

UTILITY BOARD AGENDA

INFORMATION ONLY DISCUSSION /	()
ACTION APPROVAL/RESPONSE	()
REQUESTED	(X)

PROPOSED ACTION:

That the Utility Board recommends that the City Council approve Resolution 2011 – 49 and the Needles Public Utility Authority approve Resolution 12-13-2011-NPUA which resolutions respectively reject adopting SBX1 2 Compliance Plan ("Plan").

BACKGROUND:

SBX1 2 was enacted during a recently adjourned special session of the state legislature and will take effect on December 10, 2011. Its primary impact is to require Publicly Owned Utilities ("POU") to adopt a Renewables Portfolio Standards ("RPS") program with prescribed goals for procuring renewable energy resources and the criteria for achieving such goals. Secondly, the bill requires POUs to adopt a plan for enforcing its provisions no later than January 1, 2012. Staff has elected to combine these two requirements into one document entitled the SBX1 2 Compliance Plan.

The City of Needles does not have an RPS goal of 33% by 2020. While there is a genuine desire to meet that statutory goal, there are some empirical reasons why that goal is unattainable by the City. The *Oxford English Dictionary* gives the following definition to empirical: based on, concerned with or verifiable by observation or experience rather than theory or pure logic.

The principal impediment to Needles achieving the benchmark compliance percentages stated in SBX1 2 is the fact that Needles present portfolio has a hydro component from the Parker Davis Project that averages 40% (*) of the total power purchased.

Power Supply Total ¹	61,709,640
Power Supply, Hydro- Winte	6,708,856
Power Supply, Hydro- Summer ³	17,678,106
Power Supply, Hydro Total ⁴	24,386,962

(*) 24,386,962/61,709,640 = 40.1698646%- See attached- City of Needles Parker-Davis Project Contract 87-BCA-10098, Exhibit A-1 Monthly Kilowatt-Hour (kWh) Obligations, Resource Integration Exchange Request Form. Note: These numbers include the Credit Benefiting Agreement described below.

Needles also holds a Credit Benefiting Agreement with the Agua Caliente Band of the Cahuilla Indians in Palm Springs, CA that is coterminous with the PDP expiry- April 30, 2018. The Agua Caliente entered into a contract with Western Area Power Administration ("WAPA") in October 2007 for delivery of PDP Firm Electric Service. The transmission service provider in Agua

Caliente's area is Southern California Edison ("SCE"). Per WAPA, Agua Caliente had been unable to work out a scheduling/crediting arrangement with SCE.

Because creating a tribal utility to directly accept the PDP allocation was not a viable option at that time, Agua Caliente sought to finalize arrangements to receive the economic benefit of its PDP allocation through the City of Needles. WAPA put forth a Benefit Credit Arrangement for the Agua Caliente that allows it to receive those economic benefits in monthly payments. The City of Needles pays the Aqua Caliente \$40.00 per MW for the use of Agua Caliente's PDP allocation during the term of the agreement. It calls for 1 MW firm for an aggregate annual delivery of 5,144,000 of hydro.

Rationale for Needles Inability to Comply

Mandated Renewables Compliance Percentages:

20% RPS by December 31, 2013

20% of 61,709,640 KWh total power purchases is 12,341,928 KWh of renewable energy that Needles must procure.

25% of 61,709,640 KWh total power purchased is 15,427,410KWh of renewable energy that Needles must procure.

33% of 61,709,640 KWh total power purchased is 20,364,181 KWh of renewable energy that Needles must procure.

Needles cannot shape (particularly in summer) its load to accommodate renewable energy sources without foregoing inexpensive hydro. It purchases hydro at firm prices from PDP, e.g., \$0.0178/KWh in winter, \$0.0144 in summer. At compliance threshold No. 1 -December 31, 2013, Needles would have to forego 4,877,392 KWh of inexpensive hydro in order to absorb a like amount of renewable energy; at compliance threshold No. 2- December 31, 2016 it would have to forego 6,096,741 KWh of inexpensive hydro, and at compliance threshold No. 3- December 31, 2020 the foregone hydro KWh would number 8,047,697.

Needles had a 20 year Purchase Power Agreement ("PPA") with Renewable Energy Development Company ("REDCO") that it executed on June 9, 2009 for 5 MW of solar thermal at \$128.00/MW (\$0.12/KWh). REDCO could not perform and the parties agreed to hold one another harmless.

Renewable energy at REDCO's \$0.12/KWh represents an increase over winter hydro of 6.74X and an increase of 8.33X over summer hydro. Needles poverty rate is 29.9%. There is a very small universe of electric customers in this municipality of 4,844. Peak load in summer is 18 MW; in winter 6 MW. With temperatures that never drop below 110 degrees from June to the end of September, air conditioners are operating continuously.

The City approved engaging the firm of Ralph Hitchcock & Associates ("Hitchcock") to consider the merits and issues associated with integrating a fixed Photovoltaic solar array into the City's resource mix.

Per Hitchcock, our task is the organization and modeling of various solar capacities and quantifying the cumulative fiscal impact. The acceptability of integrating RPS cost increases into their mix is a policy determination for the NPUA Board.

Four targeted amounts of PRS were evaluated: .5MW, .75MW, 1.0 MW, and 2.0 MW. The annual net increased costs of RPS respectively for these targets were \$90,721.00, \$131,430.00, \$176,421.00, and \$348,977.00

Note: Hitchcock's RPS targeted amounts did not factor in the negative impact of forcing out hydro KWh out of the power mix, consequently they are not representative of the true financial impact to rate payers. Were Needles to procure even .5 MW of renewable energy, it would adversely affect the ratepayers and would only produce 35% of the compliance period mandate of December 31, 2013.

Chevron Renewables prepared a feasibility study for the City in late 2010 in which put forth two possible solutions:

- Demand side efficiencies at a cost of \$900,000
- A Utility Owned Generation ("UOG") capital cost for .5 MW solar at a cost of \$2,500,000

Note: Both solutions would be required to meet the RPS mandates.

Needles is an unrated credit that cannot qualify for financing, but even if it could the additional debt service would unduly burden the ratepayers, e.g.,

- Demand side debt service (5.54%, 15 years) would be \$88,474.42 annually. or 0.0013638415/KWh
- UOG debt service (5.54%, 20 years) would be \$207,044.54 annually or 0.003834158/KWh

Demographics

Needles is an economically distressed city with a poverty rate that approaches 30% According to the Profile of the City of Needles by the Southern California Association of Governments' (SCAG) Regional Council the following statistics are presented:

- The Median Household Income in 2010 was \$34,000 or 60% that of San Bernardino County as a whole
- Needles is the smallest city in San Bernardino County. Its population grew by 14 from 2000 to 2010
- There are only 1,918 households in Needles
- In 2010, 64% of households earned less than \$50,000
- Median home sale prices decreased 50% from 2006 to 2010
- Median home sales price was \$60,000 in 2010; it was \$95,000 for the County
- In 2010, total jobs numbered 3,160, a 5.1% decrease from 2007
- From 2007 to 2010, construction trade jobs decreased 44.3%
- From 2007 to 2010, manufacturing jobs decreased by 26.3%
- From 2007 to 2010, retail trade jobs decreased 13.2%
- From 2007 to 2010, professional and management jobs decreased by 15.5%
- From 2005 to 2009, retail sales decreased 21.2%
- From 2000 to 2008, K-12 school enrollment decreased 14.5%

Reasoning

Due to the City's impoverished state, it pleads that the financial ramifications of adopting and implementing RPS are not in the best interests of the City and the ratepayers. RPS would cause a disproportionate impact that would be catastrophic.

Per SBX1 2,

(c) The commission shall establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables portfolio standard. In establishing this limitation, the commission shall rely on the following:

(1) The most recent renewable energy procurement plan.

(2) Procurement expenditures that approximate the expected cost of building, owning, and operating eligible renewable energy resources.

(3) The potential that some planned resource additions may be delayed or canceled.

(d) In developing the limitation pursuant to subdivision (c), the commission shall ensure all of the following:

(1) The limitation is set at a level that prevents disproportionate rate impacts.

(2) The costs of all procurement credited toward achieving the renewables portfolio standard are counted towards the limitation.

(3) Procurement expenditures do not include any indirect expenses, including imbalance energy charges, sale of excess energy, decreased generation from existing resources, transmission upgrades, or the costs associated with relicensing any utility-owned hydroelectric facilities.

(e) (1) No later than January 1, 2016, the commission shall prepare a report to the Legislature assessing whether each electrical corporation can achieve a 33-percent renewables portfolio standard by December 31, 2020, and maintain that level thereafter, within the adopted cost limitations. If the commission determines that it is necessary to change the limitation for procurement costs incurred by any electrical corporation after that date, it may propose a revised cap consistent with the criteria in subdivisions (c) and (d). The proposed modifications shall take effect no earlier than January 1, 2017.

(2) Notwithstanding Section 10231.5 of the Government Code, the requirement for submitting a report imposed under paragraph (1) is inoperative on January 1, 2021.

(3) A report to be submitted pursuant to paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

(f) If the cost limitation for an electrical corporation is insufficient to support the projected costs of meeting the renewables portfolio standard procurement requirements, the electrical corporation may refrain from entering into new contracts or constructing facilities beyond the quantity that can be procured within the limitation, unless eligible renewable energy resources can be procured without exceeding a de minimis increase in rates, consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5.

FISCAL IMPACT: Indeterminate at this point

ALTERNATIVES: There appears to be no alternative to pleading disproportionate impact. The City is in no position to adopt RPS. The City cannot afford to give up any portion of its hydro allotment.

RECOMMENDED ACTION:

Move that the Utility Board not adopt an SBX1 2 Compliance Plan and recommend that the City Council and Needles Public Utility Authority approve their respective resolutions that state the reasons set forth for not adopting such Plan.

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Submitted By: David G. Brownlee Jr., City Manager

Meeting Date: December 6, 2011

Agenda Item _____