Justification for a Contract Amendment to
Contract 2012-03: Cap-and-Trade Market Monitoring Service

December 9, 2013

Introduction

Most of the administrative support provided by WCI, Inc. is highly technical or specialized and has been
developed through the use of contractors. In January 2013, WCI, Inc. contracted with Monitoring
Analytics, LLC (Monitoring Analytics) for analyses in support of market monitoring being conducted by
California and Québec (Contract 2012-03). In May 2013, WCI, Inc. amended the contract to update the
schedule, activities, and budget to accommodate the California and Québec linking schedule (Contract
Amendment 2012-03-001).

WCI, Inc. proposes to extend the term and budget of its contract with Monitoring Analytics in order to
provide market analysis to support monitoring and reporting of auctions, reserve sales, and market
activity through 2015, as well as to provide ad hoc support to the jurisdictions as they complete the
linking process and perform their own monitoring.

Description of Services

The services being procured through the proposed amendment include various analytical, planning, and
jurisdictional support tasks requested by the Participating Jurisdictions, including:

- Preparing and maintaining security and monitoring plans for the Participating Jurisdictions;
- Monitoring allowance holdings, transfer activity, and secondary market activity;
- Conducting independent review of participant corporate structure;
- Reviewing program guidance documents such as jurisdictions' regulations and the auction and
  reserve sale procedures, and providing an independent opinion of any issues that may interfere
  with the efficient operation of the programs; and
- Monitoring and auditing one Québec auction (in February 2014), one California auction (in
  February 2014), a practice joint Québec-California auction (first quarter of 2014), and up to
  seven quarterly joint auctions through 2015.
- Monitoring and auditing up to six Québec reserve sales (June 2014 through December 2015);
  and eight California reserve sales (March 2014 through December 2015).

An optional task is also included that will only be acted upon by the contractor with separate, written
authorization from the WCI, Inc. Executive Director:

- Transition out to smoothly transition market monitoring services to another service provider,
  including training and knowledge transfer.
**Procurement Approach**

The competitive procurement process that resulted in the initial selection of Monitoring Analytics to provide market monitoring services has been described previously and approved by the WCI, Inc. Board of Directors.

Monitoring Analytics has demonstrated its qualifications to provide the services described above through its performance under the existing WCI, Inc. and previous California contracts.

Market monitoring services need to continue uninterrupted and on schedule in order to accommodate upcoming program milestones, including implementing a linked cap-and-trade system and joint auction activities.

A contract modification is being proposed as the procurement vehicle to retain these required services. Continuing to work with the existing service provider during 2014-15 will best enable WCI, Inc. to maintain the stability of the program while developing the capability to implement a linked cap-and-trade system, and enables the Participating Jurisdictions and WCI, Inc. to take advantage of Monitoring Analytic's technical understanding of the existing market infrastructures. This approach is also the most efficient approach for transferring services from jurisdiction-specific contracts to WCI, Inc. contracts.

WCI, Inc. and Participating Jurisdiction staff approached Monitoring Analytics to confirm their interest in and availability to continue this work. The contract amendment with Monitoring Analytics was developed by WCI, Inc. staff. Monitoring Analytics finalized the attached technical and cost proposal, which has been reviewed and agreed to by WCI, Inc. and jurisdictional staff.

No additional steps have been taken to tender ongoing market monitoring services.

**Justification for a Non-Competitive Procurement**

WCI, Inc.’s Procurement Policy provides for non-competitive procurement in certain instances. In this case, the non-competitive procurement is justified based on the following two allowable exemptions:

- Contracts for services provided by contractors that have been selected by a federal, state, city, county, provincial, or other regulatory entity, usually through a competitive process.

- Contract amendments to extend the original term for services and to add additional funding to a contract.
CONTRACT AMENDMENT: 2012-03-002

Agreement number 2012-03 between Monitoring Analytics, LLC (Monitoring Analytics or Contractor) and Western Climate Initiative, Inc. (WCI, Inc.), which was executed by the parties on December 20, 2012, and amended on May 8, 2012 (Amendment 2012-03-001), is hereby further amended as follows:

SUMMARY OF CHANGES

<table>
<thead>
<tr>
<th>Amendment Number</th>
<th>002</th>
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</thead>
<tbody>
<tr>
<td>Effective Date for Amendment:</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>Current Agreement Amount:</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>Changes to the Agreement Amount:</td>
<td>Net increase of [Redacted]</td>
</tr>
<tr>
<td>Amended Maximum Agreement Amount:</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>Agreement Term as Amended:</td>
<td>Thirty-seven months, beginning on January 1, 2013 and ending on January 31, 2016.</td>
</tr>
<tr>
<td>Extension of Tasks:</td>
<td>Tasking has been updated to include various analytical, planning, and jurisdictional support tasks required in 2014-2015.</td>
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PURPOSE OF THIS AMENDMENT

1) Extend the term and budget for Monitoring Analytics to provide market analysis to support monitoring and reporting of auctions, reserve sales, and market activity through 2015, as well as to provide ad hoc support to the jurisdictions as they complete the linking process and perform their own monitoring.

SPECIFIC TERMS AND CONDITIONS WHICH CONSTITUTE THE AMENDMENT

1) The agreement referenced above is modified as follows:
   a. Term: Line 2 of the Standard Agreement cover page is changed to "Thirty-seven months, beginning on January 1, 2013 and ending on January 31, 2016."
   b. Maximum amount of agreement: Line 3 of the Standard Agreement cover page is changed to "[Redacted]."
   d. Attachment B, section B "Budget Detail", is modified as follows: "Not-to-exceed time and material budget for this agreement is [Redacted] See Attachment F, Contractor’s Cost Proposal for updated 2013 Scope, and Attachment F-1 (Contractor’s Cost Proposal for Amendment 2012-03-002) for invoice basis."
EXPLANATION OF CHANGES

1) Monitoring Analytics will provide market monitoring services for an additional twenty-four months as outlined in Attachment A-1. Tasks include:
   a. Preparing and maintaining security and monitoring plans for the Participating Jurisdictions;
   b. Monitoring allowance holdings, transfer activity, and secondary market activity;
   c. Conducting independent review of participant corporate structure;
   d. Reviewing program guidance documents such as jurisdictions’ regulations and the auction and reserve sale procedures, and providing an independent opinion of any issues that may interfere with the efficient operation of the programs; and
   e. Monitoring and auditing one Quebec auction (in February 2014), one California auction (in February 2014), a practice joint Quebec-California auction (first quarter of 2014), and up to seven quarterly joint auctions through 2015.
   f. Monitoring and auditing up to six Quebec reserve sales (June 2014 through December 2015); and eight California reserve sales (March 2014 through December 2015).

2) An optional task is also included that will only be acted upon by the contractor with separate, written authorization from the WCI, Inc. Executive Director:
   a. Transition out to smoothly transition market monitoring services to another service provider, including training and knowledge transfer.

3) The cost that are expected to be incurred for extending the term for market monitoring through 2015 are outlined in Attachment F-1, Contractor’s Cost Proposal for Amendment 2012-03-002.
   a. Note: The cost proposal provided by Monitoring Analytics includes a revised budget for 2013 work. At the time of this amendment, there is expected to be a balance of [redacted] remaining in the current contract at the end of 2013. This balance will be applied to the costs associated with market monitoring tasks through 2015.
APPROVALS

This document and any attachments described herein constitute an amendment to the above numbered agreement. All provisions of that contract, except those which are explicitly changed by this amendment, shall remain in full force and effect.

By signing, the Contractor and WCI, Inc. do hereby accept and approve this amendment.

**Monitoring Analytics, LLC**

<table>
<thead>
<tr>
<th>Signature on File</th>
<th>December 17, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Joseph Bowring</td>
<td>President</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
</tr>
</tbody>
</table>

**Western Climate Initiative, Inc.**

<table>
<thead>
<tr>
<th>Signature on File</th>
<th>December 13, 2013</th>
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</thead>
<tbody>
<tr>
<td>Authorized Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Patrick Cummins</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
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</tbody>
</table>
The scope of work for 2014-2015 is defined in ten tasks as described below. This attachment supplements Attachment A. More detail on these tasks is included in Attachment F-1, Contractors Cost Proposal for 2014-2015 Scope, dated November 19, 2013.

All final and revised deliverables provided to the jurisdictions under this contract shall be provided in redacted form to WCI, Inc.

**Task 1. Prepare and Maintain a Security Plan**

The purpose of this task is to provide the participating jurisdictions with a documented plan for handling and communicating confidential information.

The contractor shall review and update their system security plan to capture jurisdiction-specific communication requirements. This includes adapting the ARB System Security Plan to handle confidential reporting to the specified jurisdiction authorities in California and Québec. Following receipt of comments on the draft plan, the contractor shall prepare a final plan that incorporates responses to the comments received.

The Security Plan will include a linked program communication plan appendix, which spells out how Monitoring Analytics is to communicate confidential information among WCI, Inc. and the jurisdictions.

The deliverables from this task include:

- An updated System Security Plan incorporating requirements for both Québec and California;
- A final System Security Plan that addresses comments received: within 2 weeks of receiving final feedback; and
- Revisions to the System Security Plan: As Requested by WCI, Inc.

These deliverables shall be prepared in English and delivered to California and Québec, as appropriate. The linked communication plan appendix will be delivered to WCI, Inc.

**Task 2. Prepare and Maintain a Monitoring Plan**

The purpose of this task is to provide the participating jurisdictions with a plan for how the contractor will monitor the linked Cap and Trade Program, including a description of the methods and metrics to be used. The monitoring plan shall describe the contractor's plan for monitoring allowance holdings, transfer activity, and secondary market activity (Task 3) and for auditing and monitoring the auctions and reserve sales (Task 6 and 6A).
The monitoring plan will build on the existing California and Québec plans that have been used to monitor the California and Québec allowance auctions and market activity. The monitoring plan shall reflect the specific needs of both the California and Québec programs, and the needs of the programs once they are linked.

The auction and reserve sale portion of the plan shall include the contractor’s planned activities to monitor approving participants, flagging bids, rejecting bids, and certifying the auction and reserve sale. Protocols for the contractor to communicate potential issues to WCI, Inc. and appropriate jurisdiction authorities shall be included.

The contractor shall include the following elements in the monitoring plan:

- Roles and responsibilities
- Levels of authority
- Areas of coordination with regulators and the auction and reserve sale operator
- Avenues for referral to regulators
- Data requirements of market administrators and participants
- Resources to be applied to monitoring (staff, systems, software, and processes)
- Metrics proposed to be used, and proposed sources of information
- Reporting requirements of the market monitor
- Procedures for monitoring auctions and reserve sales, analyzing results, and assessing the effectiveness of market rules

The deliverables from this task include:

- A draft Market Monitoring Plan for the linked programs;
- A final Market Monitoring Plan for the linked programs that addresses comments received: within three weeks of receiving final feedback; and
- Revisions to the Market Monitoring Plan: As Requested by WCI, Inc.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

As the cap and trade program evolves, and the market monitoring metrics and processes continue to grow, the monitoring plan will be updated.

**Task 3. Monitor Allowance Holdings, Transfer Activity, and Secondary Market Activity**

The purpose of this task is to monitor the activity of allowance holders outside of the auctions for any allowance holding positions that may violate the regulations or provide opportunity to exercise market power.

The contractor shall gain primary and backup staff and system access to the required data, process the data into robust, usable formats, calculate appropriate metrics for analysis, and identify any issues found in allowance holdings and transfers. The contractor shall also identify and report any issues found in allowance market activity outside of CITSS using secondary market data sources.
Deliverables from this task include 1) ongoing analysis and communication of issues to authorized representatives of Québec and California on a weekly basis and more frequently as needed, and 2) the quarterly, annual, and ad hoc reports described in Task 10, which include the results of activities under this task as well as others.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

**Task 4. Independent Review of Participant Corporate Structure**

The purpose of this task is to maintain a database of corporate structure information, such as corporate ownership and affiliates that can be used to track ownership and identify when market participants may be in violation of the regulations or may be in a position to exercise market power.

The contractor shall review ownership structures using collected data. This review will occur as part of the pre-auction monitoring process on a monthly basis between auctions. Based on this review, the contractor shall revise its ownership structure database. Where additional data elements would be useful, the contractor shall communicate suggested changes to data requirements to WCI, Inc. and the appropriate jurisdictions.

The deliverables from this task include ongoing analysis of corporate structures and affiliations, and communication of issues to the jurisdictions. The contractor shall also provide:

- an Excel spreadsheet template for maintaining a database of participant corporate structure; and
- prior to each auction, an Excel spreadsheet of participant corporate/parent information.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate. The Excel spreadsheet template and any revisions to the spreadsheet shall also be delivered to WCI, Inc.

**Task 5. Review Regulation and Procedures**

The purpose of this task is to review program guidance documents such as the Regulations and the Auction and Reserve Sale procedures and provide an independent opinion of any issues that may interfere with the efficient operation of the programs.

The contractor shall review the jurisdictions’ regulations and Auction and Reserve Sale procedures and provide a written list of comments, issues, and any further clarifying questions that arise in our review of the jurisdictions’ regulations, and the Auction and Reserve Sale procedures.
The contractor shall perform an initial review of the Regulations and subsequent review of any proposed or issued changes to the Regulations, and review of the Auction and Reserve Sale procedures of the jurisdictions and the Auction Administrator.

Deliverables from this task include

- Review of regulations
- Review of auction requirements and procedures
- Review of Reserve Sale requirements and procedures: within 3 weeks of receiving requirements and procedures;
- Review of proposed or adopted changes to regulations, requirements or procedures: As requested by WCI, Inc.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate. Review of auction and reserve sale requirements and procedures shall also be delivered to WCI, Inc.

_task 6. Audit and Monitor the Auctions_

The purpose of this task is to monitor the conduct and administration of the Cap and Trade auctions, and provide an independent review of auction performance and results, and report on the outcomes.

The contractor shall monitor the auctions per the Monitoring Plan (Task 2), including 1) observing the auction conduct via conference call with the jurisdiction authorities and the auction administrator, 2) reviewing auction processes and compliance with regulations, 3) acquiring and formatting auction data, and 4) calculating and reporting auction metrics.

The contractor shall monitor and report on:

- One Québec only auction (starting in February 2014);
- One California only auction (starting in February 2014);
- A practice joint Québec-California auction (first quarter of 2014); and
- Up to seven quarterly joint auctions through 2015.

For cost estimation purposes, where the precise number of events is not given above, we assume one Québec auction, one California auction, one practice joint auction and seven joint auctions. The processes and work performed by Monitoring Analytics are assumed to have the same level of effort for a Practice Auction as for an actual Auction.

In the event that the joint California and Québec programs do not have linked auctions as anticipated, and require continued monitoring of separate auctions, the scope of monitoring multiple jurisdiction auctions will expand beyond the scope of this proposal.

Deliverables from this task include:
• Monitoring of each auction, including providing analyses and explanations of auction activities and outcomes to jurisdiction authorities; and
• Auction Report for each auction. The Auction Report will provide the contractor’s opinion on whether the auction should be certified, information to support the jurisdictions’ determination as to whether to certify the auction, and information for a public auction report to be released by the jurisdictions. The Auction Report will include a review of auction process issues including: processes and procedures; communications; security; and auction platform. The Auction Report will also include a review of the auction clearing including: participant behaviors or activities impacting auction outcomes; validation of auction results; and auction market metrics. The Auction Report will be provided to the jurisdictions two business days after the auction clearing has been calculated by the Auction Administrator. The contractor will be available to answer jurisdiction questions about the Auction Report as the jurisdiction evaluates whether or not to certify the auction results.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

Task 6A. Audit and Monitor the Reserve Sales

The task of monitoring and reporting the reserve sales includes preparation work that begins prior to the execution of the reserve sales. Because Québec can schedule its reserve sales as needed, Monitoring Analytics requires at least 30 days notice prior to the execution of the Québec reserve sales to enable preparation. For both the California and Québec reserve sales, actual hours worked in preparation for the reserve sales will be billed as time and material, whether or not the reserve sale is actually executed.

The purpose of this task is to monitor the conduct and administration of the Cap and Trade reserve sales, and provide an independent review of reserve sale performance and results, and report on the outcomes.

The contractor shall monitor the reserve sales per the Monitoring Plan (Task 2), including 1) observing the reserve sale conduct via conference call with the jurisdiction authorities and the reserve sale administrator, 2) reviewing reserve sale processes and compliance with regulations, 3) acquiring and formatting reserve sale data, and 4) calculating and reporting reserve sale metrics.

The contractor shall monitor and report on:

• Up to six Québec reserve sales (June 2014 through December 2015); and
• Up to eight California reserve sales (March 2014 through December 2015).

Deliverables from this task include:

• Monitoring of each reserve sale, including providing analyses of reserve sale activities and outcomes to jurisdiction authorities; and
• Reserve Sale Report for each reserve sale. The Reserve Sale Report will provide the contractor’s recommendation on whether the reserve sale should be certified, information to support the jurisdictions’ determination as to whether to certify the reserve sale, and information for a public reserve sale report to be released by the jurisdictions. The Reserve Sale Report will include a review of reserve sale process issues including: processes and procedures; communications; security; and reserve sale platform. The Reserve Sale Report will also include a review of the reserve sale clearing including: participant behaviors or activities impacting reserve sale outcomes; validation of reserve sale results; and reserve sale metrics. The Reserve Sale Report will be provided to the jurisdictions two business days after the reserve sale clearing has been calculated by the Auction Administrator. The contractor will be available to answer jurisdiction questions about the Reserve Sale Report as the jurisdiction evaluates whether or not to certify the reserve sale results.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

Task 7. Linking Preparation Support

The purpose of this task is to provide data and analytical support to WCI, Inc. and the jurisdiction authorities related to the market monitoring requirements for linked programs. The contractor will work with the jurisdictions to identify corporate associations across the jurisdictions so that they can, among other things, apportion holding and purchase limits. The contractor will also confirm auction platform results during jurisdictional and linked program user acceptance testing, provide recommendations for updating the auction platform to accept and process currency exchange rates and bids in multiple currencies, and evaluate the auction platform algorithm for use in joint auctions. Upon request by WCI, Inc., the contractor shall also:

• identify regulatory and economic implications that may arise as a result of approaches to linking programs;
• identify market monitoring requirements that may arise as a result of linking programs;
• propose approaches satisfying the requirements; and
• respond to questions regarding how best to achieve effective monitoring of linked programs.

Deliverables include memos and conversations as requested by WCI, Inc. These deliverables shall be prepared in English and delivered to California and Québec. Work regarding the auction platform shall also be delivered to WCI, Inc.

Task 8. Knowledge Transfer

The purpose of this task is to transfer knowledge between the contractor, WCI, Inc., where appropriate, and jurisdiction authorities. The contractor shall be available upon request of WCI, Inc. to provide knowledge, advice, and recommendations based on
experience with monitoring markets, and based on observations and lessons learned from the prior history of the programs.

Deliverables include memos and conversations as requested by WCI, Inc. These deliverables shall be prepared in English and delivered to WCI, Inc., California and Québec as appropriate.

**Task 9. Meetings**

The purpose of this task is to prepare for, conduct, document, and follow up on meetings and ad hoc communications that support the overall objective of the contractor providing effective support to the jurisdictions’ market monitoring and surveillance activities. This task helps to establish and maintain a strong channel of communication among all parties involved in market monitoring.

The contractor shall prepare for, conduct, document, and follow up on meetings and provide ad hoc communications.

The deliverable is effectively managed communications among the contractor, WCI, Inc., and the jurisdictions, including written documentation of key communications. These deliverables shall be prepared in English and delivered to California, Québec, and WCI, Inc. as appropriate.

**Task 10. Quarterly, Annual, and Ad-Hoc Reports**

The purpose of this task is to provide market monitoring reports on a quarterly, annual, and ad-hoc (as requested) basis.

The contractor shall collect, analyze, and report on data and issues in quarterly and annual reports to the jurisdiction authorities. The quarterly reports and annual reports will provide a confidential review of the market(s) over the relevant, calendar-based reporting period, including analysis and observations regarding auctions, reserve sales, and secondary market activity in the reporting period. The quarterly and annual reports will provide auction bid metrics, market structure metrics, review of auction and secondary markets, and recommendations regarding market rules.

The contractor shall provide ad hoc reports as requested by California, Québec, or WCI, Inc. Ad hoc reports shall include periodic memoranda to WCI, Inc. regarding the status of deliverables provided to California, Québec, and WCI, Inc.

Deliverables include two Quarterly Reports (one for each jurisdiction) in April, July, and October, two Annual Reports in January (one for each jurisdiction), and ad hoc reports as requested by California, Québec, or WCI, Inc.

These deliverables shall be prepared in English. Quarterly and Annual Reports shall be delivered to California and Québec as appropriate. Memoranda regarding the status of deliverables shall be provided to WCI, Inc. Other ad hoc reports shall be provided to WCI, Inc. or the jurisdictions as appropriate.
Task 11. Optional Task: Transition Out

This is an optional task that will only be acted upon by the contractor with separate, written direction from the WCI, Inc. Executive Director.

The contractor shall work with WCI, Inc. and any other vendor(s) selected by WCI, Inc., if applicable, at the conclusion of the contract, to smoothly transition market monitoring services to another service provider, including training and knowledge transfer. Knowledge transfer will not include the release of any information deemed confidential or proprietary by the contractor, including plans, methods, processes, data, or code.

The contractor shall provide a Contract Closeout and Turnover Plan that details the requirements of WCI, Inc. or another vendor to successfully take over services at the conclusion of the contract. The Contract Closeout and Turnover Plan must include:

- Technical requirements;
- General outline of responsibilities;
- Security during transition;
- Data source planning; and
- Skill requirements.

The Contract Closeout and Turnover Plan will be due to WCI, Inc. three (3) months prior to the expected termination of the Contract. If so directing, the WCI, Inc. Executive Director will provide written direction to act upon this task at least five (5) months prior to the expected termination of the Contract.

The deliverable shall be prepared in English and provided to WCI, Inc.

The contractor shall not exceed the proposed and authorized budget for this task. Upon exhausting the proposed and authorized budget for this task, the contractor shall cease work on this task, and deliver to WCI, Inc. the Contract Closeout and Turnover Plan in its latest state, as of the date of Task 11 budget exhaustion.
ATTACHMENT F-1: CONTRACTOR’S COST PROPOSAL FOR AMENDMENT 2012-03-002

Submitted to the Western Climate Initiative, Inc. (WCI)

November 19, 2013
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Dear Mr. Cummins:

Monitoring Analytics, LLC submits to WCI, Inc. this revised proposal for market monitoring services for the linked WCI, Inc. cap and trade program. This proposal updates the budget for 2013, and proposes new scope and budget for WCI, Inc. market monitoring services for 2014 and 2015.

The total billing terms for the updated 2013 budget, and the proposed 2014 and 2015 budget are proposed as time and materials, not to exceed the sum of [redacted]. Details follow in the attached proposal. This total includes [redacted] for the linked California and Quebec program for 2014 through 2015, as well as a revised budget for 2013 of [redacted].

Monitoring Analytics has served as the market monitor for the CARB cap and trade program since 2011 and for the Québec program since 2012. This cost estimate is based on our experience with those programs, as well as our expectation for the complexity of the linked program going forward.

Should you have any questions please contact me directly at 610-271-8051, or by email at Joseph.Bowring@MonitoringAnalytics.com.

Sincerely,

Joseph Bowring

President
Monitoring Analytics, LLC
2621 Van Buren Avenue, Suite 160
Eagleville, Pennsylvania 19403

This proposal updates the WCI, Inc. budget for 2013, and proposes new scope and budget for WCI, Inc. market monitoring services for 2014 and 2015.

The billing terms are proposed as time and materials, not to exceed the proposed sum for the contract term (through January 2016). This arrangement will give WCI, Inc. and the participating jurisdictions the flexibility to call on Monitoring Analytics to complete the required monitoring tasks, and provide monitoring support as described in the task scope descriptions.

Revised 2013 Budget

Based on actuals through October of 2013 and the estimated level of effort through the remainder of 2013, Monitoring Analytics proposes the following updated budget for the 2013 scope of the WCI, Inc. Cap and Trade program. The new 2013 budget for the WCI, Inc. Cap and Trade program is proposed as [Redacted].

The first budget column represents the approved budget for 2013. The second budget column represents actuals through October 2013. 1 The final column in the table below shows the Monitoring Analytics estimate for the projected total cost for January through December of 2013, which is proposed to be the new budget for 2013, replacing the original 2013 not-to-exceed budget.

The Monitoring Analytics estimate for projected cost to complete 2013 reflects the fact that the Québec jurisdiction is planning to conduct its first real auction in December, market monitoring data and processes are ramping up, and efforts to support program linkage are expanding.

1 The 2013 total actuals were allocated over the cost elements in this proposal, and do not correspond to the allocation showed in invoices. The first half of 2013 had actuals billed to a different set of cost elements, which were subsequently reorganized into a new set of cost elements at the request of WCI, Inc. The allocation here is based on the percentage of actuals in each cost element during the second half of the year, when actuals were being captured according to the current proposed cost elements.
Scope of Auctions and Reserve Sales in the 2014 through 2015 Cost Estimate

This scope of work includes various analytical, planning, and jurisdictional support tasks, including monitoring of:

- One Québec auction (starting in February 2014);
- One California auction (starting in February 2014);
- A practice joint Québec-California auction (first quarter of 2014);
- Up to seven quarterly joint auctions through 2015;
- Up to six Québec reserve sales (June 2014 through December 2015); and
- Eight California reserve sales (March 2014 through December 2015).

For cost estimation purposes, where the precise number of events is not given above, we assume one Québec auction, one California auction, one practice joint auction, seven joint auctions, six Québec reserve sales, and eight California reserve sales. Unlike the California cap-and-trade regulation, the Québec cap-and-trade regulation does not require quarterly reserve sales. Rather, the jurisdiction may schedule the sales as needed, on dates it deems appropriate. Because the task of monitoring and reporting of the reserve sales includes preparation work that begins prior to the execution of the reserve sales, Monitoring Analytics requires at least 30 days notice prior to the execution of each Québec reserve sale. For both the California and Québec reserve sales, actual hours worked in preparation for the reserve sales will be billed as time and material, whether or not the reserve sale is actually executed.
The processes and work performed by Monitoring Analytics are assumed to have the same level of effort for a Practice Auction as for an actual Auction.

The scope of work has been defined in twelve tasks. The following explains in detail the tasks, deliverables, and expected timelines for each. These scope descriptions also include the total 2014-2015 hours and total 2014-2015 cost expected for each subtask. For a breakout of hours by resource for each of the tasks and subtasks, please see Appendix B.

**Resolution of Conflicting Instructions**

If any instruction from WCI, Inc., California, or Québec is unclear, incomplete, or inconsistent with another instruction provided to the contractor, the contractor shall seek clarification from WCI, Inc. prior to carrying out the instruction. WCI, Inc. shall coordinate jurisdiction alignment and provide such direction.

**Scope of Work**

1. **Prepare and Maintain a Security Plan**

The purpose of this task is to provide the participating jurisdictions with a documented plan for handling and communicating confidential information.

The contractor shall review and update their system security plan to capture jurisdiction-specific communication requirements. This includes adapting the ARB System Security Plan to handle confidential reporting to the specified jurisdiction authorities in California and Québec. Following receipt of comments on the draft plan, the contractor shall prepare a final plan that incorporates responses to the comments received.

The Security Plan will include a linked program communication plan appendix, which spells out how Monitoring Analytics is to communicate confidential information among WCI, Inc. and the jurisdictions.

The deliverables from this task include:

- An updated System Security Plan incorporating requirements for both Québec and California;
- A final System Security Plan that addresses comments received: within 2 weeks of receiving final feedback; and
- Revisions to the System Security Plan: As Requested by WCI, Inc.

These deliverables shall be prepared in English and delivered to California and Québec, as appropriate. The linked communication plan appendix will be delivered to WCI, Inc.

*Hours estimate and rate details have been removed from the public document for business confidentiality and competitiveness reasons.*
2. Prepare and Maintain a Monitoring Plan

The purpose of this task is to provide the participating jurisdictions with a plan for how the contractor will monitor the linked Cap and Trade Program, including a description of the methods and metrics to be used. The monitoring plan shall describe the contractor’s plan for monitoring allowance holdings, transfer activity, and secondary market activity (Task 3) and for auditing and monitoring the auctions and reserve sales (Task 6 and 6A).

The monitoring plan will build on the existing California and Québec plans that have been used to monitor the California and Québec allowance auctions and market activity. The monitoring plan shall reflect the specific needs of both the California and Québec programs, and the needs of the programs once they are linked.

The auction and reserve sale portion of the plan shall include the contractor’s planned activities to monitor approving participants, flagging bids, rejecting bids, and certifying the auction and reserve sale. Protocols for the contractor to communicate potential issues to WCI, Inc. and appropriate jurisdiction authorities shall be included.

The contractor shall include the following elements in the monitoring plan:

- Roles and responsibilities
- Levels of authority
- Areas of coordination with regulators and the auction and reserve sale operator
- Avenues for referral to regulators
- Data requirements of market administrators and participants
- Resources to be applied to monitoring (staff, systems, software, and processes)
- Metrics proposed to be used, and proposed sources of information
- Reporting requirements of the market monitor
- Procedures for monitoring auctions and reserve sales, analyzing results, and assessing the effectiveness of market rules

The deliverables from this task include:

- A draft Market Monitoring Plan for the linked programs;
- A final Market Monitoring Plan for the linked programs that addresses comments received: within three weeks of receiving final feedback; and
- Revisions to the Market Monitoring Plan: As Requested by WCI, Inc.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

As the cap and trade program evolves, and the market monitoring metrics and processes continue to grow, the monitoring plan will be updated.
3. Monitor Allowance Holdings, Transfer Activity, and Secondary Market Activity

The purpose of this task is to monitor the activity of allowance holders outside of the auctions for any allowance holding positions that may violate the regulations or provide opportunity to exercise market power.

The contractor shall gain primary and backup staff and system access to the required data, process the data into robust, usable formats, calculate appropriate metrics for analysis, and identify any issues found in allowance holdings and transfers. The contractor shall also identify and report any issues found in allowance market activity outside of CITSS using secondary market data sources.

Deliverables from this task include 1) ongoing analysis and communication of issues to authorized representatives of Québec and California on a weekly basis and more frequently as needed, and 2) the quarterly, annual, and ad hoc reports described in Task 10, which include the results of activities under this task as well as others.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

4. Independent Review of Participant Corporate Structure

The purpose of this task is to maintain a database of corporate structure information, such as corporate ownership and affiliates that can be used to track ownership and identify when market participants may be in violation of the regulations or may be in a position to exercise market power.

The contractor shall review ownership structures using collected data. This review will occur as part of the pre-auction monitoring process on a monthly basis between auctions. Based on this review, the contractor shall revise its ownership structure database. Where additional data elements would be useful, the contractor shall communicate suggested changes to data requirements to WCI, Inc. and the appropriate jurisdictions.
The deliverables from this task include ongoing analysis of corporate structures and affiliations, and communication of issues to the jurisdictions. The contractor shall also provide:

- an Excel spreadsheet template for maintaining a database of participant corporate structure; and
- prior to each auction, an Excel spreadsheet of participant corporate/parent information.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate. The Excel spreadsheet template and any revisions to the spreadsheet shall also be delivered to WCI, Inc.

**5. Review Regulation and Procedures**

The purpose of this task is to review program guidance documents such as the Regulations and the Auction and Reserve Sale procedures and provide an independent opinion of any issues that may interfere with the efficient operation of the programs.

The contractor shall review the jurisdictions’ regulations and Auction and Reserve Sale procedures and provide a written list of comments, issues, and any further clarifying questions that arise in our review of the jurisdictions’ regulations, and the Auction and Reserve Sale procedures.

The contractor shall perform an initial review of the Regulations and subsequent review of any proposed or issued changes to the Regulations, and review of the Auction and Reserve Sale procedures of the jurisdictions and the Auction Administrator.

Deliverables from this task include

- Review of regulations
- Review of auction requirements and procedures
- Review of Reserve Sale requirements and procedures: within 3 weeks of receiving requirements and procedures;
- Review of proposed or adopted changes to regulations, requirements or procedures: As requested by WCI, Inc.

*Hours estimate and rate details have been removed from the public document for business confidentiality and competitiveness reasons.*
These deliverables shall be prepared in English and delivered to California and Québec as appropriate. Review of auction and reserve sale requirements and procedures shall also be delivered to WCI, Inc.

*Hours estimate and rate details have been removed from the public document for business confidentiality and competitiveness reasons.*

6. Audit and Monitor the Auctions

The purpose of this task is to monitor the conduct and administration of the Cap and Trade auctions, and provide an independent review of auction performance and results, and report on the outcomes.

The contractor shall monitor the auctions per the Monitoring Plan (Task 2), including 1) observing the auction conduct via conference call with the jurisdiction authorities and the auction administrator, 2) reviewing auction processes and compliance with regulations, 3) acquiring and formatting auction data, and 4) calculating and reporting auction metrics.

The contractor shall monitor and report on:

- One Québec only auction (starting in February 2014);
- One California only auction (starting in February 2014);
- A practice joint Québec-California auction (first quarter of 2014); and
- Up to seven quarterly joint auctions through 2015.

For cost estimation purposes, where the precise number of events is not given above, we assume one Québec auction, one California auction, one practice joint auction and seven joint auctions. The processes and work performed by Monitoring Analytics are assumed to have the same level of effort for a Practice Auction as for an actual Auction.

In the event that the joint California and Québec programs do not have linked auctions as anticipated, and require continued monitoring of separate auctions, the scope of monitoring multiple jurisdiction auctions will expand beyond the scope of this proposal.

Deliverables from this task include:

- Monitoring of each auction, including providing analyses and explanations of auction activities and outcomes to jurisdiction authorities; and
- Auction Report for each auction. The Auction Report will provide the contractor’s opinion on whether the auction should be certified, information to support the jurisdictions’ determination as to whether to certify the auction, and information
for a public auction report to be released by the jurisdictions. The Auction Report will include a review of auction process issues including: processes and procedures; communications; security; and auction platform. The Auction Report will also include a review of the auction clearing including: participant behaviors or activities impacting auction outcomes; validation of auction results; and auction market metrics. The Auction Report will be provided to the jurisdictions two business days after the auction clearing has been calculated by the Auction Administrator. The contractor will be available to answer jurisdiction questions about the Auction Report as the jurisdiction evaluates whether or not to certify the auction results.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

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### 6A. Audit and Monitor the Reserve Sales

The task of monitoring and reporting the reserve sales includes preparation work that begins prior to the execution of the reserve sales. Because Québec can schedule its reserve sales as needed, Monitoring Analytics requires at least 30 days notice prior to the execution of the Québec reserve sales to enable preparation. For both the California and Québec reserve sales, actual hours worked in preparation for the reserve sales will be billed as time and material, whether or not the reserve sale is actually executed.

The purpose of this task is to monitor the conduct and administration of the Cap and Trade reserve sales, and provide an independent review of reserve sale performance and results, and report on the outcomes.

The contractor shall monitor the reserve sales per the Monitoring Plan (Task 2), including 1) observing the reserve sale conduct via conference call with the jurisdiction authorities and the reserve sale administrator, 2) reviewing reserve sale processes and compliance with regulations, 3) acquiring and formatting reserve sale data, and 4) calculating and reporting reserve sale metrics.

The contractor shall monitor and report on:

- Up to six Québec reserve sales (June 2014 through December 2015); and
- Up to eight California reserve sales (March 2014 through December 2015).

Deliverables from this task include:
• Monitoring of each reserve sale, including providing analyses of reserve sale activities and outcomes to jurisdiction authorities; and
• Reserve Sale Report for each reserve sale. The Reserve Sale Report will provide the contractor’s recommendation on whether the reserve sale should be certified, information to support the jurisdictions’ determination as to whether to certify the reserve sale, and information for a public reserve sale report to be released by the jurisdictions. The Reserve Sale Report will include a review of reserve sale process issues including: processes and procedures; communications; security; and reserve sale platform. The Reserve Sale Report will also include a review of the reserve sale clearing including: participant behaviors or activities impacting reserve sale outcomes; validation of reserve sale results; and reserve sale metrics. The Reserve Sale Report will be provided to the jurisdictions two business days after the reserve sale clearing has been calculated by the Auction Administrator. The contractor will be available to answer jurisdiction questions about the Reserve Sale Report as the jurisdiction evaluates whether or not to certify the reserve sale results.

These deliverables shall be prepared in English and delivered to California and Québec as appropriate.

7. Linking Preparation Support

The purpose of this task is to provide data and analytical support to WCI, Inc. and the jurisdiction authorities related to the market monitoring requirements for linked programs. The contractor will work with the jurisdictions to identify corporate associations across the jurisdictions so that they can, among other things, apportion holding and purchase limits. The contractor will also confirm auction platform results during jurisdictional and linked program user acceptance testing, provide recommendations for updating the auction platform to accept and process currency exchange rates and bids in multiple currencies, and evaluate the auction platform algorithm for use in joint auctions. Upon request by WCI, Inc., the contractor shall also:

• identify regulatory and economic implications that may arise as a result of approaches to linking programs;
• identify market monitoring requirements that may arise as a result of linking programs;
• propose approaches satisfying the requirements; and

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respond to questions regarding how best to achieve effective monitoring of linked programs.

Deliverables include memos and conversations as requested by WCI, Inc. These deliverables shall be prepared in English and delivered to California and Québec. Work regarding the auction platform shall also be delivered to WCI, Inc.

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8. Knowledge Transfer

The purpose of this task is to transfer knowledge between the contractor, WCI, Inc., where appropriate, and jurisdiction authorities. The contractor shall be available upon request of WCI, Inc. to provide knowledge, advice, and recommendations based on experience with monitoring markets, and based on observations and lessons learned from the prior history of the programs.

Deliverables include memos and conversations as requested by WCI, Inc. These deliverables shall be prepared in English and delivered to WCI, Inc., California and Québec as appropriate.

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9. Meetings

The purpose of this task is to prepare for, conduct, document, and follow up on meetings and ad hoc communications that support the overall objective of the contractor providing effective support to the jurisdictions’ market monitoring and surveillance activities. This task helps to establish and maintain a strong channel of communication among all parties involved in market monitoring.

The contractor shall prepare for, conduct, document, and follow up on meetings and provide ad hoc communications.

The deliverable is effectively managed communications among the contractor, WCI, Inc., and the jurisdictions, including written documentation of key communications. These deliverables shall be prepared in English and delivered to California, Québec, and WCI, Inc. as appropriate.
10. Quarterly, Annual, and Ad-Hoc Reports

The purpose of this task is to provide market monitoring reports on a quarterly, annual, and ad-hoc (as requested) basis.

The contractor shall collect, analyze, and report on data and issues in quarterly and annual reports to the jurisdiction authorities. The quarterly reports and annual reports will provide a confidential review of the market(s) over the relevant, calendar-based reporting period, including analysis and observations regarding auctions, reserve sales, and secondary market activity in the reporting period. The quarterly and annual reports will provide auction bid metrics, market structure metrics, review of auction and secondary markets, and recommendations regarding market rules.

The contractor shall provide ad hoc reports as requested by California, Québec, or WCI, Inc. Ad hoc reports shall include periodic memoranda to WCI, Inc. regarding the status of deliverables provided to California, Québec, and WCI, Inc.

Deliverables include two Quarterly Reports (one for each jurisdiction) in April, July, and October, two Annual Reports in January (one for each jurisdiction), and ad hoc reports as requested by California, Québec, or WCI, Inc.

These deliverables shall be prepared in English. Quarterly and Annual Reports shall be delivered to California and Québec as appropriate. Memoranda regarding the status of deliverables shall be provided to WCI, Inc. Other ad hoc reports shall be provided to WCI, Inc. or the jurisdictions as appropriate.

11. Optional Task: Transition Out

This is an optional task that will only be acted upon by the contractor with separate, written direction from the WCI, Inc. Executive Director.

The contractor shall work with WCI, Inc. and any other vendor(s) selected by WCI, Inc., if applicable, at the conclusion of the contract, to smoothly transition market monitoring services to another service provider, including training and knowledge transfer.
Knowledge transfer will not include the release of any information deemed confidential or proprietary by the contractor, including plans, methods, processes, data, or code.

The contractor shall provide a Contract Closeout and Turnover Plan that details the requirements of WCI, Inc. or another vendor to successfully take over services at the conclusion of the contract. The Contract Closeout and Turnover Plan must include:

- Technical requirements;
- General outline of responsibilities;
- Security during transition;
- Data source planning; and
- Skill requirements.

The Contract Closeout and Turnover Plan will be due to WCI, Inc. three (3) months prior to the expected termination of the Contract. If so directing, the WCI, Inc. Executive Director will provide written direction to act upon this task at least five (5) months prior to the expected termination of the Contract.

The deliverable shall be prepared in English and provided to WCI, Inc.

The contractor shall not exceed the proposed and authorized budget for this task. Upon exhausting the proposed and authorized budget for this task, the contractor shall cease work on this task, and deliver to WCI, Inc. the Contract Closeout and Turnover Plan in its latest state, as of the date of Task 11 budget exhaustion.

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Total 2013-2015 Cost

The total billing terms for the replaced 2013 budget, and the proposed 2014 and 2015 budget are proposed as time and materials, not to exceed the sum of $\text{[redacted]}$. This total includes $\text{[redacted]}$ for the linked California and Québec program for 2014 through 2015, as well as a revised budget for 2013 of $\text{[redacted]}$.

Specific Costs

An additional $\text{[redacted]}$ of incremental “Technical Infrastructure” costs is proposed to support the database and communication infrastructure and data licensing for 2014 and 2015.

The $\text{[redacted]}$ infrastructure cost includes allocations for the following:
• Data subscriptions to Point Carbon for pricing information;
• Data subscriptions to Hoovers for corporate structure information;
• Allocation for hosting, supporting, and maintaining FTP servers for MA, CA, WCI, and QC accounts;
• Allocation for SAS licenses which are used to run our market clearing calculation engine and calculate market monitoring metrics; and
• Allocation for the Monitoring Analytics IT support staff that is not charged directly to the project.

A total budget of [Blank] is allocated for travel expenses, should WCI, Inc. request the presence of Market Monitoring staff at meetings.
Appendix A: Hourly Rates by Resource

Hours estimate and rate details have been removed from the public document for business confidentiality and competitiveness reasons.
Appendix B: 2014 through 2015 Budget Hours by Task by Resource

Hours estimate and rate details have been removed from the public document for business confidentiality and competitiveness reasons.