The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at **wvOASIS.gov**. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at **WVPurchasing.gov** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Jump to: FORMS [Go] | Home | Personalize | Accessibility | App Help | About

Welcome, Lu Anne Cottrill | Procurement | Budgeting | Accounts Receivable | Accounts Payable

Solicitation Response(SR) | **Dept:** 0210 | **ID:** ESR05091800000005120 | **Ver.:** 1 | **Function:** New | **Phase:** Final | ▼ | Modified by batch , 05/10/2018

Header 📎 2 ▢ ▬

[List View] ⌃

| General Information | Contact | Default Values | Discount | Document Information |

Procurement Folder: 436907

Procurement Type: Central Master Agreement

Vendor ID: 000000103433 ⬆

Legal Name: IBM CORP

Alias/DBA:

Total Bid: $464,940.00

Response Date: 05/10/2018 📅

Response Time: 11:37

SO Doc Code: CRFQ

SO Dept: 0210

SO Doc ID: ISC1800000012

Published Date: 4/30/18

Close Date: 5/10/18

Close Time: 13:30

Status: Closed

Solicitation Description: Addendum 1-Mainframe Disaster Recovery Services (OT18037)

Total of Header Attachments: 2

[Apply Default Values to Commodity Lines] [View Procurement Folder]

Proc Folder : 436907

Solicitation Description : Addendum 1-Mainframe Disaster Recovery Services (OT18037)

Proc Type : Central Master Agreement

Date issued	Solicitation Closes	Solicitation Response	Version
	2018-05-10 13:30:00	SR 0210 ESR05091800000005120	1

VENDOR
000000103433
IBM CORP

Solicitation Number: CRFQ   0210   ISC1800000012

Total Bid : $464,940.00   **Response Date:**   2018-05-10   **Response Time:**   11:37:41

Comments:

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers

(304) 558-0246
jessica.s.chambers@wv.gov

Signature on File   FEIN #   DATE

All offers subject to all terms and conditions contained in this solicitation

Page : 1   FORM ID : WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Contract Service #1 - Recovery Center Access	12.00000	MO	$7,053.000000	$84,636.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.1 Contract Service #1: Recovery Center Access - Vendor must provide the recovery center for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Contract Service #2 - Network Access	12.00000	MO	$1,689.000000	$20,268.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.2 Contract Service #2: Network Access - The Vendor must provide the recovery center with the following networking related services for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Contract Service #3 - Agcy Declaration of DR/Incr. Connect.	1.00000	EA	$0.000000	$0.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.3 Contract Service #3: Agency Declaration of Disaster Recovery and Increased Network Connectivity - The Vendor shall provide the Agency with the cost of a disaster recovery declaration fee and including increased network connectivity.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Contract Service #4 - Recovery Center - Usg Rate for 3 Days	3.00000	DAY	$2,518.000000	$7,554.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.4 Contract Service #4: Recovery Center Usage Rate - The Vendor shall provide access to the Recovery Center to the Agency immediately upon Agency-Declaration for quantity of three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Contract Service #5 - Recovery Center - Extended Usg Rate	1.00000	DAY	$3,777.000000	$3,777.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.5 Contract Service #5: Extended Recovery Center Daily Usage Rate - The Vendor shall provide the Agency with the option to extend usage of the Recovery Center for a daily rate after the initial three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Opt. Renewal Y2 - Contr Srv #1 - Recovery Center Access	12.00000	MO	$7,053.000000	$84,636.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.1 Contract Service #1: Recovery Center Access - Vendor must provide the recovery center for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	Opt. Renewal Y2 - Contr Srv #2 - Network Access	12.00000	MO	$1,689.000000	$20,268.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.2 Contract Service #2: Network Access - The Vendor must provide the recovery center with the following networking related services for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
8	Opt. Renewal Y2 - Contr Svr #3 - Agcy DCL of DR/Incr. Connec	1.00000	EA	$0.000000	$0.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.3 Contract Service #3: Agency Declaration of Disaster Recovery and Increased Network Connectivity - The Vendor shall provide the Agency with the cost of a disaster recovery declaration fee and including increased network connectivity.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
9	Opt. Renewal Y2 - Contr Srv #4 - Rcvy Cntr/Usg Rate - 3 Days	3.00000	DAY	$2,518.000000	$7,554.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.4 Contract Service #4: Recovery Center Usage Rate - The Vendor shall provide access to the Recovery Center to the Agency immediately upon Agency-Declaration for quantity of three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
10	Opt. Renewal Y2 - Contr Srv #5 - Rcvy Cntr-Extended Usg Rate	1.00000	DAY	$3,777.000000	$3,777.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.5 Contract Service #5: Extended Recovery Center Daily Usage Rate - The Vendor shall provide the Agency with the option to extend usage of the Recovery Center for a daily rate after the initial three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
11	Opt. Renewal Y3 - Contr Srv #1 - Recovery Center Access	12.00000	MO	$7,053.000000	$84,636.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.1 Contract Service #1: Recovery Center Access - Vendor must provide the recovery center for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
12	Opt. Renewal Y3 - Contr Srv #2 - Network Access	12.00000	MO	$1,689.000000	$20,268.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.2 Contract Service #2: Network Access - The Vendor must provide the recovery center with the following networking related services for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
13	Opt. Renewal Y3 - Contr Svr #3 - Agcy DCL of DR/Incr. Connec	1.00000	EA	$0.000000	$0.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.3 Contract Service #3: Agency Declaration of Disaster Recovery and Increased Network Connectivity - The Vendor shall provide the Agency with the cost of a disaster recovery declaration fee and including increased network connectivity.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
14	Opt. Renewal Y3 - Contr Srv #4 - Rcvy Cntr/Usg Rate - 3 Days	3.00000	DAY	$2,518.000000	$7,554.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.4 Contract Service #4: Recovery Center Usage Rate - The Vendor shall provide access to the Recovery Center to the Agency immediately upon Agency-Declaration for quantity of three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
15	Opt. Renewal Y3 - Contr Srv #5 - Rcvy Cntr-Extended Usg Rate	1.00000	DAY	$3,777.000000	$3,777.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.5 Contract Service #5: Extended Recovery Center Daily Usage Rate - The Vendor shall provide the Agency with the option to extend usage of the Recovery Center for a daily rate after the initial three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
16	Opt. Renewal Y4 - Contr Srv #1 - Recovery Center Access	12.00000	MO	$7,053.000000	$84,636.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.1 Contract Service #1: Recovery Center Access - Vendor must provide the recovery center for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
17	Opt. Renewal Y4 - Contr Srv #2 - Network Access	12.00000	MO	$1,689.000000	$20,268.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.2 Contract Service #2: Network Access - The Vendor must provide the recovery center with the following networking related services for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
18	Opt. Renewal Y4 - Contr Svr #3 - Agcy DCL of DR/Incr. Connec	1.00000	EA	$0.000000	$0.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.3 Contract Service #3: Agency Declaration of Disaster Recovery and Increased Network Connectivity - The Vendor shall provide the Agency with the cost of a disaster recovery declaration fee and including increased network connectivity.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
19	Opt. Renewal Y4 - Contr Srv #4 - Rcvy Cntr/Usg Rate - 3 Days	3.00000	DAY	$2,518.000000	$7,554.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.4 Contract Service #4: Recovery Center Usage Rate - The Vendor shall provide access to the Recovery Center to the Agency immediately upon Agency-Declaration for quantity of three (3) days.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
20	Opt. Renewal Y4 - Contr Srv #5 - Rcvy Cntr-Extended Usg Rate	1.00000	DAY	$3,777.000000	$3,777.00

Comm Code	Manufacturer	Specification	Model #
81112004			

Extended Description : 5.1.3.5 Contract Service #5: Extended Recovery Center Daily Usage Rate - The Vendor shall provide the Agency with the option to extend usage of the Recovery Center for a daily rate after the initial three (3) days.

IBM RFP RESPONSE TO:

State of West Virginia

For Business Resiliency Services

PRICING RESPONSE - SOLICITATION NO.: CRFQ 1SC1800000012

Prepared for the State of West Virginia
By Karlton Washington, Account Manager
IBM Business Resiliency Services
Tel: (972) 906-3309
kwashin@us.ibm.com

May 10, 2018

State of West Virginia Pricing

		Year 1	Year 2	Year 3	Year 4
Mainframe	**Quantity**	12	12	12	12
	Unit Price	$7,053	$7,053	$7,053	$7,053
	Total Price	$84,636	$84,636	$84,636	$84,636
Network	**Quantity**	12	12	12	12
	Unit Price	$1,689	$1,689	$1,689	$1,689
	Total Price	$20,268	$20,268	$20,268	$20,268
Declaration Fee		$0	$0	$0	$0
Initial Recovery Charge (IRC) (Includes initial 3 days)	**Quantity**	3	3	3	3
	Unit Price	$2,518	$2,518	$2,518	$2,518
	Total Price	$7,554	$7,554	$7,554	$7,554
Daily Usage Charge (DUC) (each day for day 4 through day 42)	**Quantity**	1	1	1	1
	Unit Price	$3,777	$3,777	$3,777	$3,777

Notes:

1. *This RFP response and the prices below are valid for a period of ninety (90) days following submission.*

2. ***Included Recovery Exercises** – Number of annual recovery exercises included with Total Monthly Charge*
   - *IBM is proposing for **mainframe** 80 hours of annual recovery exercise allowance to State of West Virginia, which represents one (1) event per year*
   - *IBM is proposing for **network** 92 hours of annual recovery exercise allowance to State of West Virginia, which represents one (1) event per year*

IBM Terms and Conditions

The exchange of Confidential Information between State of West Virginia and IBM is governed by the Agreement for the Exchange of Confidential Information between the parties dated 2001 and identified by reference number HW13103.

Notwithstanding any language to the contrary in the RFP, IBM's response to your RFP is made with the understanding that the terms and conditions that will govern the transaction between us will be the previously entered into agreements between IBM and the State of West Virginia will govern this transaction. These documents include:

1. the IBM Customer Agreement ("ICA"); JM71665 between the parties dated May 1993

2. the IBM Customer Agreement Attachment for Multivendor Information Technology Recovery Services (Z125-8306-06) ("the Attachment")); and

3. various Transaction Documents which will specify the details associated with a Subscription(s) (including Configuration details for Mainframe, and Network,, including pricing, contract period, etc.), and any standard IBM amendments to the Attachment that are applicable to the particular options you decide to select for the Subscription(s).

IBM is providing information responses in the format requested by your RFP, along with additional information related to our services. Although we believe the information to be accurate and useful to you in your decision process, we do not consider this information (or the RFP itself) to be part of the contract terms.

The estimates provided are for budgetary and planning purposes only, are based upon the general information provided to IBM, and are for your information only. The estimates are subject to change based upon validation of, or alterations to, your requirements and the availability of the solution elements (configurations), as well as further technical and quality assurance reviews by IBM. The estimates are valid for a period of ninety (90) days following submission, subject to change as referenced above.

At the time that you request executable contracts for the proposed Services, the availability of the space will be determined. If the space is not yet confirmed as available, then any contract will necessarily be contingent upon IBM procuring the space necessary to deliver the Services. For purposes of these estimates, IBM has assumed that all the solution elements of these Services would be available by the target date for contract signing. The actual availability of part or all of the solution elements, and the resulting price, will be determined at the time that you contract for services.

IBM will deliver the Services proposed in this RFP using Recovery Sites located within the United States. All equipment used to provide the Services will also be located in the United States. IBM may use personnel from locations outside the United States to provide some administrative, planning, or support functions, unless the final contract agreed between us indicates that the data housed in the Recovery Site requires use of US based personnel only.

IBM is not responsible for printing errors in this proposal that result in pricing or information inaccuracies. Products, programs, services or features discussed in this proposal may be subject to change without notice.

IBM, AIX, AS/400, DB2, DFSMS/MVS, Enterprise Storage Server, ESCON, FICON, FlashCopy, eServer, iSeries, Netfinity, OS/390, pSeries, RS/6000, S/390, SANergy, Tivoli, TotalStorage, VM/ESA, xSeries, z/OS, z/VM and zSeries are trademarks of the IBM Corporation in the United States or other countries or both. Intel is a registered trademark of Intel Corporation in the United States, other countries, or both. Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both. Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation in the United States, other countries, or both. UNIX is a registered trademark of The Open Group in the United States and other countries.

Jessica Chambers, Department of Administration Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

SOLICITATION NO.: CRFQ 1SC1800000012

Dear Ms. Chambers,

IBM Business Resiliency Services is pleased to present the following response to State of West Virginia's "Solicitation No. CRFQ 0210 ISC1800000012 - State of West Virginia - Mainframe Disaster Recovery Services OT18307," issued April 12, 2018. We appreciate the opportunity to continue to support your critical business continuity and resiliency requirements.

IBM understands your requirements and is uniquely qualified to continue to provide the solution based on the wide range of offerings available in our extensive portfolio of services. Should IBM be down selected, our expectation is that we would provide services under our previous agreed to terms which includes the IBM Customer Agreement and the Attachment for Multivendor Information Technology Recovery Services.

The key components of the solution we have proposed for you are:

- Mainframe

- Network

Our experienced staff of resilience specialists is trained to address your infrastructure requirements as well as your business processes. We can assist you in providing a balanced approach of cost vs. risk in order to optimize the investment in your resiliency program. To date, IBM Business Resiliency Services has successfully supported over 500 U.S. recoveries. Our enterprise resiliency centers are built and managed to combine emergency response across almost every major IT hardware and software platform. Specifically, we are proposing our fully equipped, fully hardened enterprise resiliency center in Research Triangle Park, NC to State of West Virginia.

IBM has earned the trust and confidence of thousands of clients around the world. Just as important, IBM is financially sound, organizationally stable and continues to make significant investment in our recovery business.

IBM Business Resiliency Services has been recognized by Gartner, Inc. in the June 2017 Gartner Magic Quadrant for Disaster Recovery as a Service (DRaaS) for the third consecutive year. To view the full report, and learn more visit IBM Business Resiliency Services

I am your authorized IBM representative on all issues for this response to your Request for Proposal. This response is valid for a period of 90 days following submission. We look forward to continuing to maintain State of West Virginia's trust and confidence as your provider of continuity and recovery services every single day. I will be contacting you shortly to see if there is any additional information or clarifications you may need regarding our response.

Yours sincerely,

Karlton Washington, Account Manager
IBM Business Resiliency Services
Tel: (972) 906-3309
kwashin@us.ibm.com

IBM RFP RESPONSE TO:

State of West Virginia

For Business Resiliency Services

TECHNICAL RESPONSE - SOLICITATION NO.: CRFQ 1SC1800000012

Prepared for the State of West Virginia
By Karlton Washington, Account Manager
IBM Business Resiliency Services
Tel: (972) 906-3309
kwashin@us.ibm.com

May 10, 2018

Table of Contents

Executive Summary

Today's volatile, increasingly unpredictable world presents daunting challenges to enterprises across all industries and locations. In addition to protecting their internal resources, organizations must consider the security and well-being of their employees and their operations, and must count on the reliability of the web of networks and information technology systems on which they absolutely depend. With 40 years of global experience in the business continuity and resilience arena and eight recovery locations in the United States, IBM has deep industry-specific knowledge and a portfolio of unmatched services that help companies avoid disruption and keep their operations online. IBM is committed to helping our clients achieve the levels of business continuity and resilience necessary to address the triple threat of data protection, security and compliance head-on.

Enterprise Resiliency Center

To meet your goals for successful business resilience, IBM proposes our hardened, fully equipped enterprise resiliency center in Research Triangle Park, North Carolina to State of West Virginia. This highly secure site will meet your requirements for computer hardware, disk storage, peripherals, and network connectivity provisions as specified in your Request for Proposal.

Supplemented by onsite support from our experienced IBM service delivery team, the solution we have designed for State of West Virginia will enable your organization to thoroughly exercise your recovery plan, and will facilitate State of West Virginia's execution of your recovery plan at time of disaster, should your datacenter(s) in Research Triangle Park, North Carolina be impacted by an outage emergency.

Right:

IBM Business Resiliency Services made a major strategic investment to build this new, IBM-owned, leading edge business resiliency center in Research Triangle Park, NC. The site has over 70,000 square feet of raised floor to serve our clients.

Facility / Infrastructure – The hardened infrastructures of IBM's enterprise resiliency centers feature built-in redundancy throughout, to mitigate the risk of failure.   This includes receiving power and communications for voice and data from multiple providers, via multiple, above and below ground paths. Each of our enterprise resiliency centers is outfitted with UPS and backup generators.

Each IBM enterprise resiliency center. such as Research Triangle Park, has redundant, computer-controlled environmental systems, including multiple chillers, excess cooling capacity, dual water supplies, and fire/smoke/water detection and prevention systems. Security provisions are stringent, and include 24x7 guard patrols with closed-circuit surveillance of all critical areas. There are strictly controlled-access entrances to facilities, I/O suites, client offices and tape vaults via badge reader or numeric scramble pads.

Site Skills and Support

Professional, onsite staff consists of hundreds of recovery specialists, who support our clients' recovery exercises and recovery events. Our IBM Business Resiliency Services staff includes: Account Managers, Service Delivery Program Advisors, Systems Specialists and Network Analysts. A key strength of IBM Business Resiliency Services is the depth and breadth of experience our personnel contribute to each recovery effort. The support capabilities of our recovery specialists are not limited to IBM technology—our extensive onsite inventories, combined with our impressive skill base, provide an extensive level of support for mainframe, midrange systems, multi-vendor open systems, client/server systems and work area environments.

As a subscriber to IBM Business Resiliency Services, State of West Virginia will work with assigned an **Account Manager**, and a **Service Delivery Program Advisor**. IBM technical support personnel will include systems recovery specialists and network analysts. Our professional staff will be available to support you 24 x 7 during your exercises or actual recovery events.

Your **IBM Account Manage**r has the responsibility for reviewing your goals, objectives, and budget priorities for business continuity and resilience. The AM communicates new offerings, maintains responsiveness to your requests in all areas of our service, engages other sales and support specialists to address your needs if necessary, and oversees your overall satisfaction with us.

The **IBM Service Delivery Program Advisor** assigned to you is responsible for facilitating the success of your engagement, whether it is an exercise or a recovery event. Your Service Delivery Program Advisor coordinates and manages all recovery exercise activity, including scheduling the exercises. During any events supported by IBM, the Service Delivery Program Advisor is your primary point of contact, and is also responsible for your satisfaction with our services.

At the IBM resiliency center are technical support staff comprised of systems recovery specialists and network analysts. During a recovery exercise or recovery event, these IBM support personnel (available onsite and on-call) will assist you with problem determination related to the hardware and software IBM provides with the configuration.

Solution Overview

Outlined below are the key elements of the proposed Business Resiliency Services, which we integrate together to assist you in resuming normal, business-as-usual functionality and connectivity of your critical data processing environment:

- IBM's fully equipped resiliency center in Research Triangle Park, North Carolina, with the capabilities to support State of WV's required hardware configuration necessary for recovery

- Six (6) weeks use of the recovery configuration following a disaster

- On-site technical recovery support for State of West Virginia's mainframe hardware and network configuration

- Experienced IBM support team includes assigned Account Manager and Service Delivery Program Advisor

- Robust WAN/LAN Infrastructure

- Remote Console Access – Our solution supplements the primary resiliency center with our resiliency center in Research Triangle Park, NC. The use of Remote Console operation in our Research Triangle Park site will enable remote testing and recovery options, and allow State of West Virginia to control your recovery configuration equipment physically located in Boulder. This can provide significant advantages to State of West Virginia, by simplifying the logistics of

exercise or recovery and reducing your dependence on transportation modes that could be delayed or unavailable because of a regional outage.

- Operating System load services for each server from IBM's shared infrastructure, including storage of the recovery images

Recovery Exercises

IBM is proposing the following recovery exercise allowance for each year of your IBM Business Resiliency Services contract:

- IBM is proposing for **mainframe** 80 hours of annual recovery exercise allowance to State of West Virginia, which represents one (1) event per year

- IBM is proposing for **network** 92 hours of annual recovery exercise allowance to State of West Virginia, which represents one (1) event per year

Why IBM?

- **IBM corporate commitment.** IBM commits resources dedicated to our readiness and ability to support our clients' recovery of critical business processes and applications should a business interruption occur. IBM responded to 100% of our subscribers that declared an outage emergency, providing environments and technical support so that each client could recover their mission-critical applications and resume their business operations.

- **IBM professionals to support your recovery.** A dedicated IBM Business Resiliency Services staff in excess of 700 professionals, averaging 10+ years of experience, supports you during your recovery exercises and outage emergency events.

- **Proven processes and intellectual property.** IBM Business Resiliency Services has been providing commercial recovery services since 1989 and based upon this experience offers a robust, proven suite of services to assist you in the development, management, and maintenance of your recovery program.

- **Multi-vendor assets to restore operations.** We continually make significant investment in IBM and non-IBM IT assets, which are solely dedicated to our clients for their use during exercise and recovery events.

- **Exclusive IT environment.** An IBM Business Resiliency Services client would never be required to compromise the exclusivity of their own IT environment.

- **Risk mitigation.** IBM Business Resiliency Services carefully manages asset syndication levels to provide availability of IT assets to our subscribers, should a regional disaster occur.

- **Geographically dispersed resiliency centers.** IBM Business Resiliency Services has fifteen resiliency centers located within the United States. The three enterprise resiliency centers located in Boulder, Colorado, Sterling Forest, New York, and Research Triangle Park, North Carolina are geographically dispersed to minimize the risk of a regional disaster affecting our ability to provide recovery services. IBM has the ability to support most recovery requirements in a single resiliency center.

- **Advanced recovery techniques.** To support our clients that require low RTO (Recovery Time Objectives) and RPO (Recovery Point Objectives), IBM Business Resiliency Services offers a rich set of solutions supporting multi-vendor architectures and tools that provide advanced recovery techniques.

- **Contract flexibility.** Our contract was designed to provide you flexibility to change and update your coverage, so that the recovery solution can support your current IT and business requirements. You are not penalized for changing the assets to which you subscribe. In addition, should your recovery equipment requirements change; you can add platforms or devices without extending the length of your contract.

1. PURPOSE AND SCOPE

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Office of Technology (WVOT) to establish an open-end contract for mainframe disaster recovery services. The objective of the disaster recovery service is to restore essential functioning capacity at a remote location. In the event of an emergency and for regular testing, these services will support the Agency's function at the remote location.

IBM Response

Read and understood.

2. DEFINITIONS

The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.

2.1 "Business Hours" means Monday - Friday 8:00 AM to 5:00 PM EST excluding weekends and Federal and State holidays, which are as follows:

- New Year's Day (January I)
- Martin Luther King Day (Third Monday in January)
- President's Day (Third Monday in February)
- Memorial Day (Last Monday in May)
- West Virginia Day (June 20)
- Independence Day (July 4)
- Labor Day (First Monday in September)
- Columbus Day (Second Monday in October)
- Veterans Day (November 11)
- Thanksgiving (Fourth Thursday in November)
- Day After Thanksgiving (Fourth Friday in November)
- Christmas Day (December 25)

2.2 "CICS" means Customer Information Control System
2.3 "Contract Services" means to provide mainframe disaster recovery services as more fully described in these specifications.
2.4 "GB" means gigabyte: 1,000,000,000 bytes of data.
2.5 "IFL" means Integrated Facility for Linux, a central processor dedicated to Linux workloads.
2.6 "LC" means Lucent Connector
2.7 "LPAR" means Logical Partition allowed by the (PRISM)
2.8 "MIPS" means million computer instructions per second.
2.9 "OSA ports" means Open System Adapter ports
2.10 "PR/SM" means Processor Resource/System Manager in IBM mainframe terminology refers to virtual partitions.
2.11 "Pricing Page" means the pages, contained wvOASIS or attached hereto as Exhibit C, upon which Vendor should list its proposed price for the Contract Services.
2.12 "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
2.13 "SX SFP" means Small Form Factor Pluggable. SX transceivers allow for a maximum distance of 550m at 1.25 Gbits.
2.14 "TB" means terabyte: I,000,000,000,000 bytes of data
2.15 "VMLPAR" means Virtual Machine Logical Partition

IBM Response

Read and understood.

3. CURRENT ENVIRONMENT:

3.1. The West Virginia Office of Technology Data Center provides server and storage services to multiple West Virginia agencies. Exhibit A provides a list of hardware and enterprise server software utilized by the WVOT Data Center. Exhibit B provides a summary of the equipment in the current operating environment for the agency's mainframe.

<u>IBM Response</u>

Read and understood.

4. QUALIFICATIONS

Vendor, or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

4.1.   The Vendor shall have at least three (3) years of experience in assisting clients of comparable size in recovering IBM mainframe-based applications at its recovery center(s). The Vendor must provide documentation upon request.

IBM Response

Read and understood.

4.2.   The Vendor shall adhere the Internal Revenue Service's IRS Publication 1075 Requirements. Upon request, the Vendor shall provide proof in the form of an internal or a third-party audit that applicable security controls have been validated.

IBM Response

IBM Business Resiliency Services can only be responsible to comply with the requirements of the agencies that regulate IBM Business Resiliency Services directly, not those of the agencies or organizations that regulate our clients. The only two that regulate us directly are: Federal Financial Institutions Examination Council (FFIEC); Health Insurance Portability and Accountability Act. (HIPAA). We meet the requirements of these regulations as they apply to the services we provide.

IBM will not certify that the services provided are compliant with specific laws or regulations that apply to our clients. IBM will not interpret laws and regulations on the customer's behalf. IBM will agree to comply with all laws, rules and regulations that apply to IBM as an Information Technology solution provider in performance of IBM's obligations under a transaction document (SOW, ICA, Contract, etc.). IBM will review any special requirements a Customer might have for a specific transaction document, and determine whether IBM can meet those requirements, and any additional costs associated with doing so. IBM Business Resiliency Services is compliance with all regulatory requirements that impact us directly as a service provider. IBM Business Resiliency Services has not pursued any specific certification as IBM Business Resiliency Services is not directly regulated.

4.3.   The Vendor shall be Health Insurance Portability and Accountability Act (HIPAA) and Health Information Technology for Economic and Clinical Health (HITECH) compliant. An executed BAA (see Appendix 1) will be required prior to award.

IBM Response

Please refer to the response to 4.2.

5. MANDATORY REQUIREMENTS:

5.1   Mandatory Contract Services Requirements and Deliverables: Contract Services must meet or exceed the mandatory requirements listed below.

5.1.1   Recovery Center Requirements

5.1.1.1 The Vendor shall provide an alternate processing facility/ disaster recovery center available to the Agency for use in scheduled disaster recovery testing and, immediately, in the event of an Agency-declared disaster.

IBM Response

The IBM solution proposed in this RFQ response continues the recommendation of the IBM enterprise resiliency center in Research Triangle Park, NC as the St of West Virginia's primary recovery center.

5.1.1.2 Recovery services in support of the Agency shall be concentrated at a single recovery center. The recovery center shall be located no further than 500 miles from the customer's site, which is located at 1900 Kanawha Boulevard East, Charleston, WV 25305. Considering the imperatives of prompt system restoration, and the uncertainties of post-disaster transportation, the Agency deems 500 miles to be the maximum distance its recovery team can travel to reach the recovery center and still have adequate time to rebuild its system.

IBM Response

The IBM enterprise resiliency center in Research Triangle Park, NC is approximately 300 miles from Charleston, West Virginia.

5.1.1.3 The Vendor shall maintain technical compatibility with the Agency as the Agency upgrades hardware, software, and network configurations during the life of the contract resulting from this solicitation. The Agency will notify the Vendor of such upgrades, and the Vendor shall work with the Agency to update the contract as Change Orders may be required.

IBM Response

Read and understood.

5.1.1.4 The Agency's current operating environment listed in Exhibit B is not static, but a dynamic one. Environment changes include, but are not limited to, changes in MIPS, processors, storage, connectivity, and / or bandwidth. The Vendor must support the Agency's environment changes as Change Orders may be required.

IBM Response

The IBM Account Manager is your single primary contact into IBM Business Resiliency Services Resiliency Services. The Account Manager has the responsibility for reviewing your goals, objectives, and budget priorities for business continuity, communicating new offerings, and being responsive to your requests for our services. The Account Manager engages sales and technical support specialists to address your needs when necessary, and maintains your overall satisfaction with us.

Your Account Manager is your interface should you ever need to revise your services contract (for instance, an upgrade to your subscribed IT recovery configuration). The Account Manager will periodically review your IBM Business Resiliency Services account and contact you if necessary, in order to:

- Validate the accuracy of the configuration and network services listed in your contract.

- Determine if you need to add and/or delete equipment to your contracted recovery configuration, because of changes to your requirements.

- Review any changes that IBM plans to make to our equipment inventory at the resiliency center, which might impact your contracted configuration requirements.

Contact your Account Manager if you have any questions about our recovery services. You never need to know the "right" person to call, because if your Account Manager can't immediately answer your question, they will engage a staff resource within IBM Business Resiliency Services who can.

5.1.1.5 At no additional cost, the Agency shall have access to, and use of, the vendor's recovery center, and equipment configuration as specified in Exhibit B, for up to 80 hours each year, in order to test its disaster procedures. The Agency anticipates performing one inclusive test each calendar year, but it reserves the right to perform multiple tests. In either case, the total test-time will not exceed 80 hours a year.

IBM Response

IBM is proposing the following recovery exercise allowance for each year of your IBM Business Resiliency Services contract:

- IBM is proposing for **mainframe** 80 hours of annual recovery exercise allowance to State of West Virginia, which represents one (1) event per year

- IBM is proposing for **network** 92 hours of annual recovery exercise allowance to State of West Virginia, which represents one (1) event per year

All exercise **scheduling** is done through the IBM Service Delivery Program Advisor, as follows:

- IBM Business Resiliency Services customers may request any or all of their annual Recovery Exercise Allowance to be scheduled up to 24 months after date on which the request is made (scheduling request must be within the contractual period).

- Customers may either accept or reject an Exercise Date that has been offered to them by their Service Delivery Program Advisor. If the Service Delivery Program Advisor has not received a response from the customer within ten days, the date will be released.

- Network exercises (no system involved) may use either annual Recovery Exercise Allowance hours, Additional Exercise Time, or be billed on an hourly rate for the duration of the event, per network technical person. Such network exercises will not be counted or charged as an "Exercise."

Regarding lead times to schedule exercises, this is dependent upon the complexity of your requirements for the exercise. By reviewing your requirements with your IBM Business Resiliency Services Service Delivery Program Advisor, they'll be able to provide guidance regarding lead time for scheduling. Generally speaking, the more flexible your requirements are regarding day of week, month of year, and configuration, the easier it will be to schedule an exercise.

5.1.1.6 The Agency will consult with the Vendor in scheduling test time. The Vendor shall provide the Agency with a scheduled block of test time within 30 days of Agency request. The vendor will provide a starter system with a base SMS configuration for the TS7740 environment. The Agency's testing shall include, but not be limited to: loading and testing the Agency's mainframe operating systems, restoration of the State's backbone network, restoration of critical State applications and databases, batch processing, and communications testing.

IBM Response

All **exercise scheduling** is done through the IBM Service Delivery Program Advisor, as follows:

- IBM Business Resiliency Services customers may request any or all of their annual Recovery Exercise Allowance to be scheduled up to 24 months after date on which the request is made (scheduling request must be within the contractual period).

- Customers may either accept or reject an Exercise Date that has been offered to them by their Service Delivery Program Advisor. If the Service Delivery Program Advisor has not received a response from the customer within ten days, the date will be released.

- Network exercises (no system involved) may use either annual Recovery Exercise Allowance hours, Additional Exercise Time, or be billed on an hourly rate for the duration of the event, per network technical person. Such network exercises will not be counted or charged as an "Exercise."

Regarding lead times to schedule exercises, this is dependent upon the complexity of your requirements for the exercise. By reviewing your requirements with your IBM Business Resiliency Services Service Delivery Program Advisor, they'll be able to provide guidance regarding lead time for scheduling. Generally speaking, the more flexible your requirements are regarding day of week, month of year, and configuration, the easier it will be to schedule an exercise.

For **starter systems**, IBM Business Resiliency Services recommends that the State of West Virginia build a rescue system to be used for 7740 tape restores/copy export. The State of West Virginia would then use the starter system to perform the restore. he State of West Virginia 's rescue system will then have its catalog, SMS and RMS configurations and use its own addressing to accomplish the restore.

5.1.1.7 Immediately upon the conclusion of each of the Agency's tests and actual disaster recovery events, the vendor shall perform a minimum initialization of the Direct Access Storage Device (DASD) volumes that were used by the Agency. If the Agency requires a more thorough erasure of its data from DASD, the Agency will be responsible for performing the task, and will perform it after each test (within the 80-hour window) or immediately upon the conclusion of any actual disaster recovery event.

IBM Response

Read and understood.

S.1.1.8 The Vendor shall provide technical support personnel, including systems programmers and network engineers, to assist the Agency in the planning of tests, and during events at the recovery facility. The same support shall be available to the Agency 24/7 during tests and customer-declared disasters.

IBM Response

IBM has hundreds of full-time professionals supporting our resiliency centers. One of the key strengths of IBM Business Resiliency Services is the depth of experience which these IBM professionals contribute to a recovery effort. The management and technical support staff assigned to each of our resiliency centers represents a significant IBM asset in providing our service.

Each IBM enterprise resiliency center has a dedicated management and technical staff available to assist you, prior to and during your use of the resiliency center. These IBM Business Resiliency Services specialists provide technical and systems support for the Configuration(s) 24X7 for subscribers using the service. There is no additional charge for this; it is standard support that is available to all IBM Business Resiliency Services subscribers, whether the event is an exercise, or an actual recovery from an unplanned outage emergency.

Some of the key responsibilities of our support staff are as follows:

Support Staff:	Responsibilities
Account Manager	The IBM Account Manager is your single primary contact into IBM Business Resiliency Services. The Account Manager has the responsibility for reviewing your goals, objectives, and budget priorities for business continuity, communicating new offerings, and being responsive to your requests for our services. The Account Manager engages sales and technical support specialists to address your needs when necessary, and maintains your overall satisfaction with us.
	Your Account Manager is your interface should you ever need to revise your services contract (for instance, an upgrade to your subscribed IT recovery configuration). The Account Manager will periodically review your IBM Business Resiliency Services account and contact you if necessary, in order to:
	• Validate the accuracy of the configuration and network services listed in your contract.
	• Determine if you need to add and/or delete equipment to your contracted recovery configuration, because of changes to your requirements.
	• Review any changes that IBM plans to make to our equipment inventory at the resiliency center, which might impact your contracted configuration requirements.
	Contact your Account Manager if you have any questions about our recovery services. You never need to know the "right" person to call, because if your Account Manager can't immediately answer your question, they will engage a staff resource within IBM Business Resiliency Services who can.
Service Delivery Program Advisor	Your Service Delivery Program Advisor is your single point of contact for delivery of our services during any event (i.e., an exercise or recovery). All recovery exercises are scheduled via your Service Delivery Program Advisor, who will encourage you to plan your exercise event well in advance, to give your company time to review and hone your plans and for IBM to schedule a mutually agreeable date for your exercise.
	Once you have scheduled a recovery exercise event, your Service Delivery Program Advisor will coordinate all of the event's support activity. The Service Delivery Program Advisor will work together with your team to prepare for the exercise, so that all details are clarified prior to the scheduled date. As part of the IBM Business Resiliency Services total service team, your Service Delivery Program Advisor is responsible for IBM's provision of services during your event, whether it is an exercise or an actual recovery from an outage emergency.

Support Staff:	Responsibilities
Network Support	Our network team provides support for every aspect of your resiliency center connectivity requirements.
	The skills on the support team are some of the most comprehensive in the industry, covering hardware and software setup, implementation and problem determination for Local Area Network (LAN), Wide Area Network (WAN), Client/Server, Automated Call Distribution (ACD), and legacy technologies. Our roster of employees contains staff with advanced degrees with telecommunications specialties, extensive project management skills, and industry recognized certifications. In addition, IBM maintains a skilled Development staff whose primary function is to continually evaluate the telecomm industry, in support of developing high quality, cost-effective network recovery solutions for our clients.
Systems Support	We provide support for IBM System z (mainframe), System i (AS/400), Open Systems multi-vendor distributed systems (including the open systems platforms of IBM/System P, Oracle, HP), diverse Intel-based client/server environments, Work Area recovery and Call Center (voice) recovery. Other OEM computing equipment is also supported, including disk drives, tape drives, and peripherals from various multi-vendor manufacturers. The support specialists within IBM Business Resiliency Services average 10 years of I/S experience.
	Our expertise and support of IBM and non-IBM equipment and software is second to none in the recovery industry. Our alliances with IBM developers, IBM help desks, and IBM testing labs allow our staff to access information and technical hardware only available to IBM Business Resiliency Services. We cover the gamut from leading-edge Parallel Sysplex and Virtual Tape Server technology, and operating systems including z/OS, z/VM, and z/VSE. Through our alliances with Oracle, HP, and EMC, our systems support staffs have equal access to these vendors' product education and support structures.
	IBM is a leader in cloud technology products, services and thought leadership and we can leverage extensive expertise gained from deploying and managing cloud services to organizations of virtually all sizes.
	All of the above uniquely position IBM as your commercial recovery provider.
Customer Administrators	Customer Administrators are the key to the smooth operation you see when you come to an IBM resiliency center. A CA works with your Service Delivery Program Advisor to set up security clearances for your team. Upon your team's arrival, following site security's verification of your IDs, Customer Administrators will issue temporary access badges to your team, provide instruction on how to obtain access to your designated areas via the security system, and guide you and your team to the appropriate recovery suite.
	Customer Administrators will oversee the receipt and shipment of your company's vital records by working with site security and shipping/receiving departments. The CA takes pride in providing our resiliency center in showcase condition. This includes your assigned suite(s) being clean, stocked, and ready for your arrival.
	They are there to help you with a wide variety of administrative details throughout an exercise or recovery. The CAs answer calls to the Service Delivery desk and deliver messages in a timely fashion, and page clients or technical support when needed. They can also provide recommendations and directions to local restaurants, assist with ordering take-out meals, and handle the sending or receipt of faxed materials. In an outage emergency situation, the CAs can assist with hotel, car or catering arrangements. The Customer Administrator team will be there to help make your stay at our facility is a pleasant one, and encourages you to "Ask for it, if you don't see it."

S.1.1.9 The Agency will ship a router to the Vendor after award of bid. The Vendor shall provide rack space, power, and a quantity of two (2) 1Gb network connections, install the router, house it in a secure cabinet, and ensure that it remains fully operational at all times. At the time of a scheduled disaster recovery test or declared disaster, the Vendor shall provide Internet connectivity for the router, and a connection to the Vendor-provided Cisco GbE layer 3 switch with a minimum of four (4) ports available for Agency use. The Vendor shall, upon Agency request, provide the exact cabinet location of the router.

IBM Response

IBM Business Resiliency Services will house customer owned equipment and provide appropriate power and a total of two (2) 1Gb network LAN connections and can connect any/all subscribed services and equipment Internet/appliances/switches) via our Layer2 infrastructure including a customer configured Layer3 switch with 4-10Gb trunk connections.

5.1.1.9.1 For the purpose of disaster recovery testing and declaration of disaster, the Vendor must provide a Cisco GbE layer 3 switch since WVOT network engineers have subject matter expertise with this product line. This will prevent delays in configuring an alternative manufacturer's switch when trying to recover time sensitive data.

IBM Response

IBM Business Resiliency Services will provide a Nexus Layer3 switch with four (4) 10Gb trunk connections to trunk the required Layer2 VLANS. Customer would then configure this Nexus switch to do the Layer3 routing among the trunked Layer2 VLANS.

5.1.1.10   The Agency will utilize the Internet for connectivity to the Vendor's facility. The Vendor will permit all IP and protocol traffic.

IBM Response

IBM will provide the quantity of subscription megabits as required by customer along with any/all VPN appliance specified for the contracted configuration. Customers are always responsible to configure the appliances so any protocols, routing, security etc. are handled by the configuration/usage of said appliances

5.1.1.11   The Vendor will allow Generic Routing Encapsulation (GRE) over an Internet Protocol (IP) internetwork.

IBM Response

See response in 5.1.1.10.

5.1.1.12   The Vendor must allow all protocols necessary to maintain internet protocol security (IPSec) connection.

IBM Response

See response in 5.1.1.10.

5.1.1.13   The recovery center shall feature uninterruptible power supply (UPS) units, batteries, diesel generators, redundant transformers, redundant chillers/air conditioners, smoke and water detectors, fire suppression systems, 24-hour guard service, and closed-circuit TV monitoring.

IBM Response

The IBM enterprise resiliency center in Research Triangle Park provides those features, as listed below:

IBM Enterprise Resiliency Center - Research Triangle Park, NC	
Data Center Space Infrastructure	
Item	**Description**
Total power capacity	4.2 MW capacity for IT equipment
Total cooling capacity	44 CRACs @ 35 Tons = 1540 Tons of IT cooling
Utility power feeds	Redundant 100 kV utility transmission lines
Network entry points	Two (2)
Floor loading	1500 lbs. / sq. ft.
Generator fuel supply	Two (2) 100 K gallon fuel tanks
Data Center Space Redundancy	
Item	**Redundancy Level**
Emergency generator	N+1
Main switchgear	N+1
Uninterruptible power supply	N+1
Power distribution units	N+1
Remote power panels	N+1
Cooling pump gear	N+1
CRAC units	N+25%
Data Center Temperature/Humidity/Fire Detection and Suppression	
Item	**Description**
Data Center Temperature and Humidity	IBM will provide heating, ventilating and air conditioning within the Data Center Space as described in the SOW Temperature and Humidity service levels.
Fire Detection	Ceiling smoke detection
Water Detection	Under floor leak detection
Fire Suppression	Wet pipe sprinkler system
Data Center Access/Security	
Item	**Description**
Command Center	Command Center staffed 24 x 7
Access Doors	Entry doors to Data Center Space from IBM managed space.

IBM Enterprise Resiliency Center - Research Triangle Park, NC	
Security	IBM-provided security access card terminal at the access doors to the Data Center Space, supported by IBM-provided and managed card key access system with biometric reader.
Data Center Security Access	IBM security access cards or visitor badges to be provided to Customer for use by authorized Customer personnel requiring access during normal use.
Video Monitoring & Recording	Surveillance Camera positioned at the access doors into the Data Center space, recording 24 x 7.
Secure Holding Space	Secure holding area for temporary storage of customer provided equipment within the Data Center that is only accessible to IBM personnel.
	Customer is responsible for scheduling items to be held and removed within thirty (30) days.

Data Center Power/UPS/Cooling		
Item	**Description**	**Redundancy Level**
Incoming Electrical	Two (2) on-site, Duke owned HV to MV substations	2 N
Incoming Mechanical	Dual feed from IBM plant, looped supply on primary	N+1
Electrical Distribution	Fully diverse power distribution, concurrently maintainable	2N
Power Density	60 W /sq. ft. wall to wall raised floor	
Generators	Redundant generator	N+1
UPS	Redundant UPS, two (2) multi-module systems with auto transfer	N+1
Static Switches	Distribution level supporting PDUs on UPS with utility alternate feed	1 to 3
PDUs	Single feed with Static Switch upstream, circuit level monitoring. IT Load spread across two (2) static switches	2 N
Central Mech. Plant	Fault tolerant, DDC controlled, CUP manned 24 x 7	N+1
Heat Rejection	Centrifugal chillers, cooling towers	N+1
Coolant Distribution	Multiple primary pumps supporting raised floor with looped feed	N+1
AC	Variable speed CRAC units on 36" raised floor	N+25%
Controls	Fault tolerant, dual alarm path, circuit level monitoring	N+1

5.1.1.13.1   The Vendor must provide documentation validating these requirements prior to award.

IBM Response

Read and understood.

5.1.1.14   The Vendor shall provide the Agency with office facilities during testing and disasters. The facilities shall be located at the recovery center and shall include at least 600 square feet of office space, chairs, work surfaces, terminals connected to the recovery CPU, at least six (6) telephones connected to long-distance service, a printer, and Internet access.

IBM Response

Our center features 10 fully equipped universal customer suites with flat panel displays and virtualized thin-client technology. Each suite contains a large, flat screen TV with satellite service, refrigerator, printer and fax machine, telephones, and we provide 24x7 concierge service on site to see to the comfort of our clients. Universal suites are capable of supporting all technology platforms, eliminating the need to use several individual suites in a multiple platform solution.

We also have two customer conference rooms, a large vending and kitchen area, and three breakout and relaxation lounges.

5.1.1.ISThe Vendor shall provide an overview of its proposed recovery center. The overview shall include at least a written description of the facility and should include photographs of the facility; driving directions to the facility from the Agency's site at 1900 Kanawha Boulevard East, Charleston, WV; driving directions to the facility from nearby airports; and a map(s) indicating the location of the facility, recommended routes, and nearby lodging upon request.

IBM Response

The IBM campus in Research Triangle Park (RTP) is on a 765 acre complex with 4 million square feet of space incorporating 280,000 square feet of raised floor data center space. It is located in the heart of North Carolina near excellent universities such as Duke, University of North Carolina and North Carolina State. There are many arts and cultural venues (Durham Performing Arts Center, the Nasher Gallery, North Carolina Museum of Art) to enjoy as well as major and minor league sports in the area. The RTP site was selected as the new Resiliency Services location due to its geography and favorable weather. We invested $80 million into the facility for our opening in 2014. This new facility is designed to meet the business continuity goals of our clients through existing proven programs as well as the latest advances in Cloud technologies.

- The center offers 72,000 square feet to serve IBM Business Resiliency Services clients and a +8,000 square feet tape pool.

- The RTP resiliency center is brand new. We invested $80 million into the facility for our opening in July 2014.

- In addition to IBM Business Resiliency Services, IBM business units with operations in RTP, include IBM Software, Global Technology Services, Systems Technology, Retail Solutions, Finance, Integrated Supply Chain, Marketing, and Human Resources.
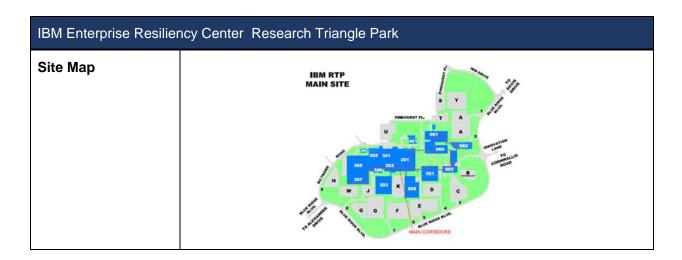
- The RTP facility is IBM's largest facility in the United States on 765 acres of total property area, four million square feet of floor space, and 280,000 square feet of raised floor space.
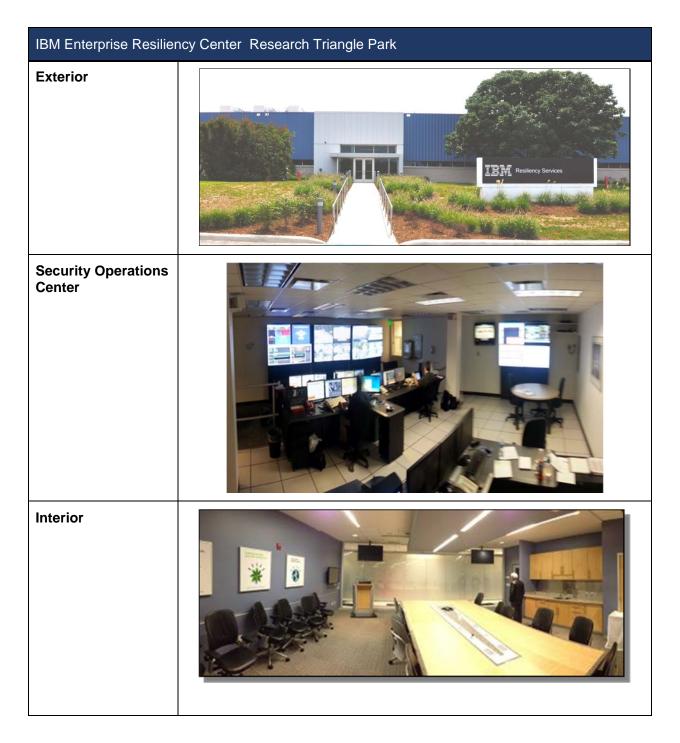
The hardened infrastructure of the RTP enterprise resiliency center has built-in redundancy throughout, to mitigate the risk of failure. This includes receiving power and communications from multiple providers, and outfitting the campus with the latest in UPS and generator technology. Full time security guards and controlled-access doors to all entrances and system suites provide a highly secure environment.

IBM rates our resiliency centers to IBM Reliability Levels. A level 3 facility is defined as one that has a UPS with internal redundancy provided for computer equipment, along with backup generators that are provided for utility outages. The RTP resiliency center has an IBM level 3 rating.

Our center features 10 fully equipped universal customer suites with flat panel displays and virtualized thin-client technology. Each suite contains a large, flat screen TV with satellite service, refrigerator, printer and fax machine, and we provide 24x7 concierge service on site to see to the comfort of our clients. Universal suites are capable of supporting all technology platforms, eliminating the need to use several individual suites in a multiple platform solution. We also have two customer conference rooms, a large vending and kitchen area, and three breakout and relaxation lounges.

IBM Business Resiliency Services RTP has in place the staff, skills and technology to support the goals of our clients. The systems, equipment and networking capabilities supported by our site span a wide range of IBM and multi-vendor platforms. These capabilities and our teams are available to assist our clients in exercising their business continuity plan or in recovering from an unexpected outage. Our personnel are among the finest in the industry and we encourage our clients to leverage the deep skills of IBM RTP to enhance and elevate their business continuity and resiliency program.

IBM Enterprise Resiliency Center Research Triangle Park	
Site Map	

IBM Enterprise Resiliency Center Research Triangle Park	
Exterior	
Security Operations Center	
Interior	

IBM Enterprise Resiliency Center Research Triangle Park	

5.1.1.16The Vendor shall provide a computer that has pre-configured access to the Web Specialist GUI on the 7740 Virtual Tape System {VTS). The Vendor shall provide the computer by the beginning of the disaster recovery test and / or as soon as a disaster is declared.

IBM Response

- **Recovery exercise** - our complete configuration is available upon commencement of the exercise event

- **Disaster declaration** - when you notify IBM that you are experiencing an Outage Emergency by calling IBM's toll-free number, we will begin to prepare, without delay, the Recovery Site facilities for your use. You may have immediate access to the Recovery Site IBM makes available to you. IBM will use commercially reasonable efforts to provide the Configuration as soon as you are ready to use it and will provide it no later than twenty-four (24) hours after you Declare.

5.1.2 Pre-Test Specifications

5.1.2.1 At least two weeks prior to the start of disaster recovery tests, the Vendor shall provide the Agency with the names, phone numbers, electronic mail (e-mail) addresses, and hours of availability, of individuals who will be assisting the Agency, remotely, in preparation for the test, and at the recovery center during the test. The Vendor shall also indicate who will be available to provide similar assistance to the Agency, at the recovery site, during hours outside of prime shift (8:00 a.m.- 5:00 p.m.) and shall provide similar contact information for those individuals.

IBM Response

IBM Business Resiliency Services provides client support with on-site and on-call resources to assist with problem determination related to the hardware and software that IBM provides with the contract configuration. This is a shared technical support model that is utilized for testing and/or recovery clients at time of event. Staffing support personnel are dynamic and subject to change based upon the needs of our clients and IBM requirements. IBM may provide a staffing schedule when possible, however no contractual assurance can be made that this schedule will accurately depict the actual resources that may be staffed at time of event. All support team members are contacted through our site support phone number.

5.1.2.2 Modem Test: Approximately 12 hours prior to a scheduled disaster recovery test, the Vendor shall work with the Agency's networking staff to facilitate an end-to-end mini-test to ensure connectivity between the Agency's modem and the recovery center's modem and router. · After successful connectivity to the disaster recovery center's modem and router, the Agency will remotely configure the router located at the recovery center.

IBM Response

IBM Business Resiliency Services does support network mini-tests with our clients. IBM will schedule a (4) hour block of time prior to the exercise to validate the network connectivity. This time is taken out of your annual contract annuity hours, or you have the option to purchase the hours at the established rate of $190/hr. IBM will work with our client to bring up the network connectivity. The client then can remotely configure the router as needed, or you may elect to have IBM perform this configuration if you contract for a RPE (Recovery Program Execution). It is the client's responsibility to request this network mini-test from their IBM Project Manager. This is best done when scheduling the main exercise to ensure that the hardware and support personnel are available.

5.1.2.3 Router Test: At the start of the disaster recovery test, the Agency and the Vendor shall work together to establish connectivity between the Agency's data center and the Vendor.

IBM Response

Customer is responsible for configuration of any network devices for communication to another location. IBM Business Resiliency Services support personnel are available should they encounter a problem that is within our infrastructure.

5.1.2.4 After the conclusion of the disaster recovery test, the Vendor shall save the Agency's router settings. The Vendor shall load the configuration during the Agency's next mini-test, disaster recovery test, or Agency-declared disaster.

IBM Response

IBM Business Resiliency Services will save / reload a customer's router configuration if the appropriate offering for save/restore is contracted if available (only Cisco devices at this time).

5.1.3   Contracted Services

5.1.3.1 Contract Service #1: Recovery Center Access - Vendor must provide the recovery center for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

IBM Response

Scheduling: All exercise scheduling is done through the IBM Service Delivery Program Advisor, as follows:

- IBM Business Resiliency Services customers may request any or all of their annual Recovery Exercise Allowance to be scheduled up to 24 months after date on which the request is made (scheduling request must be within the contractual period).

- Customers may either accept or reject an Exercise Date that has been offered to them by their Service Delivery Program Advisor. If the Service Delivery Program Advisor has not received a response from the customer within ten days, the date will be released.

- Network exercises (no system involved) may use either annual Recovery Exercise Allowance hours, Additional Exercise Time, or be billed on an hourly rate for the duration of the event, per network technical person. Such network exercises will not be counted or charged as an "Exercise."

Regarding lead times to schedule exercises, this is dependent upon the complexity of your requirements for the exercise. By reviewing your requirements with your IBM Business Resiliency Services Service Delivery Program Advisor, they'll be able to provide guidance regarding lead time for scheduling. Generally speaking, the more flexible your requirements are regarding day of week, month of year, and configuration, the easier it will be to schedule an exercise.

Declaration: You must notify IBM that you are declaring an Outage Emergency (i.e., disaster) by calling the toll-free number that IBM provides.

Access rights for all clients are in accordance with our standard terms and conditions, as stated in the IBM Attachment for Multivendor Information Technology Recovery Services, under the subsection Recovery:

> "IBM will provide the Configuration for your use at the Recovery Site for a maximum of six (6) consecutive weeks after you Declare. You will have priority access to the Configuration over any customer, except one who has Declared before you."

When you (as an IBM Business Resiliency Services subscriber) call IBM to declare, IBM records your declaration under a date/time-stamp. This establishes your priority of access over any other subscriber who may subsequently declare an outage emergency. The date and time of a subscriber's declaration determines the priority of access when two or more subscribers declare during the same time frame.

5.1.3.1.1 The current operating environment of the Agency's mainframe is listed in Exhibit B - Equipment Summary of   Agency's   Mainframe   Current   Operating Environment. The Vendor must provide the equivalent capacity at the recovery center.

IBM Response

Read and understood.

5.1.3.2 Contract Service #2: Network Access - The Vendor must provide the recovery center with the following networking related services for scheduled testing, and immediately upon Agency-Declaration of a disaster for a minimum of 12 months from the date of award.

5.1.3.2.1   The annual Disaster Recovery test, the Vendor shall provide ingress to \ egress from DR site at rate of no less than IOOMbps.

IBM Response

IBM Business Resiliency Services will provide the amount of megabits of Internet egress customer requires.

5.1.3.2.2 .2 Vendor must provide a quantity of one (1) remote secure console port access to agency-owned router as specified in Section 5.1.1.9.

IBM Response

Customers can configure routers remotely via the Internet or dial modem/analog dial line.

5.1.3.2.3   Vendor must install and house one (1) agency-owned router per Section 5.1.1.9.

IBM Response

If required and contracted, IBM Business Resiliency Services will supply rack space/power for any customer owned equipment.

5.1.3.2.4   Vendor must provide the Agency with a quantity often (10) non-RFC 1918 IP addresses.

IBM Response

With the required megabits of internet access, IBM Business Resiliency Services supplies a public IP range of 29 usable addresses.

5.1.3.3 Contract Service #3: Agency Declaration of Disaster Recovery and Increased Network Connectivity - The Vendor shall provide the Agency with the cost of a disaster recovery declaration fee and increased network connectivity.

IBM Response

Any additional network requirements/costs can be addressed as specifically requested.

5.1.3.3.1   In the event of a declared disaster, the vendor shall provide ingress to \ egress from the DR site at the rate of no less than 500Mbps, with the ability to adjust upward as the workloads dictate.

IBM Response

IBM Business Resiliency Services can supply 500Mb of internet egress for an actual declaration event.

5.1.3.4 Contract Service #4: Recovery Center Usage Rate- The Vendor shall provide access to the Recovery Center to the Agency immediately upon Agency-Declaration for a minimum of three (3) calendar days.

IBM Response

IBM will provide the Configuration for your use at the Recovery Site for a maximum of six (6) consecutive weeks after you Declare.

5.1.3.5 Contract Service #5: Extended Recovery Center Daily Usage Rate - The Vendor shall provide the Agency with the option to extend usage of the Recovery Center for a daily rate after the initial three (3) days as defined in 5.1.3.4.

IBM Response

Note that the Initial Recovery Charge (IRC) includes the initial three (3) days after a Declaration, and the Daily Recovery Charge (DRC) is incurred each day for day 4 through day 42.

6. CONTRACT AWARD

6.1   Contract Award: The Contract is intended to provide Agency with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.

CONTRACT WILL BE AWARDED BY TOTAL BID AMOUNT, HOWEVER, INITIAL CONTRACT PERIOD WILL BE FOR A PERIOD OF ONE YEAR.

Renewal options for years 2, 3, and 4 will be initiated by the Agency, agreed to by the Vendor and processed by the West Virginia Purchasing Division **as Change Orders for subsequent years.**

IBM Response

Please note that material changes to the configuration may affect the price.

6.2   Pricing Page: Vendor must complete the Pricing Page by providing the monthly cost for contract service items #1 through #2 and unit cost for contract items #3 through #5.

Vendor should complete the Pricing Page infull as failure to complete the Pricing Page in its entirety may result in Vendor' s bid being disqualified.

Vendor should type or electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document. In most cases, the Vendor can request an electronic copy of the Pricing Pages for bid purposes by sending an email request to the following address: Jessica.S.Chambers@wv.gov.

Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

IBM Response

Please refer to the separate Pricing document included with our RFP response.

Attachment 1 - Mainframe Configuration

StOfWestVirginia - Mainframe.pdf

IBM Customer Agreement

IBM

Supplement for Multivendor Information Technology Recovery Services

The terms of the IBM Customer Agreement and its Attachment for Multivendor Information Technology Recovery Services (or an equivalent agreement signed by both parties) apply to this transaction.

Customer Name and Address

STATE OF WEST VIRGINIA
2019 WASHINGTON ST E
CHARLESTON, WV 25305-2214

IBM Address for Notices:

Attn: IBM Resiliency Services – Contract Operations
IBM Corporation
PO Box 700
Suffern, NY 10901-0700

Covered Address:

2019 WASHINGTON ST E
CHARLESTON, WV 25305-2214

REFERENCE NUMBERS

Attachment:	B001385
Customer:	9893710
Enterprise:	9642000

CONTRACT PERIOD

Start Date:	05/15/2014
End Date:	05/14/2020

SUPPLEMENT

Number:	CFT0LXQ
Effective Date:	05/15/2018
Revision (yes/no):	Yes
Renewal (yes/no):	No

Primary Recover Site

Research Triangle Park, NC

**This document is intended for
INFORMATIONAL PURPOSES ONLY
and MUST not be included in or as an attachment to a
contract.**

Equipment Configuration

```
Quantity    Type        Model        Product
Or Units                             Description
---------   ----------  -----------  --------------------------------------------
2828/H06[1]
    1     2828        H06          IBM zEnterprise bc 12
  144     2828        GB1          IBM 2828 Memory
        Provides 1 GB of processor memory on the 2828.
    2     2828        IFL          2828 IFL
       Includes one 2828 Integrated Facility for Linux (IFL) or
         one 2828 full capacity Central Processor (CP) available
         for Linux on System z workload.
    1     2828        ZIIP         2828 ZIIP
       Includes one 2828  Integrated Information Processor or
               one 2828 full capacity Central Processor (CP).
    3     MAINFRAME   LPAR         LPAR Selection (No cost)
   60     DSDISK5     FCFN         IBM Disk System
       Includes: 250 GBs of RAID protected Tier 1 IBM
                 disk, with PTC, PAV, HPAV authorization and
                 Fibre Channel and FICON host connectivity
    1     3584K       BASE         IBM 3584 Tape Library
       Includes 3584-L22 with 16 cartridge I/O station,
               199 cartridge capacity, FC connectivity.
               Advance Library Management System,
               Encryption Configuration, Control
               and Data Path Failover.
    1     3584K       D22          IBM 3584-D22 Tape Storage
       Includes 1 3584-D22 tape storage to 3584K BASE
               with 360 cartridge capacity.
               Prerequisite: 3584K BASE configuration
    6     3584K-FC    E05          IBM TS1120 Tape Drive
        Adds one 3592-E05 Fibre Channel tape drive with encryption
        feature to 3584K BASE.
    3     3592-FCON   E05          IBM TS1120 Tape Drive - E05
       Includes: One 3592 E05 tape drive on a 3592 C06
                 controller with one FICON port per two drives, and
                 Encryption feature.
    1     TS7740I1    BASE         IBM TS7740 VTS
       Includes 2 TBs of native cache capacity,4 FICON ports,
               hard drive encryption, and (6) 100 MB/sec
               increment of potential peak data throughput.
       Note: Drives and tape library must be selected separately
    6     3270        PC           VDI with 3270 emulation
       VDI with 3270 emulation
       Prerequisite: 9074 Ethernet port with IBM assigned TCP/IP address.
    1     9074        005          Non-SNA 3270 Controller
       Includes: 2 FICON ports and 3 Ethernet ports
       Prerequisite: A "3270 PC" solution is required for local non-SNA
                     support.  Support for any other PC connection
                     requires a "REMCONS PKG1" solution.
    1     2828OE5     10SR         2828 OSA-Express5 10 GbE SR
       Includes: Two 2828 OSA-Express5 10 Gigabit Ethernet SR port
       (OSAPORT= on one OSA PCHID.
```

Attachment 2 - Network Configuration

StOfWestVirginia -
Network.pdf

Supplement for Multivendor Information Technology Recovery Services

The terms of the IBM Customer Agreement and its Attachment for Multivendor Information Technology Recovery Services (or an equivalent agreement signed by both parties) apply to this transaction.

Customer Name and Address

STATE OF WEST VIRGINIA
2019 WASHINGTON ST E
CHARLESTON, WV 25305-2214

IBM Address for Notices:

Attn: IBM Resiliency Services – Contract Operations
IBM Corporation
PO Box 700
Suffern, NY 10901-0700

Covered Address:

2019 WASHINGTON ST E
CHARLESTON, WV 25305-2214

REFERENCE NUMBERS

Attachment:	B001385
Customer:	9893710
Enterprise:	9642000

CONTRACT PERIOD

Start Date:	05/15/2014
End Date:	05/14/2020

SUPPLEMENT

Number:	CFT0LWQ
Effective Date:	05/15/2018
Revision (yes/no):	Yes
Renewal (yes/no):	No

Primary Recover Site

Research Triangle Park, NC

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and MUST not be included in or as an attachment to a
contract.**

Customer Name: STATE OF WEST VIRGINIA

Processor type/model: NULLCPU NET

Customer Number: 9893710

LB System Storage (GB) N/A

Address: 2019 WASHINGTON ST E

DASD (GB) N/A

CHARLESTON, WV 25305-2214

Primary Recovery Site: Research Triangle Park, NC

Contract Number: CFT0LWQ.5.1.1

Equipment Configuration

```
Quantity   Type         Model        Product
Or Units                             Description
---------  -----------  -----------  ---------------------------------------------
Network
    1      NULLCPU      NET          Empty CPU, Network
    1      INT/SYNDG    IBM          MultiMegabit Internet (500Mb)
         Includes: - Local access to ISP point of presence from an IBM
                     provided recovery facility.
                   - Network interface equipment and IP router at
                     the IBM provided recovery facility.
                   - Wide area network interface and appropriate
                     Ethernet port on IP router.
                   - 29 registered IP addresses from a shared address
                     pool.  For additional addresses subscribe to
                     INT/ADDR  XYZ.
         Notes:
           - Each selection of Qty 1 is equivalent to 500Mb Internet Access
           - This Internet solution uses shared resources available to
             customers at all recovery locations in the U.S.  The
             additional  Internet Access terms in your contract apply.
           - Available during recovery exercise or outage emergency
             only.
    1      REMCONS      PKG1         Hotsite Remote Console Access
             Console infrastructure access
             Support for Serial and GUI Users
             Secure Access/Firewall Front End
    1      WEBVPN       10           Remote Access SSL WebVPN
         Includes: Remote access to the IBM recovery center via
                   customer web browser.
          - 10 UserID's
          - Broadband (Internet) gateway with appropriate microcode at
            IBM recovery center.
          - private 192.168.net addresses will be assigned to users.
          - IBM design of IP tunneling function between customer end-user
            device(s) and SSL VPN gateway at IBM recovery center.
         NOTES:
          - IBM will provide certain configuration parameters including
            userid and password for use during exercise and outage.
          - Customer is responsible for providing Internet Explorer,
            Mozilla Firefox or Sarari web browser on their end user PCs.
          - Customer is responsible for providing Internet access for
            their end users.
          - Customer agrees to comply with prerequisites and implement
            instructions provided.
    1      COEPOWER     .5KW         COE Space .5KW Power
         Includes: .5KW Power Per Qty 1 for Customer Owned Equipment.
    2      COETEMP      CGE          Copper 1GigE Port for COE
         Includes: One port for customer owned equipment, available for
                   recovery exercise or outage emergency only.
    1      COETEMP      REM1         Remote Console to Network COE
```

```
Includes:
    - One port for customer owned Network equipment.
    - Available for recovery exercise or event only.
    - Console infrastructure access
    - Support for Serial Users
    - Secure Access/Firewall Front End (REMCONS PKG1)
Customer will provide, or provide for:
    - RJ45 adapter on Client Owned Equipment (COE)
```

IBM Terms and Conditions

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IBM Corporation

The information in this proposal shall not be disclosed outside State of West Virginia and shall not be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate the proposal, provided that if a contract is awarded to IBM as a result of or in connection with the submission of this proposal, State of West Virginia shall have the right to duplicate, use or disclose the information to the extent provided in the contract. This restriction does not limit the right of State of West Virginia to use information contained in the proposal if it is obtained from another source without restriction.

The exchange of Confidential Information between State of West Virginia and IBM is governed by the Agreement for the Exchange of Confidential Information between the parties dated 2001 and identified by reference number HW13103.

Notwithstanding any language to the contrary in the RFP, IBM's response to your RFP is made with the understanding that the terms and conditions that will govern the transaction between us will be the previously entered into agreements between IBM and the State of West Virginia will govern this transaction. These documents include:

1. *the IBM Customer Agreement ("ICA"); JM71665 between the parties dated May 1993*

2. *the IBM Customer Agreement Attachment for Multivendor Information Technology Recovery Services (Z125-8306-06) ("the Attachment")); and*

3. *various Transaction Documents which will specify the details associated with a Subscription(s) (including Configuration details for Mainframe, and Network,, including pricing, contract period, etc.), and any standard IBM amendments to the Attachment that are applicable to the particular options you decide to select for the Subscription(s).*

IBM is providing information responses in the format requested by your RFP, along with additional information related to our services. Although we believe the information to be accurate and useful to you in your decision process, we do not consider this information (or the RFP itself) to be part of the contract terms.

The estimates provided are for budgetary and planning purposes only, are based upon the general information provided to IBM, and are for your information only. The estimates are subject to change based upon validation of, or alterations to, your requirements and the availability of the solution elements (configurations), as well as further technical and quality assurance reviews by IBM. The estimates are valid for a period of ninety (90) days following submission, subject to change as referenced above.

At the time that you request executable contracts for the proposed Services, the availability of the space will be determined. If the space is not yet confirmed as available, then any contract will necessarily be contingent upon IBM procuring the space necessary to deliver the Services. For purposes of these estimates, IBM has assumed that all the solution elements of these Services would be available by the target date for contract signing. The actual availability of part or all of the solution elements, and the resulting price, will be determined at the time that you contract for services.

IBM will deliver the Services proposed in this RFP using Recovery Sites located within the United States. All equipment used to provide the Services will also be located in the United States. IBM may use personnel from locations outside the United States to provide some administrative, planning, or support functions, unless the final contract agreed between us indicates that the data housed in the Recovery Site requires use of US based personnel only.

IBM is not responsible for printing errors in this proposal that result in pricing or information inaccuracies. Products, programs, services or features discussed in this proposal may be subject to change without notice.

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