

LEGAL DOCUMENTS

THE MINISTRY OF INDUSTRY AND TRADE

Circular No. 32/2012/TT-BCT of November 12, 2012, providing the development of wind power projects and the model electricity trading contract for wind power projects

Pursuant to the Government's Decree No. 189/2007/ND-CP of December 27, 2007, defining the functions, tasks, powers and organizational structure of the Ministry of Industry and Trade, and Decree No. 44/2011/ND-CP of June 14, 2011, amending and supplementing Article 3 of Decree No. 189/2007/ND-CP;

Pursuant to Electricity Law No. 28/2004/QH11 of December 3, 2004;

Pursuant to the Prime Minister's Decision No. 37/2011/QĐ-TTg of June 29, 2011, on the mechanism to support the development of wind power projects in Vietnam;

The Minister of Industry and Trade promulgates the Circular providing wind power development and the model electricity trading contract for wind power projects as follows:

Chapter I

GENERAL PROVISIONS

Article 1. Scope of regulation and subjects

of application

1. This Circular provides the development of wind power projects and promulgates the model electricity trading contract for wind power projects in Vietnam (below referred to as model electricity trading contract).

2. This Circular applies to:

- a/ Wind power project investors;
- b/ Organizations developing wind power projects for electricity trading;
- c/ Wind farm-managing and -operating units;
- d/ The electricity buyer;
- e/ Other related organizations and individuals.

Article 2. Interpretation of terms

In this Circular, the terms below are construed as follows:

1. Electricity buyer means the Vietnam Electricity Group or its authorized units.

2. Electricity seller means an enterprise producing and selling electricity from a wind power project.

3. Wind farm-managing and -operating unit means an organization directly managing and operating a wind farm connected or not connected to the electricity grid. This organization may be the investor or a unit hired or assigned by the investor to manage and operate the wind farm.

4. Land area for wind power project

investment survey and research mean the area delimited within the geographical boundaries by the People's Committee of a province or centrally run city (provincial level People's Committee) determined in a document permitting the investor to survey and research into the wind potential to formulate a wind power investment project within a permitted duration. This area can be used only for survey and research activities such as constructing wind-gauging masts and geological and topographical surveys (if any).

5. **Termed-use land area** of a wind power project is the total area of wind turbine tower foundations, the protection corridor of wind turbine tower foundations, the corridor of electricity transmission lines and transformer stations and the protection corridor of transformer stations, construction of internal roads and management and operation houses. The termed use land area is assigned by a competent agency to the project investor for use throughout the life of the project.

6. **Temporary-use land area** of a wind power project means the area which an investor is allowed to temporarily use for the construction of the wind farm, including temporary roads for construction, area for rallying supplies and equipment, construction area, makeshifts for workers and other supporting locations. When the work is completed, the temporary-use land area outside the termed-use land area will be recovered by the provincial-level People's Committee for use for other purposes.

7. **Safety corridor of a wind power project**

means the safety corridor of the wind tower, electricity transmission lines, transformer stations and auxiliary items.

8. **Safety corridor of a wind turbine** is a circle with the center being the wind tower foot and the radius at least equal to the height of the wind tower plus the radius of the turbine rotor blade.

Chapter II

DEVELOPMENT OF WIND POWER PROJECTS

Article 3. List of wind power projects

1. Before November 30 annually, the General Department of Energy shall draw up and report to the Minister of Industry and Trade for promulgation and approval a list of wind power projects allowed for development in the subsequent year and projected for five subsequent years.

2. Wind power projects in the list of wind power projects to be put into operation every year and in the planning cycle must conform to the national electricity development master plan and provincial electricity development master plans already approved for each period.

3. The list of wind power projects must be drawn up and classified on the basis of the local and national wind power development potentials; the number of registered projects must abide by the principle of prioritizing projects with high economic and financial efficiency, with good plans for connection and output feeding into the

system and clean grounds; and projects registered first will be considered for development first.

4. The list of wind power projects has such relevant information as project name, location, area and boundary of wind power project development area, capacity scope of each project, tentative plan for connection of wind farms to the national electricity system, projected schedule and time of putting projects into operation.

5. On the basis of approved provincial wind power development master plans, the list of wind power projects must be updated into the list of electricity projects in provincial electricity development master plans and must have specific plans for connection of wind farms to the national electricity system.

Article 4. Proposal of new wind power projects for inclusion in the wind power development master plan

1. Wind power projects can be proposed for project areas or zones not yet in the approved list of wind power projects. The scales of proposed wind power projects must conform to the approved potential areas under the national wind power master plan or provincial-level wind power master plans of the localities in which the proposed projects are located.

2. Investors shall compile dossiers of proposal of wind power projects as prescribed by the work construction investment law and send them to the People's Committees of provinces or

centrally run cities (below referred to as provincial-level People's Committees) in which the projects are located. On the basis of the proposal, the provincial-level People's Committee shall compile a dossier to propose addition of the project to the wind power development master plan (below referred to as dossier of proposal of master plan addition) as prescribed in Clause 5 of this Article for reporting to the Ministry of Industry and Trade.

3. The General Department of Energy shall organize the appraisal of the dossier of proposal of master plan addition within 30 (thirty days) working days after receiving a complete and valid dossier. If necessary, the General Department of Energy may hire appraisal or counter-argument consultants for the appraisal. On the basis of the appraisal results, the General Department of Energy shall report it to the Minister of Industry and Trade for consideration and decision.

4. Based on the scale of the project, the Minister of Industry and Trade shall consider and approve the addition of the project to the wind power development master plan and approve the project investment policy according to its competence or submit to the Prime Minister for approval the adjustment or addition to the wind power development master plan and the project investment policy.

5. A dossier of proposal of addition of a project to the wind power development master plan comprises:

a/ The provincial-level People's Committee chairman's report proposing the addition of the project to the wind power development master plan;

b/ Basic information on the investor: documents on legal status, business registration, key personnel, project implementation experience, financial and technical capabilities, declaring the list of projects (including industrial projects and wind power projects) implemented within the last five years and the audited financial statements of the enterprise within the last three years;

c/ Information on the proposed wind power project:

- The necessity to invest in the project construction, favorable and unfavorable conditions, the regime of exploitation and use of national resources (if any);

- Project description: location, scale and construction area, project items: contents on sectoral and local planning;

- Report on wind gauging results at the locations within the project area in the period of at least 12 consecutive months as prescribed in Clause 4, Article 5 of this Circular;

- Projected implementation solutions, including technical plan, technology and capacity; connection and equipment installation plan; implementation schedule and form of project management; general plan on compensation and resettlement and plan to support the construction of technical infrastructure (if any); cost plan;

- Assessment of environmental impacts, fire prevention and fighting solutions and security and defense requirements;

- The total investment amount of the project; capital mobilization ability, capital sources and capital allocation ability according to implementation schedule; analysis and assessment of financial-economic efficiency and social effects of the project.

d/ Opinions of the regional power corporation or electricity transmission unit (if connected to the electricity transmission system) on the dossier of proposal for master plan addition.

Article 5. Requirements on wind gauging and report on wind gauging results

1. Wind gauging must be carried out at representative typical locations within the project area for at least 12 consecutive months. The number of wind-gauging masts must suit the terrain differences of the project area. For a project with an estimated capacity exceeding 50 MW (with the land area used for wind potential research and assessment exceeding 1,000 ha), the investor shall install and operate at least two wind gauging masts in the project area.

2. For wind power projects in the list of power projects of the approved electricity development master plan or provincial wind power development master plan, investors shall obtain the result of wind potential research and assessment prior to the formulation and approval of investment projects. If the wind power

development master plans at different levels contain complete wind gauging data at the project locations, investors may use these data for the formulation and approval of investment projects. In case wind power development master plans at different levels contain incomplete data, investors shall carry out wind potential research and assessment according to regulations.

3. For newly proposed wind power projects not yet included in the list of projects under the approved provincial wind power development master plan, investors shall conduct wind gauging as prescribed after obtaining permission of the provincial-level People's Committee for use as the basis for compilation of the dossier of proposal of master plan addition, approval of the investment policy for wind power projects and formulation of wind power investment projects.

4. A report on wind gauging results covers the contents on implementation methodology, wind gauging duration and methods, description of equipment, wind gauging data and analysis of wind gauging results. Wind gauging data must be up to standard and have adequate representative quantity and adequate statistics on wind speed, wind frequency, wind direction, energy distribution map, air humidity, solar radiation and atmosphere pressure. Wind gauging data must be collected from wind gauging masts at least 60 m high, with the collection frequency of 10 minutes/time and the minimum collection cycle of 12 months at the gauging locations within

the project area at the locations of the project.

5. Investors shall send to provincial-level Departments of Industry and Trade and the General Department of Energy reports on wind gauging results (including the original data) within 18 months after competent agencies permit the research into and assessment of the wind potential at the project location.

Article 6. Wind power development investment projects

1. Investors may only formulate wind power investment projects in the list of wind power projects approved by the Minister of Industry and Trade. The contents of a wind power investment project comply with current regulations on work construction investment management and Clause 4 of this Article.

2. For wind power projects to be invested in different phases and with the total capacity of each stage at the time of electricity generation different from year to year, investors shall formulate investment projects according to each phase of the projects. If the projected time of operation of a project sees a six months' deviation from the schedule specified in the wind power development project, the investor shall report such to the General Department of Energy for consideration and approval.

3. The proportion of equity capital of a wind power project must not be lower than 20% of the total investment amount.

4. The contents of a wind power investment project must comply with the work construction investment management law, including the following principal contents:

a/ The report on wind gauging results as prescribed in Clause 4, Article 5 of this Circular;

b/ The land area used for the wind power project;

c/ Assessment of the impacts of the plan on connection of the wind farm to the regional electricity system;

d/ Cost and technical plans and for the dismantlement and handling of the wind farm's equipment after the project is terminated.

5. Provincial-level People's Committees shall grant investment certificates to investors after obtaining the written consent of the Ministry of Industry and Trade on the wind power projects' conformity with the wind power development master plans at different levels and the approved list of wind power projects.

Article 7. Conditions for starting construction of wind farms

The construction of a wind farm can be started only when the law-prescribed conditions on work construction investment management are met and the following conditions are fully satisfied:

1. Having an investment certificate.

2. Having an electricity trading contract signed with the electricity buyer.

3. Having a connection agreement with the electricity distribution unit or electricity transmission unit.

4. Having a financing contract and capital commitments to ensure the approved construction schedule in the work construction investment project.

Article 8. Termination of wind power project implementation

Termination of wind power project implementation applies to one of the following cases:

1. If within 12 months after being granted an investment certificate the investor fails to start the construction of principal work items, the provincial level People's Committee shall examine revoking the investment certificate and report it to the Ministry of Industry and Trade. If there are plausible reasons, the project's schedule can be approved to be prolonged but for not more than 12 months compared to the schedule specified in the investment certificate.

2. If within 24 months after the date of commencement of operation specified in the investment certificate the project has not yet put into operation for commercial electricity generation, the provincial-level People's Committee shall examine and decide to terminate the investment project and revoke the investment certificate without having to pay damages to the investor and report it to the Ministry of Industry and Trade on its decision to terminate the

investment project.

Article 9. Reporting regime and operation management

1. Within 10 (ten) working days after the investment project is approved, the investor shall send a dossier on the completed wind power project (including one hard copy and one soft copy) to the General Department of Energy and the concerned provincial-level Department of Industry and Trade for management and monitoring of implementation.

2. Within 10 (ten) working days after granting an investment certificate, the provincial-level People's Committee shall send a copy thereof to the General Department of Energy for monitoring and management.

3. Within 10 (ten) working days after signing an electricity trading contract with the investor, the electricity seller shall send one valid copy thereof to the General Department of Energy, the Ministry of Industry and Trade for monitoring and management.

4. During the construction of a wind power project, before the 15th of the first month of a quarter, the investor shall report on the project implementation in the previous quarter and the plan for implementation in the subsequent quarter. Annually, before January 15, the investor shall report on the project implementation in the previous year and the plan for implementation in the subsequent year. The investor shall send these reports concurrently to the General Department

of Energy and the provincial-level Departments of Industry and Trade for management and monitoring of implementation.

5. In the period of operation, annually before May 31, the investor shall send a report on the output of electricity generated from the wind farm in the previous year and the estimated electricity output in the subsequent year to the General Department of Energy for summarization and registration of wind power price support funds for the subsequent year from the Vietnam Environmental Protection Facility.

6. After the wind power project is completed and put into commercial operation, the investor shall comply with current regulations on management of operation of electricity works and environmental protection.

Article 10. Equipment and productivity of wind farms

1. Anemometers and wind farm equipment must meet the Vietnamese standards and technical regulations or IEC standards or equivalent standards.

2. Wind turbines must be brand-new, delivered from a workshop within 5 (five) years, and accompanied by appropriate certificates of origin and manufacture certificates. If second-hand turbines are used in a wind power project, such must be reported to the Ministry of Industry and Trade for consideration and decision in coordination with relevant agencies.

3. The productivity of a wind farm (wind turbine layout) must not be lower than 90%.

Article 11. Work safety

1. The scope of a wind farm covers the area of wind towers, electricity transmission lines, transformer stations and auxiliary items.

2. The safety corridors of wind farms, wind turbines and transmission lines and transformer stations must comply with the standards and technical regulations of electric equipment, regulations on safety of high-voltage power grids and the law on electricity work safety.

3. It is strictly prohibited to build works (residential areas, industrial establishments, technical infrastructure facilities, houses, schools, streets, railways, power lines, signal and signal communication lines, etc.) that encroach upon the safety corridors of wind farms.

Article 12. Land occupancy areas

1. Land used in the course of development of a wind power project covers land area for wind power project investment surveys and research; termed-use land area of the wind power project; and temporary-use land area the wind power project.

2. The land area used for a wind power project must suit the output scale of the project. The proportion of the termed-use land area of a wind power project must not exceed 0.5 ha/MW. The proportion of the temporary-use land use of

a wind power project must not exceed 0.7 ha/MW. If the road leading to a project has a complicated terrain and needs to be widened to facilitate the transportation of wind turbines and towers during the construction and operation, the provincial-level People's Committee shall consider and permit the proportion of the termed-use land area of the wind power project up to 1 (one) ha/MW.

Article 13. Management of land used within wind farms

1. Land used within a wind farm must conform to the land use master plan and not fall into other approved master plans.

2. To prioritize the development of wind farms in barren and rocky land areas of little agricultural or aquacultural value, which are thinly populated or uninhabited.

3. Termed-use land areas of wind farms must not fall into the following categories:

a/ Residential land, office land;

b/ Security or defense land;

c/ Land of industrial parks, production and business establishments;

d/ Land of transport infrastructure, including airways, railways, roads, waterways and other traffic works.

4. After a wind farm is put into operation, the investor shall restore the temporarily occupied area to the original state and deliver it to the local administration for management.

5. Provincial-level People's Committees may permit the use of land within wind farms for appropriate purposes (small-scale cultivation) and must ensure the safe operation of wind farms.

Article 14. Requirements on environmental protection

1. Wind farms must not encroach upon archeological and historical relics, cultural or religious sites, sensitive ecological zones and nature reserves.

2. Wind farms must be located at least 300 m away from residential quarters.

3. Activities of wind power project investment development must comply with current environmental standards.

4. Wind farms must not affect air traffic, radio, telecommunications and electronic waves of residential quarters and surrounding works.

5. Wind turbines and towers must be painted in bright and non-reflexive colors. Advertisements are not allowed on wind turbines.

6. Investors shall restore and rehabilitate the environment after dismantlement of wind farms.

Chapter III

WIND POWER PROJECT
DEVELOPMENT SUPPORT

Article 15. Registration for annual electricity price supports for grid-connected wind farms

1. Annually before May 31, the electricity buyers shall report to the General Department of Energy on:

a/ General information on the wind farms which have signed electricity trading contracts for the subsequent year (names of wind farms, investors, capacity, output, locations, areas, contract numbers and dates of contract signing);

b/ The electricity output already bought from the wind farms in the previous year;

c/ The estimated electricity outputs to be bought from each of the wind farms in the current year and subsequent year and the estimated total money amount for electricity price support as prescribed.

2. The General Department of Energy shall check, summarize and report to the Minister of Industry and Trade for consideration and sending to the Ministry of Natural Resources and Environment and the Ministry of Finance for registration of electricity price supports from the central budget.

Article 16. Adjustment of wind electricity buying prices

Annually before October 30, based on the general cost and electricity price of the system, the General Department of Energy shall propose a plan on adjustment of preferential prices of electricity bought from wind farms at electricity delivery locations and the electricity price support levels and report it to the Minister of Industry and Trade for submission to the Prime Minister

for consideration and decision.

Article 17. Support for wind farms not connected to the grid

1. Principles and conditions for consideration of supports for wind farms not connected to the grid:

a/ Ensuring economic, social and environmental efficiency;

b/ The project has been completely invested and put into operation;

c/ Some major input data for calculating electricity price and price support level for the project are considered on the following principles:

If the installed capacity of the project is higher than the actually required capacity of the regional electricity grid, the actually generated electricity output of the previous year and the estimated electricity output to be generated in subsequent years will be used as the basis for calculating the price support level. For other projects, if the generated electricity output is based on the actually generated output or the projected output in the approved investment project, the larger output will be used:

- The total project investment, which is the total investment amount stated in the approved investment project, must not be higher than VND 51 million/kW (equivalent to USD 2,500/kW);

- The amortization expenses comply with current regulations.

2. Order of registration for electricity price

support applicable to unconnected wind power projects

a/ The investor of an unconnected wind power project compiles a dossier of proposal for electricity price support for the unconnected wind power project and sends it directly or by mail to the General Department of Energy. The required number of dossier sets is 10 together with a CD/DVD/USB containing the soft copies of the dossier and enclosed documents.

b/ Within 30 (thirty) days after receiving a complete and valid subsidy proposing dossier, the General Department of Energy shall organize the appraisal of the dossier and report it to the Ministry of Industry and Trade for submission to the Prime Minister for consideration and approval. If necessary, the General Department of Energy may hire appraisal and counter-argument consultants for the appraisal.

If the dossier is invalid, within 10 working days after receiving it, the General Department of Energy shall notify in writing the investor of the required supplementation or recompilation of the dossier.

3. A dossier of proposal for electricity price support for an unconnected wind power project comprises:

a/ The investment project containing explanations about the electricity price plan and principal contents on the necessity and assessment of the efficiency of the support plan;

b/ The report on research and assessment of the wind potential within at least 12 consecutive

months at locations within the project scope:

c/ The operation plan and the business plan;

d/ The cost and technical plans for the dismantlement and handling of wind farm equipment after the termination of the wind power project;

e/ The provincial-level People's Committee's opinions on the contents of the dossier;

f/ Opinions of the power corporation of the locality in which the project is located on the content of the dossier proposing investment support for project development.

Chapter IV

MODEL ELECTRICITY TRADING CONTRACT FOR GRID-CONNECTED WIND POWER PROJECTS

Article 18. Conditions for application of the model electricity trading contract to wind power projects

1. Application of the model electricity trading contract to wind power projects is compulsory in electricity trading between grid-connected wind power projects and the electricity buyers.

2. Wind power projects have all electricity output generated from wind energy.

Article 19. Contents of the model electricity trading contract for wind power projects

1. The contents of the model electricity trading contract for wind power projects are provided in the appendix to this Circular (*not translated*).

2. The electricity seller and buyer may only supplement the contents of the model electricity trading contract in order to clarify the responsibilities and powers of the parties but not modify its basic contents.

Chapter V

ORGANIZATION OF IMPLEMENTATION

Article 20. Organization of implementation

1. The General Department of Energy shall disseminate, guide and inspect the implementation of this Circular. For any problems arising in the course of implementation, the General Department of Energy shall coordinate with relevant units or localities in considering and proposing amendments and supplements to the Circular to the Minister of Industry and Trade.

2. Provincial-level People's Committees shall monitor, supervise and inspect wind power project development activities in their respective localities under the approved wind power development master plans and in accordance with this Circular.

Article 21. Effect

This Circular takes effect on December 27, 2012.-

For the Minister of Industry and Trade

Deputy Minister

LE DUONG QUANG