

1 DEPARTMENT CIRCULAR NO.DC2016-3-_____

2
3 PRESCRIBING THE OPTIMAL UTILIZATION OF AGUS HYDRO ELECTRIC
4 GENERATING PLANTS IN MINDANAO
5

6 **WHEREAS**, pursuant to the declared policy of the State under Republic Act No. 9136,
7 otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA), the
8 Department of Energy (DOE) is mandated to ensure the quality, reliability, security,
9 and affordability of the supply of electric power and establish and administer
10 programs for, among others, utilization of energy resources in the Philippines;

11
12 **WHEREAS**, the DOE is mandated to formulate and implement programs, including
13 a system of providing incentives and penalties, for the judicious and efficient use of
14 energy in all energy-consuming sector of the economy;

15
16 **WHEREAS**, Section 6 of the EPIRA provides that the generation of electric power is a
17 business affected with public interest and shall be competitive and open;

18
19 **WHEREAS**, upon the issuance of the DOE of Department Circular No. 2010-03-0003,
20 "Directing All Generation Companies, the Transmission Service Provider, and All
21 Distribution Utilities to Ensure Adequate and Reliable Electric Power Supply in the
22 Country", power situation in Mindanao has improved due to the entry of large base
23 load plants and various initiatives such the DOE-NEA Modular Gensets Program,
24 electric cooperatives-initiated embedded gensets, Interruptible Load Program and
25 aggressive energy efficiency and conservation programs;

26
27 **WHEREAS**, the Mindanao Power Summit organized by the Mindanao Development
28 Authority (MinDA) and attended by the different stakeholders in Mindanao,
29 including the business sector, consumer groups, academe, and energy agencies was
30 held at the Grand Ballroom, Waterfront Insular Hotel in Davao City on 13 April 2012
31 to present their proposal/proposed measures to address the impending power
32 supply shortage in Mindanao ;

33
34 **WHEREAS**, the Mindanao grid continued to experience tight power supply situation
35 and even rotating brownouts in some areas, particularly during times of low hydro
36 production from Agus, scheduled maintenance of power plants and occurrences of
37 forced outages of power plants and transmission lines;

1 **WHEREAS**, the Philippine Atmospheric Geophysical Astronomical Services
2 Administration (PAG-ASA) maintains a nationwide network, pertaining to
3 observation and forecasting of weather and flood and other climatological Conditions
4 affecting the national safety, welfare and economy;

5
6 **WHEREAS**, there is a need to optimize the utilization of hydro, considering it is the
7 cheapest source of power;

8
9 **WHEREAS**, the utilization of Lake Lanao includes riparian flows for the surrounding
10 communities;

11
12 **WHEREAS**, portion of the available capacity of Agus Hydroelectric Power Plants
13 (HEPPs) serves as regulating and contingency reserve to the Mindanao Grid;

14
15 **WHEREAS**, there is a need to optimize the dispatch of the hydropower plants;

16
17 **NOW, THEREFORE**, premises considered, the DOE hereby declares the following in
18 support of ensuring supply security through optimal utilization of all power
19 generating facilities in Mindanao Grid:

20
21 **Section 1. Scope and Application.** This Circular shall apply to all agencies and
22 entities named herein and to all electric power industry participants in Mindanao.

23
24 **Section 2. Policy on Revised Dispatch Order.** The usage of hydro resources in
25 Mindanao Grid particularly Agus HEPPs shall be optimized to ensure their efficient,
26 effective and sustainable operations. As such, Power Sector Assets and Liabilities
27 Management Corporation (PSALM) and National Power Corporation (NPC) shall
28 optimize Agus Plant capacity for dispatch in such manner that the minimum
29 operating level of 699.15 Meters Above Sea Level (MASL) will not be reached during
30 the peak summer months in conjunction with all the available power plants of the
31 grid.

32
33 To this effect the provisions of this section shall be considered in the existing and
34 prospective dispatch protocols.

35
36 **Section 3. Responsibilities of the Energy Agencies.** Pursuant to their respective
37 mandates and functions under the EPIRA and its Implementing Rules and
38 Regulations, Philippine Grid Code (PGC) and other relevant laws, rules and

1 issuances, the following are mandated to extend their full cooperation and action, to
2 ensure the objectives of this Circular:

3
4 **(a) National Grid Corporation of the Philippines (NGCP)-System Operator**
5 **(SO).** The NGCP, as the Concessionaire of the national transmission facilities,
6 for and in the interest of the general welfare of the public, is hereby directed to
7 perform its obligations of ensuring and maintaining the reliability, adequacy,
8 security, stability and integrity of the nationwide electricity grid in accordance
9 with the performance standards for the operations and maintenance of the
10 grid, as set forth in the PGC including the procurement of Ancillary Services to
11 cover adequately the reserve requirements of the grid. In the performance of
12 its obligations, NGCP is hereby directed to optimize the use of all available
13 capacity based on the Revised Nomination and Dispatch Protocol to maintain
14 load-generation balance and the required reserves.

15
16 The NGCP shall comply with the directives set out in this Circular and shall
17 implement the Revised Nomination and Dispatch Protocol, pursuant to Section
18 4 of this Circular.

19
20 **(b) Power Sector Assets and Liabilities Management Corporation (PSALM) and**
21 **National Power Corporation (NPC).** To ensure the effective implementation
22 of this Circular, PSALM and NPC through its Mindanao Generation (NPC-
23 MinGen) shall:

24
25 (i) Prepare and submit to NGCP, nomination of all its available capacities in
26 Mindanao Grid so as not to breach the minimum operating level of Lake
27 Lanao at 699.15 MASL with due consideration to all available units. To
28 avoid breaching the minimum operating level of Lake Lanao, MinGen to
29 start drought watch (water conservation) when lake elevation intersects the
30 Seasonal Draw Down Limit (SDDL), which is defined as the Highest Actual
31 Elevation of the previous year minus 1.50 meters but should not be lower
32 than the Minimum Allowable Level equivalent to 698.15 MASL. The yearly
33 SDDL shall be submitted to the DOE and NGCP SO for the dissemination
34 to all stakeholders.

1 MinGen to start flood watch (water release) when the Lake Elevation is
2 critically near the Upper Rule Curve.

3
4 (ii) Undertake coordination and information campaign for all its customers on
5 the Revised Nomination and Dispatch Protocol to enable the said customers
6 to adjust and prepare the necessary measures to be adopted.

7
8 (iii) Coordinate with NGCP SO and the National Electrification Administration
9 (NEA) in the implementation of this Circular, including among others,
10 dissemination of information.

11
12 (iv) NPC-MinGen shall prepare the annual Lake Lanao Operating Rule Curves
13 (Upper and Lower) not later than 15th of January of each year to serve as
14 basis of Section 3.b(i) and use it as the guide for the optimal reservoir
15 operations of Lake Lanao and shall submit same to DOE and NGCP.

16
17 (c) **National Electrification Administration (NEA).** Consistent with its statutory
18 obligations, NEA is mandated to provide all necessary assistance to Electric
19 Cooperatives (ECs) to advise and inform all electricity end-users of the provisions of
20 this Circular, including among others, the Revised Nomination and Dispatch
21 Protocol.

22
23 (d) **Electric Power Industry Participants.** All electric power industry participants are
24 hereby mandated to provide full cooperation and to take all appropriate action and
25 compliance to ensure that the objectives set out in this Circular are attained.

26
27 **Section 4. Revised Nomination and Dispatch Protocol.** The NGCP, PSALM and
28 NPC-MinGen, in coordination with all Mindanao power generators and distribution
29 utilities (DUs), shall develop the Revised Nomination and Dispatch Protocol in
30 accordance to Section 2 of this Circular. This Protocol shall be submitted to the DOE
31 within fifteen (15) working days from the effectivity of this Circular, for approval.

32
33 **Section 5. Lead Agency.** The DOE, being the agency tasked to supervise and oversee
34 the electric power industry, shall be the lead agency in ensuring that the objectives of
35 this Circular are properly carried out.

36
37 **Section 6. Monitoring, Enforcement and Compliance.** The DOE, through EPIMB,
38 with the assistance of DOE Mindanao Field Office shall monitor the compliance of

1 PSALM, NPC-MinGen, NGCP, all generation companies including embedded
2 generation and all Distribution Utilities (DUs) to this Circular.

3
4 **Section 7. Regulatory Support.** The ERC shall ensure the timely recovery of possible
5 adjustments of electricity rates of Generators and DUs.

6
7 **Section 8. Repealing Clause.** Nothing in this Circular shall be construed as to amend,
8 supersede, or repeal any of the mechanism or institutions already existing or
9 responsibilities already allocated and provided for under any existing law, rule, or
10 contract.

11
12 **Section 9. Separability Clause.** If for any reason, any section or provision of this
13 Circular is declared unconstitutional or invalid, the other parts or provisions hereof
14 which are not affected thereby shall continue to be in full force and effect.

15
16 **Section 10. Effectivity.** This Circular shall take effect immediately fifteen (15) days
17 from its publication in a newspaper of general circulation.

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19 Signed this ____ day of ____ 2016 at the DOE, Energy Center, Bonifacio Drive,
20 Bonifacio Global City, Taguig City.

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23
24 **ZENAIDA Y. MONSADA**
25 **SECRETARY**