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**CIRCULAR**

**Regulations on implementation of wind power projects development and  
Standardized Power Purchase agreement for wind power projects**

*Pursuant to the Government's Decree No. 189/2007/ND-CP on December 27, 2007 on defining the functions, tasks, rights and organizational structure of the Ministry of Industry and Trade;*

*Pursuant to the Government's Decree No. 44/2011/ND-CP on June 14, 2011 on amending and supplementing Article 3 of the Government's Decree No. 189/2007/ND-CP;*

*Pursuant to Electricity Law No. 28/2004/QH11 on 03 December, 2004;*

*Pursuant to Decision No. 37/2011/QĐ-TTg on 29 June, 2011 on the mechanism supporting the development of wind power projects in Vietnam*

*The Ministry of Finance, the Minister of Industry and Trade issues the Circular prescribing the implementation of developing wind power projects and Standardized Power Purchase agreement for wind power projects as follows:*

**Chapter 1  
GENERAL RULES**

**Article 1: Scope and application objects:**

1. This circular prescribes the implementation of developing wind power projects and standardized power purchase agreement for wind power projects in Vietnam (hereinafter referred to as SPPA).
2. This circular applies to the following objects:
  - a) Investors of wind power projects;
  - b) Organizations who develop wind power projects for electricity sale and purchase;
  - c) Organizations who manage and operate wind power projects;
  - d) Electricity purchaser;
  - e) Other relevant organizations or individuals

**Article 2: Interpretation of terms**

In this Circular, the following terms shall be construed as follows:

1. *Electricity purchaser* means Vietnam Electricity Group (EVN) or its authorized subsidiary.

2. *Electricity seller* means enterprises which produce, operate and trade in electricity from wind power projects.

3. *Organization who manages and operates wind power works* means organization which directly manages and operates grid-connected or off- grid- wind power projects. This organization may be an investor or units hired or assigned to manage and operate wind power projects by an investor.

4. *Land area for investigation and research on investment in wind power projects* means an area limited to geographical boundaries of the People's Committee of provinces and cities under direct Central Government in accordance with approval in writing for investors to conduct investigation, research and evaluation of wind potential for setting up a wind power projects in a time limit. This area shall be only licensed for use in investigation and research activities such as erecting wind mast for wind measurement, geological and topography investigation (if any).

5. *Land area for use with term of wind power projects* means total area of pillar foundation for wind turbine, an area of protection corridor of pillar foundation for wind turbine, a corridor for electricity transmission line, transformer station and area of protection corridor of transformer station, construction area of internal road system which manager operates. Land use area with a term is assigned to projects investors by competent authority in the entire of projects.

6. *Land area of temporary use of wind power projects* means part of the area investors are allowed to use temporarily for construction of wind power projects, including: temporary road for construction, gathering yards of materials and equipment, construction site, camps for worker living and other ancillary locations. After completing work, the land area of temporary use which is not part of land area for use with term will be recovered by People's Committees of provinces and cities under direct Central Government to use for other purposes.

7. *Safety corridor of wind power works* means safety corridor of wind turbine, electricity transmission line; transformer station and auxiliary items.

8. *Safety corridor of wind turbine* means a circle of which foot is the center of wind turbine with radius of at least equal to the height of wind turbine plus radius of turbine rotor.

## **Chapter II**

### **DEVELOPMENT OF WIND POWER PROJECTS**

#### **Article 3. List of wind power projects**

1. Prior to 30<sup>th</sup> November every year, General Directorate of Energy shall establish and report to the Minister of Industry and Trade for approval list of wind power projects which will be allowed for development next years and for next five (5) years.

2. Wind power project included in the list of wind power projects which will be put into operation every year and which is in the planning cycle must be consistent with national and provincial power development planning approved for each period.

3. List of wind power projects shall be established and classified based on potential of wind power development in provinces as well as the country. Number of registered projects must follow principles of priority to mobilize projects which have highly economic and financial efficiency, connection plans and good release of capacity into grid system and clean ground. Projects which registered early will be prioritized for development.

4. List of wind power projects include: name of projects, location, area, regional boundaries for development of wind power projects, capacity scale of each wind power project, expected connection plan of wind power projects with national electricity system, expected progress and time to put the projects into operation

5. Based on the approved provincial wind development planning, list of wind power projects shall be updated in the list of provincial power projects of provincial power development planning and shall prescribe specific connection plan of wind power projects to the national electricity system.

#### **Article 4. Recommendations on new wind power projects into development planning of wind power**

1. Wind power projects are allowed to propose to areas, projects areas which have not been listed in the approved wind power projects. Scale of wind power projects shall be in accordance with approved potential areas of national wind power planning or provincial wind power planning where wind power projects have been proposed.

2. Investors draft dossier of wind power projects proposals in accordance with law of investment in construction works and send to the People's Committees of provinces and cities under direct Central Government (hereinafter referred to People's Committees of provinces) where the projects locate. Based on project proposals, Provincial People's Committees draft dossier to request for adding the add proposed projects into wind power development planning (hereinafter referred to as proposed dossier of supplementation for planning) as prescribed in Clause 5 of this article and report to Ministry of Industry and Trade.

3. General Directorate of Energy is responsible for organizing the appraisal on proposed dossier of supplementation for planning within thirty (30) working days since the date of receiving valid dossier. When necessary, General Directorate of Energy may be allowed to hire consultants to appraise and defend for the appraisal process. Based on evaluation results, General Directorate of Energy shall report to Minister of Industry and Trade for consideration and decision.

4. Based on scale of the projects, Minister of Industry and Trade will consider for approval on supplementing projects to the development planning of wind power and approval in principal project investment application under their competent authority or submit to the Prime Minister for approval, adjustment or supplementation to the development planning of wind power and approval in principal on project investment application. .

5. Dossier for requesting the supplementation of projects to development planning of wind powers:

Dossier of for requesting supplementation of projects to wind power development planning includes:

a) The Official letter of the Chairman of People's Committee of provinces requesting for supplementation of projects to development planning of wind power

b) Basic information about investors includes: legal status documents, business license, information about key human resource, experience in project implementation, financial and technical capacity, in which list of the implemented projects (including industrial projects and power projects) within the last five years must be included and audited financial statements of the enterprise within the past recent three years;

c) Information about proposed wind power projects:

- The need to invest in projects, advantages, disadvantages and method of exploitation as well as use of national resources (if any);
- Description of projects: location, size and area of construction works, works item belonging to the projects; content on sectoral planning and provincial planning;
- Report on result of wind measurement at location within scope of the projects for at least 12 consecutive months as specified in Clause 4, Article 5 of this Circular;
- Preliminary implementation solutions including: technical plans, technology and capacity; connection plan; equipment installation plan; implementation progress, projects management form; common plan on resettlement compensation and support for technical infrastructure, if any; plan and cost plan;
- Environmental impact assessment, fire prevention, fire fighting solutions and requirements for security and defense;
- Total investment of the projects; capital arrangement capabilities, and ability to finance capital-in-progress; analysis and evaluation of financial and economic efficiency, social efficiency of the projects.

d) Comments and opinions of Provincial Power Corporation or of Electricity transmission company (if connected to electricity transmission system) on proposed dossier of supplementation to planning.

#### **Article 5. Requirements for wind measurement and report on wind measurements**

1. Wind measurement will be implemented at typical positions, within scope of the projects area in at least twelve (12) consecutive months. The number of wind mast must be consistent with the topographic change of the projects area. For projects with expected capacity of more than fifty (50) MW (land area used for wind potential assessment greater than one thousand (1,000) hectares), investors must install and operate at least two (02) wind masts to measure wind in the projects area.

2. For wind power projects in the list of electricity source projects of the provincial power development planning or provincial wind power development planning which has been approved, investors must have result of research on wind potential assessment prior to setting up and to the approval of investment projects. Where development planning of wind power at all levels has completed wind measurement at the projects location, investors can use this data for development and approval of investment projects. Otherwise, investors must study and assess wind potential as regulated.

3. For new wind power project proposals which are not included in the list of approved projects of provincial development planning of wind power, investors must implement wind measurement as regulated after obtaining permission of People's Committee of provinces to draft proposed dossier to request for the supplementation to planning, for approval in principal on the proposed projects and developing the project investment applications.
4. Content of report on wind measurement includes: implementation methodology, time for wind measurement, implementation modalities, equipment description, wind measurement data and analysis of wind measurement data. Wind measurement data which meet requirement and has enough statistical information must include information on wind speed, wind frequency, wind rose, energy distribution map, humidity, solar radiation and atmospheric pressure. Wind measurement data must be collected from wind mast with height of at least sixty (60) m, frequency of collection of ten (10) minutes per one time, collection cycle of a minimum of twelve (12) months at measurement location within the projects area.
5. Investors are responsible to submit report on wind measurement result (including raw data) to Department of Industry and Trade and General Directorate of Energy within eighteen (18) months from the date permitted by the competent authority to conduct wind resource assessment at the project location.

#### **Article 6. Investment Projects of wind power development**

1. Investors shall set up wind power investment projects which are only in the list of wind power projects approved by the Minister of Industry and Trade. The content of wind power projects complies with current regulations on management of construction investment and in accordance with Clause 4 of this Article.
2. For wind power projects invested in different phases and different total capacity of each phase put into operation for each year, investors shall be responsible for setting up investment projects according to various phases. When estimated operation time of proposed projects differs more than six (6) months than regulated in wind power development planning, investors shall be responsible to report to General Directorate of Energy for their consideration and approval.
3. Ratio of the equity of investors in wind power projects shall not be permitted to be less than 20 % of total investment capital.
4. The content of wind power projects application in accordance with the law on management of construction investment includes the followings:
  - a) Report on wind measurement results in accordance with Clause 4 of Article 5 of this Circular;
  - b) Land use area of wind power project;
  - c) Impact evaluation of connection plan of wind power projects to the provincial electricity grid;
  - d) Cost and technical plans, techniques for dismantling and processing equipment of wind power plant at the end of projects;

5. People's Committee of provinces grants investment certificates to investors after the official consent in writing from Ministry of Industry and Trade on the compatibility of wind power projects with development planning of wind power at all levels and with approved list of wind power projects.

#### **Article 7. Conditions for starting construction of wind power projects**

Wind power projects will be only constructed if meeting requirements prescribed by law of management of construction investment and meeting the following conditions:

1. Investment certificate has already been granted.
2. Power purchase agreement has been signed with the electricity purchaser.
3. Connection agreement with electricity distributor or electricity transmission Company has been signed
4. Financial Agreement and capital commitment to ensure works construction progress in accordance with approved progress of investment projects of construction works must be signed

#### **Article 8. Termination of wind power projects**

Termination of wind power projects shall apply to one of the following cases:

1. Within twelve (12) months from the date of issuing investment certificate, if investors does not start construction of the main construction items of the project, People's Committee of province shall be responsible for considering revoking the investment certificate and reporting to Ministry of Industry and Trade. In case of sound reasons, the projects can be approved to prolong the planned progress but not more than twelve (12) months in comparison with progress specified in the investment certificate
2. Maximum of twenty-four (24) months from the date of commitment to operate the project regulated in investment certificate, if the project does not come into commercially operation, the Provincial People's Committee shall be responsible for considering terminating the investment projects, revoke the investment certificate without being responsible for compensation for investors and reporting to Ministry of Industry and Trade of decision of terminating the investment projects.

#### **Article 9: Report regulation and operation management**

1. Within ten (10) working days from the date of investment project approval, investors shall be responsible for submitting one complete dossier of wind power projects (including one (01) printed copy and one (01) electronic copy to the General Directorate of Energy and Department of Trade and Industry to manage and monitor the implementation
2. Within ten (10) working days from the date of issuance of the investment certificate, Provincial People's Committee has responsibility for sending one (01) copy of the investment certificate to the General Directorate of Energy for monitor and management
3. Within ten (10) working days from the date of signing the Power Purchase agreement with the investors, The Electricity seller has responsibility for sending one (01) valid

copy of Power purchase agreement to the General Directorate of Energy, Ministry of Industry and Trade for monitor and management.

4. During the construction of wind power projects, prior to the 15th date of the first month of each quarter, investors must report on the implementation of projects of the previous quarter and implementation plan for the next quarter. Every year, prior to January 15<sup>th</sup>, investors must report on the implementation of projects of the previous year and implementation plans for the next year. These reports of investors must be sent to the General Directorate of Energy and the Department of Industry and Trade at the same time to monitor and manage the implementation.

5. During the operational phase, prior to May 31<sup>st</sup> every year, investors must report on the electricity output of the previous year generated from wind power plants and projected electricity output of next year to the General Directorate of Energy to generalize for registering budget for electricity subsidy from Vietnam Environmental Protection Fund in the next year

6. After the wind power project has been finished and put into commercial operation, investors must obey current regulations on operation and management of power work and environment protection.

#### **Article 10: Equipment and efficiency of wind farm**

1. Anemometer and equipment of wind power work must meet the Vietnamese technical standards and regulations or international standard of IEC, or equivalent standards.

2. Wind turbine must have not been used and have the manufacture date of no more than five (05) years, an appropriate certificate of origin and certificate of manufacture. If wind power projects use second-hand wind turbine, it must be reported to the Ministry of Industry Trade for consideration and decision in collaboration with relevant agencies.

3. Efficiency of wind farm (wind turbine arrangement), is not permitted to be less than ninety percent (90%).

#### **Article 11: Work Safety**

1. Scope of wind power work includes wind turbine, electricity transmission line, transformer station and other auxiliary items.

2. Safety corridor of wind power work, safety corridor of wind turbine, safety corridor of line and transformer station must obey the technical standards and regulations on power equipment, regulations on safety of high-voltage power grid work and regulations on safety of power work

3. Construction of work items (residential areas, industrial facilities, technical infrastructure, housing, schools, roads, railways, power lines, signal information...) which violate safety corridor of wind power work is prohibited.

#### **Article 12: Land occupancy**

1. Land use area during the development of wind power projects includes: land area for investigation and research on investment in wind power projects; land use area with terms of wind power projects; temporary land use area of wind power projects.

2. Land area for use of wind power projects must be appropriate with the capacity scale of project works. Rate of land use with term of wind power projects is not allowed to exceed zero point five (0.5) ha / MW. Land area of temporary use of wind power projects is not allowed to exceed zero point seven (0.7 ha / MW). In case topography of the roads to projects is complex, roads need to be enlarged to facilitate the transportation of turbine, wind mast in the construction and operation phase. The provincial People's Committees will consider allowing rate of land use with term of wind power projects to be maximum of one (01) ha/MW.

### **Article 13: Management of land use in wind power work area**

1. Land used in wind power work area must be appropriate with land planning for use and not overlap with other planning which has been approved by the competent authorities.

2. Prioritizing the development of wind power work at arid, rocky soil position, which has less value for agriculture, aquaculture, or at sparsely populated or inhabited land locations.

3. Land area for use with term of wind power projects does not belong to the following categories:

a) Housing area; office area

b) Security and defense area

c) Industrial zone, production and business areas

d) Transportation infrastructure area including aviation, railway, road and waterway and other traffic works.

4. After wind power projects have been put into operation, investors must restore the status of land area for temporary use and hand over to provincial authority for management.

5. Provincial People's Committee can allow to use land in wind power projects area for appropriate purposes (farming, small farming) but must ensure the safety of the operation of the wind power work.

### **Article 14: Environmental protection requirements**

1. Wind power work must not violate the archaeological, historical vestige and cultural sites, religion, sensitive ecological areas, nature conservation areas.

2. Wind power work must be located away from residential areas for at least 300 m.

3. Development and investment activities of the wind power projects must obey the current environmental regulations.

4. Wind power work must not affect air traffic, radio waves, electronic telecommunications of surrounding residential area and buildings.

5. Turbines must be in bright color and non-reflective. Advertising on wind turbines is not allowed.

6. Investors are responsible for restoring environment after the dismantling wind power work.



### **Chapter III**

#### **SUPPORT FOR WIND POWER PROJECTS DEVELOPMENT**

##### **Article 15: Registering for yearly power subsidy for grid connected wind power plants**

1. Prior to May 31<sup>st</sup> every year, the electricity purchaser has responsibility for reporting to the General Directorate of Energy:
  - a) Generalized information about wind power plants of which the Power purchase agreement for next year has been signed (name of plants, investors, capacity, output, location, area, agreement number, signing date.
  - b) Electricity output bought from wind power plants in the previous year
  - c) Estimated electricity output which shall be bought from wind power plants for current year and for next year and estimate the total amount subsidy as stipulated.
2. General Directorate of Energy reviews, generalizes, and reports to Minister of Industry and Trade for consideration and send to Ministry of Natural Resources and Environment and Ministry of Finance to register for the total amount of subsidy from the central budget

##### **Article 16: Adjusting purchasing price of wind power**

Prior to October 30<sup>th</sup> every year, based on the electricity costs and general prices of the system, General Directorate of Energy proposes to Minister of Industry and Trade to adjust the preferential electricity purchase price from wind power projects at the point of delivery and the subsidy for consideration and approval of the Prime Minister

##### **Article 17: Support for off- grid connected wind power projects**

1. Principles and conditions to consider for support for off - grid connected wind power projects:
  - a) To ensure the economic, social, environmental effectiveness
  - b) Investment projects shall be finished and put into operation
  - c) A number of major input data to calculate the electricity price and subsidy for wind power projects is considered based on the following principles:
    - In case the installed capacity of the projects is greater than actually-required capacity of the local grid, the actual electricity output of the previous year and the expected electricity output for the next year are used as the basis to determine the subsidy. For other projects, actual electricity output or expected electricity output in the approved investment projects will be taken as electricity output , but greater number will be used;
    - Total projects investment cost is taken in accordance with the total investment cost approved in the project investment application but not exceed fifty (51) million dong / kW (equivalent to two thousand five hundred (2,500) dollars / kW);
    - Depreciation cost is in accordance with current regulation.

## 2. Procedures for registering subsidy of off - grid connected wind power projects

a) Investors of off- grid connected wind power projects develop a dossier requesting subsidy for off- grid connected wind power projects and submit directly or by post to General Directorate of Energy. The required number of dossier includes: ten (10) dossiers and one (01) CD/DVD/USB containing soft file of dossier requesting for subsidy and enclosed documents.

b) Within thirty (30) days from the date of receiving complete and valid dossiers, General Directorate of Energy is responsible for organizing the evaluation of dossier requesting for subsidy and report to Minister of Trade and Industry to submit to the Prime Minister for consideration and approval. When necessary, General Directorate of Energy may hire consultant to verify, appraise and defend.

In case dossiers are invalid, within ten (10) working days from the date of receiving dossiers requesting for subsidy off-for grid connected wind power projects, General Directorate of Energy must notify investors in writing for supplementing documents or send new dossiers.

## 3. Dossiers requesting for subsidy for off- grid connected wind power projects include:

a) Investment projects including explanation about the electricity price plan and the main content regarding to the need and assessment of the effectiveness of support plan;

b) Report on findings, assessment of wind resource assessment for at least 12 consecutive months in the position within the projects;

c) Operational plan and business plan

d) Cost and technical plans for dismantling and processing wind power plant equipment after the end of the projects;

đ) Opinions of Provincial People's Committee about the content of Dossier requesting for subsidy

e) Opinions of Power Corporation where projects locate about Dossier requesting for development and investment projects support

## **Chapter IV**

### **STANDARDIZED POER PURCHASE AGREEMENT FOR GRID CONNECTED WIND POWER PROJECT**

#### **Article 18: Conditions to apply the Standardized Power Purchase agreement for grid connected wind power projects**

1. Standardized power purchase agreement for grid connected wind power projects is mandatory in electricity sale and purchase between grid connected wind power projects and the electricity purchaser

2. All electricity from wind power projects have been generated from wind energy

**Article 19: The content of Standardized Power Purchase agreement for wind power projects**

1. The content of Standardized Power Purchase Agreement for wind power projects is stipulated in the Annex of this Circular
2. The electricity seller and the electricity purchaser can only supplement the content of Standardized Power Purchase Agreement to clarify the responsibilities and rights of the parties without changing the basic content of the Standardized Power Purchase Agreement

**Chapter V**

**ORGANIZATION OF IMPLEMENTATION**

**Article 20: Organization of implementation**

1. General Directorate of Energy has responsibility for disseminating, guiding and inspecting the implementation of this Circular. During implementation, if there is any difficulty, General Directorate of Energy shall co-ordinate with relevant agencies and provinces to consider and propose to Minister of Industry and Trade for amendment and supplementation
2. Provincial People's Committee shall monitor, supervise and inspect the development of the wind power projects at provinces in according to wind power development plan , comply with the provisions of this Circular.

**Article 21: Effectiveness**

This Circular takes effect from 27 December 2012

***Recipients:***

- Prime Minister, Deputy Prime Ministers of the Government
- Office of Party Secretary General
- Ministries, Ministerial-level agencies, Government agencies;
- People’s Committees of provinces
- Official Gazette
- Website of the Government
- Website of the Department of Industry and Trade and Department of Energy
- Ministry of Justice (Department of Examination of Legal Normative Document)
- Department of Industry and Trade of provinces and cities under direct central authority;
- Vietnam Electricity
- Power corporation
- Archives: Secretariat, Department of Banking and Financial Organizations

**FOR AND BEHAFL OF THE MINISTER**

**DEPUTY MINISTER**

**Le Duong Quang**