

# **Preliminary Energy Division-Proposed Program Performance Metrics and Market Transformation Indicators**

**SCE AL XXXX  
PG&E AL XXXX  
SoCalGas AL XXXX  
SDG&E AL XXXX**

**September 15, 2010**

## Codes and Standards Candidate PPMs

	<b>Mission</b>
<b>SW Program: Codes and Standards</b>	<p>The Codes and Standards (C&amp;S) Program saves energy on behalf of ratepayers by directly influencing standards and code-setting bodies to strengthen energy efficiency regulations, by improving compliance with existing codes and standards, and working with local governments to develop ordinances that exceed statewide minimum requirements.</p> <p>Subprograms include:            (1) Building Codes: Advocacy, Extension of Advocacy (EOA) and CASE Studies            (2) Appliance Standards: Advocacy, Extension of Advocacy (EOA) and CASE Studies            (3) Compliance Enhancement (CE): Measure-Based &amp; Holistic            (4) Reach Codes</p> <hr/> <p><i>SW Program Goal (1) The C&amp;S Program will provide a direct response to the CPUC's first goal by specifically addressing each near-term strategy in the Strategic Plan. Through the advocacy activities, the program will:</i></p> <ul style="list-style-type: none"> <li>• <i>Continue to expand Title 24 Building and Title 20 Appliance Efficiency Regulations through improved research to identify current code and compliance shortcomings, new technologies and processes, and latest thinking on breadth (scope) and depth (stringency) of possible standards</i></li> <li>• <i>Develop aggressive proposals to accelerate regulations for both Title 20 appliance efficiency standards and Title 24 building standards</i></li> <li>• <i>Support leading activities such as statewide reach standards (e.g., codes that include California Green Building Standard) and the coordinated development and adoption of advanced local government ordinances.</i></li> <li>• <i>Coordinate with both internal and external organizations on an ongoing basis, including voluntary programs and national standards organizations</i></li> </ul> <p>(Ref: AL)</p> <hr/> <p><i>SW Program Goal (2) To address goal 2, C&amp;S will expand Extension of Advocacy activities and launch the new Compliance Enhancement (CE) subprogram. The Program will leverage existing, and develop new education and outreach activities to equip both building and appliance industry market actors with the knowledge and tools needed to comply with Title 24 building energy efficiency standards and Title 20 appliance efficiency regulations. Expanding the Program to include CE will help ensure that the full potential of the state's codes and standards efforts are realized, and results in a comprehensive C&amp;S Program.</i></p> <p>(Ref: AL)</p>

<b>CA EESP Goals/Strategies Addressed by C&amp;S Program:</b>	<b>CA EESP Ref. pp. #</b>
CA EE SP Goal (1) Continually strengthen and expand building and appliance codes and standards as market experience reveals greater efficiency opportunities and compelling economic benefits Goal Results: California's codes and standards will support this Plan's residential, commercial, and HVAC sector goals	AL
CA EE SP Strategy 1-1 Develop a phased and accelerated approach to more stringent codes and standards CA EE SP Strategy 1-2 Expand Titles 24 and 20 to address all significant energy end uses CA EE SP Strategy 1-3 Improve code research and analysis CA EE SP Strategy 1-4 Improve coordination of State energy codes and standards with other state and Federal regulations CA EE SP Strategy 1-5 Improve coordination of energy codes and standards with utility programs	AL
CA EE SP Goal (2) Dramatically improve code compliance and enforcement Results: Energy savings from codes and standards will be fully realized	AL
CA EE SP Strategy 2-1 Improve code compliance and enforcement	AL
CA EE SP Strategy 3-4 Continuously strengthen standards, including the expansion of both T 24 and T 20 to codify advanced in plug loads management	Staff/ SP page 22

<b>Long-Term (2013-2020) Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
1. By 2020, Title 24 will require ZNE for Residential Buildings.	Staff/SP page 68	
2. By 2030, Title 24 will require ZNE for Commercial Buildings.	Staff/SP page 68	
3.		IOU COMMENT from Strategic direct incentives relevant to C&S
4. By 2015 incorporate mandatory onboard diagnostic system in equipment standards.	Staff/SP page 66	
5. By 2020 incorporate mandatory onboard diagnostic system in buildings codes.	Staff/SP page 66	
6. By 2015, 80% of transactions that trigger T24 requirements for existing homes will comply with all applicable requirements.	Staff/SP, page 21	
7. By 2016, current non-compliance rates with C&S is halved & by 2020, full compliance with most up to date C&S.	Staff/SP page 90	

<p>8. HVAC in commercial buildings:</p> <ul style="list-style-type: none"> <li>a. By 2015, 50% of HVAC installation in commercial sector comply with codes via permits</li> <li>b. By 2020, 90% of HVAC systems are installed to code and optimally maintained for systems' useful life.</li> <li>c. By 2020, 100% of HVAC systems are installed to quality standards.</li> </ul>	Staff/SP page 38 & page 60	
<p>9. Code Compliance:</p> <ul style="list-style-type: none"> <li>a. By 2015, investigate tools, software programs, "incentives" and policies to simplify and streamline permit process.</li> <li>b. By 2015, apply feasible mechanisms to prove code compliance as a pre-requisite for partnership funding or incentives from the IOUs.</li> </ul>	Staff/SP page 69	
<p>10. Advanced Voluntary Standards:</p> <ul style="list-style-type: none"> <li>a. In 2017, advanced voluntary standards towards Residential ZNE incorporated in T24.</li> <li>b.</li> </ul>	Staff/SP page 17	
<p>11. Increase in regional consistency of Reach Codes (countywide or geographically contiguous jurisdictions) in jurisdiction in the IOUs service territories.</p>	Staff/PGE PIP (page 83)	

*\*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]*

Long-Term MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU
1. % of buildings in California (a) Residential (b) Commercial that are built to comply with code targeting ZNE technologies, practices and design	Staff	3	N	
2. Number of utility incentivized EE measures that become part of the following code cycle (e.g. measures incentivized in 2006-2008 would be part of 2011 or 2014 code) targeting the following: a. advanced climate-appropriate HVAC technologies (equipment controls, including system diagnostics) b. Whole Building approaches in Commercial buildings c. Whole House approaches in Residential homes d. Advanced Lighting e. High efficient peak reduction technologies including plug loads f. Insert other categories	Staff	3	N	IOU COMMENT "categories" in categories."
3. Compliance rates of T24 in (a) existing homes and (b) commercial buildings in California.	Staff	3	N	
4. Compliance rates of T24 in (a) new homes (b) new commercial buildings in California.	Staff	3	N	
5. % of building departments (jurisdictions) that adopt and use tools identified as industry best practices to improve permit application, tracking, and inspection processes and increase regional consistency.	Staff	3	Y (Need to identify existing practice as baseline)	
6. Number of measures from Voluntary beyond code standards and rating systems (LEED, CHPS, 189) that are incorporated into mandatory T24 Standards in the Residential and Commercial Sectors. (a) In 2017, advanced voluntary standards towards Residential ZNE incorporated in T24.	Staff	3	N	IOU COMMENT and purpose of
7. Number of Jurisdictions in California implementing Reach Codes in the Residential and Commercial Buildings.	Staff	3	N	

\*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

\*\*Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.

## Codes & Standards – Building Standards Advocacy Subprogram

	<b>Mission</b>
SW Program: <b>Codes &amp; Standards</b>	<p>The C&amp;S Program conducts advocacy activities to improve building efficiency regulations. The principal audience is the California Energy Commission (CEC) which conducts periodic rulemakings, usually on a three-year cycle (for building regulations).</p> <p>Codes And Standards Enhancement (CASE) studies, focused on energy efficiency improvements, are developed for promising design practices and technologies and presented to standards- and code-setting bodies. Advocacy also includes affirmative expert testimony at public workshops and hearings, participation in stakeholder meetings, ongoing communications with industry, and a variety of other support activities.</p> <p>Extension of advocacy activities, in particular, include compliance improvement efforts carried out as continuing advocacy for codes or standards adopted as a result of the Program. Following adoption, C&amp;S supports compliance improvement with both Title 24 building codes.</p>
SW <u>Sub-program</u> : <b>Building Standards Advocacy</b>	

<b>Short-term (2010-2012) “SMART” <u>Sub-program</u> Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
<p>1. By 2012, X CASE Studies targeting ZNE technologies, practices and design including high efficiency plug loads, in Residential that are presented to and Y studies adopted by the CEC.</p> <p>IOU PROPOSED: By 2012, develop at least XX draft Residential CASE studies targeting efficient technologies practices and design in the areas of: lighting; HVAC; envelope; water heating; and cross-cutting measures in support of ZNE goals, with the IOU anticipation that Y studies would be adopted, subject to CEC discretion. Additionally, drafted CASE Studies may be consolidated during the process, thereby reducing the final number of CASE studies. Adoption is defined as approval by a majority of CEC commissioners during a business meeting at the end of the hearing process.</p>	Staff/SP Strategies 1-2, page 17	<p>IOU EDITS: By XX <i>draft</i> Residential targeting efficient technologies practices, and lighting; HVAC heating; and/ measures in s with the IOU a studies would to CEC discret</p> <p>Drafted CASE consolidated development reducing the f studies. Cons studies will be</p>

		<p>Draft is defined as a CASE study submitted to the CEC prior to the rulemaking proceeding.</p> <p>Adoption is defined as a CASE study by the CEC at a commissioner meeting at the end of the hearing process.</p> <p>ED COMMENT: &amp; 11 (CalGreen)</p> <p>ED COMMENT: Y's as possible</p>
<p>2. By 2012, X CASE Studies targeting ZNE technologies, practices and design in Commercial that are presented to and Y studies adopted by the CEC, including the following:</p> <ul style="list-style-type: none"> <li>a. Integrated design in Commercial Buildings including: metering and data management; automated diagnostic systems; and sub-metering of tenant-occupied spaces.</li> <li>b. Whole Building approaches in Commercial Buildings including HVAC aspects.</li> </ul> <p>IOU PROPOSED: By 2012, at least XX Commercial CASE studies targeting efficient technologies practices and design in each of the following areas: lighting; HVAC; envelope; water heating; and cross-cutting measures in support of ZNE goals including:</p> <p>IOU PROPOSED: By 2012, develop at least XX draft Commercial CASE studies targeting efficient technologies practices and design in the areas of: lighting; HVAC; envelope; water heating; and cross-cutting measures in support of ZNE goals, with the IOU anticipation that Y studies would be adopted, subject to CEC discretion. Additionally, drafted CASE Studies may be consolidated during the process, thereby reducing the final number of CASE studies. Adoption is defined as approval by a majority of CEC commissioners during a business meeting at the end of the hearing process. CASE Studies will support:</p> <ul style="list-style-type: none"> <li>a. Integrated design in Commercial Buildings. <i>[Sub metering is not on the list of mutually agreed upon studies by CEC &amp; IOUs; however, sub metering is being researched as part of the ZNE Action Plan.]</i></li> <li>b. HVAC program objectives for Whole Building approaches in Commercial Buildings.</li> </ul>	<p>Staff/(a)SP Strategies1-2, page 34 &amp; (b) SP Strategies 3-2, page 63</p>	<p>IOU EDITS: By XX <i>draft</i> Commercial CASE studies targeting efficient technologies practices and design in the areas of: lighting; HVAC; envelope; water heating; and cross-cutting measures in support of ZNE goals, with the IOU anticipation that Y studies would be adopted, subject to CEC discretion. Standards proposed:</p> <ul style="list-style-type: none"> <li>a. Integrated design in Commercial Buildings.</li> <li>b. HVAC program objectives for Whole Building approaches in Commercial Buildings.</li> </ul> <p>Drafted CASE Studies may be consolidated during the process, thereby reducing the final number of CASE studies.</p>



	<p>studies. Consistent studies will be</p> <p>Draft is defined as a CASE study submitted prior to the rulemaking proceeding.</p> <p>Adoption is defined as a CASE study by the commissioner at a meeting at the rulemaking process.</p> <p>ED COMMENT: SB 11 (CalGreen)</p> <p>ED COMMENT: already advocated resurrected and mapping ZNE-rules goals identified not below code “primetime”</p> <p>IOU COMMENT: <i>Commercial service is prohibited except Section B.2.b., B2 b. Multi-Term Service</i>  <i>. Where a master installs, owns, or submeters on its distribution system of dynamic pricing conservation in</i></p>
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		<p><i>cost of electricity for commercial buildings billed at the same rate as a meter billed by the utility. CPUC approved the master metering program.</i></p> <p>IOU COMMENT: utilities cannot bill for the meter however utilities are required to bill to end users. The various metering programs currently in use. The master meter is used to bill a building owner to bill a utility. Title 49 regulations require that a meter be classified as a building meter if it is used solely to bill the owner of a building. The owner would be responsible for a utility and would be responsible for the meter (Gorman)</p>
<p>3. By 2012, adopt ANSI standards into T24 to replace current T24 optional quality control requirements with mandatory requirements (ANSI QI/QM).  IOU PROPOSED: By 2012, support the HVAC program and industry in developing future standards for QI related to ACCA/ANSI standards to replace current T24 optional quality control requirements with mandatory requirements.</p>	<p>Staff/SP page 60</p>	<p>IOU EDITS: By 2012, support the HVAC program and industry in developing future standards for QI related to ACCA/ANSI standards to replace current T24 optional quality control requirements with mandatory requirements.</p> <p>ED EDITS: By 2012, support the HVAC program and industry in developing future standards for QI related to ACCA/ANSI standards to replace current T24 optional quality control requirements with mandatory requirements.</p>

		standard(s). ***IOUs mod long as identifi track****  IOU COMMENT ACCA/ANSI sta current code r with HVAC pa Work on seco soon (Randall
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Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU
<p>1. <i>Number of Code Enhancement Proposals submitted to the CEC (mutually agreed upon by IOU and CEC, to address significant energy savings to the CEC docket, within authorized budget)</i></p> <p>IOU PROPOSED: Number of CASE Study proposals developed as mutually agreed upon by IOUs and CEC, to address significant energy savings to the CEC docket, within authorized budget.</p>	AEO based on AL	2a	N	IOU EDITS: Nu proposals dev agreed upon b address signif within author
<p>2. <i>Number of CASE studies that are adopted by the CEC Rule-making (as the result of program advocacy) that address each of the following:</i></p> <p>(a) Whole Building and Integrated Design, including metering and data management, automated diagnostic systems, and sub-metering of tenant-occupied spaces Sector, with emphasis on HVAC aspects of Whole Building</p> <p>(b) ZNE technologies, practices, and design in Residential Sector</p> <p>(c) Peak efficient technologies including plug loads and HVAC technologies</p> <p>(d) Advanced Lighting Technologies</p> <p>IOU PROPOSED: Number of Residential and Commercial CASE studies for which adoption by the CEC is anticipated by the IOUs, targeting efficient technologies practices and design in each of the following areas: lighting; HVAC; envelope; water heating; and cross-cutting measures in support of the following:</p>	AEO based on SP	2b	N	IOU EDITS: Nu and Commerc which adoptio anticipated by efficient techn design in each areas: lighting water heating measures in s following: (a) Integrated data manager

<p>(a) Integrated Design, including data management and automated diagnostic systems, with emphasis on HVAC aspects of Whole Building</p> <p>(b) ZNE technologies, practices, and design in Residential Sector</p> <p>(c) Peak efficient technologies including plug loads and HVAC technologies</p> <p>(d) Advanced Lighting Technologies</p>			<p>diagnostic systems on HVAC aspects of Whole Building</p> <p>(b) ZNE technologies and design in Residential Sector</p> <p>(c) Peak efficient technologies including plug loads and HVAC technologies</p> <p>(d) Advanced Lighting Technologies</p> <p>of Residential Sector CASE studies in adoption as an IOU. The CA efficient technologies design in each area: lighting water heating measures in the following:</p> <p>(a) Integrated Design, including data management and automated diagnostic systems on HVAC aspects of Whole Building</p> <p>(b) ZNE technologies, practices, and design in Residential Sector</p> <p>(c) Peak efficient technologies including plug loads and HVAC technologies</p> <p>(d) Advanced Lighting Technologies</p> <p>IOU COMMENT per objective</p>
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\*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

\*\*Metric type: 2a = reported annually, 2b = reported by end of cycle.

<p><b>Long-Term (2013-2020) "SMART" Sub-program Objectives:</b></p>	<p><b>Source (SP, AL, DR, PIP, or Staff)*</b></p>	<p><b>IOU</b></p>
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None proposed.		
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<b>Long-Term Sub-program MT Indicators:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>Metric Type (3)**</b>	<b>Baseline Study Required (Y/N)</b>	<b>IOU</b>
None proposed.				

## Codes & Standards – Appliance Standards Advocacy Subprogram

	<b>Mission</b>
<b>SW Program: Codes &amp; Standards</b>	<p>This sub-program conducts advocacy activities to improve appliance efficiency regulations. The principal audience is the California Energy Commission (CEC) which conducts periodic rulemakings, usually on a three-year cycle (for building regulations), to update appliance energy efficiency regulations.</p> <p>Codes And Standards Enhancement (CASE) studies, focused on energy efficiency improvements, are developed for promising design practices and technologies and presented to standards- and code-setting bodies. Advocacy also includes affirmative expert testimony at public workshops and hearings, participation in stakeholder meetings, ongoing communications with industry, and a variety of other support activities.</p> <p>Extension of advocacy activities, in particular, include compliance improvement efforts carried out as continuing advocacy for codes or standards adopted as a result of the Program. Following adoption, C&amp;S supports compliance improvement with Title 20 appliance standards.</p> <p>The sub-program participates in DOE proceedings and legislative negotiations leading to federal regulations that are passed through to California; in particular, Title 20 appliance efficiency regulations that are the same as Federal regulations.</p>
<b>SW Sub-program: Appliance Standards Advocacy</b>	

<b>Short-term (2010-2012) “SMART” Sub-program Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
<p>1. By 2012, X CASE Studies targeting plug loads, HVAC technologies, and advanced lighting that are presented to the DOE.</p> <p>IOU PROPOSED: By 2012, develop at least XX CASE Studies (if mutually agreed upon by the CEC and IOUs) in support of plug loads, refrigeration, advanced lighting, and other technologies with the IOU anticipation that Y proposals would be adopted, subject to CEC discretion. Additionally, drafted CASE Studies may be consolidated during the process, thereby reducing the final number of CASE studies. Adoption is defined as approval by a majority of CEC commissioners during a business meeting at the end of the hearing process.</p>	AEO/SP	<p>IOU EDITS: By XX CASE Studi upon by the C support of plu advanced ligh technologies v anticipation th be adopted, s discretion.</p> <p>Additionally, c may be conso process, there number of CA</p>

		<p>Adoption is de CASE study by commissioner meeting at the process. IOU COMMENT only 1 study a aren't adopte cycle, only 1 v</p> <p>ED COMMENT area, not so m</p>
<p>2. <i>By 2012, submit xx proposals to federal standards proceedings to address high efficient plug loads</i> IOU PROPOSED: By 2012, actively participate in at least XX U.S. DOE rulemakings in support of plug loads, HVAC technologies, refrigeration, advanced lighting, and other technologies.</p>	<p>AEO derived from AL &amp; SP</p>	<p>IOU EDITS: By participate in rulemakings in loads, HVAC t refrigeration, other technol</p> <p>ED EDITS: By 2 proposals/tec the comment proceedings a for the IOUs.</p> <p>IOU COMMENT preselect a nu rulemakings a invitation only</p>

<b>Short-term <u>Sub-program</u> PPMs:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>Metric Type (2a or 2b)**</b>	<b>Baseline Study Required (Y/N)</b>	<b>IOU</b>
<p>3. Number of CA T20 Standards adopted into DOE Ruling (as the result of program advocacy) that address :</p> <p>(a) Plug loads (such as copy machines, printers, battery charges etc.)</p> <p>(b) Advanced Lighting Technologies</p>	<p>AEO based on SP</p>	<p>2b</p>	<p>N</p>	<p>IOU EDITS: Nu in support of refrigeration, and other tech</p>

(c) New climate appropriate HVAC technologies (equipment and controls, including systems diagnostics). IOU PROPOSED: Number of CASE Studies in support of plug loads, refrigeration, advanced lighting, and other technologies that are adopted by the CEC.				adopted by the discretion.
4. IOU PROPOSED: Number of U.S. DOE rulemakings supported by IOU's Codes and Standards Program [through advocacy activities such as letters, comments, laboratory testing, and other technical research and analysis] in support of plug loads, HVAC, advanced lighting, and other technologies.				IOU EDITS: Number of rulemakings supported by Codes and Standards Program [through advocacy activities such as letters, comments, laboratory testing, and other technical research and analysis] in support of plug loads, HVAC, advanced lighting, and other technologies subject to DOE.

\*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

\*\*Metric type: 2a = reported annually, 2b = reported by end of cycle.

<b>Long-Term (2013-2020) "SMART" Sub-program Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
None proposed.		

<b>Long-Term Sub-program MT Indicators:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>Metric Type (3)**</b>	<b>Baseline Study Required (Y/N)</b>	<b>IOU</b>
None proposed.				



## Codes & Standards – Compliance Enhancement Subprogram

	<b>Mission</b>
SW Program: <b>Codes &amp; Standards</b>	Compliance Enhancement (CE) subprogram activities – in that, these are not carried out as Extension of advocacy – include two elements based on the CPUC’s Evaluator’s Protocol for Code Compliance Enhancement Programs: 1) the measure-based element is aimed at codes or standards not adopted as a result of the Program, similar to extension of advocacy efforts, and 2) the holistic compliance enhancement subprogram seeks to improve building department energy code enforcement processes from beginning to end. Compliance improvement responds to the CPUC’s interest in robust implementation of existing standards and support for the California Long Term Energy Efficiency Strategic Plan’s HVAC Big Bold strategies.
SW <u>Sub-program</u> : <b>Compliance Enhancement</b>	

<b>Short-term (2010-2012) “SMART” <u>Sub-program</u> Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
<p>1. By 2012, develop a compliance plan for existing homes to identify :</p> <ul style="list-style-type: none"> <li>a. Measures to support enforcement of local energy efficiency C&amp;S and</li> <li>b. Opportunities for leveraging Title 24 and local codes enforcement.</li> </ul> <p>IOU PROPOSED: By 2012, support of the California Energy Commission and government partnerships to increase compliance by developing a compliance improvement advisory group (including HVAC advisory committee) and implementing a building department best practices program, in collaboration with IOU energy training centers, incentive programs, and other stakeholders.</p>	Staff/SP p. 21	<p>IOU EDITS: By CEC and govern increasing con residential an building energ</p> <ul style="list-style-type: none"> <li>1. Developin improvem for existin include th committe</li> <li>2. Implemen departme program, IOU energ incentive stakeholc</li> </ul> <p>The complian advisory grou</p> <ul style="list-style-type: none"> <li>1. Measur</li> </ul>

		enforce efficient 2. Opport Title 24 enforce
	Staff/SP p. 38	
<p>2. By 2012, provide XX comprehensive training and outreach programs targeting builders, contractors, designers, retailers, manufacturers and distributors of T20, T24 requirements.</p> <p><i>IOU PROPOSED: By 2012, provide 60+ (SCE? Sempra?) role based, Title 24, training sessions, in cooperation with energy training centers and other EE programs, targeting building departments, energy consultants, and contractors. Based on a future needs assessment, develop and implement outreach plan for Title 20 appliance standards that targets designers, contractors, retailers, manufacturers, and distributors. (check March 25 PIP)</i></p>		<p>IOU EDITS: By (SCE? Sempra) training sessio with energy tr other EE prog building depa consultants, a on a future ne develop and in plan for Title 2 that targets d retailers, man distributors.</p> <p>IOU COMMENT in March 25 P</p>
<p>3. Improve consumer awareness by x% of T20/T24 requirements of "targeted" measures as compared to 2008. (check PIP)</p>		<p>IOU COMMENT in March 25 P</p> <p>ED COMMENT assessment th evaluation; no reporting.</p> <p>ED EDITS: Imp participants' a and awareness for meeting co T20/T24 for re</p>

		permits in the commercial sector  Training participants (homeowners, training courses, training course refinement]  ***NO PPM with this objective: tracking methods and efforts
4. IOU PROPOSED: By 2012, distribute results of best practice studies to XX local governments for Residential and Commercial buildings.-		
5. IOU PROPOSED: By 2012, develop a report that identifies best practices and/or tools to support enforcement of energy efficiency codes and standards. Distribute report to XX local governments.-	Staff/PG&E PIP p. 88	IOU EDITS: By report that identifies and/or tools to support enforcement of energy codes and standards report to 100% of local governments Government PIP

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU
Reported easier enforcement of T24 and T20 in IOUs service territories as a result of IOU training and (Tools) as compared to 2008.	Staff/SP	2b	N N	
1. IOU Proposed: Number of role based, Title 24, training sessions delivered.				IOU EDITS: Number of Title 24, training sessions delivered

2	IOU Proposed: Complete Title 20 needs assessment and develop outreach plan.				IOU EDITS: Co assessment an plan.
3.	IOU Proposed: Number of local governments that received best practices report				IOU EDITS: Nu governments practices repo

<b>Long-Term (2013-2020) "SMART" Sub-program Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
None proposed.		

<b>Long-Term Sub-program MT Indicators:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>Metric Type (3)**</b>	<b>Baseline Study Required (Y/N)</b>	<b>IOU</b>
1. Compliance rates after building departments adopt improved compliance tools (resulting from IOUs training) in existing buildings (retrofits) and new construction. IOU PROPOSED: X recommendations and/or develop at least one tool from best practices study.	Staff/PIP	2b	Y	IOU EDITS: De tool from best  ED COMMENT should be mo delete. If only worth it. Need

## Codes & Standards – Reach Codes Subprogram

	<b>Mission</b>
SW Program: <b>Codes &amp; Standards</b>	This sub-program advocates for the development and implementation of “reach codes” that exceed minimum state code requirements and may be adopted by local jurisdictions or agencies. The Program monitors and/or participates in a wide range of activities or proceedings that have direct or indirect impacts on California regulations including, but not limited to American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), international activities including Europe, Asia, Canada, and Australia, voluntary standards such as green building codes, and ratings organizations such as the Cool Roof Rating Council (CRRC), National Fenestration Rating Council (NFRC), and the United States Green Building Council (USGBC).
SW <u>Sub-program</u> : <b>Reach Codes</b>	

<b>Short-term (2010-2012) “SMART” <u>Sub-program</u> Objectives:</b>	<b>Source (SP, AL, DR, PIP, or Staff)*</b>	<b>IOU</b>
1. By 2012, map a trajectory for T24 mandatory and voluntary standards through 2020.	Staff/SP 21	
2. By 2012, C&S develops SW reach code templates to streamline the reach code adoption and compliance support IOU PROPOSED: By 2012, C&S develops new construction model reach code language to streamline reach code adoption. Coordinate with compliance improvement sub program efforts.	Staff/PGE PIP page 83	IOU EDITS: By new construction language to streamline reach code adoption. Coordinate with compliance improvement sub program efforts.
3. By 2012, produce consistent package of "reach code" that applicable at time-of-scale" while remain consistent with current T24 climate designations to reduce potential market confusion IOU PROPOSED: By 2012, produce a package of reach code documentation for each climate zone that is applicable to existing homes.	Staff/ (C&S PIP p.29).	IOU EDITS: By package of reach code documentation for each climate zone that is applicable to existing homes.  ED COMMENT: language about reach code was in PIP? (K)
4. <del>By 2012, with the support of C&amp;S program, CEC develops pre-approved model reach codes so as to eliminate duplicative LG development costs and facilitate subsequent adoption of code</del> IOU PROPOSED: By 2012, in cooperation with the CEC, the C&S program develops templates for reach	Staff/ (C&S PIP p.29).	IOU COMMENT: covered in #2 a

<p><del>codes so as to reduce duplicative LG development costs and facilitate subsequent adoption of code.</del></p>		<p>ED COMMENT</p>
<p>5. By 2012, IOUs encourage xx% of local government leadership and enforcement personnel to recognize benefits and support activities to optimize existing codes.</p> <p>IOU PROPOSAL: By 2012, IOUs conduct outreach to xx% of local governments to recognize benefits and support activities to optimize compliance with existing codes.</p> <p><i>IOU PROPOSED 2: By 2012, provide XX advocacy sessions targeting local governments, in cooperation with energy training centers and other EE programs.</i></p>	<p>Staff/PG&amp;E PIP page 87</p>	<p>IOU EDITS: By outreach to 20 governments jurisdictions in Government R by providing 9 to recognize b activities to op with existing c</p> <p><i>IOU PROPOSE 90 advocacy s governments, energy traini programs.</i></p> <p>ED COMMENT added "by pro sessions" to fi combine the t proposal, whi</p> <p>ED COMMENT and wording (</p>
<p>6. By 2012, develop XX CASE Studies in support of Title 24, Part 11 voluntary standards for Commercial Buildings.</p>	<p>Staff/SP p34</p>	<p>IOU EDITS: By CASE Studies Part 11 volunt Commercial B</p> <p>IOU COMMENT number</p> <p>IOU COMMENT</p>

		<p>standards are in all cases; m support comm coordinate de programs (Ra</p> <p>ED COMMENT language, agr Randall, are y studies to pha standards into T24? (Ayat)</p> <p>ED COMMENT programs see appropriate a Codes (Ken)</p>
<p>7. By 2012, xx of local jurisdictions will adopt reach code as a result of the RC sub-program activities, in residential and/or commercial sectors.</p> <p>IOU PROPOSED: By 2012, IOUs anticipate that XX local jurisdictions will adopt reach code in residential and/or commercial sectors as a result of RC sub program activities, subject to local jurisdiction discretion. Adoption is defined as ....</p>	<p>Ken Keating</p>	<p>IOU EDITS: By jurisdictions w residential an sectors as a re program activ jurisdiction di defined as nu applications r for reach code</p> <p>ED COMMENT: anticipate that "anticipate" as th based on wheth – why not leave language that fo like Case Studies (Ken)</p> <p>ED COMMENT:</p>

		Local Jurisdiction need to replace t CEC makes the c clarify that the ac is by the CEC and
		IOU COMMENT number

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU
1. Number of jurisdictions in IOU Service territories implementing Reach Codes in residential and/or commercial sectors as a result of the RC sub-program activities.	Staff	2b	N	IOU EDITS: Nu in IOU Service Reach Codes i commercial se the RC sub-pr  ED COMMENT

\*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

\*\*Metric type: 2a = reported annually, 2b = reported by end of cycle.

Long-Term (2013-2020) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU
None proposed.		ED COMMENT seem that we proven useful turned into m no one to date would be anot that we may j

Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU
None proposed.				



