Tucson Electric Power Company

Response to R14-2-1812 Utility Reporting Requirements

of the

Arizona Corporation Commission

RENEWABLES DATA
FOR
YEAR-END 2010

A UniSource Energy Company
P.O. Box 711
Tucson, Arizona 85702

Executive Summary

This report covers Tucson Electric Power Company's ("TEP") Renewable Energy Standard and Tariff ("REST") progress from January 1, 2010, through December 31, 2010. TEP's specific REST target for this period was 232,294,700 Renewable Energy Credits ("REC"). That amount represents 2.5% of TEP's retail energy sales for 2010, which was 9,291,788,000 kilowatt-hours ("kWh").[1] The REST requires that 20% of those RECs be met through distributed energy ("DE") renewable resources, which represents a total of 46,458,940 ("kWh"). Of the 20% met through DE resources, 50% must come from residential customer systems and 50% must come from non-residential, non-utility applications. The remaining portion of the REST required RECs for 2010, 80% or 185,835,760 kWh, comes from utility-scale renewable energy resources.

TEP far exceeded its 2010 utility-scale REC requirement with 347,484,897 available RECs. Of these, 185,835,760 were retired to meet compliance. Included in this number are RECs that were carried over (not retired) from 2009 as well as RECs purchased in 2010. RECs in excess of what is needed for compliance will be carried forward for use in future years.

DE reservations exceeded compliance requirements in all categories at 122% compliant. Annualized-actual production compliance in 2010 increased dramatically over 2009 by 168% and reached 65% compliant excluding outstanding customer projects still in construction. TEP expects this type of annualized-actual increase to continue into 2011 and 2012 as reserved customer-sited projects continue to come on line and the average development time of larger projects continues to decline.

As required by Decision No. 70233 (December 10, 2010), TEP is required to report a list of any cases within the previous three calendar years where TEP has received damages or other considerations as a result of non-compliance related to RES contracts. TEP has had no such cases in the previous three years.

TEP shall also disclose, as part of future annual REST plan filings, whether its affiliates, its employees, or its directors have any direct financial or other interest in renewable energy projects that are owned or whose output is contracted for by TEP. No affiliates, employees, or directors have any direct financial or other interest in renewable energy projects that are owned or whose output is contracted for by TEP.

1.0 REST Requirements

The REST Rules as contained in Arizona Administrative Code R14-2-1801 became effective August 14, 2007 following approval from the Arizona Corporation Commission ("Commission"). Among other things, the REST rules require TEP to generate or purchase at least 15% of its total annual retail energy requirements from eligible renewable energy resources by 2025, with smaller amounts required in earlier years. The Commission determined that the REST should supersede the then existing Environmental Portfolio Standard ("EPS"), which like REST, was designed to encourage development of renewable generation. When the REST supplanted the EPS, the Commission ordered that all remaining EPS funds be transferred to the REST program and that TEP be released from all EPS requirements. Accordingly, some of the RECs generated during the EPS program were transferred to the REST compliance period. TEP's first REST Implementation Plan was approved by the Commission in Decision No. 70314 (April 28, 2008), and became effective on June 1, 2008. At that time, the RES Tariff was added to customer bills. After this date, the REST compliance period began, and the EPS compliance period ended.

[1] One renewable energy credit, or REC, is equivalent to one kWh of production from an eligible renewable energy resource. Except for RECs from distributed energy resources, in order to receive credit for energy from an eligible renewable energy resource, the energy must be delivered to retail customers.

Table 1.1 – The REST mandate from 2008 to 2025 as required percentages of retail sales

Year	REST Requirement	Year	REST Requirement
2008	1.75% (10% DG)	2017	7.00% (30% DG)
2009	2.00% (15% DG)	2018	8.00% (30% DG)
2010	2.50% (20% DG)	2019	9.00% (30% DG)
2011	3.00% (25% DG)	2020	10.00% (30% DG)
2012	3.50% (30% DG)	2021	11.00% (30% DG)
2013	4.00% (30% DG)	2022	12.00% (30% DG)
2014	4.50% (30% DG)	2023	13.00% (30% DG)
2015	5.00% (30% DG)	2024	14.00% (30% DG)
2016	6.00% (30% DG)	2025	15.00% (30% DG)

Source: Renewable Energy Standard and Tariff, Section R14-2-1804 and R14-2-1805

Table 1.2 – 2010 compliance requirements by category in kWh

Category	kWh Goal
Jan - Dec 2010 TEP Retail Sales	9,291,788,000
REST Target @ 2.5% of Retail Sales	232,294,700
Distributed Energy @ 20% of REST Goal, including:	46,458,940
50% Residential DE	23,229,470
50% Non-Residential, Non-Utility DE	23,229,470
Utility Scale @ 80% of REST Goal	185,835,760

Table 1.3 – kWh of energy or equivalent obtained from eligible renewable energy resources for Utility-Scale and Distributed Energy

TEP 2010 RECs:

	Category	Production (kWh)	REST Multiplier(s) Applied	Multiplier Value	Extra Credits (from multipliers)	Total RECs
Utility-Scale (Non-Distributed Energy)	Landfill Gas	18,280,332	In-State Manufacturing and Installation Content	0.06	1,096,820	19,377,152
	Global Solar		Manufacturing Partial Credit	2,190 * kW capacity produced and sold in 2010	8,688,154	8,688,154
	Springerville Solar	5,997,822	Annual kWh Production			
			In-State Manufacturing and Installation Content	0.5 * % in-state cost	417,387	
			In-State Power Plant Installation Credit	0.5	2,998,911	
			Distributed Generation Credit	0.5	N/A	
			Subtotal			9,414,120
	OH/DMP Projects	206,501	Annual kWh Production			
			In-State Manufacturing and Installation Content	0.5 * % in-state cost	24,155	
			In-State Power Plant Installation Credit	0.5	103,250	
			Distributed Generation Credit	0.5	N/A	
			Subtotal			333,906
	Other-Short Term Purchases	145,296,000	Annual kWh Production		N/A	145,296,000
	Total Non-DE Production	169,780,655				
	Subtotal Non-DE RECS					183,109,332
Distributed Energy	Solar PV (Residential)	8,093,312	Annual kWh Production			
			In-State Manufacturing and Installation Content	0.15	97,470	
			In-State Power Plant Installation Credit	0.5	324,901	
			Distributed Generation Credit	0.5	324,901	
			Subtotal			8,840,583
	Solar Hot Water (Residential)	3,381,546	Annual kWh Production			3,381,546
	GreenWatts (Commercial)	293,685	Annual kWh Production			
			In-State Manufacturing and Installation Content	0.5 * % in-state cost	25,202	
			In-State Power Plant Installation Credit	0.5	146,842	
			Distributed Generation Credit	0.5	146,842	
			Subtotal			612,572
	Wind (Commercial)	4,229	Annual kWh Production	N/A		4,229
	Solar PV (Small Commercial)	698,388	Annual kWh Production	N/A		698,388
	Solar PV (Large Commercial)	10,285,836	Annual kWh Production	N/A		10,285,836
	Solar Hot Water (Commercial)	22,547	Annual kWh Production	N/A		22,547
	Total DE Production	22,779,542				
	Subtotal DE RECs					23,845,701
Summary	Total DE RECs To Be Retired					23,845,701
	Total 2010 Non-DE RECs					183,109,332
	Carryover Non-DE RECs from 2009					164,375,565
	Total (Non-DE 2010 new production + 2009 carryover)					347,484,897
	Total Non-DE Retired in 2010					185,835,760
	Total Non-DE Carryover to 2011					161,649,137

TEP reports DE production in three compliance scenarios: (1) metered production from currently installed systems; (2) production that is annualized to more accurately reflect currently installed systems; and (3) the annualized production from currently installed *plus* the annualized production of reserved systems in construction to fully reflect the most accurate compliance picture.

Table 1.4 – DE kWh equivalent obtained from actual production; from production normalized to reflect a full year's production; and also to demonstrate the reserved kWh equivalent

	Residential			Commercial			Total DE kWh		
	Actual (Actual production Jan-Dec 2010)	Annualized (production prorated Jan-Dec for current systems)	Annualized production + Annualized Reservations	Actual (Actual production Jan-Dec 2010)	Annualized (production prorated Jan-Dec for current systems)	Annualized production + Annualized Reservations	Actual (Actual production Jan-Dec 2010)	Annualized (production prorated Jan-Dec for current systems)	Annualized production + Annualized Reservations
Installed kWh	11,474,858	17,368,046	23,950,459	11,304,684	12,705,615	32,541,432	22,779,542	30,073,661	56,491,891
Required kWh	23,229,470	23,229,470	23,229,470	23,229,470	23,229,470	23,229,470	46,458,940	46,458,940	46,458,940
% Compliance met	49%	75%	103%	49%	55%	140%	49%	65%	122%

2.0 Generation Capacity and Technology

The REST rules allow for a variety of renewable technologies to be utilized for compliance. TEP's utility scale efforts are strategically designed to minimize resource costs to consumers, capture economy of scale, utilize proven technologies, have a benefit to Tucson area residents, rely very little on transmission capacity, and have a sustainable environmental footprint. DE projects are not controlled by TEP and customers have graduated toward almost exclusively solar PV and solar water heating. The industrial market place in TEP's service territory is moving more toward chilling and cogeneration or hybrid PV and water heating. TEP promotes technologies that provide the most cost-effective RECs.

Table 2.1 – Generation capacity disaggregated by technology type

Technology Type	kW Capacity, Cumulative	2010 kW Capacity, New	2010 Actual kWh production	Annualized kWh production
Utility Scale:				
Solar PV	8,312	3,400	5,997,822	14,610,400
Landfill Gas	5,000	n/a	18,280,332	18,280,332
Subtotal Utility Scale	***13,312***	***3,400***	***24,278,154***	***32,890,732***
Distributed Energy:				
Solar PV	16,605	11,594	19,371,220	30,870,569
Solar Thermal	1,085	418	3,404,093	2,984,413
Wind	12	12	4,229	15,600
Subtotal DE	***17,702***	***12,024***	***22,779,542***	***33,870,581***
TOTALS	**31,014**	**15,424**	**47,057,696**	**66,761,313**

3.0 REST Costs, Surcharges, and Expenditures

The costs of the REST are covered by revenue collected from the REST surcharge on customer bills. These caps are set by the Commission and vary by customer class. The surcharge is set to collect the money required to cover the Commission approved REST budget. TEP prepares the budget as a part of its annual implementation plan filing.

Table 3.1 – 2010 Commission approved REST line-item budget

	2010 Budget REST Collections ($)	2010 Budget Expenditures ($)
To Be Recovered Through REST Charges	$ 31,803,701	
2008 & 2009 REST Funding Carried Forward	12,048,727	
REST Expenditures		
Purchased Renewable Energy		
Above Market Cost of Conventional Generation		$ 11,331,633
Transmission Direct Use Cost		480,000
Grid Management Ancillary Services		200,000
Other		120,000
Customer Sites Distributed Renewable Energy		
Up-Front Payments Customers		21,988,706
Production Based Payments to Customer		5,369,000
Builder Credit Purchase Program		700,000
Outreach Efforts		750,000
Other		1,342,000
Information Systems		375,000
Net Metering		144,078
Reporting		175,000
Outside Coordination and Support, Research and Development		
Support to University Research		250,000
Other		177,000
Renewable Energy Hardware Development		
Technology Development Projects		400,000
Other		50,000
Total	**$ 43,852,428**	**$ 43,852,417**

Part of the annual budget process is creating an estimate of the surcharges by customer class. Because these customer REST surcharges are paid in correspondence with actual kWh used by the customer, the estimated surcharges will differ from actual collections in accordance with the variance from forecast customer consumption and actual kWh consumption.

Table 3.2 – Actual surcharge collected from customers, by customer class in 2010

Date	Residential	Small General Service	Large General Service	Large Light & Power & Mining	Total
Jan-10	$1,306,749.35	$707,480.01	$189,943.62	$60,157.55	$2,264,330.53
Feb-10	$982,451.45	$918,648.49	$377,469.73	$119,320.08	$2,397,889.75
Mar-10	$1,138,443.16	$1,006,573.69	$425,517.52	$130,424.07	$2,700,958.44
Apr-10	$1,055,975.09	$988,379.27	$411,705.31	$134,639.37	$2,590,699.04
May-10	$970,431.95	$943,314.37	$377,077.87	$136,273.10	$2,427,097.29
Jun-10	$1,075,817.41	$1,169,353.70	$413,876.70	$128,470.38	$2,787,518.19
Jul-10	$1,109,542.69	$1,319,203.24	$435,122.83	$137,984.46	$3,001,853.22
Aug-10	$1,075,507.92	$1,233,407.88	$411,511.29	$149,519.14	$2,869,946.23
Sep-10	$1,111,942.43	$1,302,822.36	$437,630.88	$138,596.54	$2,990,992.21
Oct-10	$1,021,664.17	$1,143,105.06	$415,082.46	$141,837.15	$2,721,688.84
Nov-10	$981,269.01	$990,051.99	$398,154.03	$140,212.21	$2,509,687.24
Dec-10	$994,595.27	$947,369.75	$363,265.07	$139,647.79	$2,444,877.88
	$12,824,389.90	**$12,669,709.81**	**$4,656,357.31**	**$1,557,081.84**	**$31,707,538.86**

Actual REST spending by TEP is tracked by line item. Money not spent will be carried over into the 2012 REST budget.

Table 3.3 – Cents per actual kWh of energy obtained for utility scale generation charged to REST (AMCCCG)

	Generation (kWh's)	Total Cost	MCCCG ($/kWh)	PPFAC COST	AMCCCG ($/kWh)	AMCCCG COST
TOTAL	*145,296,000*	*$10,462,950.42*	*$0.03123*	*$4,587,498.90*	*$0.04078*	*$5,875,374.02*

Table 3.4 – 2010 collections and expenditures and any funds carrying over into the 2012 REST Implementation Plan

	2010 REST Collections ($)	2010 REST Expenditures ($)
REST Collections	**$31,707,539**	
REST Funding Carried Forward from Prior Years	**12,048,727**	
REST Expenditures		
Purchased Renewable Energy		
Above Market Cost of Conventional Generation		$4,742,214
Manufacturing RECs		831,859
Other		238,283
Customer-Sited Distributed Renewable Energy		
Up-Front Payments Customers - Residential		19,563,699
Reserved Funds for Up-Front Payments Customers - Residential		3,660,001
Up-Front Payments Customers - Commercial		1,070,168
Reserved Funds for Up-Front Payments Customers - Commercial		7,928,441
Production Based Payments to Customer		1,176,726
Outreach Efforts		549,857
Other Customer-Sited Distribution		740,434
Information Systems		207,720
Net Metering		178,691
Reporting		114,830
Outside Coordination and Support, Research and Development		
Support to University Research		220,000
Technology Development Projects		456,317
Other		268,703
Total	**$43,756,266**	**$41,947,943**
Total Expenditures	**41,947,943**	
Carried Over to 2012	**$1,808,323**	

4.0 Further Discussion of Utility Scale

4.1 RFP Process for PPA's

In 2010, TEP completed the Request for Proposal ("RFP") process from fall 2009. Results of that RFP and Accion's Independent Auditing report were filed with the Commission in 2010. As a result of that RFP, a total of eight (8) new solar Power Purchase Agreements ("PPA") were signed by TEP, two (2) PPA's were signed by UNS Electric, and two (2) additional self-build contracts were signed by each company and the Solon Corporation. TEP expects to self-build approximately 5 MW in 2011 and 2012, and UNS Electric expects to build approximately 1.25 MW in 2011 and 2012. Listed in Table 4.1 is all of the current contracts both under construction and planned.

Table 4.1 – TEP & UNSE Renewable Contracts and Projects

Resource/ Counterparty		Technology	Location	Operator	Completion Date	Term (Years)	Purchase Option	Capacity MW
Solar								
PPAs	Amonix	Concentrating PV	Tucson, AZ	Amonix	2011	20	On or after yr. 6 at FMV	2
	Swan Solar	Concentrating PV	Tucson, AZ	Amonix	2011	20		12
	NRG Solar	Fixed PV	Tucson, AZ	NRG Solar	2011	20		25
	First Light	Fixed PV	Tucson, AZ	CTC	2011	20		5
	Emcore Solar	Concentrating PV	Tucson, AZ	Emcore	2011	20		2
	Solon	SAT PV	Kingman, AZ	Solon	2011	20		5
	Solon	SAT PV	Santa Cruz County	Solon	2012	20		5
	FRV Tucson Solar	SAT PV	Tucson, AZ	Renewable Ventures	2012	20		25
	FSP Solar One	SAT PV	Tucson, AZ	Foresight Solar	2012	20		4
	FSP Solar Two	SAT PV	Tucson, AZ	Foresight Solar	2012	20		12
	Avalon Solar	Fixed PV	Marana, AZ	Avalon	2012	20		35
	Renewable Fuel	Solar Thermal	Tucson, AZ	Bell IPC	2013	20		5.5
Wind								
	Western Wind Energy US Corp	Wind	Kingman, AZ	Western Wind	2011	20	None	11
	Macho Springs	Wind	Deming, NM	Element Power	2011	20	None	50
Landfill Gas								
	Sexton Energy	Landfill Gas	Tucson, AZ	Sexton Energy	2013	15	None	2.2

Owned / Under Construction

Fuel/ Plant	Technology	Status	Completion Date	Net Capacity MW
Solar				
Springerville Solar Station	Fixed PV	Complete	2002	4.6
Springerville Solar Expansion	Fixed PV	Complete	2010	1.8
UASTP	SAT PV	Complete	2010	1.6
Tucson Airport Project	SAT PV	In progress	2011	5
TBD	SAT PV	Scheduled	2012	5

4.2 Landfill Gas

In August 1999, TEP and the City of Tucson started producing electricity from the installation of a nameplate 5 MW landfill gas system at the Los Reales Landfill in Tucson, Arizona. The landfill gas is piped from the landfill to the Sundt Generating Station, where it is co-fired with coal and/or natural gas.

In 2010, TEP's landfill gas resource produced 18,280,332 kWh, equivalent to the same number of RECs. Applying the In-State Manufacturing and Installation Content Extra Credit Multiplier to this production added 1,096,820 RECs for 2010. In total, the landfill gas resource produced 19,377,152 RECs.

4.3 Existing Photovoltaics

The Solar PV System located at the Springerville Generating Station ("SGS") has an approximate nameplate capacity of 4.6 MW. It was increased in size in 2010 by 1.8 MW. In 2010, the actual energy production was 5,997,822 kWh. Inclusive of applicable extra credits from multipliers, the total SGS RECs in 2010 were 9,414,120. Estimated annualized production of the 1.8 MW installed is 3,060,000 kWh additional that will be fully realized in 2011. No SGS RECs were sold, nor retired, in the 2010 REST compliance period. 1.6 MW was also installed at the University of Arizona Science and Technology Park. This installation is a single axis tracker expected to output 3,200,000 kWh annually. These RECs will be fully realized in 2011.

4.4 TEP-owned

As approved by the Commission, TEP completed its two planned solar projects in 2010: the 1.6 MW single-axis tracking system built by SOLON, and the 1.8 MW expansion of the Springerville solar facility, bringing the total Springerville solar capacity to 6.4 MW.

4.5 UA Tech Park

Approximately 200 acres of construction is underway at what will soon be a world-class solar research park called the University of Arizona Science and Technology Park Solar Zone. TEP will be placing 20 MW of various technologies for the purposes of renewable energy generation and state of the art comparative analysis on solar technologies and processes that will significantly impact the efficacy of solar power in the United States. In 2010, 1.6 MW of single axis tracking PV was commissioned and estimated annualized production would be 3,200,000 kWh. Similar to the Springerville addition, this production will be fully realized in 2011. Completion of the second project, a 2 MW concentrated photovoltaics ("CPV") being built by Amonix, is expected to be completed in April 2011. Construction of the third and fourth projects are expected to begin in the summer of 2011 and completed in the spring of 2012.

4.6 Manufacturing Credits

TEP buys RECs from Global Solar, under the REST Manufacturing Partial Credit (R14-2-1807) rule. This rule stipulates that an affected utility (TEP) can earn RECs using the following calculation:

*Nameplate capacity produced in AZ and sold Year X * 2190 = Total RECs*

As a result of its investment in Global Solar, TEP obtained 8,688,154 RECs in 2010 that are eligible to contribute to its REST requirement.[2] In 2010, Global Solar sold PV modules that were produced and sold at the Tucson facility with a combined nameplate capacity of 4,613 kW. Using the 2,190 factor assumes a 25% capacity factor for these units when they are deployed.

[2] Manufacturing Partial Credits obtained from Global Solar are prorated between TEP and UniSource Energy Services, at a rate of 86% and 14%, respectively.

5.0 Further Discussion of DE

5.1 Residential DE

The residential DE market increased dramatically in the TEP service territory in 2010. In 2007, a small handful of companies were doing solar installations in the area. In 2010, more than 150 companies were installing PV and solar hot water, primarily due to significantly lower system prices and relatively high incentive levels. The combination of lower prices, attractive incentives, and significant consumer demand for solar, TEP funds were exhausted in July. Special Commission proceedings were held to transfer additional funds into residential DE and the incentives were lowered from $3.00 per Watt DC to $2.00 per Watt. TEP worked diligently to streamline DE reservation processes, improve inspection and metering policy, and worked diligently to support the massive impact of solar construction on local area inspection jurisdictions. TEP also published improved technical specifications for solar installations to insure safe and reliable grid integration. The residential marketplace continues to be a dynamic and rapidly changing environment.

5.2 Small Commercial DE

Similar growth occurred in the small commercial marketplace in 2010, despite the limited availability of capital in the small commercial marketplace. This is due largely to increases in UFI upper limits for both PV and hot water. TEP raised the maximum PV UFI level from 20 kW A/C to 100 kW. Incentives were reduced for PV in this area as well from $2.50 per Watt DC to $1.50 per Watt.

5.3 Large Commercial and Industrial DE

TEP had a very stable and productive year for large commercial projects. This is due largely to limiting the size of large, single-customer installations by dividing PBI money into monthly auction segments. The resulting upper limit for project size was ~500 kW. The large commercial market was able to participate in incentive programs for the entire year.

Table 5.1 – Residential, Small and Large Commercial REC prices for DE by technology

Incentive Summary Tables

RECPP – CONFORMING PROJECT INCENTIVE MATRIX

2010 Program Year

Technology/Application	UP FRONT INCENTIVE [1] 20-Year REC Agreement	10-Year REC Agreement [2] 10-Year Payment ($/kWh)	15-Year REC Agreement [2] 15-Year Payment ($/kWh)	20-Year REC Agreement [2] 20-Year Payment ($/kWh)
BIOMASS/BIOGAS (Electric)	NA	0.060	0.056	0.054
BIOMASS/BIOGAS – CHP (Electric) [3]	NA	0.035	0.032	0.031
BIOMASS/BIOGAS – CHP (Thermal) [3]		0.018	0.017	0.016
BIOMASS/BIOGAS (thermal)	NA	0.015	0.014	0.013
BIOMASS/BIOGAS (cooling)	NA	0.032	0.030	0.029
DAYLIGHTING (Non-Residential)	$0.18/kWh [7] See this note for clarification	NA	NA	NA
GEOTHERMAL – (electric)	NA	0.024	0.022	0.022
GEOTHERMAL – (thermal)	NA	0.048	0.045	0.043
Ground Source Heat Pump – (cooling)	$500/ton	NA	NA	NA
SMALL HYDRO	NA	0.060	0.056	0.054
SMALL WIND (grid-tied) [4]	$2.25/Watt AC	NA	NA	NA
SMALL WIND (off-grid) [4]	$1.80/Watt AC	NA	NA	NA
SOLAR ELECTRIC:				
RESIDENTIAL (GRID-TIED)	$3.00/Watt DC [8]	NA	NA	NA
Non-Residential (Grid-Tied) 100 kW or less	$2.50/Watt DC [8]	NA	NA	NA
NON-RESIDENTIAL (GRID-TIED) More than 100 kW	NA	0.182	0.168	0.162
RESIDENTIAL (OFF-GRID)	$2.00/Watt DC [8]	NA	NA	NA
NON-RESIDENTIAL (OFF-GRID)	$2.00/Watt DC [8]	NA	NA	NA
SOLAR SPACE COOLING [5]	NA	0. 116	0. 108	0. 104
SOLAR WATER HEATING/SPACE HEATING [5,6,10] (Non-Residential, 35,000 annual kWh output production equivalent or less)	$750 plus $0.50/kWh	NA	NA	NA
RESIDENTIAL SOLAR WATER/SPACE HEATING (35,000 annual kWh output production equivalent or less) [6,9,10]	$750 plus $0.25/kWh	NA	NA	NA
NON-RESIDENTIAL POOL HEATING	NA	0.012	0.011	0.011

Notes:

1) Residential projects are eligible for an up-front incentive (UFI)). UFI payments cannot exceed 60% of the cost of renewable energy equipment.
2) Non-residential systems under 100 kW is a UFI but can be a PBI. Non-residential 100 kW and greater is PBI only. The total of payments under a production based incentive cannot exceed 60% of the project costs for any project.
3) The CHP incentives may be used in combination for the appropriate components of one system.
4) This PBI applies to a maximum system size of 1 MW.
5) The solar space heating and cooling incentives may be used in combination for the appropriate components of one system.
6) This category includes both traditional water heating and those systems combined with residential solar water heating used for space heating. Space heating applications require a report detailing energy saving for the complete system.
7) Rate applies to measured first five years of energy savings only. Payments are made over a five year period.
8) Some UFI based installations will require an adjustment of the incentive as detailed in the PV Incentive Adjustment Chart.
9) Energy savings rating is based on the SRCC OG-300 published rating or the TEP-RECPP Space Heating Calculator. The customer contribution must be a minimum of 15% of the project cost after accounting for and applying all available Federal and State incentives.
10) Rate applies to forecast/measured first year energy savings only.

NA – Not Available

Table 5.2 – 2010 DE project volume and capacity

Commercial	PV	Solar Hot Water	Total
Applications Reserved in 2010	96	25	121
Annualized kWh	16,689,988	1,644,688	18,334,676
Capacity (kW)	9,818	598	10,416
Installed in 2010	23	6	29
kWh	9,404,919	92,363	9,497,281
Capacity (kW)	5,532	34	5,566
Reservations Carried Into 2011	80	19	99
kWh	19,562,663	441,867	20,004,530
Capacity (kW)	11,507	161	11,668

Residential	PV	Solar Hot Water	Total
Applications Reserved in 2010	1,335	740	2,075
kWh	15,505,205	2,002,864	17,508,069
Capacity (kW)	9,121	728	9,849
Systems installed in 2010	929	375	1,304
kWh	10,305,133	1,057,800	11,362,933
Capacity (kW)	6,062	385	6,446
Reservations Carried Into 2011	481	447	928
kWh	5,855,708	1,175,552	7,031,260
Capacity (kW)	3,445	427	3,872

Exhibit 1

Attestation for utility receipt of purchase of renewable energy and credits

powerex

RENEWABLE ENERGY CREDIT CERTIFICATE

In connection with that certain Confirmation dated May 17, 2010, subject to that certain WSPP Agreement (the "Agreement"), by and between Powerex Corp and Tucson Electric Power Company, the undersigned certifies, as of the February 28, 2011, as follows:

1. The generators (the "Facilities") are renewable electric generating facilities located in the Province of British Columbia.

2. The Facilities commissioning dates and nameplate generating capacities are as follows:

Facility	C.O.D.	Location	Capacity
Armstrong Tolko Woodwaste	24-Jun-2003	Armstrong	20.4 MW
Tembec Pulp and Paper	14-Sep-2001	Skookumchcuk	43.2 MW
Vancouver Landfill Gas – Unit 1	21-Sep-2003	Delta	5.5 MW
Vancouver Landfill Gas – Unit 2	02-Oct-2006	Delta	1.9 MW
Canfor Prince George Bioenergy	12-May-2005	Prince George	59.9 MW
Domtar Kamloops	01-Jul-2004	Kamloops	74.0 MW

Each Facility was certified by TerraChoice as an Ecologo Class III Certified facility.

3. This Renewable Energy Credits Certificate represents the Renewable Energy Credits (as defined in the Confirmation) associated with 91,102 MWh of electric energy generated at the Facilities during July through November 2010 pursuant to the Agreement. This Renewable Energy Credits Certificate has no stated or intrinsic value.

4. The Renewable Energy Credits sold to Purchaser pursuant to the Agreement have not been and shall not be sold, pledged, hypothecated or assigned to any party other than Purchaser. Seller has good and marketable title to such Renewable Energy Credits, free and clear of all mortgages, liens, security interests, pledges, charges, encumbrances, or claims of any nature except as created by this Agreement, and Seller has full right, power and authority to sell, transfer and deliver such Renewable Energy Credits.

5. WITH PURCHASER'S KNOWLEDGE AND CONSENT, SELLER EXPRESSLY NEGATES ANY REPRESENTATION OR WARRANTY, OTHER THAN THOSE EXPRESSLY STATED IN THE AGREEMENT, WHETHER WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE ELIGIBILITY OF THE RENEWABLE ENERGY CREDITS SOLD UNDER THE AGREEMENT TO BE APPLIED, USED OR SUBMITTED TO ANY PROGRAM, GOVERNMENTAL OR OTHERWISE, AND ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED.

Powerex Corp.

Dated: February 28, 2011

By: _____
Name: _____
Title: Robert Campbell
Managing Director

Table 1
RECs Delivered to TEP in Jul 10 for Deal CRN 703 / CRN 716

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
2-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
3-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
4-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
5-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
6-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
7-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	24	24	25	22	19	20	25	25	25	25	25	25	584
8-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
9-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
10-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
11-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	19	12	12	12	13	16	16	18	18	511
12-Jul-10	19	19	19	19	19	19	16	19	12	19	17	17	15	11	11	14	15	15	16	16	16	16	16	16	391
13-Jul-10	16	17	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	583
14-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
15-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
16-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
17-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
18-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
19-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
20-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
21-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
22-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
23-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
24-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
25-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
26-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
27-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
28-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
29-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
30-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	24	25	25	25	25	25	25	25	25	25	599
31-Jul-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
																									18,268

Table 2

RECs Delivered to TEP in Aug 10 for Deal CRN 703 / CRN 716

	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
2-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
3-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	20	16	16	16	24	25	24	25	25	566
4-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
5-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
6-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
7-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
8-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
9-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
10-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
11-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
12-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
13-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
14-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
15-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
16-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
17-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
18-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
19-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
20-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
21-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
22-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
23-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
24-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
25-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
26-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
27-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
28-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
29-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
30-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	21	23	25	25	25	25	25	25	25	25	594
31-Aug-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
																									18,560

Table 3
RECs Delivered to TEP in Sep 10 for Deal CRN 703 / CRN 716

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
2-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
3-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
4-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
5-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
6-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
7-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
8-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
9-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
10-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
11-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
12-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
13-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
14-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
15-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
16-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
17-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	1	0	551
18-Sep-10	25	25	25	25	25	25	25	0	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	575
19-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
20-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
21-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
22-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	23	23	23	23	23	23	23	586
23-Sep-10	25	25	25	25	23	23	23	23	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	591
24-Sep-10	25	25	25	25	25	25	25	25	25	13	11	12	13	17	16	17	19	19	17	15	14	13	14	25	460
25-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
26-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
27-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	23	25	25	25	25	25	24	25	25	597
28-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	24	24	25	25	25	25	25	25	25	25	598
29-Sep-10	25	23	23	23	23	23	23	23	23	23	25	25	24	24	25	25	25	25	25	25	25	25	25	25	580
30-Sep-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
																									17,738

Table 4
RECs Delivered to TEP in Oct 10 for Deal CRN 703 / CRN 716

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
2-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
3-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
4-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
5-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
6-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
7-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
8-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
9-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
10-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
11-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
12-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
13-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
14-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
15-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
16-Oct-10	25	25	25	25	25	25	25	25	25	25	21	13	10	15	25	25	25	25	25	25	25	25	25	25	559
17-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
18-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
19-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
20-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
21-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
22-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
23-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	18	25	25	25	25	25	25	25	25	25	593
24-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	18	593
25-Oct-10	0	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	575
26-Oct-10	25	25	25	25	25	25	25	25	18	23	25	25	25	25	25	25	25	25	25	25	25	25	25	25	591
27-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
28-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
29-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
30-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
31-Oct-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
																									18,511

Table 5
RECs Delivered to TEP in Nov 10 for Deal CRN 703 / CRN 716

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
2-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
3-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
4-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
5-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
6-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
7-Nov-10	25	50	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	625
8-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
9-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
10-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
11-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
12-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
13-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
14-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
15-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
16-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
17-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
18-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
19-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
20-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
21-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
22-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
23-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
24-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
25-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
26-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
27-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
28-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
29-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
30-Nov-10	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	600
																									18,025

powerex

RENEWABLE ENERGY CREDIT CERTIFICATE

In connection with that certain Confirmation dated December 28, 2009, subject to that certain WSPP Agreement (the "Agreement"), by and between Powerex Corp and Tucson Electric Power Company, the undersigned certifies, as of the October 18, 2010, as follows:

1. The generators (the "Facilities") are renewable electric generating facilities located in the Province of British Columbia.

2. The Facilities commissioning dates and nameplate generating capacities are as follows:

Facility	C.O.D.	Location	Capacity
Armstrong Tolko Woodwaste	24-Jun-2003	Armstrong	20.4 MW
Tembec Pulp and Paper	14-Sep-2001	Skookumchcuk	43.2 MW
Vancouver Landfill Gas – Unit 1	21-Sep-2003	Delta	5.5 MW
Vancouver Landfill Gas – Unit 2	02-Oct-2006	Delta	1.9 MW
Canfor Prince George Bioenergy	12-May-2005	Prince George	59.9 MW
Hartland Landfill Gas	10-Feb-2004	Victoria	1.8 MW
Canfor Intercontinental*	01-Jul-2000	Prince George	25.0 MW

Each Facility was certified by TerraChoice as an Ecologo Class III Certified facility. *Facility is Ecologo Class II.

3. This Renewable Energy Credits Certificate represents the Renewable Energy Credits (as defined in the Confirmation) associated with 70,224 MWh of electric energy generated at the Facilities during February through June 2010 pursuant to the Agreement. This Renewable Energy Credits Certificate has no stated or intrinsic value.

4. The Renewable Energy Credits sold to Purchaser pursuant to the Agreement have not been and shall not be sold, pledged, hypothecated or assigned to any party other than Purchaser. Seller has good and marketable title to such Renewable Energy Credits, free and clear of all mortgages, liens, security interests, pledges, charges, encumbrances, or claims of any nature except as created by this Agreement, and Seller has full right, power and authority to sell, transfer and deliver such Renewable Energy Credits.

5. WITH PURCHASER'S KNOWLEDGE AND CONSENT, SELLER EXPRESSLY NEGATES ANY REPRESENTATION OR WARRANTY, OTHER THAN THOSE EXPRESSLY STATED IN THE AGREEMENT, WHETHER WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE ELIGIBILITY OF THE RENEWABLE ENERGY CREDITS SOLD UNDER THE AGREEMENT TO BE APPLIED, USED OR SUBMITTED TO ANY PROGRAM, GOVERNMENTAL OR OTHERWISE, AND ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED.

Powerex Corp.

Dated: October 18, 2010

By: Mark Holman
Managing Director
Name: _____
Title: _____

Table 1
RECs Delivered to TEP in Feb 10 for Deal CLA 998 / CLB 175

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Feb-10	20	20	13	0	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	453
2-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
3-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
4-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
5-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
6-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
7-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
8-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
9-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
10-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
11-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
12-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
13-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
14-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
15-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
16-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
17-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
18-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
19-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
20-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
21-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
22-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
23-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
24-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
25-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
26-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
27-Feb-10	20	20	20	20	20	20	20	20	20	20	20	7	20	20	20	20	20	20	20	20	20	20	20	20	467
28-Feb-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
																								TOTAL	13,400

Table 2

RECs Delivered to TEP in Mar 10 for Deal CLA 998 / CLB 175

	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
2-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
3-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
4-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
5-Mar-10	20	20	20	20	20	20	20	20	16	18	20	20	20	20	20	20	20	20	20	20	20	20	20	20	474
6-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
7-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
8-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
9-Mar-10	20	20	20	20	20	20	0	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	460
10-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
11-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
12-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
13-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
14-Mar-10	20	20	0	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	460
15-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	17	20	20	20	477
16-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
17-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
18-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
19-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
20-Mar-10	20	20	20	20	20	20	20	7	11	11	13	12	11	11	11	12	11	10	12	14	12	12	20	20	350
21-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
22-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
23-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
24-Mar-10	20	20	20	20	20	20	20	20	20	20	16	20	20	20	20	20	20	20	20	20	20	20	20	20	476
25-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
26-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
27-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
28-Mar-10	20	20	20	20	19	17	17	17	17	17	17	17	17	14	14	15	17	17	17	17	17	20	20	20	423
29-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
30-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
31-Mar-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480

TOTAL 14,640

Table 3
RECs Delivered to TEP in Apr 10 for Deal CLA 998 / CLB 175

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
2-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
3-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
4-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	20	20	20	20	20	20	20	20	20	479
5-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
6-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
7-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
8-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
9-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
10-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
11-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
12-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
13-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
14-Apr-10	20	20	20	20	20	20	20	20	19	13	11	12	13	13	13	13	13	13	13	13	13	13	5	11	361
15-Apr-10	13	13	13	13	13	13	13	13	13	12	11	11	11	11	11	11	13	13	13	13	13	13	12	12	297
16-Apr-10	13	13	13	13	13	13	13	13	10	9	11	11	11	12	12	11	12	12	12	12	12	11	12	12	286
17-Apr-10	12	12	12	12	12	12	12	12	11	11	12	4	9	12	11	12	12	11	12	12	12	9	5	12	263
18-Apr-10	12	11	12	11	10	11	10	10	12	11	11	9	12	12	12	12	12	12	12	12	12	12	12	12	274
19-Apr-10	12	12	12	12	12	12	12	12	11	10	12	12	12	12	12	12	12	12	12	12	11	12	6	6	272
20-Apr-10	8	8	4	4	4	12	20	20	20	20	20	20	20	13	20	20	20	20	20	20	20	20	20	20	393
21-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
22-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
23-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
24-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
25-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
26-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
27-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
28-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
29-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
30-Apr-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
																							TOTAL		13,185

Table 4
RECs Delivered to TEP in May 10 for Deal CLA 998 / CLB 175

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
2-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
3-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
4-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
5-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
6-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
7-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
8-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
9-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
10-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	17	18	20	20	20	20	20	20	474
11-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	18	20	478
12-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	479
13-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	16	20	476
14-May-10	20	20	20	20	20	20	20	20	20	20	20	20	19	17	16	20	20	20	20	20	20	20	18	19	469
15-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	19	19	20	18	20	20	20	20	20	20	20	476
16-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	20	479
17-May-10	20	20	20	20	20	20	20	19	18	16	18	17	16	16	16	16	16	16	15	15	15	15	15	15	414
18-May-10	15	15	15	15	16	16	16	16	16	15	15	16	15	15	17	17	17	17	17	17	18	19	19	19	393
19-May-10	19	19	19	17	17	17	18	20	18	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	464
20-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
21-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
22-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
23-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
24-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
25-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
26-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
27-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
28-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
29-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
30-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	15	20	20	20	20	20	20	20	20	20	475
31-May-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
																								TOTAL	14,677

Table 5
RECs Delivered to TEP in Jun 10 for Deal CLA 998 / CLB 175

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	TOTAL
1-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
2-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
3-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
4-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	16	476
5-Jun-10	15	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	6	20	12	16	20	449
6-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	20	479
7-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
8-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
9-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
10-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
11-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
12-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
13-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
14-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
15-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
16-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
17-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
18-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
19-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
20-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
21-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
22-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
23-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	20	20	20	20	20	20	20	479
24-Jun-10	20	20	20	20	20	20	20	20	20	20	20	17	17	19	16	15	15	15	16	15	17	18	19	20	439
25-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
26-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
27-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
28-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
29-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480
30-Jun-10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	480

TOTAL 14,322

Xcel Energy®
RESPONSIBLE BY NATURE™

Commercial Operations
1800 Larimer
Suite 1000
Denver, CO 80202

March 1, 2010

UniSource Energy
Attn: Carmine Tilghman, Director – Renewable Energy Resources
One South Church Avenue
Mail Stop UE2004, PO Box 711
Tucson, AZ 85702

Carmine,

For the month of February, 8,435 MWs of bundled energy was delivered to TEPM. All of the MWs delivered were under the fixed price option at $66.25. Below, I have listed out the deliveries by farm:

Resource	EIA#	MWs
Logan:	56613	8,185
CO-Green:	56173	250
Total:		8,435

Please feel free to contact me with any questions or concerns. We have enjoyed doing business with you and look forward to meeting Tucson's future needs.

Regards,

Eric Pierce
Managing Director, Energy Trading

Xcel Energy®
RESPONSIBLE BY NATURE™

Commercial Operations
1800 Larimer
Suite 1000
Denver, CO 80202

February 2, 2010

UniSource Energy
Attn: Carmine Tilghman, Director – Renewable Energy Resources
One South Church Avenue
Mail Stop UE2004, PO Box 711
Tucson, AZ 85702

Carmine,

Below is a quick summary of our bundled deliveries for the month of January:

9,967 MWs of bundled energy was delivered to TEPM for the month of January. 9,284 MWs were delivered at a fixed price and the additional 683 MWs were delivered at a real time price. Please see below the total MWs by resource delivered:

Resource	EIA#	MWs
Cedar	56371	1,125
CO-Green	56173	750
Logan	56613	8,092
Total MWs		9,967

Please feel free to contact me with any questions or concerns.

Regards,

Eric Pierce
Managing Director, Energy Trading

Exhibit 2

Attestation from an independent auditor that project selection procedures are fair and unbiased

FINAL REPORT

Tucson Electric Power
2009 RFP for Solar Energy Resources

Scope of the Project

Tucson Electric Power (TEP) retained Accion Group Inc. ("Accion") in 2009 to serve as Independent Monitor for the 2009 joint Tucson Electric Power and TEP Electric Solar Energy Resource Request for Resource ("RFP"). Accion was responsible for monitoring and assessing the appropriateness of the processes by which the Company would evaluate bids received in response to the RFP. Our specific responsibilities included the review and evaluation of models used by the Company to quantify the value of each bid. Accion reviewed the assumptions incorporated in the models and assessed the integrity of the processes and the fairness of those processes. Accion also served as a resource to bidders during the process and reviewed all communications between the Company and bidders throughout the RFP process.

Accion served as IM for seven (7) previous TEP RFPs, including for the first competitive solicitation conducted by TEP under the solicitation rules of the Arizona Corporation Counsel ("ACC" or "Commission"). This experience served to familiarize Accion with the Company, its operations, and the evaluation modeling employed by the Company.

Accion Group's Qualifications

Accion Group, Inc. is a consultancy headquartered in Concord, New Hampshire, specializing in providing services to all segments of the public utility industry. Accion serves as the Independent Evaluator, Independent Monitor, and Independent Observer in different jurisdictions for energy procurement solicitations. These solicitations range from nuclear power plants and conventional fossil fuel generators to small, residential renewable proposals provided under "Feed-in-Tariff" programs. Accion's experience reviewing solicitations for energy and capacity is familiar to the ACC and has been detailed in prior reports to the Commission. In an effort to avoid redundancy, we will not provide further detail in this report. Throughout the past six years, Accion has evaluated bids for over 80,000 MWs of energy and capacity, with the more recent focus of RFPs being on renewable portfolios. While renewable proposals provide unique challenges for evaluation and integration into a supply portfolio, Accion's extensive

experience in the electric utility industry provides for comprehensive review of evaluation techniques and methodology that is well versed in this evolving field of energy supply.

Accion drew upon this range of experience in reviewing the process and evaluation criteria employed by TEP. In particular, Accion has ongoing experience in reviewing solar energy proposals in Georgia, Hawaii and Arizona and recently completed a significant review of multiple renewable technology supplies in the Pacific Northwest. In each of these jurisdictions, considerable investment is being made in the emerging technologies, resulting in the evolution of evaluation techniques.

Project Approach

TEP based the RFP on the prior renewable RFPs. Accion's review began with examination of the modifications of the RFP documents to confirm they were appropriate for a solar RFP. Prior to the release of the RFP, we reviewed the protocols to be employed as well as the terms of the RFP documents and the requirements the bidders would have to meet. We reviewed the draft RFP documents and discussed the terms with TEP personnel. Because TEP is well experienced in conducting solicitations, the RFP required only minor adaptation to make it appropriate for this solicitation. We found the documents to be thorough, complete and devoid of ambiguity. Throughout the RFP process, TEP presented bidders with the opportunity to raise concerns with the Company or the IM, and no concerns about the quality or detail of the RFP documents were presented.

The RFP was released on September 11, 2009, and the Bidders' Conference was conducted on September 30, 2009. The RFP noted that TEP sought approximately 50,000 MWh of renewable supply from solar sources. For the convenience of bidders, interested parties could participate in the Bidders' Conference via telephone, and a number chose to do so. Bids were received on November 30, 2009. Throughout the period during which the RFP was considered by bidders, TEP reminded bidders that Accion was available to assist with any questions or concerns that they might have. This point was stressed during the Bidders' Conference.

We found the final RFP documents clearly presented and containing all of the information bidders would need to prepare a proposal. The response time for the RFP was reasonable. We discerned no unreasonable bias for or against any bidder, size of project or solar technology. To be clear, we found the encouragement of bid proposals installing solar resources on specific sites to be appropriate for this solicitation. Throughout the process, TEP

244 North Main Street • Concord, NH 03301-5041 • Phone: 603-229-1644 • Fax: 603-225-4923

personnel kept us advised of all developments and were responsive to all inquires and suggestions made by the IM. We met with TEP personnel a short time after receipt of proposals and reviewed the initial ranking of each bid. During that meeting and through subsequent telephone conference calls, TEP personnel kept us abreast of the evaluation process and the assessment of each proposal.

Accion received copies of all bids when they were submitted, and we believe TEP also provided us copies of all written exchanges with bidders. Accion participated by telephone in a Bidders' Conference. We were advised when bidders contacted the Company, and we received copies of all responses provided to bidders by TEP personnel.

As with other TEP RFPs, we acquired copies of the Company's models and sample outputs of those models in order to test their appropriateness. The evaluation model was the same as was used in prior RFPs, modified to accommodate solar resources. From our work in the renewable resource supply industry, we are well aware that renewable RFPs frequently attract proposals from firms that are less familiar with competitive solicitation protocols, and frequently are less likely to be associated with large, well-capitalized companies. With this in mind, we reviewed creditworthiness, reliability and deliverability criteria with TEP personnel. We recognize that there is no risk TEP would fail to meet system needs if the resulting solar supplies underperform. We also believe TEP intends to have selected resources as part of the supply portfolio for the duration of contracts. We found the criteria employed by TEP to be reasonable.

As is our accepted practice, we used "mock" bids as proxies for actual and expected bids. We use this device to avoid the added cost of preparing a "parallel" model that would be used to replicate the evaluation model in order to test the results. We have used this approach with success in Arizona, and first devised the method for evaluation during the Track B proceeding conducted by the ACC. Because the evaluation model was only slightly modified from the model used for the 2009 wind RFP, we were able to complete the evaluation model review with absolute confidence in the TEP modeling.

As noted, the renewable resource industry continues to attract entrepreneurs interested in exploring potential for development of a wide range of technologies. These suppliers include firms intent on developing niche positions as suppliers or partners to developers. TEP recognized the evolutionary stage of the solar generation industry and accepted responsibility for fostering its development. This was evident by the RFP's interest in acquiring solar capacity, thus providing an avenue for development, and additionally by agreeing to serve as a resource

244 North Main Street • Concord, NH 03301-5041 • Phone: 603-229-1644 • Fax: 603-225-4923

for developers. TEP invited individuals and entities interested in providing services or potential development sites to submit contact information to TEP, and the information was made available to potential developers. We found this willingness by TEP to assist solar developers to be appropriate and a far-sighted approach.

Evaluation of Bids

TEP received a robust response to the RFP with 144 proposals for a wide range of installed capacity and solar technologies. Bid capacity totaled 649.45 MWs. As the evaluation process progressed and the bids were evaluated, TEP first established a short-list, then a refined short-list, and at last the final list of proposals to which contracts were extended. At each phase of the process, TEP reviewed its decision making with Accion, and we found the winnowing of bids to be appropriate.

EVALUATION PROCESS	
Proposals	MWs
Total	649.45
Initial Short List	497.65
Updated Short List [1]	503.15
Final Selection	101.00

Proposals ranged from 1.00 MWs to 55.9 MWs. Most of the proposals were for twenty (20) year terms, though two developers offered twenty-five (25) year commitments, and one offered a thirty-year (30) proposal.

The technologies were varied and included the proven solar technologies being installed today. The bids included:

- Fixed
- 1 Axis Tracker
- Solar photovoltaic
  - PV-single axis
  - PV-single axis (crystal)
  - Mobile PV array (adjustable tilt)
  - PV-thin film
  - PV-Fixed
  - PV adjustable fixed tilt

[1] The Updated Short List number reflects revised bids by some bidders.

- Concentrated Solar Power
  - CSP Parabolic Trough
  - CSP /gas firm
  - CSP w TS
  - CSP (stirling engines)
  - CPV dual axis w/ steam turbine

We discussed the bids with TEP personnel and the terms and representations made by bidders. In particular, we reviewed the technologies that were proposed, and the ability of individual bidders to meet proposed commitments. Again, while the failure to deliver by any solar supplier would not disrupt the ability of TEP to meet system needs, care was taken to identify proposals that had the potential to supply the full commitment for the full twenty (20) years requested. We understood the interest of TEP to be meeting the renewable portfolio commitment with reliable sources.

The number of proposals demonstrates the interest in developing solar resources in Arizona, and the interest in exploring commercial application of a wide variety of technologies. As we have seen elsewhere, the array of proposals also indicates that there remains a supply potential from sources that have yet to be committed, and the likelihood that even more sources will be made available as the industry matures.

We reviewed the final selections with TEP and agreed that they were appropriate, and met the requirements of the RFP. While the final selections appeared to be dwarfed by the total capacity presented in bids, we are satisfied that TEP made responsible and reasonable selections for the final group of bidders to which contracts were extended.

FINAL SELECTIONS

Solar Technology	Total MW Capacity	Energy Price (per MWh)	Term (years)
Fixed	5.00	$90.00	20
CPV	10.00	$122.00	20
CPV	1.00	$128.00	20
1 Axis Tracker	15.00	$134.00	20
Fixed	30.00	$97.60	20
Fixed	40.00	$120.50	20

244 North Main Street • Concord, NH 03301-5041 • Phone: 603-229-1644 • Fax: 603-225-4923

It should be noted that the capacity values presented above were the estimates provided by the respective bidders. It is our understanding, and expectation, that minor adjustments will be recognized once the final engineering is completed. This is a common occurrence with green field and brown field renewable projects, since there is no site-specific experience to assess, and the actual capacity will be affected by the final installation. We believe TEP's approach of recognizing the need for adjustment is prudent, and reflects the reality of the evolving technologies.

Findings and Observations

One measure of fidelity to the RFP terms and protocols is the reaction by bidders. We are especially attentive to complaints and other direct contact received from bidders. During the process, six (6) bidders, with each inquiry concerning logistics, contacted us. We received no complaints about the process, RFP terms or any conduct by TEP personnel. Well after the RFP bid date, and after final selections were made, a participant provided a memorandum with suggestions for future RFPs by TEP. While the bidder did not forward a copy to the IM, TEP made it available to Accion. The suggestions included structural changes (such as requiring pre-qualification by bidders) and comments on preferred RFP content. The memorandum provided insights drawn from other competitive solicitations. The memorandum did not criticize this RFP, nor did it suggest that the bidder believed there were errors committed, or that the RFP process was flawed in any way.

Throughout the RFP process, no bidder contacted us with concerns about the integrity of the RFP, and no challenges to the process were raised during the Bidders Conference or after bids were received. We note that the bids were nearly universally complete as filed. We conclude that the TEP RFP was clear and complete, and that bidders understood the requirements were met.

Accion reviewed and evaluated TEP's complete evaluative process. We believe TEP personnel acted with appropriate professionalism and with diligence in reviewing the bids, without bias towards or against any bidder. We were impressed with the willingness of TEP personnel to assist bidders in the preparation of proposals by answering all questions, even when the subject of inquiry was clearly set forth and available in the RFP documents. We believe this reflected the commitment by TEP to make the RFP successful, and a recognition that not all participants came to the process with the same level of experience in competitive solicitations.

244 North Main Street • Concord, NH 03301-5041 • Phone: 603-229-1644 • Fax: 603-225-4923

We believe the RFP documents were complete, thorough, and clearly presented. As evidence of this, Accion did not receive any complaints from bidders concerning the RFP documents or the conduct of the RFP. TEP personnel were responsive to our inquiries and were available to Accion upon request, without delay or hesitation.

In our opinion, the RFP was conducted in accordance with practices we have observed in other RFPs we have monitored and in keeping with practices employed by utilities generally. The evaluative methods employed were comprehensive and appropriate. We did not observe any practice that was unfair or inequitable to any bidder.

Accion Group believes that the large number of bids demonstrates that developers were informed of the RFP, and that they viewed it as a legitimate opportunity. We believe TEP evaluated each bid fairly, and made the final selection with the intent of establishing long-term supply of solar generated electricity. TEP used well-established evaluation criteria and methodology proven reliable in prior RFPs, and modeling with which we have extensive familiarity. We believe the RFP was conducted fairly and we have no reason to question the final selections.

244 North Main Street • Concord, NH 03301-5041 • Phone: 603-229-1644 • Fax: 603-225-4923

Exhibit 3

Description of Extra Credit Multipliers

The REST order allows utilities to earn RECs from sources other than actual energy production based on applicable extra credit multipliers ("Multipliers"). These Multipliers include the Early Installation Extra Credit Multiplier, the In-State Power Plant Installation Extra Credit Multiplier, the In-State Manufacturing and Installation Content Extra Credit Multiplier, and the Distributed Solar Electric Generator and Solar Incentive Program Extra Credit Multiplier.

The Multipliers are applied to the energy generated by an eligible renewable energy resource. The energy generated by a given facility during a compliance period is multiplied by the multiplier, producing the "extra credit" earned by that facility. This "extra credit" is then added to the RECs produced by the facility as a result of its energy production to provide the total number of RECs generated by that facility during a given compliance period. The multipliers are additive, but the total multiplier cannot exceed 2.0. Table E3.1, below, shows each multiplier and its related value.

Table E3.1 – REST Extra Credit Multipliers

Extra Credit Multipliers	Value
Early Installation Extra Credit: Installed and Began Operating in	
2001	0.3
2002	0.2
2003	0.1
In-State Power Plant Extra Credit (1997-2005)	0.5
In-State Manufacturing and Installation Content (1997-2005)	0.5 * (% in-state content in installed plant)
DE Solar Electric Generator and Solar Incentive Program (1997-2005)	0.5
Source: Renewable Energy Standard and Tariff, R14-2-1806.	

The Multipliers only apply to systems installed between January 1, 1997 and December 31, 2005. In some cases, the definition is even narrower. There is no expiration date for any of the Multipliers except the Early Installation Extra Credit Multiplier. The Early Installation Extra Credit Multiplier is only applied during the first five years following a facility's operational startup; as a result, 2008 will be the final year for applying this multiplier. The remaining Multipliers can be applied to facility generation for the life of the facility.

Exhibit 4

Documentation of TEP REC retirements for 2010

(Signed Certificate available upon request)

Tucson Electric Power

A UniSource Energy Company

CERTIFICATE OF RETIREMENT OF RENEWABLE ENERGY CREDITS

Original Certificate Issue

Certificate No. TEP/REST: WRE 159,302,632 – 345,138,392

Certificate No. TEP/REST: DERES 11,585,148 – 23,807,276

Certificate No. TEP/REST: DECOM 3,973,235 – 15,596,807

On March 31, 2011 Tucson Electric Power Company (TEP) retired 185,835,760 Utility-Scale/Wholesale Renewable Energy Credits (WRE); 12,222,128 Distributed Energy - Residential Credits (DERES); and 11,623,572 Distributed Energy – Commercial Credits (DECOM) towards meeting its 2010 Renewable Energy Standard requirements.

1. TEP certifies that it derived the Wholesale Renewable Energy Credits from certified wholesale market trades that were delivered, and verified through WebTrader™, into the TEP service territory.

2. TEP certifies that it derived all other Utility Scale Solar and Distributed Energy Solar from actual generation of electricity and the application of the multipliers as permitted by the EPS and the RES.

3. TEP further certifies that, at the time of this transfer, it had title to the Credits transferred to TEP and that such Credits have not previously expired, have not been otherwise used by TEP to meet its Environmental Portfolio Standard or Renewable Energy Standard requirements, and have not been transferred by TEP to any other entity.

Attested to:

Name of TEP officer – David Hutchens

Title – Executive Vice President

Date – March 31, 2011

Signature _/s/ David G. Hutchens_____