





Funding Opportunity Announcement Training and Webinar October 29, 2019

U.S. Industry Opportunities for Advanced Nuclear Technology Development

Agenda

- Welcome
- Intellectual Property Rights
- Overview of iFOA Web Site
- Application Documents
- Merit Review and Selection (Policy Factors)
- Award Negotiations
 - Technical Review
 - Contract Specialist Review
- Indirect Rates Overview
- Cost Share Overview
- Invoicing Overview





First Things, First

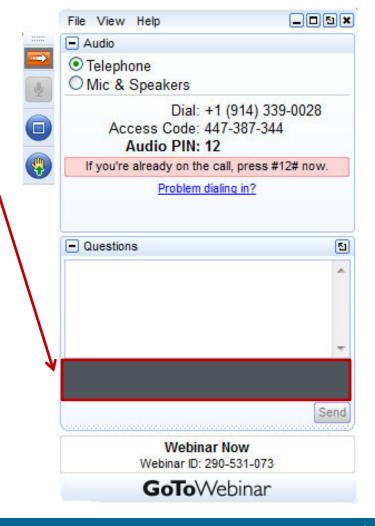
- Emergency Exits
- Restrooms





How to Ask Questions During This Webinar

- □ Submit questions using the GoToWebinar software by typing in the Webinar "Questions" field.
- Questions that do not get answered during the allotted time will be answered and posted on <u>www.id.doe.gov</u>.
- Specific questions on individual eligibility should be addressed offline.



Importance of IP to the Economy



Source: Ocean Tomo, Components of S&P 500 Market Value by percent

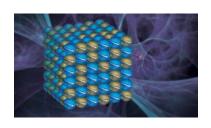
We Live in Disruptive Times . . .

- A few critical emerging areas of science and technology have the potential to rapidly shift the balance of global power in the 21st Century
- The Department of Energy, our Labs and our awardees are on the leading edge of most of if not all of these emerging areas
- Examples:

Quantum

ΑI

Advanced Nuclear







Viewing DOE IP Authorities through a Historical Lens









To truly make sense of DOE's statutory authorities it helps to understand the history of the Department

A Timeline of DOE IP and TT Authorities/Mechanisms

Atomic Energy Act of 1946 Established the AEC and give vested all title to inventions with the US Gov. unless waived. Also provides DOE "work for others"



National Competitiveness
Tech Transfer Act of
1989
Provided GOCOs the
authority to enter into
CRADAs and made Tech
Transfer a mission of
DOE Labs

Agreements for
Commercializing
Technology (ACT)
DOE established the
ACT pilot mechanism

rity







EPACT 1992
Extended CRADA like protection to information generated from certain programs

1946

1974

1980

1986

1989

2005

2011

2017

Federal Nonnuclear Energy & Development Act of 1974 Established ERDA and continued the AEC concept of vesting all title to inventions with the US Gov. unless waived

Federal Tech Transfer Act of 1986

Provided GOGOs the authority to enter into CRADAs

EPACT 2005

Provided DOE with Other

Transaction Authority, established the TCF.

DOE Tech Transfer

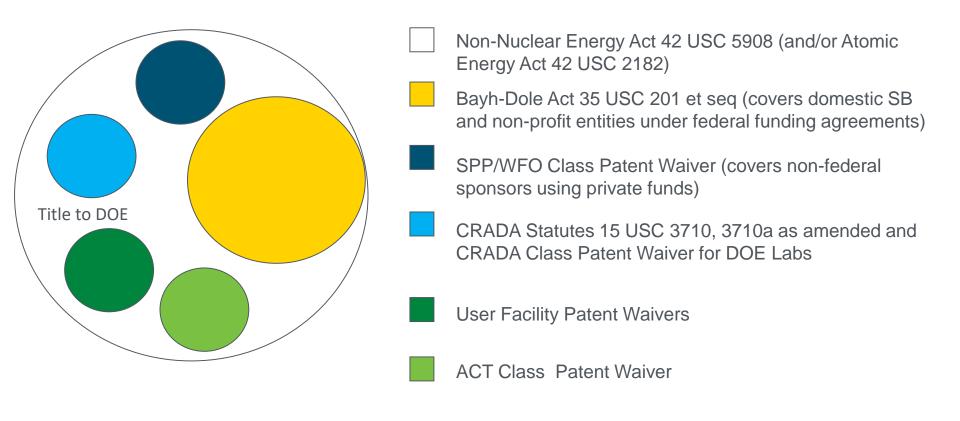
Coordinator role etc.

Agreements for Commercializing Technology (ACT)

DOE makes ACT a permanent mechanism and authorizes a Federal ACT pilot

Stevenson Wydler Act of 1980 Required Labs to take an active role in technical cooperation and sets a portion of labs budgets for tech transfer

How do all of DOE's IP authorities interact?



Bayh-Dole

- Bayh-Dole (35 U.S.C. § 200 et seq.)
 - Applies to R&D "funding agreements" with small business, non-profit, and university contractors
 - Contractor has the right to elect title to "subject inventions"

Bayh-Dole

- "subject invention" means any invention of the contractor <u>conceived or first actually reduced to practice</u> in the performance of work under a funding agreement
- "Invention" means any invention or discovery which is or may be patentable . . .
- Contractor must disclose subject inventions to the relevant Federal agency

Bayh-Dole Rights

- Contractor may elect to retain the entire right, title, and interest throughout the world to each <u>subject invention</u> <u>subject to certain reporting/election requirements and</u> <u>reserved USG rights</u>.
- Federal Government retains certain rights
 - Government license
 - March-in rights
 - U.S. Preference

Bayh-Dole Rights

- Government may obtain title where:
 - contractor fails to disclose or elect title within the times specified, or elects not to retain title;
 - in those countries in which the Contractor fails to file patent applications in a timely fashion, or discontinues a patent or patent application etc.
- Contractor retains a revocable nonexclusive royaltyfree license throughout the world, except where contractor fails to report in timely fashion!!

Inquiry/Demand Letters

What should you do if you get contacted by a Federal Agency about compliance with your IP reporting/election obligations under a federal R&D arrangement?

- Consult with internal and/or outside counsel
 - Practice tip: Not all patent attorneys (even good ones)
 understand the nuances of federally funded IP!
- Call (or if you represented by counsel have your counsel call) the listed Agency contracting officer and/or counsel and have a conversation
- **Due diligence**: document gathering, subject invention analysis

Hypothetical

- Hypothetical: Acme Corp has been working on the design of new widgets for the past 5 years and has spent over \$1M of private funds to develop several designs. Acme's most recent development, widget X promises to be the most efficient widget ever designed but Acme needs additional funding to further develop widget X and test its performance. Before deciding to put in a proposal for a federal R&D grant Acme files a patent application on the widget X design to secure its intellectual property rights. Acme is awarded \$100K in federal funds to further develop widget X and Acme uses those funds to make the first working widget X prototype.
- Is widget X a subject invention?
- What is the impact of the patent application Acme filed?

Hypothetical

- Hypothetical: Jane Inventor is one of nation's top researchers in her area of science and she recently made a major breakthrough that was funded by a federal agency. While Jane is excited about discovery and has disclosed the discovery as a subject invention to the funding agency she is worried filing a patent application as she doesn't want her competitors to find out about her new discovery.
- Instead of filing a patent application can Jane protect her new discovery as a trade secret instead?

Transactions

Typical Funding Agreements	Typical Non-Funding Agreements
Contracts	CRADAs
Assistance AwardsGrantsCooperative Agreements	 Sponsored Work (e.g. "Work For Others" or "Strategic Partnership Project" Agreements)
	User Facility AgreementsNASA Space Act Agreements

Practice Tip: Follow the color of money. The nature of the funds (federal, private or mixed) usually dictates the dissemination of IP rights in agreements with Federal Agencies and Labs

Bayh-Dole

March-in rights – Government can require the contractor, assignee, or exclusive licensee to grant license where:

- Contractor or assignee has not taken, or is not expected to achieve practical application of the subject invention
- Necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor . . .
- Necessary to meet certain requirements for public use . . .
- Non-compliance with U.S. Preference clause

Practice Note: While March-in rights look scary they are almost never invoked.

U.S. Preference

U.S. Preference: no small business firm or nonprofit organization which receives title to any subject invention and no assignee of any such small business firm or nonprofit organization . . .

- shall grant to any person the <u>exclusive right to use or sell any</u> subject invention <u>in the United States</u> unless
- such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States.
- In individual cases, the requirement for such an agreement may be waived by the Federal agency . . .

U.S. Manufacturing

- Take time to understand your obligations to domestically manufacture subject inventions
 - Are there any additional U.S. Manufacturing obligations (e.g. U.S. Competitiveness, U.S. Manufacturing Plans attached to the agreement?
 - Understand the relationship between the U.S. Manufacturing provisions and IP rights in your agreements, they are almost always tied together!

Rights to Inventions developed by LBs with funds from title taking Agencies

 DOE - Atomic Energy Act (42 U.S.C. § 2182) and Federal Nonnuclear Energy Research And Development Act of 1974 (42 U.S.C. § 5908) require that title vest with the Government

Where Bayh-Dole Does Not Provide Right to Elect

- DOE funding agreements with large businesses where title vests with the Government, and the contractor retains a <u>revocable</u>, non-exclusive royalty-free license
 - ("-13" clause (DOE)
 - However, DOE usually waive title.
- "Exceptional Circumstances"

Patent Waivers

 Both the Atomic Energy Act and the Federal Nonnuclear Research and Development Act provide that title to subject inventions may be waived to the contractors. The DOE waiver regulations are found at 10 C.F.R. 784.

Patent Waivers

Types

- Advance Waivers inventions that may be conceived or first actually reduced to practice in the course of a particular contract
- Identified Waivers invention already made
- Class Waivers class of persons or class of inventions

Scope

- Waivers may be granted for a particular field of use, duration of time, or geographical location
- U.S. Competitiveness, March-in rights, Government use license

Cooperative Research and Development Agreements (CRADAs)

Cooperative Research and Development Agreements (CRADAs): are legal agreements between government laboratories and nonfederal parties in which both participants agree to collaborate, by providing personnel, services, facilities, or equipment and pool the results from a particular research and development program.

Use	Funding	Subject Inventions	Generated Data	Highlights
Collaborative research between DOE Labs and public and/or private entities for the mutual benefit of the parties	Private and/or Federal funds	Lab and Participant generally may elect their own inventions and Participant has right to negotiate exclusive license to Lab inventions	Protected for up to 5 years	✓ Collaborative research ✓ 5 year data protection ✓ Designed for multi- party collaborative research

Strategic Partnership Projects (SPP)

Strategic Partnership Projects (SPPs): permit DOE laboratories and facilities to conduct work for other federal agencies and non-federal entities (including state and local governments, universities) on a reimbursable basis.

Use	Funding	Subject Inventions	Generated Data	Highlights
Work for businesses and other non- federal entities using highly specialized or unique DOE facilities, services or technical expertise	Private funds	Sponsor may elect title to Subject Inventions ¹	Protected as Sponsor's proprietary data w/limited exceptions ^{1,2,3}	✓ Sponsor typically retains right to elect title to subject inventions ✓ Generated data treated as proprietary ✓ Option for limited Gov. R&D license ³
	Federal funds	Lab may elect title to Subject Inventions of the Lab	Unlimited Gov. rights	 ✓ Access to unique facilities and expertise using federal funds

¹ Certain exceptions or restrictions may apply (e.g. foreign WFO Sponsors may be granted the right to elect title to inventions and receive proprietary data protection but only after the approval of DOE field patent counsel and concurrence from the cognizant DOE program office). Proprietary data protection may not be available at all facilities. 3 If the limited Gov. R&D license is utilized, data protection will be limited to 5 years. 4 User Agreements are only available when the Sponsor/Participant/User is proposing to use a DOE Designated User Facility that offers such agreements. (see, http://technologytransfer.energy.gov/docs/designateduserfacilities.html)

Agreements for Commercializing Technology (ACT)

Agreements for Commercializing Technology (ACT): is a pilot program that permits DOE lab contractors to conduct work for other entities in the Contractor's private capacity on terms that are more consistent with industry practices. The work must not conflict or interfere with DOE Programs, and can not directly compete with capabilities that are available in the private sector. Initial intellectual property rights generally belong to an appointed IP lead. The Contractor-P may charge beyond full cost recovery since Contractor-P is taking on additional risk or offering some other additional consideration (i.e. performance guarantee etc.)

Use	Funding	Subject Inventions	Generate d Data	U.S. Competitiveness	Cost	Highlights
Work for businesses and other non-federal entities using highly specialized or unique DOE facilities, services or technical expertise	Private funds	Initial title to the designated IP Lead. (ACT Participant or Lab Contractor)	Protected as proprietary data w/limited exceptions 1,2,3	U.S. Preference (see above)	Participant pays full cost recovery plus additional negotiated compensati on to the Contractor	✓ Flexibility for addressing indemnity & adv. payment ✓ Negotiable IP terms ✓ Optional performance guarantee ✓ Option for limited Gov. R&D license ³

¹ Certain exceptions or restrictions may apply (e.g. foreign WFO Sponsors may be granted the right to elect title to inventions and receive proprietary data protection but only after the approval of DOE field patent counsel and concurrence from the cognizant DOE program office). Proprietary data protection may not be available at all facilities. 3 If the limited Gov. R&D license is utilized, data protection will be limited to 5 years. 4 User Agreements are only available when the Sponsor/Participant/User is proposing to use a DOE Designated User Facility that offers such agreements. (see, http://technologytransfer.energy.gov/docs/designateduserfacilities.html)

Civilian Agency Data Policy

- Civilian science agencies, e.g. DOE, NASA, NIH, NSF, have a different mission than DOD
- Dissemination make the benefits of the data widely available
 - DOE Atomic Energy Act, 42 U.S.C. § 2051; 1977
 Department of Energy Organization Act, 42 U.S.C. § 7112

Data v. Technical Data

- "Data" means recorded information, regardless of form or the media on which it may be recorded.
 - The term *includes* technical data and computer software . . .
- "Technical data" means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation).
 - This term does **not** include computer software . . .

Focus of Data Provisions

- What you bring into the arrangement that has been developed at private expense (e.g. "limited rights data" or "background data")
- What is first produced under the arrangement (e.g. "generated data")
- The right to assert copyright in generated data and/or protect it

48 CFR 52.227-14

 <u>Unlimited rights</u> means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

48 CFR 52.227-14

The Government has unlimited rights in—

- Data <u>first produced</u> in the performance of the contract
- All other data <u>delivered</u> under this contract unless provided otherwise for limited rights data or restricted computer software
- Proper marking is extremely important
- Omitted or incorrect markings. Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights.

The Data Protection Spectrum

Unlimited Rights Data	SBIR/STTR Data	Protected Data	Limited Rights Data, Restricted Computer Software, Proprietary Data
Most data generated under federally funded agreements	Data generated under federally funded SBIR/STTR awards	Data generated under government agreements having authorized data protection	Limited to data generated using private funds
Broad government rights to use data.	Gov./Contractor agrees to protect data for 4 years* after delivery of the last technical deliverable	Gov./Contractor agrees to protect data for a defined duration (e.g. 5 years)	Contractor/Sponsor owns the data. The Gov. usually has very limited rights.
Examples: Most data developed with government funds Data not developed under EPACT/SBIR/STTR	Examples: SBIR/STTR Data	Examples:CRADA Protected InfoEPACT DataNASA Space Act	Examples:Proprietary DataNon-FederalWFO/SPP data
No marking requirement	Must be properly marked	Must be properly marked	 Limited rights data are best protected through withholding Must be properly marked

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NIST ROI Initiative



- Software Copyright: Establish copyright for software products of Federal Government R&D
- Trade Secrets: Expand authority to protect trade secrets
- Strengthen Technology Transfer at Federal Laboratories:
 Streamline Federal Laboratory technology transfer policies and practices
- Presumption of Government Rights to Employee Inventions.
 Provide for a present assignment of invention rights and streamline rights determination processes
- New/Expanded Partnership Mechanisms: Authorize new and expanded mechanisms to establish partnership agreements and nonprofit foundations
- Clarifying Tech Transfer Authorities
- Technology Entrepreneurship Programs: Establish technology entrepreneurship programs at Federal R&D agencies governmentwide
- Managing Conflicts of Interest: Implement government-wide requirements to better manage conflicts of interest to promote entrepreneurship
- Benchmarking and Metrics: Establish metrics to better capture, assess, and improve Federal R&D outcomes, impatts, and

Overview of iFOA Web Site

- DOE-ID home page: www.id.doe.gov
- https://www.id.energy.gov/NEWS/FOA/FOAOpportunities /FOA.htm
- Conformed iFOA includes all Amendments
- Most recent Press Release
- Awardees & Project Abstracts
- Q&As posted; can submit questions



Overview of iFOA Web Site

How to Submit an Application:

- DOE-ID home page
- https://www.id.energy.gov/NEWS/
 FOA/FOAOpportunities/FOA.htm
- Complete iFOA includes all Amendments

U.S. Industry
Opportunities for
Advanced Nuclear
Technology
Development Funding
Opportunity
Announcement (FOA)
Number DE-FOA0001817

Announcement Date: 12/07/2017

Overview of iFOA Web Site

How to Submit an Application (continued):

- Descriptions of each Pathway
 - Pathway 1: First of a Kind Nuclear Demonstration Readiness Projects
 - Pathway 2: Advanced Reactor Development Projects
 - Pathway 3: Regulatory Assistance Grants
- Document Library; application documents required for each pathway for
 - Prime Applicant;
 - Subawardee; and
 - FFRDC/NL



Overview of iFOA Web Site

How to Submit an Application (continued):



- Create New Account or Log In
- Electronic submission of applications is required
- Applicants must:
 - obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number
 - register with the System for Award Management (SAM)
 - register with Grants.gov
 - register with FedConnect to submit questions
 - disclose foreign government ownership interests





Overview of iFOA Web Site

Reference documents can be found on the iFOA website

- iFOA Special Instructions Rev 1 (FAQs)
- Attach 1 DCAA Informational Briefing on Provisional Billing Rates
- Attach 2 Indirect Rate Two Tier System Example
- Attach 3 Indirect Rate Three Tier System Example
- Attach 4 Procurement Standards Review Checklist
- Attach 5 Travel Policy Checklist
- Attach 6 Characteristics of Compliant Property System
- Attach 7 Accounting System Checklist
- Attach 8 Environmental Checklist



Application Documents

- Conflict of Interest Acknowledgement
- SF 424 R&R Application
- Research and Related Other Project Information
- Project Summary/Abstract
- Project Narrative File
- Project management Plan
- Resume/Vitae
- Benefit of Collaborations
- Capabilities
- R&R Budget
- R&R Sub-award Budget
- Budget for DOE National Laboratory Contractor or FFRDC/NL

Application Documents

- Budget Justification
- Commitment Letters from Third Parties Contribution to Cost Sharing
- Current and Pending Support
- Coordination and Management Plan
- Letter of Authorization from Cognizant Contracting Officer
- Project/Performance Site Location
- SF-LLL Disclosure of Lobbying Activities
- Certifications and Assurance
- Waiver Requests
- Past Performance
- Foreign Government Ownership Disclosure

Merit Review and Selection (Policy Factors)

The Selection Official (SO) will consider:

- Technical Merit;
- Merit Review Board's recommendation;
- Program Policy Factors; and
- Amount of Funds Available







Merit Review and Selection (Policy Factors)

The SO will consider the following Program Policy Factors:

- Applicability across multiple reactor technologies;
- Proposed cost share that exceeds the minimum required;
- Potential to enhance U.S. nuclear infrastructure;
- Foreign government ownership, if any; and
- Consistency and conformance with current NE Congressional appropriations



Award Negotiations – Technical Review

- SF 424 R&R Application
- Research and Related Other Project Information (n/a for Pathway 3)
- Project Summary/Abstract
 - Pathway 1 (2 page limit)
 - Pathway 2 (2 page limit)
 - Pathway 3 (1 page limit)
- Project Narrative File
 - Pathway 1 (40 page limit)
 - Pathway 2 (25 page limit)
 - Pathway 3 (8 page limit)



Award Negotiations – Technical Review

Technical Review (continued):

- Project Management Plan
 - Pathway 1 (20 page limit)
 - Pathway 2 (10 page limit)
 - Pathway 3 (n/a)



- Resume / Vitae Technical Expertise and Qualifications (2 pages each)
- Benefit of Collaborations (4 page limit) (n/a for Pathway 3)



Award Negotiations – Technical Review

- Capabilities (5 page limit) (n/a for Pathway 3)
- Project/Performance Site Location
- Past Performance
- Foreign Government Ownership Disclosure





- Conflict of Interest Acknowledgement
- Current and Pending Support (5-page limit)
- Coordination and Management Plan (4 page limit) (n/a for Pathway 3)
- Letter of Authorization from Cognizant CO for DOE/NNSA FFRDC/NL, if applicable (n/a for Pathway 3)
- SF-LLL Disclosure of Lobbying Activities, if applicable
- Certifications and Assurances
- Foreign Government Ownership Disclosure



Contract Specialist Review (continued):

- Waiver Requests: Performance of Work in the United States, if applicable (n/a for Pathway 3)
- Commitment Letters from Third Parties Contributing to Cost Sharing, if applicable
- Completed Environmental Checklist
- Verify registration in SAM
- Not currently suspended/debarred
- No derogatory information within the Federal Awardee Performance and Integrity Information System (FAPIIS)

- Responsibility Determination
 - Includes a review of applicant's and subapplicant's
 - Business management systems & procedures (i.e., accounting, financial, procurement, property, travel, etc.) See 2 CFR Subpart E Cost Principles
 - Approved accounting system
 - DCAA pre-award accounting system audit
 - Internal controls
 - Financial statements/financial condition
 - See 2 CFR 200.205, 200.303 and
 DOE's Guide to Financial Assistance



- Financial Management Assessment
 - Evaluates applicant's
 - Ability to manage the financial aspects of award
 - Plans to accomplish project activities with reasonable economy and efficiency
 - See 2 CFR 200.302



Budget Review:

- R&R Budget (Total Fed + Non-Fed) (n/a for Pathway 3)
- R&R Subaward Budget (Total Fed + Non-Fed), if applicable (n/a for Pathway 3)
- SF424A, Budget Information, Non-Construction Programs File (n/a for Pathway 1 and 2)
- Budget for DOE National Laboratory Contractor or FFRDC/NL, if applicable (n/a for Pathway 3)
- Budget Justification



Budget Review (continued):

- Allowability, allocability, and reasonableness of proposed costs NO FEE
- Indirect cost rate
- Cost sharing
- No profit or fee is included
- Plans for subawards
- Back-up documentation
- **FFRDC**



Definitions

 Indirect costs - Incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved.

Indirect rates – Equitable distribution of indirect costs to

cost objective served.

Options

- Federally approved indirect rates
- APPROVI
- De Minimis 10% [2 CFR 200.414(f)]
 - Never received negotiated Federal indirect cost rate
 - Used indefinitely
 - Applied to all Federal awards
 - Can apply to negotiate a Federal rate at any time
- Obtain Federally approved indirect rates
 - Indirect Cost Rate Proposal
 - Government review, evaluation and negotiation of rates
 - Defense Contract Audit Agency (DCAA) audit services

Indirect cost rate proposal

Documentation prepared by a non-Federal entity to substantiate its request for the establishment of an indirect cost rate.

- Cost pool detail by element
- Base detail by element
- Assumptions and basis
- Identification and exclusion of unallowable costs
- Methodology
- Documented policy and procedure

Tools and checklists

https://www.id.energy.gov/NEWS/FOA/FOAOpportunities/FOA.htm http://www.dcaa.mil/Home/Guidance http://www.dcaa.mil/Home/ChecklistAndTools



The Applicant is responsible for subapplicant. The Applicant:

Ensures subapplicant uses appropriate Federally approved indirect rates or

Establishes reasonableness of the subapplicant's indirect rates, if no Federally approved indirect rates

exist.

Cost Principles and Indirect Cost/Rates

Non-Profit

2 CFR 200, Subpart E & Appendix IV



For-Profit

- FAR Part 31.2
- 2 CFR 910.352



Institutions of Higher Education

2 CFR 200, Subpart E & Appendix III



Cost Share Overview

Budget Review evaluates cost share meets requirements:

- Source and ability to fulfill cost share commitment
- Amount of cost share
- Proposed type(s) of cost share



Cost Share Overview

Requirements

- Verifiable from the non-Federal entity's records;
- Not included as contributions for any other Federal award;
- Necessary and reasonable for accomplishment of project or program objectives;
- Allowable under Subpart E—Cost Principles
- Not paid by the Federal Government under another Federal award;
- Provided for in the approved budget when required by the Federal awarding agency; and
- Conform to other provisions of 2 CFR 200, as applicable.

2 CFR 200

Cost Share Overview

- Specific rules that apply to cost sharing:
 - FAR Part 31 for For-Profit entities, (48 CFR Part 31); and
 - 2 CFR Part 200 Subpart E Cost Principles for all other nonfederal entities.
- Examples
 - Acceptable
 - Cash contributions and third party in-kind contributions (must meet 2CFR 200 as amended by 2 CFR Part 910 requirements)
- Not acceptable
 - Efforts performed outside the period of performance
 - Unallowable Costs Cost to prepare application



Invoicing Overview

- Recommend each invoice billed at 50/50 or 80/20
- Back-up information required
 - Time-keeping system report, travel receipts, equipment invoices, subcontractor invoices, etc.
 - Subrecipient to have the same level of detail as the prime
- Invoices to be submitted thru VIPERS



Questions?

