CPUC Public Agenda 3318
Thursday, July 25, 2013, 9:30 a.m.
San Francisco, CA

Commissioners:

Michael R. Peevey

Michel Peter Florio

Catherine J.K. Sandoval

Mark J. Ferron

Carla J. Peterman

www.cpuc.ca.gov

Safety and Emergency Information

- The restrooms are located at the far end of the lobby outside of the security screening area.
- In the event of an emergency, please calmly proceed out of the exits. There are four exits total. Two exits are in the rear and two exits are on either side of the public speakers area.
- In the event of an emergency and the building needs to be evacuated, if you use the back exit, please head out through the courtyard and down the front stairs across McAllister.
- If you use the side exits you will end up on Golden Gate Ave. Please proceed around the front of the building to Van Ness Ave and continue on down to the assembly point.
- Our assembly point is between the War Memorial Building and the Opera Building (House) which is on Van Ness Ave, located between McAllister and Grove.

Public Comment

• Per Resolution ALJ-252, any member of the public who wishes to address the CPUC about matters before the Commission must sign up with the Public Advisor's Office table before the meeting begins. If an individual has signed up using the electronic system on the Commission's website, they must check in with the Public Advisor's Office on the day of the meeting, by the sign-up deadline.

• Once called, each speaker has up to 3 minutes at the discretion of the Commission President, depending on the number of speakers the time limit may be reduced to 1 minute.

• A sign will be posted when 1 minute remains.

• A bell will ring when time has expired.

• At the end of the Public Comment Section, the Commission President will ask if there are any additional individuals who wish to speak. Individuals who wish to speak but did not sign up by the deadline, will be granted a maximum of one minute to make their comments.

The following items are NOT subject to Public Comment:

- Item: 6, 19, 20, 22, 24, 29
- All items on the Closed Session Agenda

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• Once called, each speaker has up to 2 minutes to address the Commission.

• A sign will be posted when 1 minute remains.

• A bell will ring when time has expired.

• At the end of the Public Comment Section, the Commission President will ask if there are any additional individuals who wish to speak. Individuals who wish to speak but did not sign up by the deadline, will be granted a maximum of one minute to make their comments.

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Agenda Changes

• Items shown on the Consent Agenda will be taken up and voted on as a group in one of the first items of business of each CPUC meeting.

• Items on Today's Consent Agenda are: **1, 3, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33 & 34.**

• Any Commissioner, with consent of the other Commissioners, may request an item from the Regular Agenda be moved to the Consent Agenda prior to the meeting.
Items: **none** from the Regular Agenda have been added to the Consent Agenda.

• Any Commissioner may request an item be removed from the Consent Agenda for discussion on the Regular Agenda prior to the meeting.
Item: **none** have been moved to the Regular Agenda.

• Items: **2, 35 & 45** have been withdrawn

• The following items have been held to future Commission Meetings:

Held to 8/15/13: **4, 7 & 36**
Held to 9/5/13**:** **5 & 37**

Regular Agenda

• Each item on the Regular Agenda (and its alternate if any) will be introduced by the assigned Commissioner or CPUC staff and discussed before it is moved for a vote.

• For each agenda item, a summary of the proposed action is included on the agenda; the CPUC's decision may, however, differ from that proposed.

• The complete text of every Proposed Decision or Draft Resolution is available for download on the CPUC's website: www.cpuc.ca.gov.

• Late changes to agenda items are available on the Escutia Table.

Regular Agenda – Energy Resolutions and Written Reports

Item #38 [11951] Pacific Gas and Electric Company's Confirmation for Resource Adequacy Capacity Product with Calpine Energy Services, L.P.

Res E-4529 Advice Letter 4074-E Filed on July 2, 2012 – Related Matters

PROPOSED OUTCOME:

- Approves, without modification, Pacific Gas and Electric Company's Confirmation for Resource Adequacy (RA) Capacity Product, which is an Agreement for Combined Heat and Power Resource Adequacy Capacity Product for 280.5 Megawatts of combined heat and power resource adequacy capacity associated with the Los Medanos Energy Center (LMEC).

SAFETY CONSIDERATIONS:

- As an existing and operational facility, there are no incremental safety implications associated with this contract beyond the status quo.

ESTIMATED COST:

- The contract costs are confidential at this time, because the LMEC Agreement for Combined Heat and Power Resource Adequacy Capacity Product contains competitive pricing terms for capacity. As this is a capacity-only transaction, there are no pricing components for energy deliveries, ancillary services, or other variable costs.

Regular Agenda – Energy Resolutions and Written Reports

Item #38a [12140] ALTERNATE TO ITEM 11951

Advice Letter 4074-E Filed on July 2, 2012 – Related Matters

(Comr. Peevey)

PROPOSED OUTCOME:

- Rejects, in its current form, Pacific Gas and Electric Company's (PG&E) Confirmation for Resource Adequacy (RA) Capacity Product, which is an Agreement for Combined Heat and Power Resource Adequacy Capacity Product for 280.5 MW of combined heat and power resource adequacy capacity associated with the Los Medanos Energy Center.

- Provides guidance to PG&E for potential modifications to the Agreement which the Commission would approve in a subsequent Tier 1 Advice Letter filing, and provides additional guidance to PG&E for Combined Heat and Power solicitations in the future.

SAFETY CONSIDERATIONS:

- As an existing and operational facility, there are no incremental safety implications associated with this contract beyond the status quo.

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ESTIMATED COST:

- None.

Regular Agenda – Energy Resolutions and Written Reports

Item #38b [12217] ALTERNATE TO ITEM 11951

Advice Letter 4074-E Filed on July 2, 2012 – Related Matters

(Comr. Ferron)

PROPOSED OUTCOME:

- Rejects without prejudice the Confirmation for Resource Adequacy Product.
- Pacific Gas and Electric Company (PG&E) may seek approval of the contracts within the existing Resource Adequacy procurement framework, as long as the associated megawatts do not count towards the Qualifying Facility and Combined Heat and Power Program targets.
- Provides additional guidance to PG&E for Combined Heat and Power solicitations in the future.

SAFETY CONSIDERATIONS:

- The agreement is denied and we anticipate no adverse impacts on safety as a result.

ESTIMATED COST:

- None.

Regular Agenda – Energy Resolutions and Written Reports

Item #39 [11953] Southern California Edison Company's two Confirmations for Resource Adequacy Capacity Products Executed with Calpine Energy Services, L.P.

Res E-4569 Advice Letter 2771-E Filed on August 31, 2012 – Related Matters

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PROPOSED OUTCOME:

- Approves, without modification, Southern California Edison Company's (SCE) two Confirmations for Resource Adequacy (RA) Capacity Products, which are two separate Agreements for Combined Heat and Power Resource Adequacy Capacity Product.
- 280.5 Megawatts (MW) of combined heat and power resource adequacy capacity associated with the Los Medanos Energy Center, LLC (LMEC).
- 120 MW of combined heat and power resource adequacy capacity associated with the Calpine Gilroy Cogen, L.P. (Gilroy)

SAFETY CONSIDERATIONS:

- The two agreements approved here are Confirmations for Resource Adequacy associated with the LMEC and Gilroy facilities. The Commission's jurisdiction extends only over SCE, not to either of the Calpine facilities. Based on the information before us, neither agreement appears to result in any adverse safety impacts on the facilities or operations of SCE.

ESTIMATED COST:

- Both contract costs are confidential at this time, since both the LMEC and Gilroy agreements for Combined Heat and Power Resource Adequacy Capacity Product contain competitive pricing terms for capacity. As both agreements are capacity-only transactions, there are no pricing components for energy deliveries, ancillary services, or other variable costs.

Regular Agenda – Energy Resolutions and Written Reports

Item #39a [12141] ALTERNATE TO ITEM 11953
Advice Letter 2771-E Filed on August 31, 2012 – Related Matters
(Comr. Peevey)

PROPOSED OUTCOME:

- Rejects, in its current form, Southern California Edison Company's (SCE) Confirmation for Resource Adequacy (RA) Capacity Product, which is an Agreement for Combined Heat and Power Resource Adequacy Capacity Product for (1) 280.5 Megawatts (MW) of combined heat and power resource adequacy capacity associated with the Los Medanos Energy Center, LLC, (2) 120 MW of combined heat and power resource adequacy capacity associated with the Calpine Gilroy Cogen, L.P.
- Provides guidance to SCE for potential modifications to the Agreements which the Commission would approve in a subsequent Tier 1 Advice Letter filing, and provides additional guidance to SCE for Combined Heat and Power solicitations in the future.

SAFETY CONSIDERATIONS:

- The two agreements approved here are Confirmations for Resource Adequacy associated with the Los Medanos Energy Center and Calpine Gilroy Cogen facilities. The Commission's jurisdiction extends only over SCE, not to either of the Calpine facilities. Based on the information before us, neither agreement appears to result in any adverse safety impacts on the facilities or operations of SCE.

ESTIMATED COST:

- None.

Regular Agenda – Energy Resolutions and Written Reports

Item #39b [12218] ALTERNATE TO ITEM 11953

Advice Letter 2771-E Filed on August 31, 2012 – Related Matters

(Comr. Ferron)

PROPOSED OUTCOME:

- Rejects without prejudice the Confirmation for Resource Adequacy Product.
- Southern California Edison Company (SCE) may seek approval of the contracts within the existing Resource Adequacy procurement framework, as long as the associated megawatts do not count towards the Qualifying Facility and Combined Heat and Power Program targets.
- Provides additional guidance to SCE for Combined Heat and Power solicitations in the future.

SAFETY CONSIDERATIONS:

- The two agreements are denied and we anticipate no adverse impacts on safety as a result.

ESTIMATED COST:

- None.

Commissioners' Reports

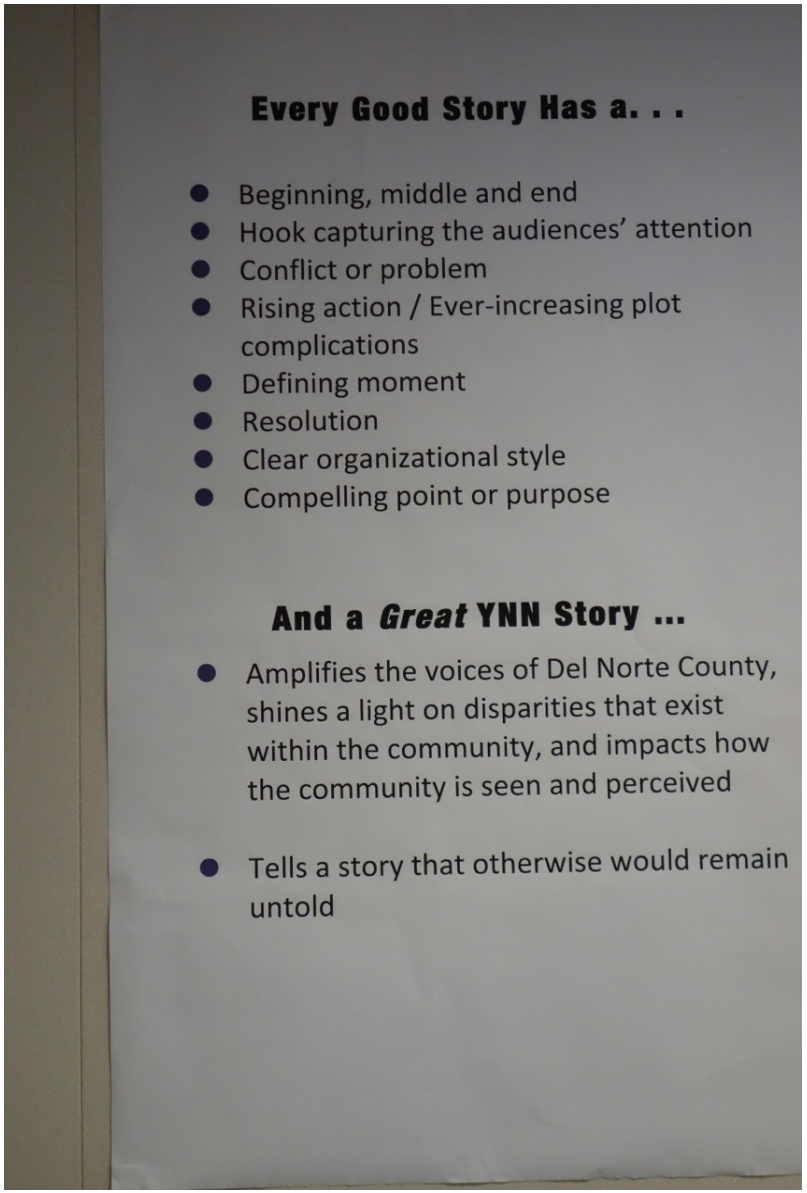
Humboldt and Del Norte Counties Visit

Commissioner Catherine Sandoval
California Public Utilities Commission

July 25, 2013

Presentation Overview

- Youth News Network, Crescent City
- Yurok Tribe
- Humboldt Nuclear Plant
- Humboldt County Meetings



Mission Statement,
Youth News Network,
Crescent City, CA

Youth News Network Team and Commissioner Sandoval

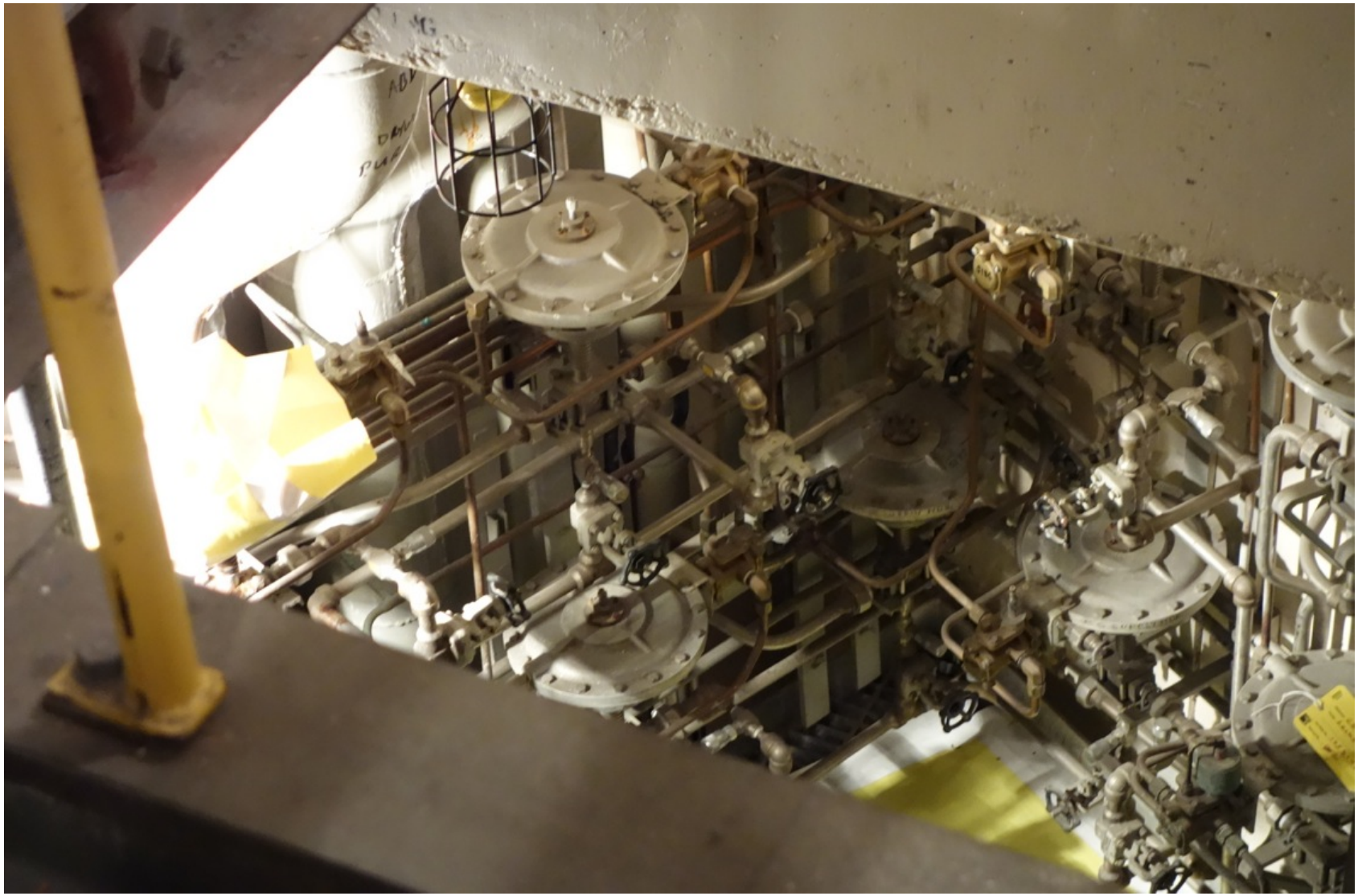
Commissioner Sandoval and Tim Hoone, Rural Human Services, Crescent City, CA

Youth News Network Lab

Commissioner Sandoval and Sean McLaughlin, Executive Director, Access Humboldt

Yurok Tribe Headquarters


VISITOR



Returning From the Bottom of the Containment Structure


CAUTION
CAUTION


CAUTION


CAUTION
RADIATION AREA

Material Being Shipped to Storage in Texas

View From Back of Humboldt Nuclear Power Plant

Broadband Policy Roundtable, Humboldt County Board of Supervisors Chambers, July 17, 2013.
Left to right: Amina Fazlullah, Director of Policy, Benton Foundation; Catherine Sandoval, CPUC; Elaine Carpenter, Vice President, ZeroDivide; Sean McGlauglin, Executive Director, Access Humboldt.

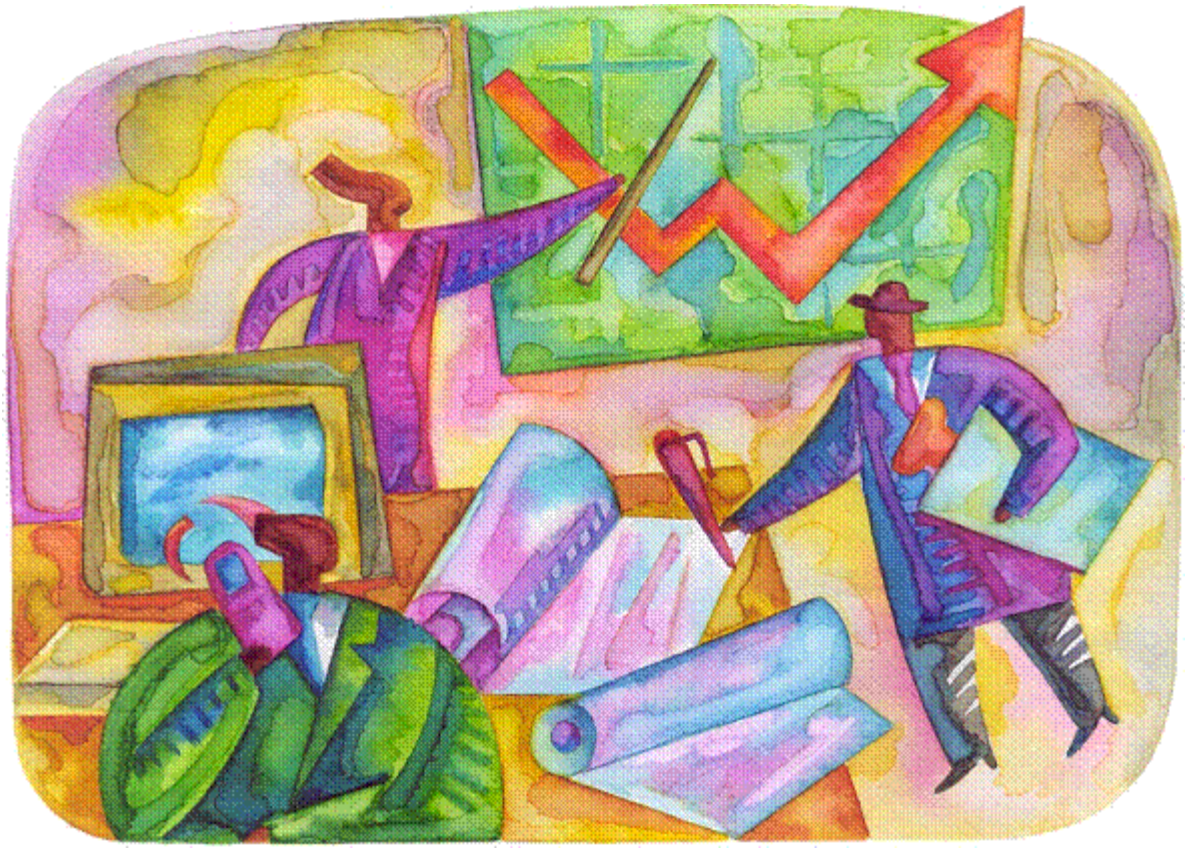
Sean McLaughlin, Executive Director, Access Humboldt

Amina Fazlullah, Director of Policy, Benton Foundation

Eureka LifeLine PPH, Humboldt Country Board of Supervisors Chambers, July 17, 2013. Left to right: Catherine Sandoval, Commissioner, CPUC; ALJ John Wong, CPUC.

Commissioners' Reports

Management Reports



Regular Agenda – Management Reports and Resolutions

Item #40 [12228]

Report and Discussion by Safety and Enforcement Division on Recent Safety Program Activities

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Rail Safety Staff Activities: Train Securement

Paul W. King, PhD
Deputy Director, Office of Rail Safety

Safety and Enforcement Division

July 25, 2013

Presentation Overview*

- Oil-train derailment tragedy, Lac-Mégantic, Canada, July 6, 2013.
- Northern oil field shipments.
- A primer on train brakes.
- California uncontrolled train movements.
- Canadian and U.S. train securement regulations.
- Transportation Safety Board of Canada safety advisories.
- SED staff inspections, activities.

* *Disclaimer: Much of the information in this presentation is preliminary and should be independently verified before further use. This is only intended to be a briefing, a primer, and material for further research and investigation.*

Lac-Mégantic, Canada, July 6, 2013, Oil-train Derailment and Fire

- Unattended oil train.
  - 72 loaded tank cars.
  - 5 locomotives.
  - 10,287 tons.
  - 0.9 mile long.
- Parked on 1.2 percent grade at Nantes.
- Ran uncontrolled 8 miles down-grade to downtown Lac-Mégantic .
- 63 tank cars derailed.
- 1.5 million gallons light crude spilled, ignited.
- 47 fatalities from explosion and fire.

Lac-Mégantic Oil-train Derailment (cont.)

Lac-Mégantic
town damage

Lac-Mégantic Oil-train Derailment (cont.)

Destroyed tank cars

Car type: USDOT Class DOT-111

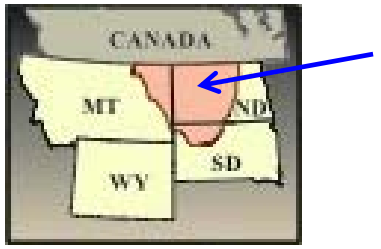
Lac-Mégantic Oil-train Derailment (cont.)

Some events, issues relevant to the investigation:

- How were brakes set?
- Did fire and locomotive shut-down affect:
  - Locomotive air brakes?
  - Locomotive handbrakes?
  - Train air brakes?
  - Train handbrakes?
- What operating rules? Reasonably executable? Ambiguity? Sufficient? Expectations of consequences? Compliance?
- Similar issues for regulations?
- Was sufficient training provided?
- Compliance assurance, competing demands?
- One-person crews?
- Mechanical defects, peculiarities in any of the three brake securement systems?
- Leaving train on main line?
- Use of derails?
- Integrity of tank cars?

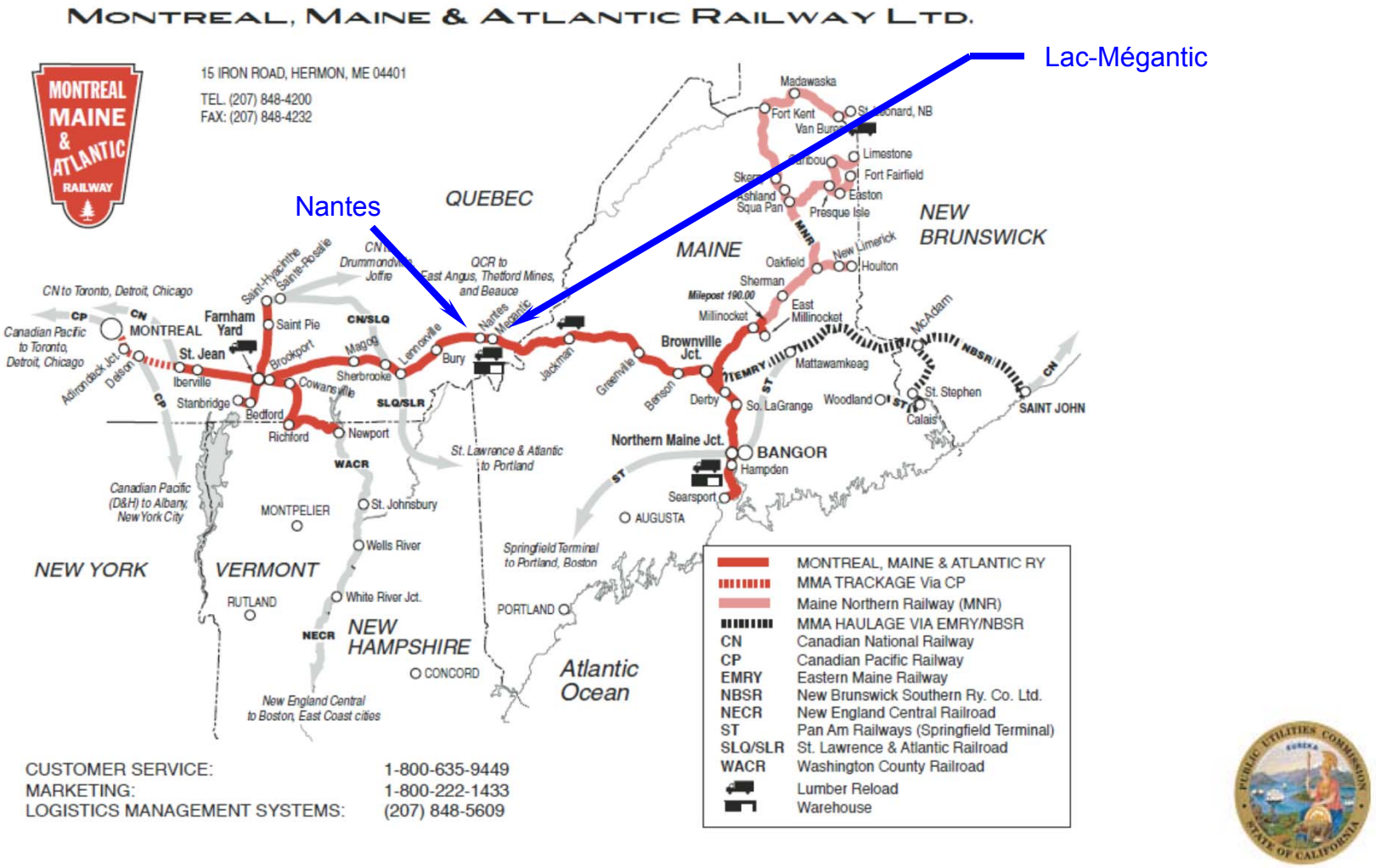
Lac-Mégantic Oil-train Derailment (cont.)

- Montreal, Maine, and Atlantic Railroad (MMA)
  - Canadian short-line railroad
  - One of two Canadian railroads that operate with only one crewmember.
- Oil shipment from the North Dakota Bakken Total Petroleum System (TPS).
- Via MMA train from Montreal to Saint John, New Brunswick, refineries.
- Implications for California.
  - Four 50-car trains per day to Benicia?
  - Other large hazardous materials shipments?



Bakken TPS

Lac-Mégantic Oil-train Derailment (cont.)

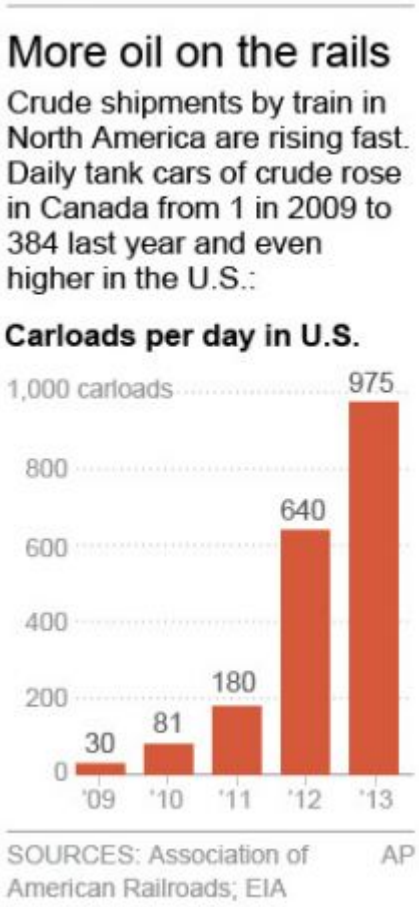


Lac-Mégantic Oil-train Derailment (cont.)

Tank car integrity

- U.S. Department of Transportation (DOT) car integrity requirements.
  - DOT-111
    - Car in Lac-Mégantic tragedy.
    - 2012 NTSB recommendations for retrofit integrity improvements.
      - Enhance head (end) and shell (side) puncture resistance.
      - Improve pressure relief valve and top fittings.
  - DOT-111S
    - New class, new standards.
    - Enhanced head (end) and shell (side) puncture resistance.
    - Improved pressure relief valve and top fittings.

Crude Oil Shipments from Northern Oil Field

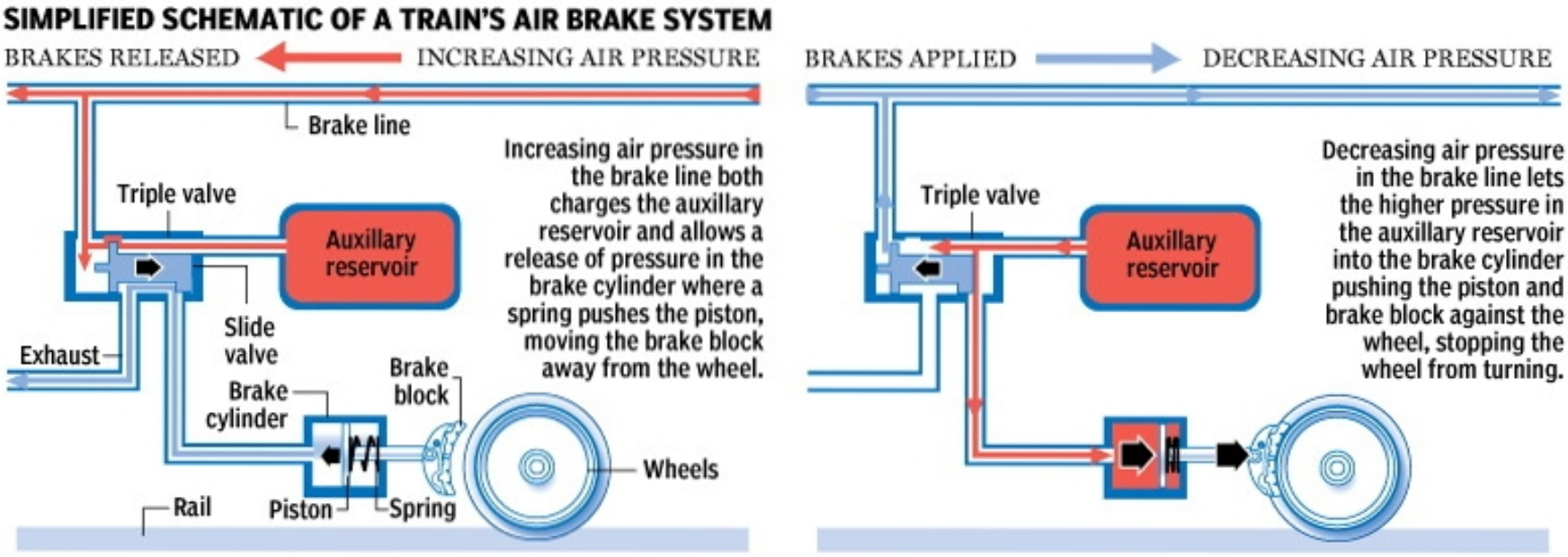


- Canada
  - 2009: 500 carloads/year.
  - 2013: 140,000 carloads/year (est).
- U.S.
  - 2009 1st half: 5,400 carloads/year.
  - 2013 1st half: 178,000 carloads/year.
- Bakken Formation
  - USGS estimates (recoverable):
    - 7.4 billion barrels crude oil.
    - 6.7 trillion cu. ft. natural gas.
    - 530 million barrels natural gas liquid.
  - Output outstrips shipping capacity.
  - Pipelines at capacity.
  - Heavy rail demand.

Train Brake Primer

- Handbrakes
  - On each car, secure standing car(s).
  - Moving trains:
    - Original 19th century system.
    - Speed controlled by brakemen walking on top of cars to set brakes on each car as train was moving.
- Air brake (train) – “Westinghouse Air Brake”
  - First invention simply applied air pressure to a brake cylinder on each car.
    - Increased air pressure in train air line applied brakes.
    - Decreased air pressure reduced brake force.
    - Complete air pressure loss released brakes.
    - Failed to unsafe.
  - “Triple valve” (control valve) invented as a more fail-safe brake.
    - Increased pressure releases brakes, decreased pressure applies brakes.
    - Air pressure loss initiates emergency brake application.
    - Fails to safe.*

Train Brake Primer (cont.)



Functional diagram of train air brake equipment on each car.
With brakes released, and with brakes applied.

Train Brake Primer (cont.)

- Modern control-valve air brake not completely fail-safe.
  - Speed and mass can exceed braking capacity.
  - Car air-brake reservoirs can be depleted with successive sets and releases without time to recharge.
  - Current FRA regulation requires trains to be stopped if exceeding authorized speed by 5 mph.

– Electronically controlled pneumatic (ECP) air brakes.
  - On some single-purpose “unit trains,” such as coal trains.
  - Electric cable runs length of train.
  - Brakes set and released electronically.
  - Air constantly charges air-brake reservoir.

– Locomotive dynamic brakes (not an issue in Lac-Megantic).

California Uncontrolled Train Movements

- Feather River Canyon, circa 1980.
  - Two “runaway” events, one fatality.
- 1989 Cajon Grade, San Bernardino.
  - Failure to control train speed with brake system. four fatalities.
  - Subsequent pipeline rupture and fire, two more fatalities.
- 1996 Cajon Grade, Cajon.
  - Failure to control train speed with brake system.
  - Two fatalities, hazardous materials release and fire.
- 2006 Beaumont Grade, Redlands (San Timoteo).
  - Failure to control with locomotive brake system.
  - Locomotive set derailed at high speed, no injuries.

Redlands 2006 locomotive derailment

Canadian and U.S. Train Securement Regulations

- Canadian Railroad Operating Rules, Rule 112 excerpts:
  - "When equipment is left at any point a sufficient number of hand brakes must be applied to prevent it from moving. Special instructions will indicate the minimum hand brake requirements for all locations where equipment is left."
  - "Before relying on the retarding force of the hand brake(s), whether leaving equipment or riding equipment to rest, the effectiveness of the hand brake(s) must be tested by fully applying the hand brake(s) and moving the cut of cars slightly to ensure sufficient retarding force is present to prevent the equipment from moving."
  - Railroad special instructions may provide guidance on "sufficient" and "minimum."
  - May be a Transport Canada compliance manual which may provide further guidance on the word "sufficient."

Regulations (cont.)

- U.S., Title 49, Code of Federal Regulations, Part 232.103(n) excerpts:
  - "A sufficient number of hand brakes shall be applied to hold the equipment."
  - "Railroads shall develop and implement a process or procedure to verify that the applied hand brakes will sufficiently hold the equipment with the air brakes released."
  - FRA Operating Practices Compliance Manual provides additional guidance on determining compliance with this section.
    - Excerpt: "A railroad simply stating in their operating rules or in their operational testing program that there will be a "sufficient" number of hand brakes, is not acceptable."
    - Excerpt: [Determine] "the precise number of handbrakes found to be fully applied, the precise number of handbrakes not fully applied, and the precise number of handbrakes required at that location."
  - Railroad special instructions should provide explicit guidance.

Number of Handbrakes to be Applied*					
	Railroad Grade				
Tons	0.25	1.00	1.25	2.00	3.00
< 1000	2	3	3	5	9
1000 +	3	5	6	10	20
3000 +	5	8	10	16	30
5000 +	6	12	15	24	39
7000 +	7	16	21	32	53
9000 +	9	20	25	40	65
10000 +	10	22	25	44	100%
11000 +	11	24	30	48	100%
13000 +	15	28	35	56	100%

Grade (%) columns apply until you reach the next higher Grade (%) shown.

* Minimum number of hand brakes required if unable to verify that sufficient hand brakes have been applied by release of the air brakes.

22 If applicable and applied to Lac-Megantic train, with 1.2% grade, 10,287 tons. Assumes available information on total tonnage includes approx. 1,000 tons for locomotives.

Transportation Safety Board of Canada Safety Advisories

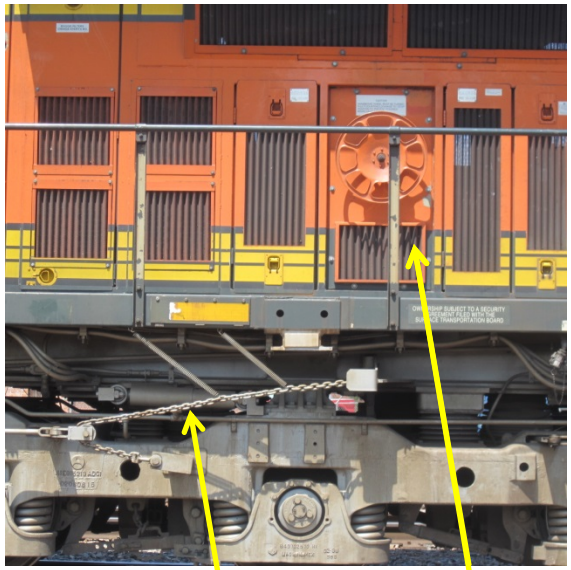
- CROR Rule 112 ensures that hand brakes are applied to prevent unwanted movement of the train while providing flexibility for a railway's operating needs. However, CROR Rule 112 is not specific enough in that it does not indicate the number of hand brakes necessary to hold a given train tonnage on various grades and it continues to be left up to the operating employee to determine the number of handbrakes to apply.
- It has been demonstrated that the push-pull test is not always a good indicator of whether an adequate number of hand brakes have been applied and not all handbrakes are effective even when properly applied.
- Considering all these risks, Transport Canada may wish to review CROR Rule 112 and all related railway special instructions to ensure that equipment and trains left unattended are properly secured to prevent unintended movements.
- Transport Canada may wish to consider reviewing all railway operating procedures to ensure that trains carrying dangerous goods are not left unattended on the main track.

SED Staff Inspections and Activities

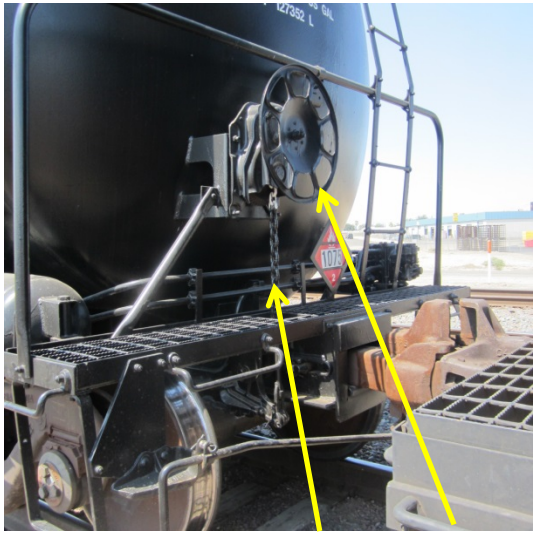
SED staff inspections of unattended equipment.

- Motive Power & Equipment inspectors.
  - Primarily inspect for handbrake condition, function, proper use.
- Operating Practices inspectors
  - Primarily determine compliance with railroad rules.
    - Determine applicable securement rules.
    - Determine appropriate number of handbrakes to be set.
    - Determine number of handbrakes set.
    - Derails set?

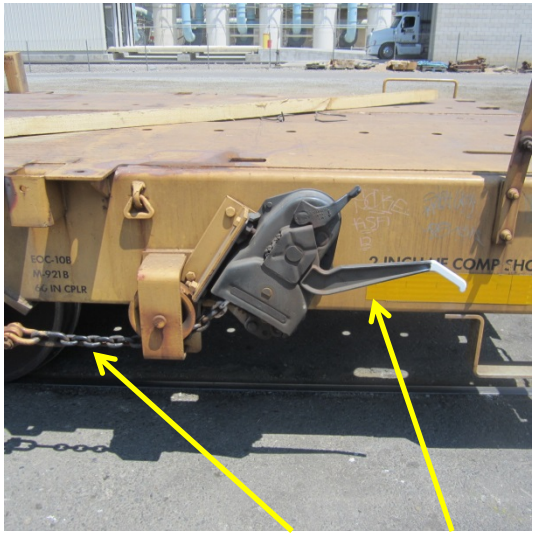
Locomotive handbrake chain Locomotive handbrake wheel



Handbrake chain Handbrake wheel



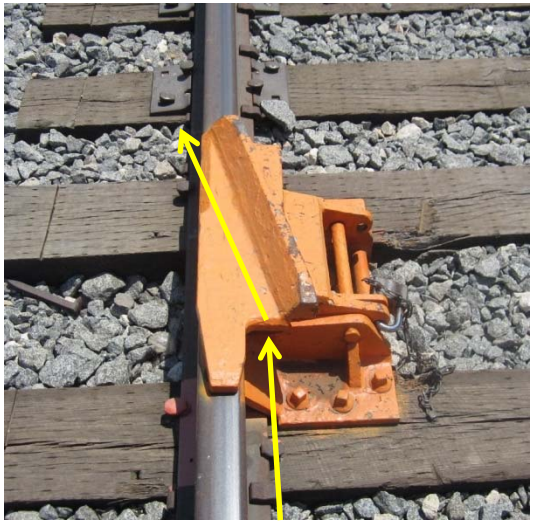
Tank car handbrake chain and wheel



Flat car handbrake, loose chain, lever

Checking handbrake

Derail



Derail showing wheel flange path

Wheel chock or block or “skate”

SED Staff Inspections and Activities

SED activities post-Lac-Mégantic derailment.

- SED staff staying informed re Lac-Mégantic investigation.
  - Unfolding facts, insights.
  - Safety advisories.
- Informal discussions with other agencies.
- Informal discussions with railroads, unions.
- Review of current railroad rules for securement.
  - Clarity, adequacy, possible weaknesses.
- Review of FRA compliance assessment practices.

Regular Agenda – Management Reports and Resolutions

Item #40 [12228]

Report and Discussion by Safety and Enforcement Division on Recent Safety Program Activities

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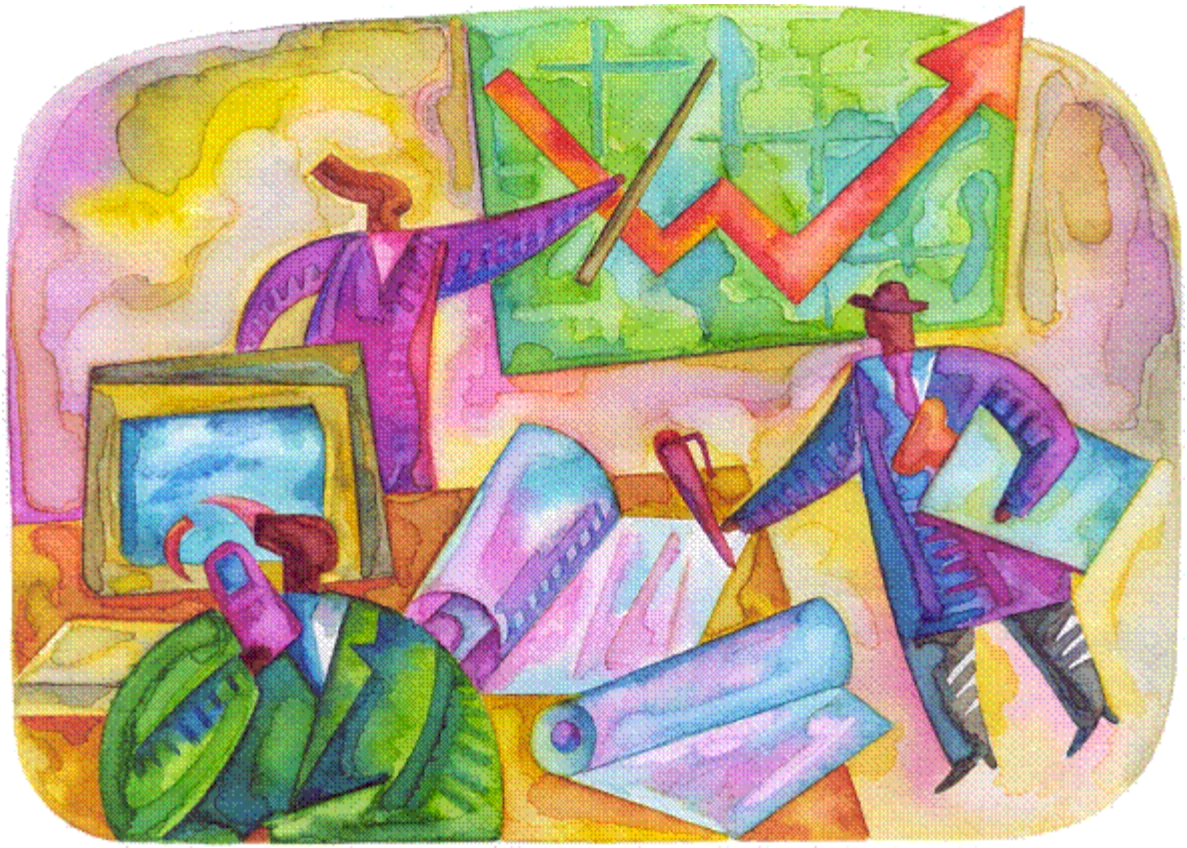
Management Reports



The CPUC Thanks You For Attending Today's Meeting

The Public Meeting is adjourned.

The next Public Meeting will be:

August 15, 2013, at 9:30 a.m. in Carmel-by-the Sea, CA