COST ESTIMATING COMMUNITY OF PRACTICE (CECOP)

SECOND ANNUAL SYMPOSIUM

Working Together:

One Mission, One Vision, One NSE

CEAG
COST ESTIMATING ANALYSIS GROUP

NNSA
National Nuclear Security Administration

November 6-7, 2018

Nevada National Security Site (NNSS)
Department of Energy Las Vegas, NV

U.S. DEPARTMENT OF ENERGY

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The CECOP Symposium 2018 would not have been possible without the efforts and dedication of the CEAG Council, CEAG Site Representatives and the CECOP 2018 Planning Committee. If you would like to become more involved, please reach out to a representative from your respective site or email **cecop@nnsa.doe.gov**.

CECOP SYMPOSIUM 2018 PLANNING COMMITTEE

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Welcome to the CECOP Symposium 2018

On behalf of the Cost Estimating Analysis Group (CEAG) Council and NNSA Defense Programs, I would like to welcome you to Las Vegas for the Second Annual Cost Estimating Community of Practice (CECOP) Symposium.

CECOP was formed by the CEAG Council for the purpose of exchanging cost estimating best practices through collaborative relationships within government, industry, and the Nuclear Security Enterprise.

This year's planning committee has brought together Leaders, Educators, and Subject Matter Experts in the fields of Cost Estimating, Model Development, Best Practices, Historical Data Analysis and other related cost estimating subject areas from DOE, NNSA, DOD, GAO, and industry partners in an effort to bring to you an Event Program filled with a broad range of learning and professional growth opportunities.

Enjoy your time at the Symposium.

Fana Gebeyehu-Houston

CEAG Chair
Director, Office of Cost Policy and Analysis NA-143
National Nuclear Security Administration

CEAG
COST ESTIMATING ANALYSIS GROUP

COST ESTIMATING ANALYSIS GROUP

NNSA is responsible for ensuring the safety, security and reliability of the U.S. nuclear stockpile through its Defense Programs activities. The planning, programming, budgeting, and execution of these activities across the Nuclear Security Enterprise and NNSA involve complex, dynamic, and interdependent processes within and between the sites. This increases the challenge of estimating costs for these activities. In October 2013, Dr. Donald Cook, Former Deputy Administrator for Defense Programs, directed that a Cost Improvement Initiative be undertaken to identify key areas of improvement within the cost estimation process, while also establishing a series of standards and best practices to significantly improve cost estimating for both programs and projects in Defense Programs.

Multiple recommendations emerged from the initiative, one of which was the creation of a subgroup within the Integrated Planning Group for estimating life extension program costs for publication in the Stockpile Stewardship and Management Plan. Members of this subgroup recognized the need for developing a Cost Estimating

Analysis Group (CEAG) for Defense Programs that would lead continuous improvement of Defense Programs cost estimation practices and other related issues in the Enterprise.

The CEAG is comprised of representatives from across the Enterprise, integrating the knowledge and expertise of professionals at the sites and NNSA headquarters. The CEAG has been chartered to lead independent cost estimate reviews and other cost analysis efforts as requested by Defense Programs leadership (NA-11, NA-12, NA-15, NA-18, NA-19) and approved by the CEAG Leadership Team. The CEAG is also responsible for leading the Cost Estimating Community of Practice (CECOP) and establishing cost estimating procedures, methodologies and best-practices specific to Defense Programs activities. This both informs higher-fidelity cost estimating efforts and also fosters more effective communication and collaboration.

ALICIA WILLIAMS,
Lawrence Livermore National Laboratory (LLNL)

Alicia Williams is the lead design engineer for the W80-4 LEP program at Lawrence Livermore National Laboratory. In that role, she is responsible for technically and programmatically guiding 19 Product Realization Teams (PRTs) that are LLNL Design Agency-oriented as well as facilitating the work of 3 PRTs that are co-led with Sandia National Laboratories. She has worked at LLNL since 2009 in a number of roles including in the W87 system group, as the certification engineer on the W78/88-1 LEP, and was the Lead Systems Engineer at an earlier phase of the W80-4 program at Lawrence Livermore. She holds a Ph.D. as well as B.S and M.S degrees in Mechanical Engineering from Virginia Tech. She has earned a graduate certificate from MIT on System Design and Management and is certified as a Project Management Professional through PMI.

JOSEPH BRUSCATO
Kansas City National Security Campus (KCNSC)

Joseph Bruscato is a Principal Mechanical Engineer working in the Operational Excellence department within the Kansas City National Security Campus' (KCNSC) Program Management Office. He has over 15 years of experience in manufacturing operations, quality, engineering, and supply chain management. Mr. Bruscato has spent the last 5 years actively engaged in the development and implementation of KCNSC's Earned Value Management System (EVMS) and was involved in the planning and execution of the B61-12 Weapon Design and Cost Report and Baseline Cost Report. He currently manages a wide variety of EVMS related processes including the Cost Estimation and Approval for KCNSC. Mr. Bruscato holds a BS in Physics from Northern Illinois University and an MBA with an emphasis in Finance from the University of Missouri Kansas City.

W80-4 LEP WDCR PANEL MEMBERS

Fana Gebeyehu-Houston	National Nuclear Security Administration (NNSA)
Cliff Holman	National Nuclear Security Administration (NNSA)
Sarah Burwell	Sandia National Laboratories (SNL)
Carol Meyers	Lawrence Livermore National Laboratory (LLNL)
Nick Salazar	Los Alamos National Laboratory (LANL)
Jeff Boswell	Kansas City National Security Campus (KCNSC)
Robert Lackey	CNS Pantex Plant (PX)
Ian Bailey	National Nuclear Security Administration (Contractor)

NATHAN CLOUGH
Sandia National Laboratories (SNL)

Nathan Clough is the Sandia Design Agency (DA) Finance Lead for the W80-4 Life Extension Program. He manages Sandia DA program funding, develops cost targets for project realization teams, leads the pre-Performance Measurement Baseline (PMB) Change Control Board (CCB), and owns internal and external financial reporting. Prior to Sandia, he worked in the corporate sector as a Sr. Data Analyst for PayPal and Safeway, Inc. Nate managed analytics on PayPal's largest merchant (eBay Inc.), optimized product adoption flow, utilized customer data to develop customized offers and targeting strategies, and helped to develop the national fuel loyalty strategy for Safeway Inc. Nathan Clough holds a M.S. in Agricultural and Resource Economics and B.S. in Managerial Economics from the University of California, Davis.

JUAN CORPION
Los Alamos National Laboratory (LANL)

Juan Corpion is a Veteran program manager at LANL currently responsible for program operations in design of the B61-12 LEP nuclear explosive package. Twelve years' experience leading the planning, programming, budgeting, and execution of production work for the W76-1 LEP from Phases 6.4 to 6.6; and both design and production work for B61-12 LEP from Phases 6.2 through 6.4. Prior relevant experience includes eight years as program manager for DSW production agency responsibilities including detonator production, prototype production, pit surveillance, detonator surveillance, power source surveillance, and non-tritium valve surveillance; and three years as the program manager for the NNSA Production Readiness Campaigns.

TANYA MOORE
Los Alamos National Laboratory (LANL)

Tanya Moore is a Postdoctoral Research Associate at Los Alamos National Laboratory. Her current assignment with the Weapons Program is to support the development of an integrated equipment management and investment system. Her primary responsibility is to develop cost models and to support long term equipment planning. She is also involved with the Capital Acquisition planning efforts. Prior to LANL, she conducted postdoctoral research related to energy conversion and storage while in the Chemical Engineering Department at the University of Michigan. Her technical background includes synthesis and characterization of inorganic materials and polymers. She has a B.A. in Chemistry and Mathematics from Assumption College and a Ph.D. in Chemistry from the University of Michigan.

CECOP SYMPOSIUM 2018

COST ESTIMATING COMMUNITY OF PRACTICE

Similar to an academic consortium, the Cost Estimating Community of Practice (CECOP) is an informal gathering of cost estimating practitioners. The CECOP is focused on training, education and the exchange of cost estimating methodologies and best practices. Cost estimating professionals from the NNSA, Department of Energy, Department of Defense, contractors, and other experts in the field will have the opportunity to participate in the CECOP Symposium.

The development of the CECOP is one of the CEAG's highest priorities. The leadership team for the CECOP is composed of experienced cost estimators from the CEAG. In conjunction with the CEAG Chair and Council representatives

The CECOP leadership team sets the priorities for the CECOP and develops and guides its values and guiding principles. In the initial stages of building and developing the CECOP, it is expected that most participants will be from the NNSA and NSE. As the community expands and the pool of participant expertise increases, the CECOP will be a group for the CEAG to pull from for specific expertise in a given field to support specific CEAG projects; however, the CECOP as a body will not be directly involved in DP projects. The CECOP is a standalone group focused on communication, community building and knowledge exchange in the form of quarterly conference calls and yearly symposiums with cost estimating–focused tracks.

Visit our website

https://LLNL.cvent.com/cecop2018

MICHAEL THOMPSON is the NNSA Assistant Deputy Administrator for Major Modernization Programs. Mr. Thompson works with teams to plan and execute major weapon system acquisitions, including weapon life extension programs and modernization of science and manufacturing capabilities.

Prior to this assignment, Mr. Thompson served as the Assistant Deputy Administrator for Infrastructure and Construction, responsible for all Defense Programs construction projects, and program facility operations at national security laboratories and production plants.

Prior to this assignment, Mr. Thompson served as the Director, Office of Facilities Operations, responsible for Headquarters policy, budget formulation, and technical direction for the Readiness in Technical Base and Facilities program. From 1995 to 2003, he served as a program manager monitoring execution of line item construction and facility operations activities at Defense Programs sites. Mr. Thompson also served as a senior safety manager, monitoring execution of environmental, safety and health programs in the field. From 1992 to 1995, Mr. Thompson served as a Team Leader of Technical Safety Appraisals, reviewing technical, budgetary, and regulatory issues impacting safe facility operations.

Mr. Thompson is a retired U.S. Navy Captain, where he supported the Chief of Naval Operations, leading crisis action teams in support of national exercises and real-world responses to terrorist attacks and disaster relief operations. He also served with the Navy Inspector General, conducting resource management assessments at Navy commands worldwide. He qualified as a naval nuclear engineer and surface warfare officer, serving on two ships.

Mr. Thompson is a 1983 graduate of the U.S. Naval Academy, and holds Masters degrees in Environmental Engineering from the Johns Hopkins University and National Security Strategy from the National War College.

JASON T. LEE

U.S. Government Accountability Office (GAO)

Jason Lee is an Assistant Director for the Applied Research and Methods team at the U.S. Government Accountability Office (GAO), where he is responsible for evaluating cost estimates and project schedules generated by programs across myriad agencies. Jason has seventeen years of experience in the analysis, parametric estimation, and evaluation of costs and master schedules associated with large federal government acquisition programs. Before joining GAO in January 2009, Jason was a consultant for eight years, developing independent cost estimates and conducting cost methodology research primarily for Department of Defense cost agencies and program offices. Prior to his work as a cost analyst, he was an operations research analyst for the U.S. Navy's Naval Center for Cost Analysis.

BRIAN FOUST

UCOR, ETTP Oak Ridge, TN

Brian Foust has been the Estimating Manager for URS | CH2M Oak Ridge LLC (UCOR) since its transition as the Deactivation and Decommissioning (D&D) contractor at the Department of Energy's (DOE) East Tennessee Technology Park (ETTP) in Oak Ridge Tennessee in the fall of 2011. He has been involved in estimating environmental management (EM) and D&D projects for over two decades at DOE sites in Tennessee, Kentucky, and Ohio. As an employee of ENTECH, an ASRC Industrial Services Company (integrated subcontractor to UCOR), for over thirteen years Brian was part of the proposal and transition team for the ETTP contract. While at UCOR he has led a department of eight estimators providing estimates for over 200 FAR based proposals valued at close to $700 million. Immediately prior to joining UCOR he was part of the owner's representative contract team at DOE's Portsmouth Ohio and Paducah Kentucky sites providing cost estimating services directly to DOE during transition between EM and D&D contracts.

HARLAN SWYERS

NNSA, Cost Estimation & Program Evaluation (CEPE)

Harlan Swyers works in NNSA's Office of Cost Estimating and Program Evaluation (CEPE) on the federal staff and is a Certified Cost Estimator/ Analyst (CCEA). During his time with NNSA, he spent one year on rotation working at the Office of the Secretary of Defense, Cost Assessment and Program Evaluation (OSD CAPE) in support of the Advanced Systems Cost Assessment Division (ASCAD). He is a veteran of the US Navy where he qualified as a nuclear propulsion Surface Warfare Officer (SWO(N)) and deployed multiple times while serving as a division officer. Prior to coming to NNSA, he was a federal civilian working for HQ Marine Corps (HQMC), Program Analysis and Evaluation (PA&E) as an Operations Research Analyst/ Cost Analyst. In addition to his federal service, he spent over a decade working for a private defense contractor providing support for multiple DoD organizations.

FANA GEBEYEHU-HOUSTON

Director, Office of Cost Policy & Analysis NA-143

Ms. Houston has spent her federal career implementing transparency and program management initiatives for the federal government. Most recently, she established an independent cost estimating and analysis organization for the United States nuclear weapons program that has received recognition for transparency and effectiveness from our nation's National Laboratories, the Deputy Administrator for Defense Programs, the Office of Management and Budget, and the Government Accountability Office. Her office's technical approach to long-range forecasting of nuclear stockpile costs headlined the September/ October 2016 Cost Engineering Journal of the Association for the Advancement of Cost Engineering. Ms. Houston lives, works, and rows in the District of Columbia with her husband and three children.

IAN BAILEY

NA-143 (NNSA Contractor)

Ian Bailey is a senior technical advisor with more than 18 years' experience in the NSE. Since 2008, he has provided program management support and helped lead the formal acquisition cost estimate process for the B61-12 LEP, currently planned at $7.6B over 13 years and also W80-4 LEP, currently developing its first major program cost estimate. He also developed novel system-driven technology evaluation approaches to support NNSA technology funding evaluation across seven NSE Management & Operations Contractors; and as a special team member, evaluated NSE-wide cost estimation methods and more effective risk-adjusted nuclear stockpile planning approaches, to improve cost and risk management performance as well as respond to GAO criticisms of prior NNSA programs' management. Mr. Bailey graduated with honors in Economics from Harvard and has an MBA from Dartmouth's Tuck School.

PHIL CHAMBERLIN,

Sandia National Laboratories, Detailee to NA-143

Phil Chamberlin is a Principal Member of Technical Staff within the Nuclear Security Enterprise and Cost Analysis Department at Sandia National Laboratories. Mr. Chamberlin has over 20 years of cost estimating and project controls experience within the disciplines of building construction, environmental management, space systems, advanced technology development and nuclear weapons. He is currently on detail assignment to NA-143, NNSA Office of Cost Policy and Analysis where he has led teams reviewing baseline cost estimates for the B61-12, the W88 ALT370 and has participated in cost estimating related policy analysis and requirements development.

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J. MICHAEL GILMORE is a former Director of the Operational Test and Evaluation Directorate of the United States Department of Defense from 2009 to 2017. A Presidential appointee confirmed by the United States Senate, he served as the senior advisor to the Secretary of Defense on operational and live fire test and evaluation of Department of Defense weapon systems.

Prior to his appointment, Dr. Gilmore was the Assistant Director for National Security at the Congressional Budget Office (CBO). In this position, he was responsible for CBO's National Security Division, which performs analyses of major policy and program issues in national defense, international affairs, and veterans' affairs. Specific areas of investigation included the long-term implications of current defense policies and programs, the implications of transformation for equipping and operating U.S. military forces, the effectiveness and costs of alternative approaches to modernizing U.S. military forces, and the resource demands associated with operating and supporting U.S. military forces.

Dr. Gilmore is a former Deputy Director of General Purpose Programs within the Office of the Secretary of Defense, Program Analysis and Evaluation (OSD (PA&E)). As the Deputy Director, he was responsible for developing, formulating, and implementing Secretary of Defense policies on all aspects of Department of Defense general purpose programs, including analyzing the operational effectiveness and costs of U.S. conventional military forces and supporting programs. Before serving as a Deputy Director, Dr. Gilmore served as the Division Director of Operations Analysis and Procurement Planning, within the Office of the Deputy Director, Resource Analysis and prior to that as an Analyst for Strategic Defensive and Space Programs Division, Office of the Deputy Director, Strategic and Space Programs. Dr. Gilmore's service with Program Analysis and Evaluation covered 11 years.

DR. RICARDO VALERDI is a Professor at the University of Arizona in the department of Systems & Industrial Engineering, Director of the Sports Management Program, and Pac-12 Faculty Athletics Representative. Previously he was a Research Associate in the Engineering Systems Division at the Massachusetts Institute of Technology. His research focuses on systems engineering metrics, cost estimation, and sports analytics. His research has been funded by Army, Navy, Air Force, BAE Systems, Lockheed Martin, Raytheon, the IBM Center for the Business of Government, the Arizona Diamondbacks, and the National Collegiate Athletic Association. He is the recipient of the Frank Freiman Award, the highest honor given by the International Cost Estimation and Analysis Association. He recently completed a sabbatical as a production consultant at SpaceX and a visiting professor at the United State Military Academy at West Point.

DAY 2 AFTERNOON SCHEDULE

01:00pm—01:45pm	**Fana Gebeyehu-Houston, Director of Cost Policy & Analysis, NA-143** ***Methodologies for Estimating Cost and Schedule of National Nuclear Security Administration (NNSA) Construction Projects*** The cost estimating methodology in this presentation is used to produce long-term budget projections for the National Nuclear Security Administration (NNSA) construction portfolio. The organization produces early-stage and defensible cost estimates across its eight sites to aid in planning purposes, specifically construction projects which initiate in the next 25 years.
01:45pm—02:15pm	**Joseph Bruscato, Kansas City, National Security Campus (KCNSC)** ***Establishing and Iterating a High Fidelity Cost Estimate in an Earned Value Management Environment*** Developing a high fidelity cost estimate requires use of particular tools and resources to make use of the available data to meet customer requests of required information and format. For multi-year projects, the tools, resources, and data available may change over time. While this change tends toward maturation of processes, it lends itself to potential difficulties in iterating the estimate or providing comparisons with previous estimates. Implementation of an EVM System to provide additional structure can help.
02:15pm—02:30pm	**Break**
02:30pm—03:00pm	**Nathan Clough, Sandia National Laboratories (SNL)** ***Accessible Monte Carlo for Cost Forecasting in XLS*** Early project phase cost estimates and Future Year Nuclear Spend Plan (FYNSP) submittals during the Concept (6.1) and 'Feasibility Study & Option Down-Select' (6.2) phases of the 6.x process generally consist of single point estimates based on spending profiles that do not explicitly take into account risk and uncertainty. With point estimates, the likelihood of staying within budget or the range of possible risk outcomes is difficult to ascertain. Through Monte Carlo simulation we can define the risk associated with our forecast and gain insight into our best and worst case scenarios. This example will detail the ease of using Excel to run Monte Carlo cost simulations, additional information needed to run the simulation and the implications this information will have on your final cost estimates.
03:00pm—03:45pm	**Juan Corpion, Los Alamos National Laboratory (LANL)** ***Risk Analysis, Identification, and Mitigation Planning*** "You'd like to see my risk management plan? Sure, let me pull it from my shelf and blow the dust off." All too often risk analysis, identification, and mitigation planning is considered a milestone at the conclusion of the programming stage of a project necessary to meet customer expectations instead of a practical tool essential to successful project execution and delivery. This presentation will introduce and define a robust project life-cycle risk management system to improve project cost and schedule estimating, and reliability during project execution from non-jargonistic, real-world experience delivering projects within the DOE and NNSA.
03:45pm—04:00pm	**Closing Remarks**

DAY 2 MORNING SCHEDULE

07:30am—08:30am	**Registration Check-in for Day 2 Arrivals**
08:30am—08:45am	**Phil Chamberlin, NA-143** ***Day 2 Welcome***
08:45am—09:45am	**Opening Speaker: Dr. David Lee** ***Some Estimating Lessons from Experience*** The mid-1980's and early 1990's saw increasing numbers of Department of Defense weapon system programs in the development and production phases. New technologies advanced firms' development and production methods, and programs of the Space Defense Initiative Organization (SDIO), the F-22 fighter, and the DDG-51 Destroyer, among others, presented interesting estimating challenges. The talk reviews the evolution of DoD estimating methods in the period, and points out some lessons learned that may continue to be helpful.
09:45am—10:15am	**Jason T. Lee, Assistant Director, Applied Research and Methods, U.S. Government Accountability Office (GAO)** ***Updates to the GAO Cost Estimating and Assessment Guide*** GAO's *Cost Estimating and Assessment Guide*, issued in March 2009, was developed to establish a consistent methodology that is based on best practices. The Cost Guide will be updated, revised, and improved and provide current guidance for use in auditing agency programs and for agencies to use for developing, managing, and evaluating program cost estimates.
10:15am—10:30am	**Break**
10:30am—11:00am	**Brian Foust, Estimating Manager,** UCOR, ETTP Oak Ridge, TN ***GAO Cost Estimating Practices Compliance - Self-Assessment Tool Discussion & Demonstration***
11:00am—11:30am	**Harlan Swyers, Office of Cost Estimating & Performance Evaluation (CEPE)** ***Practical Applications of Data*** The NNSA Office of Cost Estimating and Program Evaluation (CEPE) has a responsibility to perform Independent Cost Estimates (ICEs) on programs classified as Major Atomic Energy Defense Acquisitions (MAEDAs). One of major focus areas for the office has been data collection in support of those ICEs. As data is becoming available CEPE has been moving to fully implement objective cost estimating methods on LEPs based from actual costs.
11:30am—12:00pm	**Tanya Moore, Los Alamos National Laboratory (LANL)** ***Programmatic Equipment Cost Estimation*** This presentation summarizes work at Los Alamos to develop a cost estimation model for the replacement value of a piece of programmatic equipment. Programmatic equipment is the scientific and process instrument that directly supports programmatic activities at the laboratory. This effort combines historical data, parametric and other estimation methodologies. This work supports our effort to manage the equipment portfolio for the weapons programs and the laboratory.
12:00pm—01:00pm	**Lunch Break**

CECOP SYMPOSIUM 2018

DR. DAVID LEE has been applying the principles of mathematics and physics to cost analysis and other areas for more than fifty years. He was successively research mathematician, group leader, and Director of the Applied Mathematics Research Laboratory in the U. S. Air Force's Aerospace Research Laboratories. Then he was head of the Air Force Institute of Technology's Mathematics Department. His final civil service position was Director of the Operations Research/Procurement Planning Division in the Office of the Assistant Secretary of Defense, Program Analysis and Evaluation; that Division provided cost estimates for the OSD Cost Analysis Improvement Group (CAIG). After retirement from the Senior Executive Service he was a Senior Research Fellow in the Logistics Management Institute. He is author or co-author of more than thirty archival publications, and of the book, "The Cost Analyst's Companion." Recognition of Dr. Lee's work includes the Barchi Prize of the Military Operations Research Society, and the DoD Award for Distinguished Civilian Service.

DAY 1 MORNING SCHEDULE

07:00am—08:30am	**Registration Check-in**
08:30am—09:00am	**Welcome & Opening Remarks** **Mark Martinez**, President, Mission Support and Test Services (MSTS) **Steven J. Lawrence**, Manager, Nevada Field Office **Fana Gebeyehu-Houston,** NNSA Director, Office of Cost Policy & Analysis
09:00am—10:00am	**Kickoff Speaker:** **Michael Thompson, NNSA Assistant Deputy Administrator for the Office of Major Modernization Programs NA-19** Mr. Thompson will speak to the Symposium Theme: "Working Together, One Mission, One Vision, One NSE."
10:00am—10:30am	**Phil Chamberlin, NA-143 (NNSA Detailee) Sandia National Laboratories** ***Cost Estimating Events and Responsibilities for NNSA Major Weapon Systems*** NNSA Major Weapon Systems have several key estimating events with varying responsibilities across organizations within NNSA. This presentation will provide an overview of these events and responsibilities with an overview of key policies and requirements. In addition, approaches to Cost Estimating used within Defense Programs on Major Weapon Systems.
10:30am—10:45am	**Break**
10:45am—11:30am	**Ian Bailey, NA-143 (NNSA Contractor)** ***Issues and Opportunities in Developing/Sharing NSE Historical Data*** This presentation addresses the benefits and costs of investing in improved data sets and being able to share them; the organizational structures within NNSA that make it difficult to share data across sites; identification of future cost data needs and how best to plan to meet them; processes/guidelines that could make it easier to identify data sets across the NSE, and how to access them without risking the providers' "ownership" of the data.
11:30am—01:00pm	**Lunch Break**

No-Host Evening Social & Networking Event

Oscar's Steakhouse Las Vegas Lounge

Located in the Dome of the Plaza Hotel & Casino

1 S. Main Street, Downtown Las Vegas

5:00pm—7:00pm

DAY 1 AFTERNOON SCHEDULE

01:00pm—02:00pm	**Keynote: Dr. J Michael Gilmore** ***My Experience as an Independent Evaluator*** I will discuss the experiences I have had during my 27-year career in the government performing, leading, and reporting on independent evaluations of program performance and costs.
02:00pm—02:30pm	**Alicia Williams, Lawrence Livermore National Laboratory** ***WDCR Cost Estimating Approach and Methodology for LLNL W80-4 LEP Product Realization Teams*** LLNL is preparing to enter Phase 6.3 of the W80-4 LEP, the first of its kind that LLNL has executed since the advent of high-rigor business processes adopted in recent years due to lessons learned from previous NNSA programs. The LLNL rationale for its cost estimating approach begins with the premise that PRTs must all execute to the same requirements as defined in DPBPS to support product realization, and PRT schedules reflect those elements. The methodology and process for LLNL's approach to creating cost estimates to execute W80-4 PRTs from Phase 6.3-Phase 6.6 will be presented, which is derived from earlier FY actuals from PRT stand up, PRT complexity, and projected based on program funding.
02:30pm—02:45pm	**Break**
02:45pm—03:45pm	**Panel Discussion: W80-4 LEP Weapon Design & Cost Report (WDCR): Lessons Learned from the WDCR Lead Perspective** **Panel Members:** Fana Gebeyehu-Houston, NNSA; Cliff Holman, NNSA; Ian Bailey, NNSA (Contractor); Carol Meyers, LLNL; Robert Lackey, Pantex; Jeff Boswell, KCNSC; Nick Salazar, LANL; Sarah Burwell, SNL
03:45pm—04:45pm	**Dr. Ricardo Valerdi** ***Developing, Testing, and Applying Cost Models: The COSYSMO Story*** This talk provides the story of how the Constructive Systems Engineering Cost Model (COSYSMO) was developed in collaboration with various U.S. aerospace and defense contractors, academia, and government. Lessons learned from the development process will be shared as well as insights into improvements of the model over a 10 year period. Examples will be shared of how cost models are used to make decisions, support proposal planning, and litigation.
04:45pm—05:00pm	**Closing Remarks**
05:00pm—07:00pm	**Evening Social & Networking Event**