Republic of the Philippines ENERGY REGULATORY COMMISSION

San Miguel Ave., Pasig City

IN THE MATTER OF THE **APPLICATION FOR** APPROVAL **OF** THE ANCILLARY SERVICES PROCUREMENT AGREEMENT BETWEEN THE **NATIONAL** GRID CORPORATION OF THE PHILIPPINES AND PANASIA ENERGY, INC., PRAYER FOR THE ISSUANCE **OF PROVISIONAL AUTHORITY,**

ERC Case No. 2017-083 RC

NATIONAL GRID CORPORATION OF THE PHILIPPINES (NGCP) AND PANASIA ENERGY, INC. (PANASIA),

Applicants.

applicants.

DOCKETED Date: MAR 0 9 2018 By:

ORDER

For the Commission's consideration is the prayer for the issuance of provisional authority included in the *Application* dated 06 September 2017 (Application) for approval of the Ancillary Services Procurement Agreement (ASPA) dated 25 August 2017 filed by National Grid Corporation of the Philippines (NGCP) and PANASIA Energy, Inc. (PANASIA) on 19 September 2017.

THE FACTUAL AND PROCEDURAL ANTECEDENTS

Relative to their prayer for issuance of provisional authority, Applicants alleged, among others, the following:

NATURE OF THE CASE

1. This Application is for the approval of the Ancillary Services Procurement Agreement (ASPA) between the NGCP and PANASIA, pursuant to the Decision dated 3 October 2007 in ERC Case No. 2006-049RC, entitled: "In the Matter of the Application for the Approval of Ancillary Services – Cost Recovery Mechanism (AS-CRM) of the Ancillary Services Procurement Plan, with Prayer for Provisional Authority."

THE PARTIES

- 2. Applicant NGCP is a corporation created and existing under the laws of the Philippines, with office address at NGCP Building, Quezon Avenue corner BIR Road, Diliman, Quezon City. It holds a franchise under Republic Act No. 9511¹ to engage in the business of conveying or transmitting electricity through high-voltage back-bone systems of interconnected transmission lines, substations and related facilities, and for other purposes. The franchise also includes the conduct of activities necessary to support the safe and reliable operation of the transmission system.
- 3. Applicant PANASIA is a corporation organized and existing under and by virtue of the Philippine laws with principal office address at 3204B East Tower PSE Centre, Exchange Road Ortigas Center, Pasig City. It may be served with orders, notices, and other legal processes through its undersigned counsel. It is the owner and operator of the 540MW Bataan Combined Cycle Power Plant (BCCPP) in Barangay Luz, Limay, Bataan, which was certified and accredited by NGCP as capable of providing Regulating Reserve (RR), Contingency Reserve (CR), Dispatchable Reserve (DR) and Reactive Power Support (RPS).

ANTECEDENT FACTS

- 4. Republic Act No. 9136 provides that it is the responsibility of NGCP to ensure and maintain the reliability, adequacy, security, stability and integrity of the nationwide electrical grid in accordance with the performance standards for its operations and maintenance, as set forth in the Philippine Grid Code (PGC), adopted and promulgated by the Honorable Commission; and to adequately serve generation companies, distribution utilities and suppliers requiring transmission service and/or ancillary services through the transmission system².
- 5. Similarly, the PGC provides that NGCP is responsible for determining, acquiring, and dispatching the capacity needed to supply the required Grid Ancillary Services and for

¹ An Act Granting the National Grid Corporation of the Philippines a Franchise To Engage in the Business of Conveying or Transmitting Electricity Through High Voltage Back-Bone System of Interconnected Transmission Lines, Substations and Related Facilities, and for other Purposes; ² Section 9 (c) and (d);

developing and proposing Wheeling Charges and Ancillary Service tariffs to the ERC³.

- 6. Ancillary services (AS) as defined in Section 4b of the EPIRA "refer to those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the transmission system in accordance with good utility practice and the Grid Code to be adopted in accordance with this Act." These services are essential in ensuring reliability in the operation of the transmission system and consequently, in the reliability of the electricity supply in the Luzon, Visayas and Mindanao grids.
- 7. In order to implement and regulate the procurement of AS, the Honorable Commission approved the Ancillary Services Procurement Plan (ASPP) through its Order dated 9 March 2006 in ERC Case No. 2002-253 and the Ancillary Services-Cost Recovery Mechanism (AS-CRM) through its Decision dated 3 October 2007 in ERC Case No. 2006-049RC.
- 8. Pursuant to its mandate, NGCP on different dates published in newspapers of general circulation a Notice of Invitation for Prospective Ancillary Services Providers, inviting all grid-connected merchant plants and independent power producers to participate in the provision of ancillary services. NGCP received several positive responses from generation companies. Upon receipt of the intention from PANASIA to provide ancillary services, NGCP commenced negotiation for the execution of a new ASPA.
- 9. In view of the need for PANASIA to continue providing ancillary services, the Applicants on 25 August 2017, executed a new ASPA (ASPA 2017). NGCP agreed to procure and PANASIA agreed to supply Ancillary Services in the form of: RR, CR, DR and RPS for a period of five (5) years under firm and non-firm arrangements. A copy of the Ancillary Services Procurement Agreement between NGCP and PANASIA dated 25 August 2017 is attached as Annex "A".
- 10. During the period of negotiation, NGCP conducted several tests on Units GT1, GT2, GT3, GT5, GT6 and GT7 of the BCCPP, and certified that the power plant has met and complied with the Standard Ancillary Services Technical Requirements of the ASPP as capable of providing the following:
 - (i) 60MW/unit of RR under Free Governor Mode;
 - (ii) 60MW/unit of CR under Free Governor Mode;
 - (iii) 80MW/ Block of DR; and
 - (iv) RPS.

^{3 2007} PGC, Section 6.3.1.2;

Thus, NGCP issued the Ancillary Services Certification with Accreditation No. 2016-L0013, attached as Annex "B". xxx

ALLEGATIONS IN SUPPORT OF THE PRAYER FOR PROVISIONAL AUTHORITY

- 16. It is a declared policy of the State to ensure the quality, reliability, security and affordability of the supply of electric power (Section 2b, EPIRA). With this end in view, there is a need to comply with the system requirements for AS to ensure grid system reliability. As mentioned above, NGCP has the mandate to procure the required AS. However, the Honorable Commission must first approve the contract before the same could be implemented.
- On 13 December 2012, NGCP and PANASIA filed an 17. application for the approval of its Ancillary Services Procurement Agreement (ASPA 2012) docketed as ERC Case No. 2012-134RC. In the Order dated 18 February 2013, the Honorable Commission issued an Order provisionally approving the Application. Page 8 of the Order provides: "An initial evaluation of the instant application discloses that the ASPA entered into by and between NGCP and PANASIA will redound to the benefit of the customers in terms of continuous, reliable, efficient and affordable power supply as mandated by the EPIRA [Section 2. Declaration of Policy - (b) "to ensure the quality, reliability, security and affordability of the supply of electric power]." (Emphasis supplied) The parties implemented the 2012 ASPA on the March 2013 Billing Period.
- 18. As mentioned above, the Honorable Commission has already declared that there is a necessity for NGCP to procure the contracted ancillary services capacity of PANASIA to maintain the reliability of the operation of the transmission system and electricity supply in the Luzon Grid.
- 19. PANASIA must continue to provide ancillary services beyond the 2012 ASPA to maintain the reliability of the power grid. Based on the current levels of available contracted AS in the Luzon Grid, the firm contracted AS have not yet met the required levels. The copy of the *Luzon AS Availability* showing the required and available levels of RR, CR, and DR in the Luzon Grid is attached as **Annex "J"**.
- 20. As the demand for power in the Luzon increases, the requirements of the system to ensure stability, reliability, and security likewise increases. Ensuring the integrity of the system is essential to protect the interests of the public. The absence of system reliability and stability will certainly discourage investments and growth.
- 21. The importance of RR, CR, DR, and RPS from PANASIA to ensure and maintain the reliability, adequacy, security,

stability and integrity of the Luzon Grid cannot be overemphasized.

- 22. Applicants respectfully submit that the immediate approval of the ASPA by this Honorable Commission is a necessity to maintain the present reliability and security of the Grid. In support of these allegations, NGCP submits a copy of the Judicial Affidavit of Engr. Lizaflor Bacani-Kater, which is attached as Annex "K".
- 23. Applicants further submit that if and when the 2017 ASPA is approved by this Honorable Commission, it is hereby understood that it will only take effect, immediately upon expiration of the 2012 ASPA or on the April 2018 Billing Period.

XXX

THE ISSUE

The issue for the Commission's resolution is whether NGCP and PANASIA have satisfied the requirements provided by law for the grant of provisional authority.

THE COMMISSION'S RULING

The Commission grants provisional authority to Applicants.

I. THE LAW EMPOWERS THE COMMISSION TO GRANT PROVISIONAL AUTHORITY IN THE INSTANT CASE.

Section 4(e), Rule 3 of the Implementing Rules and Regulations of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA IRR) empowers the Commission to issue provisional authority, to wit:

SECTION 4. Responsibilities of the ERC. —

(e) Any application or petition for rate adjustment or for any relief affecting the consumers must be verified, and accompanied with an acknowledgment of receipt of a copy thereof by the LGU Legislative Body of the locality where the applicant or petitioner principally operates together with the certification of the notice of publication thereof in a newspaper of general circulation in the same locality.

The ERC may grant provisionally or deny the relief prayed for not later than seventy-five (75) calendar days from the filing of the application or petition, based on the same and the supporting documents attached thereto and such comments or pleadings the consumers or the LGU concerned may have filed within thirty (30) calendar days from receipt of a copy of the application or petition or from the publication thereof as the case may be.

Thereafter, the ERC shall conduct a formal hearing on the application or petition, giving proper notices to all parties concerned, with at least one public hearing in the affected locality, and shall decide the matter on the merits not later than twelve (12) months from the issuance of the aforementioned provisional order.

This Section 4(e) shall not apply to those applications or petitions already filed as of 26 December 2001 in compliance with Section 36 of the Act.

XXX

The above provision was upheld by the Supreme Court in the landmark case of *Freedom from Debt Coalition (FDC) vs. Energy Regulatory Commission (ERC)*⁴ (FDC Case). The Court, speaking through Justice Tinga, traced the origin and development of the Commission's authority to grant provisional rates, to wit:

Historically, therefore, in this jurisdiction, at least beginning with the Public Service Act in 1936, the regulatory bodies concerned have exercised the power to grant provisional rate adjustments only because there was a statutory grant of such power.

The foregoing recital establishes the following salient points: (1) Section 16(c) of the Public Service Act authorizing the approval of provisional rate increases has never been repealed and as such continues to be in full force and effect up to the present; (2) The BOPW had the power to grant provisional rate increases on the basis of the provision of the Integrated Reorganization Plan that the pertinent powers of the PSC were transferred to it; (3) The applicability clause found in Section 44 of the EPIRA is the same as or similar to the applicability clauses contained in Sections 11 and 21 of P.D. No. 1206 and Section 14 of E.O. No. 172; and, (4) The applicability clause or transfer of power provision is sufficient to effect the transfer of powers from a regulatory agency to its successor.

All told, the provisions of the Public Service Act and E.O. No. 172 which relate to the power of the regulatory body to approve provisional rates continue to have full force and effect, and the power was transferred to the ERC by virtue of Section 80 in relation to Section 44 of the EPIRA. Said

⁴ G.R. No. 161113, 15 June 2004.

provisions are not inconsistent with the EPIRA except the directives therein dispensing with the need for prior hearing. They are deemed modified to the extent that the EPIRA imposes a publication requirement and, through the IRR, assures the customers affected the opportunity to oppose or comment on the application for provisional rate adjustment before it is acted upon by the ERC.

Indeed, both the letter and spirit of the law require that the authority of the ERC to grant provisional power rate adjustments should be upheld. The law is so clear that it cannot be misread.

[Emphasis supplied.]

The instant Application seeks the Commission's approval of the Ancillary Services Procurement Agreement (ASPA) entered into between NGCP and PANASIA. The costs associated with Applicants' ASPA will ultimately be charged to the consuming public. As such, the Commission has the legal duty to determine the propriety of granting provisional approval consistent with prevailing laws and jurisprudence.

II. APPLICANTS HAVE SATISFIED THE DUE PROCESS REQUIREMENTS FOR THE GRANT OF PROVISIONAL AUTHORITY.

In the case of National Association of Electricity Consumers for Reforms vs. ERC⁵ (NASECORE Case), the Supreme Court reiterated the procedural requisites before the Commission may grant provisional authority under Section 4(e), Rule 3, EPIRA IRR, to wit:

XXX

- (1) The applicant must file with the ERC a verified application/petition for rate adjustment. It must indicate that a copy thereof was received by the legislative body of the LGU concerned. It must also include a certification of the notice of publication thereof in a newspaper of general circulation in the same locality.
- (2) Within 30 days from receipt of the application/petition or the publication thereof, any consumer affected by the proposed rate adjustment or the LGU concerned may file its

⁵ G.R. No. 163935, 02 February 2006.

comment on the application/petition, as well as on the motion for provisional rate adjustment.

- (3) If such comment is filed, the ERC must consider it in its action on the motion for provisional rate adjustment, together with the documents submitted by the applicant in support of its application/petition. If no such comment is filed within the 30-day period, then and only then may the ERC resolve the provisional rate adjustment on the basis of the documents submitted by the applicant.
- (4) However, the ERC need not conduct a hearing on the motion for provisional rate adjustment. It is sufficient that it consider the written comment, if there is any.
- (5) The ERC must resolve the motion for provisional rate adjustment within 75 days from the filing of the application/petition.
- (6) Thereafter, the ERC must conduct a full-blown hearing on the application/petition not later than 30 days from the date of issuance of the provisional order. Effectively, this provision limits the lifetime of the provisional order to only 12 months.

XXX

NGCP and PANASIA attached the following documents to their Application:

- a) Verification and Certification of Non-Forum Shopping dated o6 September 2017 executed by Ma. Cynthia Y. Manrique of NGCP;
- b) Verification and Certification of Non-Forum Shopping dated o6 September 2017 executed by Noemi T. Moreno of PANASIA:
- c) Affidavit of Service dated 13 September 2017 executed by Alberto I. Mapa attesting his service of a copy of the Application to the Office of Sangguniang Panlungsod of Quezon City on even date;
- d) Affidavit of Service dated 13 September 2017 executed by Gliceria E. Empleo attesting her service of a copy of the Application to the offices of Sangguniang Panlungsod of Biñan City, Laguna

and Sangguniang Panlalawigan of Laguna on even date;

- e) Affidavit of Service dated 12 September 2017 executed by Jennifer G. Pardiñez attesting her service of a copy of the Application to the office of Sangguniang Panlungsod of San Fernando City, La Union on even date;
- f) Affidavit of Service dated 14 September 2017 executed by Antonio O. Mercado attesting his service of a copy of the Application to the office of Sangguniang Panlungsod of Pasig City, on even date;
- g) Affidavit of Publication dated 14 September 2017 executed by Evelyn S. Arevalo of *The Manila Times* attesting to the publication of the Application on the 14 September 2017 issue of the newspaper.
- h) Copy of the 14 September 2017 issue of the Manila Times where the Application was published.

No Comment was received by the Commission pertaining to the instant case. Thus, the prayer for provisional authority is being resolved on the basis of the documents submitted by Applicants.

In light of these circumstances, the Commission has determined that the procedural requirements for the issuance of a provisional authority as outlined by the Supreme Court in the NASECORE Case have been complied with.

(This space is intentionally left blank.)

III. APPLICANTS HAVE SATISFACTORILY PROVEN THE NECESSITY FOR THE GRANT OF PROVISIONAL AUTHORITY.

In its Application, NGCP and PANASIA prayed for the issuance of a provisional authority on the ground that the current levels of available ancillary services in the Luzon Grid are significantly insufficient to meet the required levels to ensure grid system reliability.

In connection therewith, Applicants further allege that as the demand for power in Luzon increases, the requirements of the system to ensure stability, reliability and security likewise increase. Therefore, as alleged by Applicants, there is a need to ensure the integrity of the system since it is essential to protect the interests of the public.

NGCP and PANASIA likewise stressed that absence of system reliability and stability discourages investments and growth, thus, necessitates the immediate issuance of provisional approval of the subject ASPA to maintain the reliability and security of the Grid.

In support of the allegation, an illustration of the available level of Regulating Reserve (RR), Contingency Reserve (CR) and Dispatchable Reserve (DR) in the Luzon Grid for the period July 2016 to June 2017 was provided by NGCP, to wit:

Month	Regulating Reserve			
	Average Scheduled (MW)	Average Required (MW)	Availability (%)	Deficiency (%)
July 2016	282	286	98.60	1.40
August 2016	285	293	97.27	2.73
September 2016	290	300	96.67	3.33
October 2016	271	275	98.55	1.45
November 2016	280	288	97.22	2.78
December 2016	257	266	96.62	3.38
January 2017	249	256	97.26	2.74
February 2017	286	296	96.62	3.38
March 2017	249	260	95.77	4.23

ERC CASE NO. 2017-083 RC ORDER/ 28 NOVEMBER 2017 PAGE 11 of 23

April 2017	301	305	98.69	1.31
May 2017	311	312	99.68	0.32
June 2017	329	331	99.39	0.61

Month	Contingency Reserve			
	Average Scheduled (MW)	Average Required (MW)	Availability (%)	Deficiency (%)
July 2016	218	582	37.46	62.54
August 2016	130	620	20.97	79.03
September 2016	139	600	23.17	76.83
October 2016	189	540	35.00	65.00
November 2016	347	591	58.71	41.29
December 2016	335	544	61.58	38.42
January 2017	399	527	75.71	24.29
February 2017	445	627	70.97	29.03
March 2017	290	548	52.92	47.08
April 2017	240	607	39.54	60.46
May 2017	207	573	36.13	63.87
June 2017	320	607	52.72	47.28

Month	Dispatchable Reserve			
	Average Scheduled (MW)	Average Required (MW)	Availability (%)	Deficiency (%)
July 2016	242	525	46.10	53.90
August 2016	242	559	43.29	56.71
September 2016	437	478	91.42	8.58
October 2016	328	427	76.81	23.19
November 2016	335	441	75.96	24.04
December 2016	379	413	91.77	8.23
January 2017	415	446	93.05	6.95
February 2017	420	485	86.60	13.40
March 2017	398	505	78.81	21.19
April 2017	424	513	82.65	17.35
May 2017	404	499	80.96	19.04
June 2017	376	501	75.05	24.95

As can be seen from the tables above, significant deficiencies remain in the available levels of RR, CR, and DR in the Luzon Grid for the period July 2016 to June 2017.

· · ·

Thus, the Commission finds merit in Applicants' allegations. The factual milieu surrounding the Application satisfies the substantial requirements for the grant of provisional authority.

IV. THE **PROVISIONAL AUTHORITY FOR THE** IMPLEMENTATION OF APPLICANTS' ASPA, PENDING **FINAL EVALUATION OF THE** APPLICATION, WILL REDOUND TO THE **BENEFIT OF** CONSUMERS.

Under Republic Act No. 9136, otherwise known as the *Electric Power Industry Reform Act of 2001* (2001 EPIRA), Applicant NGCP, as the National Transmission Corporation's (TRANSCO) winning concessionaire, is mandated to ensure and maintain the reliability, adequacy, security, stability and integrity of the nationwide electrical grid and to adequately serve generation companies, distribution utilities and suppliers requiring transmission service and/or ancillary services through the transmission system.

Section 4 (b) of the 2001 EPIRA defines Ancillary Services as services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the transmission system. Such services are essential in ensuring not only the reliability in the operation of the transmission system as a whole, but also in the supply of electricity throughout the Luzon, Visayas, and Mindanao Grids.

On 29 March 2006, the Commission issued an Order in ERC Case No. 2002-2536, approving TRANSCO's proposed Ancillary Services Procurement Plan (ASPP). In the same Order, the Commission directed TRANSCO to file a separate application for the approval of the Ancillary Services-Cost Recovery Mechanism (ASCRM).

٦

⁶ Entitled "Application for the Approval of the Proposed Rules, Terms and Conditions for Open Access Transmission Service (OATS) and Proposed Rates, Terms and Conditions of Ancillary Services."

In consonance with this directive, on 12 September 2006, TRANSCO filed an Application under ERC Case No. 2006-049 RC7 seeking the Commission's approval of its proposed mechanism to recover costs accruing from procurement of Ancillary Services. On 3 October 2007, the Commission issued a Decision in the said case approving the AS-CRM to be used by TRANSCO to recover the cost of its Ancillary Services. In the same Decision, the Commission provided the following conditions for TRANSCO's recovery of Ancillary Services charges, to wit:

- a) The cost of procuring the Ancillary Services under the ASPP shall be recovered 100% from load customers but only until such time that such ancillary services are already traded in the Wholesale Electricity Spot Market (WESM); and
- b) All contracts for the procurement of ancillary services shall be submitted to the Commission for approval.

The instant Application seeks the approval of the ASPA entered into by NGCP, as TRANSCO's winning concessionaire, and PANASIA last 19 September 2017.

In their ASPA, PANASIA agreed to provide NGCP with Ancillary Services (AS). As alleged by Applicants, these AS are essential in maintaining the power quality, reliability, and security of the national grid. For this 2017 ASPA between NGCP and PANASIA, the following are the AS to be provided under the agreement:

a) Regulating Reserve (RR), also called load following and frequency regulating reserve, refers to generating capacity that is allocated exclusively to cover inter and intra-hour variations in demand (load behaviors), variations from generation schedules and hourly forecasts. During normal system conditions, loads and generator outputs vary from time to time; this behavior results in imbalance between supply and demand characterized by small deviations in system frequency. The Philippine Grid Code (PGC) requires that under normal conditions, the frequency should remain within +/- o.6 Hz of the standard 60.0

⁷ Entitled "In The Matter Of The Application For The Approval Of The Ancillary Services-Cost Recovery Mechanism (AS-CRM) Of The Ancillary Services Procurement Plan (ASPP) With Prayer For Provisional Authority."

Hz in order to ensure quality of supply and security of the Grid.

- b) Contingency Reserve (CR) refers to the synchronized generation capacity from Qualified Generating Units and Qualified Interruptible Loads allocated to cover the loss or failure of a synchronized generating unit or a transmission line or the power import from a single circuit interconnection in order to maintain the balance between generation and load on a real time basis.
- c) Dispatchable Reserve (DR) refers to the generating capacity that is not scheduled for Regular Energy Supply, Regulating Reserve or Contingency Reserve, or interruptible loads not scheduled for Contingency Reserve, and that are readily available for dispatch in order to replenish the Contingency Reserve Service whenever a generating unit trips or a loss of a single transmission interconnection occurs. This type of Ancillary Service can be provided by Qualified Generators that are not connected to the Grid but have fast start capabilities and can ramp up their output up to the offered Dispatchable Reserve within thirty minutes.
- d) Reactive Power Service (RPS) refers to the capability of a generating unit to supply Reactive Power to, or absorb Reactive Power from, the Grid in order to maintain the bus voltage within five percent (5%) of its nominal voltage.

The table below shows the proposed rate for each type of AS:

Ancillary Service	Applicable Rates (Maximum Hourly Rate)		
	Firm Non-F		
Regulating Reserve	PhP2.25/kW/hr	PhP3.00/kW/hr	
Contingency Reserve		PhP2.00/kW/hr	
Dispatchable Reserve		PhP1.12/kW/hr	
Reactive Power Support		PhP4.00/kVAR/hr	

Likewise, the table below shows the corresponding capacity for each type of AS:

Facility and Unit	Туре	Capacity
	RR (Firm)	60MW, One (1) Gas Turbine (GT) Unit during Peak Hours (12 hours). March to September
Units GT1, GT2, GT3, GT5, GT6 and	RR (Non- Firm)	Up to 60MW per GT unit
GT7 of the Bataan Combined Cycle	CR (Non- Firm)	Available capacity on top of the Technical Pmin* of each GT unit.
Power Plant (BCCPP)	DR (Non- Firm)	Up to 40MW per GT unit
	RPS (Non- Firm)	Available Capacity of Reactive Power outside the range of 85% lagging and 90% leading power factor.

Further examination of the ASPA subject of the instant Application reveals that the contract is on a firm and non-firm basis. The firm contracted capacity for Regulating Reserve is 60 MW for one (1) Gas Turbine (GT) Unit (March-September, peak hours-12 hrs). Moreover, the capacity shall be made available at all times for NGCP's instruction and dispatch, except upon the existence of any of the circumstances specified in the ASPA. Pursuant to the ASPA, NGCP shall pay PANASIA at the proposed rate for the said firm capacities whether or not such capacity is dispatched.

In justifying their agreed rate for Firm Contracted Capacity, Applicants provided the following tariffs for their 2017 ASPA:

Ancillary Service	Applicable rate
Regulating Reserve	PhP2.25/kW/Hr

On the other hand, the non-firm contracted capacity varies as to each AS. As for Regulating Reserve, the non-firm contracted capacity is up to 60 MW per GT unit. For Contingency Reserve, the non-firm contracted capacity is the available capacity on top of the Technical Pmin⁸ of each GT unit, while it is up to 40 MW per GT unit for Dispatchable Reserve. Furthermore, non-firm contracted capacity for Reactive Power Support is the available capacity of reactive power outside the range of 85% lagging and 90% leading power factor.

⁸ Techincal Pmin is the minimum stable load of each generating unit, as indicated in the Service Provider's Certificate of Compliance (COC)

Under the non-firm basis, PANASIA has the right or option not to nominate any capacity for ancillary service even if it is available while NGCP may or may not schedule the capacity nominated without any corresponding penalty or payment. This allows NGCP the flexibility to evaluate or decide for optimum ancillary service considering the prevailing economic and technical circumstances.

In justifying their agreed rate for non-firm contracted capacity, Applicants provided the following tariffs for their 2017 ASPA:

Ancillary Service	Applicable rate
Regulating Reserve	PhP3.00/kW/Hr
Contingency Reserve	PhP2.00/kW/Hr
Dispatchable Reserve	PhP1.12/kW/Hr
Reactive Power Support	PhP4.00/kWh

As to the other costs included in the proposed tariff for their 2017 ASPA, Applicants provided the following derivation:

Incidental Energy Cost:

Cost of Incidental Energy (IE) shall be computed using the formula below:

Where, IE shall be paid if it is greater than zero;

G = Summation of energy generated or dispatched due to Firm and Non-Firm Contracted Capacity, in kWh

AR = Applicable Rate per AS type

Variable = Actual Fuel Costs plus Variable O&M costs at PhP1.96/kWh. Actual Fuel Cost shall be the cost of total actual fuel consumption of Firm and Non-Firm Contracted Capacity including start-up and shutdown REV_{WESM} = Summation of WESM revenue based on Final Ex-post market clearing price of the AS Provider's trading Node arising from G above

NGCP alleged that its end goal in deriving the ASPA Rate is to lower cost to its consumers. Ancillary Services are pass-through costs and are revenue neutral for NGCP. However, NGCP believes that the procurement of the Ancillary Services should be at the lowest possible cost for the benefit of its consumers.

NGCP further alleged that in deriving the appropriate ASPA Rate, it considered a number of methodologies such as the New Build Methodology, the Opportunity Cost Methodology, and the Comparative Revenue Methodology. Ultimately, NGCP needed to entice the generators to sign and commit their capacity, for as long as the rate fell within NGCP's benchmark range.

NGCP emphasized that under its 2013 Application⁹ for approval of the ASPA it entered into with San Roque Power Corporation (SRPC), its proposed rates were based on the New Build Methodology. The said Methodology takes into consideration the cost to NGCP of building a new hydroelectric plant dam type that could provide all Ancillary Services.

A hydroelectric plant was chosen because of its capability to provide all three types of Ancillary Services: Regulating Reserve, Contingency Reserve, and Dispatchable Reserve. It is also the desirable type of technology in view of its minimal fuel costs. Under its 2013 Application, NGCP further used the cost of San Roque Power Plant as benchmark based on the following assumptions: a) it was built fairly recently (2003) compared to Magat (1983) or CBK (1950-1982); b) it has a large capacity at 411 MW; and c) the plant is certified for all three Ancillary Services.

The following assumptions were thus used by NGCP to project the cost of building a similar power plant, pursuant to the New Build Methodology:

⁹ Filed under ERC Case No. 2013-009 RC, entitled "In the Matter of the Application for Approval of the Ancillary Services Procurement Agreement Between the National Grid Corporation of the Philippines and San Roque Power Corporation, with Prayer for the Issuance of Provisional Authority."

ERC CASE NO. 2017-083 RC ORDER/ 28 NOVEMBER 2017 PAGE 18 of 23

San Roque Build Cost : US\$ 1.17 bn Installed Capacity : 411 MW

Actual Build Cost : US\$2.89/MW

Range : +/- 15%

New Build Cost Range : US\$ 2.17-3.33mn per MW

WACC : 15%
Plant Life : 25 years

Estimated Capital Cost : PhP 1.57 - PhP 2.41/kWh

Based on the actual build cost to construct a hydroelectric power plant, and applying a range of plus or minus 15%, a return on capital of 15%, and with a projected plant life of 25 years, Applicant NGCP thus arrived at its estimated cost range of PhP1.57/kWh to PhP2.41/kWh. These same assumptions were used by NGCP in determining the ASPA Rate it offered to PANASIA.

Effect to the consumer was the primary concern. The rates proposed by NGCP are much cheaper than the current structure. NGCP's analysis indicates that for the same amount of reserves (same quantity), the new rates can be 30% to 40% less than the old rate, thus:

Reserve	Old Rate (2011 Actual)		Proposed 2013 ASPA Rate		
	Quantity (GWh)	Cost (PhPMn)	Quantity (GWh)	New Rate	Cost (PhPMn)
Regulating	1,459	2,428	1,459	2.50	3,647
Contingency	1,396	5,734	1,396	2.25	3,141
Dispatchable	1,502	6,046	1,502	1.25	1,877
Total Cost		14,208			8,666
Billing Determinant 49,121 GWh			4	9,121 GWh	
Cost to Consumer 0.29 / kWh				0.18 / kWh	

The Commission also looked into the capability of PANASIA's 540MW Bataan Combined Cycle Power Plant, composed of 6 x 60MW Gas Turbines and 2 x 90MW Steam Turbines.

PANASIA submitted the Certificate of Compliance (COC) No. 16-03-M-00286ffL issued by the Commission on 30 March 2016 and valid until 10 April 2021.

In the Accreditation Certificate No. 2016-L0013 issued by NGCP dated 01 December 2016 with an expiry date until 30 November 2017, PANASIA has successfully proven its capability to provide the Regulating Reserve, Contingency Reserve, Dispatchable Reserve and Reactive Power Support Service. The said plant was

further certified to have met and complied with the Standard Ancillary Services Technical Requirements of the System Operations during the actual testing of the said plant.

In determining the reasonableness of the proposed rates for issuance of provisional authority, the Commission used the comparison of the proposed maximum rate with that of the previously approved ASPA rate, to wit:

Ancillary Service	SNAP-BI Binga HEPP (ERC Case No. 2017-016 RC)	SRPC San Roque HEPP (ERC Case No. 2013-009 RC)	SNAP-BI Ambuklao HEPP (ERC Case No. 2016-165 RC)	SNAP-MI Magat HEPP (ERC Case No. 2016-164 RC)
RR	PhP3.00/kW/Hr (Non-Firm)	PhP2.25/kW/Hr (Firm) PhP3.00/kW/Hr (Non-Firm)	PhP2.25/kW/Hr (Firm) PhP3.00/kW/Hr (Non-firm)	PhP2.25/kW/Hr (Firm) PhP3.00/kW/Hr (Non-firm)
CR	PhP2.25/kW/Hr	PhP2.25/kW/Hr	PhP2.25/kW/Hr	PhP2.25/kW/Hr
	(Non-Firm)	(Non-Firm)	(Non-Firm)	(Non-Firm)
DR	PhP1.25/kW/Hr	PhP1.50/kW/Hr	PhP1.25/kW/Hr	PhP1.25/kW/Hr
	(Non-Firm)	(Non-Firm)	(Non-Firm)	(Non-Firm)

The above table shows that the proposed ASPA rates of PANASIA approximates the provisionally approved Firm and Non-Firm RR rates of San Roque Power Corporation (SRPC) and other existing AS Providers. The RR, CR and DR rates of SRPC was deemed by NGCP as the "ceiling" for its AS.

For the proposed RPS of PANASIA, comparison is only made with that of First Gen Hydro Power Corporation considering that there is no other RPS Provider in the Luzon Grid. Previous ASPA Rates provisionally approved by the Commission under ERC Case No. 2011-062 RC¹⁰ as contained in its Order dated 06 June 2011 shows the following:

Ancillary Service	Applicable Rate
Reactive Power Support	PhP4.3648/kVar/hour

Considering that the RPS under the present Application is lower than the previously approved PhP4.3648/kVar/hour under the

In the Matter of the Application for Approval of the Ancillary Services Procurement Agreement (ASPA) Between the National Grid Corporation of the Philippines and First Gen Hydro Power Corporation, with Prayer for Provisional Authority

aforementioned case for the same plant, the Commission adopts the PhP4.00/kVar/hour as proposed by Applicants.

The EPIRA mandates the Commission to exercise regulatory oversight in NGCP's performance of its responsibility to construct, install, finance, improve, expand, rehabilitate, and repair the nationwide transmission system and the grid. The Commission's initial evaluation of the instant Application disclosed that the contracted ancillary service capacity is needed to augment the deficiency of ancillary reserve capacity to be able to maintain the reliability in the operation of the transmission system and in the reliability of the electricity supply in the Luzon Grid.

IN VIEW OF THE FOREGOING, Applicants National Grid Corporation of the Philippines (NGCP) and PANASIA Energy, Inc. (PANASIA) are **GRANTED PROVISIONAL AUTHORITY** to implement their Ancillary Services Procurement Agreement (ASPA), subject to the following conditions:

1. Applicable Rates:

PANASIA shall nominate the corresponding price (in per kW capacity per hour) for each ancillary service capacity to NGCP. In the event that the said nominated capacity is scheduled for Ancillary Service (AS), the pricing shall be as follows:

a. Scheduled capacity without energy dispatched

NGCP shall pay PANASIA the corresponding nominated price of that scheduled capacity. Provided, however, that the nominated price shall in no case exceed the following Fixed Fee Rates, without any minimum cost:

Ancillary Service	Applicable Rate (Maximum Hourly Rate)		
	Firm	Non-Firm	
Regulating Reserve	PhP2.25/kW/hr	PhP3.00/kW/hr	
Contingency Reserve		PhP2.00/kW/hr	
Dispatchable Reserve		PhP1.12/kW/hr	
Reactive Power Support		PhP4.00/kVAR/hr	

b. Scheduled capacity with energy dispatched

The ASPA rate shall be recovered through settlement on the Wholesale Electricity Spot Market (WESM). Thus, in this case, the ancillary capacity is free of charges as the cost is recovered through the market.

Provided that PANASIA shall be entitled to a Monthly Minimum Incidental Energy Cost based on actual dispatch and the cost of generation computed using the formula provided under Schedule 4 of the ASPA, subject to further clarification regarding the components of the Incidental Energy Cost.

Provided further that, in the event that the revenue from WESM exceeds the calculated Monthly Minimum Incidental Energy Cost, the excess shall be used to off-set any positive amount determined within the relevant period or to the immediately succeeding billing month.

- 2. NGCP should be enjoined to optimize economic and technical dispatch of the available ancillary service capacity wherein it shall schedule a mix of hourly ancillary service capacity at least cost for a reserve needed to maintain power quality, security, reliability and integrity of the grid;
- 3. The rate to be paid by NGCP as ancillary services cost should be passed on to its customers in accordance with the approved "Ancillary Services-Cost Recovery Mechanism" (AS-CRM). Further, NGCP should be directed to submit its monthly computation of ancillary service rates that it passed on to its customers, with supporting documents on or before the 5th day of the month; and
- 3. In the event that the final rates are higher than that provisionally granted, the resulting additional charges shall be collected by PANASIA from NGCP and the latter shall pass it on to its customers. On the other hand, if the final rate is lower than that provisionally granted, the amount corresponding to the reduction

ERC CASE NO. 2017-083 RC ORDER/ 28 NOVEMBER 2017 **PAGE 22 of 23**

shall be refunded by PANASIA to NGCP and the latter shall pass it on to its customers.

Finally, Applicants are hereby directed to implement the herein approved applicable rate upon the termination of the 2012 ASPA of the Applicants under ERC Case No. 2012-134 RC11 or on the April 2018 Billing Period.

SO ORDERED.

Pasig City, 28 November 2017.

ALFREDO J OIC Chairman and CEO

GERONIMO D. STA. ANA

Commissioner

se No. 2017-083 RC (NGCP&PANASIA)

¹¹ In the Matter of the Application for Approval of the Ancillary Services Procurement Agreement Between the National Grid Corporation of the Philippines and Panasia Energy, Inc., with Prayer for the Issuance of Provisional Authority

ERC CASE NO. 2017-083 RC ORDER/ 28 NOVEMBER 2017 PAGE 23 of 23

Copy Furnished:

 Atty. Luis Manuel U. Bugayung, Ronald Dylan P. Concepcion, Mark Anthony S. Actub and Raycell D. Baldovino
 Counsel for Applicant NGCP Office of the General Counsel
 NGCP Building, Quezon Avenue corner BIR Road
 Diliman, Quezon City

 National Grid Corporation of the Philippines (NGCP)
 Applicant
 NGCP Building, Quezon Avenue corner BIR Road
 Diliman, Quezon City

Atty. Ethel Odrunia
 Counsel for Applicant PANASIA
 3204-B East Tower, Philippine Stock Exchange, Centre,
 Exchange Road, Ortigas Center, Pasig

4. Panasia Energy , Inc. (PANASIA)
 Applicant
 3204-B East Tower, Philippine Stock Exchange, Centre, Exchange Road, Ortigas Center, Pasig

5. Office of the City Mayor Quezon City

- 6. Office of the Local Government Unit (LGU) legislative body Quezon City
- Office of the Municipal Mayor Limay, Bataan
- 8. Office of the Local Government Unit (LGU) legislative body Limay, Bataan
- Office of the Governor Bataan
- Office of the Local Government Unit (LGU) legislative body Bataan
- 11. National Association of Electricity Consumers for Reforms, Inc. (NASECORE) No. 85 Independencia Street, Tacloban City
- 12. Office of the Solicitor General 134 Amorsolo Street, Legaspi Village, Makati City
- 13. Commission on Audit Commonwealth Avenue, Quezon City
- Senate Committee on Energy GSIS Bldg. Roxas Blvd., Pasay City
- 15. House Committee on Energy Batasan Hills, Quezon City
- 16. Philippine Chamber of Commerce and Industry (PCCI) 3rd Floor, Chamber and Industry Plaza (CIP), 1030 Campus Avenue corner Park Avenue, McKinley Town Center, Fort Bonifacio, Taguig City