



**California Energy Commission**

**Acceptance Test Technician Certification Providers  
Building Better Technicians  
for  
Better Buildings Today**

**California Commissioning Collaborative**

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Efficiency Division

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# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?





# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?

OPR  
BOD

## Commissioning Requirements (Section 120.8)

- Owner Project Requirements
- Basis of Design



# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?

OPR  
BOD

Comp

Certificate of Compliance (Section 10-103(a)(1))

- Design Review Kickoff Certificate(s)
  - Construction Document Design Review Checklist
- Commissioning Measures & NRCC Forms



# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?

OPR  
BOD

App

Comp

Application for Building Permit (Section 10-103(a)(2))

- All Required NRCC forms



# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?

OPR  
BOD

App

Comp

Permit Issued





# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?

OPR  
BOD

App

Inst

Comp

Permit Issued

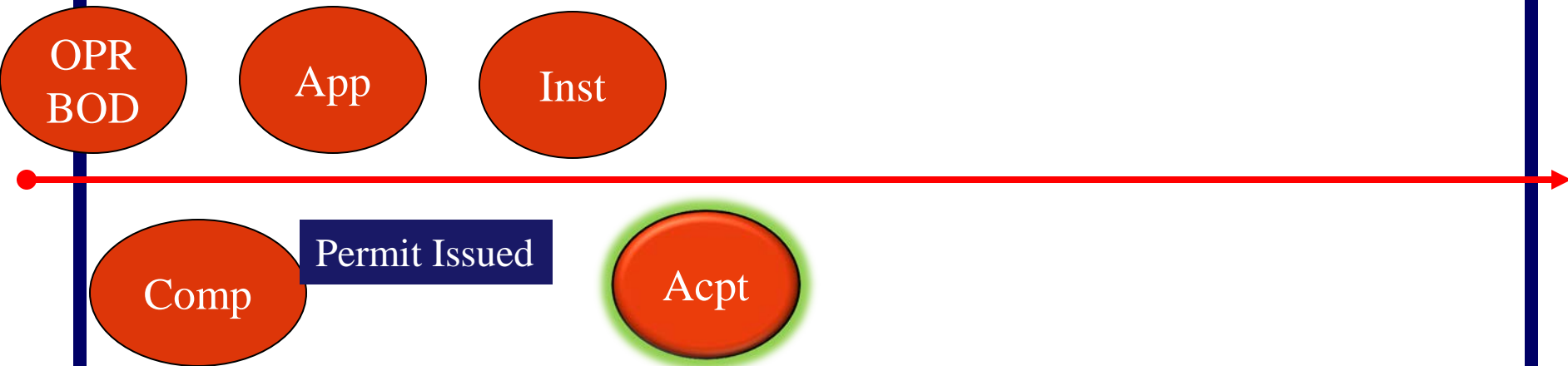
Certificate of Installation (Section 10-103(a)(3))

- All Required NRCI forms



# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?



## Certificate of Acceptance (Section 10-103(a)(4))

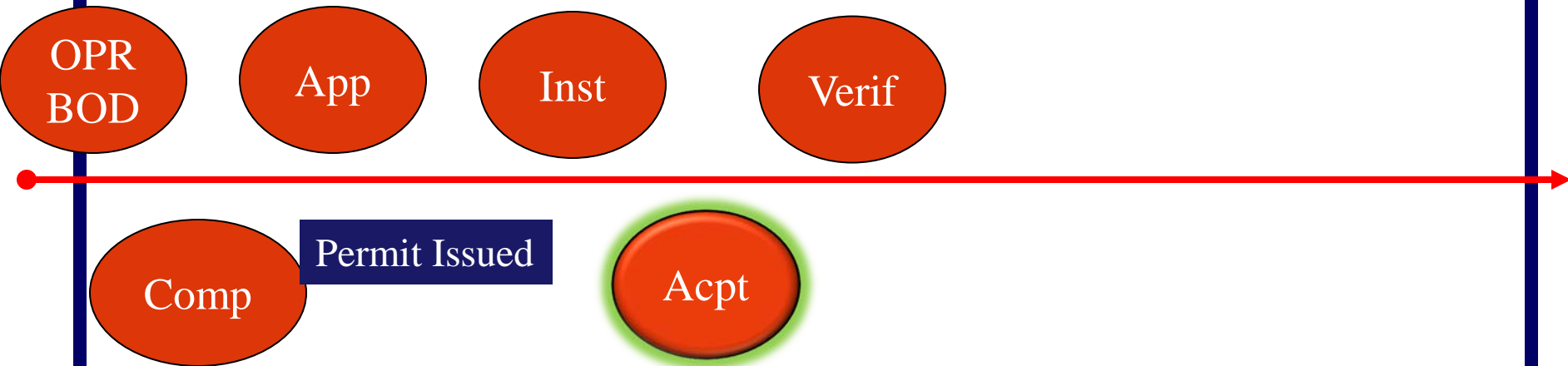
- All Required Acceptance Tests NRCA Forms  
ATTCP Regulations Lighting Controls and Mechanical  
Systems NRCA Forms





# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?



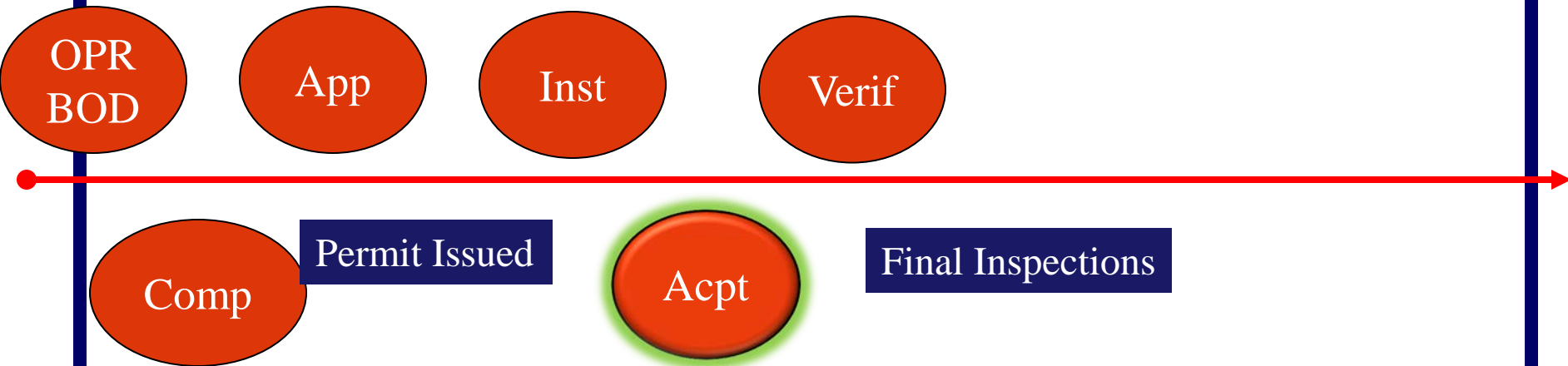
## Certificate of Verification (Section 10-103(a)(5))

- Home Energy Rating System:
  - Duct Leakage,
  - DHW Distribution.



# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

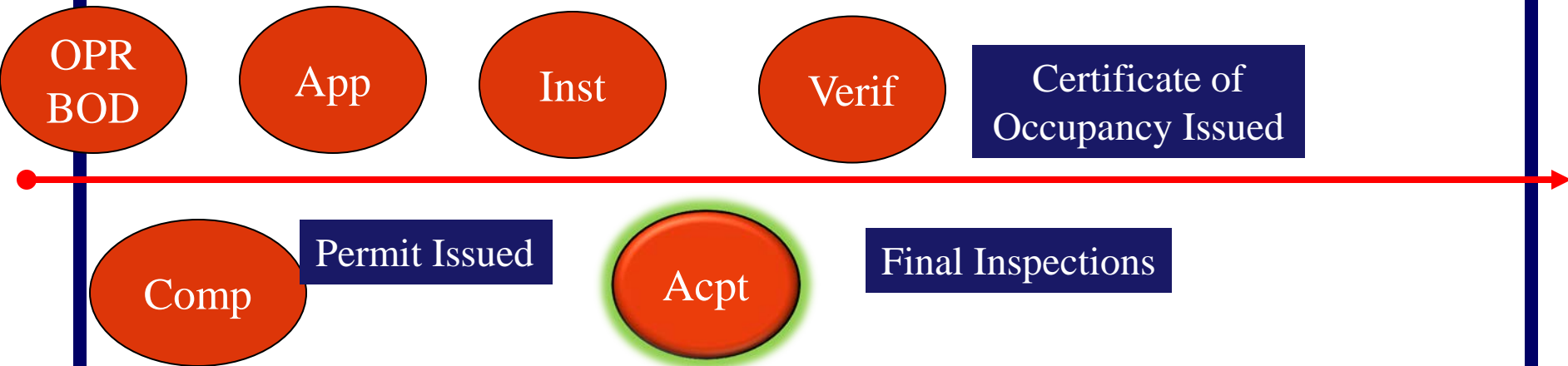
When is Acceptance Testing required?





# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

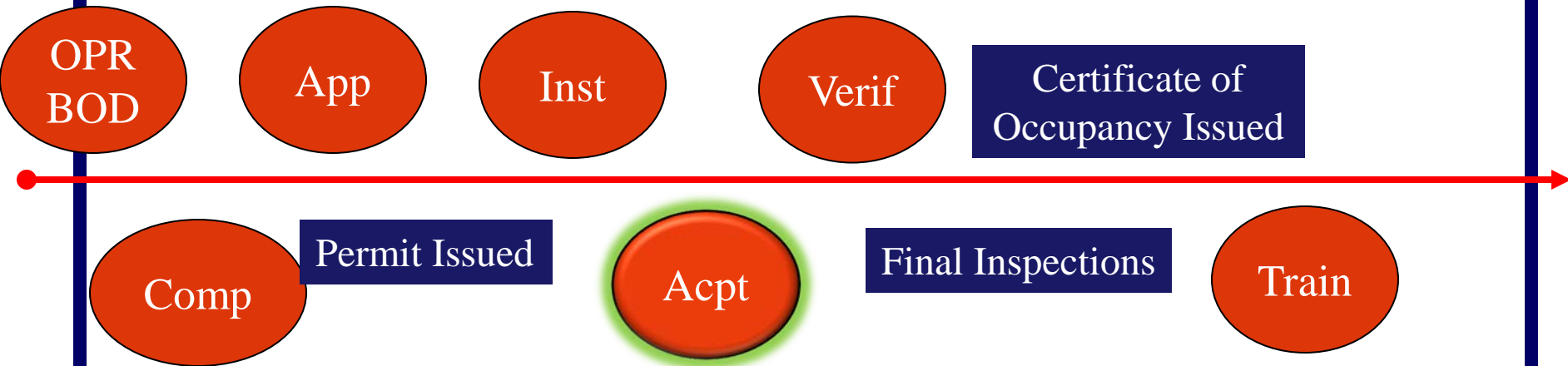
When is Acceptance Testing required?





# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?



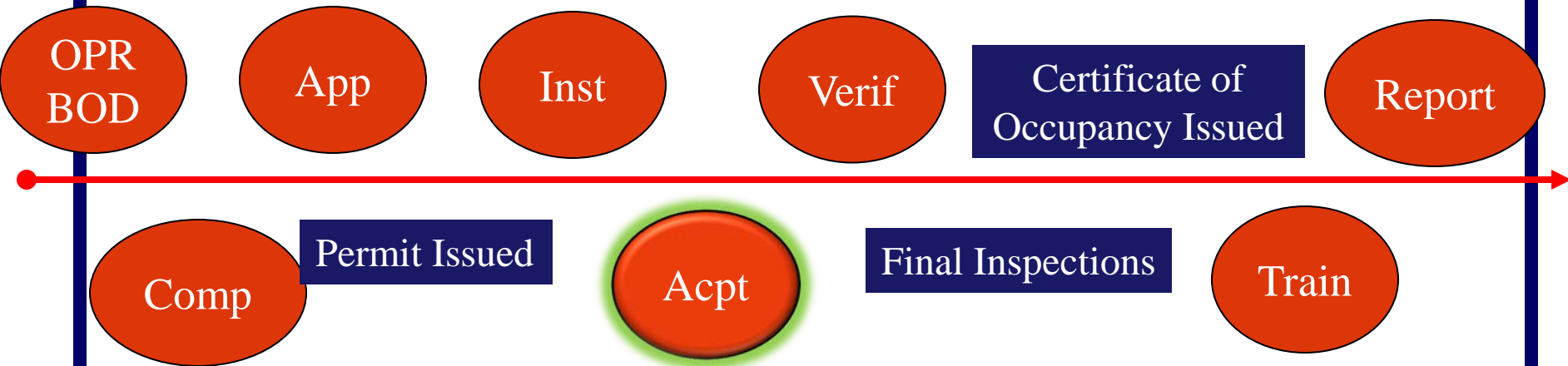
Commissioning Documentation and Training  
(Section 120.8(h))

System Manuals and Systems operations training



# From The Dawn of Acceptance Testing 2005 Standards and the 2013 Standards

When is Acceptance Testing required?



Commissioning Report (Section 120.8(i))

A complete report of processes and activities for the building owner



# Enter the ATTCP

2013 Title 24, Part 1, Section 10-103-A and –B

Acceptance Test Technician Certification Provider

Train, certify and oversee technicians to perform acceptance tests required by the Building Energy Efficiency Standards.

## Lighting Controls

- Standards Section 130.4(a)
- Nonresidential Appendix  
NA7.6 through NA 7.9

## Mechanical

- Standards Section 120.5
- Nonresidential Appendix  
NA7.5.1 through NA7.5.16
- Energy Management Control  
System



# Who are the ATTCPs

2013 Title 24, Part 1, Section 10-103-A and –B

## Lighting Controls ATTCP

California Advanced Lighting Controls Training Program ([CALCTP](#))

National Lighting Contractors Association of America ([NLCAA](#))

## Mechanical ATTCP

National Energy Management Institute Committee ([NEMIC](#))

National Environmental Balancing Bureau ([NEBB](#))

Note that NEBB is Interim-Approved  
(ending June 30, 2015)



# Who are the ATTCPs

2013 Title 24, Part 1, Section 10-103-A and –B

## Lighting Controls ATTCP

Threshold Requirements have been met (Section 10-103-A(b))

Only Certified ATTs can perform Lighting Controls Acceptance Testing

## Mechanical ATTCP

Threshold Requirements have NOT been met (Section 10-103-B(b))

Any technician can perform Mechanical Acceptance Testing





California Energy Commission

# Building a Better Technician through the ATTCP

2013 Title 24, Part 1, Section 10-103-A and -B

Training

Testing

Oversight



# Building a Better Technician through the ATTCP

2013 Title 24, Part 1, Section 10-103-A and -B

Training

Prequalification Requirements

Testing

Required Curricula for Classroom Training

Hands-On Training or Laboratory Training

Recertification

Oversight



# Building a Better Technician through the ATTCP

2013 Title 24, Part 1, Section 10-103-A and –B

Training

Both written and practical testing is required.

Testing

Must demonstrate the applicant's competence in all specified subject areas.

Results are maintained for five years.

Oversight



# Building a Better Technician through the ATTCP

2013 Title 24, Part 1, Section 10-103-A and -B

Training

Complaint Procedures

Revocation Procedures

Testing

Quality Assurance Program

Public Notification of Certification Status

Oversight



# Looking Forward or Speculation

i.e., There are no plans to do any of this!

- Expand the existing ATTCP Program to include Certificates of Installation
- Create a Certificate Program for
  - Commissioning
  - Covered Processes
  - Solar Ready, Photovoltaic and Thermal Heating

Ultimately leading to a true  
Nonresidential Data Registry