Headquarters U.S. Air Force

Integrity - Service - Excellence

Energy as a Service

U.S. AIR FORCE

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U.S. AIR FORCE

Overview

- Definition
- Current Drivers
- Air Force Vision
- Next Steps

DEFINITION

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Energy as a Service

A long-term arrangement with a single entity to meet the fence-to-fence electric power needs of an Air Force installation using the necessary acquisition authorities.

This arrangement will comprehensively address: (1) the operation of and investment in the on-base electric utility system, (2) the procurement of supply and (3) the implementation of energy conservation measures.

CURRENT DRIVERS

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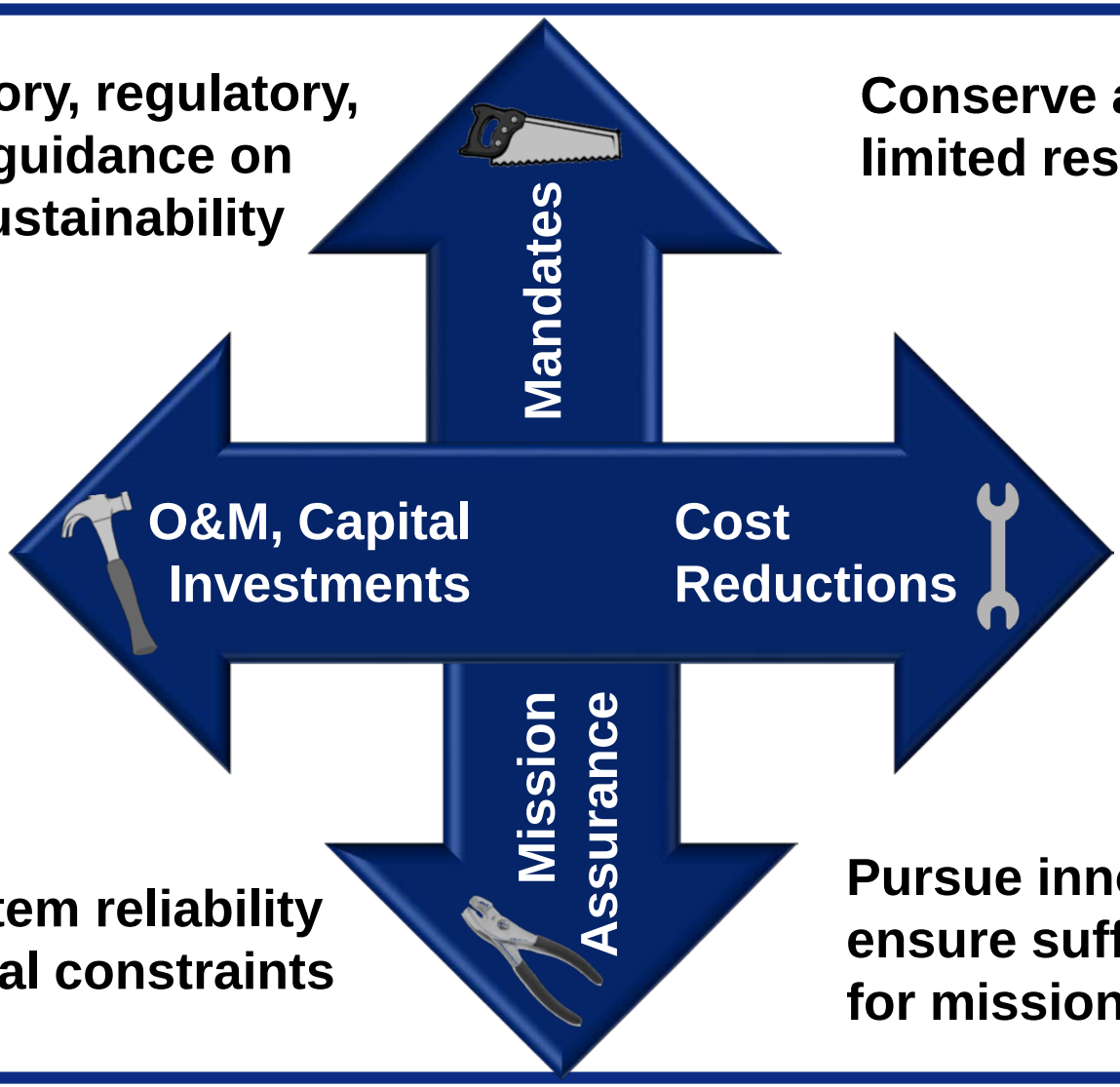
Multiple Priorities

Meet statutory, regulatory, policy and guidance on EE, RE & sustainability

Conserve and prioritize limited resources



Ensure system reliability despite fiscal constraints

Pursue innovation and ensure sufficient energy for mission needs

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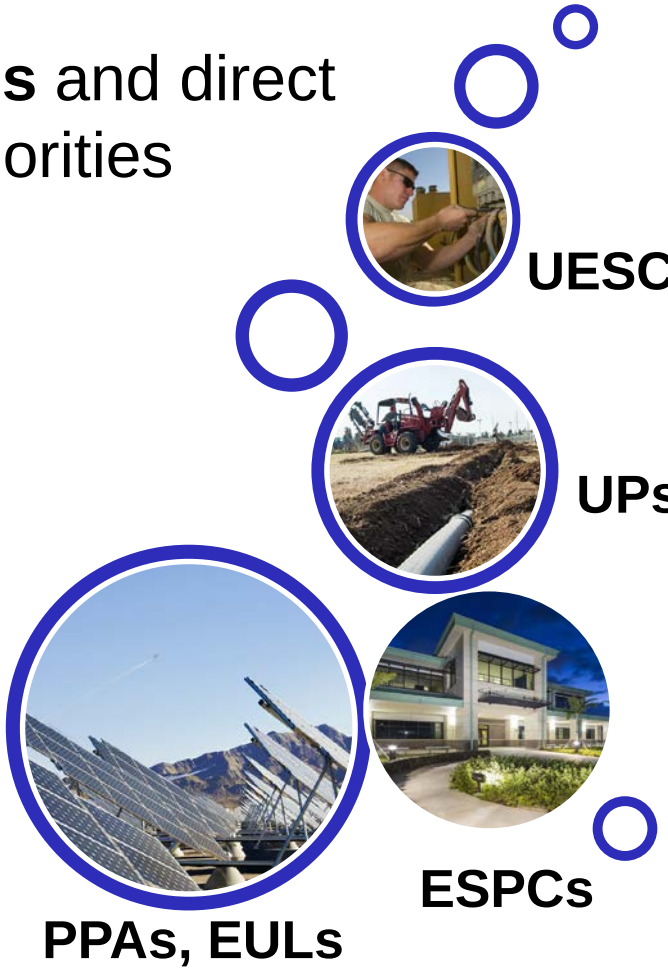
Inefficiencies

- **Various acquisition authorities** and direct investments to meet multiple priorities
- **Piecemeal approach** leading to siloed, incomplete understanding of opportunities and results at the installation level
- **Increased costs** to Air Force to manage multiple solicitations and portfolios



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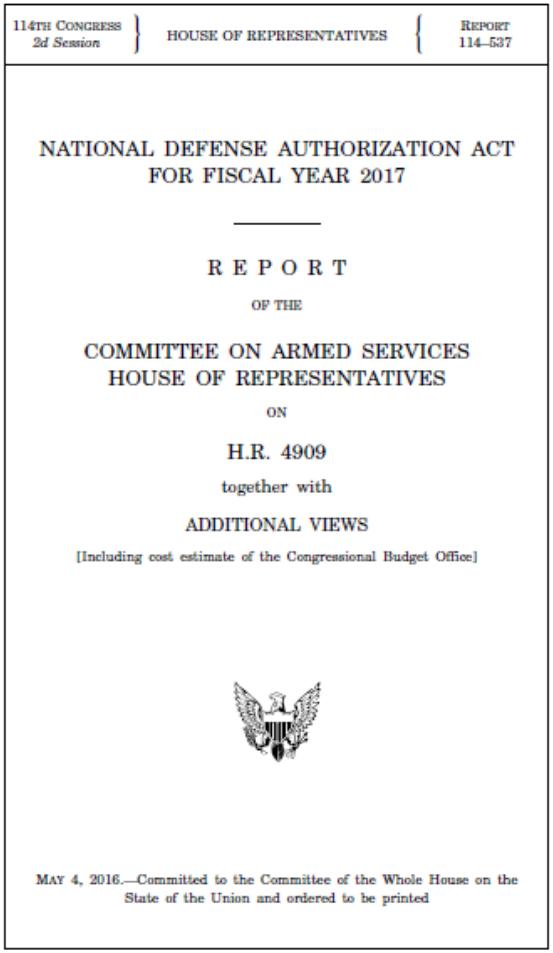
Congressional Perspective

- House Armed Services Report on National Defense Authorization Act for FY2017
- Specific sections address energy assurance and integration of installation energy authorities
- Encourage DoD to . . .
  - "**leverage and integrate existing authorities** to ensure installations have resilient, available, reliable, and continuous power"
  - "interpret and integrate its existing authorities to support **holistic approach**"



114TH CONGRESS 2d Session | HOUSE OF REPRESENTATIVES | REPORT 114–537

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2017

REPORT

OF THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ON

H.R. 4909

together with

ADDITIONAL VIEWS

[Including cost estimate of the Congressional Budget Office]

MAY 4, 2016.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

HASC Report 114–537 (page 106, 107) to accompany H.R. 4909, the National Defense Authorization Act For Fiscal Year 2017

THE VISION

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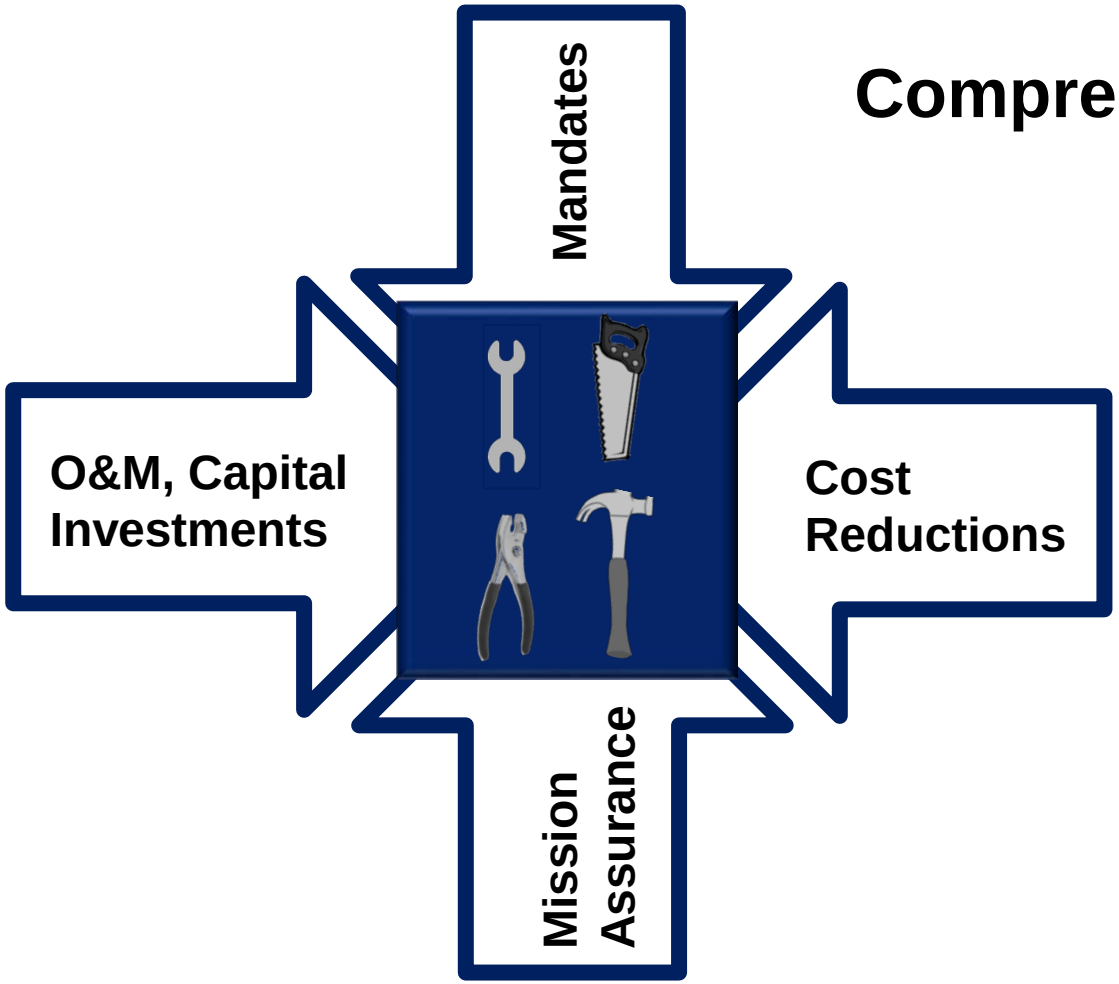
The Toolbox Approach



Comprehensively Address:

1. **On-base electric utility system**
2. **Supply**
3. **Energy conservation measures**

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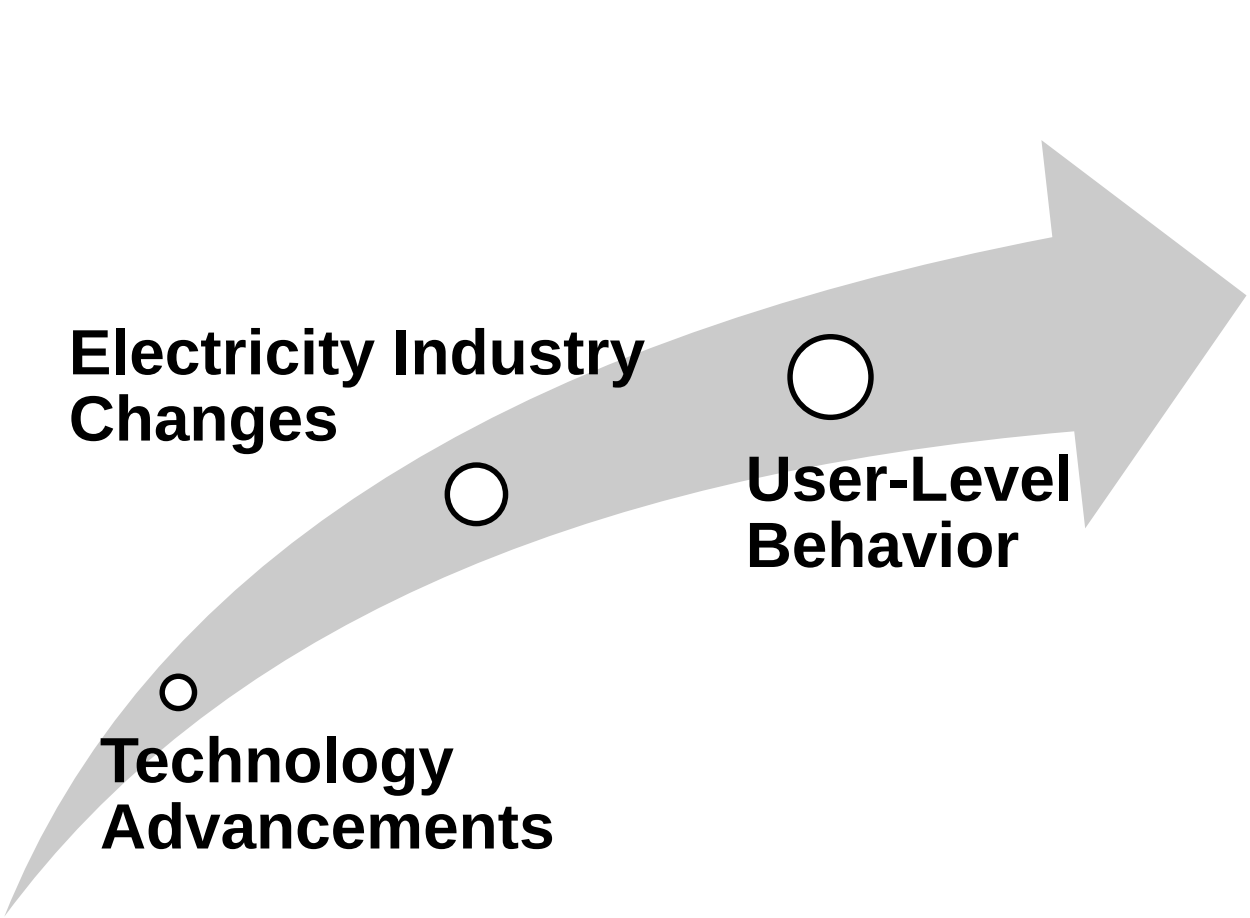
Market Changes



Rethinking how energy is produced, distributed and used

The Service Business Model

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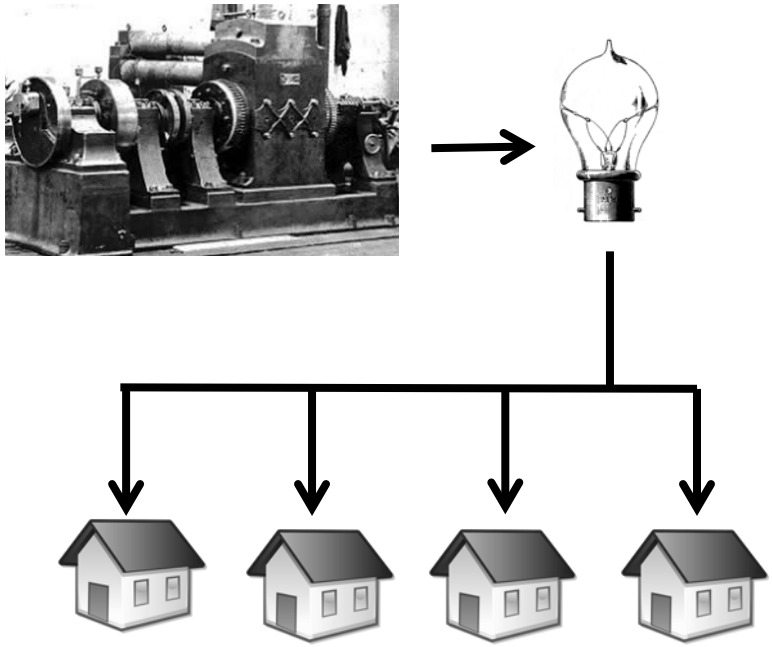
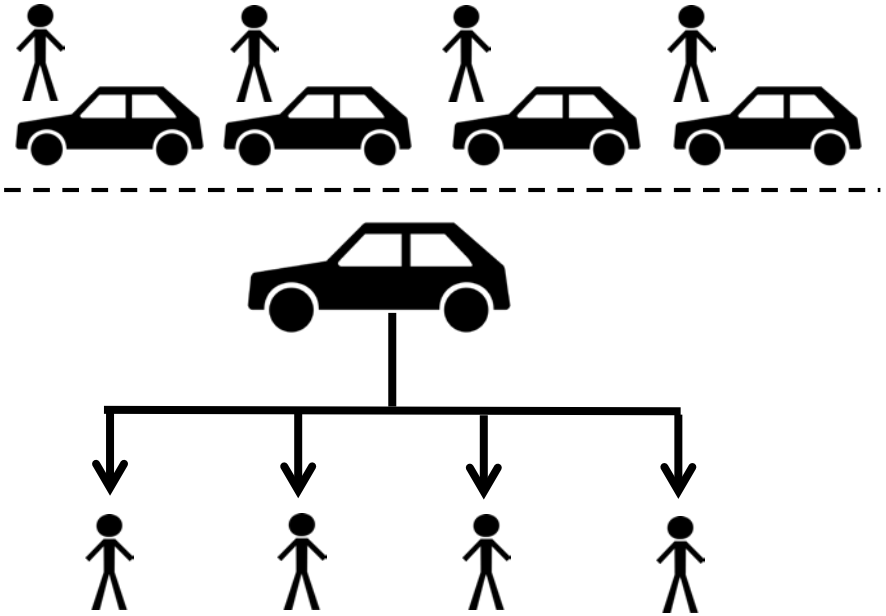
Energy as a Service 1.0

In the 1880s, Edison started by selling lightbulbs and light, not kWh



Transport as a Service

The sharing economy demonstrates value of end state (transportation), over the means (personal car)



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The Air Force Vision

Buy the Capability, Not Just the Commodity

- Ensure the Air Force has the power **when, where and how** it's needed so airmen can focus on the mission
- Harness all resources to ensure **efficient, effective operations**
- Shift focus from the business of energy to the value of **enhanced energy assurance**

The Air Force Vision

Enhance Energy Assurance

Energy Assurance should be . . .

- **Holistic** – encompass reliability, efficiency, resiliency and flexibility
- **Integrated** – create key linkages across lines of effort to eliminate silos and increase effectiveness
- **Continuous** – go beyond single events and points of failure to make assurance a day-to-day effort

NEXT STEPS

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Areas of Exploration

Buy the Capability, Not Just the Commodity

- Coordination of Expertise?
- Guaranteed Efficiencies?

Enhance Energy Assurance

- Packaged Authorities?
- Evolving Priorities?

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Lines of Effort

Scope Definition

- Conduct outreach for input and lessons learned
- Present concept to stakeholders and industry

Site Selection

- Select pilot installation
- Develop energy profile for RFI

Request for Information

- Establish RFI objectives
- Outline evaluation criteria for responses

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Scope Definition

- **GOAL: Leverage stakeholders at all levels to gather expertise and lessons learned for comprehensive EaaS solution**
- **PROCESS: Conduct outreach, gather lessons learned**
  - Air Force Energy Managers' quarterly webinar
  - Ohio State University
- **PROCESS: Present to stakeholders and industry**
  - Federal Utility Partnership Working Group
  - Defense Energy Innovation Summit

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Case Study: Ohio State University

- GOAL: Strengthen sustainability efforts via **innovative energy strategy** while providing new resources for academic mission

- PROCESS: Active solicitation for **Comprehensive Energy Management** through private partnership

Phase 1: RFQ
(completed June 2015, 44 responses)

Phase 2: RFI
(completed Feb. 2016, 40 groups/companies)

Phase 3: RFP
(currently in due diligence)

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Pilot Installation Selection

- **GOAL: Select installation as host to demonstrate concept**
- **PROCESS: Complete screening for candidate bases, factoring in:**
  - Existing energy projects and authorities
  - Viability to leverage 3rd party financing
- **PROCESS: Develop energy profile for RFI**
  - Conduct site visit
  - Gather detailed energy data from base personnel and databases of record

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Request for Information

- **GOAL: Release RFI by early 2017**
- **PROCESS: Define objectives for RFI with focus on areas of exploration:**
  - Execution pathways
  - Barriers to comprehensive approach
  - Evaluation criteria in Request for Proposal process
- **PROCESS: Draft RFI using objectives and installation profile**
- **PROCESS: Outline evaluation criteria for responses**

Contact

Questions?

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