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HON. ZENAIDA G. CRUZ-DUCUT
Chairperson
Energy Regulatory Commission
Pacific Center Bldg., San Miguel Avenue
Ortigas Center, Pasig City

THRU: **ATTY. FRANCIS SATURNINO C. JUAN**
Executive Director
Energy Regulatory Commission

SUBJECT: **NGCP's Comments on AECOM's Advice for PIPPA**

Dear Hon. Chairperson Ducut:

We wish to submit NGCP's comments on the 11 June 2014 presentation of Mr. George Horvath, entitled, "*Advice Pertaining to ERC Resolution No. 16 and the Role of Hybrid Generation (Advice with respect to specific questions from PIPPA)*".

Mr. Horvath, the representative from AECOM, has admitted in his report the following:

- a) That, Connection Assets are links in the electricity network that are constructed to connect **ONE** grid customer at the location in the network (page 28);
- b) That, a switchyard is not part of a power plant if it has been built primarily for the purpose of the **SHARED GRID**, even if power plant connects to it (page 35); and
- c) That, there are power plants without its own switchyard (page 36).

Topic 1. Definition of Connection Assets in other Jurisdictions

AECOM's Advice to PIPPA:

The definition of "Connection Assets" is consistent with the definition of connection assets in some other jurisdictions. In practice, there is broad diversity in connection assets, which depends on the intended operational and business purposes they will serve.

It is a given fact that different jurisdictions have different definitions of "connection assets". Such definitions, depend to a large extent on the kind of connection charging policy being adopted in a particular jurisdiction, i.e., either "deep" or "shallow".

In addition, Question 1(b) from PIPPA (slide 28) posed essentially the same question, i.e., on what specific types of assets or equipment are considered "connection assets" in other



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jurisdictions. Similarly, the broad diversity in types of assets depends on the connection charging policy.

In the Philippines, the ERC, following a series of public consultations (refer to <http://www.erc.gov.ph/pressrelease/ViewPressRelease/erc-goes-public-on-connection-charging-policy-for-transco>), has decided to adopt a “shallow” rather than “deep” definition of connection assets. This approach is consistent with connection charging approaches adopted in Ireland, United Kingdom and Australia. The ERC has since aligned various regulatory documents to reflect the said decision, including Resolution No. 16, Series of 2011.

Under a “shallow” definition, shared assets are considered transmission assets. This is a simple approach and avoids undue complexity because in practice, it is difficult to determine whether any particular asset is provided for the benefit of a specific customer or part of the grid providing service to all customers. More importantly, this definition is consistent with Section 9(f) of Republic Act No. 9136 stating that once the dedicated point-to-point limited transmission facilities owned, developed and operated by a generation company are required for competitive purposes, the ownership of the said assets shall be transferred to TransCo (NGCP) at a fair market price.

Topic 2. Ownership of Switchyard

AECOM's Advice to PIPPA:

There are no means by which the acquisition of a grid user customer's assets could be justified under a regulated grid investment process.

The above cited advice from AECOM has no basis under the law and regulations of ERC. We wish to reiterate the provisions set forth by the Republic Act 9136 – Electric Power Industry Reform Act of 2001 (EPIRA) and its Implementing Rules and Regulations (IRR). Section 9 of RA 9136 provides,

“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 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.”

Section 5, Rule 5 of the IRR, states,

- “(a) Subject to prior authorization from ERC, TransCo or its Buyer or Concessionaire may allow a Generation Company to develop, own and/or operate dedicated point-to-point limited transmission facilities: Provided, That:*
- (i) Such dedicated point-to-point limited transmission facilities are required only for the purpose of connecting to the Grid which will be used solely by the Generation Facility, and are not used to serve End-users or Suppliers directly;*



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- (ii) *The facilities are included and consistent with the TDP as certified by TransCo or its Buyer or Concessionaire; and*
- (iii) *Any other documents that may be required by the ERC.*

(b) 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. In case of disagreement on the fair market price, the ERC shall determine the fair market value of such asset, either directly or through such dispute resolution mechanism as ERC may specify."

Topic 3. Ways of Improving Grid Reliability

AECOM's Advice to PIPPA:

It is my opinion that transferring ownership of power plant switchyards would DECREASE RELIABILITY and INCREASE THE COST of the grid for users and the public.

We refute the above statement of AECOM for lack of basis and substantiality. For instance, in the case of PEDC being a "hybrid" plant providing direct connection to PECO has not warranted grid reliability but definitely caused instability to the grid (pls. see data below):

Date	Details of Incident
April 25, 2011	Panay black-out due to 3 phase fault inside PECO 69kV system
January 31, 2012	Negros-Panay submarine overloading protection (i.e., Special Protection System or SPS) activated due to tripping of PEDC unit 1 by induced draft fan (IDF) problem
May 2, 2012	0744h- Heavy voltage fluctuation at NGCP due to flash-over at 13.8kV feeder 7 breaker insulator of PECO 20MVA load end substation at General Luna. 1035h- Heavy voltage fluctuation at NGCP due to flash-over at bus PT cubicle at 69kV breaker at PECO 20Mva load end substation at General Luna. 1306h- PEDC U1 & U2 tripped during re-energization of 5 PECO feeders when 15kV power cable at feeder 6&7 exploded while PECO 69kV breaker did not open. In effect, overload protection for Negros-Panay submarine cable activated thus isolating Panay island from the Negros-Cebu grid.
February 20, 2013	Negros-Panay submarine overloading protection (SPS) activated due to tripping of PEDC U2 by stucked up damper
April 9, 2013	Negros-Panay submarine overloading protection (SPS) activated due to tripping of PEDC U2 by stucked up level valve.
August 8, 2013	Fault inside PECO affecting PEDC U1 & U2 causing Negros-Panay submarine cable overloading protection activated resulting to Panay island blackout.



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We disagree with AECOM's advice that transferring the ownership of power plant switchyards would increase cost of the grid users for lack of bearing. A DU directly connecting to a power plant becomes a captive customer of the power plant thereby depriving the DU with the power of choice, hence, making its electricity rate higher than the others (pls. see data below):

Distribution Utility	Supply Source	Generation Rates, PhP/kWh September 2013	Rank
GUIMELCO	NPC, WESM, GCGI, Trans-Asia Oil & Energy	7.6218	1
PECO	PPC, PEDC	7.6185	2
AKELCO	WESM, GCGI, PPC, PEDC	6.5797	3
ANTECO	NPC, NPC-SPUG, WESM, PEDC, ILECO I	6.4142	4
ILECO II	NPC, WESM, GCGI, PEDC, SIPC	6.2070	5
ILECO III	WESM, PEDC, GCGI	6.0887	6
CENECO	NPC, WESM, KSPC GCGI	5.4787	7
MECO	NPC, WESM, KSPC, CEDC, SIPC	5.4136	8

Notes:

1. Data were based on information provided by the DUs to ERC.
2. Ranking is from highest to lowest.
3. Note that among the DUs, only PECO is not connected to the Grid.

In fact, transferring the switchyard to NGCP will bring down the transmission charge because the capacity used to be supplied directly by a power plant will already be accounted as part of the system demand thereby decreasing the transmission charge.

Topic 4. Allowing a Power Plant to directly connect to a distribution utility enhances a power plant's operational efficiency.

AECOM's Advice to PIPPA:

“Serving local load reduces transmission losses and therefore increases power plant efficiency.

In fact, many/most System Operators formally practice ‘Locational Marginal Prices’ (LMP) to weight the bid-prices in favour of power plants that are closest to the load prior to determining the order of dispatch. The method of determining LMPs is to consider the system losses.”

The statement of AECOM insofar as reducing line losses and increases power plant efficiency is misleading. LMP is determined by the reference trading node and marginal plant and not the



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connection of a load directly to a generator. On the other hand the efficiency of the power plant is dependent on the type of power plant and not of its location. AECOM is trying to mislead the Commission that generators with loads directly connected to it are more efficient compared to the rest of the generators in the grid.

In the case of PECO, it has one of the highest electricity rates in the Philippines even though it “by-passes” the grid and remains a captive customer of PEDC, this runs counter to the argument of PIPPA that by not paying PDS a DU can avail of cheaper electricity rates. This is a clear example of false and deceptive marketing where it deprives PECO and all its contestable customers cheaper generation rates than that of PEDC and PPC. VECO also claims that they were able to reduce their electricity rates by connecting directly to CEDC and thus “by-passing” the PDS. Such claim is also an example of false and deceptive marketing as VECO fails to present the complete picture, a clear violation of the EPIRA and its IRR. VECO constructed a very long line just to connect its AYA s/s to CEDC switchyard rather than connecting to our Colon s/s that is just beside its AYA s/s, which is proof of “inefficiency”. In other words, VECO committed a double whammy. Had VECO entered into a supply contract with a cheaper plant like KSPC, their consumers which includes NGCP should have been spared from high generation rates coming from CEDC and high volume transactions in the WESM during peak hours. VECO also violated the EPIRA through unfair trade practice when it constructed and operates transmission facilities from CEDC to its substation. Bear in mind that CEDC is way beyond the franchise area for VECO. Only NGCP has the franchise to operate maintain and expand the national transmission system.

The VECO and PECO cases are concrete proof that the so called “hybrid connection providing a more reliable power and more efficient cost” is absolutely a myth.

Having all these comments, we look forward to the Honorable Commission’s consideration of this submission and we also reserve our right to submit further comments as it may deemed necessary.

Thank you.

Sincerely,

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Head, Revenue and Regulatory Affairs and
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Encl: Copy of NGCP's Comments to AECOM's Report dated 16 January 2014

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