

Lompoc City Council Agenda Item



City Council Meeting Date: August 3, 2010

TO: Laurel M. Barcelona, City Administrator

FROM: Ronald V. Stassi, Utilities Director
r_stassi@ci.lompoc.ca.us

SUBJECT: NCPA SECOND PHASE AGREEMENT FOR FUNDING THE PLANNING AND DEVELOPMENT ACTIVITIES OF THE SOLAR PHOTOVOLTAIC PROJECT (SOLAR PV PROJECT).

Recommendation: The City Council approve participation in the Northern California Power Agency's (NCPA) "Second Phase Agreement" for Funding the Planning and Development Activities of NCPA's SOLAR PV Project; authorize expenditures of up to \$82,600 which includes a 20% contingency of \$11,700 and an allowance of \$12,500 to reimburse the developer if NCPA elects to not proceed with the SOLAR PV Project; and authorize the Mayor to sign the subject agreement.

Background/Discussion: In November 2007 the NCPA Commission approved the NCPA Green Power Pool (NGPP) Amended Third Phase Agreement^{*} incorporating changes to an

^{*} The method by which NCPA creates and proceeds with projects for its members consists of three phases, all of which require approval of the NCPA Commission and subsequent approvals of participants. **First Phase** activities are exploratory in nature and consist mainly of NCPA staff costs associated with identifying project opportunities that can bring value to NCPA members. Activities include likely viability and economic analysis. Conducting First Phase activities is at the discretion of NCPA management, funded in NCPA's annual budget, and does not require signed agreements with the member participants. Once a project is considered viable a **Second Phase** Agreement may be authorized by the Commission. A project's "second phase" consists of planning and development studies, CEQA analysis, inter-connection studies, contracts preparation, and other tasks necessary and prudent to ascertain the constructability and economics of a project under consideration. Those NCPA members that choose to participate in the project are required to get council approval for participation and funding commitments. Members that commit to Second Phase activities are responsible for their proportionate share of costs. (For projects of an approximate one megawatt size the cost would likely range between \$40,000 and \$80,000.) If NCPA members that took part in Second Phase activities choose to move forward to acquire or construct a project, it will fall under a **Third Phase** activity. During this phase a project will generally be designed, licensed, financed, and constructed over a significant period of time.

Only those participants that participate in the Second Phase and/or Third Phase of a project are responsible for related costs. Third Phase costs can range up to hundreds of millions of dollars if the project consists of acquiring or constructing a multi-megawatt power generating facility such as the Lodi Energy Center. Only those members that participate in Phase Three activities receive the benefits from the project.

Phase Three commitments under a "Third Phase Project Agreement" create obligations that exist for the duration of a project unless the participating member sells its share to another participant.

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agreement first put in place in June 2006. This agreement was developed to enable NCPA to assist its members in meeting their respective renewable energy goals by providing NCPA with the authority to negotiate and enter into power purchase agreements to purchase electricity from renewable resources and/or to develop or acquire physical renewable generation. Only those members that are parties to NCPA's NGPP Third Phase Agreement have rights to proceed with individual projects that are identified through specific NGPP efforts. (NCPA members besides Lompoc that are participants in the NGPP include Healdsburg, Lodi, Palo Alto, Santa Clara, Ukiah, Plumas Sierra, and BART. Gridley is in the process of joining the NGPP and has an interest in participating in the SOLAR PV Project.) Through an RFP process several renewable energy proposals have been received by NCPA. Proposals have been received for biomass energy and solar energy as well as for providing landfill and methane gas.

Once the NGPP Third Phase Agreement was in place, NCPA undertook First Phase activities on behalf of the NCPA members that were parties to the NGPP to assess certain solar energy proposals that were submitted to NCPA as part of the NGPP Third Phase effort. (Note that the NGPP Third Phase Agreement serves as an "umbrella" agreement under which future Second and Third Phase activities for specific green projects could take place.) Some NGPP members now wish to proceed with a "project specific" Second Phase Agreement to direct NCPA staff to conduct appropriate studies for certain solar photovoltaic projects referred to as the SOLAR PV Project. This requires an action by NCPA's Commission authorizing NCPA staff to pursue renewable energy resources on behalf of those members who chose to be parties to the agreement. This was accomplished at the Commission's meeting held on June 17, 2010 when it approved the attached SOLAR PV Project Second Phase Agreement. This agreement also requires the approval of the governing boards (in Lompoc's case, the City Council) of those NGPP participants that elect to participate in the SOLAR PV Project. This is the action that is being requested of the City Council.

Under this agreement NCPA will evaluate five renewable solar energy projects identified through the RFP process. Specific Projects will likely be undertaken by one or more participants and may eventually be completed under NCPA's Third Phase Agreement process if no "fatal flaws" are identified. At this stage of the SOLAR PV Project (Second Phase), Lompoc, Gridley and BART wish to commit study funds which will give them the right to purchase energy from among five identified projects in the future if they elect to sign power purchase (Third Phase) agreements upon completion of Second Phase work.

The City's interest in NCPA's SOLAR PV Project is based upon a solar plant developer (LightBeam Energy, Inc.) responding through the RFP process and indicating an interest in siting a one-megawatt solar energy facility within the City. The developer's targeted site is on the City's Airport property. If this site is developed, several benefits will accrue to the City. For the Utilities Department, the cost of acquiring this renewable energy source is minimized in several ways. First, since it is "behind the meter," that is, directly connected to our own electrical system, there are no transmission losses or third-party interconnection fees. The

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SOLAR PV Project would also reduce Lompoc's need to purchase and have delivered approximately 2000 MWh of energy annually. For the general City, we will accrue rental fees that the developer will pay for the right to site the project on City-owned property.

Additionally, there are likely to be some benefits derived from having minimal on-site electrical generation should a catastrophic event occur that separates Lompoc from the electrical grid. For example, since the solar facility will be located on the same circuit as the Wastewater Treatment Plant, it could serve to power its operations for a greater period of time than is presently possible with only its on-site emergency generation capability.

NCPA's SOLAR PV Project will evaluate five independent solar power facilities in central and northern California ranging in size from a half-megawatt to five megawatts all of which will partner with LightBeam Energy, Inc. as the developer. One site and only one site from among the five are of particular interest to Lompoc utility staff. That site would host a one-megawatt facility planned to be located on the south side of the City's Airport property. This solar facility will be capable of providing about 1.5% of Lompoc's annual energy needs and put us well within reach of the City Council established goal of having 33% of our annual energy needs provided by renewable energy resources by 2015.

The City at its sole discretion could purchase the full output from the Airport Project under a future Third Phase Agreement that will require City Council approval, paying only for that energy delivered for a period of 25 to 30 years. The energy would primarily be delivered during heavy load hours and the price is expected to be \$118/MWh escalated by ½% per year. Final cost parameters will not be known until Second Phase work is completed. The City is not pursuing participation in the SOLAR PV Project's other four proposed facilities.

Fiscal Impact:

The total cost of Second Phase activities for this SOLAR PV Project is expected to be completed for a not to exceed amount of \$523,000, of which Lompoc's cost exposure is \$82,600, if this project is approved. Lompoc's funding request consists of three components: \$58,400 for expected Second Phase; costs, a contingency of 20% or \$11,700 (as prescribed in NCPA's Commission action to establish SOLAR PV Project); and an "at risk" potential cost of \$12,500. This at risk cost would only be required to be paid as reimbursement to the developer for its costs of performing interconnection studies should the participants choose not to construct the SOLAR PV Project. If NCPA goes forward under a Third Phase Agreement as expected, Lompoc's budgeted \$12,500 "at risk" obligation disappears. Second Phase activities are expected to be completed by June 30, 2011, and funds are available from cash reserves. If the construction of the SOLAR PV Project goes forward under a Third Phase Agreement, it is expected to take three to four months.

The table below summarizes the cost exposure under Second Phase activities for the NGPP members that are SOLAR PV Project participants.

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NCPA PV Project – Second Phase Not-to-Exceed Budget (\$1,000s)				
Participant	Expected Phase 2 Cost	Contingency @ 20%	Second Phase Max. Cost at Risk if Project is Terminated	Total Max. Second Phase Cost at Risk
BART	\$201.5	\$40.3	\$49.0	\$290.8
Lompoc	\$ 58.4	\$11.7	\$12.5	\$ 82.6
Gridley	\$109.7	\$21.9	\$18.0	\$149.6
Total	\$369.6	\$73.9	\$79.5	\$523.0

Environmental Analysis:

Staff’s recommendation if approved by the City Council will not result in a direct or reasonably foreseeable change in the physical environment and is therefore not a “project” for purposes of the California Environmental Quality Act (CEQA). No environmental review is necessary at this stage of the SOLAR PV Project.

Conclusion:

The SOLAR PV Project consists of five independent solar power facilities in central and northern California, ranging in size from a half-megawatt to five megawatts. One facility is a one-megawatt facility planned to be located on the south side of the City’s Airport property. This facility would be capable of providing about 1.5% of Lompoc’s annual energy needs and putting us well within reach of the City Council established goal of having 33% of our annual energy needs provided by renewable energy resources by 2015. The City would purchase the full output from the Airport Project, paying only for that energy delivered. The City is not pursuing participation in the SOLAR PV Project’s other four proposed facilities. City Council approval of the SOLAR PV Project Second Phase Agreement does not commit the City to participation in the construction of the SOLAR PV Project nor obligate to purchase any energy from it.

Staff recommends that staff approve participation in NCPA’s SOLAR PV Project “Second Phase Agreement” (Attached) for funding the planning and development activities of NCPA’s SOLAR PV Project.

APPROVED FOR SUBMITTAL TO THE CITY ADMINISTRATOR:

Ronald V. Stassi, Utilities Director

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APPROVED FOR SUBMITTAL TO THE CITY COUNCIL:

Laurel M. Barcelona, City Administrator

Attachment: [Second Phase Agreement for Planning and Development Activities of the SOLAR PV Project](#)