

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION



IN THE MATTER OF:) GPA Docket 21-01
)
The Application of the Guam Power)
Authority for an Increase in the Stanley) ALJ REPORT
Engineering. Procurement and)
Construction Management (EPCM))
Contract.)

INTRODUCTION

1. This matter comes before the Guam Public Utilities Commission [PUC] upon the Petition of the Guam Power Authority ["GPA"] to Request Review and Approval by PUC for an increase in the Stanley EPCM Contract.¹

BACKGROUND

2. In March 2017, Stanley Consultants ["Stanley"] was selected by GPA, through GPA RFP 17-001, as the Engineering, Procurement and Construction Management (EPCM) contractor for the new 180MW power plant.²
3. The PUC has a history of involvement with the EPCM Contract. It authorized the Contract and approved various prior fee increases. In GPA Docket 15-05, on October 27, 2016, the PUC authorized GPA to procure the 180MW combined cycle plant. At the same time, it allowed GPA "to procure an Engineering, Procurement and Construction Management contractor for a new combined cycle plant, and authorized the expenditure of \$750,000 for such engineering and consulting services (to be paid from the 2014 bond fund allocation for LNG Initial Startup)."³
4. In GPA Docket 18-09, on March 29, 2018, the PUC addressed GPA's request for an increase in the Stanley EPCM contract in the amount of \$650,000 for consulting and technical services through September 2018.⁴
5. In its Order, PUC recognized that Stanley had been assigned numerous tasks, which included preparation of all bid documents for the procurement of the 180MW plant

¹ GPA Petition for Approval of GPA Request for an Increase in the Stanley EPCM Contract filed October 20, 2020.

² Id.

³ PUC Order, GPA Docket 15-05, dated October 27, 2016, at p. 9.

⁴ PUC Order, GPA Docket 18-09, dated March 29, 2018.

and assistance regarding determination of the most qualified bidder. In addition, Stanley, as EPCM, had major responsibility for assisting GPA in the process of land acquisition for the new power plant, including representation at legislative and other public hearings, and preparation of responses to issues raised in various forums.⁵

6. Stanley was involved with technical discussions concerning the IPP scope and support for land rezoning efforts. Stanley further addressed incorporation of Liquified Natural Gas ["LNG"] details into the bid documents, regulatory requirements, and preparation of responses to bidders' procurement questions.⁶
7. The extensive amount of work involved, and its technical nature, has required that Stanley retain various subconsultants, including K&M Advisors LLC, Pond & Company, EA Engineering, Science and Technology, and PBC.⁷
8. Stanley has served as GPA's Owner's Representative under the EPCM contract.⁸ In that respect it is involved in every aspect of the administration of the IPP Contract. On March 29, 2018, PUC approved an additional \$600,000 for the increase in the Stanley Contract (however, deleting a request for a "community outreach specialist").⁹
9. On November 29, 2018, in GPA Docket 18-09 the PUC approved an additional \$2.4M for services to be performed by Stanley for years 2019 through 2022.¹⁰ New services included "project management" for the new power plant project for the term of the construction, continuing Owner's Representative services, and regulatory support before the PUC, Legislature and CCU, including preparation of a rate impact study for the selected IPP proponent.¹¹
10. The total authorized by PUC for the Stanley EPCM Contract, to date, is \$3,750,000. With the additional \$2.25M requested by GPA, the total contract amount would be increased to approximately \$6M.
11. In Resolution No. 2020-20, adopted on October 20, 2020, the Guam Consolidated Commission on Utilities approved a contract increase for the Stanley EPCM

⁵ Id., at p. 2.

⁶ Id., at p. 2.

⁷ Id., at p. 3.

⁸ Id.

⁹ Id., at p. 4.

¹⁰ PUC Order, GPA Docket 18-09, dated November 29, 2018, at pgs. 5-6.

¹¹ Id., at p. 2.

Contract, through March 2022, in the amount of \$2.25M. The funding source for the additional contract costs will be from the Cabras No. 3 & 4 Insurance proceeds.¹²

ANALYSIS

12. To date, GPA has expended roughly \$3.1M on EPCM services with Stanley Consultants. Based upon average monthly cost estimates, GPA estimates that the current budget of \$3.75M will be exhausted in January, 2021.¹³ If the additional funding sought in this Docket by GPA is approved by the PUC, the total available funds for the EPCM Contract would be \$6M.¹⁴
13. The budget for the five-year period, March 2017 to February 2022, would be \$6M. This equates to an annual cost of \$1.20M.
14. There can be no dispute, but that GPA needs the services of an EPCM such as Stanley Consultants. As the PUC held in GPA Docket 15-05: “the process of procurement for the combined cycle plant, as well as various proposed aspects of GPA’s IRP plan, will require expert consulting services. It stands to reason that GPA needs the services of a highly specialized consultant to carry out a project [i.e. the new power plant] of this scope and magnitude.”¹⁵
15. In GPA Docket 18-09, the PUC further determined that “GPA clearly has a need for an EPCM Contractor. The proposed 180MW IPP project is a substantial and technical undertaking. It has some complicated aspects including provision for dual firing with both ULSD and LNG and the need to install a new pipeline. GPA needs the technical assistance of a contractor such as Stanley to assist it as Owner’s Representative and to guide GPA through the construction and commissioning process. Such assistance can help to ensure that the new plant is constructed in an efficient and safe manner.”¹⁶
16. The complexity of the GPA EPCM Project is indicated in the Summary attached hereto as Exhibit “1”.¹⁷ The Summary details the work completed by Stanley in the procurement process to select the contractor for the new power plant and tasks

¹² CCU Resolution No. 2020-20, Relative to Authorization of Contract Increase for Engineering, Procurement, and Construction Management through March 2022, adopted on October 20, 2020, at p. 2.

¹³ GPA Petition for Approval of GPA Request for an Increase in the Stanley EPCM Contract filed October 20, 2020, at p. 1.

¹⁴ Id., at pgs. 1-2.

¹⁵ PUC Order, GPA Docket 15-05, dated October 27, 2016, at p. 6.

¹⁶ PUC Order, GPA Docket 18-09, dated November 29, 2018, at p. 4.

¹⁷ GPA EPCM Project Summary (GPA Work Session-October 15, 2020-ISSUES FOR DECISION).

undertaken in the Project Initiation and Project Permitting Phases.¹⁸ A major change in the Project Permitting Phase is that KEPCO has now determined that it must pursue a “major source air permit”, rather than a “minor source permit”, as originally contemplated.¹⁹

17. Future Support Services will be provided, such as the facilitation of coordination, communication, and documentation between KEPCO, GPA & GWA, the monitoring and facilitation of Permitting Progress, and the monitoring and facilitation of the KEPCO & GWA interface on water treatment issues.²⁰ Stanley will be responsible for “permitting support”, which includes various aspects of Environmental Permitting, Air Permit, Biological Resources Approvals, Cultural Resources Approvals, Environmental Impact Assessment approvals, and additional pre-construction permits.²¹
18. Stanley and its participating sub-contractors have an extremely challenging and detailed job ahead of them. Stanley, as GPA’s Owner’s Representative, has substantial responsibility for the successful construction, permitting, and commissioning of the new 180MW power plant.
19. The original cost estimates of GPA for the EPCM Contract were apparently underestimated. The November 2018 PUC Order in GPA Docket 18-09 approved an additional \$2.65M for the period **through September 2022**. Now, GPA has, in the current Petition, requested an additional \$2.25M for the period **through March 2022**. However, GPA has submitted some compelling reasons as to why the estimated current cost for the EPCM contract is higher than the initial cost estimates made in 2017-2018.²²
20. The original schedule for the commercial operation date of the new power plant was December 2021. The present IPP schedule shows COD being achieved in the first quarter of 2024. Additional permitting oversight, including specialized resources, are required from Stanley Consultants and the external sub-contractors.²³ These needs increase the cost of the EPCM Contract.

¹⁸ Id., at pgs. 1-14.

¹⁹ Id., at pgs. 13-14.

²⁰ Id., at p. 15.

²¹ Id., at pgs. 18-23.

²² Submission by GPA Legal Counsel Graham Botha of GPA response to discovery questions, October 23, 2020: “Reasons the current estimated cost is higher than the initial cost estimates made in 2017-2018.”

²³ Id.

21. As previously mentioned, it has now been determined that a “major source permit” must be obtained for the new power plant rather than a “minor source air permit.” A minor source permit was estimated by the Contractor to take 9 months, but it now appears that the major source air permit will take approximately 18 months to obtain.²⁴
22. The environmental and construction permitting for the new power plant and pipeline have proven to be more complex than originally anticipated and has required more coordination by GPA and Stanley with Govguam/US federal government agencies, and between intra-agencies. For ongoing work, the plan of the IPP contractor is improved; however, the overall schedule has been impacted and extended for additional time.²⁵
23. Project delay has also been caused by the coronavirus through travel restrictions and other issues. It should be expected that GPA will likely seek further funding increases for the EPCM Contract for the period of March 2022 through March 2024.
24. The work of Stanley and its sub-contractors is extremely important to ensure the commissioning of a safe and efficient plant; shortchanging the funding for such services would be highly risky. GPA must take every effort to ensure that the power plant is properly constructed, permitted, and commissioned.
25. GPA estimates that EPCM Contract costs typically are 1-3% of the total plant project costs. The new power plant is now expected to cost \$600M. At 1%, there would be \$6M EPCM cost. GPA believes its EPCM costs are within industry standards.²⁶
26. However, there are still issues concerning the amount of funding that GPA seeks at the present time.
27. According to GPA’s own estimates, the current funding of \$3,750,000 is sufficient to pay for ECPM services until January 2021.²⁷ GPA then requests an additional \$2.25M for the period from February 2021 through February 2022.
28. According to GPA’s “EPCM Project Support Projected Cost Breakdown”, attached hereto as Exhibit “2”, the total anticipated cost for EPCM services between January 2021 and February 2022 is \$2,045,450 (13 months at roughly \$157,000 per month).

²⁴ Id.

²⁵ Id.

²⁶ CCU Resolution No. 2020-20, Relative to Authorization of Contract Increase for Engineering, Procurement, and Construction Management through March 2022, adopted on October 20, 2020, at p. 2.

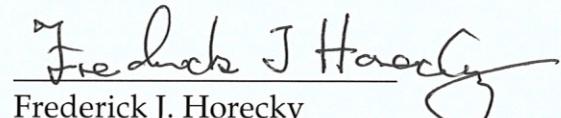
²⁷ Petition, at Attachment A.

29. In CCU Resolution No. 2020-20, the possibility is referenced for adding in an additional amount for “an allowance for a 20% contingency...”²⁸ The GPA Contract Review Protocol already includes an authorization for GPA to incur additional expense on PUC approved contracts: “GPA shall not incur expenses for PUC approved contracts and obligations in excess of 20% over the amount authorized by the Commission without prior PUC approval.”
30. It is not necessary for GPA to include a 20% contingency in the contract price. If GPA needs additional funding, it can rely upon the Contract Review Protocol or subsequently seek additional funds from the PUC.
31. The EPCM contract will terminate in March 2022. GPA will be required to solicit a new Construction Management Contract by August 2021; if any additional EPCM funds will be needed, GPA can petition the PUC at that time.

RECOMMENDATION

32. The ALJ recommends that the PUC approve an increase in the Stanley EPCM Contract for consulting and technical services for GPA in the amount of \$2,045,450.00.
33. No contingency provision apart from the GPA Contract Review Protocol is required.
34. GPA should exercise best efforts to reduce EPCM Contract costs.
35. A Proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 26th day of October 2020.



Frederick J. Horecky
Chief Administrative Law Judge

²⁸ CCU Resolution No. 2020-20, adopted October 20, 2020, at p. 2.

GPA EPCM Project Summary

- August 2020

Summary

- PUC funding approved to date
- Expenditures to date
- Work completed to date
- Work to be completed

PUC Approved Funding

Total PUC approved funding to date for EPCM services \$3,750,000

- PUC approved \$750,000 October 2016
- PUC approved \$600,000 March 2018
- PUC approved \$2,400,000 December 2018

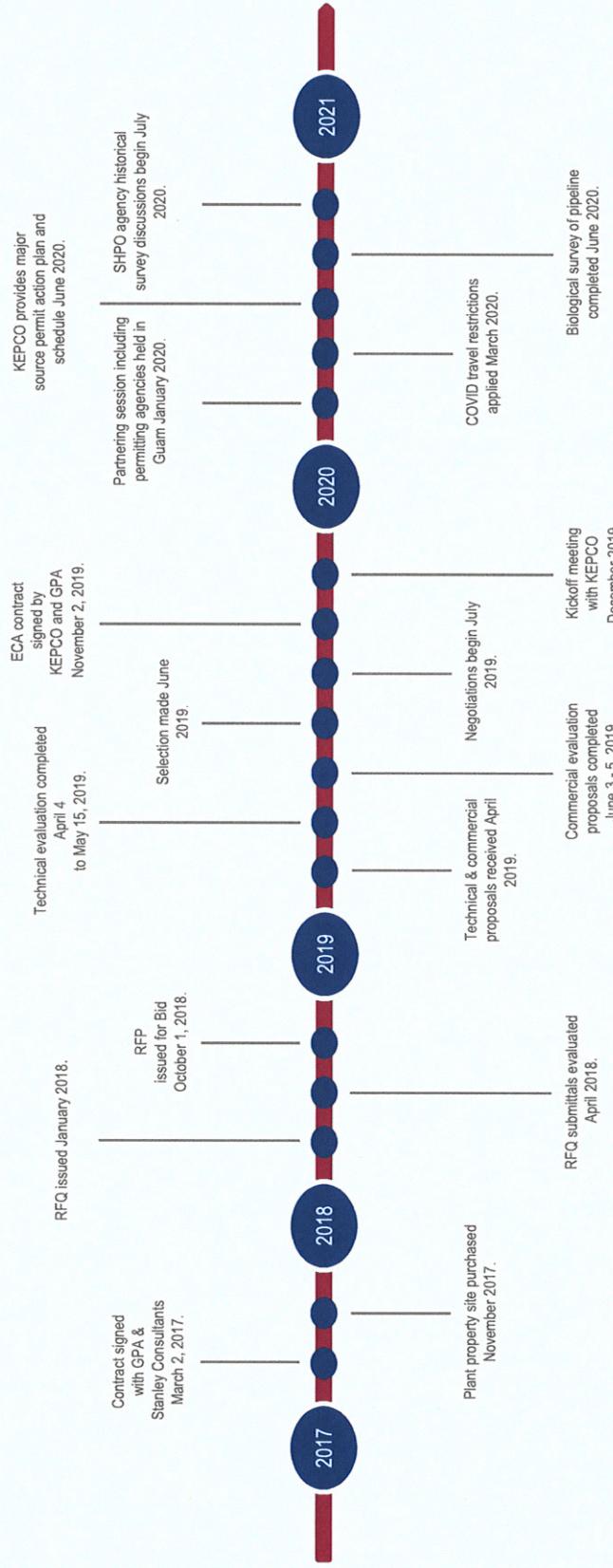


EPCM Expenditures

- Expenditures to date
 - \$3,023,249
- Remaining of PUC approved \$3,750,000
 - \$726,751
- Average billing per month over forty one month history
 - \$73,737
- Average billing per month over last seven months
 - \$131,500
- The remaining \$726,751 will last until January 2021



Major Milestones Completed



Work Completed

- Contract signed with GPA & Stanley
 - March 2, 2017 five year term with three year base and two year options
 - Specialized subcontractors to Stanley
 - K&M Advisors commercial support March 2017
 - Pond pipeline technical support March 2017
 - EA/Ganda Guam environmental and historical March 2017 for plant property
 - EPS review proposals compliance with specified system dynamic requirements November 2018
 - PBS plant property noise analysis December 2018
 - EPS provide updated system dynamic study for new plant July 2019
 - EA/SEARCH November 2019 for pipeline historical survey
 - Ventura Consulting Group January 2020



Work Completed: Qualification Phase

- First draft documents and ECA transmitted for GPA review June 2017
- RFQ draft submitted to PUC for review September 2017
- PUC RFQ comments received November 2017
- RFQ published in January 2018 soliciting responses
- Seventeen RFQ submittals evaluated April 2018
- Recommendation issued April 2018 for seven qualified respondents to receive the RFP package



Work Completed: Bid Phase

- RFP documents approved by GPA June 2018
- RFP documents submitted to CCU for review July 2018
- RFP documents submitted to PUC for review August 2018
- PUC approval September 2018
- RFP issued for Bid October 1, 2018



Work Completed: Bid Phase

- Technical and commercial proposals received from four respondents April 4, 2019
- Technical evaluation completed May 15, 2019
- Commercial evaluation of three proposals completed June 6, 2019
- Selection made GPA project team June 8, 2019
- Protest filed - June 14 -delayed negotiations - developed response - was dismissed



Work Completed: Contract Award Phase

- Negotiations begin July 2019
- ECA submitted to PUC for approval
September 2019
- Approved October 31, 2019 by PUC
- ECA contract signed by KEPSCO and GPA
November 2, 2019



Work Completed: Project Initiation Phase

- Kickoff meeting with KEPCO December 10, 2019
 - Weekly permitting calls established
 - Weekly KEPCO GPA status calls established
- Partnering session including permitting agencies held in Guam January 29 and 31, 2020
- COVID travel restrictions applied March 2020 - Gov Guam agencies were shut down



Work Completed: Project Permitting Phase

- KEPCO provide initial emission calculations for review January 30, 2020
- KEPCO determined that minor source permit would limit the operating hours for combined cycle unit
- * • Alternate sites for diesel engines evaluated by SCI & GPA



Work Completed Project Permitting Phase

- * • KEPSCO decides to pursue major source air permit beginning end of May 2020
 - KEPSCO provides major source permit action plan and schedule for review June 2020
- *• Biological survey of pipeline completed June 2020
 - Endangered snail colonies (27) and endangered plants found
 - Will require mitigation
- Air monitoring plan submitted by KEPSCO for EPA review
 - August 2, 2020



Future SCI Support Services Scope

Work Group 11 Project Management and Administration

- Facilitate coordination, communication and documentation between KEPCO, GPA & GWA
- Monitor and Facilitate Permitting Progress
 - Continue to monitor progress on permitting schedule weekly
 - Continue to facilitate and monitor permits (more than 20 total)
- Monitor and facilitate KEPCO & GWA interface on water treatment issues



Future SCI Support Services Scope

Work Group 12 Subcontractors

- EA/SEARCH cultural survey scope significant to comply with requirements along with workload and COVID-19 challenges
- K&M ECA contract review and interaction to support interpretation questions from KEPCO
- EA environmental support for permitting

Future SCI Support Services Scope

Work Group 13 Project Support

- Permitting support
 - Review submitted permit calculations for completion, accuracy
 - Review submitted permit calculation for assumptions to determine if assumptions are in accordance with contractual requirements
 - Review permit schedule for completeness, accuracy and feasibility
 - Review permit process risks and manage risks for avoidance when possible and mitigate when necessary
- Permitting agencies inquiry and coordination



Environmental Permitting

- Air permitting
- Biological resources approval
- Cultural resources approval
- EIA approval
- Additional preconstruction permits

Air Permit

- US EPA and Guam EPA approvals
- Major source permit
 - Preconstruction monitoring
 - Dispersion modeling analyses
 - BACT analysis
 - Public hearings
- A Lengthy Process. Approval is required before Financial close can proceed
- Air permit is current schedule critical path



Biological Resources Approvals

Permitting agencies involved:

- US Army Corp of Engineers
- US Fish & Wildlife
- Guam Department of Agriculture

Completed surveys:

- Wetlands
- * - Threatened and endangered species
 - Twenty seven snail colonies found on pipeline route
 - Two endangered plants species found
- Surveys completed, permit determinations are ongoing
 - Mitigation will be needed to be coordinated with design and construction
 - Provide verification that mitigation is provided.

Biological Surveys are secondary project critical path



Cultural Resources Approvals

- Addressing approval requirements in two parts
 - Geotechnical boring monitoring
 - Survey of route
- There are known sensitive historical sites along the pipeline route
 - Close coordination and approval of SHPO necessary and time sensitive
- Facilitate communication and monitor progress weekly



EIA Approvals

Required approvals prior to construction

- Local Guam EPA requirements
 - Assessment of impacts for multiple resources, i.e. **■**
 - Natural resources (wetlands and species)
 - Cultural resources
 - Air quality
 - Social impacts (infrastructure, cost of living, quality of life)
 - Water quality
 - Solid/hazardous waste
 - Completion of EIA document is dependent on substantial completion of individual permits requirements
 - EIA approval is required before Financial Closing process
- * •



Additional Pre-Construction Permits

- Height variance Guam Land Use commission
- Storm water construction permits Guam EPA
- Building permit DPW
- FAA obstruction evaluation
- Bureau of Statistics Coastal program consistency review
- Effects of Visa requirements TBD
- GWA pretreatment permit
- Guam EPA dewatering permit
- Landfill permit/contract

-Facilitate coordination and monitor progress weekly



Cost impacts

- Extended duration for project
- Sub contractors added under Stanley providing specialized services
- Additional required oversight and coordination with IPP contractor and their support team
- Increased complexity and duration for permitting process (PSD permit, SHPO process,
* Navy role, wetlands, snails)



* Value of Continuing SCI EPCM Support Services

- Ongoing EPCM support services are required to ensure that KEPCO and their subcontractors perform appropriately to meet the permitting schedule dates
- Continuity of service, understanding of the ECA and appropriate coordination with GPA and subcontractor Extensive experience with USEPA Region IX and GEPA
- Since 2017, Stanley project team has applied established PMP practices to help GPA manage procurement, KEPCO's scope, critical path schedules and project risks



Value of Continuing SCI EPCM Support Services

- Full integration with GPA's energy portfolio-depth of project management and technical capability
- Working relationships with Navy and Guam Stakeholder agencies
- Specifically experienced with Korean EPC contractors
- Versatile team that can work hand-in-glove with GPA to minimize change orders from KEPCO - example water treatment change in law



* EPCM Objectives

- Assist GPA with oversight of KEPCO's project delivery both schedule and quality
- Protect GPA and ratepayer interests
- Manage risks
- Document progress of works
- Assist GPA in compliance with Consent Decree
- Provide relief for Guam's ratepayers by delivering new generation
- Support the long-term success of GPA-KEPCO partnership
- Facilitate success and limit schedule impacts due to permitting process and lack of planning



* Challenges

- Challenging complex project
 - KEPCO has five subcontractors so far to coordinate
 - GWA GPA KEPCO water interface technical issues
- KEPCO's familiarity with US permitting processes
 - Coronavirus
 - Permitting
 - More than twenty agencies involved in permitting
- COVID-19 impacting Agencies responsiveness
- Project life cycle including 25 year operational period with performance guarantees



* Summary of Value and Benefits

- Help GPA project team on this complex and challenging project by providing needed expertise as arises in all areas of construction including those noted below. GPA last power plant construction project was over 20 years ago.
 - Procurement plan
 - Design engineering schedule
 - Construction schedule
 - Quality assurance plan
 - Environmental permits design and construction compliance verification



Date: 10/22/2020

**GPA EPCM Project Support
Projected Cost Breakdown**

Company	Services for Month End												CCU Approval Variance
	Nov-20	Oct-20	Sep-20	Aug-20	Jul-20	Jun-20	May-20	Apr-20	Mar-20	Feb-20	Jan-20	Dec-20	
SCI	\$ 87,150	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 99,600	\$ 112,050
EA	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 112,050
SEARCH	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 112,050
K&M	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 112,050
WSF	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 112,050
EPS Dynamic Study													
VSG Partnering													
POND													
	\$ 115,650	\$ 128,100	\$ 128,100	\$ 183,100	\$ 148,100	\$ 168,100	\$ 148,100	\$ 144,600	\$ 157,050	\$ 132,050	\$ 132,050	\$ 132,050	\$ 2,392,800
													\$ 167,800

Exhibit "2"