

THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS

Independent Assessments Guidance for Recipients

This guidance is designed to provide an overview of the Independent Assessments process. The guidance covers a general overview of what information the Recipient may be asked to provide and how the Office of Clean Energy Demonstrations (OCED) may review it.

What are Independent Assessments?

Independent Assessments (IA) are in depth reviews that provide an objective, data-driven evaluation of projects to support management best practices. IA assess the quality, health, and feasibility of projects based on scope, cost, schedule, and risk documentation. These assessments determine if the project is following the Government Accountability Office (GAO) and industry best practices for project management. The IA team conducts a deep-dive evaluation of project materials to highlight areas of potential strength and weakness. Assessments are conducted by teams of Federal staff and contractor support services that are external from any direct line of decision making or oversight of the project to ensure an independent and unbiased assessment.

What are the Different Types of Independent Assessments?

The most common IA OCED will conduct is an Independent Project and Cost Assessment (IPCA):

An IPCA combines elements of a project review and cost review for an integrated assessment of project management quality and feasibility and cost estimate quality as defined by the project's scope, schedule, and risk. It results in a report organized by high-level charge questions and specific lines of inquiry including ratings, observations, and recommendations.

Other types of IA that OCED may conduct include Independent Project Reviews (IPR), Independent Cost Reviews (ICR), and Independent Cost Estimates (ICE):

- An IPR is a comprehensive review of all project elements. This assessment incorporates a full-picture understanding of the project scope, management, technology, cost, schedule, and risk factors. It results in a detailed report based on the Recipient's provided materials, with ratings, observations, and recommendations on specific review areas.
- An ICR reviews the quality of a project's cost estimate against GAO and industry best practices (including AACE [Association for the Advancement of Cost Engineering] standards). This assessment is focused on evaluating the alignment between the defined scope, schedule, and risks and whether those elements are appropriately reflected in the cost estimate. It results in a detailed report rating the quality of the cost estimate including assessment of the probable cost range and recommended contingency.

This guidance document does not supersede Federal laws and regulations. This OCED guidance document is for informational purposes only and is not a requirements document. If there are inconsistencies between this OCED guidance document and any specific program or project document, the specific OCED program or project document should be relied upon as it is the controlling document.

• An ICE includes a complete independent re-build of the project's cost estimate based on the scope and materials provided. This assessment results in a total project cost estimate that will be compared to the Recipient's estimate. Any cost variances will be evaluated to understand their cause and a report will be developed with recommendations for cost updates.

IA may also include focused reviews on the Integrated Project Schedule, Risk Register, or other areas. These IA will typically be called for due to specific risks or challenges encountered during the project execution.

When are Independent Assessments Required?

OCED projects are typically managed across four Phases: Phase 1 is structured for planning activities, Phase 2 for permitting and design, Phase 3 for construction, and Phase 4 for operations. IA may be required prior to critical funding decisions, particularly before Phase 3 construction activities. They may also be required in response to risk-triggered events, for example if the project is significantly or consistently over budget or behind schedule.

IA may include one or more focus points. Projects with \$100M or more in Federal funding can expect OCED to conduct at least one IA, typically an IPCA, prior to Phase 3. Projects at any cost may be required to have an IA based on challenges related to scope, schedule, budget, or other risk factors.

What Information is Required to Conduct Independent Assessments?

Several documents will be required to complete a thorough and accurate assessment. A list of common requirements for IA are provided in Appendix 1. Some of this information may already be provided for project deliverables. Other items may be requested specifically to conduct the IA. Information may be submitted through the OCED Awards Management Platform (AMP), via external reading rooms, or collected in the course of meetings and interviews. Information collected for IA will be for the exclusive purpose of conducting the IA. IA reports will not be made public and will be considered and treated as confidential, business sensitive information.

What is the Process for Conducting an Independent Assessment?

The Federal Project Manager will collaborate with the IA team to prepare for the IA. The IA team will prepare an IA plan including the scope and requirements for the IA. Once the plan is established, the IA team will submit a data request to the defined Recipient Liaison. If the submitted data is sufficient, the IA will begin with a kickoff meeting, typically onsite at the Recipient's facilities. The onsite meeting will include an overview of the scope and intent of the IA, followed by review of the provided documents, interviews with any applicable personnel, and/or tours of the facilities as required. Following the onsite, the IA team will conduct their review and develop a draft report. The Federal Project Manager will help identify any factual discrepancies before the IA is finalized and submitted to DOE leadership.

Who Conducts the Independent Assessments?

The OCED IA team is part of the Portfolio Strategy Division. The OCED IA team will work with the OCED Federal Project Manager to confirm the status of the project and any specific information that should be used to scope the IA. The IA will be led by the OCED IA team and conducted with the use of subject matter experts contracted for OCED support services. Both OCED employees and contractors are deeply familiar with DOE priorities and under strict Non-Disclosure Agreement (NDA) terms to protect project data and ensure no conflict of interest with any project ownership or scope.

Who Receives the Independent Assessments?

IA are produced for OCED and DOE internal use only. They will be shared with the Federal Project Team and with DOE leadership as appropriate. The resulting reports are non-decisional, i.e., they do not define or dictate the requirement of any specific decision. However, IA results will be used by OCED and DOE management to inform project management oversight decisions and advice to support the success of the OCED mission.

Recipients may not receive final reports nor use IA results external to OCED efforts. IA results are used exclusively to support DOE project management oversight decisions and will not be shared, published, or used external to the management of any individual project.

What Happens after the Independent Assessment?

After an IA is complete, the Federal Project Team may require a project to update specific documents or deliverables according to the recommendations provided. The Federal Project Team may request a follow-up IA to confirm any required actions have occurred. These requirements may be used to inform a Go/No-Go decision or more generally to support project operations.

Appendix 1

Documents that may be requested for an IA include but are not limited to:

| Area | Document List |
|--|---|
| Construction and Execution Planning | Project Execution/Management Plans |
| | Construction Execution/Management Plans |
| Cost | Estimating Plan |
| | Bottom-Up Cost Estimates |
| | Basis of Cost Estimate |
| | Staffing Plan |
| | Historical Data used for Assumptions |
| | (costs, rates, production factors, wage determinations) |
| | Vendor/Subcontractor/Contractor quotes |
| Management & Procurement | Project Team Contact Information |
| | Project Organization Chart |
| | Project Partners and Contractual Relationships |
| | Acquisition Strategy/Acquisition Plan |
| | Procurement Strategy/Procurement Plan |
| | Major Equipment List, (Including current and proposed products including data sheets, specifications, warranty information, availability and country of origin) |
| Project Assessments | Reports and corrective action plans from previous project reviews, assessments, and audits (if applicable) |
| Project Control | Project Scope Descriptions |
| | Work Breakdown Structure (WBS) and WBS Dictionary |
| | Project Controls Plan |
| | Earned Value Procedures |
| | Existing and future contract cost/schedule modifications |
| | Project Performance/Progress Reports |
| Risk | Risk Management Plan |
| | Risk Analysis Report/Risk Register |
| | Risk Detail Sheets |
| | Schedule Risk Assessments |
| Schedule | Project Schedule for design, construction, and startup |
| | Basis of Schedule Estimate |
| | Critical Path and Near-Critical Path Schedules |

| Area | Document List |
|----------------------------|--|
| Startup & Readiness | Start-up Testing, Commissioning and Turnover Plans |
| | Operation Readiness Plans |
| | Plant Operations / Maintenance Concept / Description |
| | Instrumentation and Control Diagram |
| Technical & Engineering | Project Requirements Document |
| | System Functions and Requirements Document |
| | Design Documentation |
| | Utility Interconnect Description and Plan |
| | Interconnect Impact Study |
| | Specialty / Long-Lead Equipment Design Specifications |
| | Comparative Market Analysis of Existing Similar Plants |
| | Research & Development Documentation / Results |
| | Patent / Intellectual Property Documentation |
| | Pilot and Demonstration Testing and process verification reports |