide the Chairman with all the pertinent information relevant to his responsibilities merely because the Commission lacked a SCIF.) Other financial regulators, such as the FRB, FDIC, and CFTC, already have SCIFs.

Establishing a SCIF is an extremely costly endeavor. Given the expense, we discussed with Commission staff whether it would be sufficient to agree to share the SCIF of another government agency within walking distance of the Commission's headquarters building in the event of an emergency.³ This would give the Chairman and Commission the benefit of a SCIF without incurring its cost.

³ The Commission has entered into agreements with at least one other agency to use office space including, as necessary, the agency's SCIF in the event that Station Place must be evacuated.

The need for a Command Center and/or SCIF needs to be carefully evaluated. The evaluation needs to consider how these additions could help the Chairman make better decisions during a crisis and whether it would be likely to improve significantly the types of information to which the Chairman would have access (note, the Commission already has secure telephone and facsimile lines).

Recommendation D

The Chairman should decide whether the Commission needs a Command Center, SCIF, or both, weighing the likely cost of each against the enhanced capability it could provide under crisis conditions not requiring evacuation of the headquarters building.

MARKET WATCH ROOM ENHANCEMENTS

The following enhancements, some of which are underway, are needed in the Market Watch room(s):

- The Market Watch rooms in Station Place and the Operations Center should enable staff to videoconference with other entities, such as the bank regulatory agencies, Self Regulatory Organizations, Congress, the White House, and other Federal government agencies. Videoconferencing is important because in an emergency situation, it is helpful to see decision makers' body language and reactions. Videoconferencing capability could be set up on an existing computer monitor. OIT is working with MR on this task.
- The Market Watch rooms in Station Place and the Operations Center currently broadcast television news channels through satellite. If a satellite is down, there is no backup. OIT is working to install cable as a backup for Station Place and the Operations Center.
- Market watch room staff record television broadcasts on video-cassette tapes. MR is considering using more advanced technology, such as digital video recorders that have the ability to record onto DVDs (*e.g.*, TiVo). This is more flexible and takes up less space than videos. If information is recorded onto a DVD, it could be loaded onto any Commission desktop computer. OIT is working with MR on this task.
- The doors to the Commission's Station Place Market Watch Room should contain a lock because the room contains sensitive information such as the Commission's Red Book, a laptop computer and cell phones. These materials are stored in a locked, mobile filing cabinet. However, it would still be useful to lock the MarketWatch room doors at the close of business. MR should ensure that OAS installs a door lock.
- If eligible, the hoot-n-holler phones in the Market Watch rooms (Station Place and Operations Center) should be registered for priority repair service (Telecommunications Service Priority or TSP). Phone lines registered as TSP receive a higher priority for repair than unregistered lines. OIT is responsible for completing this task.

Recommendation E

OIT and OAS, in consultation with OED and MR, should complete the above enhancements as quickly as possible.

CUSTOM REDIRECT

In the event that staff work at an alternative location such as the Operations Center, their homes, or any Commission backup site, it would be useful to redirect phone lines to the new locations, so an employee's line will ring at the alternate location.

OIT is currently working with a phone company on this task. The objective of their efforts is to implement a redirection program that ensures that no call will go unanswered even during emergency operations from an alternate site. To meet that objective, OIT is making sure that all operating division and office phones will be redirected to ring on at least one line at the alternate site during any crisis evacuation. In addition, the office phones of staff who are working from home during such an emergency will be redirected to ring at their homes.

The OC and OED should continue to provide guidance to OIT regarding emergency redirection of incoming calls during evacuation emergencies.

Recommendation F

OIT, in consultation with the OED and the OC, should continue to implement the custom redirect feature.

TESTING

Backup Generator

Station Place buildings 1 and 2 each have two backup generators. One of each building's generators backs up designated systems (desktop computers, fax machines, Bloomberg, Reuters, Telerate, etc.) such as those in the Market Watch room, the Chairman's Office and the Commissioners' offices. The other two generators back up life and safety equipment, such as elevators, emergency exit lights, and fire pumps. The generators should enable these systems and equipment to function despite a failure of utility power.

All four generators are tested every Saturday by the building engineers.⁴ Testing consists of running each generator for 30 minutes. During testing, systems are powered by generator instead of utility power, but the utility power is not turned off.

Commission staff have not observed the backed up systems and equipment during a switch from utility power to generator power and, therefore, have not confirmed:

- Which systems and equipment are in fact backed up by generator; and

⁴ The building engineers are employed by the building's owners.

- Whether these systems and equipment could continue to operate, without interruption, in the event of a utility power failure.

A more effective test would include turning off utility power, as this would better replicate a real life situation. According to the building engineers, turning off utility power is only recommended once a year to avoid wear and tear on the components that allow for switching between generator and utility power.

During the audit, plans for testing the generators were underway.

Recommendation G

OAS, in coordination, as necessary, with OIT, MR, the OC and the building engineers, should confirm that backed-up systems in the Station Place Market Watch room and the Chairman's and Commissioners' offices function without interruption when power is switched from utility to generator power. This test should be performed annually with utility power off.⁵

Recommendation H

OAS, in coordination with OIT and the building engineers, should ensure that life and safety equipment, such as elevators, emergency exit lights, and fire pumps, are adequately backed up. To do this, Commission staff should confirm that the equipment functions without interruption during testing. This test should be performed annually with utility power off.⁶

Additional Backups

Desktop computers and systems outside the OC and Market Watch rooms are not backed up by generator. It could be useful if the systems of other essential staff were backed up by generator.

Recommendation I

OAS, in consultation with the OC and OED, should determine which additional Commission staff's desktop computers and other systems, if any, should be backed up by generator power. If it is determined that additional systems should be backed up, then the ED's office, including OAS, should work with OIT on this task.

Equipment

Essential Commission staff typically have some combination of Commission-issued cell phones, walkie talkies, Blackberries, Government Emergency Telecommunications Service (GETS) cards, secure phones and fax machines and computers to access the Commission's network drives remotely.

During an emergency situation, COOP essential staff may need to work from home or a backup site. Such situations would require increased reliance on using the above equipment.

While MR staff periodically test equipment such as walkie talkies, the Commission does not have a testing program to ensure staff periodically test their

⁵ The remaining weekly tests should continue to be conducted with utility power on.

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communications equipment. Additionally, with the significant exception of CITRIX⁷ training for teleworking, there is no training program to ensure essential staff know how to use the equipment.

Recommendation J

OIT, in consultation with OED and the OC, should establish a policy for routine testing of communications and electronic equipment and for training essential staff on the use of this equipment. OED, in consultation with OIT and OC, should consider asking division and office heads to have certain essential staff work periodically from a remote location using such equipment. A means should be developed to ensure that those staff designated “essential” for emergencies periodically test their equipment (*e.g.*, through a signed self-certification, hands-on training, and/or electronic tracking of usage by OIT). Test results should be documented.

VITAL RECORDS

FPC 65 states that agencies must have procedures for protecting and updating vital records and that: “To the extent possible, agencies should pre-position and update on a regular basis duplicate records or back-up electronic files.”⁸

The Commission identified hundreds of vital records that are needed to carry out essential functions during a COOP event. Such records constitute hard copy documents, electronic documents and electronic systems.

Some vital records, such as employee official personnel folders, phone logs, correspondence logs, no-action positions, hardship exemptions, Enforcement case documents (primarily at the field offices), 8(b) requests, and paper filings are in hard copy only and are not backed up. OIT backs up electronic records.⁹

The Office of Filings and Information Services (OFIS) is responsible for all official Commission records (many of which are vital records).¹⁰ OFIS does not have a listing of the Commission’s vital records or ensure they are backed up. Some Commission divisions and offices may not be aware that they need to notify OFIS of their vital records.

Recommendation K

Within 90 days of this report’s issuance, OFIS should obtain a listing of each division and office’s vital records and should, in consultation with other OED offices and OIT, work with each division and office to ensure that vital records are routinely backed up and sent off-site, as appropriate.

⁷ CITRIX enables Commission staff to access Commission’s network drives and e-mail from a non-Commission computer.

⁸ FPC 65, June 15, 2004, page 7.

⁹ We were told that the Commission backs up various electronic records such as network drives and systems such as EDGAR. However, we did not conduct detailed audit testing to confirm the comprehensiveness and resiliency of OIT’s backup program.

¹⁰ SEC Regulation 7-7 (May 8, 1996) established and “provides guidance and instructions for implementing the SEC’s VRP [Vital Records Program].”

TESTS, TRAINING AND EXERCISES

FPC 65 states, “All agencies must plan, conduct, and document periodic tests, training, and exercises to demonstrate the [COOP] plan’s viability and identify deficiencies. Deficiencies and actions taken to correct them must be documented.”¹¹

Tests

FPC 65 requires agency testing to include quarterly testing of COOP alert, activation and notification procedures.¹² This testing consists of calling or sending an e-mail to all essential employees’ communications devices (telephones, computers, e-mail, Blackberries, etc.) and ensuring the employees received the message. This test has not been performed. OED is now testing a new emergency notification system with its essential employee workforce.

Recommendation L

OED, in consultation with the OC and OIT, should test the COOP alert, activation and notification procedures on a quarterly basis.

Training and Exercise Program

In 2005, OAS staff devised draft computer-based COOP training slides. Once approved, OAS intends to have all Commission employees view the slides. OAS also created a draft “table top” exercise for select essential Headquarters staff. In December 2005, OAS provided copies of these drafts to the OC, OED and OIT.

Critiquing the draft training materials and developing a Commission-wide COOP training program will require considerable additional work. As a result, the draft computer-based training slides have not yet been administered to Commission staff and decisions have not yet been made regarding which staff should participate in the draft table top exercise or how many and what type of table top exercises and other COOP training to hold annually.

Recommendation M

The OC, in consultation with the OED and OIT, should ensure that the appropriate continuity-related training is provided to Commission staff.

Recommendation N

OED should draft and submit a proposed schedule of annual COOP-related training and exercises for Commission staff to OC for review and approval.

Field Office Training

Currently, COOP training and exercises focus on participation by headquarters staff. Field office staff suggested that the following training would be useful to them:

- Training in CPR, First Aid, Shelter-in-Place and the use of an automatic external defibrillator (AED);
- Participation in a mock COOP event;

¹¹ FPC 65, June 15, 2004, page 8.

¹² FPC 65, June 15, 2004, page I-1.

- Basic training involving relocation to a backup site;
- Field office management's role in emergency planning and response;
- Periodic meetings among all field office heads to discuss each other's COOP plans (one meeting was planned for December 2005, then canceled).

Recommendation O

In drafting the proposed schedule provided for in Recommendation N, OED should consider field office training needs and include field office staff in proposed COOP training exercises, as appropriate.

COOP Policies and Procedures

The Commission should develop policies and procedures delineating the roles of essential staff and describing how staff should perform essential functions at each stage of a COOP event (*e.g.*, in the first hour, four hours, day, two days, etc.). Once these policies and procedures are approved, appropriate staff training needs to take place.

Recommendation P

The OED should prepare draft COOP policies and procedures, as described above, for OC review and approval. The OED should ensure that the appropriate training for essential staff is among the training included in the proposed schedule produced under Recommendation N. The OC should ensure that this training, once approved, is provided to essential staff.

OCCUPANT EMERGENCY PLANS

Emergency Supplies and Equipment

Each Commission building (headquarters, the Operations Center, and the field offices) has an Occupant Emergency Plan (OEP). OAS provides guidance to all Commission organizations on setting up their OEPs. However, only OEP staff in Station Place and the Operations Center report to OAS. OEP staff in the field offices report to each field office head. We believe this contributes to disparities in OEPs.

There are limited supplies of emergency food (meals-ready-to eat or MREs) and bottled water at Station Place and the Operations Center. Five field offices (New York, Boston, Philadelphia, Miami and Chicago) did not have emergency water supplies and five field offices (New York, Boston, Philadelphia, Atlanta and Chicago) did not have any MREs. Some offices plan to order these supplies, if such purchases are approved.

The OED and OAS believe it is each staff's personal responsibility to have their own emergency food and water, in the event of a prolonged stay in the building. This could make it unnecessary for the Commission to purchase additional MREs and water. However, no policy decision has been made regarding whether additional purchases of these items will be permitted.

Staff are responsible to ensure they have adequate supplies of medications, clothes, shoes, and other personal items.

Recommendation Q

OED should, after coordination with the OC, prescribe a Commission-wide policy on whether additional Commission purchases of emergency food (MREs) and bottled water should be made for Commission offices, including field offices. OED should also periodically remind staffs (*e.g.*, semi-annually through an administrative notice) that it is their responsibility to have their own supplies of medications, clothes, shoes, and other personal items available in the event of a prolonged stay in the building or other contingency.

The field offices' other emergency supplies such as blankets, radio, batteries, common area TVs, flashlights, first aid equipment, face masks and evacuation chairs for handicapped varied by office.

Recommendation R

OAS should ensure that each Commission field office has sufficient emergency supplies, as well as any emergency food and bottled water the Commission may purchase under the policy adopted pursuant to Recommendation Q.

Only three of the field offices (Denver, Salt Lake and San Francisco) have conducted shelter-in-place drills.

Recommendation S

In drafting the proposed schedule provided for in Recommendation N, OED should work with each field office to determine its need for shelter-in place drills and, in consultation with the head of each field office, ensure that approved training and drills are conducted.

Evacuation Meeting Spot Outside the Building

Each division and office in Station Place has a designated meeting spot outside the building for staff to convene in the event of a building evacuation. These locations can be found on the Commission's *Insider* website as well the "Welcome Package" that employees received when they moved into Station Place.

Despite these resources, many individuals may still be unaware of the designated meeting locations. OED and other offices' representatives are working to increase the relevance and availability of evacuation information for Station Place employees.

Recommendation T

OED should remind Commission staff of the building evacuation meeting locations. In doing so, OED should consider sending out periodic administrative notices containing this information and posting the meeting points in elevator lobbies and stairwells.