



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.

Header @ 1

General Information[Contact](#)[Default Values](#)[Discount](#)[Document Information](#)

Procurement Folder: 371245

Procurement Type: Central Master Agreement

Vendor ID:

Legal Name: SPECTRUM GAMING GROUP LLC

Alias/DBA:

Total Bid: \$312,000.00

Response Date: Response Time:

SO Doc Code: CRFQ

SO Dept: 0705

SO Doc ID: LOT1800000004

Published Date: 9/12/17

Close Date: 9/19/17

Close Time: 13:30

Status: Closed

Solicitation Description:

Total of Header Attachments: 1

Total of All Attachments: 1

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	IMPACT STUDY OF SPORTS BETTING & INTERNET GAMING IN				\$312,000.00

Comm Code	Manufacturer	Specification	Model #
93131703			

Extended Description : THE WEST VIRGINIA PURCHASING DIVISION IS SOLICITING BIDS ON BEHALF OF THE WV DEPARTMENT OF REVENUE FOR AN EXPERIENCED VENDOR TO PROVIDE RESEARCH AND ANALYTICAL SERVICES NECESSARY TO COMPLETE A COMPREHENSIVE IMPACT STUDY OF SPORTS BETTING & INTERNET GAMING IN WV PER ATTACHED SPECIFICATIONS



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

State of West Virginia
 Request for Quotation
 10 – Consulting

Proc Folder: 371245

Doc Description: ADDENDUM 1 -IMPACT STUDY OF SPORTS BETTING & INTERNET GAMING

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2017-09-12	2017-09-19 13:30:00	CRFQ 0705 LOT1800000004	2

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Name, Address and Telephone Number:

Electro Gaming Group LLC
 1201 Lee Road, Suite 08
 Linwood, WV 26021
 304-251-5100

FOR INFORMATION CONTACT THE BUYER

Michelle L Childers
 (304) 558-2063
 michelle.l.childers@wv.gov

Signature X

FEIN # 228477

DATE September 1, 2017

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

ADDITIONAL INFORMATION:

Addendum

Addendum 1 issued to:

1. Answer the vendor questions.
2. Make changes to Section 1 Purpose and Scope and to replace Section 4.1.6 of the Mandatory Requirements.
3. Correct the Estimated Hours on the Exhibit A Pricing Page.
4. Move the Bid Opening to 9/19/2017.

End of Addendum 1

Request for Quotation

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Lottery to establish an open-end services contract for an experienced vendor to provide research and analytical services necessary to complete a comprehensive market study relating to revenue opportunities and potential economic impact of implementing sports betting and other forms of Internet gaming in West Virginia. Other services will include consulting on strategies, recommended regulatory structures, including setting administrative fees and tax rates, making presentations and providing testimony to legislative committees, and other related services as needed.

INVOICE TO		SHIP TO	
ACCOUNTS PAYABLE LOTTERY PO BOX 2067		PURCHASING LOTTERY 900 PENNSYLVANIA AVE	
CHARLESTON	WV 25327-2067	CHARLESTON	WV 25302
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	IMPACT STUDY OF SPORTS BETTING & INTERNET GAMING IN			20.00 per hour	12,000.00

Comm Code	Manufacturer	Specification	Model #
93131703			

Extended Description :

THE WEST VIRGINIA PURCHASING DIVISION IS SOLICITING BIDS ON BEHALF OF THE WV DEPARTMENT OF REVENUE FOR AN EXPERIENCED VENDOR TO PROVIDE RESEARCH AND ANALYTICAL SERVICES NECESSARY TO COMPLETE A COMPREHENSIVE IMPACT STUDY OF SPORTS BETTING & INTERNET GAMING IN WV PER ATTACHED SPECIFICATIONS

LOT1800000004	Document Phase Final	Document Description ADDENDUM 1 -IMPACT STUDY OF SPORTS BETTING & INTERNET GAMING	Page 3 of 3
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ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ 0705 LOT 80000004

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)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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.

Spectrum Gaming Group LLC

Company

Authorized Signature

9/13/17

Date

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

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.

Michael Pollock, Managing Director

(Name, Title)

Michael Pollock, Managing Director

(Printed Name and Title)

1201 New Road, Suite 308, Linwood, NJ 08221 USA

(Address)

609.233.9590/609.926.5121

(Phone Number) / (Fax Number)

pollock@spectrumgaming.com

(email address)

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.

Spectrum Gaming Group LLC

(Company)



Michael Pollock, Managing Director

(Authorized Signature) (Representative Name, Title)

Michael Pollock, Managing Director

(Printed Name and Title of Authorized Representative)

9/13/17

(Date)

609.233.9590/609.926.5121

(Phone Number) (Fax Number)

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 accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. **Application is made for 2.5% vendor preference for the reason checked:**
 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 of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
 Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **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 employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,
3. **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 or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,
4. **Application is made for 5% vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,
5. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,
6. **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 purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
 Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Spectrum Gaming Group Signed: [Signature]
Date: 9/13/17 Title: Managing Director

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

West Virginia Ethics Commission



Disclosure of Interested Parties to Contracts

Pursuant to W. Va. Code § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$100,000 or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation.

"Interested party" or "Interested parties" means:

- (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
- (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
- (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: ethics@wv.gov; website: www.ethics.wv.gov.

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

Contracting business entity: Spectrum Gaming Group LLC

Address: 1201 New Road, Suite 308, Linwood, NJ 08221 USA

Contracting business entity's authorized agent: Michael Pollock

Address: 1201 New Road, Suite 308, Linwood, NJ 08221 USA

Number or title of contract: Managing Director

Type or description of contract:

Governmental agency awarding contract: Purchasing Division

Names of each Interested Party to the contract known or reasonably anticipated by the contracting business entity (attach additional pages if necessary):

Spectrum Gaming Group LLC

Signature: [Signature] Date Signed: 3/13/17

Check here if this is a Supplemental Disclosure.

Verification

State of New Jersey, County of Atlantic

I, Jacqueline Bonner, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledges that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 13th day of September, 2017.

[Signature]
Notary Public's Signature

JACQUELINE E. BONNER
NOTARY PUBLIC OF NEW JERSEY
Comm. # 50059036
My Commission Expires 4/21/2022

To be completed by State Agency:

Date Received by State Agency:

Date submitted to Ethics Commission:

Governmental agency submitting Disclosure:

STATE OF WEST VIRGINIA
Purchasing Division
PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, 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 vendor 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 does 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 not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed 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 liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered 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 whatsoever, related to any vendor by blood, marriage, 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 exceeds 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. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Spectrum Gaming Group LLC

Authorized Signature:  Date: 9/13/17

State of New Jersey

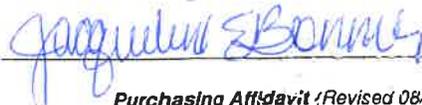
County of Atlantic, to-wit:

Taken, subscribed, and sworn to before me this 13th day of September, 2017.

My Commission expires _____, 20____.

AFFIX SEAL HERE

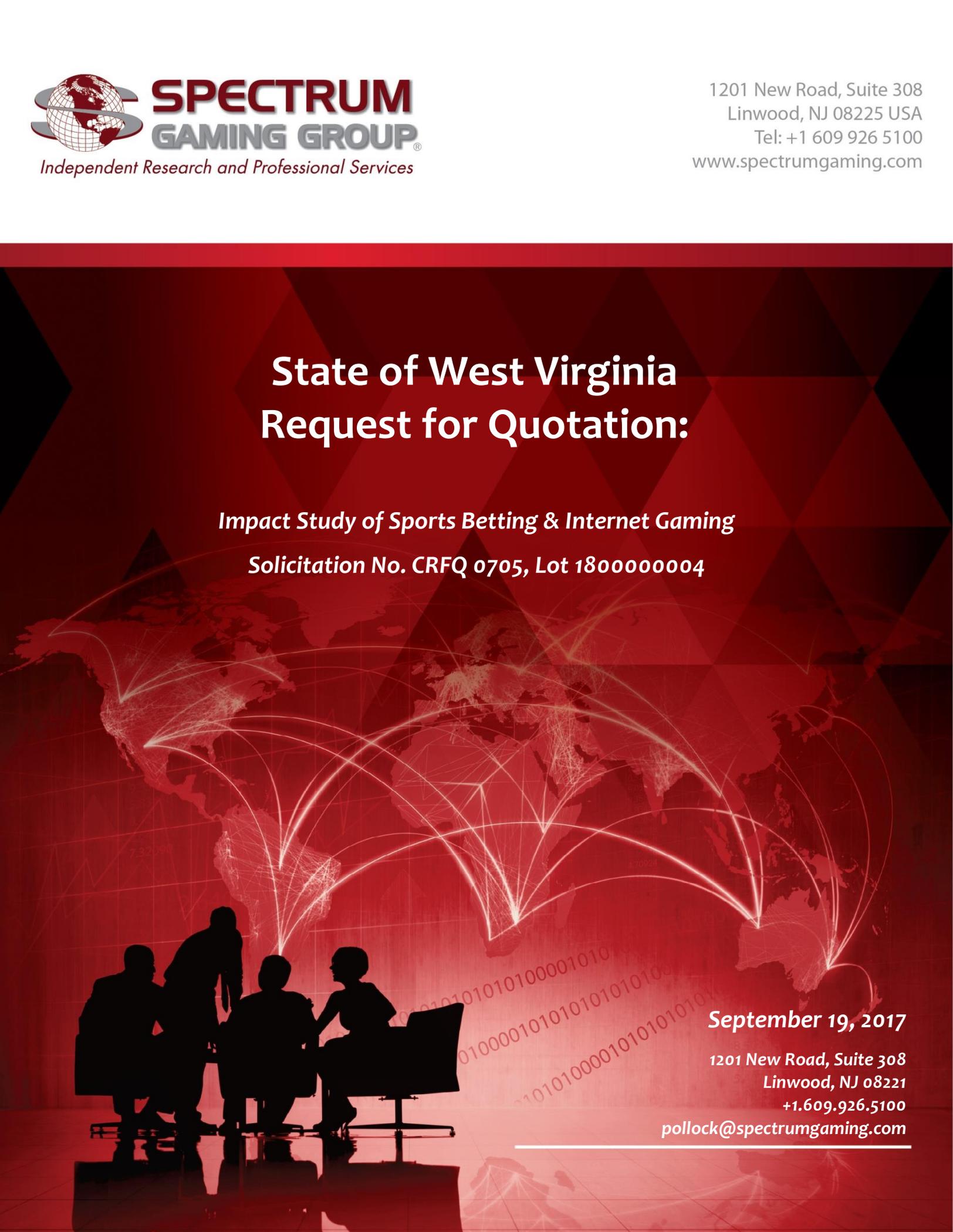
JACQUELINE E. BONNER
NOTARY PUBLIC OF NEW JERSEY
Comm. # 50059036
My Commission Expires 4/21/2022

NOTARY PUBLIC 
Purchasing Affidavit (Revised 08/01/2015)

State of West Virginia Request for Quotation:

Impact Study of Sports Betting & Internet Gaming

Solicitation No. CRFQ 0705, Lot 1800000004



September 19, 2017

1201 New Road, Suite 308
Linwood, NJ 08221
+1.609.926.5100

pollock@spectrumgaming.com

 **TRANSMITTAL LETTER**

September 19, 2017

Michelle L. Childers
State of West Virginia
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

Dear Ms. Childers:

Spectrum Gaming Group understands the purpose and scope of the West Virginia Lottery's mission to explore the implementation of sports betting and other forms of Internet gaming. This endeavor proves the Lottery's commitment to maximizing the return for the purpose of improving public education, improving the quality of life for senior citizens and other benefits for the people of West Virginia.

Spectrum's long history with the West Virginia Lottery – including our work to successfully implement table games and our analysis of greyhound racing – demonstrates that we fully embrace those goals. This proposal is further evidence of our commitment to ensure that gaming in West Virginia advances in a responsible manner. As our proposal demonstrates:

- Spectrum's team is on the cutting edge of both Internet gaming and sports betting around the world, as demonstrated by the recent publication of white papers on both subjects, as well as in presentations to groups ranging from the National Council of Legislators from Gaming States (NCLGS) to numerous state and federal legislative committees.
- Our project team includes three best-of-breed professional firms: Gaming Laboratories International, Gaming Economics and the UMass Donahue Institute.
- Relevant stakeholders in West Virginia – including regulators, legislators, gaming operators and the media – are familiar with our track record and the consistently high quality of our work products.
- West Virginia's longstanding comfort level with the quality of Spectrum's work product will be markedly enhanced by our partnership with Regional Economic Models, Inc. (REMI), which many state agencies and universities in West Virginia rely on for accuracy and depth.

Spectrum has no conflicts of interest, real or perceived. We do not seek to operate any form of gaming in West Virginia, nor would we share in any revenues. Our longstanding goal is that we are independent, comprehensive and candid in all our analyses.

We thank you for your consideration and are prepared to answer any questions you may have.

Sincerely,



Michael J. Pollock, Managing Director
1201 New Road, Suite 308
Linwood, NJ 08221

E: pollock@spectrumgaming.com | O: 609.926.5121 | M: 609.233.9590 | F: 609.926.5121



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THE SPECTRUM TEAM AND PROJECT APPROACH

West Virginia finds itself confronting two realities with respect to gaming:

1. Video Lottery revenue is declining (Racetrack -3.6% year-over-year in FY 2016 and -44.7% since 2007 peak; Limited -3.3% year-over-year in FYI 2016 and -12.5% since 2009 peak); and
2. New forms of gambling are now available to West Virginia, and other forms of gambling may soon be available.

Like many states, West Virginia is considering ways to compensate for gaming revenue declines or capitalize on the economic benefits of new forms of gambling, or both. Spectrum recognizes the planned studies that are the subject of this Response are critical steps toward potential implementation of would be the two most impactful forms of gambling expansion – sports betting and internet gaming.

With both forms of gambling currently limited to a few states (only three states operate Internet gaming,¹ and only one state operates traditional sports betting²), West Virginia has the opportunity to be among the early adopters or leaders.

Spectrum believes it is ideally positioned to help the State of West Virginia understand the economic impacts, implications and implementation of both sports betting and internet gaming, as we have extensive experience studying West Virginia gaming market and in studying these forms of gambling.

- The West Virginia Department of Revenue in 2014 retained Spectrum Gaming Group to produce a comprehensive study requested by the Legislature to examine the fiscal and budgetary impact of state-subsidized greyhound racing. Our study, widely cited by legislators and media, provided an independent, objective analysis of the government subsidy to greyhound racing. According to the *Charlestown Gazette-Mail*: “Delegate Cindy Frich, R-Monongalia, called greyhound racing a dying sport, citing a Spectrum Gaming Group study from 2015 showing the state subsidy accounts for 95 percent of racing purses, and 65 percent of those purses go to out-of-state greyhound owners.”
- In 2008, Spectrum worked with the West Virginia Lottery to manage and implement the introduction of live table games in casinos. We oversaw all critical regulatory aspects of this task to ensure that table games were implemented in a manner that was comprehensive, timely and fair, and that the regulations were drafted to ensure that the rules protect the public interest, as well as the interests of the casino operators.

¹ Internet gaming is operational within Delaware, Nevada and New Jersey.

² As a result of the 1992 federal Professional and Amateur Sports Protection Act, only four grandfathered states may operate sports betting as approved before the prohibition – Delaware, Montana, Nevada and Oregon, but only Nevada allows true sports betting today.

- We conducted gaming market analysis for a prospective operator exploring a potential new casino location in the southern portion of the state.
- Through our Spectrumetrix™ service, we publish the monthly East Coast Slot Analysis, Mid-Atlantic Gaming Analysis, and US Gross Gaming Revenue Analysis, all of which provide detailed performance data about West Virginia gaming properties.
- In 2002 we developed the Spectrum Internet Gaming Heuristic Theorem (SIGHT), which foretold how internet gaming and land-based gaming would eventually converge. We observed the 15th anniversary of SIGHT this year with the public release of a two-part white paper that examined how land-based casino operators and policymakers in gaming states should position themselves to best capture the opportunities afforded by Internet gaming.
- We have conducted several studies on Internet gaming for clients ranging from the National Indian Gaming Association to the Gaming Division of the Puerto Rico Tourism Company, and we have presented or testified before several government bodies on this subject including the US Senate Committee on Indian Affairs and the Michigan Senate Regulatory Reform Committee.
- Through client studies, public presentations and, most recently, our white paper titled *Legal Sports Betting in the United States: How Will it Evolve? How Should it Evolve?*, Spectrum has been at the forefront in providing critical insights and research on legalized sports betting.
- In our position as Executive Director of the National Council of Legislators from Gaming States (NCLGS), we develop semi-annual conferences that include panel discussions focusing on sports betting and internet gaming.

Spectrum executives who would be directly involved in the West Virginia study include:

- Managing Director **Michael Pollock**, who is one of the country's most respected and widely quoted gaming-economics and public policy experts in the country and who has been at the forefront of examining the trends and implications for both internet gaming and legal sports betting.
- Executive Vice President **Joseph Weinert**, who was project director for Spectrum's 2014-2015 study on greyhound racing subsidies for the State of West Virginia and who has been project director of large-scale state-government studies including in 2016 for the Washington State Gambling Commission and in 2013 for the Florida Legislature.
- Senior Vice President **Adam Steinberg**, who was lead research analyst and public presenter for Spectrum's 2014-2015 study on greyhound racing subsidies for the State of West Virginia and who has forecast internet, sports betting and internet gaming revenues for numerous projects in both the public and private sectors.

Spectrum is prepared to complete a comprehensive market study relating to revenue opportunities and potential economic impact of implement sports betting and other forms of

Internet gaming in West Virginia. We have developed a world-class team to undertake this important project that includes the following experts:

- **Gaming Economics** – an independent gaming consultancy specializing in providing sound business guidance for operators, suppliers and investors within the Internet gaming and sports betting industries. Principal Lee Richardson was a co-author of the September 2017 Spectrum white paper titled *Legal Sports Betting in the United States: How Will it Evolve? How Should it Evolve?* The firm is led by **Lee Richardson**, whose experience includes senior roles with several European firms as both an operator and supplier of sports betting and internet gaming.
- **Gaming Laboratories International, LLC** – Spectrum has engaged with Gaming Laboratories International, LLC (GLI), a longtime trusted partner to the West Virginia Lottery, for technical support. GLI has been working with the operations of the West Virginia Lottery since 1990 and provided support with the introduction of VLTs at racetracks in 1994. For this work, we have an engagement with GLI to support the regulatory recommendations, making presentations and providing testimony as a subject matter expert, as needed. Below are some highlights from the GLI team:
 - GLI’s VP of Government Relations and General Counsel, **Kevin Mullally, Esq** is an industry expert with public policy and regulatory issues relating to the implantation of new gaming technology.
 - **Rich LaBrocca**, Senior Director of Engineering is the most experienced technical advisor to the industry assisting government agencies with the classification of gaming devices and has been recognized as an expert by courts across the United States. In addition, he has assisted with the drafting technical standards and legislation for use in domestic and international markets where gaming is regulated.
 - **Chad Kornett**, Director of Technical Compliance, has served as a pivotal consultant for many state governments tasked with the regulation of emerging technologies within traditional brick and mortar casinos/lotteries as well as online gaming deployments, such as Internet poker/casino systems and fantasy sports systems.
 - **Joe Carlon**, Senior Engineering Manager, he has provided testing and consulting services on a wide variety of Internet gaming, sports book, daily fantasy sports platforms, 50/50 raffle systems, esports, and land-based casino products for many US and international markets.
 - **Peter Wolff**, Technical Compliance Manager, is a subject matter expert in newer technology types which includes skill based games, esports, daily fantasy sports, and multiple other technologies. Pete also has been providing consulting and testing services to the West Virginia Lottery since 2008.
- **UMass Donahue Institute** – The Institute conducts rigorous economic impact analyses that trace the direct effects of industries, policies, investments, or business ventures on local, regional, and state economies. Economic impact metrics range from changes in

business revenue, employment, wages and income, gross state (or regional) product, and fiscal impacts. Clients have included government and quasi-government agencies, industry associations, universities, hospitals, non-profits, and chambers of commerce. Economist **Rod Motamedi**, who is the Institute’s Research Manager, has worked with Spectrum on numerous economic impact studies, including those for the Washington State Gambling Commission, Florida Legislature, and the American Gaming Association and other private-sector clients. Motamedi is a former executive with REMI (Regional Economic Models Inc.) and uses its models for both government and commercial clients.

- **Regional Economic Models, Inc.** – For the West Virginia study, Spectrum and Mr. Motamedi will employ the REMI model, which is the gold standard in economic modeling, generating outputs and data points that extend far beyond anything that can be produced by competing models, such as IMPLAN. While Spectrum has used other models in the past, we fundamentally believe this particular engagement demands the most robust model available. REMI’s particular strength is in producing fiscal outputs that are comprehensive and credible, which is one reason why states – including West Virginia – are its core client base, and is why Spectrum often works with REMI on detailed gaming analyses for state governments to paint a complete portrait that allows policymakers to make informed decisions.

SECTION 3: QUALIFICATIONS

3.1: Vendor must have at least 15 years of experience conducting economic impact studies or other financial or budgetary analysis for government entities or regulatory bodies in the casino gaming industry. Vendor should include all relevant clients and a description of services provided and contact information for each.

Spectrum Gaming Group has been conducting economic impact studies since its founding in 1993. Working with appropriate models, we have measured how changes in gaming would impact employment (direct, indirect and induced), gross state/regional product, personal income, other industries, and fiscal outputs. Following are descriptions of our work for governmental or regulatory entities:

- 2016: [*Economic Market Study: Casinos, Cardrooms and Other Forms of Gambling in Washington State*](#), conducted for the Washington State Gambling Commission. Spectrum completed a comprehensive economic market study of all regulated gambling in the state other than lottery and horse racing. This study focused on the revenue, trends and demography of casino gaming and cardrooms while also examining commercial pull tabs and amusement games and non-profit bingo, pull tabs and raffles. The Spectrum team included the UMass Donahue Institute, which measured the gaming industry's contributions to the State of Washington in areas including employment, new personal income, business activity and value added, changes in state and local government tax revenues, changes in sales and jobs for the retail, accommodations and restaurant sectors, and in-state industries that are supported by the spending of casinos.
Contact: David Trujillo, Executive Director, Washington State Gambling Commission; 360.486.3512, Dave.trujillo@wsgc.wa.gov
- 2014: [*Socioeconomic Impact of Gambling on Iowans: A Study for the Iowa Racing and Gaming Commission*](#), conducted for the Iowa Racing and Gaming Commission. Working with project partner Strategic Economics Group, Spectrum calculated the economic and fiscal impacts of Iowa's statewide casino industry, and compared social and economic impacts in casino vs. non-casino counties. Spectrum employed the REMI model to measure the economic impacts of the casino industry, including in employment (direct, indirect and induced), gross state product, output, and personal income, as well as fiscal and construction impacts.
Contact: Brian Ohorilko, Administrator, Iowa Racing and Gaming Commission; 515.281.7352, Brian.Ohorilko@iowa.gov
- 2013: [*Gambling Impact Study*](#), conducted for the Florida Legislature. The Legislature retained Spectrum to complete a comprehensive two-part study designed to help lawmakers understand the economic, fiscal, and social impacts of any potential changes in Florida's casino gaming environment. The report provided both an educational component and complex economic-impact analyses of casino gaming expansion under 12 different scenarios using the REMI model.
Contact: Senator Bill Galvano, State of Florida; 941.741.3401, galvano.bill.web@flsenate.gov

- 2012: [*Facing the Lottery's Future: Implications and Strategies Regarding Internet Sales*](#), conducted for the Massachusetts Treasurer's Online Products Task Force. Among our tasks was to project Lottery sales via the internet and examine issues of substitution and cannibalization with respect to various forms of gaming. Of importance was how the lottery would be impacted by the coming opening of four casinos in the state.
Contact: Paul Sternburg, then-Director, Massachusetts Lottery; 617.435.4119, psternie@hotmail.com
- 2011: [*VLT Blueprint: Overview of long-term plan for development of VLT gaming in Georgia*](#), conducted for the Georgia Lottery. Spectrum projected the gross gaming revenue for video lottery terminal casinos at various locations throughout the state. Our analysis projected the participation rate and the annual expenditure per participant, among other variables, as well as analyzed the relevant trends and issues regarding this form of gaming.
Contact: Debbie D. Alford, President and CEO, Georgia Lottery Corporation; 404.215.5000, dalford@galottery.org
- 2009: [*Gambling in Connecticut: Analyzing the Social and Economic Impacts*](#), conducted for the Connecticut Division of Special Revenue. The study examined the social and economic impacts of all forms of gambling in the state, including two of the world's largest casinos, lottery and pari-mutuel wagering. The study included a 3,000-response survey of adults, and examined such trends as migration patterns of adults into and out of Connecticut in counties that host casinos.
Contact: Representative Kevin Ryan, State of Connecticut; 860.848.0790, Kevin.Ryan@cga.ct.gov
- 2008: [*Comprehensive Analysis: Projecting and Preparing for Potential Impact of Expanded Gaming on Commonwealth of Massachusetts*](#), conducted for the Commonwealth of Massachusetts Executive Office of Housing and Economic Development, the Department of Business & Technology, the Office of Business Development and the Massachusetts Office of Travel and Tourism. Spectrum examined the potential economic and social impacts of three casino resorts in the state. Tasks included projecting revenue, employment, wages and taxes; recommending strategies to maximize the benefit of gaming for restaurants and other small businesses; and analyzing issues including crime and problem gambling. We used the REMI model to measure the economic outputs.
Contact: Senator Stanley Rosenberg, Commonwealth of Massachusetts; 617.722.1500, stan.rosenberg@masenate.gov
- 1998: *Survey and Review of Cardroom Operations*, conducted for the City of San Jose (CA). Our report reviewed the city's regulatory approach to controlling cardroom operations. Our work included examining the economics of cardroom operations, the impacts of efficient regulation on the cardroom business, and the cost of regulation as compared to cardroom revenues.
Contact: Richard Teng, Administrator, Division of Gaming Control, San Jose Police Department; 408.794.1481, richard.teng@sanjoseca.gov

3.2: Vendor must have prepared economic impact studies on Sports Betting and other forms of Internet gaming for at least three government regulatory bodies in the United States. Vendor should provide the names of the clients in its response as well as a description of the services provided and contact information for references for each.

Following are descriptions of engagements involving sports betting and/or internet gaming for US government regulatory bodies:

- 2016: [*Economic Market Study: Casinos, Cardrooms and Other Forms of Gambling in Washington State*](#), conducted for the Washington State Gambling Commission. Among our tasks in the study:
 - Estimating the market size/revenues of Internet gaming in Washington state, if it were legalized
 - Estimating the market size/revenues of sports betting in Washington State, if it were legalized
 - Estimating the market size/revenues of daily fantasy sports in Washington State, if it were legalized

For each segment we provided an educational component and discussed the key issues before providing our projections.

Contact: David Trujillo, Executive Director, Washington State Gambling Commission; 360.486.3512, Dave.trujillo@wsgc.wa.gov

- 2013: [*Gambling Impact Study*](#), conducted for the Florida Legislature, which used our report as the basis for a series of regulatory hearings. Among our tasks in the study was to provide an overview of sports betting to education legislators and other stakeholders. We discussed the structure, regulatory oversight and market size for sports betting in Nevada, overseen by the Nevada Gaming Control Board and Nevada Gaming Commission, and the limited sports betting in Delaware, overseen by the Delaware Lottery. In addition, our report included a chapter on Internet gaming, which at the time had just been legalized in Delaware, Nevada and New Jersey.

Contact: Senator Bill Galvano, State of Florida; 941.741.3401, galvano.bill.web@flsenate.gov

- 2012: [*Facing the Lottery's Future: Implications and Strategies Regarding Internet Sales*](#), conducted for the Massachusetts Treasurer's Online Products Task Force, an advisory board appointed by, and reporting to, the Massachusetts Lottery Commission. We studied all aspects of the highly successful Massachusetts Lottery selling its products online. In addition, we examined the opportunities and implications to lottery sales if sports betting were legalized.

Contact: Paul Sternburg, then-Director, Massachusetts Lottery; 617.435.4119, psternie@hotmail.com

3.3: Vendor shall have at least 10 years of experience providing consulting services that include making regulatory recommendations to government regulators who oversee casino gaming. Vendor should include a description of the services provided and relevant client information in its response.

The Spectrum and GLI team are the global leaders of gaming professionals. The combined service offering provides regulators with full coverage from AML, licensing, responsible gaming policies to technical and security operations. Our combined professionals have end-to-end experience with exploring, developing the framework and implementing new forms of gaming. Our team knows the risks and challenges the West Virginia Lottery may face should sports betting or other forms of internet gaming be approved. The below list will demonstrate the global consulting work we have provided to government regulators:

- 2017: Loteria Nacional de Beneficencia de el Salvador Contracted with GLI for Consultancy Service for the Elaboration of the Legal Framework Related with Games of Chance in El Salvador. This work is currently in progress.
Contact: Rogelio Fonseca Alvarenga, Presidente; 503.252.5200, info@lnb.gob.sv
- 2017: GLI has provided expert testimony, technical standard consulting and regulation writing for skill-based amusement machines for the Ohio Casino Control Commission. This work is ongoing.
Contact: Matt Schuler, Executive Director; 855.800.0058, matt.schuler@casinocontrol.ohio.gov
- 2016: GLI's subject matter experts supported the Massachusetts Gaming Commission and Attorney General's Office during their research efforts on the topics of fantasy sports systems and esports. GLI's team engaged in on-site interviews as well as multiple support calls as the State was forming its position and approach to the construction of suitable regulatory controls aligned with their unique needs. The sharing of this technical and regulatory expertise ultimately served as a valuable resource in enabling these teams to release technical standards and an industry white paper to support the regulation of these emerging technologies.
Contact: Gayle Cameron, Massachusetts Gaming Commissioner; 617.979.8400, Gayle.Cameron@state.ma.us
- 2016: GLI has provided technical standard consulting and regulation writing for multiple technology types used in casinos for Lotería Nacional Sociedad del Estado-Argentina. This work is ongoing.
Contact: Pablo Bourlot, Vice Presidente; +54.011.4379.5200, telizalde@loteria-nacional.gov.ar
- 2016: GLI provided legislative and regulatory review, Staffing Advice and Technical Advice to the Ministry of Finance & the Economy, Trinidad and Tobago.
Contact: Colm Imbert, Minister of Finance; 868.627.9700, imbertc@got.tt

- 2016: GLI provided Turks and Caicos Ministry of Tourism Regulation writing, staffing advice and technical advice.
Contact: Desmond R. Ewing, Director; 649.338.5153, drewing@gov.tc
- 2015: The Iowa Racing and Gaming Commission, which regulates both casinos and racing, retained Spectrum to make recommendations for the distribution of the Iowa Greyhound Pari-Mutuel Racing Fund. Both Iowa greyhound tracks are integrated with casinos, making Spectrum's task particularly sensitive. Spectrum concluded its report with detailed recommended regulations for fund distributions.
Contact: Brian Ohorilko, Administrator, Iowa Racing and Gaming Commission; 515.281.7352, Brian.Ohorilko@iowa.gov
- 2015: GLI was engaged by the Oregon State Lottery to establish the Project Management Office and the associated management processes match the requirements as described by the new system specifications. The purpose of this engagement was to manage the Video Lottery Modernization Project. GLI performed a "Project Health-check" to proactively analyze this project, which was critical to business success and posed a significant risk to the organization in the event of failure.
Contact: Craig Durbin, Assistant Director Security; 503.540.1406, Craig.Durbin@state.or.us
- 2015: GLI provided consultancy and specifications of a central monitoring system to the Panama Gaming Control Board. This work is ongoing.
Contact: Eric Ivan Rios Aguilera, Executive Secretary; 507.507.7911, erios@mef.gob.pa
- 2015: GLI consulted with the St. Maarten Ministry of Tourism and provided regulation writing, staffing advice and technical advice. This work is ongoing.
Contact: Thadeus Richarson, Minister; 721.542.9252, thadeus.richarson@sintmaartengov.org
- 2015: The Bermuda Ministry of Tourism Development and Transport contracted with GLI to provide consultation that includes rule writing, staffing advice and technical advice. This work is ongoing.
Contact: Wayne Scott, Director of Information Technology; 441.297.7926, rwscott@gov.bm, or Alan Dunch, Chairperson; 441.400.2100, adunch@gov.bm
- 2014: The Indiana Gaming Commission contracted with GLI to provided consultancy for the development of technical standards and internal controls for mobile gaming systems.
Contact: Sara Tait, Executive Director; 317.233.0046, STait@igc.in.gov
- 2013: The Republic of Paraguay contracted with GLI for technical standard consulting for gaming devices.
Contact: Javier Rodrigo Balbuena Estigarriba, Presidente; +595.21.229.499, javier_balbuena@hacienda.gov.py
- 2013: GLI assisted the Delaware State Lottery with consulting services for the planning phases of its Interactive Gaming System solution and to author Delaware's online gaming

regulations, online gaming minimum internal control standards and other technical supplements to address the custom online gaming implementation envisioned for Delaware. Services provided included:

- Regulatory consulting to understand what the system must do to meet regulatory compliance.
- Wrote technical specifications that defined the base architecture of the requirements needed for the technical solution.

Contact: Rebecca Satterfield, iGaming Project Lead; 302.744.1606,
Rebecca.satterfield@state.de.us

- 2013: GLI was requested to provide technical standard consulting for gaming devices by PAGCOR (the Philippines).

Contact: Ramon Villaflor, Gaming Licensing & Development; +63.2.521.1542,
RamonStephen.Villaflor@pagcor.ph

- 2013: COLJUEGOS - Ministerio de Hacienda y Crédito Público de Colombia contracted with GLI to provide consultancy on gaming law.

Contact: Alejandro Botero Valencia, Sub Director de Pensiones; 571.381.2321,
abotero@minhacienda.gov.co

- 2012: The Massachusetts Gaming Commission: Spectrum played a critical role in helping the Commission to meet its obligations in licensing a new casino industry, with one slot parlor and three destination gaming resorts planned for different regions, subject to an intense competitive bidding process. Spectrum's role included investigating the backgrounds of many applicants, and developing a strategic plan that crafted the regulatory framework to help create the new casino gaming agency.

Contact: Steven Crosby, Chairman, Massachusetts Gaming Commission; 617.979.8400,
steve.crosby@state.ma.us

- 2012: GLI provided technical standard consulting to the Ohio Lottery Commission.

Contact: Dennis Berg, Executive Director; 216.774.5777, dennis.berg@olc.state.oh.us

- 2012: Superintendencia de Casinos de Juegos (SCJ) de Chile contracted with GLI to provide consultancy on gaming law.

Contact: Vivien Villagran Acuna, Superintendente; +56.2.2589.3000,
villagran@scj.gob.cl

- 2011: The Ohio Casino Control Commission retained Spectrum to provide myriad services, including a statewide and regional market analyses; analysis of gaming public policy; analysis of gaming-tax rates, capital investment and licensing fees; drafting of gaming regulations; due diligence investigations of license applicants and qualifiers; developing a roadmap for organization of the newly-formed Casino Control Commission.

Contact: Matthew T. Schuler, Executive Director, Ohio Casino Control Commission; 614.387.5851, matt.schuler@casinocontrol.ohio.gov

- 2011: GLI was contracted with the Autoridad de Fiscalización y Control Social del Juego (AJ) de Bolivia to provide consultancy on technical standards.
Contact: Jessica Paola Saravia Atristain, Directora Ejecutiva; 591.212.5057, jsaravia@aj.gob.bo
- 2011: The Ohio Casino Control Commission contracted with GLI for technical standard consulting.
Contact: Matt Schuler, Executive Director; 855.800.0058, matt.schuler@casinocontrol.ohio.gov
- 2011: The Perú Dirección General de Juegos de Casinos y Maquinas Tragamonedas contracted with GLI to provide consulting for server-based/supported standards.
Contact: Manuel Antonio San Roman Benavente, Direccion General; 511.513.6122, msanroman@mincetur.gob.pe
- 2010: GLI provided technical standards for video gaming terminals and payout devices consultancy to the Illinois Gaming Board.
Contact: Bob Burke, License Coordinator; 312.814.4639, Robert.Burke@igb.illinois.gov
- 2009: The Delaware Lottery retained Spectrum to lead the implementation of live table games in what had been a slots-only market. Spectrum's regulatory expertise helped ensure that table games were implemented comprehensively and efficiently, while ensuring the maintenance of the public's trust. Our work began with the Governor's Chief Counsel as we assisted in the drafting the revised gaming law. We developed and provided a strategic plan within the state's tight timeframe. This involved extensive interaction with the Delaware Lottery, numerous other public agencies, and the VLT facility operators. This work required extensive discussions and consultations on a multitude of issues, including funding, scope and regulation. Our team of 15 professionals for this project included gaming attorneys, operations specialists, surveillance experts and public policy specialists. Spectrum was subsequently retained to conduct casino operational and compliance audits of Delaware's three casinos.
Contact: Vernon Kirk, Director, Delaware Lottery; 302.744.1601, Vernon.Kirk@state.de.us
- 2009: GLI contracted with the Arkansas Racing Commission to provide consultation to develop the regulatory framework for gaming operations and skill-based gaming.
Contact: (note the directors in house at the time of this work are no longer available) Chrissy Horner, Administrative Specialist; 501.683.3347, chrissy.horner@dfa.arkansas.gov
- 2009: GLI performed a technological analysis of the South Dakota law, as requested by the South Dakota Commission on Gaming.
Contact: Larry Eliason, Executive Secretary; 605.773.6050, larry.eliason@state.sd.us
- 2008: West Virginia Lottery retained Spectrum to manage and implement the highly sensitive and complex task of implementing live table games on an expedited basis in a market that had previously authorized only slot machines. Spectrum oversaw all critical regulatory aspects of this task to ensure that table games were implemented in a manner

that was comprehensive, timely and fair, and that the regulations were drafted to ensure that the rules protect the public interest, as well as the interests of the casino operators.

Contact: John Musgrave, then-Director, West Virginia Lottery; 304.675.1497, jmusgrave@suddenlink.net

- 2008: GLI provided consultation on technical standards for the Singapore Casino Regulatory Authority.
Contact: Kwong Yee Lee, Deputy Director, GT & ICT Systems; +65.6501.7013, LEE_Kwong_Yee@cra.gov.sg
- 2008: GLI was performed a technological analysis of the Indiana law, as requested by the Indiana Gaming Commission.
Contact: Sara Tait, Executive Director; 317.233.0046, STait@igc.in.gov
- 2007: GLI assisted the Kansas Racing and Gaming Commission with the startup rules and procedures and development of gaming technical standards.
Contact: Dennis Bachman, Director of IT and Electronic Security; 785.296.8358, Dennis.Bachman@krgc.ks.gov
- 2005: Working first for the Singapore Ministry of Home Affairs, Spectrum reviewed the draft regulations as that city-state prepared for the introduction of two world-class integrated resorts. We recommended changes, based on our experience and global best practices, that would assure the government that casino gaming was conducted to the highest standards. We were subsequently retained by the Singapore Casino Regulatory Authority, for which we drafted regulations to control junket operations, which are critical to major gaming operations throughout Southeast Asia.
Contact: Teck Wang TAN, General Counsel of Casino Regulatory Authority; +65.6501.7000, TAN_Teck_Wang@cra.gov.sg
- 2003: Spectrum has been regularly retained since 2003 as gaming advisors to the Gaming Division of the Puerto Rico Tourism Company and to the Commissioner of Financial Institutions. In that capacity our tasks has included rewriting and updating gaming regulations for Puerto Rico's 18 casinos. We were also was retained to draft regulations regarding the operation of slot machines at the commonwealth's international airports and cruise ports and to draft regulations for the operation of Internet gaming as well as to conduct vendor licensing investigations and undertake various economic and research projects. Spectrum was retained to conduct a market analysis regarding the density of the Puerto Rico casino market, analyze the impact on casinos of adding video lottery terminals to off-track betting facilities, and to study to the impact on casinos of a smoking ban.
Contact: Andy Viera Diaz, Director, Gaming Division, Puerto Rico Tourism Company; 787.721.2400, extension 3800/3801, Andy.Viera@tourism.pr.gov

3.4: Vendor shall have conducted studies or provided consulting services to at least 10 government entities or regulatory bodies that oversee lottery and casino gaming in the United States, and at least three of which must be government entities or regulatory bodies that oversee lottery and casino gaming in mature markets [jurisdictions in the United States where casino gaming and lottery sales have been in operation for at least five years]. Vendor should include the names of clients in its response as well as a description of the services provided and contact information for references for each.

Through both state legislatures and specific agencies that oversee lottery and casino gaming, Spectrum and GLI have provided consulting services to the following government entities, six of which have overseen lottery and commercial casinos for more than five years. In addition, GLI will has several consulting services performed specifically by the selected project team.

- 2016 and 2014: Spectrum performed two public studies for the Casino Association of Indiana developed for the purpose of educating members of the Indiana General Assembly and other stakeholders. The General Assembly was not our client in either instance, but clearly relied on our work, as stated by Randhir Jha, Chief Economist, Indiana Legislative Services Agency, said of Spectrum’s work: “The changing dynamics of the gaming industry in the past 25 years requires continuous research and the ability to gather and analyze information. In doing so, along with other resources, I have used Spectrum’s reports and developed an appreciation for the company’s wide-ranging analyses.”

Contact: Randhir Jha, Chief Economist, Indiana Legislative Services Agency; 317.232.9556, randhir.jha@iga.in.gov

- 2014-2015: GLI provided consultation and training services to the Maryland State Lottery & Gaming Control Agency on gaming devices commonly referred to as “gray market games.” GLI’s services with the MLGCA included an in-depth review of various game types often encountered in unregulated markets or operated illegally, with a focus on critical aspects of game functionality, game outcome determination, enforcement concerns, device identification, and seizure. Training also included a view of common legal loopholes and the effects of specific gambling regulatory verbiage on enforcement and legal proceedings.

Contact: Jennifer Wetherell, Director; 410.230.8891, jennifer.wetherell@maryland.gov

- 2013: GLI assisted the Delaware State Lottery with consulting services for the planning phases of its Interactive Gaming System solution and to author Delaware’s online gaming regulations, online gaming minimum internal control standards and other technical supplements to address the custom online gaming implementation envisioned for Delaware. Services provided included:

- Regulatory consulting to understand what the system must do to meet regulatory compliance.
- Wrote technical specifications that defined the base architecture of the requirements needed for the technical solution.

Contact: Rebecca Satterfield, iGaming Project Lead; 302.744.1606, rebecca.satterfield@state.de.us



- 2013: [Gambling Impact Study](#), conducted for the Florida Legislature (as noted in sections 3.1 and 3.2 of this RFQ). Among our tasks in the study was to provide an overview of sports betting to education legislators and other stakeholders. We discussed the structure, regulatory oversight and market size for sports betting in Nevada, overseen by the Nevada Gaming Control Board and Nevada Gaming Commission, and the limited sports betting in Delaware, overseen by the Delaware Lottery. In addition, our report included an entire chapter on Internet gaming, which at the time had just been legalized in Delaware, Nevada and New Jersey.

Contact: Senator Bill Galvano, State of Florida; 941.741.3401, galvano.bill.web@flsenate.gov
- 2012-2013: The Maryland Lottery Commission retained Spectrum to conduct suitability background investigations for the entities and employees that apply for licenses for the state's VLT casinos. We investigated companies that applied for operator licenses, vendors and employees. (Lottery and casinos have co-existed in Maryland since September 2010.)

Contact: Stephen Martino, then-Director, Kansas Racing and Gaming Commission; 702.692.6222, smartino@mgmresorts.com
- 2011: The State of Ohio, through the Department of Administrative Services, hired Spectrum to provide myriad services, including statewide and regional market analyses for both full-service casinos (Casino Control Commission) and racetrack casinos with prospective video lottery terminals (Ohio Lottery); analysis of gaming public policy; analysis of gaming-tax rates, capital investment and licensing fees; drafting of gaming regulations; due diligence investigations of license applicants and qualifiers; developing table of organization for Casino Control Commission.

Contact: John Barron, Deputy Executive Director & General Counsel, Ohio Casino Control Commission, 614.387.5858, john.barron@casinocontrol.ohio.gov; and Constance Miller, Deputy Director, Office of Operations, Ohio Lottery; 216.774.5900, Constance.Miller@olc.state.oh.us
- 2010: The Delaware Lottery retained Spectrum to lead the implementation of live table games in what had been a slots-only market. Spectrum's regulatory expertise helped ensure that table games were implemented comprehensively and efficiently, while ensuring the maintenance of the public's trust. Spectrum was honored with a Governor's Team Excellence Award certificate issued by Delaware Governor Jack Markell for our regulatory work in helping to implement table games. (Lottery and casinos have co-existed in Delaware since December 1995.)

Contact: Vernon Kirk, Director, Delaware Lottery; 302.744.1601, Vernon.Kirk@state.de.us
- 2009: The Connecticut General Assembly authorized a study, conducted by Spectrum for Division of Special Revenue, titled [Gambling in Connecticut: Analyzing the Social and Economic Impacts](#). The study examined the social and economic impacts of all forms of gambling in the state, including two of the world's largest casinos, lottery and pari-mutuel wagering. The study included a 3,000-response survey of adults, and examined such

trends as migration patterns of adults into and out of Connecticut in counties that host casinos.

Contact: Representative Kevin Ryan, State of Connecticut; 860.848.0790, Kevin.Ryan@cga.ct.gov

- 2008: The Massachusetts Legislature authorized a study, [*Comprehensive Analysis: Projecting and Preparing for Potential Impact of Expanded Gaming on Commonwealth of Massachusetts*](#), conducted for the Commonwealth of Massachusetts Executive Office of Housing and Economic Development, the Department of Business & Technology, the Office of Business Development and the Massachusetts Office of Travel and Tourism. Spectrum examined the potential economic and social impacts of three casino resorts in the state. Tasks included projecting revenue, employment, wages and taxes; recommending strategies to maximize the benefit of gaming for restaurants and other small businesses; and analyzing issues including crime and problem gambling.

Contact: Senator Stanley Rosenberg, Commonwealth of Massachusetts; 617.722.1500, stan.rosenberg@masenate.gov

- 2007: West Virginia Lottery, Spectrum was retained to manage and implement the highly sensitive and complex task of implementing live table games on an expedited basis in a market that had previously authorized only slot machines. Spectrum oversaw all critical regulatory aspects of this task to ensure that table games were implemented in a manner that was comprehensive, timely and fair, and that the regulations were drafted to ensure that the rules protect the public interest, as well as the interests of the casino operators. (Lottery and casinos have co-existed in West Virginia since June 1990 [when VLT trial began at Mountaineer Park].)

Contact: John Musgrave, then-Director, West Virginia Lottery; 304.675.1497, jmusgrave@suddenlink.net

- 2007: The Kansas Racing and Gaming Commission, which regulates casinos under the Kansas Expanded Lottery Act, retained Spectrum to develop a strategic plan and draft regulations for the anticipated casinos that would be developed under the unique public ownership/private operation legal and regulatory scheme in that state. (Lottery and commercial casinos have co-existed in Kansas since February 2012.)

Contact: Stephen Martino, then-Director, Kansas Racing and Gaming Commission; 702.692.6222, smartino@mgmresorts.com

- 2004-2005: The Pennsylvania Department of Revenue, which oversees the Pennsylvania Lottery and has an oversight role with the Gaming Control Board, retained Spectrum to provide guidance regarding the structure of the Gaming Control Board and how to conduct background investigations of applicants for gaming licenses.

Note: Contacts familiar with our work on this project 13 years ago have since left the Department of Revenue and we do not have current contact information.

3.5: Vendor shall have experience making presentations and providing testimony as a subject matter expert to legislative committees or in legislative hearings in at least five states, and of those five at least two must be related to sports betting or internet gaming. Vendor should include the names of clients in its response as well as a description of the services provided and contact references for each.

Aside from preparing detailed studies, Spectrum and GLI recognize the importance of speaking to legislators in a public forum – both to present highlights from a given study and to answer questions. Presenting or testifying as a subject matter further strengthens the trust that stakeholders have in our work product. We provide state examples below as well as one federal example that we believe is relevant.

- 2016-2017: GLI’s Kevin Mullally and Chad Kornett presented on various occasions to the Massachusetts Special Commission on online gaming, fantasy sports gaming and daily fantasy sports on regulated internet gaming. This work is ongoing.
Contact: Gayle Cameron, Massachusetts Gaming Commissioner; 617.979.8400, Gayle.Cameron@state.ma.us
- 2016-2017: GLI’s Kevin Mullally presented extensively on internet gaming, sports book and fantasy sports, on various occasions, to the Ohio Senate and Ohio Casino Control.
Contact: Senator William P. Coley, II, Ohio Senate - 4th District, 614.466.8072, wpcoley2@msn.com and John Barron, Deputy Director & General Counsel, Ohio Casino Control Commission; 855.800.0058, John.Barron@casinocontrol.ohio.gov
- 2016: Spectrum Managing Director Michael Pollock testified before the Michigan Senate Regulatory Reform Committee regarding proposed legislation SB889 that would have authorized poker and online casino games in that state. Mr. Pollock’s testimony focused on anticipating some unanticipated consequences of the legislation as structured, including language that would have created a situation in which not every casino operator might have received an online license. A news account written after the hearing noted that: “For most of the hearing they (committee members) sat stoically, and only a handful of questions were asked – most directed to the final witness of the day, Michael Pollock of Spectrum Gaming Group.”
Contact: Senator Mike Kowall, State of Michigan; 517.373.1758, SenMKowall@senate.michigan.gov
- 2015: Spectrum Managing Director Michael testified before the Georgia Committee for the Preservation of the HOPE Scholarship, a joint Senate and House committee. Mr. Pollock noted that Spectrum had performed a 2011 study on authorizing VLTs in Georgia under the auspices of the Georgia Lottery, but emphasized that a 2011 study had limited value in 2015. Pollock told the Committee: “You only have one opportunity to launch a gaming industry, and it requires lots of planning and care. Once facilities are opened and operating, the state’s influence declines dramatically. ... Georgia is in a particularly enviable position – you can look at a number of states to see what has been successful.”
Contact: Representative Mickey Stephens, State of Georgia; 912.661.1733, mickey.stephens@gmail.com

- 2015: GLI's Kevin Mullally testified for the Massachusetts Gaming Commission during its Gaming's Daily Fantasy Sports Educational Forum – December 10, 2015.
Contact: Gayle Cameron, Massachusetts Gaming Commissioner; 617.979.8400, Gayle.Cameron@state.ma.us
- 2015: GLI's Kevin Mullally and Chad Kornett presented on Internet Gaming to the Pennsylvania Chairman Payne, Chairman Kotik and members of the House Gaming Oversight Committee. Kevin also presented to the House Gaming Committee in Pennsylvania.
Contact: John D. Payne (Former Member – House of Representatives and Chair of House Gaming Oversight), Principal - State Government Relations at Buchanan, Ingersoll & Rooney, Government Relations & Public Policy; 717 237 4886, john.payne@bipc.com
- 2013: Five Spectrum professionals testified before both the Florida Senate Committee on Gaming House Select Committee on Gaming regarding all aspects of legalized gambling in the state. Our testimony was the culmination of our work (as cited in sections 3.1 and 3.2 of this RFQ) completing the *Gambling Impact Study* for the Florida Legislature. Our testimony covered the economics of casino gaming, social impacts, public policy, pari-mutuel trends, demography and revenue projections.
Contact: Senator Bill Galvano, State of Florida; 941.741.3401, galvano.bill.web@flsenate.gov
- 2012: GLI's Kevin Mullally testified for the Massachusetts Gaming Commission during its Forum on Problem Gambling.
Contact: Gayle Cameron, Massachusetts Gaming Commissioner; 617.979.8400, Gayle.Cameron@state.ma.us
- 2012: GLI's Kevin Mullally testified for the Massachusetts Gaming Commission for Research-Guided Policies: Using Science to Address Gambling Disorders in Massachusetts.
Contact: Gayle Cameron, Massachusetts Gaming Commissioner; 617.979.8400, Gayle.Cameron@state.ma.us
- 2011: Spectrum Managing Director Michael Pollock testified before the US Senate Committee on Indian Affairs, as that committee was examining issues related to the potential authorization of Internet gaming for tribal casinos. The crux of his testimony is in the following: "Internet gaming represents a significant revenue stream for government. What is less readily apparent is that Internet gaming also represents a significant marketing opportunity for Indian casinos. Internet gaming offers the ability to reach customers easily and at low cost, to identify customers' potential, and to cultivate customers and reward them through the ability to earn visits at their brick-and-mortar casinos. If Internet gaming is allowed to develop as simply a revenue stream, then I suggest the United States has squandered a once-in-a-century opportunity."
Contact: Jason Giles, Executive Director, National Indian Gaming Association; 202.546.7711, jgiles@indiangaming.org

- 2009: Spectrum Managing Director Michael Pollock testified before the Indiana Gaming Study Committee, a joint Senate-House committee that was examining the future of gaming in that state. As the official minutes from that meeting note: “Mr. Pollock recommended developing casino properties into regional tourist destinations with amenities beyond the gaming floor as a strategy to combat out-of-state competition. Mr. Pollock urged Indiana to avoid creating an environment of ‘disinvestment’ in which a lack of confidence in the future of the industry would lead to declining investments in Indiana gaming properties. Mr. Pollock cited the following tax and regulatory issues of concern to the industry:
 - The riverboat admissions tax.
 - The maritime requirements imposed on the Lake Michigan and Ohio River riverboats.
 - (The inability to deduct promotional free play from adjusted gross receipts for purposes of the wagering taxes.)

Contact: Matt Bell, then-Representative, State of Indiana; 317.910.7572, mbell@casinoassociation.org

- 2008: Spectrum Senior Vice President Joseph Weinert testified before the New Jersey Assembly, Tourism and Gaming Committee, as the state legislature considered legalizing sports betting. Mr. Weinert noted that sports betting itself is not a major revenue source for Las Vegas Strip casinos, historically accounting for slight more than 1 percent of total gaming revenues. Rather, he testified, sports betting results in indirect incremental gaming and non-gaming revenue; that is, more revenue at the table games, slot machines, hotels, restaurants, bars, spas and shops from the sports bettors themselves and those who might accompany them.

Note: There was no client involved with Mr. Weinert’s testimony; he was invited by the Assembly Tourism and Gaming Committee and appeared as an unpaid, independent expert.

3.6: Vendor shall have knowledge of political, demographic, technological, regulatory, and competitive industry standards and trends, and utilize such knowledge in the methodology utilized to perform such services.

In 2017 alone, we have published three widely read and highly regarded white papers on the subjects of sports betting and Internet gaming:

- June 2017: *Online Gaming From Land-Based Perspective, Part Two*: Examining the issues of protectionism with respect to casinos being the providers of online gaming in a given state.
- July 2017: *Online Gaming From Land-Based Perspective, Part One*: How land-based casino operators and policymakers in gaming states should position themselves to best capture the opportunities afforded by Internet gaming
- September 2017: *Legal Sports Betting in the United States: How Will it Evolve? How Should it Evolve?* An examination of the legal, policy and logistical issues regarding the likely implementation of sports betting.

In recent years, we have been granted the enormous responsibility of reviewing gaming policies and impacts in a variety of states, from Connecticut to Florida, as well as overseas in markets ranging from Spain to Cyprus.

Carrying out such tasks demands a team of specialists in all necessary disciplines. As this proposal demonstrates, we have assembled such a team for this potential engagement in West Virginia, including expertise in gaming and sports law, as well as in the implementation and regulation of legal sports betting in multiple markets.

We layer that on to our demonstrated expertise in identifying and analyzing political and regulatory trends, as well as our proven experience in West Virginia. Notably, Spectrum was founded by former regulators, and that experience forged as government officials remains fundamental to our business model. We fully understand and embrace principles espoused in West Virginia and other progressive gaming states, including:

- A gaming license is a privilege, not a right, and is granted to individuals who have demonstrated good character, honesty and integrity.
- Gaming policies are designed to advance a variety of public policies, such as growth in employment, tourism development, capital investment and enhanced fiscal revenue.
- Emerging technologies and policies should not diverge from these core goals and principles, but should rather advance them.

Spectrum's knowledge of political and policy trends earned us the privilege of serving as the Executive Director of the National Council of Legislators from Gaming States (NCLGS). That national organization is founded on the principle that it is neither pro-gaming nor anti-gaming, but is rather devoted to promoting best practices in gaming. Again, that principle dovetails perfectly with our business model and corporate culture.

With all of that in mind, we will approach this engagement as we have others:

- We will conduct thorough research, meeting with as many stakeholders as possible, irrespective of the views held by such stakeholders
- We will leverage proven economic models, with inputs and outputs that are clear and supportable
- Our findings will be built on a foundation of clarity and comprehensiveness, and will not be guided or shaded by any pre-conceived notions held by anyone, including our clients

Such a rational, scientific approach is the best way to provide meaningful guidance to all policymakers in West Virginia.

3.7: Vendor shall provide a statement that certifies each study conducted pursuant to this RFQ is an independent analysis and Vendor has no conflict of interest that would impact its ability to be objective.

Spectrum Gaming Group, as stated in our tagline, is an “Independent research and professional services” firm. We are not beholden to any outside interests. We do not participate in gaming, betting, lottery or any other gambling operations, nor do we invest or otherwise have a stake in any gambling-related companies. We do not accept engagements that seek a preferred result, nor do we accept engagements that offer a success fee.

Accordingly, each study conducted under contract with the State of West Virginia would be independent, absent conflict of interest, and completely objective.

3.8: Vendor’s personnel that may be involved in making presentations must be preapproved by the Agency.

Spectrum understands that any project professionals who may be involved in making presentations must be preapproved by the State of West Virginia, and we will follow all procedures to effect approvals.

3.9: Compliance with experience requirements will be determined prior to contract award by the State through references provided by the Vendor with its bid or upon request, through knowledge or documentation of the Vendor's past projects, or some other method that the State determines to be acceptable. Vendor should provide a current resume which includes information regarding the number of years of qualification, experience and training, and relevant professional education for each individual that will be assigned to this project. Vendor must provide any documentation requested by the State to assist in confirmation of compliance with this provision. References, documentation or other information to confirm compliance with this experience requirement are preferred with the bid submission, but may be requested after bid opening and prior to contract award.

Following are the biographies of the Spectrum professionals and associates who would comprise the West Virginia study project team. We are prepared to quickly provide and document our references to confirm compliance with this provision of the RFQ. Our professionals and associates will be supported by staff as needed.



◀ **Michael J. Pollock**

Managing Director | Spectrum Gaming Group

Michael Pollock oversees a broad portfolio of Spectrum services, including policy and impact studies for country, state and local governments, and financial and market studies for private-sector clients.

Pollock began analyzing the casino industry in 1978 and served as spokesman for the New Jersey Casino Control Commission from 1991 through 1996. He was a close advisor to the chairman, and oversaw the Office of Legislative Liaison. During this period of rapid deregulation, his charge was to maintain public confidence in the integrity of the regulatory system.

Pollock is the author of the award-winning book *Hostage to Fortune: Atlantic City and Casino Gambling*, published by the Center for Analysis of Public Issues in Princeton. The book examines the impact of casinos on Atlantic City and New Jersey. He has testified before the International Tribunal at The Hague, the World Bank in Washington DC, the US Senate Indian Affairs Committee and the US Senate Select Committee on Indian Gaming, and has been a featured speaker at the Congressional Gaming Caucus, a group of US House of Representatives members from gaming jurisdictions. He has also testified before numerous legislative committees throughout the United States.

He has led Spectrum economic analyses in markets throughout North America, as well as in Latin America, Guam and Korea.

Pollock has won 20 journalism awards, and is the former editorial page editor of *The Press of Atlantic City*. Pollock is often cited by national media outlets, including *The New York Times*, *Star-Ledger*, BBC, MSNBC, ABC News and National Public Radio.

Pollock earned his MBA, with high honors, from Rutgers University, and has served as a member of the adjunct faculty of New York University, Rutgers University and Stockton University.



◀ Lee Richardson

CEO | Gaming Economics

Lee Richardson is founder and CEO of Gaming Economics, an international iGaming consultancy and advisory business, with clients in Europe, Asia and the Americas. He also delivers a Sportsbook Management module for the Totally Gaming Academy, a division of Clarion Events.

A General Motors-trained engineer, Richardson held senior marketing and commercial roles with the Hertz Corporation in both UK and Europe. He is a Former marketing director with the British Horseracing Board and has since operated within the iGaming business for almost 20 years, holding senior CEO/COO roles with Tote Direct, Coral-Eurobet plc, Chartwell Games International, Boylesports and ONEworks.

Richardson earned his MBA from University of Strathclyde (Glasgow). He is a Chartered Marketer and a Fellow of the UK Chartered Institute of Marketing.



◀ Joseph Weinert

Executive Vice President | Spectrum Gaming Group

Joe Weinert has been analyzing the gaming industry since 1996. At Spectrum, he is a project director and researcher for studies for private- and public-sector clients worldwide. He has directed numerous projects in multiple North American jurisdictions, as well as in the Czech Republic, Russia, Slovak Republic, Spain and United Kingdom.

Weinert works on a broad range of projects, including market analyses, economic-impact studies, reasonableness analyses, litigation support, strategic planning, regulatory services, due diligence investigations, and Internet gambling, among other areas.

Weinert came to Spectrum after 18 years at *The Press of Atlantic City*, where for his last eight years he was responsible for the newspaper's intensive coverage of the casino industry. He has been a panelist, presenter or moderator at more than 60 industry conferences worldwide and has been quoted in prominent media outlets, including *The Wall Street Journal*, *Financial Times*, *Barron's*, *Forbes*, *New York Times*, *Washington Post*, *USA Today* and CNN, among many others. In addition, he has testified before legislative committees in Illinois, Massachusetts, New Jersey and Pennsylvania and has served as an expert witness in Puerto Rico.

Weinert graduated from Ohio Wesleyan University with a BA in Journalism.



◀ Adam Steinberg

Senior Vice President | Spectrum Gaming Group

Adam Steinberg is Senior Vice President of Spectrum Gaming Group. In his more than 15 years involved in the casino industry, Steinberg has been an equity analyst, high yield analyst, investment banker and a corporate development officer. As an investment professional, he worked at Bear Stearns, CIBC World Markets, Morgan Joseph & Co., and FBR Capital Markets. Notable client transactions include serving as financial advisor to the first-lien lenders of Tropicana Entertainment and to the senior secured noteholders of Black Gaming, LLC. At Morgan Joseph, Steinberg was also the research analyst covering the gaming and leisure industries.

Prior to Morgan Joseph, Steinberg was Director of Business Evaluation at GTECH Corp., where he was responsible for providing objective and consistent business case evaluation capabilities and advice that resulted in the creation of value both strategically and economically from new business opportunities

worldwide. At GTECH, he managed the \$185 million acquisition of Spielo, a slot machine manufacturer, including due diligence, financial modeling and valuation.

Steinberg has more than 15 years' experience in financial services. He is a widely quoted industry source, recognized for industry knowledge and stock-picking skills with multiple television appearances on CNBC and Bloomberg Television, and has been a featured speaker at industry conferences and tradeshows.

Steinberg is a Chartered Financial Analyst with an MBA in Finance from Cornell University and a BS in Accounting from Florida State University. Steinberg is on the Board of Directors of ADHD Aware, a 501c3 nonprofit organization.



◀ **Rod Motamedi**

Research Manager | UMass Donahue Institute

Rod Motamedi is a Research Manager at the University of Massachusetts Donahue Institute with over nine years of experience conducting economic and policy impact analyses, economic development and regional competitiveness assessments, and industry footprint studies. He is an expert in the application of economic models to high-visibility issues around the US and internationally. Prior to joining the Donahue Institute, Motamedi was a senior economic associate at Regional Economic Models, Inc. where he led client training and support, business development, and consulting projects. As a trainer, Motamedi was responsible for ensuring that all new and existing clients domestically and internationally used their economic models effectively for their unique projects, regions, and modeling goals. He was the go-to person for advice and collaboration for clients with anywhere from one day to 25 years of experience with REMI models.

As a consultant, he has had a role in every study completed by REMI during his tenure and remains the economic impact expert at the Donahue Institute. Many of his projects were on public and potentially-contentious issues such as the economic impact of casinos, national immigration reform, film tax incentives, and higher education funding. Motamedi's experience with the economic evaluations of gaming extends back five years and includes eight total projects, of which four are statewide, one national, and three property-level studies. Most notable among them were a statewide analysis of Florida's current gaming environment (tribal casinos, racinos, lottery, etc.) and 12 different expansion scenarios on behalf of the Florida Legislature and a full evaluation of the economic effects of the introduction of casino gambling in Massachusetts on behalf of the Massachusetts Gaming Commission (currently ongoing). Both projects have included in-depth and complex data collection, safeguarding of confidential and proprietary data, economic modeling of hundreds of variables, and multiple rounds of public testimony and presentations to legislators and commissioners.

Motamedi received his bachelors of arts in economics from the University of Massachusetts Amherst.



◀ Kevin P. Mullally, Esq.

Vice President of Government Relations and General Counsel | GLI

Kevin P. Mullally is the Vice-President of Government Relations and General Counsel for Gaming Laboratories International, LLC (GLI). Mr. Mullally is GLI's chief legal officer, and is responsible for all risk management policies for the company as well as supervision of all outside attorneys and consultants. In addition, he serves internationally as GLI's primary liaison to elected and appointed officials at the federal, state and local level. As such he regularly interacts with regulatory agencies, key organizations devoted to developing gaming policy as well as senior level executives of gaming equipment manufacturing companies, lotteries, pari-mutuel wagering facilities, social gaming companies and casino operators. Mr. Mullally provides GLI with over 30 years of diversified leadership in law, management, public policy, public relations, economic analysis, and organizational administration.

Kevin is currently a member of the Board of Trustees of the International Association of Gaming Advisors. He also Chairs the National Council on Problem Gambling's Committee on Standards, Policy & Regulation. He is a frequent teacher, author, and speaker on issues relating to administrative and business law topics, public policy development, regulatory issues, and problem gambling.

Since arriving at GLI in 2006, Mr. Mullally has created a Government Relations unit that assists GLI's clients with public policy and regulatory issues relating to the implementation of new gaming technology. In addition, he served as the Project Manager for GLI's consulting to assist the Kansas Lottery and the Kansas Racing and Gaming Commission implement the Kansas Expanded Lottery Act. This work involved assisting the KRGC staff in the development of rules, policies, internal control procedures and workflow processes. Of particular note was Mr. Mullally's work in helping KRGC establish its breakthrough responsible gaming programs including its innovative self-exclusion program.

In addition to his work for KRGC, Mr. Mullally has served as project manager for consulting work in Arkansas, Bermuda, Delaware, Kansas, Kentucky, Illinois, Indiana, Iowa, Maryland, Ohio, St. Maarten, Turks and Caicos, Trinidad and Tobago and Texas. Mr. Mullally is the author of GLI's White Paper on Internet Gambling Law, which has been used as a reference by the Regulator's Internet Gambling Task Force. Mr. Mullally is leading discussions relating to the treatment of social gaming and has a thorough understanding of internet gaming regulation, having served as the first Chairman of the Regulator's Internet Gambling Task Force in 2006. Finally, Mr. Mullally has a long history of dealing with lottery policy, having worked on the implementation of the Missouri Lottery while working for Senator Wiggins in 1981. Since that time, he has consulted with lotteries on a variety of technical and legal issues as well as advising them on responsible gaming policy and program implementation.

Mr. Mullally conceived and drafted the first government-sponsored self-exclusion program for problem gamblers. The program is the largest of its kind, currently serving over 15,000 problem gamblers. It has been imitated in jurisdictions around the world. Mr. Mullally also acted as the lead lobbyist to gain passage of dedicated funding for problem gambling treatment in Missouri. In addition, Mr. Mullally twice served as President of the Missouri Alliance to Curb Problem Gambling. He remains the only person to have held the position two times. Mr. Mullally also served as lead lobbyist for two gaming regulation reform bills in 1994, both of which passed with emergency clauses requiring two-thirds majorities in the House and Senate.

Highlights of Published Works

- Public Policy Implementation and Regulatory Practice, chapter in *Regulating Land Based Casinos*, UNLV Gaming Press, 2014.

- The Future of Gaming Policy in the U.S., Casino Lawyer Magazine, September 2013.
- A Starting Point for Global Online Gaming Technical Standards, iGaming Business North America, May 2012.
- Guest commentary: Changes can help problem gamblers, OP-ED for St. Louis Post-Dispatch, September 20, 2011.
- The Emergence of Self-Exclusion Programs, Commentary for Volume 5 of the National Center for Responsible Gaming's *Increasing the Odds* Series, December 2010.
- Regulating Modern Gaming Technology, Canadian Gaming Lawyer, October 2009.
- Critical Components of a Robust Responsible Gaming Program: Policy Considerations and Legal Implications, Indian Continuing Legal Education Forum, July 2009.
- Overview of Gaming Machine Regulation, Arizona Race Track Industry Program, March 2008.
- Internet Gambling White Paper, March 2007. Internet Gambling Resource Guide for the Internet Gambling Task Force, February 2006.
- St. Louis Market Study: Evaluating Proposals for Casino Expansion in the St. Louis Metropolitan Area, (with Jim Oberkirsch), August 2004.
- Summary of U.S. Gambling Laws for the Missouri Joint Committee on Gaming & Wagering, November 2004.
- Self-Exclusion Committee Report for the National Council on Problem Gambling, June 2003.
- NAGRA Problem Gambling Resource Guide, September 2002.
- "Missouri Riverboat Gaming Laws." 2002 Update Missouri Taxation and Law Practice Desk Book. Missouri Bar, January 2002.
- North American Gaming Association Problem Gambling Resource Guide, June 2001.
- Editorial Response to "What the Gaming Industry Can Learn from Yucca Mountain" by Marvin Karlins, Ph.D., The Wager, Internet magazine published by Harvard University Medical School, December 2002.
- "Building an Alliance of Organizations to Create and Promote Resources to Help Problem Gamblers," Paper Presented to the National Council on Problem Gambling Annual Meeting, October 7, 2000, Philadelphia, Pennsylvania.
- St. Louis Market Study: Evaluating Proposals for Casino Expansion in the St. Louis Metropolitan Area, (with Jim Oberkirsch), August 2000.
- "Missouri Riverboat Gambling Laws" - 1999 Update Taxation Law and Practice, Volume III, Third Edition, Missouri Bar CLE Deskbook

Organizations and Memberships

- National Center for Responsible Gaming Board of Directors
- National Council for Problem Gambling (NCPG)
- Chairman, NCPG Standards, Policy, Regulation Interest Group Committee
- International Association of Gaming Advisors Board of Trustees



◀ Rich LaBrocca

Senior Director of Engineering | GLI

Rich LaBrocca is Senior Director of Engineering for GLI. His job is truly global, supervising and monitoring the testing activities of more than 90 engineers within GLI's New Jersey Engineering Groups, which is responsible for testing all types gaming devices including lottery, casino, and social gaming games, large scale central systems for both domestic and international regulators and online gaming software.

Rich assists government agencies and law enforcement groups with the review and classification of gaming devices and has been recognized as an expert by Courts across the United States. In addition, he has assisted with the drafting technical standards and legislation for use in domestic and international markets where gaming is regulated. He also ensures all corporate compliance guidelines related to the review and testing process are adhered to.

He works closely with government and jurisdictional agencies to facilitate the approval of gaming regulations and associated software. To do this, he maintains a current understanding of gaming and lottery technological advances, systems, communication protocols and testing methodologies used throughout the industry.

Rich has an in-depth knowledge of multiple protocols and casino control/casino monitoring systems currently in use throughout the industry. With his wealth of knowledge, he is often asked to act as technical advisor to regulatory bodies as they conduct their decision making processes regarding gaming and the associated equipment. He has played a role in many first time markets starting from the initial conceptual development, through the testing process and the ultimately the public start of the gaming products.

Expert Testimony and Consultant History

- Game Systems, Inc. a/k/a Texas Game Systems, United States Bankruptcy Court, Northern District of Texas Case No. 05-46823-dml-11
- State of Alabama vs. American Gaming Systems, LLC Civil Action No.: CV-08-1837
- Sherry Knowles vs. Macon County Greyhound Park Inc. Civil Action No.: CV-06-99
- Alternatives for Youth and Families, et al vs. St. Mary's County, Maryland et al. Case No. Civil 08541
- State of Ohio ex rel. vs. Larry Lomaz et al. Case No. 2008 CV 00158
- Fraternal Order of Eagles, Aerie 2171 Meigs, Inc et al. vs. Ohio Dept. Of Public Safety Case No. 06CVH11 14726
- SGN International Oil Co. vs. Ohio Liquor Control Commission. Case No. 05CV-5629
- State of Ohio ex rel. vs. Vivian L Soltis Case No.: 2007-CRB-03048-R
- Cynthia Teel vs. Macon County Greyhound Park, Civil Action No. CV-07-38
- Jimmie Harp as District Attorney of Etowah Co vs. D&F Charitable Trust et al CV-2009-000343
- Elks Lodge #482, Inc. v. Diamond Game Enterprises, Kanawha County Circuit Court, West Virginia - Civil Action #09-C-1127.
- State of California v. Lucky Bob's Internet Café LLC, Vista, California – Case #37-2010-00063508-CU-BT-NC.
- CCI Entertainment LLC t/a Crooked I Sports Bar and Grill, et al. v. State of Maryland, et al – Case No. C-12-170687
- State of New York v. Jane Doe (File#9543)

- Alabama v. 825 Gambling Devices, et al. – Case #CV-2010-00020
- The Ohio Veterans and Fraternal Charitable Coalition, et al., v Mike DeWine, Attorney General of Ohio, et al.; Franklin County Court of Common Pleas, 13-CVH-013610
- U.S v. David Ricky Goodwin Jr. et al 5:15-CR-115-D
- State of Alabama v. 825 Electronic Gambling Devices, case no. CV–2010.20
- United States Customs and Border Protection on behalf of the Department of Homeland Security Case No. 2015290400002401/001
- The Kentucky Horse Racing Commission, et al., v. The Family Trust Foundation of Kentucky, Civil Action No. 10-CI-1154
- State of Texas v Alabama Coushatta Tribe of Texas, No. 9:01-CV-00299



◀ Chad Kornett

Director of Technical Compliance | GLI

Chad Kornett directs global operations for GLI's Technical Compliance division from its Headquarters located in Lakewood, New Jersey. Chad started his career at GLI in 2004 as a test engineer and has since developed diverse experience in gaming technology and related regulations. He brings a background in electrical engineering, computer programming and intellectual property/gaming law. He has played an essential role in developing gaming regulatory structures and laboratory methodologies for many state and international governments. Chad has served as a pivotal consultant for many state governments tasked with the regulation of emerging technologies within traditional brick and mortar casinos/lotteries as well as online gaming deployments, such as Internet poker/casino systems and fantasy sports systems. As an example, Chad served as a primary consultant to the Delaware Lottery as they pursued technology expansion to the online environment of both a poker and casino offering, the first of its kind within the US. This consultation continued as Delaware combined player pools with other gambling sites within Nevada to propel the growth of the communal gaming environment across varying sets of unique regulatory objectives. Chad's team maintains GLI's regulatory repository of technical standards from every regulated gaming market around the globe. This unique vantage point has allowed Chad and his team to provide exceptional insight and consultation value to the various regulatory agencies with whom GLI partners.



◀ Joseph Carlon

Senior Engineering Manager | GLI

Joseph has provided testing and consulting services on a wide variety of Internet Gaming, Sports Betting, Daily Fantasy Sports platforms, 50/50 raffle systems, eSports, and land based casino products for many US and international markets. His current responsibilities as an Senior Engineering Manager include (but are not limited to) overseeing 4 technical teams for the coordination of all Internet Gaming testing and certification projects in GLI North American offices for text based, mobile, and online gaming applications from suppliers which include PokerStars, IGT, Scientific Games, 888, and OpenBet in addition to numerous others. He and his teams are also responsible for major Sports Betting projects for retail and online deployments in Nevada including evaluation of the first from the ground up new Sports Betting system sought for NV in over a decade as well as covering Sports Betting projects for many international jurisdictions. Joe's teams have completed the first Daily Fantasy Sports audits for US jurisdiction licensing this product type covering all jurisdictions that have set auditing standards and every licensed operator in those jurisdictions. Joe and his teams have also developed technical standards and completed numerous evaluations for 50/50 charitable raffle systems a common

offering at sporting events. The 50/50 charitable raffle systems include venue testing requiring assessment of the production deployment at numerous professional sporting venues.

Joe has been responsible for managing multiple concurrent projects while balancing timelines and priorities against engineering resources. He has also developed numerous technical standards, testing procedures, and tools at the request of the company, manufacturers, and regulatory agencies to ensure GLI is constantly meeting the changing needs of the gaming industry with regards to emerging technologies. Joe has also overseen numerous projects involving evaluation of age & identity verification and geolocation technologies for regulated Internet Gaming markets in the US including Nevada, Delaware, and New Jersey as well as for regulated gaming in the province of British Columbia, Canada. Additional work in the area of age & identity verification and geolocation technologies has been completed for evaluation of social and skill based websites per US laws governing these game types with respect to allowed/disallowed states and minimum age requirements.

Talks

“State-Federal Relations Committee: Internet Gaming – New Administration...New Outlook?” National Council of Legislators from Gaming States, June 2017.

“Interactive Gaming Compliance Workshop,” OpenBet, August 2013 and January 2016

“Interactive Gaming Compliance Workshop,” PokerStars an Amaya company, December 2015

“Strategic Global Alignment and Interactive Gaming,” GTECH, March 2014

“Interactive Gaming Compliance Workshop,” Williams Interactive, November 2013

“Interactive Gaming Systems Demonstration,” Nevada Gaming Commission, March 2013.

“Introduction to SAS Communications and GLI’s Investigation Process,” Cadillac Jack, November 2012.

“The Drive to Protocol Standards,” NAGRA (North American Gaming Regulators Association), June 2012. Presentation performed in tandem with Peter DeRaedt President of Gaming Standards Association

“IGT sbX System Training,” Kansas Racing and Gaming Commission, May 2011.

“Introduction to Server Based Gaming,” Singapore Casino Regulatory Authority. April 2011.

“Server Based Gaming Demonstration,” Colorado Department of Gaming. August 2010.

“Introduction to SAS Communications and GLI’s Investigation Process,” Georgia Gaming Commission, October 2009

Conferences and Committees

- National Council of Legislators from Gaming States Summer Meeting, June 2017.
- Technical advisor to Delaware Lottery and Nevada Gaming Commission on Interstate Liquidity Sharing for iGaming systems, June 2014.
- Technical advisor to Delaware Lottery’s Interactive gaming System RFP Evaluation Committee for primary vendor presentations in response to the RFP, March 2013.
- GLI representative attending quarterly GSA (Gaming Standards Association) OGC (Online Gaming Committee) meetings, June 2014 – Present.
- GLI representative attending quarterly GSA (Gaming Standards Association) G2S, S2S, transport, CIC, and SAS technical committee meetings, January 2008 – January 2013
- NAGRA (North American Gaming Regulators Association) Annual Conference, June 2012.



◀ Peter Wolff

Technical Compliance Manager | GLI

Peter Wolff has been with GLI since 2008, starting out as a Test Engineer in the lottery market group. Throughout his career, he has also been involved in interoperability, protocol and Class II testing. In 2015, he was promoted to Technical Compliance Manager for the New Jersey office. Peter's primary responsibilities are: ensuring testing standards are being met and constantly up to date; helping ensure a high level of quality in testing is performed across all GLI offices; building and maintaining relationships with multiple regulatory bodies; and working with GLI engineering groups on regulatory technical questions and issues. He has also become a subject matter expert in newer technology types which includes skill based games, eSports, Daily Fantasy Sports, and multiple other technologies. Peter attended DeVry University where he earned a Bachelor's Degree in Electrical Engineering Technology.

Professional Appearances

- July 13, 2017 – Pete was a subject matter expert panelist at Midwest Regional Gaming Regulator's Seminar in Kansas City, MO, on the topic of Cyber Security in the session "What to Do in the Event of an Online Breach – Protocols for Regulators"
- June 7, 2017 – Pete spoke at NAGRA (North American Gaming Regulators Association) Training and Education Conference in Orlando, FL, on the topic of Modernizing the Delivery of Content.
- May 30, 2017 – Pete was an expert panelist at IAGA (International Association of Gaming Advisors) International Gaming Summit for GLI University at the Essex House in New York City, NY about The Gaming Industry of the Future.
- March 15, 2017 – Pete was one of the expert panelist at GLI's North American Regulators Roundtable for the eSports Live Demo and Session.
- August 31, 2016 – Pete spoke at UNLV's Gaming Law Conference in Las Vegas, NV on Challenges Posed by New Generation Betting Products.



SECTION 4: MANDATORY REQUIREMENTS

Spectrum recognizes that the RFQ is structured in a way that recognizes significant similarities in the expected analyses of sports betting (4.1) and Internet gaming (4.2). We fundamentally agree with this approach, noting for example that our deep experience in West Virginia gaming and regulatory work is equally applicable to both areas. Moreover, we note that the robust value of the REMI model (explained in detail below) can be harnessed to provide valuable data in both areas, among other examples.

At the same time, we recognize that the RFQ was developed quite carefully, and has been structured to fully recognize areas of significant differentiation. With that in mind, our response exercises the same level of care and recognition.

Our core qualifications that are relevant in both areas are noted as such in 4.1, but are not necessarily fully repeated in 4.2. However, following the structure of the RFQ, we note the relevant differences in 4.2.

4.1: Mandatory Contract Service Requirements and Deliverables: Contract Services must meet or exceed the mandatory service requirements listed below

Spectrum's goal is to exceed the mandatory requirements as listed wherever possible, and we are particularly positioned to meet that goal because of ...

1. Our significant experience in West Virginia and knowledge of its regulatory structure and policy goals, and
2. Our deep history of examining the potential impact of new forms of gaming, and our understanding of how new forms of gaming can be effectively harnessed to advance public policy goals.

4.1.1: Research and independent objective analyses and market study on the potential economic impact of sports betting in West Virginia shall include:

Following are Spectrum's approaches for each deliverable for this project.

4.1.1.1: Historical assessment and review of existing gaming market and five (5) year projected analysis of the opportunities for growth and identifying challenges

Spectrum's suggested methodology to meet the goals as outlined is to leverage:

1. Our knowledge of the West Virginia gaming market (as evidenced by our past studies of the market), bolstered and updated by anticipated meetings with both gaming managers and regulators.
2. Our experience in markets throughout the world of carefully projecting both the growth of gaming and the expected challenges that would accompany adding new forms of gaming.
 - a. This experience is evidenced by our work for the Massachusetts State Lottery Commission and the National Indian Gaming Association (NIGA), both of which

included multi-year projections of growth of adding online wagering to an existing gaming model. Other examples of such work include projecting the addition of integrated resorts into existing markets in Cyprus, Spain and various Asian jurisdictions, as well as in US markets such as Georgia.

- b. All of Spectrum’s gaming-related projections in markets large and small are characterized by a clear-eyed approach that includes the examination of potential challenges that could thwart reaching the anticipated goals. In this instance, our examination would cover:
 - i. Regulatory and law-enforcement challenges
 - ii. Responsible-gaming issues
 - iii. Competitive challenges from outside West Virginia’s borders
 - iv. Taxation and related policy issues
 - v. Impacts on existing forms of gaming

Spectrum will also examine and offer detailed suggestions on:

1. **Delivery channels:** Spectrum will review and assess the benefits and challenges of West Virginia enabling different channels for sports betting, including retail vs. non-retail business models. Our team members have extensive experience in European markets such as the United Kingdom, Ireland and Italy, and we will leverage that experience to highlight the advantages/disadvantages of both retail and non-retail channels. That work would be guided by first identifying West Virginia’s overall policy goals, with employment being a key tangible differentiator.
2. **Product Development:** Spectrum will leverage our team’s deep experience of, and involvement with, product development within sports betting to ensure that West Virginia policymakers are sufficiently well-informed to enable policy goals to reflect best practices. By way of example, our study would analyze the relative importance of enabling “in-play” betting on sports, and the economic benefits inherent in the leveraging of recycled betting revenue, subsequent margin enhancement and resultant fiscal impacts.

4.1.1.2: Analysis of the economic impact and potential budget effects of sports betting in West Virginia by conducting a thorough market study. This includes evaluating all potential costs associated with regulation as well as a detailed demographic study of players who are illegally wagering on sports and how to capture those players in a regulated market.

The key word in this section is “thorough,” which Spectrum defines as being both comprehensive and credible in its examination, while being cost-conscious as well. To meet that challenge, our team will incorporate the PI+ Model of Regional Economic Models Inc. (REMI) of Amherst, Massachusetts.

The REMI model is:

1. Already well-established in West Virginia. Current users include both Marshall University and West Virginia University. State agencies rely on the work of these institutions, and these institutions, in turn, rely on REMI.

2. A key element in many Spectrum studies. Spectrum’s team in this instance will include experienced REMI analysts who have worked seamlessly with Spectrum in markets ranging from Florida to Massachusetts and beyond, including a seminal study for the American Gaming Association on the impacts of gaming on small businesses throughout the United States.
3. Far more robust than other models in capturing the fiscal impacts and developing a complete model that serves as the basis for informed policy guidance. As REMI itself notes, its PI+ model “is a top down and bottom up model, accounting for national and regional data down to the county level. Over the last 35 years, the model has been continually developed; expanded client oriented applications and annually adjusted for changes to the regional and national economy. The model captures the full economic and demographic effects of policy changes and events, including the spatial dimension of economic activity within and between different regions.”

As for a demographic analysis, Spectrum would – based on a presumed adult population of about 1.45 million adult West Virginians -- conduct an analysis designed to test the likely viability of various types and methods of sports betting in West Virginia, irrespective of the channel, through adopting models designed to indicate likely “yield values.”

The goal of being “thorough” also requires examining the impact of sports wagering through a wide prism that fully considers the ability of West Virginia’s gaming operators to market to a new demographic: sports bettors, and to convert many of these adults into loyal customers who visit the existing West Virginia gaming facilities.

Our fundamental view is that any economic-impact analysis cannot be effective or thorough unless it fully accounts for the land-based visits from new customers, who will gamble at existing facilities, as well as spend money on dining, lodging and entertainment. That, in turn, can spur additional capital investment and employment.

Our analysis – relying on the robust REMI model – will fully account for all such direct and ancillary impacts and spending.

As noted, Spectrum is quite cost-conscious in determining the most effective means of reaching the goals as outlined in this RFQ. We do not recommend commissioning a new study to determine the detailed demographics of the illegal sports wagering market in West Virginia, or to suggest how much of that illegal wagering can be converted into legal sports wagering.

Rather, as we did in our recent White Paper, *Legal Sports Betting in the United States: How Can it Evolve? How Should it Evolve?*, we will examine all existing, credible studies that have already been undertaken and published, and apply them to our West Virginia model.

Additionally, our team has deep experience in legal sports-betting markets in Europe as well as Nevada, and we will leverage that experience and knowledge to ensure an accurate, actionable approach.

Such an approach is not only cost-effective, but will help ensure continuity with other studies.

4.1.1.3: Detail all factors, including but not limited to, competition from other states, that could impact the success of sports betting in West Virginia, and how the approach to market entry could be adjusted to account for such challenges.

Spectrum’s deep experience in researching and producing a variety of detailed impact studies will guide us in determining the relevant factors that could impact the success of sports betting in West Virginia. The most visible factors include:

1. Tax rates
2. Regulatory structure
3. Number of licenses issued, and to which entities
4. The authorized sports that could serve as the basis for legal wagering
5. Anticipated rules in neighboring states, layered atop the existing land-based industries in neighboring states

Each factor – including those not listed here – demands its own detailed examination. For example, we would analyze how tax rates should be established, and how those rates would affect marketing plans for existing licensees. If, say, the tax rate on sports wagering is identical to, greater than or lower than the existing rate on traditional land-based gaming, it would affect the marketing strategy of land-based licensees, and all such scenarios would be examined.

During the course of our study, other factors would clearly emerge. For example, we would conduct detailed interviews with existing gaming licensees to gauge their potential marketing plans, as well as examine the quality and breadth of their existing amenities to determine how their actions and plans would impact the likelihood of a successful sports-wagering launch in West Virginia.

4.1.1.4: Recommend the best legal and regulatory framework for sports betting in West Virginia so that the Lottery may recommend legislation that maximizes revenues and protects the public interest.

Spectrum already has a proud, relevant history of meeting this precise goal. For example, West Virginia was a pioneer in the eastern United States on the critical issue of evolving from a slots-only market to a full-service casino market. The risks involved in such a transition were enormous, if not handled properly. The West Virginia Lottery relied on our professionals, many of whom had more than two decades of regulatory experience, to make sure it was done right.

Ten years ago, Spectrum oversaw all critical aspects of this task to ensure that table games were implemented in a manner that was comprehensive, timely and fair, and that the regulations were drafted to ensure that the rules protect the public interest, as well as the interests of the casino operators.

We offered candid advice to the West Virginia Lottery, based on our experience, and – as a team comprised of current and former public and private officials – we made it happen, and the system we established a decade ago has been running smoothly ever since.

Eight years later, Spectrum was retained by the West Virginia Department of Revenue to analyze the cost-effectiveness of casino-funded State subsidies for the greyhound racing industry. The report included purse data that had never been released. Spectrum followed up this report with testimony before the West Virginia Joint Standing Committee on Finance.

Following that report, Bill Maloney, Board Member and founder of the West Virginia Center for a Brighter Future and former candidate for Governor of West Virginia, was quoted as saying: “Two years ago, the Legislature hired the independent research firm Spectrum Gaming to examine the greyhound subsidy issue, and their findings have guided our legislative work.”

We would follow the same pattern and approach in this engagement by developing a series of recommendations focused on the following core principles, which are unassailable and non-negotiable:

1. Our recommendations will be based on comprehensive research, with each recommendation supported by appropriate findings.
2. Our work is independent and unbiased, grounded in our experience working for government agencies around the world, including West Virginia.
3. Our recommendations will focus on what is best for the residents of the state of West Virginia, whom we view as our ultimate clients.

We will rely on our examination of the regulatory process in Nevada – the only state that presently offers full-scale sports wagering within a comprehensive regulatory environment. Spectrum has a strong relationship with Nevada regulators. We note, for example, that Nevada Gaming Control Board Chairman A.G. Burnett has made the important point that his state exercises regulatory oversight over licensed gaming operators and suppliers, but not players or sports leagues. He believes regulators must maintain faith that professional leagues, as well as organizations such as the International Olympic Committee, have a vested interest in the honesty and fairness of their competition. Indeed, if any organization failed to meet that standard, Nevada – like other states – would retain the right to prohibit wagering on that organization’s or league’s activities.

Such examples are relevant to any efforts by West Virginia to promulgate its own set of relevant regulations that would govern sports wagering.

4.1.1.5: Make presentations and provide testimony as gaming industry subject matter experts to legislative committees and other officials in the Department of Revenue or administration.

As part of this response, Spectrum fully commits to being available and fully prepared to participate as requested and needed in any hearing, meeting or other setting to explain and discuss our report and findings.

We have deep experience in providing such testimony. We proudly note that our principals have testified or presented before the following government bodies:

- British Columbia Lottery Corporation
- California Assembly Governmental Organization Committee
- Florida House Select Committee on Gaming



- Florida Senate Gaming Committee
- Georgia House Study Committee on the Preservation of the HOPE Scholarship Program
- Georgia Joint Committee on Economic Development and Tourism
- Illinois Gaming Board
- Illinois House Executive Committee
- Indiana Gaming Study Commission
- Indiana Horse Racing Commission
- International Tribunal, The Hague
- Iowa Racing and Gaming Commission
- Louisiana House and Senate Joint Criminal Justice Committee
- Massachusetts Gaming Commission
- Massachusetts Joint Committee on Bonding, Capital Expenditures, and State Assets
- Michigan Senate Regulatory Reform Committee
- National Gambling Impact Study Commission
- New Hampshire Gaming Study Commission
- New Jersey Assembly Regulatory Oversight and Gaming Committee
- New Jersey Assembly Tourism and Gaming Committee
- New Jersey Senate Legislative Oversight Committee
- New Jersey Senate Wagering, Tourism & Historic Preservation Committee
- New York Senate Racing, Gaming and Wagering Committee
- New York State Economic Development Council
- Ohio House Economic Development Committee
- Ohio Senate Oversight Committee
- Pennsylvania Gaming Control Board
- Pennsylvania House Gaming Oversight Committee
- Puerto Rico Racing Board
- US House Congressional Gaming Caucus
- US Senate Indian Affairs Committee
- US Senate Permanent Subcommittee on Investigations
- US Senate Select Committee on Indian Gaming
- US Senate Subcommittee on Organized Crime
- Washington State Gambling Commission
- West Virginia Joint Standing Committee on Finance
- World Bank, Washington, DC

4.1.2: Research and independent objective analyses and market study on the potential economic impact of other forms of Internet gaming in West Virginia shall include:

Spectrum recognizes that independence is a hallmark of all our work, and has been since our founding nearly a quarter-century ago. Moreover, we highlight that our experience in detailed economic-impact studies – particularly working with the aforementioned REMI model – has withstood scrutiny in multiple markets around the world, and regulators, legislators, investors and others have relied on our analyses in developing their own policies.

4.1.2.1: Historical assessment and review of existing gaming market and five (5) year projected analysis of the opportunities for growth and identifying challenges

As noted in our response to 4.1.1.1, Spectrum has deep experience in West Virginia, among many other markets. That experience is particularly relevant to 4.1.2.1, as many of our studies – in Florida, Washington State, Massachusetts and for the National Indian Gaming Association (NIGA) – included relevant analyses of Internet gaming.

Indeed, the Massachusetts Lottery study and the NIGA study focused solely on Internet gaming.

NIGA retained Spectrum to examine the development and status of Internet gambling in Europe and suggest strategies for tribes seeking to enter the likely Internet gambling market in the United States.

Mark Van Norman, then-Executive Director of NIGA, noted at the time: “Spectrum did an outstanding job — the report was informative, insightful and right on the money. The report provided tribal leaders with the information that they need to evaluate Internet gaming policy and take the necessary steps to address the challenges and capitalize on the opportunities it presents to Indian country.”

The Massachusetts State Lottery Commission retained Spectrum to provide detailed advice as to whether it should consider offering online wagering and, if so, how it could proceed. The Lottery – the most successful in the United States on a per capita basis – required Spectrum to provide advice that would protect both the interests of its 7,400 retailers and the value of forthcoming casino licenses. Spectrum produced a detailed report that is serving as a blueprint for all relevant aspects as to how the Lottery should venture carefully and methodically into online gambling.

Spectrum also notes with pride that private operators in Europe – which has a much longer, deeper experience with Internet gaming – also rely on Spectrum, knowing that our analyses are independent, conservative and based on sound methodologies.

Spectrum was previously retained by a major European company to research and model a comprehensive Internet gambling business, including market research, demographic analysis, demand modeling, revenue projections, assessment of required resources, identification of operational and strategic partners, and development of a comprehensive business model.

As of this very writing, Spectrum is developing a study for an existing land-based operator in the United Kingdom that is considering expanding into Internet gaming. Our work includes a detailed overview of the level of Internet gaming in major European countries, including Spain, Germany and Austria, among others.

4.1.2.2: Analysis of the economic impact and potential budget effects of Internet gaming in West Virginia by conducting a thorough market study including the immense population within driving distance to each of the state’s casinos. This includes but is not limited to, evaluating all potential costs associated with regulation as well as a detailed demographic study of players who are illegally wagering online from West Virginia and how to capture those players in a regulated market.

Section 4.1.2.2 has been carefully constructed to differentiate itself from 4.1.1.2 by adding language noting the “immense population within driving distance to each of the state’s casinos.” The inference of that addition is clear, as it recognizes that Internet gaming holds out the possibility of serving as a valuable marketing tool that can broaden the demographic and geographic reach of casinos, within existing state and federal restrictions.

Spectrum fundamentally agrees with that inference, and our research supports the notion that Internet gaming can capture new players. With that in mind, the recommendation we put forth in our response to 4.1.1.2 that it would not be cost-effective to commission new demographic studies in West Virginia is even more compelling when considering the demographics of Internet gaming.

For example, we noted in a widely publicized White Paper published in July that data already mined in New Jersey – where Internet gaming commenced in the fourth quarter of 2013 --- provides an extraordinarily valuable guidepost to West Virginia.

Our report, for example, noted that Caesars Entertainment – the largest operator in Atlantic City – reported that 80 percent of its online players are new customers, and that, of the players in its Total Rewards database, 42 percent of those who played online were inactive prior to the offering of online play and then reactivated after signing up online.

Golden Nugget, another major Atlantic City operator, reported that only 11 percent of online signups have come from Golden Nugget Atlantic City rated patrons. Perhaps the most valuable data point comes from Rush Street Interactive, which operates an online site in New Jersey as well as the SugarHouse casino in Philadelphia. Rush Street reports that its online players are approximately 8 to 10 years younger than those players visiting SugarHouse’s physical facility.

With those examples, among many others, Spectrum --- which is highly cognizant of the need to be cost-effective --- believes it would be both prudent and effective to rely on our experience and access to existing studies, as well as to knowledgeable gaming operators, to meet the important goals of this section.

4.1.2.3: Detail all factors, including but not limited to, competition from other states, that could impact the success of Internet gaming in West Virginia, and how the approach to market entry could be adjusted to account for such challenges.

Spectrum reiterates the key points made in our response to 4.1.1.3 that the factors enumerated with respect to the success of sports wagering are equally valid with respect to any analysis regarding Internet gaming.

Of particular importance within that list is the analysis and recommendations related to which entities should receive licenses. The critical nature of that issue has already come to the fore in online markets such as New Jersey, where Spectrum is assessing the wisdom (or lack thereof) in the approach that allows both land-based operators and free-standing online operators (who have independent licenses tied to the land-based operators) to offer legal Internet gaming.

Our analysis in West Virginia would include a focus on the results of that approach, ensuring that West Virginia learns from the experience of other states to craft a policy that optimizes the benefits to the state.

4.1.2.4: Recommend the best legal and regulatory framework for Internet gaming in West Virginia so that the Lottery may recommend legislation that maximizes revenues and protects the public interest.

As noted in our response to 4.1.1.4, Spectrum has no peers when it comes to our deep regulatory and legal experience in West Virginia and other markets. We proudly note that many of our team members have legal and regulatory experience dating back nearly four decades. We would apply the same level of diligence and experience to our work in Internet gaming that we applied to our work in successfully launching table games in West Virginia, as well as to our successfully experience developing full-scale regulatory models in markets ranging from Ohio and Massachusetts to Singapore, among others.

Through detailed experience of, and involvement with, key-performing products within Internet gaming, proven in regulated markets elsewhere, we can help ensure that West Virginia policy-makers are sufficiently well-informed to enable policy goals to reflect best practices.

For example, we would provide evidence and advice on the relative, optimum share of Internet gaming revenues, and typical operating margin, expected from such product categories as:

- Table games (such as blackjack and roulette)
- Numbers-based games (such as keno)
- Slots (such as multiple-reel slot games)
- Bingo (variable formats available)
- Poker (variable formats available)

This product approach, coupled with our guidance with respect to maximizing the public policy benefits, would provide a clear foundation for policymakers to structure Internet gaming in a way that ensures the optimal fiscal benefit for the residents of West Virginia.

We reiterate another critical point in our approach: Our quantitative assessment of the potential economic impacts of Internet gaming will also account for any potential increase in land-based gaming and non-gaming spending, which in turn would generate some incremental employment and other benefits.

That broad, necessary approach is a clear differentiator between Spectrum and other analytical firms.

4.1.2.5: Make presentations and provide testimony as gaming industry subject matter experts to legislative committees and other officials in the Department of Revenue or administration.

Spectrum notes the detailed experience we have developed in providing testimony and making presentation, as enumerated in our response to 4.1.1.5. We further note that any presentations or testimony required with regard to Internet gaming will be made without hesitation or reservation, and will adhere to our strict requirement that all testimony and presentations by Spectrum professionals will be made in a knowledgeable, respectful and candid manner. Such requirements are a hallmark of Spectrum, and are non-negotiable.

4.1.3: Methodology: Analyses shall describe any sources of variation including but not limited to inputs to the study's fiscal impact models or calculations used to estimate fiscal impacts.

Spectrum commits to meeting this important requirement as enumerated in 4.1.3. Our experience working with the REMI model demonstrates that commitment. Indeed, we note that numerous states – including West Virginia – rely on the efficacy of the REMI model for a variety of reasons, including its ability to describe such variations.

4.1.4: Authors of the studies commissioned by the Lottery shall be available to discuss each study in person with the Lottery Director and the Department of Revenue Cabinet Secretary and to present the study to the legislature if required.

Spectrum believes that, in any such engagement, the availability of our team members to meet with our Clients and other stakeholders is an essential part of our commitment. That commitment has already been demonstrated by our previous engagements in West Virginia. Moreover, we note that many of our team members – as well as our home office – are within reasonable travel distances of all points within West Virginia.

4.1.5: Two hard copies of each study shall be provided in printed color to the Lottery in addition to providing a digital copy.

Spectrum fully commits to meeting the requirements enumerated in 4.1.5.

4.1.6: Other Services, limited to sports betting and internet gaming, include consulting on strategies, recommended regulatory structures, setting administrative fees and tax rates, making presentations and providing testimony to legislative committees, and implementation.

Spectrum takes pride in our 360-degree ability to conduct analyses and research, as well as to implement any recommendations or policies that the Lottery and legislators determine to pursue. This ability was clearly and forcefully demonstrated in our previous work in West Virginia (among other states) in which we worked with the Lottery to effectively and successfully implement table games. Additionally, our team members who would work on this engagement include professionals who have deep familiarity with sports wagering and online gaming in multiple markets, and are fully prepared to assist in its implementation and oversight.

4.1.7: Vendor shall work with the Lottery to set deadlines that are mutually agreed upon for delivery of each study.

Spectrum commits to working with the Lottery to set realistic deadlines and timeframes that meet the Lottery's goals. As demonstrated by our previous work, we will be fully committed to meeting such established deadlines with a product that is comprehensive and professional in all aspects.

 **SECTIONS 5 - 9:**

Spectrum has read, understands and agrees to the policies and procedures identified in sections 5 through 9 of the RFQ.

Exhibit A - Pricing Page

Consulting Services and Market Studies on Potential Economic Impact of Sports Betting and Internet Gaming in West Virginia

Item#	Description	Hours:	Unit Price:	Total:
1	Hourly Rate (Includes all travel, production, and incidental expenses)	975	\$ 320.00	\$ 312,000.00
		Total Bid Amount		\$ 312,000.00

Note: Quantities (hours) listed above are estimates and are for evaluation purposes only. Actual need is not guaranteed or implied.

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Signature: 

Date: 19-Sep-17