

CLIMATE INVESTMENT FUNDS

February 4, 2015

APPROVAL BY MAIL: ARMENIA: GEOTHERMAL EXPLORATORY DRILLING PROJECT (GEDP) (SREP)

Comments and Questions Raised by the Sub-Committee Member from Switzerland



3 February 2015

SREP: Armenia Karkar Geothermal Project
Exploration drilling and technical assistance

Questions and Comments

1. Reminding the conditions under which the SREP Investment Plan for Armenia was approved and notably our concerns regarding risk (\$8.55 million grant) and reward (28.5 MW proven geothermal potential), we take note that the exploration drilling is sequenced and may be stopped, if the results are not promising. The conditions for the stop or go on decisions during the process are however not clear in the PAD. Please detail the sequencing of project components (exploration drilling and technical assistance parts) in a way that shows the actually to be incurred costs depending on the drilling results. At least the following questions should thereby be answered:
 - a. Under what conditions will the second slim well be drilled or not and what are the financial implications?
 - b. Under what conditions will the drilling of a production-sized well be justified?
 - c. What will be the financial implications if it is not, i.e. what components of the project would remain relevant?
2. The economic analyses indicate that only a flash cycle geothermal power plant would produce electricity at a levelized cost which would be competitive enough to justify its construction. We understand that the flash cycle technology requires a high temperature (about 250°C) geothermal resource. We conclude that the drilling would be stopped if the drilling of the slim well(s) indicates temperatures significantly lower than 250°C. Please clarify if our conclusion is correct.
3. What is foreseen to be done with possible savings due to an abortion of the exploration drilling in relation to obviously insufficient geothermal resources?
4. We noticed that the \$2.13 million contribution from the recipient is equivalent to the taxes related to the different project components (Annex 7 Procurement Plan). Given that the Government of Armenia owns the recipient, the question arises, whether “taxes only” can/should be considered a legitimate co-financing of an SREP project.
5. The procurement risk was qualified as “substantial” notably in relation to the weakness of the R2E2 Fund. Capacity building and the hiring of procurement consultants are mentioned as mitigation measures but no budget is therefore requested. How will these mitigation measures be financed?
6. In general, the amounts provided for the consultancy mandates (300'000 USD + taxes for technical supervision and support and 200'000 USD + taxes for transaction advisory) seem low for a \$100 million renewable energy project. Please explain. Also, does that include a provision for post-transaction advisory?



7. In the Procurement Plan it is indicated that the shortlist of consultants may consist entirely of national consultants. While we encourage the use of national consultants as far as possible, this raises the question whether specialized consultants and transaction advisories for geothermal projects under PPPs of this magnitude can be found under adequate competitive conditions, if restrained to the national market.