



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

GUIDELINES FOR THE INCREMENTAL GENERATION COST ADJUSTMENT (IGCA)

ERC CASE NO. _____ RM

Pursuant to Section 43(F) of Republic Act No. 9136 or the Act and Rule 7 of the Implementing Rules and Regulations (IRR) of the Act, the Energy Regulatory Commission (ERC) hereby adopts and promulgates these Guidelines to establish a process for the incremental generation cost adjustment (IGCA) of the National Power Corporation (NPC), including National Power Corporation-Small Power Utilities Group (NPC-SPUG).

ARTICLE I

GENERAL PROVISIONS

1.1 Objectives

- 1.1.1 To ensure transparent and reasonable prices of electric power service in a regime of free and fair competition and to achieve greater operational and economic efficiency; and
- 1.1.2 To ensure reasonable recovery of allowable incremental fuel and purchased power costs or refund of savings, if any, of NPC Generation Charges for the Luzon, Visayas and Mindanao Grids in an efficient and timely manner.

1.2 Scope

These Guidelines shall apply to the NPC.

1.3 Definition of Terms

Incremental Generation Cost Adjustment	Shall mean the NPC calculated automatic monthly cost adjustment for fuel and purchased power.
Accounting Adjustment	Shall mean the PhP/kWh adjustment deemed necessary after confirmation of previous twelve (12) IGCA charges which shall cover for the under or over recoveries in the incremental fuel and purchased power costs from previous months' charges and adjustments.
Adjustment Date	Shall mean the last day of the billing month of the twelfth (12th) IGCA charge.
Allowable Fuel Cost	Shall mean the amount in PhP/kWh of fuel cost for the billing month subject to heat rate caps determined by the ERC. This includes Bunker, Diesel, Coal, Natural Gas and other fuel types. Steam cost shall form part of the allowable fuel cost but shall not be subjected to any heat rate cap.
Allowable Purchased Power Cost	Shall mean the amount in PhP/kWh of purchased power cost for eligible Independent Power Producer (IPP) Supply Contracts during the test month. This excludes payment of Capacity & Infrastructure Fees for Build-Operate-Transfer (BOT) plants.
Average Monthly Base Fuel Cost	Shall mean the amount in PhP/kWh of fuel cost established by the ERC in the last rate approval. This includes Bunker, Diesel, Coal, Steam, Natural Gas and other fuel types, if any.
Average Monthly Base Purchased Power Cost	Shall mean the amount in PhP/kWh of purchased power costs established by the ERC in the last rate approval. This excludes payments of Capacity & Infrastructure Fees for BOT plants.
Average Rate Schedules	Shall mean the Rate Schedules in PhP/kWh duly approved by the ERC containing the single generation rate in each grid.
Billing Month	Shall mean the existing billing month beginning at the 26th day of the previous month up to 25th day of the current month. For purposes of IGCA calculations, recoverable costs during the billing month shall include allowable fuel cost of the

previous billing month (one month lag) and the allowable purchased power costs two-months previous the current billing month (two months lag).

Energy Regulatory Commission or ERC

Shall refer to the regulatory agency created by Section 38 of the Act.

Energy Sales

For purposes of calculating IGCA, shall mean regular energy sales (kWh) including sales arising from the implementation of Special Rate Programs such as One Day Power Sales (ODPS), Productivity Enhancement Program (PEP) and other rate programs that may be established in the future. The energy sales shall coincide with the period when the actual fuel and purchased power costs were incurred.

Eligible Independent Power Producers (IPP) Supply Contracts

Shall mean power supply agreements entered into by NPC with IPPs under the Build-Operate-Own (BOO), Build-Operate-Transfer (BOT), Build-Rehabilitate-Operate-Transfer (BROT), Build-Transfer-Operate (BTO), Power Purchase (PPA), Energy Conversion (ECA), Rehabilitate-Operate-Lease (ROL) and Rehabilitate - Operate - Maintain - Manage (ROMM) Agreements prior to the enactment of RA No. 7638 or the Department of Energy Law and those agreements entered into after the enactment of RA No. 7638 but were duly approved by the then Energy Regulatory Board (ERB) or the ERC for inclusion in rate calculations.

Heat Rate Caps

Shall mean the latest heat rate caps determined by the ERC.

Recovery Period

Shall mean the period or number of months approved by the ERC to recover or refund its confirmed Accounting Adjustment.

Special Rate Programs

Shall mean the One Day Power Sales (ODPS), Productivity Enhancement Program IV (PEP IV) or any other rate programs to be established by NPC/PSALM aimed at providing customers with incentives to improve productivity and obtain savings in terms of power costs. (This is not applicable to NPC-SPUG)

Time-of-Use (TOU) Rate Schedules

Shall mean the Rate Schedules in PhP/kWh duly approved by the ERC containing hourly generation rates. (This is not applicable to NPC-SPUG)

ARTICLE II

MONTHLY ADJUSTMENT OF THE NPC FORMULA

2.1 Monthly Adjustment Formula - NPC shall calculate the IGCA based on the following formula:

$$\text{IGCA} = \sum \left[\left\{ F_1 - F_0 \right\} + \left\{ PP_1 - PP_0 \right\} \right] \pm \text{AA}$$

Where:

IGCA	=	Incremental Generation Cost Adjustment expressed in Peso per kilowatt-hour (PhP/kWh)
F₁	=	Allowable monthly fuel costs, PhP/kWh
F₀	=	Average Monthly Base Fuel Costs, PhP/kWh
PP₁	=	Allowable Monthly Purchased Power Costs, PhP/kWh
PP₀	=	Average Monthly Total Base Purchased Power Costs, PhP/kWh
S_f	=	Energy sales when the actual fuel cost was incurred
S_{pp}	=	Energy sales when the actual purchased power cost was incurred
AA	=	Accounting Adjustment, computed as follows:

$$\text{AA} = \left\{ \frac{F_2 + PP_2 - FPP_R}{S_{p_n}} \right\}$$

Where:

F₂	=	Allowable fuel costs in Pesos verified and confirmed by the ERC.
PP₂	=	Allowable purchased power costs in Pesos verified and confirmed by the ERC.
FPP_R	=	Actual recovered/billed fuel and purchased power costs in Pesos covering the IGCA billing months for confirmation by the ERC. FPP _R shall be calculated as follows:

$$FPP_R = FPP_A + FPP_T$$

FPP_A = Recovered/billed from customers billed under the Average Rate Schedule, if applicable, to be determined as follows:

The sum of the fuel and purchased power costs components of ERC-approved Average Grid Rate and the IGCA, both in PhP/kWh multiplied by the energy sales of customers billed under the Average Rate Schedule.

FPP_T = Recovered/billed from customers billed under the TOU Rate Schedules to be determined as follows:

The sum of the fuel and purchased power costs components of the resulting average Grid TOU Rate and the calculated IGCA, both in PhP/kWh multiplied by the total energy sales of the customers billed under the TOU Rate Schedule.

The fuel and purchased power cost component of the resulting Grid average TOU Rate shall be calculated as follows:

Resulting Grid Average TOU Rate – Sum of the grid average component other than fuel & purchased power.

(This is not applicable to NPC-SPUG)

Sp_n = Represents the actual regular energy sales for the test period including sales arising from the implementation of Special Rate Programs such as One Day Power Sales (ODPS), Productivity Enhancement Program (PEP) and other rate programs that may be established in the future. The energy sales shall coincide with the period when the actual fuel and purchased power costs were incurred.

Calculation of Allowable Fuel Costs

$$\begin{array}{l}
 F_1 = \sum \left\{ F_{1B} + F_{1D} + F_{1C} + F_{1S} + F_{1N} + F_{1x} \right\} \\
 F_2 = \sum \left\{ F_{2B} + F_{2D} + F_{2C} + F_{2S} + F_{2N} + F_{2x} \right\}
 \end{array}$$

- F_{1B}** = NPC-calculated allowable bunker costs, PhP/kWh
- F_{2B}** = ERC-confirmed allowable bunker costs, PhP/kWh
- F_{1D}** = NPC-calculated allowable diesel costs, PhP/kWh
- F_{2D}** = ERC-confirmed allowable diesel costs, PhP/kWh
- F_{1C}** = NPC-calculated allowable coal costs, PhP/kWh
- F_{2C}** = ERC-confirmed allowable coal costs, PhP/kWh
- F_{1N}** = NPC-calculated allowable natural gas costs, PhP/kWh
- F_{2N}** = ERC-confirmed allowable natural gas costs, PhP/kWh
- F_{1x}** = NPC-calculated allowable costs of other fuel types, PhP/kWh
- F_{2x}** = ERC-confirmed allowable costs of other fuel types, PhP/kWh
- F_{1S}** = NPC-calculated actual steam costs, PhP/kWh
- F_{2S}** = ERC-confirmed actual steam costs, PhP/kWh
- FV_{1B,1D}** = Allowable volume of bunker and diesel consumed during the billing month (in liters) multiplied by their corresponding average cost per liter during the same billing month.
- FV_{1C}** = Allowable volume of coal consumed during the billing month (in metric Tons) multiplied by average cost of coal per metric ton during the same billing month.
- FV_{1N}** = Allowable volume of natural gas consumed during the billing month (in GigaJoules) multiplied by average cost of natural gas per GigaJoule during the same billing month.

Where:

Allowable Volume (bunker, diesel, coal, natural gas, and other fuel types) is calculated based on the following formula:

$$\text{Allowable Volume of Fuel} = \frac{\left\{ \frac{\text{Allowable Heat Rate}^*}{\text{Heating Value}} \right\}}{\text{Density of Fuel} \times \text{Unit Conversion} \times \text{Generation}}$$

Variables	Bunker	Diesel	Coal	Nat Gas
Heat Rate	Btu/kWh	Btu/kWh	Btu/kWh	Btu/kWh
Density	lb/gal	lb/gal	None	
Conversion	liters/gal	liters/gal	Kg/MT lb/Kg	
Heating Value	Btu/lb	Btu/lb	Btu/lb	Btu/lb
Generation	kWh	kWh	kWh	kWh
Allowable Volume	Liters	Liters	Metric Ton	Gigajoules

* Allowable heat rate cap as determined by the ERC.

The above IGCA formula shall be applied uniformly across all main power grids namely Luzon, Visayas and Mindanao, including NPC-SPUG. Adoption of the IGCA shall mean replacement and cessation of the Generation Rate Adjustment Mechanism (GRAM) issued by the ERC in its Order dated February 24, 2003.

Components of Allowable Purchased Power Costs

Allowable purchased power costs include purchased power costs from IPP Supply Contracts which have been approved by the ERC for inclusion in the computation of IGCA. Those that are yet to be approved by the ERC for inclusion in the rate calculations shall not form part of the determination of the allowable purchased power cost component of the IGCA.

Any under or over recovery resulting from the imposition of the monthly automatic IGCA or Accounting Adjustment shall not be subject to the imposition of a carrying charge.

2.2 Determination of Heat Rate Caps

In the determination of heat rate caps to be used in the computation of allowable volume of fuel, the ERC shall take the weighted average heat rate of the top three (3) most efficient power plants grouped according to the age of the plants on a per grid basis for each fuel technology using the CY 2004 data for NPC power plants and guaranteed heat rate provided in the contract or the actual heat rate, whichever is lower, for IPP power plants. The heat rate cap of Natural Gas shall be based on the guaranteed heat rate provided in the contract.

The heat rate caps shall be reset annually every March of the succeeding year, based on the most recent data, until such time that the Commission changes its policy on heat rate.

(Attached as "Annex A" is the proposed heat rate caps)

2.3 Under or Over Recovery

The under or over recovery shall be recovered over a period determined by the ERC.

2.4 Billing of Incremental Charges

The adjustment mechanism is an automatic monthly variable charge which shall be shown as a separate item in the NPC monthly billing to its customers, calculated in accordance with Section 1 above. This automatic charge will allow NPC to recover all allowable incremental fuel and purchased power costs or refund savings if any, in an efficient and timely manner without the need for pre-evaluation and approval by the ERC.

An Accounting Adjustment representing under or over recoveries from the previous twelve (12) IGCA shall be derived by getting the difference between the actual allowable costs as confirmed by the ERC and the actual recovered billings for fuel and purchased power costs to customers both billed under the Average Rate Schedule and TOU Rate Schedules during the same billing months. Should there be any remaining balance of the Accounting Adjustment upon cessation of the approved recovery period, said balance shall true-up to the next Accounting Adjustment covering the succeeding twelve (12) IGCA charges. The Accounting Adjustment shall be imposed

upon confirmation or deemed confirmed by the ERC. An annual reset of the TOU rates will be conducted.

ARTICLE III

VERIFICATION PROCESS

3.1 Documentary Support and their Submission to ERC

Similar to the GRAM, a test or billing month shall cover fuel cost of the previous billing month (one month lag) and purchased power costs of two-months previous the current billing month (two months lag). Thus, documents for submission should correspondingly support said costs.

On or before the twenty fifth (25th) day of the succeeding month, NPC and PSALM shall jointly submit to the ERC the detailed calculation/determination of the monthly IGCA charge together with all pertinent supporting documents as bases for the ERC to conduct its initial evaluation, to wit:

- 3.1.1 Copies of receipts/invoices showing actual price of fuels used in generating electricity, including steam during the billing period;
- 3.1.2 Copies of receipts/invoices showing actual payments for purchased energy during the billing period;
- 3.1.3 Schedule showing purchases of fuels segregated into local and foreign;
- 3.1.4 Fuel Inventory Reports;
- 3.1.5 Schedule showing the volume of consumption of fuels, fuel costs, gross generation, net generation, heat rate and heating values;
- 3.1.6 Schedule showing the amount and volume of purchased energy on a per contract basis; and
- 3.1.7 Computation of IGCA charges during the billing period per grid, including supporting computations.

3.2 Post Verification - Submission of Final IGCA Calculations for ERC Confirmation

NPC/PSALM shall submit calculations for the final levels of IGCA charges together with the actual under or over recovery of fuel and purchased power costs resulting from the imposition of the monthly IGCA charge. The aforementioned submissions shall be made on or before twenty fifth (25th) day of the succeeding month.

The ERC shall annually verify and confirm the imposition the monthly IGCA charges, within one hundred eighty (180) days from the receipt of NPC/PSALM's submission of the final calculations for the past twelve (12) IGCA charges to rule on the veracity of NPC/PSALM's claim for additional charge to recover incremental costs or refund savings, as the case may be. Should the ERC fail to verify and confirm NPC/PSALM's past twelve (12) IGCA charges from the submission of calculations and supporting documentations after the one hundred eighty (180)-day

evaluation/confirmation period, the submitted calculation for the final levels of IGCA shall automatically be deemed final/confirmed and NPC/PSALM shall be automatically authorized to impose the additional charge or refund, as submitted, effective the following billing month after the lapse of the one hundred eighty (180)-day grace period.

3.3 Notice of Complete Submission

The ERC shall issue a Notice of Complete Submission of IGCA documents, which is necessary before the prescription period takes effect and the confirmation process commences. The ERC will notify NPC of the deficiency or completeness of its compliance within ten (10) days from receipt of its submission.

ARTICLE IV

FINAL FILING UNDER THE GENERATION RATE ADJUSTMENT MECHANISM

- 4.1 Effectivity of the Generation Rate Adjustment Mechanism (GRAM) –** Upon the effectivity of these Guidelines, the GRAM shall no longer be applicable to NPC, including NPC-SPUG. The remaining balance, if any, of the Deferred Accounting Adjustment (DAA) for Luzon, Visayas and Mindanao Grids shall be continually charged until the full amount shall have been recovered, pursuant to the authorization granted in the Orders dated April 12, 2005 under ERC Case No. 2005-007RC [In the Matter of the Application for the Recovery of Fuel and Independent Power Producer Costs Under the Generation Rate Adjustment Mechanism (GRAM), NPC/ PSALM, Applicants] and January 5, 2005 under ERC Case No. 2004-421 [In the Matter of the Adoption of the Generation Rate Adjustment Mechanism (GRAM), NPC-SPUG, Applicant].
- 4.2 Final Filing under GRAM –** NPC shall file their final GRAM application within sixty (60) days from the effectivity of these Guidelines. The final GRAM filing shall cover the billing period from their last approved GRAM filing up to the last billing month prior to the effectivity of these Guidelines for purposes of calculating the final DAA.

ARTICLE V

FINES AND PENALTIES

- 5.1** Violation of any provision of these Guidelines shall be subject to the imposition of fines and penalties in accordance with the Guidelines to Govern the Imposition of Administrative Sanctions in the Form of Fines and Penalties Pursuant to Section 46 of Republic Act No. 9136 promulgated by the ERC on May 17, 2002.

ARTICLE VI

EXCEPTION CLAUSE

- 6.1** Where good cause appears, the ERC may allow an exception from any provisions of these Guidelines, if such exception is found to be in the public interest and is not contrary to law or any other related rules and regulations.

ARTICLE VII

SEPARABILITY CLAUSE

- 7.1** If for any reason any provision of these Guidelines is declared unconstitutional or invalid by final judgment of a competent court, the other parts or provisions hereof which were not affected thereby shall continue to be in full force and effect.

ARTICLE VIII

EFFECTIVITY

- 8.1** These Guidelines shall take effect on the fifteenth (15th) day upon publication in a newspaper of general circulation.

Pasig City, August 18, 2005 .

RODOLFO B. ALBANO, JR.
Chairman

OLIVER B. BUTALID
Commissioner

JESUS N. ALCORDO
Commissioner

RAUF A. TAN
Commissioner

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