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## Federal Energy Management Program

# Purpose of this Briefing

- Go over processes and identify changes



# ESPC Basics

- **Using the new IDIQs**
- **Latest legislation and its affect**
- **From ESPC to DOE's "Super ESPC"**
- **Changes in the five phases of a Super ESPC project**
- **Primary roles in Super ESPC**



# Key points about federal ESPCs

- Savings guarantees are mandatory
- Savings must exceed payments in each year
- Measurement and verification (M&V) is mandatory
- Contract term cannot exceed 25 years





## **EISA (2007) – ESPC highlights**

- Sites may use any combination of appropriated funds and private financing (Section 512)
- Agencies shall not limit contract term to less than 25 years (Section 513)
- Sites may sell excess energy generated on site from renewable sources or cogeneration to utilities or non-federal energy users (Section 515)



## **DOE Final Rule (10 CFR Part 436)**

- Implemented legal authority in regulation
- Takes precedence over Federal Acquisition Regulations (FAR)
- Specifies procurement procedures and criteria for selecting ESCOs
- Allows unsolicited proposals
- Recommends standard terms & conditions
- Defines conditions of payment
- Addresses annual M&V requirements



## EPACT-'05 and EO 13423 ('07) Goals

- Reduce energy intensity by 3% per year, 2006 – 2015 (from FY 2003 baseline)
- Increase use of renewable energy to
  - not less than 5% of electricity use, 2010 - 2012
  - not less than 7.5% from 2013 on
  - at least half from new (1999 or later) sources
  - double credit for on-site generation
- Reduce water use by 2% per year, 2008 – 2015 (from FY 2007 baseline)



## Key features of Super ESPC

- Any federally owned facility worldwide eligible
  - no leased facilities
  - no state- or municipally owned facilities
- Standardized general terms and conditions
- Allows for revision, within scope, of IDIQ terms by agency in task orders
- Allows agencies to skip time-consuming full competition and award a task order sooner



# Scope of new Super ESPC IDIQs

- New Super ESPC IDIQs have world-wide scope
- All awarded Super ESCOs are eligible to implement all technologies in all regions
  - Read: no more “tech-specifics”
  - Read: no more regional boundaries



# Contract Scope — Technologies

- Must save money from energy or water bills, or energy-related O&M
  - Demand (kW) -only measures (e.g., thermal storage) acceptable and encouraged
- Last category (of 20) is “Future ECMs”



## Roles: Ordering Agency

- Responsible for ensuring Super ESPC vehicle and potential project are in government's best interest
- Appoints TO acquisition team
- Reviews initial proposal and final proposal
- Negotiates through the site/agency CO
- Awards and administers TOs
- Reviews/approves ESCO's design
- Provides construction oversight/acceptance
- Reviews M&V activities and reports throughout performance period



# Roles: Site CO and Project Manager

- Site Contracting Officer (CO)
  - Coordinates with DOE CO
  - Shared responsibility for success of ESPC
  - Negotiates
- Site Project Manager
  - Shares responsibility for ESPC with site CO
  - Coordinates with DOE-hired Project Facilitator
  - Coordinates with agency's Energy Manager
  - Manages documentation



## **Roles: Site Energy Manager/P.E.**

- Communicates with ESCO
- Responsible w/ PM for contract documentation
- Technical representative on site
  - develops/reviews measurement and verification plan, commissioning, pricing, and feasibility of energy-conservation measures (ECMs)
- Lead responsibility for performance-period administration
- Works closely with FEMP Federal Financing Specialist (FFS) and PF



## **Roles: Super ESCOs**

- Market ESPC program to federal agencies
- Satisfy administrative requirements of the IDIQ
- Identify energy savings opportunities
- Negotiate in good faith and perform work as outlined in awarded task orders (TOs)
- Arrange financing
- Design and construct the project
- Provide performance-period services per negotiated contract
- Perform annual M&V reviews



## **Roles: Project Facilitator (PF)**

- Note: Agencies using Super ESPCs are required to use a DOE-qualified PF
  - PF is your best insurance for a successful project
  - experienced, objective, and dedicated guide
  - expert on technical, financial, and contractual issues
- Advocates for agency throughout process
- Leads kick-off meetings and regular calls
- Leads development of TO RFP
- Reviews ESCO submissions
- Assembles review comments



# Development of Super ESPC TO

- Phase 1: Project Planning
- Phase 2: ESCO Selection
- Phase 3: Negotiation and Award of TO
- Phase 4: Design, Construction, and Acceptance
- Phase 5: Performance Period



## Roles: DOE/FEMP

- FEMP FFS is agency's primary contact
  - account manager
  - assists in initial project planning (Phase 1)
  - works closely with PF
- FEMP-hired national lab employees provide technical oversight and troubleshooting
  - Key areas: M&V, risk & responsibility, financing
- DOE/Golden contracting office runs IDIQ contracts, oversees Super ESCOs



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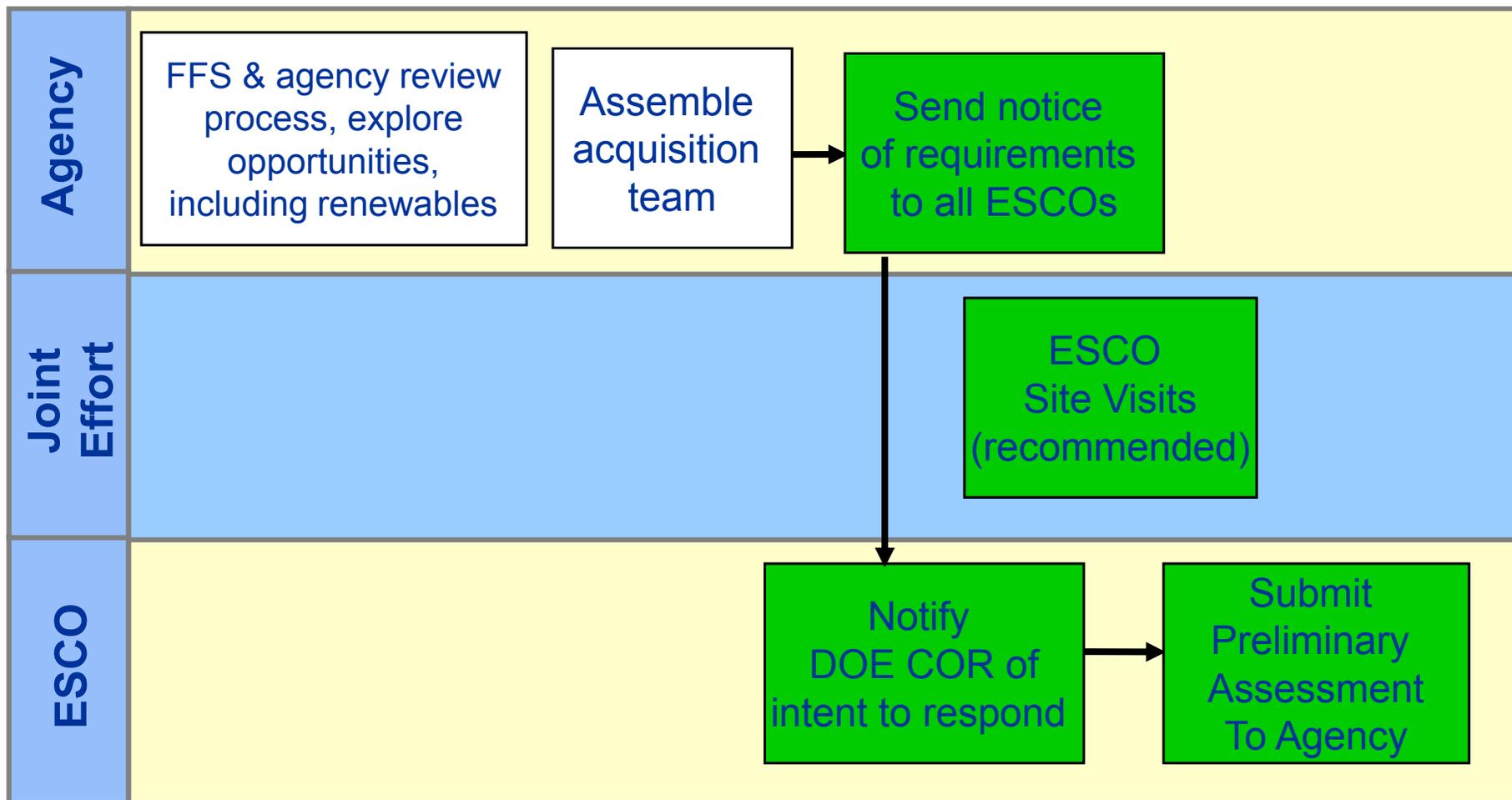
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# Phase 1: Project Planning





# Phase 1: Project Planning, Gov't.-Initiated



ESCO — Energy Services Company  
COR — Contracting Officer's Representative

FFS — FEMP Federal Energy Project  
Financing Specialist



## **ESCO Selection: (Major change) Contractor-Initiated Method**

- ESCO alerts agency of desire to submit proposal
- If project's estimated value > \$5M, agency must notify other Super ESCOs and identify requirements
  - Requirements: desired ECMs, buildings, etc.
  - If < \$5M, agency can proceed with ESCO as sole source
- Other ESCOs can then submit PAs
- Agency, using “fair consideration,” issues statement selecting one based on best value
  - Post-selection de-briefing; protests allowed if > \$10M



## **ESCO Selection: (Major change) Government-Initiated Option**

- Agency sends notice to all 16 ESCOs with requirements and selection criteria
  - Requirements: e.g., buildings, ECMs to include
  - Selection criteria: e.g., price (required) technical approach, past performance
  - Agency may host site visits for interested ESCOs
- One or more ESCOs submit PAs
- Agency, using “fair consideration,” issues statement selecting one based on best value
  - Here (not at award) is where protest could occur



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# Word changes and what do they mean?

- Contractor Identified vs.  
Contractor Initiated
- Government Identified vs.  
Government Initiated



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## Contractor Identified/Contractor Initiated

**Contractor Identified** – process required the ESCO to identify the need for an ESPC project and offer to do a walk-through and provide an Initial Proposal

**Contractor Initiated** - requires ESCO to provide an Preliminary Assessment for evaluation and consideration by the site – may lead to a notice to other 15 ESCOs and process under Government- Initiated



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# Government Identified/Government Initiated

**Government Identified project** – required Government to identify the project through a solicitation – project was identified through a Site Data Package provided to all ESCOs (short list was acceptable but no changes allowable )

- **Government Initiated** – requires that all 16 ESCO be notified of the sites desire to initiate a project with an outline of goals and intent. Streamlined evaluation process to selection.



## ESCOs' Preliminary Site Visit(s)

- Walk-through of facility to gather data for the Preliminary Assessment
- Optional but desirable
- Agency provides site access and escort (if applicable)



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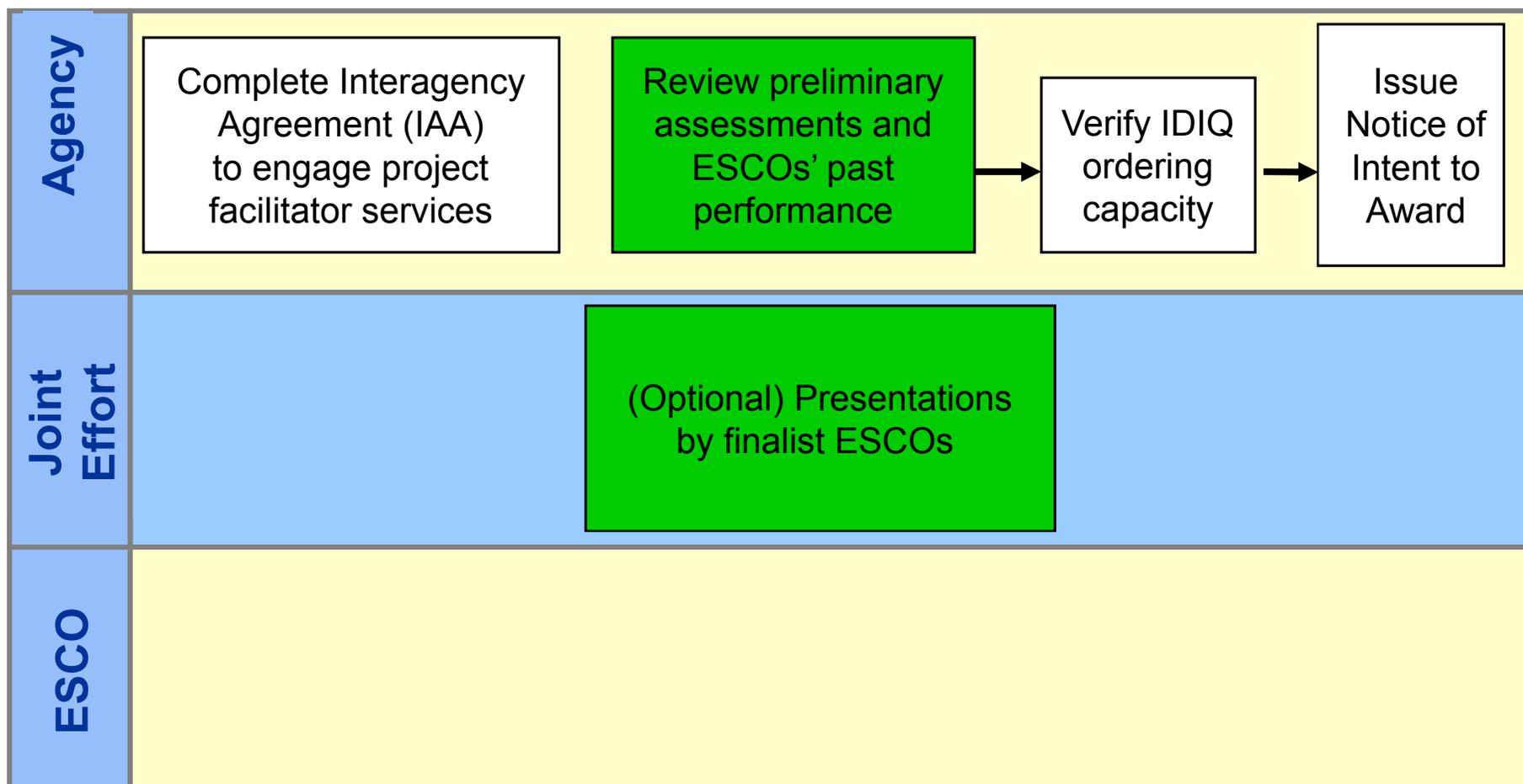
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# Phase 2: Preliminary Assessment and ESCO Selection





## Phase 2: Moving forward



IDIQ — Indefinite-delivery, indefinite-quantity (contract)



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# Preliminary Assessment vs Initial Proposal Are they different?



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# Initial Proposal

- Generated by ESCO after Initial Kickoff meeting – walk through assessment
- Reviewed by Agency – “Go” “No Go” decision (with some changes identified in RFP)
- Signified ESCO Selection with “Go” decision



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# Preliminary Assessment

- **Contractor Initiated** – Preliminary Assessment submitted and evaluated by site
  
- **Government Initiated** – Notice to all with outline and goals – Preliminary Assessment submitted by all (contract provides for a limit of 20 pages) and evaluated by site.



# The Preliminary Assessment – Is it a Request for Quote?

- Only if RFQ allow ESCOs to be innovative in their assessment of the site's goals.
- Notice provides enough data for ESCOs to make assumptions on type of ECMs that could provide a workable/desireable project
- Evaluation criteria - comparing apples to apples
- Must comply with IDIQ contract requirements (see section H.4) and give sufficient information for a decision



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# Is it enough to make a decision? Look familiar?

Key elements: ( All this on 20 pages)

- A narrative summary of proposed project
- Description of ECMs
- Estimates of proposed energy and cost savings
- M&V approach (general)
- Risk/responsibility matrix
- Financial schedules



# Evaluating Criteria – Which is most important to you?

- Technical - Review ESCOs' qualification statements:
  - [www1.eere.energy.gov/femp/financing/superespcs\\_espcescos.html](http://www1.eere.energy.gov/femp/financing/superespcs_espcescos.html)
- Past Performance - Request data on ESCOs' past performance
  - Available from Golden, CO Field Office
- Price – Look at the Schedules – summarizes price proposal



# This is the time for protest if allowable

- Send notice of ESCO selection to all participants
- Allow opportunity for debrief
- Allow time for discussions and final decision





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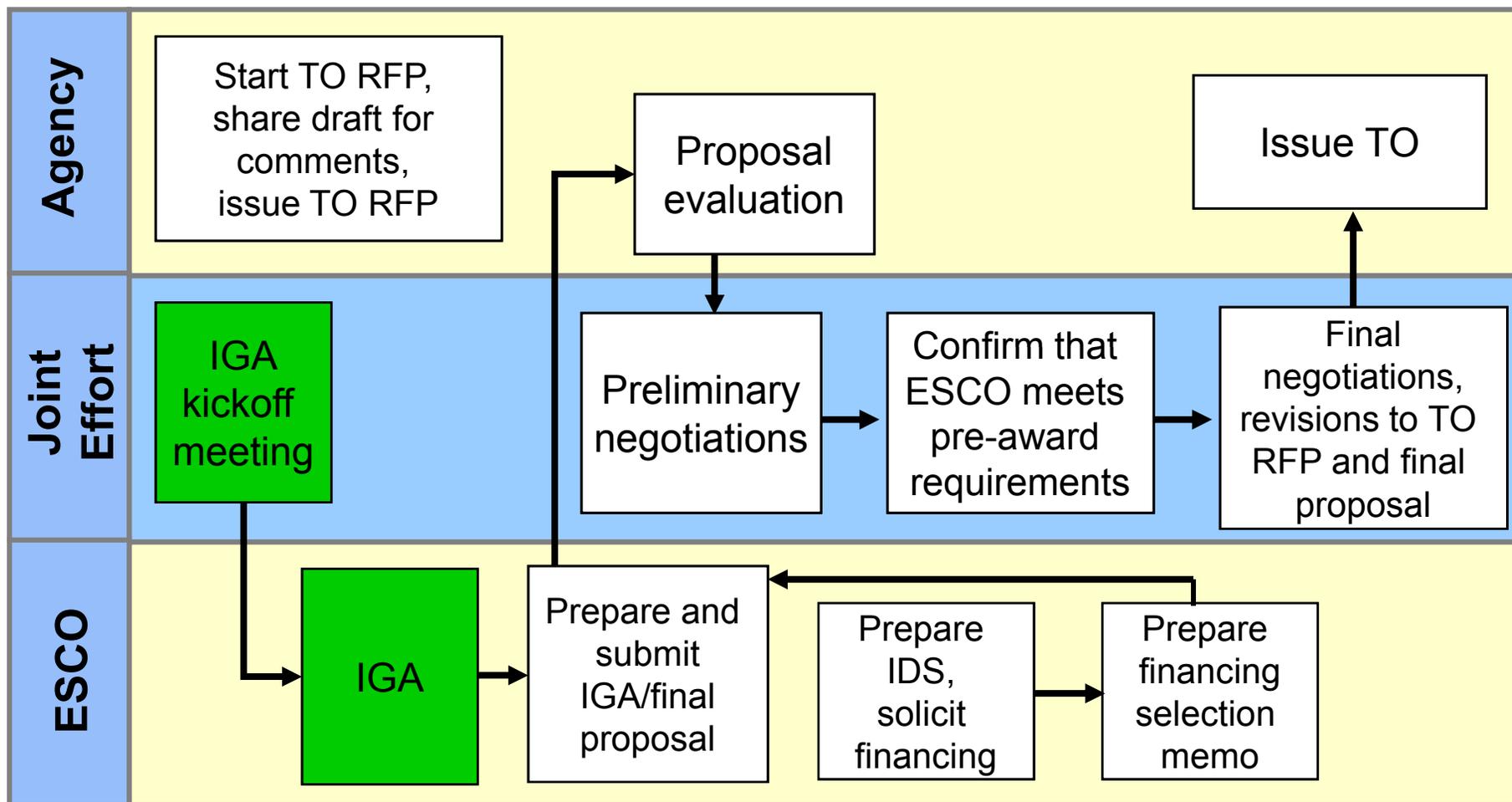
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# Phase 3: Negotiation and Award of Final Task Order





# Phase 3: Negotiation and Award of Task Order



IGA — Investment-Grade Audit

TO RFP — Task Order Request for Proposal

IDS — Investor's Deal Summary



# Kickoff Meeting - DES/IGA

- Purpose: Same - To get all interested parties to the table to begin the process
- FEMP services include facilitation of kickoff meeting





# The Final Proposal

- Executive Summary – No Change
- Technical aspects – No Change
- Pricing
  - TO schedules – change in format but not drastically
  - Level of supporting detail as per TO RFP
  - Financing Summary



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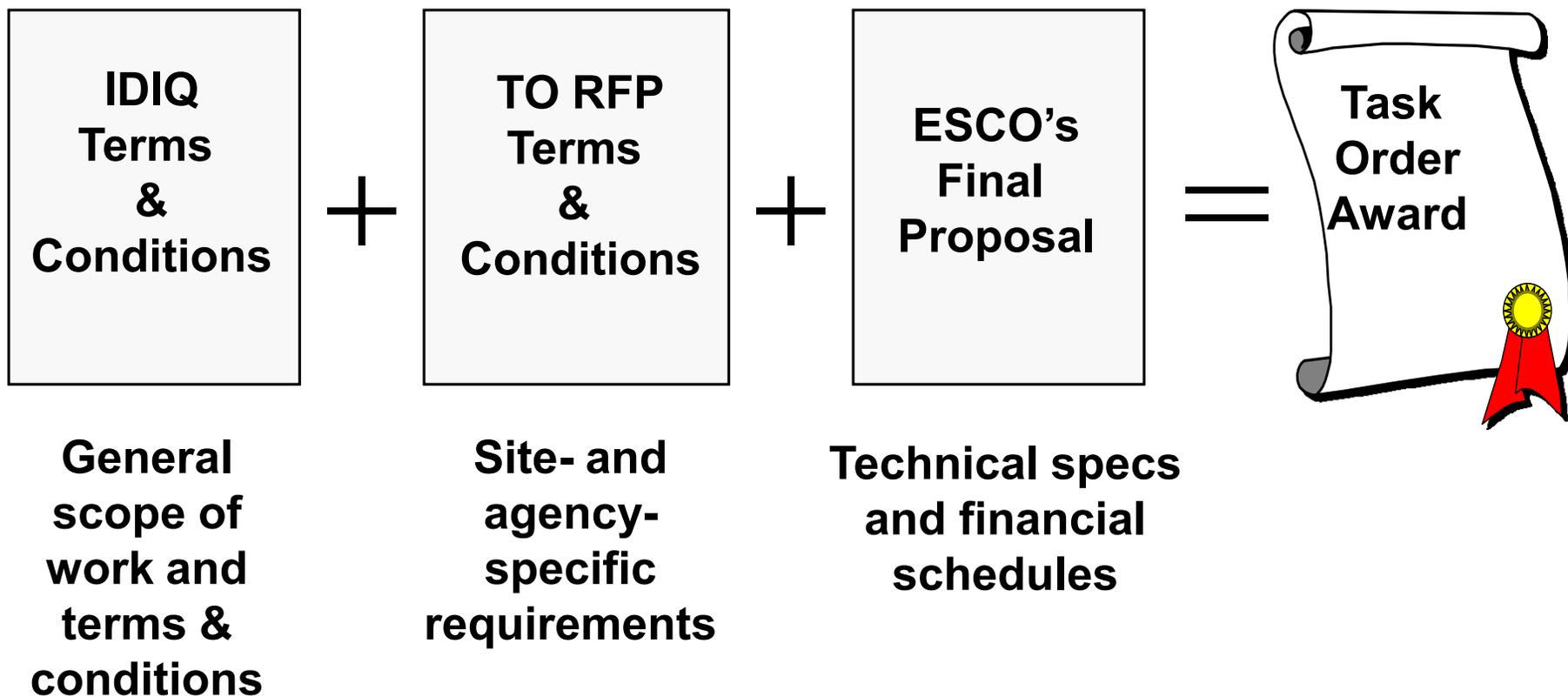
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# Task Order Request for Proposal (TO RFP)

## Preparing the Contract



# IDIQ Contract/TO Relationship





# TO RFP Template

- Changed to reflect difference in terminology
- Template follows numbering of new IDIQ



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# Changes in the Task Order Financial Schedules



# TO Schedule - T01

- Notes and conditions of project i.e. length of implementation period and escalations at the top of the schedule rather than the bottom



# TO-1 Lists Total Savings (Estimated and Guaranteed) and Payments for Each Year

<b>SCHEDULE TO-1 (FINAL)</b>			
<b>PROPOSED GUARANTEED ANNUAL COST SAVINGS AND ANNUAL CONTRACTOR PAYMENTS</b>			
<b>Performance Period Year</b>	<b>(a) IGA Proposed Annual Cost Savings (\$)</b>	<b>(b) Guaranteed Annual Cost Savings (\$)</b>	<b>(c) Annual Contractor Payments (\$)</b>
Zero	117,095	117,000	117,000
One	285,640	276,384	276,383
Two	294,095	284,572	284,571
Three	294,596	285,226	285,225
~			
Totals	4,022,293	3,741,531	3,741,519



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# Differences in TO-2

- No “B-1” Schedule/Maximum markups per ECM
- Markup is on total project
- Direct, Indirect and Profit are separate elements



# TO-2 Shows Direct, Indirect and Profit Equal to the Total Implementation Costs

*(Just Like TO-4 Detailed Savings Per ECM)*

SCHEDULE TO-2 IMPLEMENTATION PRICE BY ECM							
Tech Category	ECM No.	Equipment description— title	ECM size	M&V Expense	(a) Total imple. expense		(c) Imple. price (c) = (a) x (b)
C.2.17	17	Proposal development energy surveys			\$ 169,296		\$ 218,392
C.2.1.4	4.1	HVAC system modifications			\$ 343,620		\$ 443,270
C.2.1.5	5.1	Install lighting upgrades	Lighting 705 kW per month baseline treated		\$ 404,653		\$ 522,002
C.2.1.7	7.1	Replace mechanical steam traps with orifice traps	83 Traps		\$ 45,568		\$ 58,783



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# Difference in TO-3 Schedule

- No “B-2” Schedule
- No added premium maximum



# TO-3 – Performance-Period Cash Flow

*Shows all payments: financing information, performance-period expenses, etc.*

<b>Project Capitalization</b>	Applicable Financial Index: <b>Swap</b>	Issue Date: <b>3/15/2003</b>
Total Implementation Price (TO-2 Total): <b>2,036,037</b>	Term (Years) : <b>13</b>	Source: <b>Treasury Web</b>
Financing Procurement Price (\$): <b>187,702</b>	Index Rate: <b>5.10%</b>	Effective Through: Interest rate effective through COB 4/1/03
Pre-Performance Period Payments: <b>117,095</b>	Added Premium: <b>1.90%</b>	
Total Amount Financed: <b>2,106,644</b>	Project Interest Rate: <b>7.00%</b>	

Annual Cash Flow (Performance Period)						
	Term					
	0	1	2	3	4	5
<b>Debt Service</b>						
Interest (\$)		\$ 146,793	\$ 140,399	\$ 132,629	\$ 123,412	\$ 112,976
Principal Repayment (\$)		\$ 84,805	\$ 98,021	\$ 123,453	\$ 140,205	\$ 158,400
Total Debt Service (a)		\$ 231,598	\$ 238,420	\$ 256,082	\$ 263,617	\$ 271,376
<b>Performance-Period Expenses</b>		1.00	1.0305	1.0619	1.0943	1.1277
Management/Administration		\$ 4,080	\$ 4,204	\$ 4,333	\$ 4,465	\$
Operation						4,601
Maintenance		\$ 1,600	1,649	1,699	1,751	1,804
Repair and Replacement		5000	5,153	5,310	5,472	5,638



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**SCHEDULE TO-4**  
**Delivery Order Proposed First Year Annual Cost Savings**

**TO-4 Breaks out estimated savings (current year \$)**

ECM No.	a. ECM energy baseline MBtu/yr	b1. Electric energy savings kWh/yr	b2. Electric energy savings \$/yr	c1. Electric demand savings kW/yr	c2. Electric demand savings \$/yr	d1. Natural gas savings MBtu/yr	d2. Natural gas savings \$/yr	e1. Other savings MBtu/yr	e2. Other savings \$/yr
4.1	10,528	581,520	34,874			5,966	52,269		
5.1	8,622	1,303,440	78,167						

	f. (b1+d1+e1)  Total energy savings MBtu/yr	g. (b2+c2+d2+e2)  Total energy cost savings \$/yr	h.  Other energy-related & O&M savings \$/yr	i.  Water savings kgal/yr	j.  Water savings \$/yr	K (g+h+j)  Estimated annual cost savings \$/yr	L  Implementation price \$	M (I/k)  Simple Payback years
	7,950	87,143				87,143	443,270	5.1
	4,449	78,167	12,674			90,841	522,002	5.7



## SCHEDULE TO-5 ANNUAL CANCELLATION CEILING SCHEDULE

Project Site:	Task Order No:	Contractor Name:
exercise FP	123456	0

	Outstanding Capital Investment	Total Cancellation Ceiling
Installation Acceptance	\$ 2,154,690	\$ 2,262,425
End of Year One	\$ 2,069,886	\$ 2,173,380
End of Year Two	\$ 1,971,864	\$ 2,070,458
End of Year Three	\$ 1,848,411	\$ 1,940,832
End of Year Four	\$ 1,708,206	\$ 1,793,616
End of Year Five	\$ 1,549,806	\$ 1,627,296
End of Year Six	\$ 1,377,651	\$ 1,446,533
End of Year Seven	\$ 1,184,692	\$ 1,243,927

See handouts page 10



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# Phase 4, Part 1

## Pre-Installation — ESCO Submittals and Agency Reviews



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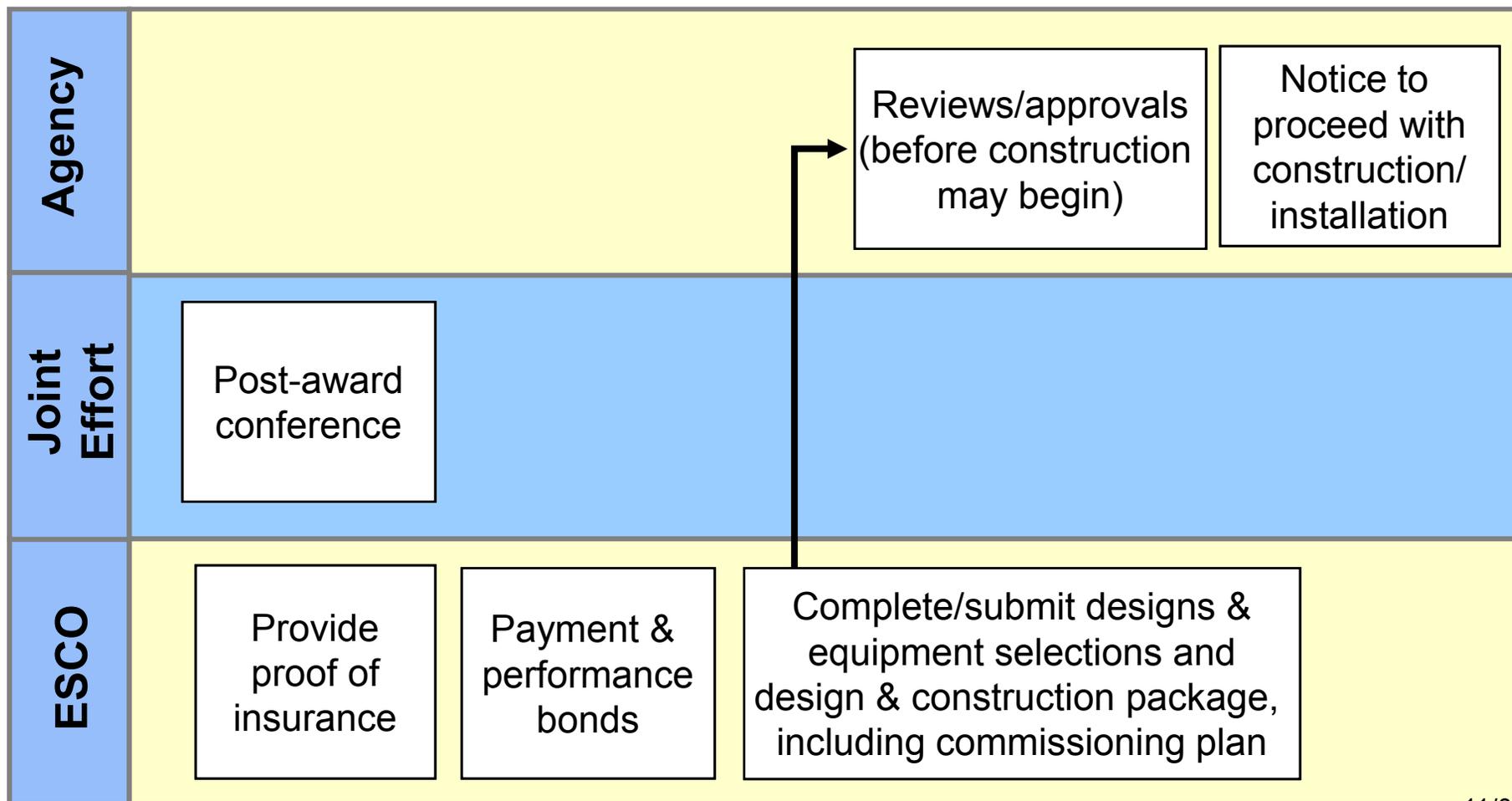
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# End of Changes in Process and Structure

Just a flip through to identify that  
nothing more has changed



## Phase 4, Part 1: Pre-Installation Activities





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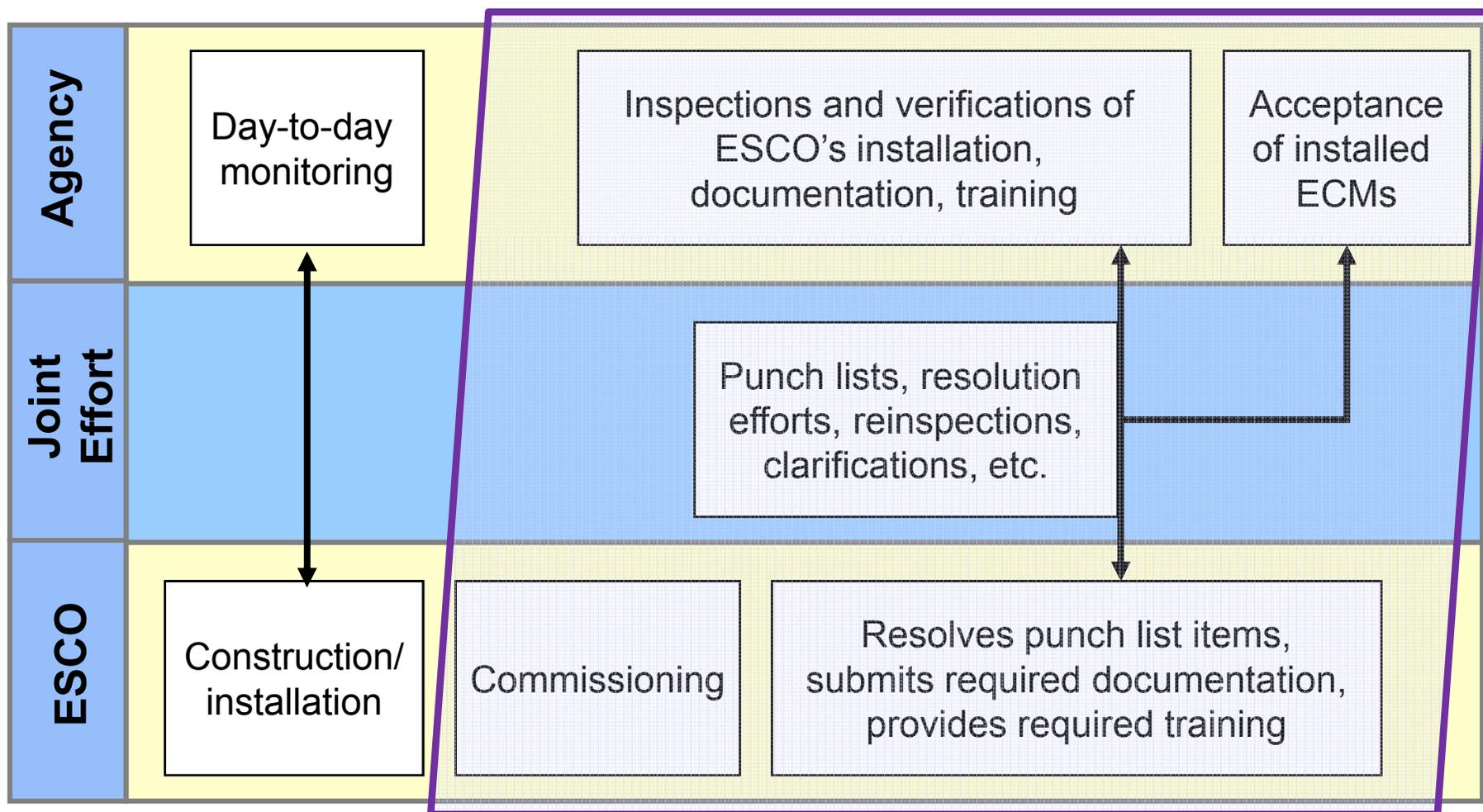
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# Phase 4, Part 2: Commissioning, Post-Installation Report, and Acceptance



# ECM Installation & Acceptance





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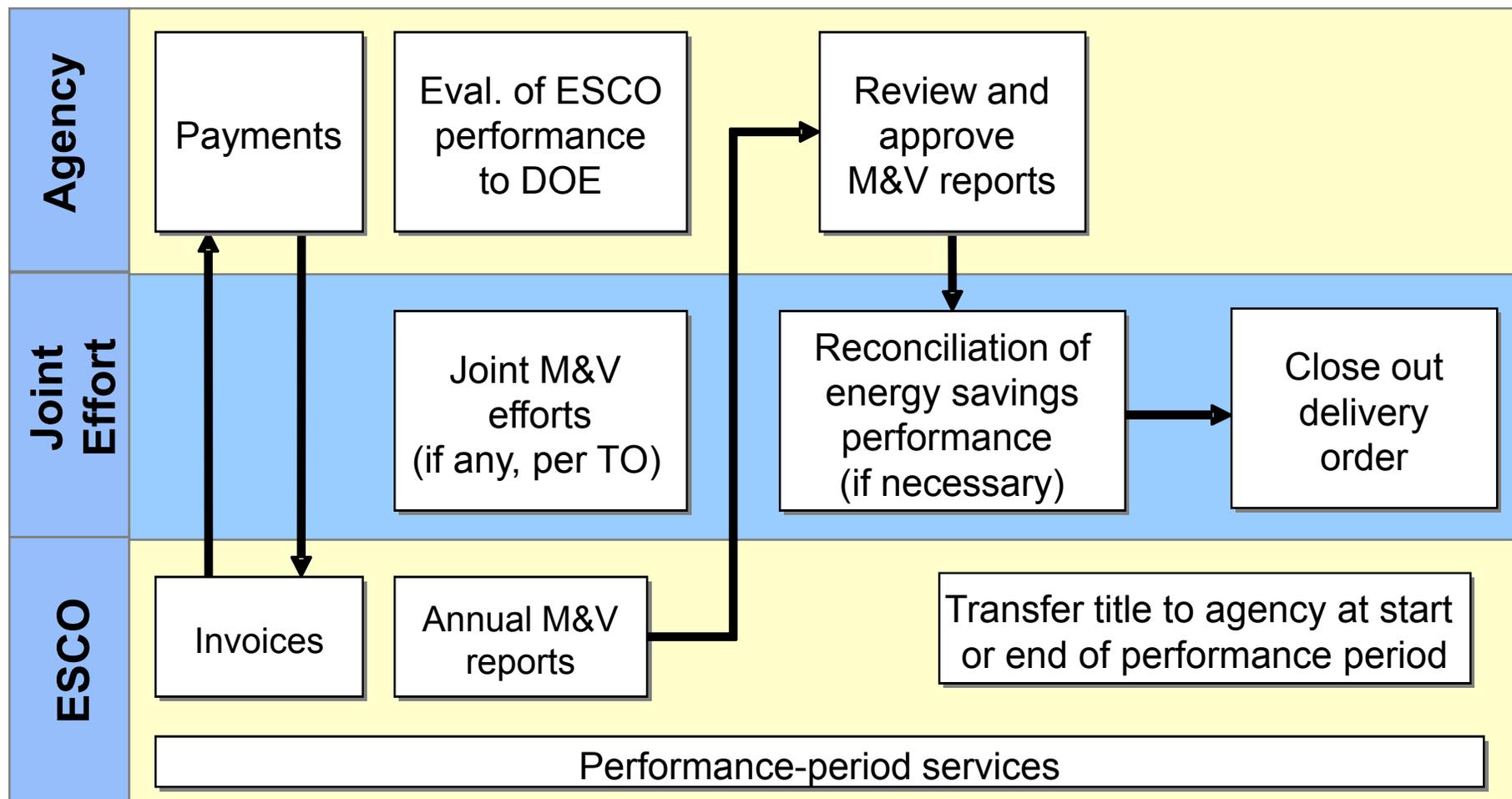
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# Phase 5: Performance Period





# Post-Acceptance Performance Period





# Or just wondering?

**Comments?**

**Questions?**

