

Client Alert

September 2024

Unlocking Opportunities: Thailand's New Third Party Access Codes and Direct PPA Project - A Game Changer for the Energy Sector

New Guidelines Issued: In May 2022, the Energy Regulatory Commission introduced the Third-Party Access Framework Guideline, enabling third parties to connect to and utilize Thailand's grid system.¹

Attracting Investment: This initiative aims to attract foreign investors, particularly data center companies, by offering an alternative to the Enhanced Single Buyer system.

Draft Codes Submitted: The Electricity Generating Authority of Thailand, Provincial Electricity Authority, and Metropolitan Electricity Authority have prepared and submitted draft Third Party Access Codes, including the TPA Service Code, TPA Connection Code, and TPA Operation Code, for the Energy Regulatory Commission's consideration.

Next Steps: According to ERC officials, each Distribution Utility has already submitted their initial drafts of the revised TPA Codes. The issuance of the finalized TPA Codes is currently expected within 2024.

Background

In May 2022, the Energy Regulatory Commission (the "ERC") issued the Third-Party Access Framework Guideline (the "TPA Framework Guideline"), which allows a third party to connect or utilize the grid system. The TPA Framework Guideline appoints the Electricity Generating Authority of Thailand (the "EGAT"), the Provincial Electricity Authority (the "PEA"), and the Metropolitan Electricity Authority (the "MEA") (collectively, the "Distribution Utilities") to prepare the Third Party Access Code (the "TPA Code") which sets out details regarding rules and requirements for the connection, operation, and provision of service of the grid system.

By allowing third parties to access the grid system, Thailand is hoping to attract more foreign investors, especially data center companies, to invest in the country. With Thailand offering an alternative to the Enhanced Single Buyer (the "ESB") system, which granted the EGAT as the sole electrical distribution authority in Thailand, it is anticipated that local and foreign companies may opt to utilize alternative options.

Following the issuance of the TPA Framework Guideline, each of the Distribution Utilities has prepared and submitted its draft TPA Code to the ERC for consideration. Each draft consists of three subordinate codes as follows:

- I. TPA Service Code
- II. TPA Connection Code
- III. TPA Operation Code

In February 2024, the ERC and Chulalongkorn University conducted an online seminar on the draft TPA Codes study to discuss on the proposed concepts of the TPA Codes.

Most recently, the National Energy Policy Council (the “**NEPC**”) has approved the criteria for the implementation of the direct power purchase pilot project (the “**Pilot Project**”), which will enable private offtakers to purchase electricity directly from renewable energy generators under a direct power purchase agreement (the “**Direct PPA**”) through the TPA Code.

A. Pilot Project

I. Purpose

- The purpose of the Pilot Project is to respond to significant interest from foreign investors, particularly foreigners investing in data centers in Thailand, which are required to utilize “clean energy” (i.e., 100% renewable energy) for their business operations.

II. Total Procurement Capacity

- The total procurement capacity of the Pilot Project is expected to be 2,000 MW. Each participating data center is required to utilize electricity of at least 50 MW.

III. Eligible Projects²

- Foreign investors who invest in data centers in Thailand which are required to utilize “clean energy” (i.e., 100% renewable energy) for their business operations.
- Other than data centers invited by the government as mentioned above, it is not yet confirmed if other offtakers will be allowed to participate in the Pilot Project. However, it is expected that other investors who comply with the RE100 policy (e.g., new S-curve businesses) may also be able to join the Pilot Project.

IV. Next Steps

The ERC is preparing regulations for the Direct PPA and the service fees applicable to the TPA Code of each Distribution Utility. These service fees include wheeling charge, connection charge, system security charge or ancillary services charge, imbalance charge, and policy expenses. The regulations are expected to be finalized by the end of 2024 and the Service Agreement under the Pilot Project is expected to start by March 2025.

Apart from the relevant energy-related authorities, former Thai Prime Minister Srettha Thavisin had also expedited the data center initiative by directing the Board of Investment of Thailand to develop supportive measures to facilitate the Direct PPA.

After the Pilot Project, it is expected that each Distribution Utility will announce its available transfer capacity (the “**Available Transfer Capacity**” or the “**ATC**”) annually.

The economic stimulus measures introduced by the former administration are expected to remain. Therefore, the Direct PPA is expected to continue with the same concept and on the same schedule.

B. TPA Codes

The TPA Codes of each Distribution Utility are divided into three subordinate codes consisting of the following:

I. TPA Service Code

The TPA Service Code sets out the rules and procedures regarding the submission of applications for connection and utilization of the grid system (the “**Application**”). The applicant shall prepare and submit the Application and other required documents, while each of the Distribution Utilities responsible for the area of the grid system which is expected to be connected or utilized (the “**Responsible Utility**”) shall assess the Application and such supporting documents pursuant to the criteria, rules, and procedures set out in the TPA Service Code.

- The TPA Service Code also provides the criteria for the Responsible Utility to allocate the ATC to the power producer for the sale of electricity to its customers (i.e., the oftaker). The allocation of the ATC shall be on a first-come, first-served basis.

II. TPA Connection Code

The TPA Connection Code sets out the technical requirements and standard procedures for the connection of the grid system as well as standards for the equipment to be connected to the system which must be manufactured, installed, and maintained per the requirements.

III. TPA Operation Code

The TPA Operation Code sets out the duties and responsibilities of the power producer (and its customers) who connect and utilize the grid system. It also provides duties to coordinate with the responsible authority in certain activities such as operations in the planning of electrical distribution systems and management of capacity and unbalance of electricity.

B.1. Services under the TPA Code

1. Connection to the Grid System

The connector of the grid system (the “**Connector**”) may connect its electricity generator or grid system to the Distribution Utilities’ grid system to receive or distribute electricity from one electrical distribution point to another.

2. Utilization of the Grid System

A user of the grid system (the “**User**”) can utilize the system for the purposes of receiving or distributing electricity from one electrical distribution point to another electrical receiving point.

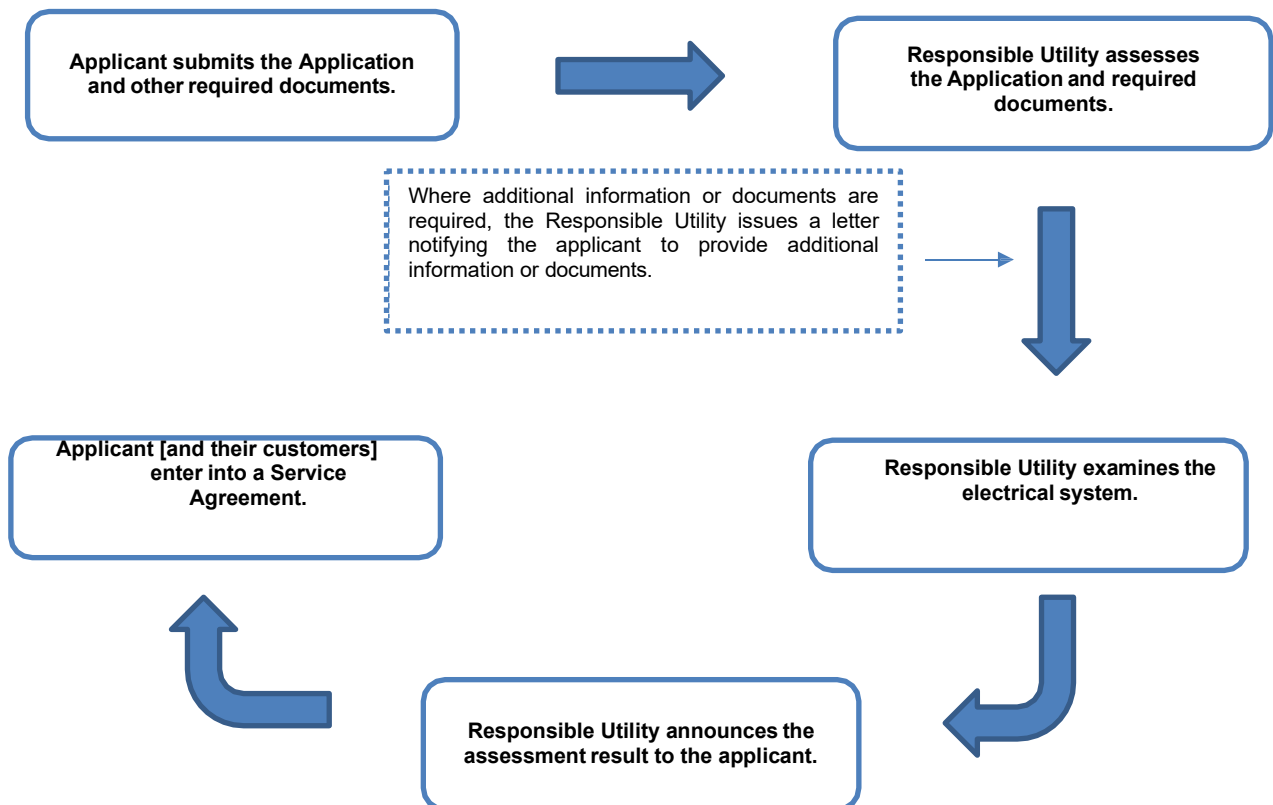
B.2. Eligible Applicants³

- EGAT
 - Small Power Producers (SPPs) having excess electricity capacity from the sale of

electricity to the EGAT and wish to sell such excess to other customers.

- Very Small Power Producers (VSPPs) having excess electricity capacity from the sale of electricity to the PEA or the MEA and wish to sell such excess to other customers.
 - Other electricity-generating licensees such as Independent/Industrial Power Suppliers (IPs) who wish to utilize the EGAT’s grid system (excluding the PEA, the MEA, or other Independent Power Producers (IPPs)).
 - Other applicants, for example a licensed person for the distribution of electricity, energy storage systems (ESS) or microgrids.
- **PEA and MEA**
 - Applicants must not be a party to an effective PPA with any of the Distribution Utilities or other authorities prior to the signing of the Service Agreement (defined below) with its customers and the PEA/MEA.

B.3. Process of Application and Preparation of Service Agreement⁴



- The applicants must submit the Application for connection or utilization of the grid system to each of the Responsible Utility. The Application will go through an assessment process until the Responsible Utility makes its decision. Successful

applicants (and their customers) will prepare and eventually enter into a service agreement for connection or utilization of the grid system (the “**Service Agreement**”) with the Responsible Utility.

- Term of the Service Agreement is not yet concluded, but it is expected to be around 1–5 years with an automatic renewal until the expiration of the term of the PPA.
- In the initial phase, there will be a ‘one-on-one model’ where a single generator produces and supplies electricity to one load at a time.
- The tables below set out the process of application and preparation of the Service Agreement for the connection or utilization of the grid system for each Responsible Utility.

Electricity Generating Authority of Thailand		
No.	Process	Timeline
Connection and Utilization of the Grid System		
1.	The EGAT to periodically open for application for connection or utilization of the grid systems by announcing the ATC.	-
2.	Applicants to submit the Application and other required documents to the EGAT.	A
3.	The EGAT to assess the Application and other supporting documents. Where additional information or documents are required, the EGAT to issue a notification letter to the applicants to provide additional information or documents within ten working days from the date of reception of the application.	Within A + 10 (B) (within ten working days from the receipt of the Application)
4.	Applicants to provide all required additional information or documents to the EGAT within five working days from the receipt of the notification letter.	Within B + 5 (C) (within five working days from the receipt of the notification letter)
5.	The EGAT to examine the electrical system and assess the possibility to connect or utilize the grid system within 45 working days from the date of receipt of the Application and all required information and documents.	Within C + 45 (within 45 working days from the date of receipt of the Application and all required information and documents)
6.	The EGAT to announce the assessment result to the applicants.	D
7.	Failed applicants may file an objection letter and evidence to the EGAT within 15 working days from the date of receipt of the assessment result.	Within D + 15 (E) (within 15 working days from the date of receipt of the assessment result)

Electricity Generating Authority of Thailand		
No.	Process	Timeline
8.	The EGAT to announce results of the objection within 30 working days from the date of receipt of the objection letter.	Within E + 30 (F) (within 30 working days from the receipt of the objection letter)
9.	Applicants who disagree with the objection result may submit an appeal letter with supporting evidence to the ERC within 30 working days from the date of receipt of the result of the objection. The ERC's decision is final.	Within F + 30 (within 30 working days from the receipt of the objection result)
10.	Successful applicants to submit additional documents for the signing of the Service Agreement within seven working days from the date of receipt of the assessment result.	Within D + 7 (G) (within seven working days from the receipt of the assessment result)
11.	If additional information or documents are needed, the EGAT to issue a notification letter requesting the applicants to provide additional information or documents within ten working days from the date of receipt of the additional documents.	Within G + 10 (H) (within ten working days from the receipt of the additional documents)
12.	Applicants to provide all the required additional information or documents to the EGAT within five working days from the date of receipt of the notification letter.	Within H + 5 (I) (within five working days from the receipt of the notification letter)
13.	Each of the applicants (and their customers) and the EGAT to enter into a Service Agreement within 30 working days from the date of receipt of all required information and documents from the applicants.	Within I + 30 (within 30 working days from the receipt of all required information and documents)
14.	Applicants (and their customers) that are unable to enter into the Service Agreement within the specified period may file a written notice to request for an extension of such period to the EGAT for the EGAT's consideration. The extension of the period shall not exceed 30 days from the specified due date.	-

Provincial Electricity Authority		
No.	Process	Timeline
Utilization of the Grid System		
1.	Applicants to submit the Application and other required documents to the PEA.	-
2.	The PEA to assess the Application and examine the electrical system.	-
3.	The PEA to announce the assessment result to the applicants.	-
4.	Applicants to submit the evidence of service fee payment and place the guarantee according to the capacity that has been allocated.	-
5.	Each of the applicants (and their customers) to prepare and enter into a Service Agreement with the PEA.	-
Connection to the Grid System		
1.	Applicants to submit the Application and other required documents to the PEA.	A
2.	The PEA to assess the Application and required documents and announce the assessment result and the service fees to the applicants within 45 days from the receipt date of the application.	Within A + 45 (within 45 days from the receipt of the Application)
3.	Applicants to pay the service fees as notified.	-
4.	After the installation of the necessary equipment, the applicants to submit a request for the PEA to assess their electrical system.	B
5.	The PEA to assess the electrical system (i.e., grid synchronization, installed equipment, and energy trading platform) and electrical capacity management plan within 45 days from the date on which the applicants submit a request for the PEA to assess the electrical system.	B + 45 (within 45 days from the date on which the applicants submit a request for the PEA to assess the electrical system)
6.	Applicants to submit licenses as specified by the PEA within 15 days prior to the commencement date of grid synchronization.	Not less than 15 days prior to the commencement date of grid synchronization.

Metropolitan Electricity Authority		
No.	Process	Timeline
Connection and Utilization of the Grid System		
1.	The MEA to check availability of the grid synchronization point (the “Feeder”) as requested by the power producer.	-
2.	The MEA to announce results of the Feeder checking.	-
3.	Applicants to submit the Application and other required documents to the MEA.	-
4.	The MEA to assess the Application and required documents to assess the possibility to connect or utilize the grid system and allocation of the ATC. In the case where additional information or documents are required, the MEA to issue a letter requesting the applicants to provide additional information or documents.	A
5.	Applicants to provide additional information or documents to the MEA within 15 working days from the date of receipt of the notification letter.	Within A + 15 (within 15 working days from the receipt date of the notification letter)
6.	The MEA to announce the assessment results and service fees to the applicants.	B
7.	Applicants to pay the service fees within 15 days from the date of receipt of the assessment result.	Within B + 15 (within 15 working days from the date of receipt of the assessment result)
8.	The MEA to issue a letter notifying the applicants to sign the Service Agreement.	C
9.	Applicants to provide the equipment installation plan for approval from the MEA prior to the signing of the Service Agreement.	Prior to the signing of the Service Agreement
10.	Each of the applicants (and their customers) to sign the Service Agreement within 30 days from the receipt of the notification letter.	Within C + 30 (within 30 days from the receipt of the notification letter)
11.	Applicants to submit licenses and permits (as required by the MEA) within 15 days prior to the commencement date of the grid synchronization.	Not less than 15 days prior to the commencement date of the grid synchronization

12.	The MEA to assess the grid synchronization and protective system as requested by the applicants.	-
13.	Applicants are then able to generate and distribute electricity into the system upon the commencement date stated in the MEA's notification letter.	-

B.4. Required Documents for the Application Assessment

- **Electricity Generating Authority Thailand**
 - Application for connection or utilization of the grid system.
 - Supporting documents of the Application for connection or utilization of the grid system.
 - Evidence of service fee payment for the Application for connection or utilization of the grid system and evidence of service fee payment for the allocation of the ATC.
 - Other documents as required by the Responsible Utility.
- **Provincial Electricity Authority**
 - To be announced at a later date.
- **Metropolitan Electricity Authority**
 - Request form for the Feeder checking.
 - Application for connection or utilization of the grid system.
 - Supporting documents of the Application for connection or utilization of the grid system.

B.5. Conditions of Connection or Utilization of the Grid System

- Conditions for connection or utilization of the grid system shall be in accordance with the conditions set out in the Service Agreement.
- Term of the Service Agreement shall be varied from 1–3 years from the commencement date of the grid system service operation.
- The Connector or the User of the grid system shall comply with the TPA Codes (i.e., TPA Service Code, TPA Connection Code, and TPA Operation Code) and the Grid Code (i.e., Service Code, Connection Code, and Operation Code) of the Distribution Utilities.

B.6. Allocation of Available Transfer Capacity

- The ATC will be allocated to the Connector or the User on a first-come, first-served basis. The ATC will be allocated until all capacity has been provided or until all of the Applications with all required information have been approved.

- In the case where the ATC is less than the capacity requested in the Application, the Connector or the User will receive the remaining amount of the ATC only.
- It is still unclear as to how the ATC will be calculated, but, conceptually, the ATC should be equal to available capacity of the distribution line of each Distribution Utility.

B.7. Use-It-or-Lose-It Conditions

- The Connector or the User must start the connection or utilization of the grid system within four months from the date scheduled for the commencement of the grid system service operation. The Responsible Utility reserves the right to retrieve the allocated ATC and revoke the license to connect to the grid system.
- If the Connector or the User uses less than half of the ATC that has been allocated to it, the Responsible Utility reserves the right to reduce the allocated ATC.
- The Connector or the User of the ATC may return the allocated ATC to the Responsible Utility by submitting a written notice to the Responsible Utility within ten working days prior to the return date. The retrieved or returned ATC will be further allocated to other applicants.
- The Connector or the User will bear the cost of services for the ATC that has been retrieved or returned until such capacity is allocated to others.
- In the case where there is a price difference between the service fees of the former and the new Connectors or Users, the former shall be responsible for the payment of such difference.
- Unless written consent has been granted from the Responsible Utility, the Connector or the User shall not be entitled to transfer its rights to utilize the distribution system to another electrical generator or another person apart from the electrical generator or the person as specified in the Application or the Service Agreement.

B.8. Increase of the Allocated Available Transfer Capacity

- The Connector or the User may file a request to the Responsible Utility for an increase of the allocated ATC. Costs of such modification shall be borne by the Connector or the User.
- The increase of the allocated ATC shall be subject to the sole discretion of the Responsible Utility.

B.9. Payment of the Service Fees

- The Responsible Utility will periodically announce the service fees rates.
- The Connector or the User shall pay all of the following service fees relating to the connection or utilization of the grid system to the Responsible Utility whether or not the ATC has been fully utilized.
 - Service fee for the Application to connect or utilize the grid system – to be paid on the date of the submission of the Application.
 - Service fee for the allocation of the ATC – to be paid on the date of the submission of

the Application.

- Service fee for the supply and utilization of assets for the grid system service – to be paid within 30 days from the receipt of the invoice.
 1. Annual fee – to be paid within 30 days from the receipt of the invoice. The annual fee shall be calculated from the commencement date of the grid system service operation to the expiration date of the Service Agreement. The calculation of the annual fee shall be on a pro-rata basis.
 2. Operation fee – to be paid within 30 days from the receipt of the invoice.
 3. Wheeling charge
 - Wheeling charge consists of two key charges, i.e., transmission charges of the EGAT and distribution charge of the PEA/MEA.
 - It is not yet confirmed whether the “transmission charges of EGAT” will be exempted for a power producer using the PEA’s or the MEA’s distribution lines. This is subject to the final consideration of the ERC.
 - The rate of the wheeling charge is not yet concluded. However, the wheeling charge at the rate of THB1.07 per unit under the draft regulation for the Pilot Project is likely to apply to the TPA Codes.
 - The wheeling charge will be calculated on a “postage stamp basis”, instead of distance or zoning basis.
 - The wheeling charge will be paid within 30 days from the receipt of the invoice.
 4. Imbalance Charge (Electrical balancing fee)
 - An imbalance charge will be paid within 30 days from the receipt of the invoice. The electrical balancing fee incurs when the Connector or the User distributes the electricity in a capacity not in accordance with the electrical capacity management plan or causes unbalance of electricity. The Connector or the User shall bear the costs of modification.
 - If the amount of electricity generated exceeds the amount specified in the power producer’s forecasting plan submitted to the Distribution Utility and the power producer wishes to sell the excess to the Distribution Utility, the agreed excess should be purchased by the EGAT at a discounted rate price but not higher than the marginal cost.
 - If the amount of electricity generated is less than the amount specified in the power producer’s forecasting plan, the offtaker will be automatically switched to use the electricity from the Distribution Utility and the power producer may be fined by the Distribution Utility.
 5. Ancillary service fees for the stabilization of the grid system – to be paid within 30 days from the receipt of the invoice.
 6. Policy Expense – to be paid within 30 days from the receipt of the invoice.
- Failure to pay any fees within the abovementioned periods will subject the Connector or the User to interest at the specified rates, provided that the interest rate does not exceed

15 percent per year.

B.10. Next Steps

Following the NEPC's approval of the Pilot Project, the ERC has assigned the Distribution Utilities to revise their TPA Codes according to the criteria approved by the NEPC.

We understand from ERC officials that each Distribution Utility has already submitted to the ERC their first drafts of the revised TPA Codes. It is currently expected that the TPA Codes will be issued within 2024.

The Energy and Infrastructure team at Hunton Andrews Kurth Thailand has experience in advising various clients on energy and infrastructure-related matters in Thailand and further afield.

If you require further information on the Draft TPA Codes and the impact it will have on your business, please do not hesitate to reach out to our team for a confidential discussion.

End notes

1. Please note that this alert is prepared based on: (i) the draft TPA Codes; (ii) presentation material from the online seminar on the draft TPA Codes study conducted by the ERC and Chulalongkorn University in February 2024 (the "**Seminar Material**"); and (iii) discussions with the officials at the Energy Policy and Planning Office (the "**EPPO**"), the ERC and the Distribution Utilities in June and July 2024. As of the date of this Summary, the TPA Codes have not yet become effective and are subject to further revisions to be made by relevant Distribution Utilities according to the ERC's final consideration.
2. Based on our recent discussions with officials at the EPPO and the ERC, the necessary qualifications of power producers and other relevant requirements for the power producers to comply with are still being considered by the authorities.
3. The above summary of the "eligible applicants" is prepared based on the first draft TPA Codes. The qualifications of the eligible applicant required by EGAT/PEA/MEA are still unclear as the TPA Codes are subject to further revisions and finalization by the ERC.
4. Based on the Seminar Material, the ERC is considering having each Distribution Utility sign two Service Agreements – one with the Power Producer and one with the Power Producer's customer (i.e., the offtaker). Section C is to be updated once the concept of the Service Agreement(s) is finalized.

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