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FAX

Garning Laboratories International, LLC 600 Airport Road

Lakewood, NJ 08701

732-719-1429 Fax 732-719-1475 Procurement@gaminglabs.com



Michelle L Childers

304-558-3970

304-558-2063

THIRD PARTY ACCEPTANCE TESTING

SOLICITATION: LOT1800000010



Jo Ann Zettlemoyer

57_____

February 27, 2018

Hi Michelle,

I am sending the Third Party Acceptance Testing Solicitation: LOT18000000010 bid to you via fax as per your telephone call this morning. I also submitted the bid electronically through the West Virginia Casis VSS website. Would you be able to send an email confirming your receipt of this fax?

Thank you for your help,

Jo Ann Zettlemoyer

02/27/18 13:03:22 | | | W Purchasing Division



GLI

World Headquarters

600 Airport Road Lakewood, NJ 08701

Phone (732) 942-3999 Fax (732) 942-0043 www.gaminglabs.com February 23, 2018

Michelle Childers
Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

RE: Solicitation No. LOT1800000010
Third Party Acceptance Testing

Dear Ms. Childers:

Gaming Laboratories International, LLC (GLI) respectfully submits this proposal in response to the above solicitation for Third Party Acceptance Testing.

With over 27 years of industry experience, GLI offers unmatched competency, and our personnel are uniquely specialized in acceptance testing. A testament to the quality that GLI has delivered can be seen in the number of recurring engagements with the same clients.

On behalf of our firm of highly qualified professionals, we look forward to your evaluation of our proposal. This submission demonstrates GLI's commitment in providing West Virginia with the highest quality of service.

Thank you for the opportunity to respond to this CRFQ. Should you have any questions or need additional information about our response, please feel free to contact Anne Stone, Procurement Manager, at (732) 961-5031.

Sincerely,

World Headquariers Lakewood, New Jersey

u.s. Regional Offices

Worldwide Locations

Colorado

Nevada

International Offices

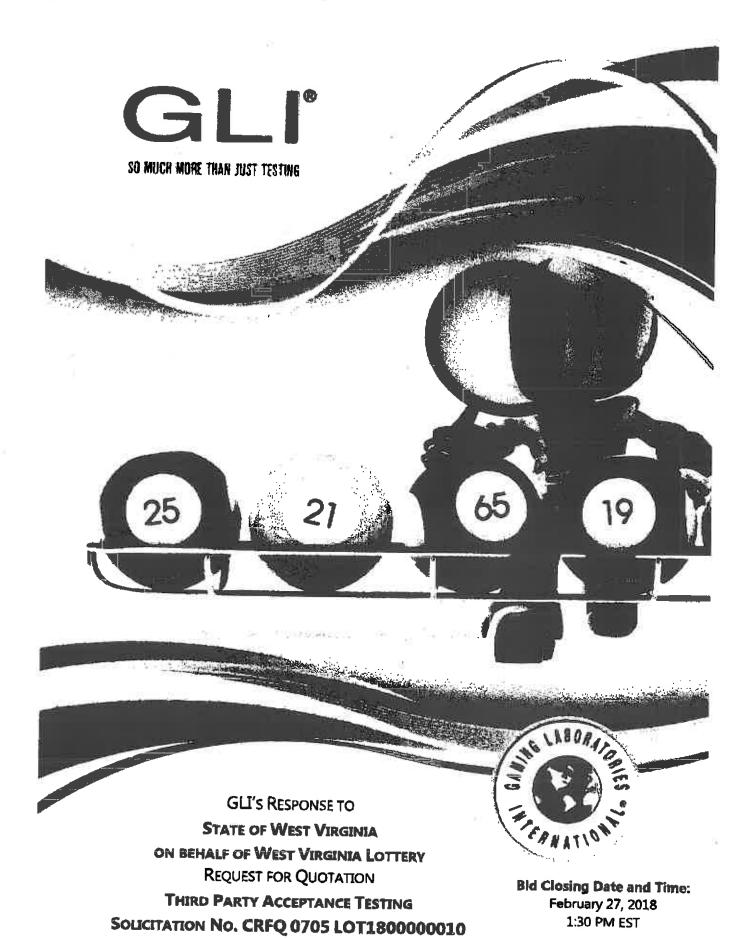
GLI Africa GLI Asia GLI Australia Pty Ltd GLI Austria GmbH GLI Europe BV GLI Italy GLI South America Bruce A. Hecht

Chief Financial Officer

Bua A Hich

1:30 PM EST

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Received: 7329420043



West Virginia Lottery Third Party Acceptance Testing Solicitation No. CRFQ 0705 LOT1800000010

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West Virginia Lottery
Third Party Acceptance Testing
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CORPORATE EXPERIENCE

Corporate Overview

For over 27 years, **Gaming Laboratories International**, **LLC (GLI)** has been the world leader in providing independent Quality Assurance Testing, RNG testing, Product Certification and Consulting Services to the Lottery, Gaming and Wagering industries. GLI's first corporate contract, signed in 1989, was to test lottery devices and systems. What began as testing for a single jurisdiction has now grown to more than 65 lottery jurisdictions worldwide, most of them exclusively, which is more than any testing organization in the world. In fact, GLI has been bringing its strategic insights and testing expertise to the lottery and gaming industries worldwide. GLI helps regulators ensure the integrity of the gaming industry, and is proud to say that regulators around the world have come to trust us. Suppliers have also come to rely on GLI to thoroughly test, inspect, and certify, so that there are no surprises when their products go live in the field.

We have demonstrated our excellence in global testing by earning the industry best practice standard, <u>ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories Accreditation</u> for all laboratory work throughout our network of global labs. GLI specializes in, and adheres to, the strictest quality standards and industry best practices:

- ✓ ISTQB certification for testers (International Software Testing Qualifications Board) leader in the certification of competencies in software testing.
- ✓ ISO/IEC/IEEE 29119 Software Testing an internationally agreed set of standards for software testing that can be used within any Software Development Life Cycle (SDLC) or organization.
- Capability Maturity Model Integration (CMMI) which defines maturity levels for processes in the SDLC.
- ✓ World Lottery Association Security Control and Responsible Gaming Standards.
- Gaming Standards Association (GSA) standards.
- Multi State Lottery Association Standards (MUSL).

Our Software Quality Assurance, Testing and Professional Services Division was formed in November 2011, and has been providing Software Quality Assurance & Testing services to the gaming industry over the past seven years.

GLI has provided Software Quality Assurance, Testing, Certification and Professional Consulting Services to more lotteries in the United States and around the world than any other test lab, and we are confident in the quality of our work. The strength and experience of GLI's team, and the value we will bring to the West Virginia Lottery in this engagement is unmatched.



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Technical Capability

GLI has sourced and hired what we consider to be the top professionals in the lottery industry to provide quality services to our clients. We currently provide end-to-end Software Quality Assurance & Testing services to numerous lotteries throughout North America. Our technical capabilities are summarized as follows:

- Program and project management of successful large scale lottery system modernization projects.
- ✓ GLI has utilized a Multi-Supplier Integrator (MSI) model to handle the complex management of stakeholders and vendors with the use of advanced Quality Assurance processes.
- ✓ Implementation of a proven and scalable QA Testing methodology that can be customized for the West Virginia Lottery.
- Numerous seasoned resources bringing QA testing and IT experience, specific to the lottery industry.
- ✓ GLI has offices across North America and around the world. This geographical
 dispersion of GLI's testing resources allows for testing across multiple time zones,
 increasing speed to market.
- ✓. GLI can provide outsourced hosting of testing environments.
- ✓ GLI includes HP tools such as HP ALM, UFT and LoadRunner as part of our QA process for management of requirements, test case and defect management, test automation and performance testing.

GLI understands the lottery industry, lottery systems and has deep relationships with the respective Suppliers. We will leverage this experience to the benefit of the West Virginia Lottery during this engagement.

STATEMENT OF WORK

GLI understands that the West Virginia Lottery seeks to refresh their lottery gaming system and terminals and is requesting a proposal to provide Independent Verification & Validation (IV&V) as well as Software Quality Assurance & Testing Services at various phases of their Lottery Systems Replacement project.

Mandatory Requirements

GLI affirms that it will meet the requirements listed in sections 4.1 through 4.15.



West Virginia Lottery
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QUALIFICATIONS

Lottery Experience



Familiarity with Lottery Industry and IGT Systems.

GLI has over 27 years of lottery industry experience and 20 years of IGT systems experience.

Lottery Industry Experience

GLI tests for more than 65 lottery jurisdictions globally, and for more than 475 jurisdictions in the global gaming industry. We understand the lottery industry and will leverage this experience to the benefit of the West Virginia Lottery during this engagement. GLI is an associate member of the European Lotteries Association (ELA), the North American Association of State and Provincial Lotteries (NASPL), and of the World Lottery Association (WLA), which speaks to our commitment to the industry and lotteries worldwide.

At GU, our mission is to provide world-class testing, certification, and professional services to the global gaming and lottery industries, and to accomplish our mission with the highest levels of independence and integrity.

GLI's seasoned staff has brought years of experience in in-depth testing of IGT Traditional Lottery and Video Lottery systems. Following are examples which demonstrate GLI's experience in performing software acceptance testing projects for lottery clients:

- System acceptance of a new lottery system implementation and subsequent system testing of game releases.
- User acceptance testing of a new state-wide KENO game.
- Independent Verification & Validation (IV&V) Testing Services to demonstrate compliance with Multi-State Lottery Association (MUSL) rules and documented specifications.
- Quality Assurance Testing of TAP Electronic Lottery games such as EZPlay, EZPlay
 QuicKeno, EZPlay TAP and EZPlay Social Games.
- Third Party Testing for IGT Indiana.
- User acceptance testing of a new lottery central monitoring and control system.

....We have the lottery systems testing EXPERIENCE

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West Virginia Lottery
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Lottery Accounts in Software Acceptance Testing

GLI's Software Quality Assurance & Testing team has been steadily growing since its inception. We currently serve lottery clients with Outsourced QA Testing Services throughout North America. These lotteries have been referenced in the proposal and we encourage West Virginia Lottery to contact our clients to discuss the quality and experience they are receiving. GLI's testing services includes test management, testing strategies, test planning, test case development, test execution, defect logging, defect management, and test reporting.

- Connecticut Lottery Corporation engaged GLI to provide user acceptance testing prior
 to the release of a new state wide KENO game. GLI was not notified of any major issues
 from the release of this project.
- Georgia Lottery Corporation engaged GLI to lead the Quality Assurance planning and testing efforts for the Coin Operated Amusement Machine Central Accounting System implementation which saw 25,000 COAMs installed in over 6,000 venues. GLI was not notified of any major issues from the release of this project.
- Montana Lottery engaged GLI to provide IV&V Testing Services to demonstrate
 compliance with MUSL rules, documented specifications and in accordance to accepted
 industry standards for the Lottery's Conversion project which includes replacement of
 their Data Center, retailer systems and retailer terminals. GLI was not notified of any
 major issues from the release of items tested by GLI.
- Oregon State Lottery worked with GLI to replace their video lottery backend system for 12,000 VLTs. After the project went into production there were 10 incidents reported during 2 weeks of system cutover, all relating to wide area network configuration and/or parameter configuration settings which were not part of acceptance testing.
- Wyoming Lottery Corporation engaged GLI to provide independent testing for system
 acceptance of a new lottery system that included Powerball and Mega Millions for 500
 initial retailers. GLI was not notified of any major issues from the release of the initial
 lottery launch or from later game release projects tested by GLI.
- **IGT Indiana** engaged GLI to provide third party testing on their behalf at Hoosier Lottery. This includes new game launches, system enhancements and end-to-end testing of said changes with the lottery sub systems and business processes.



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IGT Systems Experience

GLI has more than 20 years of working experience with IGT traditional lottery systems (including IGT, GTECH, and Spielo). Recently, GLI performed IGT lottery system (hardware, software, communication, and security) certification testing.

In addition to our certification testing, GLI has performed interoperability testing on all IGT systems for several lotteries.

GLI has also delivered security control based assessments for lotteries that have deployed the IGT Traditional Lottery system. GLI lottery audits have focused on the lottery draws and instant ticket management process integrated within the IGT system. Our assessments for the end-to-

end draws process included the system based controls deployed within the following procedures; close of sales, sales report, winning numbers draws through either ball draws or electronic draw machines (EDM); winning number entry; winner selection, prize distribution reports, Internal Control Systems (ICS) duplicate draw and balancing procedures, certification of draw results, and start of next day sales. Our teams are very familiar with all traditional lottery games deployed in lotteries such as Daily Draw

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Games, Powerball, Mega Millions, Tap Game and Keno. This knowledge is directly transferrable at a risk level to our development of Acceptance testing with a view of end-to-end user functionality. Our teams have performed the Hoosier State Lottery Security Assessment since 2011 and are very familiar with IGT Indiana, its systems and operational process.

This work represents a portion of thousands of projects that must be processed by GLI testing experts on the various iterations of IGT systems. This provides continuous training for our test experts maintaining a broad understanding of the IGT systems. As a result, GLI has developed a breadth and depth of knowledge of the IGT systems far superior to any other test lab in the world.

Mobile Application Testing

GLI has vast experience in the testing of various mobile devices and testing and certification of native applications. GLI maintains an extensive mobile device library from phones to tablets on all of the major platforms (iOS, Android, Blackberry, Windows) and even maintains legacy devices and out of date operating systems for backwards compatibility testing needs. Mobile gaming applications are specifically tested on actual devices, not emulators, which provide a user-like environment, increasing the likelihood of finding testing issues.

GLI tested and approved the first mobile poker application for Nevada for both iOS and Android as well as tested the initial mobile launches in both Delaware and British Columbia. GLI has completed, and continues to complete, numerous mobile testing and certifications for various regulated iGaming markets worldwide.



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RNG Experience

GLI has performed RNG services for nearly every U.S. lottery including West Virginia Lottery. With over 27 years of experience, GLI has provided consulting and statistical analysis services relating to the certification of automated RNGs to lottery and gaming regulatory jurisdictions throughout the world since its inception in 1989. In addition to the game analysis projects regularly conducted for other sectors of the gaming industry, GLI's Math Department has completed 1,250 individual RNG analysis projects since 2010. At a high level, these represent a balance of new RNG implementations, as well as evaluations of RNG updates and modifications.

GLI has a fully dedicated math team of **33 team members** with experience in random number generators, strategy/table games, and electronic games analysis. GLI's math analysts come from academic backgrounds in pure and applied mathematics, statistics, computer science, and engineering, all with Bachelor's or Master's degrees in their fields.

Network and Security Risk Assessment Experience

We offer extensive experience performing network and security risk assessments. The GLI team completes four to five of these similar security assessments on a monthly basis and has the experience and capacity to complete this assessment.

Our team members have a combined 40+ years of experience working with or serving clients in this field. This experience will enable GLI's team members to complete this engagement more efficiently while using less of your organization personnel's time resulting in less cost and time for your organization. You will not have to invest any of your time or money educating GLI team members. GLI attests that the qualifications of our proposed professionals will exceed the requirements and experience requisite to perform the services requested.

GLI's team of professionals hold the following industry recognized certifications:

- Certified Chief Information Security Officer (CCISO)
- EC Council Certified Ethical Hacker (CEH) V.6
- Payment Card Industry Qualified Security Assessor (PCI-QSA)
- Certified Information Systems Auditor (CISA)
- Certified Penetration Tester (CPT)
- ISO/IEC 27001 Lead Auditor
- Microsoft Certified Systems Engineer (MCSE)

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West Virginia Lottery Third Party Acceptance Testing Solicitation No. CRFQ 0705 LOT1800000010

REFERENCES



GLI is pleased to provide the following summary of clients detailing our previous lottery testing engagements and experiences providing these services to other United States lotteries:

Wyoming Lot	tery Corporation
Contact Information	Name: Jon Clontz Title: CEO Phone: 1-307-432-9302 Email: iclontz@wylotterycorp.com
Services Provided	GLI continues to be engaged by the Wyoming Lottery to provide quality assurance testing services to support the lottery's operations, product introductions, product modifications and other related testing.

Connecticut Lottery Corporation				
Name: Michael Hunter Contact Information Phone: 1-860-713-2817 Email: michael.hunter@ctlottery.org				
GLI was engaged by the Connecticut Lottery Corporation to document and execute test cases in a User Acceptance Test (UAT) project for the new KENC game.				

Montana Lott	ery
Contact Information	Name: Philip Charpentier Title: Director, Information Technology Services Phone: 1-406-444-5810 Email: PCharpentier@mt.gov
Services Provided	GLI is currently providing IV&V (Independent Verification & Validation) Testing Services to demonstrate compliance with Multi-State Lottery Association (MUSL) rules, documented specifications and in accordance to accepted industry standards for the Lottery's Conversion project.

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West Virginia Lottery
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Oregon State	Lottery
Contact Information	Name: Syed Hussain Title: Chief Information Officer Phone: 1-503-540-1347 Email: syed.hussain@state.or.us
Services Provided	GLI continues to be engaged by the Oregon State Lottery to provide outsourced quality assurance testing services for the Video Lottery business line.

Testing Certifications



As a testament to GLI's commitment to quality, GLI achieved the level of ISTQB Global Partner because of our commitment to ISTQB Certifications in the U.S., Netherlands, and Australia.



Dedicated Account and Project Manager

Kelly Black will maintain close contact with the West Virginia Lottery throughout the entire engagement to ensure that your objectives for the testing are met. Kelly is an IT professional with 18 years of IT experience with over 16 years in Software Quality Assurance & Testing, 13+ years in lead and management roles. She is also a Certified Software Test Engineer (CSTE).

Account and Project Manager: Kelly Black

Telephone Number: 506-871-6849

Email Address: k.black@gaminglabs.com



Should GLI be awarded a contract, resumes of proposed testing staff and the ability to change staffing levels throughout the process phases will be provided.





West Virginia Lottery Third Party Acceptance Testing Solicitation No. CRFQ 0705 LOT1800000010

CONTRACT MANAGER



GLI will maintain close contact with the West Virginia Lottery throughout the entire engagement to ensure that your objectives for the UAT testing are met.

As the dedicated account and project manager, James Luccarelli will ensure the testing is performed according to specifications, in accordance with the West Virginia Lottery approved test strategy, test plans and test cases.

Contract Manager: James Luccarelli, Technical Group Manager

Telephone Number: 732-719-1351

Fax Number: 732-719-1411

Email Address: j.luccarelli@gaminglabs.com

STAFFING PLAN



GLI is a global company with over 1,000 employees, many of whom are highly trained and specialized in testing, mathematics and engineering. As needed, we will leverage specialized skill sets to service the West Virginia Lottery.

We offer a highly skilled, certified team of experts with previous exposure to the various systems and sub systems of lottery networks. This insight and previous knowledge of systems and processes reduces setup and learning time thus reducing overall cost. We have sourced and hired what we consider to be the top testers in the gaming industry to provide quality services to our dients.

Key Personnel

Name	Role	Contact Details
James Luccarelli	Contract Manager	Phone: 732-719-1351 Email: <u>i.luccarelli@gaminglabs.com</u>
Kelly Black	Dedicated Account/Project Manager	Phone: 506-871-6849 Email: k.black@gaminglabs.com
Todd Handzo	Client Services	Phone: 732-719-1106 Email: t.handzo@gaminglabs.com

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West Virginia Lottery Third Party Acceptance Testing Solicitation No. CRFQ 0705 LOT1800000010

EXAMPLES

See Attachment A for examples required throughout the duration of this project such as:

- Daily Test Status Report.
- Test Exit Report.
- Quality Assurance Test Plan.
- Sample Testing Timeline.

VALUE ADDED SERVICES

Worldwide Expert Knowledge Available to You

The West Virginia Lottery can take advantage of our prominent position on the world market by leveraging the breadth and depth of our relationships with the major vendors of lottery systems. This industry penetration allows for highly efficient collaboration and a tightly integrated SDLC with a common view into processes such as defect tracking. Collaboration and tight integration on a project allows GLI to have a deep familiarity with IGT's systems and an understanding of system issues. These relationships and system knowledge generate efficient defect remediation build cycles that increases speed to market.

Value-Added Services

The added value that GLI will bring to the West Virginia Lottery through the delivery of these services is depicted in Exhibit 1:

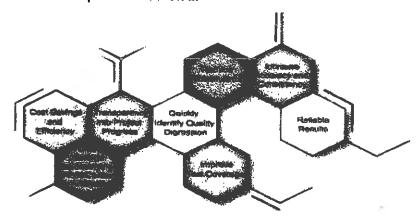


Exhibit 1: Value-Added Services

GLI has completed a number of successful projects for lottery customers utilizing our proven resources and methodologies for clients for several lotteries.

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West Virginia Lottery
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Our cumulative technological expertise and business knowledge, is leveraged to serve the business needs of the West Virginia Lottery. Our QA related services can include:

- ✓ Program and/or project management depending on project size and customer needs.
- ✓ Hosting and management of test environments in an effort to leverage GLI's systems experience.
- Requirements analysis, test case construction and execution.
- Management of test project activities on-site or performed remotely in relation to the test environment.
- Integration with our leadership of lottery client UAT test teams during test activities.
- Comprehensive reporting of all testing activities during and at the conclusion of a project.
- Program and/or project management of successful large scale lottery system modernization projects depending on project size and customer needs.
- Multi-Supplier Integrator (MSI) model to handle the complex management of stakeholders and vendors with the use of advanced Quality Assurance processes.
- ✓ Implementation of a proven and scalable QA testing methodology that can be customized for the West Virginia Lottery.
- ✓ Hosting and management of test environments in an effort to leverage GLI's systems experience.
- ✓ Requirements analysis, test case construction and execution.
- Management of test project activities on-site or performed remotely in relation to the test environment.
- ✓ GLI has offices across North America. This geographical dispersion of GLI testing resources allows for testing across multiple time zones, increasing speed to market,
- ✓ GLI includes HP tools such as HP ALM, UFT and LoadRunner as part of its QA process for management of requirements, test cases and defect management, test automation and load and performance testing.
- ✓ Integration with or leadership of lottery client UAT test teams during test activities.
- Comprehensive reporting of all testing activities during and at the conclusion of a project.

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PRICING

Pricing has been submitted via wvOasis per the RFQ instructions.

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Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Request for Quotation 34 - Service - Prof

Proc Folder: 420101 Doc Description: THIRD PARTY ACCEPTANCE TESTING Proc Type: Central Master Agreement

Date leaved Solicitation Closes Solicitation No

2018-02-13 2018-02-27 13:30:00

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BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION 2019 WASHINGTON ST E

CHARLESTON

W

25305

US

THE PROPERTY PARTY TO THE PROPERTY OF THE PROP Vendor Name, Address and Telephone Number:

Gaming Laboratories International, LLC

600 Airport Road

Lakewood, NJ 08701

732-942-3999

FOR INFORMATION CONTACT THE BUYER

Michelle L Childens (304) 558-2063

michelle.i.childers@wv.gov

Signatura X

BusAHron

FEIN# 26-1938391

DATE February 23, 2018

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

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Request for Qualition

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Lottery to establish a contract for a third-party Vandor to provide software acceptance testing services during and after the conversion of the on-line gaming system ("System") and services for traditional financial impact.

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CH	MARLESTON	WV25327-2067	CHARLESTON	WV 25302

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Comm Code	Manufacturer	Specification	Model #	
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Extended Description:

HOURLY RATE TO PROVIDE TESTING SERVICES. ALL LODGING, MEALS, AND TRAVEL SHOULD BE INCLUDED IN THE HOURLY RATE BID.

QUANTITY OF HOURS IS ESTIMATED AND TO BE USED FOR BIDDING AND EVALUATION PURPOSES. NO FUTURE USE OF THIS CONTRACT IS GUARANTEED OR IMPLIED.

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ATTACHMENT A - EXAMPLES

West Virginia Lottery Third Party Acceptance Testing Solicitation No. CRFQ 0705 LOT1800000010

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Feb 27 2018 12:57pm



Daily Test Status Report

Scheduled Start Date:
Actual Start Date:
Days Lost Since <start< th=""></start<>
Date>:

Current Status Legend

	No Issue; everything Is on schedule Issue exists; situation closely monitored	
Yellow		
	Milestone is in jeopardy; Issue requires immediate resolution	

Summary Notes of Current Day Efforts:

Next Milestone Summary

Treat initiations out initially					
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Daily Test Execution Statistics

Daily - Test Case Execution Progress - Test Set

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TOTAL	####				

^{*}Value in the Total Tests column represents sum of all project tests. Table values can change as test cases are added or removed from the project.

Test Case Execution - Test Set

Overall Test Execution Statistics - Test Status

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Add up values	97%	34	1	0	1	0

[&]quot;Value in the Total Tests column represents sum of all project tests. Table values can change as test cases are added or removed from the project.

Overall Test Execution Statistics - Test Completion

Add up values	94%	6%
	- 100 M	

^{**}Value in the Total Tests column represents sum of all project tests. Table values can change as test cases are added or removed from the project.

Defect Count - New for Specific Day - Severity New Defects Reported Today - Severity

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Defects - Overall Disposition

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Open !ssues - !ssues that will impact the test effort

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3			

Resolved issues- Moved from Open Issues after resolution

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2			
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<Client Name>

Test Exit Report – <Test Phase Title> <Project Name>

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Revision History

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Peer Review

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	Test Execution Analysis	
	6.1. Overall Execution Status	
	6.2. Defect Analysis – All project Defects	
	6.2.1. Defect Analysis – Retest Status of Delivered Defects	
	6.2.2. Defect Analysis - Defects Created for Test Phase	
	6.2.3. Active Defects (Not Closed)	



Revision Date: <DATE>

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1. Purpose

The Test Exit Report is a summary of the test results found during the <TEST PHASE TITLE> test phase of the <PROJECT TITLE> project.

The purpose of this report is to:

- Provide a summary of the testing results for the Production Environment Validation test phase of the project.
- Document recommendations from this testing.
- Indicate the Production environment's readiness to move into the next test phase.
- Identify any known issues found but not corrected to date for the test effort.

2. Recommendation

The following exit criteria have been met:

<List all test exit criteria that have been met for the test phase. Add file attachments to support test results>

The following exit criteria have not been met:

<List all test exit criteria that have not been met for the test phase. Add file attachments to support test results>

<Describe GLI's recommendation for the next stage of the project, based on the documented test results>

GI 1

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3. Test Exit Report - Acceptance Gate

The following is the acceptance for the <TEST PHASE TITLE> test effort associated with the <PROJECT NAME> project and the information contained in this report. Signature indicates acceptance of the information and agreement to proceed with the recommendation listed in section 2.

<\$TAKEHOLDER 1>	<embed email=""/>	<date received=""></date>
<stakeholder 2=""></stakeholder>	<embed email=""/>	<embed email=""/>
<stakeholder 3=""></stakeholder>	<embed email=""/>	<embed email=""/>
<stakeholder 4=""></stakeholder>	<embed email=""/>	<embed email=""/>

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4. Document Overview

This report will contain the following information:

- Test analysis information including the test coverage and recommendations.
- Test execution analysis which includes the defects analysis.

5. Coverage Analysis

<Describe the scope, significant events in the test phase timeline and overall results of the test phase>

The following items from the <TEST PLAN TITLE> test plan were out of scope for testing:

<as all="" associated="" be="" deemed="" in="" list="" listed="" of="" out="" plan,="" project="" requirements="" scope="" test="" the="" to=""></as>	

5.1. Defects by Area

The full breakdown of all defects created for the <TEST PHASE TITLE> test phase is as follows: <Describe the defects created for the test phase. Defects are calculated and categorized by Defect Type and Defect Category>

For a total of <TOTAL # OF DEFECTS> defects which can be seen in the table in section 6.2 Defect Analysis.

6. Test Execution Analysis

The following section will detail the test execution results including defect analysis.

6.1. Overall Execution Status



**Value in the Total Tests column represents sum of all project tests. Table values can change as test cases are added or removed from the project.

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Overall Test Execution Statistics - Test Completion

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**Value in the Total Tests column represents sum of all project tests. Table values can change as test cases are added or removed from the project.

<Insert spreadsheet from ALM test set listing all FAILED, NOT COMPLETED, BLOCKED, NO RUN test</p> cases with associated OPEN defects and comments>

6,2. Defect Analysis - All project Defects

This table represents the disposition of all defects as listed in the Master Defect List, attached in <DOC SECTION> at the end of <TEST PHASE TITLE>.

STATUS -)	H			

6.2.1. Defect Analysis - Retest Status of Delivered Defects

This table represents the retest status of the <# OF DELIVERED DEFECTS> defects fixed in <TEST PHASE TITLE>.

STATUS ->				
			No.	

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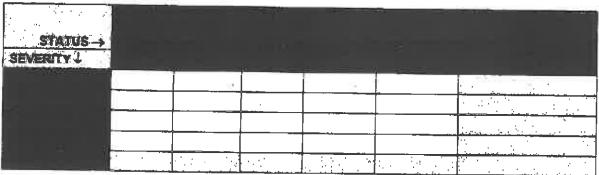


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6.2.2. Defect Analysis - Defects Created for Test Phase

The table represents the status of the <# OF CREATED DEFECTS> defects found in <TEST PHASE TITLE>.



6.2.3. Active Defects (Not Closed)

Attached below is the project <FULL LIST OF DEFECTS> as of <DATE>. The defects have been filtered to only show the defects that have not been CLOSED but represent all defects logged for the project. All defects have been triaged with the <CLIENT>, <VENDOR> and GLI as of <DATE>.

<List all defects that are not CLOSED. Insert a filtered spreadsheet of the final list of defects for the project,>

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<Customer>

Quality Assurance Test Plan < Project>

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1. Introduction

The objective of the Test Plan is to communicate the test approach and the management of the test activities to GLI project team members and <customer>. It is intended as a baseline to identify what is deemed in and out of scope for testing, testing risks and assumptions.

1.1 Testing Objectives

The test objectives for the <title> project include the following: <Bullet List>

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1.2 Roles and Responsibilities

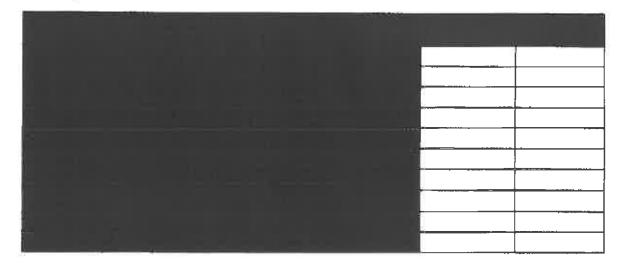
This section identifies the roles and responsibilities of the team involved during Quality Assurance Testing.

R = Responsible

A = Accountable

C = Consulted

I = Informed



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2. Testing Design

2.1 In Scope

The following items are in scope for the test effort.

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2.2 Out of Scope

The following table identifies the parts of the system that will not be tested as part of the project during the project. If functionality is not going to be tested, any related risks and the mitigation to those risks are documented for the excluded parts of the system.

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2.3 Assumptions

This section lists assumptions that are made for the test effort for this project. <Bullet List>

2.4 Constraints

The following constraints impact the test effort.

2.5 Risks to Project Quality

The following risks have been identified for successful execution of the test phase and the appropriate action documented to mitigate their impact on the project. The impact (or severity) of the risk is based on how the project would be affected if the risk was triggered. The trigger is what milestone or event would cause the risk to become an issue to be dealt with.



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2.6 User Acceptance Test Phase Entry Conditions

The following Entry Conditions will be used to determine when the test phase may begin: <Bullet List>

2.7 User Acceptance Test Phase Exit Conditions

The following Exit Conditions will be used to determine when the test phase can end. <Bullet List>

3. Test Documentation & Test Tools

3.2 Test Documentation

The following test documentation will be produced for the test phase: <Examples>

- Test Plan
- Test Schedule
- Test Cases
- Test Metrics
- Test Exit Report
- Test Retrospective

3.2 Test Tools

The following test tools will be utilized during the test phase:

3.3 Test Management

This section specifies the test management activities for the test phase activities. <Examples>

Test Meetings:

 Defect triage meetings will be held between <Customer> and GLI to review and prioritize open defects as required.

Test Status Reporting:

Daily Test Status Reports will be sent by GLI via email to <Customer> to communicate test progress, issues, risks, milestones and open defects.

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Requirements Management:

Software User Manual was provided by <Customer> to GLI to use for Test Planning and Test Case creation. The content of these technical specifications were broken down into requirements that were added to ALM for test case traceability.

Test Case Management:

Test Cases will be created in ALM for the project. Test cases will be mapped to the project requirements in ALM to ensure test coverage.

Defect Management:

Please refer to Appendix C for the Defect Management Process to be used by <Customer> and GLI.

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4. Appendix A – High Level Test Schedule

This appendix represents the diagram or table related to the planned test activities. The Test Schedule is meant to represent the day to day high level testing activities.

<Spreadsheet>

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5. Appendix B - High Level Defect Build Schedule

This appendix represents the table related to the defect build schedule that has been identified in the testing timeline. Note: The dates shown are proposed only and need to be negotiated with the vendors and approved by the client.

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6. Appendix C - Defect Management Process

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7. Appendix D - Test Case Planning and Execution

<Description>

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The following are the approx	pproval Gate vals for the Test Plan and supp	orting test documents.	
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13	Performance Testing	10 days	11	18	25		08 15	22	May 2	06 13	20	June 201/ 27 03	10 17
			İ			ļ							20 1 21
14	System Cutover Testin	g 10 days											
15	Test Case Cleanup, Les Learned, Text Exit Rep	sons 3 days ort				 						.0	
												24	
		Task				Inactive 1				Start-onl			
		Split		1111111						Start-only Finish-on		E J	
roject: S	Sample Testing Timeline	Split Milestone	!	11111111	1.111.1111	Inactive N	Milestone Jummary						
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A - Constitution Control School Section (Section 1)

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ATTACHMENT B - DESIGNATED CONTACT & CERTIFICATION AND SIGNATURE

(email address)

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)

James Juccarell, Technical Group Manager

(Printed Name and Title)

600 Alport Road, Lakewood, NJ 08701

(Address)

732-719-1351 / -732-719-1411 fax

(Phone Number) / (Fax Number)

procurement@gaminglabs.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Geming Laboratories International, LLC	
Dua Mach CFO	_
(Authorized Signature) (Representative Name, Title)	_
Bruce A. Hecht, CFO	
(Printed Name and Title of Authorized Representative)	_
February 23, 2018	
(Date)	_
732-942-3999 / 732-719-1411 fex	
(Phone Number) (Fax Number)	_

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ATTACHMENT C - ADDENDUM ACKNOWLEDGEMENT FORM

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ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFQ LOT1800000010

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[x]	Addendum No. 1	[1	Addendum No. 6
D	x]	Addendum No. 2	1	1	Addendum No. 7
[1	Addendum No. 3	ſ]	Addendum No. 8
t]	Addendum No. 4	ſ	1	Addendum No. 9
1]	Addendum No. 5	1]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Company

Authorized Signature

February 23, 2018

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

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ATTACHMENT D - PURCHASING AFFIDAVIT

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STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroil taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10e, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vandor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above dose not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tex or other execut of money exact to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or flability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-20-2, failure to maintain mendatory workers' compensation coverage, or failure to into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity wheteoever, related to any vendor by blood, mentage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Vs. Code §51-5-3) that: (1) for construction contracts, the vandor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in compleyer default as defined above, unless the debt or employer default is permitted under the exception above.

Vendor's Name: Gaming Laborational LLC Authorized Signature: Daw P. Och Date: February 23, 2018 State of New Jersey County of Ocean to-wit: Taken, subscribed, and sworn to before me this 23 day of February My Commission expires Tune 25, 2020 , 20 AFFIX SEAL HERE NOTARY PUBLIC NEW JERSEY

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West Virginia Lottery Third Party Acceptance Testing Solicitation No. CRFQ 0705 LOT1800000010

ATTACHMENT E ~ RESIDENT VENDOR PREFERENCE

Approved / Revised

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State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in Division will make the determination of the Vendor Preference, if applicable.

Application is made for 2.5% vendor preference for the research obstacle.

hack any c	Title:
ate:	Signed:
nd if any ng Divisio	reby cartifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder on in writing immediately. Ming Laboratories International, 14.0.
sy submis nuthorizes he require leemed by	sion of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and of business taxes, provided that such information does not contain the amounts of taxes paid not structured to the confidential.
requireme or (b) asse the contra	derstands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the sense a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such contract or purchase order; cting agency or deducted from any unwaid because
	fance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules, in accordidate has been or expects to be approved prior to contract award by the Purchasing Division as a certified small warms.
7,	Application is made for 3.5% vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for continuously over the entire term of the project, on average at least seventy-five percent of the vendor's bid and residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
6.	and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is Application is made for 3 5% and 5.5%.
	Application is made for 5% vendor preference for the reason checked: Bidder meets either the requirement of home profite the reason checked:
	Application is made for 2.5% vendor preference for the reason checked: Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities of completing the project which is the subject of the bidder, bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees are the bidder's affiliate's or subsidiary's employees are vendor's bid; or,
2	Application is made for 2.5% vendor preference for the reason checked: Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employee immediately preceding submission of this bid; or.
	ender is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state resident which has maintained its headquarters or principal place of business within West Virginia continuously for the four (a specific process).
	bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interests the applicable features with at least eighty percent of ownership interests.
	Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
	Sidder is an individual resident vendor and has resided continuously in March Visit in the continuously in the

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