# Workforce, Education, and Training - Centergies Subprogram

	Mission	IOU Comments
SW Program: WE&T	The Statewide IOU Workforce Education and Training (WE&T)	OK.
	Program represents a portfolio of education, training, and	
	workforce development planning and implementation funded by	
	or coordinated with the Investor-Owned Utilities. Education and	
	training are vital components of each of the IOU's energy	
	efficiency portfolio filings for 2009-2011 and are integral in	
	supporting the achievement of IOU energy savings targets and the	
	workforce objectives set forth in the California Long-Term Energy	
	Efficiency Strategic Plan (Strategic Plan). Workforce Education and	
	Training has become an important crosscutting activity for the	
	IOUs in an effort to not only educate and train current workers,	
	but to prepare future workers to be better able to successfully	
	perform the jobs needed to help achieve increased energy savings	
	targets for the IOUs and California's clean energy goals.	
SW <u>Sub</u> -program:	The WE&T Centergies Sub-Program is generally organized around	OK.
Centergies	market sectors and cross-cutting segments to facilitate workforce	
	education and training appropriate for achieving the energy	
	savings, demand reductions and related energy initiatives required	
	of the IOUs. The Energy Centers represent the largest component	
	of this Sub-Program and provide WE&T curriculum and related	
	deliverables—training courses, seminars, workshops, clean energy	
	technology demonstration, equipment efficiency testing,	
	interactive training exhibits and lectures—to promote industry	
	trends and developments for advancing energy efficiency as a	
	professional discipline.	

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP

	Ref. pp.#
Goal 1: Establish energy Efficiency education and training at all levels of California's educational systems.	p. 74
Goal 2: Ensure that all minority, low-income, and disadvantaged communities fully participate in training and education programs at all levels of the demand side energy management industry.	p. 74
<u>Strategy 1-2:</u> Support the community college and adult education efforts to support students to develop their education based on visible career paths in energy efficiency and related fields.	p. 77
Strategy 1-3: Incorporate EE and demand side energy management skills into traditional contractor and technician training.	p. 77
<u>Strategy 1-4:</u> Create or expand college and university programs with EE focus and foster green campus efforts to apply this knowledge in clear view of students and faculty	p. 77

Sho	ort-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
1.	By 2012, the number of Centergies program educational partnerships within all adult education levels (CCC, CSU, UC, Trade & Labor, Adult Education) increases by X% (identify proportion of partnerships that address low-income participants / communities). (SC1-minority and disadvantaged communities are addressed in #2)	above) / Statewide WE&T PIP p. 22 23	IOUs recommend modifying Objective- 1 to following:  Using 2011 as the baseline year, by 2012, the IOUs will increase the level of educational collaboration with partners by 10%.  IOU Rationale: Definition of educational collaboration includes seminars, outreach events and consultations are needed. These collaborations may include exchanges of monetary or in- kind support and services (i.e., sharing meeting facilities, marketing/promotional services, etc.).
2.	By 2012, the number of identified low-income (pre-determined criteria) Centergies program participants increases by X%.		IOUs recommend changing Objective-2 to following:

	Statewide WE&T PIP p. 22	Using 2011 as the baseline year, by 2012, the IOUs will increase collaboration with organizations that offer educational services to disadvantaged communities by 10%.  IOU Rationale: Definition of collaboration is the same as above. We also need to define "organizations serving educational services to disadvantaged communities."
3. By 2012, the number of identified low-income (pre-determined criteria) Centergies program participants increases by X%.	CEESP (see above) / IOU – Stakeholder workshops	IOUs recommend moving Objective-3 to WET Connections. This was discussed and agreed to on 9/21/2010 ED workshop.
4. By 2012, a significant number of Centergies training courses includes the subject of Integrated Demand Side Energy Management skillsets (EE, DR, DG) in a way that promotes understanding of all these resources and how they interact as well as the career and educational paths associated with them (Yes / No Metric)	CEESP (see above) / Statewide WE&T PIP p. 39	IOUs recommend modifying Objective-4 to the following:  By 2012, the IOUs will offer IDSM
-The number of Centergies training courses offered that include substantial coverage (ie approximately 50% or more) IDSM subject matter (EE, DR, DG)ED wants to include technical. IOUs are concerned about funding; caveats to technical are		educational services with substantial IDSM content. (Y/N metric)
"subject to funding." IOUs should be working towards collaborationSCE doesn't think "substantial" is appropriate for WE&T Connections. ED thinks removing "substantial" represents opportunities lost. "Significant" is defined as 25% in Connections.		Definition of "substantial" is that approximately 50% or more of class content must address IDSM subject matter.

Short-term <u>Sub-program</u> PPMs:	Source (SP,	Metric	Baseline	IOU Comments
	AL, DR, PIP,	Type	Study	
	or Staff)*	(2a or	Require	
		2b)**	d (Y/N)	
1. Number of Centergies program educational partnerships collaboration	CEESP (see	2B	N IO	Us recommend modifying
(in kind or monetary support) within all adult education levels (CCC, CSU	, above) /		PP	M-1 to the following: (For

UC, Trade & Labor, Adult Education) -Partnership/collaborative approach: schools usually provide a place, support, and/or marketing and IOUs provide money and/or resources -Tracking should identify who the IOUs are collaborating with	Statewide WE&T PIP p. 22 - 23			Objective-1) % increase in educational collaboration with partners from 2011 baseline (2b metric)
<ol> <li>Number of outreach events, technical consultations, and seminars targeted to disadvantaged communities or done in partnership with disadvantaged organizations identified low-income (pre-determined criteria) Centergies program participants</li> <li>-Pre-determined criteria: Low-income should be defined</li> </ol>	CEESP (see above) / Statewide WET PIP p. 22	2A	N	IOUs recommend modifying PPM-2 to the following: (For Objective-2)  % increase in educational collaboration with organizations serving disadvantaged communities  (2b metric)
	CEESP (see above) / IOU - Stakeholder workshops	<b>2</b> A	N	IOUs recommend deleting PPM 3 (For no objective)
3. Number of Centergies training courses that include the subject of Integrated Demand Side Energy Management skillsets (EE, DR, DG) in a way that promotes understanding of all these resources and how they interact as well as the career and educational paths associated with them (Y/N) -Need definition of significant (listed in objective, not metric) -Definition of integrated/integration: Integration can be used in more than one way -Need to consider how this fits in with the IDSM piece	CEESP (see abøve) / Statewide WET PIP p. 39	2A	N	IOUs recommend modifying PPM-4 to the following: (For Objective-4)  # of IDSM educational classes with substantial IDSM content.  (2b metric)

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

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

Long	-Term (2013-2020) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
1.	By 2015, X% of Centergies past program participants state an interest in pursuing green careers as a result of program participation (identify figures for low-income participants).	CEESP (see above) / Statewide WE&T PIP p. 30	IOUs recommend modifying Objective-1 to the following:  By 2015, increase or maintain (use 2010as baseline), X%  Centergy participants stating an interest in pursuing green careers as a result of program participation (directional)  IOU Rationale: This objective, as stated by ED, may also present measurement problems since past participants may be difficult and costly to track and monitor. IOUs would like to revisit these LT-Objectives with ED once the WET needs assessment results are published.
2.	By 2015, utilized job knowledge and skill sets that past participants received by participating in the Centergies program represents X%. (identify figures for low-income participants)	CEESP (see above) / Statewide WE&T PIP p. 30	Objective-2 to the following:  By 2015, increase and/or maintain (use 2010 as baseline), X% program participants reporting utilization of knowledge and skills received from the

			IOU Rationale: The WET Centergies Program does not require program participants to report their income level. We do not believe this is appropriate to implement due to its intrusive nature.  In addition, tracking past participants could be costly and difficult.
3.	By 201,5 the number of Centergies participants that credit participation in the program as a significant reason they are currently working in a clean energy job represents X%. (identify figures for low-income participants).	CEESP (see above) / Statewide WE&T PIP p. 30	OUs recommend deleting Objective-3.  IOU Rationale: It can be rolled up into objective-2. Furthermore, the definition of "clean energy job" would need to be defined.
4.	significantly partnering with all levels of outside educational organizations to address	CEESP (see above) Statewide PIP p. 5, 14, 69–74, 87	IOUs recommend modifying Objective-4 to the following:  By 2015, the IOU WE&T portfolio of training programs address gaps identified in the statewide WE&T Needs Assessment (includes low- income) and are partnering with applicable outside educational organizations (Yes/No)

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

Long-	Long-Term Sub-program MT Indicators:		Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
1.	Percent of Centergies past program participants that state in interest in pursuing green careers as a result of program participation (identify figures for low-income participants)	Staff)*  CEESP (see above) / Statewide WE&T PIP p. 30	3	N	IOUs recommend modifying MT-  1 to the following: (For Objective-  1)  % program participants stating an interest in pursuing green careers as a result of program participation, relative to baseline
2.	Percent of past Centergies participants that attribute the program for the job knowledge and skill sets they currently use in their job. (identify figures for low-income participants)	CEESP (see above) / Statewide WE&T PIP p. 30	3	N	IOUs recommend modifying MT-2 to the following: (For Objective-2) % program participants reporting utilization of knowledge and skills received from the program, relative to baseline
3.	Percent of past Centergies participants that attribute the program as a significant reason they are currently working in a clean energy job. (identify figures for low-income participants)	CEESP (see above) / Statewide WE&T PIP p. 30	8	N	IOUs recommending deleting MT-3 (For Objective-3)
4.		CEESP (see above) Statewide PIP p. 5, 14, 69–74, 87	3	N	Duplicative of long term objective #4.

\*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.

# Workforce, Education, and Training – Connections Subprogram

	Mission	IOU Comments
SW Program: WE&T	The Statewide IOU Workforce Education and Training (WE&T) Program	OK.
	represents a portfolio of education, training, and workforce	
	development planning and implementation funded by or coordinated	
	with the Investor-Owned Utilities. Education and training are vital	
	components of each of the IOU's energy efficiency portfolio filings for	
	2009-2011 and are integral in supporting the achievement of IOU	
	energy savings targets and the workforce objectives set forth in the	
	California Long-Term Energy Efficiency Strategic Plan (Strategic Plan).	
	Workforce Education and Training has become an important	
	crosscutting activity for the IOUs in an effort to not only educate and	
	train current workers, but to prepare future workers to be better able	
	to successfully perform the jobs needed to help achieve increased	
	energy savings targets for the IOUs and California's clean energy goals.	
SW <u>Sub</u> -program:	The WE&T Connections Sub-Program is organized around downstream	OK.
Connections	and upstream relationships between the IOUs and the educational	
	sector, entry and intro-level community-based training efforts that	
	support workforce development in energy efficiency, energy	
	management, and new emerging green careers. This Sub-Program	
	emphasizes education curriculum and related activities that inspire	
	interest in energy careers, new and emerging technology, and future	
	skills development to advance the energy initiatives and goals of the	
	state. This Sub-Program involves expanded relationship-building to	
	foster curriculum development and related training that result from	
	existing and expanding industry needs. IOUs will work with education	
	institutions, labor and communities to nurture interest in green careers	
	by K-12, community college, occupational, vocational, and major	
	university students, as well as assist in the growth of low-income and	
	transitional workforce targeted clean energy training programs.	

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP
	Ref. pp. #

Goal 1: Establish energy Efficiency education and training at all levels of California's educational systems.	p. 74
Goal 2: Ensure that all minority, low-income, and disadvantaged communities fully participate in training and education programs at all levels of the demand side energy management industry.	p. 74
<u>Strategy 1-2:</u> Support the community college and adult education efforts to support students to develop their education based on visible career paths in energy efficiency and related fields.	p. 77
Strategy 1-3: Incorporate EE and demand side energy management skills into traditional contractor and technician training.	p. 77
Strategy 1-4: Create or expand college and university programs with EE focus and foster green campus efforts to apply this knowledge in clear view of students and faculty	p. 77
Strategy 1-5: Develop K- 12 curriculum to include EE fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.	

Short-t	erm (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
	By 2012, the number of Connections program educational partnerships (predetermined criteria) within all adult education levels (CCC, CSU, UC, Trade & Labor, Adult Education, K - 12) increases by X% (identify proportion of partnerships that address low-income participants / communities).	CEESP (see above) / Statewide	iOUs recommend modifying Objective-1 to following:  Using 2011 as the baseline year, by 2012, the iOUs will increase the level of educational collaboration with partners by 10%.  IOU Comment: Definition of educational collaboration includes seminars, outreach events and consultations. These collaborations may include exchanges of monetary or in-kind support and services (i.e., sharing meeting facility, marketing/promotional service, etc.).
	By 2012, the number of identified low-income (pre-determined criteria) Connections program participants / Schools in low-income communities increases	CEESP p. 74	IOUs recommend modifying Objective-2 to following:

	by X%.		By 2012, for k-12 WET Connection sub- programs only, increase the # of title-1 school participants to 50% of all participants.
3.	By 2012, the number of high school level continuing education outreach partnerships the IOU Connections program supports increase by X%.	CEESP (see above) / IOU – Stakeholder workshops / Statewide WE&T PIP p. 47	IOUs recommend modifying Objective-3 to following:  By 2012, increase the number of high school continuing education outreach partnership in the WET Connection Program by 10%.  IOU Comment: Milestone:  1) By the end of 2011, IOUs will determine the current number of partnerships and use the WE&T Schools subcommittee as a forum to build these relationships statewide. This information will be used as baseline for Objective-3.
4.	By 2012, a significant number of Connections educational courses includes the subject of Integrated Demand Side Energy Management knowledge and awareness (EE, DR, DG) in a way that promotes understanding of how all these resources interact and mitigate GHG environmental impacts as well as the career paths associated with them (Y/N)	CEESP (see above) / Statewide WE&T PIP p. 67	IOUs recommend modifying Objective-4 to following:  By 2012, the Connections educational courses will include educational content for IDSM subject matter to increase awareness (Y/N objective)  IOU Rationale: As we have discussed in the ED workshop on 9/21, it is more appropriate for the substantive IDSM classes to be addressed in WET Centergies Program. In WET

Connection, the IOUs will focus on integration of IDSM subject matters into
the training material.

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 Comments
<ol> <li>Number of Connections program educational collaborations partnerships (in kind or monetary support) (pre-determined criteria) within all adult education levels (CCC, CSU, U€, Trade &amp; Labor, Adult Education, K - 12) (identify proportion of partnerships that address low-income participants / communities).</li> <li>Number of high school level continuing education outreach partnerships the IOU Centergies program supports (this was moved from Centergies and is more appropriately)</li> <li>Educational collaborations are aimed to influence minds</li> </ol>	CEESP (see above) / Statewide WE&T PIP p. 47	2B		IOUs recommend modifying PPM-1 to the following: (For Objective-1)  By 2012, % increase in educational collaboration with partners from 2011 baseline  (2b metric)
<ol> <li>Number of identified low-income (pre-determined criteria) Connections program participants / schools in low income neighborhoods</li> <li>-Ways of determining low-income individuals:         <ul> <li>-Title 1: 40% of the residents in the community are considered low-income (low-income is defined by Federal poverty definition)</li> <li>-Number of individuals who qualify for school lunches</li> <li>-"Minority" and "low-income" should not be used interchangeably</li> </ul> </li> </ol>		2A		IOUs recommend modifying PPM-2 to the following: (For Objective-2)  % K-12 WET Connection program participants that are from title-1 schools  (2a metric)
3. Number of high school level continuing education outreach partnerships the IOU Connection program supports -Partnerships issue should be addressed similarly to how it will be addressed in Centergies	CEESP (see above) / IOU – Stakeholder	2A		IOUs recommend modifying PPM-3 to the following: (For Objective-3)  PPM-3a: Complete identified milestones (Y/N)  PPM-3b: # of high school continuing

				education outreach partnerships in WET Connection, relative to baseline (2a & b metric)
the subject of IDSM (EE, DR, DG) in a way that promotes	CEESP (see above) / PIP p. 67	2A	N	IOUs recommend modifying PPM-4 to the following: (For Objective-4)  Did WET Connection Program integrate IDSM subject matter into its educational material? (Y/N)  (2b metric)

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\*\*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 Comments
By 2015, X% of past participating schools have continued to offer the programs and curricula originally developed via IOU / educational organization partnerships without continued IOU support.  Output  Description:	CEESP (see above)	IOUs recommend modifying Objective- 1 to the following:  By 2012 the % of prior program cycle participating schools that have continued the WET Connection training activities without program support.  IOU Rationale: to make this into a SMART objective, we are recommending limiting the scope of this objective to monitor progress from program cycle to program cycle.
2.	Statewide PIP p. 37, 45, 76, 92	IOUs recommend deleting Objective-2 IOU Rationale: This objective can be rolled-up into objective-1 above.

3.	By 2015, most of the IOU WE&T portfolio of training programs address	CEESP (see above)	IOUs recommend modifying
	the gaps identified in the statewide WE&T Needs Assessment (includes	Statewide PIP p. 5, 14,	Objective=3 to the following:
	low-income) and are significantly partnering with all levels of outside	69–74, 87	
	educational organizations to address these gaps (Y/N)		By 2015, the IOU WE&T portfolio of
			training programs address the gaps
			identified in the statewide WE&T
			Needs Assessment (includes low-
			income) and are partnering with
			appropriate levels of outside
			educational organizations (Yes/No)

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

Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Type	Baseline Study Required (Y/N)	IOU Comments
	CEESP (see above)	3	N	IOUs recommend modifying MT-  1 to the following: (For Objective-  1)  % of prior program cycle participating schools that have continued the WET Connection training activities without program support.  IOU Rationale: (2b metric-could be very costly and difficult to measure)  IOU assessment of priority: Low.

2.	Statewide	3	N	IOUs recommend deleting MT-2
	PIP p. 37,			(duplicative of Objective-2)
	45, 76, 92			
<b>3.</b>	CEESP (see	3	Ν	IOUs recommend deleting MT-3
	above)			(duplicative of Objective-3)
	Statewide			
	PIP p. 5, 14,			
	69-74, 87			

\*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.