

Republic of the Philippines  
ENERGY REGULATORY COMMISSION  
San Miguel Avenue, Pasig City



IN THE MATTER OF THE  
APPLICATION FOR  
AUTHORITY TO DEVELOP,  
OWN, AND OPERATE  
DEDICATED POINT-TO-POINT  
LIMITED FACILITIES TO  
CONNECT THE BAC-MAN 3  
GEOTHERMAL PROJECT TO  
THE LUZON GRID, WITH  
PRAYER FOR PROVISIONAL  
AUTHORITY,

ERC CASE NO. 2015-056 MC

ENERGY DEVELOPMENT  
CORPORATION (EDC),  
Applicant.  
x ----- x

DOCKETS  
Date: DEC 10 2015  
By: *[Signature]*

**O R D E R**

On September 8, 2015, the Energy Development Corporation (EDC) filed an application for authority to develop, own and operate dedicated point-to-point limited facilities to connect the Bac-Man 3 Geothermal Project to the Luzon Grid, with prayer for provisional authority.

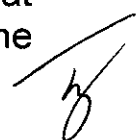
In the said application, EDC alleged, among others, the following:

1. EDC is a corporation duly organized and validly existing under and by virtue of the laws of the Republic of the Philippines, with principal office address at One Corporate Centre, Julia Vargas Avenue corner Meralco Avenue, Ortigas Center, Pasig City;
2. EDC is in the business of, among others, exploring, discovering, developing, producing, utilizing, processing, transporting, marketing, using, experimenting with,

distributing, manufacturing, or otherwise dealing in, any substance which by itself or in combination with other substances, or after processing or the application to it of technology, emanates, gives off, generates, or causes the emanation or generation of heat or power or energy;

3. In its 2013 Supply-Demand Outlook, the Department of Energy (DOE) recognized the growing demand for power in the Philippines. For the Luzon Grid, the DOE projects the energy demand *“to increase at an average annual growth rate (AAGR) of 4.13 percent, from 7,969 MW in 2012 to 10,693 MW in 2020 and will increase further to 16,477 MW in 2030.* Based on the 2013 Supply-Demand Outlook, the existing capacity of the Luzon Grid as of 2015 is 11,612 MW. The DOE projects that an additional capacity of 1,000 MW will be needed by 2017. This projection assumes that the committed plants for the period are timely completed;
4. To help alleviate the increasing energy demand and in response to the Philippine Government’s call to accelerate the exploration and development of renewable energy resources under Republic Act No. 9513, or the Renewable Energy Act of 2008, EDC is developing the 31 MW Bac-Man 3 Geothermal Project (the “Project” or the “Bac-Man 3 Project”) located in Barangay Capuy, Bucalbucalan, Rizal and Bulabog, Sorsogon City, Sorsogon Province;
5. In order to supply the energy generated by the Bac-Man 3 Project to the public, EDC intends to connect the Plant to the Luzon Grid. For this purpose, it plans to construct a connection asset for its exclusive use, which shall connect the Plant directly to Palayan Bayan Switchyard. The proposed interconnection of the Plant to the Palayan Bayan Switchyard consists of a 230 kV connection asset, composed of transmission wires, steel lattice towers, steel poles, and other related facilities (“the Connection Project”);
6. Section 9 of the Electric Power Industry Reform Act (EPIRA) provides that:

“A generation company may develop and own or operate dedicated point-to-point limited transmission facilities that are consistent with the TDP: Provided, That such facilities are required only for the

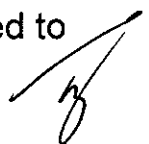


purpose of connecting to the transmission system, and are used solely by the generating facility, subject to prior authorization by the ERC: Provided, further, That in the event that such assets are required for competitive purposes, ownership of the same shall be transferred to the TRANSCO at a fair market price: Provided, finally, That in the case of disagreement on the fair market price, the ERC shall determine the fair market value of the asset.”

7. On October 23, 2009, EDC was granted a Geothermal Renewable Energy Service Contract by the DOE, under Certificate of Registration No. 2009-10-003 (GRES-C). In the GRES-C, it was granted the exclusive right to explore, develop, and utilize the renewable energy sources, specifically geothermal energy, in Legazpi City and the Municipality of Manito, Province of Albay and Sorsogon City and the Municipality of Castilla, Province of Sorsogon;
8. An assessment of the impact of the Bac-Man 3 Project on the Luzon Grid was conducted by Engineer Anastacio R. Almario (doing business under the name and style of Almario's Computer, Civil-Electrical Protection and Safety Technology), an independent third party commissioned by EDC. A System Impact Study dated March 1, 2014 (SIS) was subsequently prepared by Engr. Almario. NGCP reviewed and approved the impact assessment and found that the conclusions reached therein provided an acceptable assessment of the impact to its system of the Connection Project.

EDC sent letters to NGCP on June 23, 2015 and August 15, 2015 wherein EDC informed NGCP of the change in the capacity of Bac-Man 3 Project from 40 MW to 31 MW and a revision in the connection scheme, respectively and requested NGCP's confirmation that the SIS dated March 1, 2014 was still valid and applicable given said changes.

On September 1, 2015, NGCP informed EDC thru a letter that based on the initial assessment, there is no need to



conduct a re-run of the prior NGCP-approved SIS to consider the revised connection scheme and generation capacity of Bacman 3 Geothermal Power Plant (GPP), i.e. the latter's direct connection to Bacman 1 Switchyard and reduction of its proposed generation capacity from 40 MW to 31 MW;

9. The Sangguniang Barangays of Bulabog, Bucalbucalan, Capuy and Rizal have endorsed the Bac-Man 3 Project and have passed resolutions of support for the project. The Sangguniang Panlungsod of Sorsogon City has likewise endorsed the Bac-Man 3 Project and passed a resolution of support;
10. On August 5, 2003, EDC obtained Environmental Compliance Certificate 0301-007-203 for the Bac-Man 3 Project. On March 3, 2008, it also obtained a Certificate of Non-Overlap with Control No. RV-08-002-A1&Sor from the National Commission on Indigenous Peoples. It is in the process of obtaining the permits and certificates necessary for the construction and development of the Bac-Man 3 Project and will timely apply for the permits and certificates necessary for its operation, including the Certificate of Compliance;

**THE BAC-MAN 3  
CONNECTION PROJECT IS  
FINANCIALLY FEASIBLE,  
AND EDC HAS THE  
FINANCIAL CAPABILITY TO  
DEVELOP, OPERATE, AND  
MAINTAIN THE CONNECTION  
PROJECT**

11. The Connection Project is financially feasible. The estimated cost of the construction and development of the Connection Project is PhP130 Million;
12. The Bac-Man 3 Project, including the Connection Project, will be funded through cash. Its audited financial statements for the year 2013 will show that it has sufficient funds on hand to undertake the construction, development, operation, and maintenance of the entire project;



13. With respect to the Net Present Value and five (5) year projected financial ratios, these do not apply to the Connection Project. These apply to the Bac-Man 3 Project as a comprehensive project, which is expected to be in operation by December 2017;

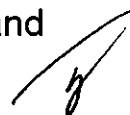
**THE BAC-MAN 3  
CONNECTION PROJECT IS  
TECHNICALLY FEASIBLE,  
AND IT HAS THE TECHNICAL  
CAPABILITY TO DEVELOP,  
OPERATE, AND MAINTAIN  
THE CONNECTION PROJECT**

14. The SIS shows that the Connection Project is technically feasible;
15. EDC, by itself or through its affiliates, has the technical capability to develop, construct, operate, and maintain the Connection Project.

15.1 It is the largest producer of geothermal energy in the Philippines and the third largest in the world. It has expertise spanning the entire geothermal energy value chain, including geothermal energy exploration and development, reservoir engineering and management, engineering design and construction, environmental management, and energy research and development.

15.2 Since 1996, EDC, through its Transmission and Dispatch personnel, has been operating the connection assets of the Unified Leyte (UL) Power System.

15.2.1 The UL Power System is the electrical system that interconnects the UL geothermal power plants to the Luzon and Visayas grids. The system makes it possible to transmit bulk electrical power from Leyte to the commercial and



industrial load centers in the islands of Luzon and Cebu.

15.2.2 The UL Power System is composed of seven switchyards interconnected by high voltage transmission lines and directed by a complex control system.

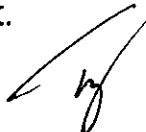
15.3 In recent years, it has expanded its portfolio of renewable energy sources by tapping into hydro power and wind energy and solar energy.

15.4 It has experience, resources, and technical expertise as a power generation company to undertake its work commitments specified in the Work Program of the Service Contract for the development stage of the Bac-Man 3 Project.

15.5 The operations and maintenance of the Connection Project is planned to be carried out by three (3) to five (5) personnel belonging to the Operations and Engineering Group (OEG) of EDC. These personnel will be under the supervision and direction of Mr. Dominador M. Camu, as the Senior Vice President of the OEG and Mr. Jay Joel L. Soriano, as the Head of the Bac-Man Geothermal Business Unit. The personnel can all be contacted through its principal office address;

**EDC SHOULD BE GRANTED  
AUTHORITY TO DEVELOP,  
OWN AND OPERATE THE  
CONNECTION PROJECT**

16. Pursuant to Section 9 of the EPIRA, it applies with the Commission for authority to develop, own, and operate the Connection Project.



16.1 Its Connection Project is required only to connect the Bac-Man 3 Project to the Luzon Grid.

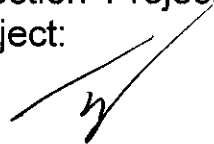
16.1.1 It carefully studied two options for the Connection Project: a) radial configuration and transmission line will utilize existing transmission line towers from Cawayan to Palayan Bayan Switchyard (Option 1); b) cut-in connection to the existing transmission line of Cawayan to Palayan Bayan Switchyard. The line from Palayan Bayan Switchyard shall be diverted to the Bac-Man 3 Switchyard and then connected to the Cawayan Switchyard (Option 2).

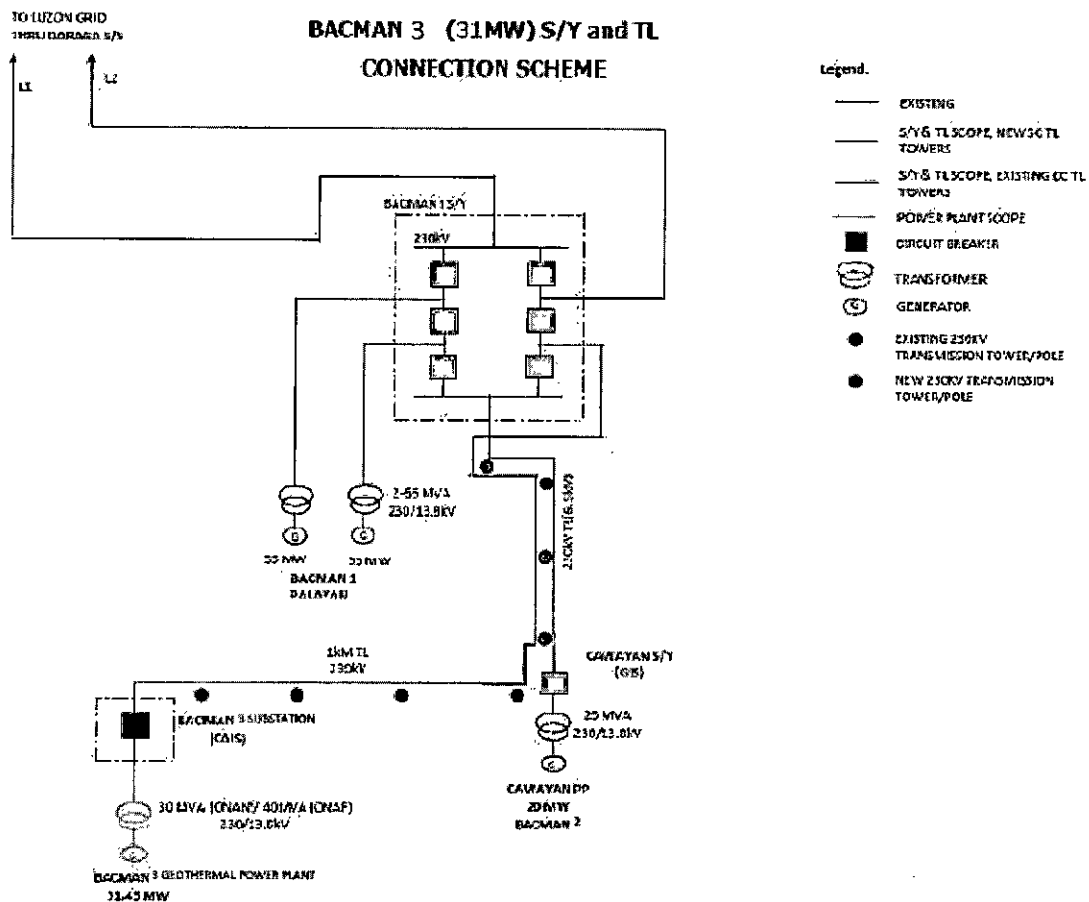
EDC chose Option 1 because it was the shortest, most economical, and viable option to supply the energy generated by the Bac-Man 3 Project to the public.

16.2 The Connection Asset will be used solely by the Bac-Man 3 Project.

16.3 If the Connection Project is taken out of the transmission system, it will not affect the Luzon Grid;

17. Below is the single-line diagram of the proposed interconnection which shows that the Connection Project will be exclusively used by the Bac-Man 3 Project:





**Motion for Provisional Authority and Allegations in Support of Prayer for Provisional Authority**

18. Rule 14 of the Commission's Rules of Practice and Procedure authorizes the issuance of a provisional authority or an interim relief prior to a final decision, provided that the facts and circumstances warrant the issuance of the same;
19. EDC expects to complete the construction of the Connection Project by the latter part of the second quarter of 2017. It wants to have the Connection Project in place and ready for the commissioning of the Bac-Man 3 Project which is scheduled to happen around the fourth quarter of 2017;
20. Given the immediate need for additional capacity by 2017 and onwards as projected by the DOE, the completion of the Bac-Man 3 Project within the projected timeframe is critical to ensure that additional capacity will be available for the Luzon Grid in a timely manner. EDC prays that the



Commission provisionally authorize the development, ownership, and operation of the Connection Project considering that the impending power crisis projected by the DOE warrants the issuance of a Provisional Authority;

21. It is in such context that EDC respectfully prays that a provisional authority be immediately issued for the development and construction of the Connection Project;
22. In support of the foregoing allegations, copies of the judicial affidavits of Annalyn C. Tayag and Rexie Marie A. Valenciano are attached to the application as Annexes "X" and "Y", respectively;
23. In further support of the application, EDC submitted to the Commission the following documents:

ANNEX	NATURE OF DOCUMENTS
A	Certificate of Incorporation
B	Articles of Incorporation, as amended
C	By-Laws, as amended
D	Latest General Information Sheet
E	DOE's 2013 Supply-Demand Outlook.
F	Geothermal RE Service Contract - Bacon-Manito, Albay-Sorsogon
G	DOE Certificate of Registration No. GRESC 2009-10-003
H	Business profile of Engineer Anastacio R. Almario (doing business under the name and style of Almario's Computer, Civil-Electrical Protection and Safety Technology)
I	System Impact Study, dated March 1, 2014
J	Letter from NGCP, dated September 2, 2014
K	Letter from EDC, dated June 23, 2015
L	Letter from EDC, dated August 13, 2015
M	Letter from NGCP, dated September 1, 2015
N to N-3	Resolutions of Endorsement from the Sangguniang Barangays of Bucalbucalan, Bulabog, Capuy and Rizal, Sorsogon City
O	Resolutions of Endorsement from the Sangguniang Panlungsod of Sorsogon City
P	Environmental Compliance Certificate with No. 0301-007-203
Q	Certificate of Non-Overlap from the National Commission on Indigenous Peoples with Control No. RV-08-002-A1&Sor

R	Affidavit of Annalyn C. Tayag, Senior Manager, stating that the necessary applications for approval and endorsement of Bacman -3 Geothermal Project will be filed with the relevant government authorities
S	Estimated Cost of Construction and Development of Connection Project
T	Audited Financial Statements of EDC for the years ended 2014 and 2013
U	Latest Five-Year Financial Projections for the Bac-Man 3 Project
V	Single Line Diagram
W	Project Schedule (Gantt Chart)
X	Judicial Affidavit of Annalyn C. Tayag
Y	Judicial Affidavit of Rexie Marie A. Valenciano

24. EDC prays that the Commission:

- a. Issue an order provisionally authorizing it to develop, own, and operate the Connection Project for the Bac-Man 3 Geothermal Project; and
- b. After due notice and hearing, issue an order: i) making the provisional authority a permanent authority to develop, own and operate the Connection Project; and ii) authorizing it to operate and maintain the Connection Project until such time said project is otherwise re-classified, owned, operated and maintained by NGCP.

Finding the said application to be sufficient in form and in substance with the required fees having been paid, the same is hereby set for jurisdictional hearing, expository presentation, pre-trial conference and evidentiary hearing on **January 20, 2016 (Wednesday) at two o'clock in the afternoon (2:00 P.M.) at the ERC Hearing Room, 15<sup>th</sup> Floor, Pacific Center Building, San Miguel Avenue, Pasig City.**

EDC is hereby directed to cause the publication of the attached Notice of Public Hearing, at its own expense, once (1x) in a newspaper of general circulation in the Philippines, with the date of the publication to be made not later than ten (10) days before the scheduled date of initial hearing. It is also directed to inform the



consumers, by any other means available and appropriate, of the filing of the instant application, its reasons therefor, and of the scheduled hearing thereon.

Let copies of the application, this Order and the attached Notice of Public Hearing be furnished the Office of the Solicitor General (OSG), the Commission on Audit (COA), and the Committees on Energy of both Houses of Congress. They are hereby requested, if they so desire, to send their duly authorized representatives at the scheduled hearing.

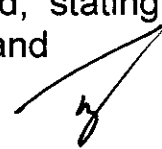
Likewise, let copies of this Order and the attached Notice of Public Hearing be furnished the Office of the Mayors of Pasig City and Sorsogon, Sorsogon, for the appropriate posting thereof on their respective bulletin boards.

EDC is hereby directed to furnish all those making requests therefor with copies of the application and its attachments, subject to reimbursement of reasonable photocopying costs.

On the date of the initial hearing, EDC must submit to the Commission its written Compliance with the jurisdictional requirements attaching therewith, methodically arranged and duly marked, the evidences on the actual posting and publication of the Notice of Public Hearing consisting of certifications issued to that effect, signed by the Mayors and or their duly authorized representatives, bearing the seals of their offices, and the affidavit of the Editor or Business Manager of the newspaper where the said Notice of Public Hearing was published together with the complete issue of the said newspaper, and such other proofs of compliance with the requirements of the Commission.

EDC and all interested parties are directed to submit, at least five (5) days before the date of initial hearing and pre-trial conference, their respective Pre-trial Briefs containing, among others:

- a) A summary of admitted facts and proposed stipulation of facts;
- b) The issues to be tried or resolved;
- c) The documents or exhibits to be presented, stating the purposes and proposed markings therefore; and



- d) The number and names of the witnesses, with their written testimonies in an individual affidavit form, to be attached to the Pre-trial Brief.

Failure of EDC to submit the required Pre-trial Brief and Judicial Affidavits of its witnesses within the prescribed period shall be a ground for cancellation of the scheduled hearing, and the resetting of which shall be six (6) months from said date of cancellation.


As part of the pre-trial conference, EDC must also be prepared to make an expository presentation of its application, aided by whatever communication medium that it may deem appropriate for the purpose, in order to put in plain words and explain, for the benefit of the consumers and other concerned parties, what the application is all about and the reasons and justifications being cited in support thereof.

**SO ORDERED.**

Pasig City, November 26, 2015.

FOR AND BY AUTHORITY  
OF THE COMMISSION:

  
**JOSE VICENTE B. SALAZAR**  
Chairman and CEO

  
mico/NJS/P2P/2015-056MC EDCBac-Man3/initialORD.doc

**ERC**  
Office of the Chairman



L-2015-004-02023

**Copy Furnished:**

1. **QUIASON MAKALINTAL BAROT  
TORRES IBARRA & SISON**  
Counsel for Energy Development Corporation  
21<sup>st</sup> Floor, Robinsons-Equitable Tower  
ADB Avenue corner Poveda Street  
1605 Ortigas Center, Pasig City  
Tel. No. (632) 631-0981 to 85
2. **ENERGY DEVELOPMENT CORPORATION (EDC)**  
One Corporate Center, Julia Vargas corner  
MERALCO Avenue, Ortigas Center, Pasig City
3. **The Office of the Solicitor General**  
134 Amorsolo Street, Legaspi Village, Makati City  
Metro Manila
4. **The Commission on Audit**  
Don Mariano Marcos Avenue  
Diliman, Quezon City, Metro Manila
5. **The Senate Committee on Energy**  
Senate of the Philippines  
GSIS Building, Roxas Blvd., Pasay City, Metro Manila
6. **The House Committee on Energy**  
House of Representatives  
Batasan Hills, Quezon City, Metro Manila
7. **Office of the President of PCCI**  
Philippine Chamber of Commerce and Industry (PCCI)  
3<sup>rd</sup> Floor, ECC Building, Sen. Gil Puyat Avenue  
Makati City
8. **Office of the City Mayor**  
Pasig City
9. **Office of the City Mayor**  
East, West and Bacon Districts, City of Sorsogon  
Province of Sorsogon