

Republika ng Pilipinas  
AMBANSANG PANGASIWAAN NG PAMBIG  
NATIONAL IRRIGATION ADMINISTRATION  
Lungsod ng Quezon

MC # 37, s. 2008

**MEMORANDUM CIRCULAR**

**TO :** THE DEPUTY ADMINISTRATOR, ASSISTANT ADMINISTRATORS,  
DEPARTMENT MANAGERS, REGIONAL/OPERATIONS MANAGERS,  
PROJECT MANAGERS, PROVINCIAL IRRIGATION OFFICERS,  
IRRIGATION SUPERINTENDENTS AND ALL OTHERS CONCERNED  
THIS AGENCY

**SUBJECT : COST REDUCTION STRATEGIES FOR ELECTRIC MOTOR DRIVEN PUMP IRRIGATION SYSTEM (PIS)**

In view of the unabated increase of oil in the world market directly affecting the operation costs of PIS and the viability of concerned Regional Offices, you are directed to immediately adopt and implement the following cost reduction methods and strategies:

1. For PIS located in Luzon, operate the pumps during the following off-peak period using the TIME-OF-USE RATES SCHEDULE FOR LUZON GRID (ANNEX A) which shows the hourly rate from Monday to Saturday including Sundays and Holidays, January-June and July-December:
  - a) 12:00 AM to 7:00 AM (7-hour pumping) @ P 1.8744/KWHR only compared to P 5.50 to P 6.00/KWHR during peak period. With this scheme, Region 2 was able to save almost P 4M on power cost in CY 2007.
  - b) For longer pumping time, you can start at 10:00 PM up to 9:00 AM (11-hour pumping) with slightly higher power rate of about P 2.00/KWHR from 10:00 PM – 11:00 PM and 8:00 AM-9:00 AM. Better if rotational method of irrigation could be applied to make use of “a” above.

For PIS located in the Visayas, use the attached TIME-OF-USE RATES SCHEDULE FOR VISAYAS GRID (ANNEX B). For PIS located in Mindanao, use the attached TIME-OF-USE RATES SCHEDULE FOR MINDANAO GRID (ANNEX C).

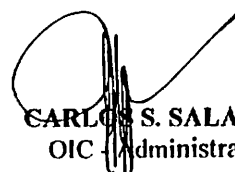
2. Request for re-classification of power consumer status from FIRM to NON-FIRM. Attached is a copy of Region 2 request (ANNEX D) for your information and reference. Region 2 was able to refund about P 14M when their request was approved.
3. Request for VAT exemption of PIS power bills. Attached is a copy of Region 2 request (ANNEX E) for your information and reference. Region 2 was able to refund more than P 200,000 when their request was approved.
4. Determine the actual number of units needed based on the total water requirement and/or holding capacity of the main irrigation canals.
5. Renegotiate contracted demand and correct sizing of transformer from the power utility if the actual number of units needed is less than what were installed.
6. Improve the power factor (PF) to at least 95% which reduced not only induction losses but also penalty in the form of Power Factor Adjustment (PFA). Discount is given to billings with power factor higher than 85% but also imposes penalty for power factor below 85%, i.e., a PF of 75% will mean a penalty of about 6% but a PF of 98% will mean a discount of about 4%.

It is further directed that, whenever applicable and possible, all PISs shall adopt the experiences/strategies of Region 2 as shown in ANNEX F. Adoption of strategies shall be in combination with the appropriate operation and maintenance and institutional procedures.

In view of these, all Regional Irrigation Offices including Head Office of MRIIS shall submit to the OIC Administrator Attention: Office of the OIC Assistant Administrator for Systems Operations and Equipment Management within two weeks before the start of every forthcoming cropping season beginning the crop year 2009 operation and maintenance plans of PISs under their jurisdiction, and thereafter. The plan shall include, among others, all aspects of PIS O & M – water delivery and distribution, repair and maintenance, social/institutional, pump operation, and financial, as well as other PIS-specific strategies for cost reduction. The plan shall be accompanied by a lay-out map showing the water delivery and distribution scheme.

Please be guided accordingly.

Date : 8 August 2008

  
**CARLOS S. SALAZAR**  
OIC Administrator

**ANNEX A**

**National Power Corporation**  
**Power Rates/Effective Rates**

<http://www.napocor.gov.ph/npc5.asp> - July 7, 2008

**TIME-OF-USE RATES SCHEDULE FOR LUZON GRID, P/kWh**  
**P/kWh – 3.1780**

Period	Jan – Jun		Jul – Dec	
	Mon–Sat	Sun/Hol	Mon–Sat	Sun/Hol
1:00 AM	1.8744	2.0340	1.8744	1.8744
2:00 AM	1.8744	1.8744	1.8744	1.8744
3:00 AM	1.8744	1.8744	1.8744	1.8744
4:00 AM	1.8744	1.8744	1.8744	1.3967
5:00 AM	1.8744	1.8744	1.8744	1.3967
6:00 AM	1.8744	1.8744	1.8744	1.3967
7:00 AM	1.8744	1.8744	1.8744	1.3967
8:00 AM	2.1574	1.8744	2.0340	1.8744
9:00 AM	5.3108	1.8744	2.1574	1.8744
10:00 AM	6.0601	2.0340	5.5190	2.0340
11:00 AM	6.0601	2.0340	6.0601	2.0340
12:00 PM	6.0601	2.0340	5.5190	2.0340
1:00 PM	6.0601	2.0340	5.5190	2.0340
2:00 PM	6.0601	2.0340	6.0601	2.0340
3:00 PM	6.0601	2.0340	5.5190	2.0340
4:00 PM	6.0601	2.0340	5.3108	2.0340
5:00 PM	5.5190	2.0340	5.0799	2.0340
6:00 PM	5.5190	2.0340	5.5190	2.1574
7:00 PM	6.0601	5.3108	6.0601	5.0799
8:00 PM	6.0601	5.3108	5.5190	5.0799
9:00 PM	5.5190	2.7912	5.3108	2.1574
10:00 PM	2.7912	2.1574	2.1574	2.0340
11:00 PM	2.1574	2.0340	2.0340	1.8744
12:00 AM	2.0340	1.8744	1.8744	1.8744

**ANNEX B**

**National Power Corporation**  
**Power Rates/Effective Rates**

<http://www.napocor.gov.ph/npc5.asp> - July 7, 2008

**TIME-OF-USE RATES SCHEDULE FOR VISAYAS GRID, P/kWh**  
**P/kWh - 2.9934 – July 7, 2008**

Period	Jan – Dec	
	Mon – Sat	Sun / Hol
1:00 AM	1.7782	1.7782
2:00 AM	1.3805	1.3805
3:00 AM	1.3805	1.3805
4:00 AM	1.3805	1.3805
5:00 AM	1.3805	1.3805
6:00 AM	1.3805	1.3805
7:00 AM	1.3805	1.3805
8:00 AM	2.0964	1.3805
9:00 AM	2.5781	1.3805
10:00 AM	2.7946	1.7782
11:00 AM	2.7946	2.0964
12:00 PM	2.7946	2.0964
1:00 PM	2.7946	2.0964
2:00 PM	2.7946	2.2140
3:00 PM	2.7946	2.0964
4:00 PM	2.7946	2.0964
5:00 PM	2.6956	2.0964
6:00 PM	5.6379	2.7946
7:00 PM	5.6379	5.6379
8:00 PM	5.6379	5.6379
9:00 PM	5.6379	2.7946
10:00 PM	2.7946	2.6956
11:00 PM	2.2140	2.2140
12:00 AM	2.0964	1.7782

ANNEX C

**National Power Corporation**  
**Power Rates/Effective Rates**

**<http://www.napocor.gov.ph/npc5.asp> - July 7, 2008**

**TIME-OF-USE RATES SCHEDULE FOR MINDANAO GRID, P/kWh**  
**P/kWh - 2.5277 - July 7, 2008**

Period	Jan - Jun		Jul - Dec	
	Mon-Sat	Sun/Hol	Mon-Sat	Sun/Hol
1:00 AM	2.1367	2.1367	1.3159	1.3159
2:00 AM	2.0051	2.1367	1.3159	1.3159
3:00 AM	2.0051	2.0051	1.3159	1.3159
4:00 AM	2.0051	2.0051	1.3159	1.3159
5:00 AM	2.1367	2.0051	1.3159	1.3159
6:00 AM	2.0051	2.0051	1.3159	1.3159
7:00 AM	2.0051	2.0051	1.3159	1.3159
8:00 AM	2.1367	2.0051	1.3159	1.3159
9:00 AM	2.2319	2.0051	2.1367	1.3159
10:00 AM	2.2496	2.1367	2.2319	1.3159
11:00 AM	2.2496	2.1367	2.2319	2.0051
12:00 PM	2.2496	2.1367	2.2319	2.0051
1:00 PM	2.2496	2.1367	2.2319	2.0051
2:00 PM	2.2496	2.2319	2.2319	2.0051
3:00 PM	2.2496	2.1367	2.2319	2.0051
4:00 PM	2.2496	2.1367	2.2319	2.0051
5:00 PM	2.2496	2.1367	2.2319	2.1367
6:00 PM	2.5773	2.2496	2.5773	2.5773
7:00 PM	2.5773	2.5773	2.5773	2.5773
8:00 PM	2.5773	2.5773	2.5773	2.5773
9:00 PM	2.5773	2.5773	2.2496	2.2496
10:00 PM	2.2496	2.2319	2.2319	2.1367
11:00 PM	2.2319	2.1367	2.1367	2.0051
12:00 AM	2.1367	2.1367	1.3159	1.3159



DEPARTMENT OF AGRICULTURE  
NATIONAL IRRIGATION ADMINISTRATION  
Cagayan Valley Region  
Minante I, Cauyan City, Isabela  
Tel (078) 652-2033/Fax (078) 652-0289

September 8, 2003

FOR : Mr. Jesusito H. Sulit,  
Manager, Corporate Planning  
National Transmission Corporation  
Power Center, Building 2  
Agham Road Corner Quezon Avenue  
Diliman, Quezon City

SUBJECT : **NIA's REQUEST FOR CLASSIFICATION AS NON-FIRM POWER CONSUMER**

FROM : The Regional Manager  
National Irrigation Administration  
Region 2, Cauayan, Isabela

We view with urgency and seriousness the present power rates accorded to our agency, the National Irrigation Administration (NIA) as power consumer. The rate is quite high, bordering upon a prohibited cost in the light of palay production cost per hectare on all our Pump Irrigation System within the Cagayan Valley Region (Please refer to Annex "A" hereto). As one among the concerned electric industry-participants in the July 16, 2003 Coordination Meeting with National Transmission Corporation (TRANSCO), we learned that the reason higher rates were applied to us was that NIA is categorized as a "Firm". In this connection, we therefore, earnestly request that NIA be recognized as a "Non-Firm" essentially due to the following reasons:

1. NIA is a non-profit, government-owned and controlled corporation;
2. NIA is a serviced-oriented government agency;
3. NIA's clients are farmer-cultivators whose economic plight are mostly marginalized;
4. NIA is only a conduit for the use of power wherein the electromotive-force to drive our Pumping Irrigation System enable us "lift precious irrigation water" for our farmer-beneficiaries' advantage thru irrigated agriculture;
5. NIA does not operate pumping irrigation system requiring electricity for the whole year. Rather NIA consumes power only during irrigation periods, based on the culturally established production season for cultivating rice crops. At times, irrigation suspension is affected whenever there are on-sets of heavy rains, stormy typhoons, prolonged rain showers within the irrigated areas, thus, regulating pump operation when irrigation water had served its intended purpose. At this instance please refer to Annex "B" for the period of operation our national pump irrigation systems function.

If NIA management opt on a crucial, but painful decision to stop operating our pumping stations due to high operating cost tributary to the present rate as a "Firm", our farmer's occupational venture on rice farming might be jeopardized. Besides, such scenario could significantly give a dent in the Food Security Posture of Cagayan Valley as the shutdown would yield a loss of palay production to about 106-thousand metric tons. This situation was brought to the attention of our farmer-clienteles where with a consensus of raising the issues to their political leaders was arrived at for assistance to bring down the power rate to the affordable level. Please refer to Annex "C" hereof, a sample computation, using the billing period March 26 to April 25, 2003, to attest to the fact that as a "Firm" vis-à-vis as a "Non-Firm", power cost/kwh consumed is much higher comparatively.

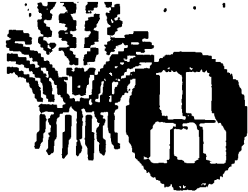
Furthermore, when bundled rate was used, we experienced financial difficulties in setting our power-bill burdens, more so now that "unbundled rate" is now in effect. To ease our dilemma significantly, we are determined to make known our sentiments, thus, our appeal for NIA to be classified as a "Non-Firm" power consumer without any required Security Deposit, since at the outset, this Security Deposit, was not required. Moreover, power bills could be serve to us on a monthly basis. However, payment should be based on a semi-annual mode to coincide with deadline dates of ISF payments as follows:

For dry season crop -- every July  
For wet season crop -- every January

In view hereof, we ardently re-iterate our request as captioned in the aforesaid subject, the approval of which we earnestly solicit.

  
VICENTE E. GALVEZ, CESO V  
Regional Manager

Copy furnished:  
NIA Administrator  
Quezon City



**Republic of the Philippines**  
**DEPARTMENT OF AGRICULTURE**  
**NATIONAL IRRIGATION ADMINISTRATION**  
**Cagayan Valley Region**  
**Minante I, Cauyan City, Isabela**  
**Tel (078) 652-2033/Fax (078) 652-0289**

September 20, 2006

Mr. Antonio F. Montemayor  
Regional Director  
Bureau of Internal Revenue  
Tuguegarao City, Cagayan

Dear Mr. Montemayor,

We are forwarding to your office (Annex A, B & C) signed resolutions from Irrigators Association of Magapit Pump Irrigation System covering the municipalities of Lal-lo, Camalaniugan, Buguey and Aparri; Irrigators Association from Iguig-Alcala-Amulong Pump Irrigation System; and Irrigators Association from Solana Pump Irrigation System, all in the Province of Cagayan.

Although said resolutions are self explanatory, we thought it would be wise to give you more facts to the subject matter, i.e. to exempt **NIA POWER BILLS** from Value Added Tax (VAT) retroactive November 2005, to wit:

1. NIA is a non-profit government owned and controlled corporation and a service oriented government agency.
2. NIA's clients are farmer-cultivators whose economic plight are mostly marginalized.
3. NIA is only a conduit for the use of power to drive our electric pumps to lift irrigation water for our farmer-beneficiaries' advantage thru irrigated agriculture.
4. NIA is created under R.A. 3601 as amended by PD 552. It is authorized to collect Irrigation Service Fee (ISF) from its clients.
5. Previous years up to October 2005, power bills for our pumping stations were VAT free (Annex D). Effective November 2005, 10% VAT were included in our power bills and on February 2006, the VAT was increased to 12% (Annex E & F). the accumulate VAT of our three (3) pumping stations as of August 2006 amounted to P 2,524,732.43 (Annex G).
6. Power cost is increasing every year since 2002 and as a result, NIA is indebted to NPC and TRANSCO respectively.

Deducing from the three (3) resolutions, our farmers were very much concerned with the rising cost of power and the imposition of VAT. They know that the amount collected from them ISF are not enough even for the payment of power bills alone. How much more with the imposition of VAT. Hence, their collective resolutions.

To cope with the power cost increases, NIA had been instituting stringent measures in water management and energy conservation, to the extent that we have realized almost a million kilowatt-hour savings in our pump operations. But the savings is not enough to compensate the rising cost of power.

If NIA opt on a crucial but painful decision to stop operating our pumping stations due to high operating cost, our farmer's occupational venture on rice farming might be jeopardized. Besides, such scenario could significantly give a dent in the Food Security Posture of Cagayan Valley as the shutdown would yield a loss of palay production to about 100-thousand metric tons. His will lead to low purchasing power of our farmers, a big letdown on agri-business, less tax and will result to economics' regression. Likewise, if NIA opt to operate our pumping stations even at a higher cost of operation, we do not have any recourse but to increase our ISF and the burden will be shouldered by our poor farmers.

Aware of our farmers' concerns, we find the REPORT TO THE NATION of Senator Ralph G. Recto published in the Philippine Daily Inquirer on July 31, 2006 very relevant and maybe use as our legal basis to exempt our pumping irrigation system from VAT. Please refer to paragraph 14 of Annex II. it is clear from said paragraph that NIA which is engage in agriculture particularly staple food, i.e. rice production remained VAT free zones.

From the foregoing and in tandem with the Irrigator's Association Resolutions, we request for the issuance of a certification that our three(3) pumping systems, namely: Magapit Pump Irrigation System in Lal-lo, Cagayan Iguig-Alcala-Amulong Pump Irrigation System in Amulong, Cagayan; and Solana Pump irrigation System in Solana, Cagayan as VAT exempt.

For clarification or requirements needed, you can contact us at our telephone/fax nos. or thru mail.

It is that you will consider our request favorably.

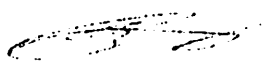
Very truly yours,

  
**VICENTE E. GALVEZ, CESO V**  
Regional Manager

**INTERVENTIONS/STRATEGIES TO REDUCE POWER COST**

1. Adopt the time of the use rate, i.e., operate our pumps during off-peak and maximize operation during Sundays and Holidays.
2. All farmers should properly be informed of the water delivery and cut-off schedule. Strictly implement cropping calendar to avoid extended pump operations which means additional power cost.
3. Land soaking periods should not be too long. The twenty days land soaking period shall strictly be followed.
4. Late farmers' request for irrigation shall be evaluated such that the ISF that will be generated is enough to cover operation expenses prior to giving in to their request.
5. Reduce number of pumping hours proportional to the total area under terminal drainage.
6. Avoid using two or three pumps simultaneously unless necessary. Loads per day are computed on the highest registered load in one day.
7. Outgoing pumps, which is in operation, should not overlap the starting time of incoming pump.
8. Water re-use for irrigation from drainage, if possible shall be implemented.
9. Fishponds should be billed as a part of the services area.
10. Adopt alternative wet and dry method. Rice field should be leveled so that water will not be concentrated in low-lying areas.
11. Prompt payment of power bill to avail a 3% discount.
12. Consider the billing period from 25<sup>th</sup> of the month to the 26<sup>th</sup> of the following month to maximize operation of pump. Start pumping on the 27<sup>th</sup> of the month. Avoid start of irrigation on the 4<sup>th</sup> week of the month and avoid cut-off of irrigation water on the 1<sup>st</sup> week of the following month.
13. Do not pump water more than the required target maximum 10,000 cubic meter per hectare per cropping season.
14. Consider lag and lead time of your meters, i.e., avoid starting and cutting-off pump at 11:30 PM and 12:30 AM. It should be earlier and later respectively.
15. Implement rotational scheme of water delivery.
16. Shutdown sub-station if there are long gaps between irrigation. Sub-station consumes power at the rate of more or less Php 2,000/day.
17. Established a good communication network with the IAs.
18. Maintain calibrated staff gauges to serve as basis in monitoring the supply of water. Thus, avoiding over supply, which means additional power cost.
19. Continue Type 1 Contract with IA to control vegetation in canals.
20. Four (4)-day shut-off of all pumps within a month during irrigation periods shall be mandatory. More than 26 days operation within a month will increase your demand and will be higher than FIRM rates.
21. Keep out transmission lines from branches of trees and climbing vines. These will add loads to your system.

Prepared by:

  
**WINSTON S. ZULUETA**  
Transport & Maintenance Supervisor  
Equipment Management Division - Region 2