## MINISTRY OF INDUSTRY AND TRADE OF VIETNAM

# THE SOCIALIST REPUBLIC OF VIETNAM Independence - Freedom - Happiness

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No. 36/2025/TT-BCT

Hanoi, June 03, 2025

#### **CIRCULAR**

ON AMENDMENTS TO SOME ARTICLES OF CIRCULAR NO. 16/2025/TT-BCT DATED FEBRUARY 01, 2025 OF THE MINISTER OF INDUSTRY AND TRADE ON OPERATION OF A COMPETITIVE WHOLESALE ELECTRICITY MARKET

Pursuant to the Law on Electricity dated November 30, 2024;

Pursuant to Decree No. 40/2025/ND-CP dated February 26, 2025 of the Government on functions, responsibilities, jurisdiction and organizational structure of the Ministry of Industry and Trade;

The Government promulgates the Decree on amendments to Decree No. 100/2025/ND-CP dated May 08, 2025 of the Government on amendments to Decree No. 56/2025/ND-CP dated March 03, 2025 of the Government elaborating the law on electricity pertaining to electricity development, electrical supply grid development plan, electricity plan investment and development, bidding for investor selection of electricity business investment project.

At the request of the Director General of the Electricity Authority of Vietnam;

The Minister of Industry and Trade promulgates the Circular on amendments to some articles of Circular No. 16/2025/TT-BCT dated February 01, 2025 of the Minister of Industry and Trade on operation of a competitive wholesale electricity market.

Article 1. Amendments to some articles of Circular No. 16/2025/TT-BCT dated February 01, 2025 of the Minister of Industry and Trade on operation of a competitive wholesale electricity market.

- 1. Amendment to clause 2 of Article 3:
- "2. Take-or-pay electricity output (hereinafter abbreviated as "take-or-pay output") including:
- a) The minimum committed electricity output to be purchased under the power purchase agreements within the project contract package of power plants invested under the public-private partnership (PPP) method for the build—operate—transfer (BOT) contract type, or supplementary agreements between the power purchaser and the BOT power producer;
- b) The electricity output operated and dispatched corresponding to the maximum level based on gas supply capacity in accordance with fuel constraints, capacity, and available generation output

requirements of gas-fired power plants that are required to utilize the maximum gas fuel source, as well as the demand and technical constraints of the national power system.".

#### 2. Addition of Clause 19a to Article 3:

19a. A gas-fired power plant required to maximize the use of gas fuel is a gas-fired power project using domestically-extracted natural gas which is invested, constructed, and put into operation in accordance with the Law on Electricity; Decree No. 56/2025/ND-CP dated March 3, 2025 of the Government elaborating the Law on Electricity pertaining to electricity development, electrical supply grid development plan, electricity plan investment and development, bidding for investor selection of electricity business investment project; and Decree No. 100/2025/ND-CP dated May 8, 2025 of the Government on amendments to Decree No. 56/2025/ND-CP dated March 03, 2025."

- 3. Amendments to points a and b of clause 1 of Article 4:
- a) Power plants with an installed capacity greater than 30 MW connected to the national power system (including BOT power plants of which contracts have expired and have been transferred to Vietnam, hydropower plants cooperating with multi-purpose strategic hydropower plants to operate as specified in point b, clause 4, Article 51 of the Law on Electricity);
- b) Power plants with an installed capacity of 10 MW or more of which power purchase agreements based on avoidable costs have expired including cascade hydropower plants, and other renewable energy power plants of which power purchase agreements under state incentive and preferential pricing mechanisms have expired;".
- 4. Amendment to point c of clause 3 of Article 4:
- "c) Gas-fired power plants that are required to maximize the use of gas fuel;".
- 5. Amendment to clause 1 of Article 11:
- "1. For power plants that have been granted an electricity operation license and are required to participate in the electricity market in accordance with Article 4 of this Circular but the power generating unit owning these plants fails to complete the registration to participate in the electricity market (except for hydropower plants cooperating with multi-purpose strategic hydropower plants to operate as specified in clause 4a, Article 133 of this Circular), power plants without power purchase agreements (except for multi-purpose strategic hydropower plants), power plants with power purchase agreements but without official electricity prices or with expired electricity prices, generating units without commercial operation date agreements, the system and market operator shall not dispatch these power plants to generate electricity to the national power system, except in the following cases:
- a) In cases of an imbalance between electricity supply and demand in the power system or to ensure power supply;

- b) To ensure downstream water demand requirements in accordance with the operating procedures for cascade reservoirs, single reservoir operation procedures, or as requested by competent state authorities (for hydropower plants);
- c) To prevent spillway overflow (for hydropower plants)."
- 6. Amendment to point c of clause 1 of Article 18:
- "c) Obligations regarding guaranteed electricity output of power plants;"
- 7. Amendments to clause 3 and clause 4 of Article 18:
- "3. In cases where the power system operation satisfies the requirements prescribed in clause 2 of this Article, the system and market operator shall be responsible for cooperating with dispatch levels to stop or reduce the dispatched generation capacity to the grid from power plants, generating units, and power sources in the following order:
- a) Reduce the output of thermal generating units with variable costs in descending order, except for thermal generating units of gas-fired power plants that are required to maximize the use of gas fuel;
- b) Stop or reduce hydropower plants that have not yet spilled in conformity with the ratio of remaining volume to useful volume in ascending order;
- c) Stop slow-start generating units in the following order: units voluntarily shutting down; according to unit bid price (only applying to the next-day scheduling frame and the next cycle); according to variable costs in descending order. In cases where slow-start units have the same variable costs, units shall be stopped according to startup costs in ascending order;
- d) Reduce renewable energy power plants that still have storage capacity;
- dd) Stop or reduce power plants with agreed shutdown/reduction clauses before other power plants in accordance with requirements prescribed in grid connection agreements or power purchase agreements;
- e) Partially or fully reduce wind power plants and grid-connected solar power plants (except for power plants prescribed in point k of this clause); medium-voltage grid-connected rooftop solar power systems; hydropower plants dispatched under the avoidable cost mechanism (except for spilling hydropower plants as prescribed in point i of this clause);
- g) Reduce the output of thermal generating units of gas-fired power plants that are required to maximize the use of gas fuel;
- h) Stop thermal generating units of gas-fired power plants that are required to maximize the use of gas fuel that have variable cost in descending order;

- i) Reduce hydropower plants directly participating in the electricity market that are spilling at floor price bids, and hydropower plants indirectly participating in the electricity market that are spilling;
- k) Reduce power plants or parts of power plants that are in the testing phase before being officially recognized with a commercial operation date.
- 4. For generating units of power plants of the same group as prescribed in points e, g, i, and k of clause 3 of this Article, the reduction in generation output shall be carried out based on the principle of evenly distributing the required reduction capacity according to rated capacity, available capacity, declared capacity, or forecasted capacity (depending on the type of power source and dispatch method) without differentiation of price criteria"."
- 8. Amendment to clause 2 of Article 19:
- "2. The operators of the power system and the electricity market are responsible for using the electricity market simulation model to calculate the contents prescribed in clause 1 of this Article. The input parameters used in the electricity market simulation for thermal power units are the variable costs of the units as determined in clause 3 of this Article, the hydrological characteristics and technical characteristics of the hydroelectric plants, the constraints for establishing the operation mode of the national power system in accordance with regulations on dispatching, operation, maneuvering, handling incidents, black start and restoring the national power system issued by the Ministry of Industry and Trade, as well as constraints related to power purchase commitments and secondary frequency control service constraints."
- 9. Amendment to point b of clause 2 of Article 32:
- "b) Input parameters for calculating the annual market operation planning include:
- Forecasted load for each region North, Central, South and for the entire national power system in each trading period;
- Hydrological data and operational constraints of hydroelectric reservoirs used for electricity market simulation calculations;
- The commissioning schedule of new power plants; technical parameters and operational constraints of the transmission grid;
- Expected electricity import and export schedules; annual maintenance and repair schedules of power plants, transmission grid, and major gas supply sources;
- Forecasted load of electricity buyers in each trading period;
- Constraints related to take-or-pay output;

- Constraints on generation dispatch to ensure power supply, and minimum generation configuration to guarantee the safe operation of the transmission grid.".
- 10. Amendment to clause 2 of Article 47:
- "2. The expected (or forecasted) dispatch capacity in each trading period of the next day of the power plants prescribed in clause 3, Article 4 of this Circular, rooftop solar power sources, and power plants that do not directly bid in the electricity market including constraints related to take-or-pay output."
- 11. Amendment to clause 14 of Article 54:
- "14. Constraints related to take-or-pay output.".
- 12. Amendment to clause 1 of Article 58:
- "1. The operators of the power system and electricity market shall adjust the declared capacity of multi-purpose strategic hydropower plants in accordance with clause 2, Article 61 of this Circular, and carry out adjustments to the dispatch capacity of gas-fired power plants through compressed air solutions to prioritize the highest possible dispatch capacity of gas-fired power plants during the peak load periods of the power system."
- 13. Amendment to clause 14 of Article 60:
- "14. Constraints related to take-or-pay output.".
- 14. Amendments to point a of clause 2 of Article 62:
- "a) The operators of the power system and electricity market shall schedule the dispatch of generating units in accordance with the following principles:
- Use the capacity increase bids of the generating units;
- Adjust the dispatch capacity of gas-fired power plants using compressed air solutions to maximize the dispatch capacity of gas-fired power plants during the peak load periods of the power system;
- Gas-fired power plants indirectly participating in the electricity market with variable pricing;
- Generating units providing fast-start reserve services to ensure power supply;
- Hydropower plants indirectly participating in the electricity market based on the remaining volume ratio relative to the useful capacity in descending order;
- Generating units providing must-run operating services to ensure power supply;

- Reduce the secondary frequency control service capacity to the minimum allowable level.".
- 15. Amendment to point a of clause 4 of Article 67:
- "a) The operators of the power system and electricity market are responsible for dispatching and operating the power system in accordance with the following principles:
- Ensure that the system operates safely, stably, and reliably with the lowest possible electricity procurement cost for the entire system.
- Ensure that the fulfillment of agreed quantities in electricity export and import contracts as well as constraints related to take-or-pay output;
- Ensure the compliance with downstream water supply requirements for hydropower plants.".
- 16. Addition of clause 4 and clause 5 to Article 132:
- "4. Vietnam Electricity Group or the electricity buyer is responsible for providing the System Operator and Electricity Market Operator with the take-or-pay output data prescribed in point a, clause 2, Article 3 of this Circular.
- 5. The power generation units and fuel supply units are responsible for providing the System Operator and Electricity Market Operator with data on gas supply capacity and fuel-related constraints of thermal power plants that are required to maximize the use of gas fuel in order to calculate the guaranteed electricity output prescribed in point b, clause 2, Article 3 of this Circular in conformity with the fuel consumption rates prescribed in the power purchase agreements.".

#### 17. Addition of Clause 4a to Article 133:

- "4a. Before June 1, 2026, power generation units owning and managing the operation of hydropower plants shall cooperate with strategic multi-purpose hydropower plants as prescribed in point b, clause 4, Article 51 of the Law on Electricity; point b, clause 2, Article 1 of Circular No. 08/2025/TT-BCT dated February 1, 2025 of the Minister of Industry and Trade on the generation costs of power plants during the period prior to participation in the competitive electricity market for certain types of power plants; and the Appendix VI attached to this Circular with the following responsibilities:
- a) Sign power purchase agreements and complete the procedures and conditions to directly participate in the electricity market as prescribed;
- b) During the period of not directly participating in the electricity market, these hydropower plants shall be dispatched as power plants indirectly participating in the electricity market.".
- 18. Amendments to clause 8 of Article 13, Appendix II attached to Circular No. 16/2025/TT-BCT:

- "8. Constraints related to take-or-pay output in which". the simulation constraint ensuring that the dispatched output from day D to the end of the current week is greater than or equal to the approved output according to the power system and electricity market operation plan for the next week, minus the actual dispatched output from the beginning of the week up to and including day D-1.
- 19. Amendments to point I of clause 2 of Article 2, Appendix V attached to Circular No. 16/2025/TT-BCT:
- "i) Information management system for electricity market intervention and suspension of the spot electricity market helps manage operational information of the electricity market and power system in cases of electricity market intervention and suspension of the spot electricity market."
- 20. Amendments to point dd of clause 2 of Article 9, Appendix V attached to Circular No. 16/2025/TT-BCT:
- "dd) Operational constraints, including: take-or-pay output, inter-regional transmission limits, minimum generation configurations, fuel supply system technical constraints, hydrological constraints, and other constraints (if any);".
- 21. Amendments to point g of clause 1 of Article 20, Appendix V attached to Circular No. 16/2025/TT-BCT:
- "g) Annual maintenance and repair schedules of power plants, transmission grid, and major gas supply sources; operational constraints of generation and grid leading to the need to dispatch one or several power plants in the system; take-or-pay output;";
- 22. Addition of Appendix VI to Circular No. 16/2025/TT-BCT in the Appendix attached to this Circular.

## Article 2. Annulment of points, clauses, articles, Appendices of Circular No. 16/2025/TT-BCT

- 1. Point c of clause 1 of Article 17 is annulled.
- 2. Clause 15 of Article 54 is annulled.
- 3. Clause 15 of Article 60 is annulled.
- 4. Clause 9 of Article 13, Appendices II attached to Circular No. 16/2025/TT-BCT is annulled.

### **Article 3. Implementation clause**

1. This Circular comes into force from June 03, 2025.

2. Organizations, individuals shall report any issues arise during the implementation to the Ministry of Industry and Trade for instructions within its jurisdiction or suitable amendments./.

## PP. MINISTER DEPUTY MINISTER

**Nguyen Hoang Long** 

#### **APPENDIX**

ADDITION OF APPENDIX VI TO CIRCULAR NO. 16/2025/TT-BCT DATED FEBRUARY 01, 2025 OF THE MINISTER OF INDUSTRY AND TRADE ON OPERATION OF A COMPETITIVE WHOLESALE ELECTRICITY MARKET

(Attached to Circular No. 36/2025/TT-BCT dated June 03, 2025 of the Minister of Industry and Trade on amendments to some articles of Circular No. 16/2025/TT-BCT dated February 01, 2025 of the Minister of Industry and Trade on operation of a competitive wholesale electricity market)

### **APPENDIX VI:**

## LIST OF HYDROPOWER PLANTS COOPERATING WITH STRATEGIC MULTI-PURPOSE HYDROPOWER PLANTS

No.	Power plant name	Capacity	Year of operation	Note
1	Ban Chat Hydropower Plant	220	In operation	Da River
	Huoi Quang Hydropower Plant	520	In operation	Da River
3	Pleikrong Hydropower Plant	100	In operation	Sesan River
4	Sesan 3 Hydropower Plant	260	In operation	Sesan River
5	Sesan 4 Hydropower Plant	360	In operation	Sesan River