

## Appendix 1

### PDP8 Implementation Plan Priority Projects and Programmes

#### 1. List of newly built domestic gas power projects

| No. | Projects                           | Capacity (MW) | Province   | COD year    | Note                                  |
|-----|------------------------------------|---------------|------------|-------------|---------------------------------------|
| 1   | O Mon I thermal power <sup>1</sup> | 660           | Can Tho    | Operational | To use gas from Block B field         |
| 2   | O Mon II thermal power plant       | 1050          | Can Tho    | 2027        |                                       |
| 3   | O Mon III thermal power plant      | 1050          | Can Tho    | 2030        |                                       |
| 4   | O Mon IV thermal power plant       | 1050          | Can Tho    | 2028        |                                       |
| 5   | Dung Quat I CCGT power plant       | 750           | Quang Ngai | 2028        | To use gas from the Ca Voi Xanh field |
| 6   | Dung Quat II CCGT power plant      | 750           | Quang Ngai | 2028        |                                       |
| 7   | Dung Quat III CCGT power plant     | 750           | Quang Ngai | 2028        |                                       |
| 8   | Mien Trung I CCGT power plant      | 750           | Quang Nam  | 2030        |                                       |
| 9   | Mien Trung II CCGT power plant     | 750           | Quang Nam  | 2030        |                                       |
| 10  | Quang Tri CCGT power plant         | 340           | Quang Nam  | 2030        | To use gas from the Bao Vang field    |

**Notes:**

- The exact capacity shall be determined in accordance with the capacity of units during the development of the projects.

#### 2. List of newly built LNG thermal power projects

| No. | Project  | Capacity (MW) | Province/City    | COD year  | Note               |
|-----|--|---------------|------------------|-----------|--------------------|
| 1   | Nhon Trach 3 and Nhon Trach 4 Thermal Power Plants | 1,624         | Dong Nai         | 2024-2025 | Under construction |
| 2   | LNG Hiep Phuoc phase I                             | 1,200         | Ho Chi Minh City | 2025      | Under construction |
| 3   | LNG Bac Lieu                                       | 3,200         | Bac Lieu         | 2027-2029 | Under FS drafting  |
| 4   | Son My II Thermal Power Plant                      | 2,250         | Binh Thuan       | 2027-2029 | Under FS drafting  |

<sup>1</sup> Existing power plant switch to use gas from Block B.

| No. | Project  | Capacity (MW) | Province/City | COD year  | Note  |
|-----|--|---------------|---------------|-----------|---|
| 5   | BOT Son My I Thermal Power Plant   | 2,250         | Binh Thuan    | 2027-2029 | Under FS drafting   |
| 6   | LNG Quang Ninh   | 1,500         | Quang Ninh    | 2028-2029 | Under FS drafting   |
| 7   | LNG Hai Lang phase 1   | 1,500         | Quang Tri     | 2028-2029 | Under FS drafting   |
| 8   | LNG Thai Binh  | 1,500         | Thai Binh     | 2029      | Under investor selection  |
| 9   | LNG Nghi Son   | 1,500         | Thanh Hoa     | 2029-2030 | Under investor selection  |
| 10  | Ca Na LNG  | 1,500         | Ninh Thuan    | 2029-2030 | Under investor selection  |
| 11  | LNG Quang Trach II   | 1,500         | Quang Binh    | 2029-2030 |   |
| 12  | LNG Quynh Lap  | 1,500         | Nghe An       | 2029-2030 |   |
| 13  | LNG Long An I  | 1,500         | Long An       | 2029-2030 | Under FS drafting   |
|     | Potential and back-up areas for power projects that are behind schedule or cannot be implemented |               |               |           | Thai Binh, Nam Dinh, Nghi Son, Quynh Lap, Vung Ang, Chan May, Mui Ke Ga, Hiep Phuoc 2, Tan Phuoc, Ben Tre, Ca Mau, etc. |

**Notes:**

- The exact capacity shall be determined in accordance with the capacity of units during the development of the projects.

**3. List of newly built coal thermal power projects**

| No. | Project                                  | Capacity (MW) | Province/City | COD year  | Note                     |
|-----|--|---------------|---------------|-----------|--------------------------|
| 1   | Van Phong 1 Thermal Power Plant          | 1,432         | Khanh Hoa     | 2024      | Operational              |
| 2   | Vung Ang II Thermal Power Plant          | 1,330         | Ha Tinh       | 2025-2026 |                          |
| 3   | Na Duong II Thermal Power Plant          | 110           | Lang Son      | 2026      | Prepare for construction |
| 4   | Quang Trach I Thermal Power Plant        | 1,403         | Quang Binh    | 2026      | Under construction       |
| 5   | An Khanh – Bac Giang Thermal Power Plant | 650           | Bac Giang     | 2027      |                          |
| 6   | Long Phu I Thermal Power Plant           | 1,200         | Soc Trang     | 2027      |                          |

**List of thermal power projects behind schedule, and encounter difficulties in shareholder changes and financial arrangement:**

| No. | Project                                     | Capacity (MW) | Province/City | Note  |
|-----|---|---------------|---------------|---|
| 1   | Quang Tri Thermal Power Plant <sup>2</sup>  | 1,320         | Quang Tri     | The MOIT works with investors. Projects which cannot be implemented until June 2024 must be considered for termination in accordance with laws. |
| 2   | Cong Thanh thermal power plant <sup>3</sup> | 600           | Thanh Hoa     |   |
| 3   | Nam Dinh I Thermal Power Plant              | 1,200         | Nam Dinh      |   |
| 4   | Vinh Tan III Thermal Power Plant            | 1,980         | Binh Thuan    |   |
| 5   | Song Hau II Thermal Power Plant             | 2,120         | Hau Giang     |   |

**4. List of newly built cogeneration power source projects, power sources using residual heat, blast furnace gas, and by-products of technological lines in industrial facilities**

| No. | Project                                      | Capacity (MW)  | Province/City | COD year  | Note |
|-----|--|--|---------------|-----------|------|
| 1   | Formosa HT2                                  | 650  | Ha Tinh       | 2026      |      |
| 2   | Duc Giang cogeneration power plant           | 100  | Lao Cai       | 2027      |      |
| 3   | Hai Ha 1 cogeneration thermal power plant    | 300  | Quang Ninh    | 2026-2030 |      |
| 4   | Hoa Phat II residual gas thermal power plant | 300  | Quang Ngai    | 2026-2026 |      |
| 5   | Other projects                               | To prioritize the development of these projects to increase the efficiency of energy utilization. These power projects are permitted to be developed with an unlimited capacity on the basis of being aligned with the demands and potential of industrial facilities. |               |           |      |

**5. List of newly built medium and large-scale hydropower projects**

| No. | Project                    | Capacity (MW) | Province/City | COD | Note        |
|-----|----------------------------|---------------|---------------|-----|-------------|
| 1   | Long Tao hydropower plant  | 44            | Dien Bien     |     | Operational |
| 2   | Song Lo 6 hydropower plant | 60            | Ha Giang      |     | Operational |

<sup>2</sup> The investor proposed to stop the project (Document EGATi 277/2023). Quang Tri PPC proposed the conversion of the plant to gas power (Official Letter 4009/UBND-KT dated 9 August 2023).

<sup>3</sup> Thanh Hoa PPC proposed the conversion of the plant to LNG (Official Letter 19346/UBND-CN dated 21 December 2023).

| No. | Project                               | Capacity (MW) | Province/City | COD  | Note   |
|-----|---------------------------------------|---------------|---------------|------|--|
| 3   | Pac Ma hydropower plant               | 160           | Lai Chau      |      | Operational  |
| 4   | Suoi Sap 2A hydropower plant          | 49.6          | Son La        |      | Operational  |
| 5   | Dak Mi 2 hydropower plant             | 147           | Quang Nam     |      | Operational  |
| 6   | Song Tranh 4 Hydropower Plant         | 48            | Quang Nam     |      | Operational  |
| 7   | Thuong Kon Tum hydropower plant       | 220           | Kon Tum       |      | Operational  |
| 8   | Song Lo 7 hydropower plant            | 36            | Tuyen Quang   |      | Operational  |
| 9   | Nam Cum 1,4,5 hydropower plant        | 95.8          | Lai Chau      |      | Under construction (4-56 MW Nam Cum expected to operate in 2025; 5-10 MW Nam Cum expected to operate in 2024; 1 - 29.8 MW Nam Cum 4 expected to operate in 2027) |
| 10  | Nam Cum 2,3,6 hydropower plant        | 79.5          | Lai Chau      |      | 48.5 MW Nam Cum 3 in operation; 24 MW Nam Cum 2: operating in 2024; 7 MW Nam Cum 6 is expected to operate in 2027.   |
| 11  | Song Hieu hydropower plant (Ban Mong) | 45            | Nghe An       | 2024 | Under development  |
| 12  | Phu Tan 2 hydropower plant            | 93            | Dong Nai      | 2023 | Operational  |
| 13  | Yen Son hydropower plant              | 90            | Tuyen Quang   | 2025 | Under construction   |
| 14  | Hoi Xuan hydropower plant             | 102           | Thanh Hoa     | 2024 | Under construction   |
| 15  | Expanded Ialy hydropower plant        | 360           | Gia Lai       | 2024 | Under construction   |
| 16  | Dak Mi 1 hydropower plant             | 84            | Kon Tum       | 2024 | Under construction   |
| 17  | Expanded Hoa Binh hydropower plant    | 480           | Peace         | 2025 | Under construction   |
| 18  | Expanded Tri An                       | 200           | Dong Nai      | 2027 | In progress  |

| No. | Project                               | Capacity (MW) | Province/City | COD  | Note  |
|-----|---------------------------------------|---------------|---------------|------|---|
|     | hydropower plant                      |               |               |      |   |
| 19  | Thanh Son hydropower plant            | 40            | Dong Nai      | 2026 | Adjusting planning                                  |
| 20  | My Ly hydropower plant                | 120           | Nghe An       | 2028 | Adjusting investment policy                         |
| 21  | Nam Mo 1 hydropower plant             | 51            | Nghe An       | 2028 | Adjusting investment policy                         |
| 22  | Duc Thanh hydropower plant            | 40            | Binh Phuoc    | 2026 | Under construction                                  |
| 23  | La Ngau Hydropower Plant <sup>4</sup> | 46            | Binh Thuan    | 2026 |   |
| 24  | Phu Tho low water column <sup>5</sup> | 105           | Phu-Tho       | 2026 |   |
| 25  | Cam Thuy 2 hydropower plant           | 38            | Thanh Hoa     | 2030 | Overlapping planning with Cam Hoang Irrigation Lake |

#### 6. List of newly built pumped storage hydropower projects

| No. | Project                                   | Capacity (MW)   | Province/City | COD Year  | Note |
|-----|---|---|---------------|-----------|------|
| 1   | Bac Ai pumped-storage hydropower plant    | 1,200   | Ninh Thuan    | 2028-2029 |      |
| 2   | Phuoc Hoa pumped-storage hydropower plant | 1,200   | Ninh Thuan    | 2029-2030 |      |
| 3   | Other projects                            | Some provinces (e.g., Dien Bien, Lai Chau, Quang Tri, Kon Tum, Khanh Hoa, Dak Nong, etc.) proposed new pumped-storage hydropower projects. The number, necessity, capacity, and location of these projects will be assessed based on the needs of the power system to report to the Prime Minister. |               |           |      |

#### 7. List of key national power source projects in Decision 270

| No. | Power source projects             | Capacity   | Note |
|-----|-----------------------------------|------------|------|
| 1   | Quang Trach I thermal power plant | 2x701.5 MW |      |

<sup>4</sup> La Ngau plant included in the revised PDP7 obtained Investment Registration Certificate and Land Use Right Certificate(s). Binh Thuan PPC proposed to remove this project from the planning (Official Letter 21/UBND-KT dated 30 January 2020). The MOIT requested Binh Thuan PPC to address issues mentioned in Official Notification 193/TB-VPCP dated 25 May 2018 (MOIT's Official Letter 1986/BCT-DL dated 20 March 2020).

<sup>5</sup> Phu Tho PCC proposed to exclude the project from the PDP8 Implementation Plan (Official Letter 4424/UBND-CNXD dated 8 November 2023).

| No. | Power source projects                                | Capacity | Note |
|-----|--|----------|------|
| 2   | LNG Quang Trach II thermal power plant               | 1,500 MW |      |
| 3   | Expanded Hoa Binh hydropower plant                   | 2x240 MW |      |
| 4   | Expanded Ialy hydropower plant                       | 2x180 MW |      |
| 5   | Expanded Tri An hydropower plant                     | 200 MW   |      |
| 6   | Bac Ai pumped-storage hydropower plant               | 1,200 MW |      |
| 7   | Long Phu I thermal power plant                       | 2x600 MW |      |
| 8   | Nhon Trach III and Nhon Trach IV thermal power plant | 1,624 MW |      |
| 9   | Hiep LNG thermal power plant phase 1                 | 1,200 MW |      |
| 10  | LNG Long An 1 thermal power plant                    | 1,500 MW |      |
| 11  | LNG Long An 2 thermal power plant                    | 1,500 MW |      |
| 12  | Phuoc Hoa pumped-storage hydropower plant            | 1,200 MW |      |

## Appendix 2

### PDP8 Implementation Provincial Renewable Energy Capacity Allocation

#### 1. Regional offshore wind power capacity allocation

| Region                | Total installed capacity of offshore wind (MW) |
|-----------------------|--|
| Northern              | 2,500  |
| North Central Coast   | 0  |
| Central               | 500  |
| South Central Coast   | 2,000  |
| Central Highlands     | 0  |
| Southern              | 1,000  |
| <b>Total capacity</b> | <b>6,000</b>                                   |

#### 2. Provincial onshore wind power (onshore and nearshore) capacity allocation

| No. | Region/Province | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|-----|-----------------|--------------------------------|--------------------------------|-----------------------------------|
| 1   | <b>Northern</b> | <b>0</b>                       | <b>3,816</b>                   | <b>3,816</b>                      |
| 1   | Hanoi           | 0                              | 0                              | 0                                 |
| 2   | Hai Phong       | 0                              | 2,3                            | 2,3                               |
| 3   | Hai Duong       | 0                              | 0                              | 0                                 |
| 4   | Hung Yen        | 0                              | 0                              | 0                                 |
| 5   | Ha Nam          | 0                              | 0                              | 0                                 |
| 6   | Nam Dinh        | 0                              | 0                              | 0                                 |
| 7   | Thai Binh       | 0                              | 70                             | 70                                |
| 8   | Ninh Binh       | 0                              | 0                              | 0                                 |
| 9   | Ha Giang        | 0                              | 0                              | 0                                 |
| 10  | Cao Bang        | 0                              | 0                              | 0                                 |
| 11  | Lao Cai         | 0                              | 0                              | 0                                 |
| 12  | Bac Kan         | 0                              | 400                            | 400                               |
| 13  | Lang Son        | 0                              | 1,444                          | 1,444                             |
| 14  | Tuyen Quang     | 0                              | 0                              | 0                                 |
| 15  | Yen Bai         | 0                              | 200                            | 200                               |
| 16  | Thai Nguyen     | 0                              | 100                            | 100                               |
| 17  | Phu-Tho         | 0                              | 0                              | 0                                 |
| 18  | Vinh Phuc       | 0                              | 0                              | 0                                 |
| 19  | Bac Giang       | 0                              | 500                            | 500                               |
| 20  | Bac Ninh        | 0                              | 0                              | 0                                 |
| 21  | Quang Ninh      | 0                              | 400                            | 400                               |
| 22  | Lai Chau        | 0                              | 0                              | 0                                 |

| No.        | Region/Province        | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|------------|------------------------|--------------------------------|--------------------------------|-----------------------------------|
| 23         | Dien Bien              | 0                              | 300                            | 300                               |
| 24         | Son La                 | 0                              | 400                            | 400                               |
| 25         | Hoa Binh               | 0                              | 0                              | 0                                 |
| <b>II</b>  | <b>North Central</b>   | <b>252</b>                     | <b>2,200</b>                   | <b>1,948</b>                      |
| 1          | Thanh Hoa              | 0                              | 300                            | 300                               |
| 2          | Nghe An                | 0                              | 70                             | 70                                |
| 3          | Ha Tinh                | 0                              | 700                            | 700                               |
| 4          | Quang Binh             | 252                            | 1,130                          | 878                               |
| <b>III</b> | <b>Central Central</b> | <b>671</b>                     | <b>1,900</b>                   | <b>1,229</b>                      |
| 1          | Quang Tri              | 671                            | 1,800                          | 1.129                             |
| 2          | Hue                    | 0                              | 50                             | 50                                |
| 3          | City. Danang           | 0                              | 0                              | 0                                 |
| 4          | Quang Nam              | 0                              | 0                              | 0                                 |
| 5          | Quang Ngai             | 0                              | 50                             | 50                                |
| <b>IV</b>  | <b>Highlands</b>       | <b>1039</b>                    | <b>4.101</b>                   | <b>3,062</b>                      |
| 1          | Kon Tum                | 0                              | 154                            | 154                               |
| 2          | Gia Lai                | 561                            | 1,842                          | 1,281                             |
| 3          | Dak Lak                | 428                            | 1,375                          | 947                               |
| 4          | Dak Nong               | 50                             | 730                            | 680                               |
| <b>V</b>   | <b>South Central</b>   | <b>944</b>                     | <b>3,065</b>                   | <b>2.121</b>                      |
| 1          | Binh Dinh              | 77                             | 250                            | 173                               |
| 2          | Phu Yen                | 0                              | 462                            | 462                               |
| 3          | Khanh Hoa              | 0                              | 102                            | 102                               |
| 4          | Ninh Thuan             | 573                            | 1.127                          | 554                               |
| 5          | Binh Thuan             | 294                            | 907                            | 613                               |
| 6          | Lam Dong               | 0                              | 217                            | 217                               |
| <b>VI</b>  | <b>Southern</b>        | <b>1080</b>                    | <b>6,800</b>                   | <b>5,720</b>                      |
| 1          | Ho Chi Minh City       | 0                              | 0                              | 0                                 |
| 2          | Binh Phuoc             | 0                              | 0                              | 0                                 |
| 3          | Tay Ninh               | 0                              | 0                              | 0                                 |
| 4          | Binh Duong             | 0                              | 0                              | 0                                 |
| 5          | Dong Nai               | 0                              | 0                              | 0                                 |
| 6          | Ba Ria Vung Tau        | 0                              | 150                            | 150                               |
| 7          | Long An                | 0                              | 0                              | 0                                 |
| 8          | Dong Thap              | 0                              | 0                              | 0                                 |
| 9          | An Giang               | 0                              | 50                             | 50                                |
| 10         | Tien Giang             | 50                             | 250                            | 200                               |
| 11         | Vinh Long              | 0                              | 0                              | 0                                 |
| 12         | Ben Tre                | 93                             | 1,100                          | 1,007                             |
| 13         | Kien Giang             | 0                              | 137                            | 137                               |
| 14         | Can Tho City           | 0                              | 0                              | 0                                 |

| No. | Region/Province | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|-----|-----------------|--------------------------------|--------------------------------|-----------------------------------|
| 15  | Hau Giang       | 0                              | 100                            | 100                               |
| 16  | Tra Vinh        | 257                            | 1,130                          | 873                               |
| 17  | Soc Trang       | 111                            | 1,613                          | 1,502                             |
| 18  | Bac Lieu        | 469                            | 1,210                          | 741                               |
| 19  | Ca Mau          | 100                            | 1,060                          | 960                               |
|     | <b>Total</b>    | <b>3,986</b>                   | <b>21,880</b>                  | <b>17,894</b>                     |

### 3. Provincial small-scale hydropower source capacity allocation

| No.       | Region/Province      | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|-----------|----------------------|--------------------------------|--------------------------------|-----------------------------------|
| <b>I</b>  | <b>Northern</b>      | <b>2,881</b>                   | <b>5,500</b>                   | <b>2,619</b>                      |
| 1         | Hanoi                | 0                              | 0                              | 0                                 |
| 2         | Hai Phong City       | 0                              | 0                              | 0                                 |
| 3         | Hai Duong            | 0                              | 0                              | 0                                 |
| 4         | Hung Yen             | 0                              | 0                              | 0                                 |
| 5         | Ha Nam               | 0                              | 0                              | 0                                 |
| 6         | Nam Dinh             | 0                              | 0                              | 0                                 |
| 7         | Thai Binh            | 0                              | 0                              | 0                                 |
| 8         | Ninh Binh            | 0                              | 0                              | 0                                 |
| 9         | Ha Giang             | 305                            | 562                            | 257                               |
| 10        | Cao Bang             | 177                            | 298                            | 121                               |
| 11        | Lao Cai              | 711                            | 940                            | 229                               |
| 12        | Bac Kan              | 22                             | 74                             | 52                                |
| 13        | Lang Son             | 35                             | 104                            | 69                                |
| 14        | Tuyen Quang          | 54                             | 82                             | 28                                |
| 15        | Yen Bai              | 308                            | 582                            | 274                               |
| 16        | Thai Nguyen          | 2                              | 2                              | 0                                 |
| 17        | Phu Tho              | 3                              | 3                              | 0                                 |
| 18        | Vinh Phuc            | 0                              | 0                              | 0                                 |
| 19        | Bac Giang            | 0                              | 0                              | 0                                 |
| 20        | Bac Ninh             | 0                              | 0                              | 0                                 |
| 21        | Quang Ninh           | 4                              | 4                              | 0                                 |
| 22        | Lai Chau             | 461.8                          | 1,529                          | 1,055                             |
| 23        | Dien Bien            | 160                            | 471                            | 311                               |
| 24        | Son La               | 588                            | 801                            | 213                               |
| 25        | Hoa Binh             | 38                             | 48                             | 10                                |
| <b>II</b> | <b>North Central</b> | <b>412</b>                     | <b>638</b>                     | <b>226</b>                        |
| 1         | Thanh Hoa            | 114                            | 175                            | 61                                |
| 2         | Nghe An              | 240                            | 303                            | 63                                |
| 3         | Ha Tinh              | 44                             | 86                             | 42                                |

| No.        | Region/Province        | Accumulated capacity<br>2022 (MW) | Accumulated<br>capacity<br>2030 (MW) | Increased capacity<br>2023-2030 (MW) |
|------------|------------------------|-----------------------------------|--------------------------------------|--------------------------------------|
| 4          | Quang Binh             | 14                                | 74                                   | 60                                   |
| <b>III</b> | <b>Central Central</b> | <b>614</b>                        | <b>1,190</b>                         | <b>576</b>                           |
| 1          | Quang Tri              | 104                               | 197                                  | 93                                   |
| 2          | Hue                    | 118                               | 127                                  | 9                                    |
| 3          | Danang City            | 0                                 | 0                                    | 0                                    |
| 4          | Quang Nam              | 206                               | 407                                  | 201                                  |
| 5          | Quang Ngai             | 186                               | 459                                  | 273                                  |
| <b>IV</b>  | <b>Highlands</b>       | <b>799</b>                        | <b>1,408</b>                         | <b>609</b>                           |
| 1          | Kon Tum                | 288                               | 716                                  | 428                                  |
| 2          | Gia Lai                | 281                               | 352                                  | 71                                   |
| 3          | Dak Lak                | 104                               | 138                                  | 34                                   |
| 4          | Dak Nong               | 126                               | 202                                  | 76                                   |
| <b>V</b>   | <b>South Central</b>   | <b>511</b>                        | <b>863</b>                           | <b>352</b>                           |
| 1          | Binh Dinh              | 82                                | 155                                  | 73                                   |
| 2          | Phu Yen                | 37                                | 74                                   | 37                                   |
| 3          | Khanh Hoa              | 35                                | 47                                   | 12                                   |
| 4          | Lam Dong               | 255                               | 401                                  | 146                                  |
| 5          | Ninh Thuan             | 90                                | 134                                  | 44                                   |
| 6          | Binh Thuan             | 12                                | 52                                   | 40                                   |
| <b>VI</b>  | <b>Southern</b>        | <b>61</b>                         | <b>141</b>                           | <b>80</b>                            |
| 1          | Ho Chi Minh City       | 0                                 | 0                                    | 0                                    |
| 2          | Binh Phuoc             | 37                                | 73                                   | 36                                   |
| 3          | Tay Ninh               | 3                                 | 3                                    | 0                                    |
| 4          | Binh Duong             | 18                                | 18                                   | 0                                    |
| 5          | Dong Nai               | 0                                 | 44                                   | 44                                   |
| 6          | Ba Ria Vung Tau        | 3                                 | 3                                    | 0                                    |
| 7          | Long An                | 0                                 | 0                                    | 0                                    |
| 8          | Dong Thap              | 0                                 | 0                                    | 0                                    |
| 9          | An Giang               | 0                                 | 0                                    | 0                                    |
| 10         | Tien Giang             | 0                                 | 0                                    | 0                                    |
| 11         | Vinh Long              | 0                                 | 0                                    | 0                                    |
| 12         | Ben Tre                | 0                                 | 0                                    | 0                                    |
| 13         | Kien Giang             | 0                                 | 0                                    | 0                                    |
| 14         | Can Tho City           | 0                                 | 0                                    | 0                                    |
| 15         | Hau Giang              | 0                                 | 0                                    | 0                                    |
| 16         | Tra Vinh               | 0                                 | 0                                    | 0                                    |
| 17         | Soc Trang              | 0                                 | 0                                    | 0                                    |
| 18         | Bac Lieu               | 0                                 | 0                                    | 0                                    |
| 19         | Ca Mau                 | 0                                 | 0                                    | 0                                    |
|            | <b>Total</b>           | <b>5,278</b>                      | <b>9,740</b>                         | <b>4,462</b>                         |

#### 4. Provincial biomass capacity allocation

| No.        | Region/Province        | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|------------|------------------------|--------------------------------|--------------------------------|-----------------------------------|
| <b>I</b>   | <b>Northern</b>        | <b>34</b>                      | <b>468</b>                     | <b>434</b>                        |
| 1          | Hanoi                  | 0                              | 0                              | 0                                 |
| 2          | Hai Phong City         | 0                              | 0                              | 0                                 |
| 3          | Hai Duong              | 0                              | 10                             | 10                                |
| 4          | Hung Yen               | 0                              | 0                              | 0                                 |
| 5          | Ha Nam                 | 0                              | 0                              | 0                                 |
| 6          | Nam Dinh               | 0                              | 0                              | 0                                 |
| 7          | Thai Binh              | 0                              | 0                              | 0                                 |
| 8          | Ninh Binh              | 0                              | 0                              | 0                                 |
| 9          | Ha Giang               | 0                              | 0                              | 0                                 |
| 10         | Cao Bang               | 0                              | 0                              | 0                                 |
| 11         | Lao Cai                | 0                              | 30                             | 30                                |
| 12         | Bac Kan                | 0                              | 50                             | 50                                |
| 13         | Lang Son               | 0                              | 30                             | 30                                |
| 14         | Tuyen Quang            | 25                             | 75                             | 50                                |
| 15         | Yen Bai                | 0                              | 108                            | 108                               |
| 16         | Thai Nguyen            | 0                              | 10                             | 10                                |
| 17         | Phu Tho                | 0                              | 20                             | 20                                |
| 18         | Vinh Phuc              | 0                              | 0                              | 0                                 |
| 19         | Bac Giang              | 0                              | 0                              | 0                                 |
| 20         | Bac Ninh               | 0                              | 0                              | 0                                 |
| 21         | Quang Ninh             | 0                              | 40                             | 40                                |
| 22         | Lai Chau               | 0                              | 10                             | 10                                |
| 23         | Dien Bien              | 0                              | 30                             | 30                                |
| 24         | Son La                 | 9                              | 25                             | 16                                |
| 25         | Hoa Binh               | 0                              | 30                             | 30                                |
| <b>II</b>  | <b>North Central</b>   | <b>0</b>                       | <b>40</b>                      | <b>40</b>                         |
| 1          | Thanh Hoa              | 0                              | 10                             | 10                                |
| 2          | Nghe An                | 0                              | 10                             | 10                                |
| 3          | Ha Tinh                | 0                              | 10                             | 10                                |
| 4          | Quang Binh             | 0                              | 10                             | 10                                |
| <b>III</b> | <b>Central Central</b> | <b>0</b>                       | <b>6</b>                       | <b>6</b>                          |
| 1          | Quang Tri              | 0                              | 0                              | 0                                 |
| 2          | Hue                    | 0                              | 0                              | 0                                 |
| 3          | Danang City            | 0                              | 0                              | 0                                 |
| 4          | Quang Nam              | 0                              | 6                              | 6                                 |
| 5          | Quang Ngai             | 0                              | 0                              | 0                                 |
| <b>IV</b>  | <b>Highlands</b>       | <b>118</b>                     | <b>123</b>                     | <b>5</b>                          |
| 1          | Kon Tum                | 0                              | 5                              | 5                                 |

| No.       | Region/Province      | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|-----------|----------------------|--------------------------------|--------------------------------|-----------------------------------|
| 2         | Gia Lai              | 118                            | 118                            | 0                                 |
| 3         | Dak Lak              | 0                              | 0                              | 0                                 |
| 4         | Dak Nong             | 0                              | 0                              | 0                                 |
| <b>V</b>  | <b>South Central</b> | <b>121</b>                     | <b>150</b>                     | <b>29</b>                         |
| 1         | Binh Dinh            | 0                              | 0                              | 0                                 |
| 2         | Phu Yen              | 31                             | 60                             | 29                                |
| 3         | Khanh Hoa            | 90                             | 90                             | 0                                 |
| 4         | Lam Dong             | 0                              | 0                              | 0                                 |
| 5         | Ninh Thuan           | 0                              | 0                              | 0                                 |
| 6         | Binh Thuan           | 0                              | 0                              | 0                                 |
| <b>VI</b> | <b>Southern</b>      | <b>49</b>                      | <b>301</b>                     | <b>252</b>                        |
| 1         | Ho Chi Minh City     | 0                              | 0                              | 0                                 |
| 2         | Binh Phuoc           | 0                              | 15                             | 15                                |
| 3         | Tay Ninh             | 37                             | 37                             | 0                                 |
| 4         | Binh Duong           | 0                              | 0                              | 0                                 |
| 5         | Dong Nai             | 0                              | 12                             | 12                                |
| 6         | Ba Ria Vung Tau      | 0                              | 0                              | 0                                 |
| 7         | Long An              | 0                              | 23                             | 23                                |
| 8         | Dong Thap            | 0                              | 10                             | 10                                |
| 9         | An Giang             | 0                              | 50                             | 50                                |
| 10        | Tien Giang           | 0                              | 0                              | 0                                 |
| 11        | Vinh Long            | 0                              | 10                             | 10                                |
| 12        | Ben Tre              | 0                              | 10                             | 10                                |
| 13        | Kien Giang           | 0                              | 25                             | 25                                |
| 14        | Can Tho City         | 0                              | 0                              | 0                                 |
| 15        | Hau Giang            | 0                              | 30                             | 30                                |
| 16        | Tra Vinh             | 0                              | 25                             | 25                                |
| 17        | Soc Trang            | 12                             | 20                             | 8                                 |
| 18        | Bac Lieu             | 0                              | 10                             | 10                                |
| 19        | Ca Mau               | 0                              | 24                             | 24                                |
|           | <b>Total</b>         | <b>322</b>                     | <b>1,088</b>                   | <b>766</b>                        |

#### 5. Provincial waste-to-energy capacity allocation

| No.      | Region/Province        | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|----------|------------------------|--------------------------------|--------------------------------|-----------------------------------|
| <b>I</b> | <b>Northern region</b> | <b>62</b>                      | <b>486</b>                     | <b>424</b>                        |
| 1        | Hanoi                  | 62                             | 190                            | 128                               |
| 2        | Hai Phong City         | 0                              | 40                             | 40                                |
| 3        | Hai Duong              | 0                              | 30                             | 30                                |

| No.        | Region/Province             | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|------------|-----------------------------|--------------------------------|--------------------------------|-----------------------------------|
| 4          | Hung Yen                    | 0                              | 0                              | 0                                 |
| 5          | Ha Nam                      | 0                              | 0                              | 0                                 |
| 6          | Nam Dinh                    | 0                              | 15                             | 15                                |
| 7          | Thai Binh                   | 0                              | 25                             | 25                                |
| 8          | Ninh Binh                   | 0                              | 15                             | 1                                 |
| 9          | Ha Giang                    | 0                              | 0                              | 0                                 |
| 10         | Cao Bang                    | 0                              | 0                              | 0                                 |
| 11         | Lao Cai                     | 0                              | 1                              | 1                                 |
| 12         | Bac Kan                     | 0                              | 1                              | 1                                 |
| 13         | Lang Son                    | 0                              | 11                             | 11                                |
| 14         | Tuyen Quang                 | 0                              | 0                              | 0                                 |
| 15         | Yen Bai                     | 0                              | 0                              | 0                                 |
| 16         | Thai Nguyen                 | 0                              | 10                             | 1                                 |
| 17         | Phu Tho                     | 0                              | 18                             | 18                                |
| 18         | Vinh Phuc                   | 0                              | 15                             | 15                                |
| 19         | Bac Giang                   | 0                              | 25                             | 25                                |
| 20         | Bac Ninh                    | 0                              | 37                             | 37                                |
| 21         | Quang Ninh                  | 0                              | 30                             | 30                                |
| 22         | Lai Chau                    | 0                              | 0                              | 0                                 |
| 23         | Dien Bien                   | 0                              | 3                              | 3                                 |
| 24         | Son La                      | 0                              | 7                              | 7                                 |
| 25         | Hoa Binh                    | 0                              | 13                             | 13                                |
| <b>II</b>  | <b>North Central</b>        | <b>0</b>                       | <b>127</b>                     | <b>127</b>                        |
| 1          | Thanh Hoa                   | 0                              | 50                             | 50                                |
| 2          | Nghe An                     | 0                              | 30                             | 30                                |
| 3          | Ha Tinh                     | 0                              | 30                             | 30                                |
| 4          | Quang Binh                  | 0                              | 17                             | 17                                |
| <b>III</b> | <b>Central Central</b>      | <b>0</b>                       | <b>60</b>                      | <b>60</b>                         |
| 1          | Quang Tri                   | 0                              | 0                              | 0                                 |
| 2          | Hue                         | 0                              | 12                             | 12                                |
| 3          | Danang City                 | 0                              | 18                             | 18                                |
| 4          | Quang Nam                   | 0                              | 15                             | 15                                |
| 5          | Quang Ngai                  | 0                              | 15                             | 15                                |
| <b>IV</b>  | <b>Highlands</b>            | <b>0</b>                       | <b>21</b>                      | <b>21</b>                         |
| 1          | Kon Tum                     | 0                              | 0                              | 0                                 |
| 2          | Gia Lai                     | 0                              | 15                             | 15                                |
| 3          | Dak Lak                     | 0                              | 6                              | 6                                 |
| 4          | Dak Nong                    | 0                              | 0                              | 0                                 |
| <b>V</b>   | <b>South Central region</b> | <b>0</b>                       | <b>66</b>                      | <b>66</b>                         |
| 1          | Binh Dinh                   | 0                              | 15                             | 15                                |

| No.       | Region/Province  | Accumulated capacity 2022 (MW) | Accumulated capacity 2030 (MW) | Increased capacity 2023-2030 (MW) |
|-----------|------------------|--------------------------------|--------------------------------|-----------------------------------|
| 2         | Phu Yen          | 0                              | 15                             | 15                                |
| 3         | Khanh Hoa        | 0                              | 16                             | 16                                |
| 4         | Lam Dong         | 0                              | 10                             | 10                                |
| 5         | Ninh Thuan       | 0                              | 0                              | 0                                 |
| 6         | Binh Thuan       | 0                              | 10                             | 10                                |
| <b>VI</b> | <b>Southern</b>  | <b>8</b>                       | <b>422.1</b>                   | <b>414.1</b>                      |
| 1         | Ho Chi Minh City | 0                              | 123                            | 123                               |
| 2         | Binh Phuoc       | 0                              | 20                             | 20                                |
| 3         | Tay Ninh         | 0                              | 10                             | 10                                |
| 4         | Binh Duong       | 0                              | 9.6                            | 9.6                               |
| 5         | Dong Nai         | 0                              | 66                             | 66                                |
| 6         | Ba Ria Vung Tau  | 0                              | 30                             | 30                                |
| 7         | Long An          | 0                              | 18                             | 18                                |
| 8         | Dong Thap        | 0                              | 13                             | 13                                |
| 9         | An Giang         | 0                              | 7.5                            | 7.5                               |
| 10        | Tien Giang       | 0                              | 10                             | 10                                |
| 11        | Vinh Long        | 0                              | 14                             | 14                                |
| 12        | Ben Tre          | 0                              | 18                             | 18                                |
| 13        | Kien Giang       | 0                              | 14                             | 14                                |
| 14        | Can Tho City     | 8                              | 15                             | 7                                 |
| 15        | Hau Giang        | 0                              | 12                             | 12                                |
| 16        | Tra Vinh         | 0                              | 10                             | 10                                |
| 17        | Soc Trang        | 0                              | 16                             | 16                                |
| 18        | Bac Lieu         | 0                              | 0                              | 0                                 |
| 19        | Ca Mau           | 0                              | 16                             | 16                                |
|           | <b>Total</b>     | <b>70</b>                      | <b>1.182</b>                   | <b>1.112</b>                      |

#### 6. Provincial rooftop solar power capacity allocation

| No.      | Region/Province        | Capacity increased for the period of 2023-2030 (MW) |
|----------|------------------------|---|
| <b>I</b> | <b>Northern region</b> | <b>927</b>  |
| 1        | Hanoi                  | 47  |
| 2        | Hai Phong City         | 107   |
| 3        | Hai Duong              | 70  |
| 4        | Hung Yen               | 62  |
| 5        | Ha Nam                 | 57  |
| 6        | Nam Dinh               | 31  |
| 7        | Thai Binh              | 32  |
| 8        | Ninh Binh              | 23  |
| 9        | Ha Giang               | 3   |

| No.        | Region/Province             | Capacity increased for the period of 2023-2030 (MW) |
|------------|-----------------------------|---|
| 10         | Cao Bang                    | 2   |
| 11         | Lao Cai                     | 28  |
| 12         | Bac Kan                     | 3   |
| 13         | Lang Son                    | 25  |
| 14         | Tuyen Quang                 | 4   |
| 15         | Yen Bai                     | 26  |
| 16         | Thai Nguyen                 | 52  |
| 17         | Phu Tho                     | 31  |
| 18         | Vinh Phuc                   | 59  |
| 19         | Bac Giang                   | 86  |
| 20         | Bac Ninh                    | 79  |
| 21         | Quang Ninh                  | 73  |
| 22         | Lai Chau                    | 2   |
| 23         | Dien Bien                   | 1   |
| 24         | Son La                      | 5   |
| 25         | Hoa Binh                    | 19  |
| <b>II</b>  | <b>North Central</b>        | <b>231</b>  |
| 1          | Thanh Hoa                   | 75  |
| 2          | Nghe An                     | 54  |
| 3          | Ha Tinh                     | 74  |
| 4          | Quang Binh                  | 28  |
| <b>III</b> | <b>Central Central</b>      | <b>168</b>  |
| 1          | Quang Tri                   | 23  |
| 2          | Hue                         | 33  |
| 3          | Danang City                 | 30  |
| 4          | Quang Nam                   | 43  |
| 5          | Quang Ngai                  | 39  |
| <b>IV</b>  | <b>Highlands</b>            | <b>32</b>   |
| 1          | Kon Tum                     | 7   |
| 2          | Gia Lai                     | 8   |
| 3          | Dak Lak                     | 8   |
| 4          | Dak Nong                    | 9   |
| <b>V</b>   | <b>South Central region</b> | <b>136</b>  |
| 1          | Binh Dinh                   | 38  |
| 2          | Phu Yen                     | 18  |
| 3          | Khanh Hoa                   | 14  |
| 4          | Lam Dong                    | 21  |
| 5          | Ninh Thuan                  | 38  |
| 6          | Binh Thuan                  | 7   |
| <b>VI</b>  | <b>Southern</b>             | <b>1.109</b>  |
| 1          | Ho Chi Minh City            | 73  |

| No. | Region/Province | Capacity increased for the period of<br>2023-2030 (MW) |
|-----|-----------------|--|
| 2   | Binh Phuoc      | 93   |
| 3   | Tay Ninh        | 53   |
| 4   | Binh Duong      | 185  |
| 5   | Dong Nai        | 229  |
| 6   | Ba Ria Vung Tau | 133  |
| 7   | Long An         | 153  |
| 8   | Dong Thap       | 16   |
| 9   | An Giang        | 11   |
| 10  | Tien Giang      | 22   |
| 11  | Vinh Long       | 16   |
| 12  | Ben Tre         | 17   |
| 13  | Kien Giang      | 10   |
| 14  | Can Tho City    | 29   |
| 15  | Hau Giang       | 28   |
| 16  | Tra Vinh        | 10   |
| 17  | Soc Trang       | 14   |
| 18  | Bac Lieu        | 2  |
| 19  | Ca Mau          | 15   |
|     | <b>Total</b>    | <b>2,600</b>   |

### Appendix 3

#### PDP8 Implementation Plan Provincial Renewable Energy Projects for Development by 2030

##### 1. List of newly built battery storage projects

| No. | Project  | Capacity (MW) | COD year  | Note   |
|-----|--|---------------|-----------|--|
| 1   | 50 MW battery storage project                                    | 50            | 2023-2030 | According to Decision 1009/QD-TTg dated 31 August 2023 |
| 2   | 7 MW battery storage project integrated into 50 MW solar farm    | 7             | 2023-2030 |  |
| 3   | 105 MW battery storage project integrated into 400 MW solar farm | 105           | 2023-2030 |  |
| 4   | Other battery storage projects                                   | 138           | 2023-2030 |  |

##### 2. List of onshore wind power projects (in land and nearshore )

| No. | Project                             | Capacity (MW) | COD year  | Note |
|-----|-------------------------------------|---------------|-----------|------|
|     | <b>Dien Bien Province</b>           | <b>300</b>    |           |      |
| 1   | BCG Dien Bien 1 wind power plant    | 175           | 2026-2030 |      |
| 2   | Envision Nam Po wind power plant    | 125           | 2026-2030 |      |
|     | <b>Bac Kan province</b>             | <b>400</b>    |           |      |
| 1   | Cho Moi 2 wind power plant          | 130           | 2026-2030 |      |
| 2   | Ngan Son wind power plant           | 150           | 2026-2030 |      |
| 3   | Thien Long Cho Moi wind power plant | 120           | 2026-2030 |      |
|     | <b>Yen Bai Province</b>             | <b>200</b>    |           |      |
| 1   | Nam Bung wind power plant           | 200           | 2026-2030 |      |
|     | <b>Bac Giang province</b>           | <b>500</b>    |           |      |
| 1   | Bac Giang 1 wind power plant        | 55            | 2026-2030 |      |
| 2   | Bac Giang 2 wind power plant        | 55            | 2026-2030 |      |
| 3   | Cam Ly wind power plant             | 55            | 2026-2030 |      |
| 4   | Gio Tan Son Wind Power Plant        | 50            | 2026-2030 |      |
| 5   | Luc Ngan wind power plant           | 30            | 2026-2030 |      |
| 6   | SD Son Dong wind power plant        | 105           | 2026-2030 |      |
| 7   | Yen Dung wind power plant           | 150           | 2026-2030 |      |

| No. | Project                                | Capacity (MW) | COD year  | Note |
|-----|--|---------------|-----------|------|
|     | <b>Lang Son Province</b>               | <b>1,444</b>  |           |      |
| 1   | Ai Quoc wind power plant               | 100           | 2026-2030 |      |
| 2   | Binh Gia wind power plant              | 80            | 2026-2030 |      |
| 3   | Cao Loc wind power plant               | 55            | 2026-2030 |      |
| 4   | Cao Loc 3 wind power plant             | 69            | 2026-2030 |      |
| 5   | Chi Lang wind power plant              | 100           | 2026-2030 |      |
| 6   | Cao Loc 1 wind power plant             | 50            | 2026-2030 |      |
| 7   | Cao Loc 1.1 wind power plant           | 50            | 2026-2030 |      |
| 8   | Dinh Lap wind power plant              | 100           | 2026-2030 |      |
| 9   | Dinh Lap 1 wind power plant            | 50            | 2026-2030 |      |
| 10  | Dinh Lap 1.1 wind power plant          | 50            | 2026-2030 |      |
| 11  | Dinh Lap 4 wind power plant            | 90            | 2026-2030 |      |
| 12  | Dinh Lap 5 wind power plant            | 100           | 2026-2030 |      |
| 13  | Van Quan 1 wind power plant            | 50            | 2026-2030 |      |
| 14  | Huu Kien wind power plant              | 90            | 2026-2030 |      |
| 15  | Loc Binh wind power plant              | 60            | 2026-2030 |      |
| 16  | Loc Binh - Pharbaco wind power plant   | 50            | 2026-2030 |      |
| 17  | Loc Binh 1 wind power plant            | 50            | 2026-2030 |      |
| 18  | Loc Binh 3 wind power plant            | 60            | 2026-2030 |      |
| 19  | Mau Son Wind Power Plant               | 30            | 2026-2030 |      |
| 20  | Thang Long 3 wind power plant          | 50            | 2026-2030 |      |
| 21  | Van Lang 1 wind power plant            | 80            | 2026-2030 |      |
| 22  | Van Quan wind power plant              | 30            | 2026-2030 |      |
|     | <b>Thai Binh Province</b>              | <b>70</b>     |           |      |
| 1   | Tien Hai – Thai Binh wind power plant  | 70            | 2026-2030 |      |
|     | <b>Thanh Hoa province</b>              | <b>300</b>    |           |      |
| 1   | Bac Phuong - Nghi Son wind power plant | 100           | 2026-2030 |      |
| 2   | Muong Lat wind power plant             | 200           | 2026-2030 |      |

| No. | Project  | Capacity (MW) | COD year  | Note  |
|-----|--|---------------|-----------|---|
|     | <b>Nghe An province</b>                          | <b>70</b>     |           |   |
| 1   | Nam Dan wind power plant                         | 70            | 2026-2030 |   |
|     | <b>Ha Tinh province</b>                          | <b>350</b>    |           |   |
| 1   | HBRE Ha Tinh wind power farm                     | 120           | 2023-2025 |   |
| 2   | Cam Xuyen 1 wind power plant                     | 70            | 2024-2025 |   |
| 3   | Ky Khang wind power plant - phase 1              | 60            | 2026-2030 |   |
| 4   | Cam Xuyen 2 wind power plant                     | 100           | 2026-2030 |   |
|     | <b>Dak Lak Province</b>                          | <b>870</b>    |           |   |
| 1   | Cu Ne 1 wind power plant                         | 50            | 2023-2025 | 18 wind turbines have been implemented, expected to operate in 2024 |
| 2   | Cu Ne 2 wind power plant                         | 50            | 2023-2025 | Expected operation in 2025  |
| 3   | Krong Buk 1 wind power plant                     | 50            | 2023-2025 | 18 wind turbines have been implemented, expected to operate in 2024 |
| 4   | Krong Buk 2 wind power plant                     | 50            | 2023-2025 | 18 wind turbines have been implemented, expected to operate in 2024 |
| 5   | Buon Ho 1 wind power plant                       | 20            | 2023-2025 |   |
| 6   | Buon Ho 2 wind power plant                       | 20            | 2023-2025 |   |
| 7   | Buon Ho 3 wind power plant                       | 15            | 2023-2025 |   |
| 8   | Cu M'Gar 2 wind power plant                      | 10            | 2023-2025 |   |
| 9   | Ea H'Leo 3 Wind Power Plant (Cu M'Gar)           | 10            | 2023-2025 |   |
| 10  | Ea H'Leo 4 Wind Power Plant (Cu M'Gar - Buon Ho) | 10            | 2023-2025 |   |
| 11  | Easin 1 wind power plant                         | 100           | 2026-2030 |   |
| 12  | Krongbuk 3 wind power plant                      | 100           | 2026-2030 |   |
| 13  | Thuan Phong Dak Lak wind power plant             | 100           | 2026-2030 |   |

| No. | Project  | Capacity (MW) | COD year  | Note                   |
|-----|--|---------------|-----------|------------------------|
| 14  | Tan Lap - Ea Ho wind power plant                         | 50            | 2026-2030 |                        |
| 15  | Cu Pong 1,2 wind power plant                             | 80            | 2026-2030 |                        |
| 16  | Krong Nang 1.1; 1.2 wind power plant                     | 80            | 2026-2030 |                        |
| 17  | NT 1; NT 2 wind power plant                              | 75            | 2026-2030 |                        |
|     | <b>Lam Dong Province</b>                                 | <b>118.9</b>  |           |                        |
| 1   | Cau Dat wind power plant                                 | 68.9          | 2023-2025 | Construction completed |
| 2   | Duc Trong wind power plant                               | 50            | 2026-2030 |                        |
|     | <b>Ninh Thuan Province</b>                               | <b>553.7</b>  |           |                        |
| 1   | Phuoc Huu wind power plant                               | 50            | 2023-2025 |                        |
| 2   | Vietnam Power No. 1 wind power plant                     | 30            | 2023-2025 |                        |
| 3   | Cong Hai 1 wind power plant - phase 2                    | 25            | 2023-2025 |                        |
| 4   | Cong Hai wind power plant 1- phase                       | 3             | 2023-2025 |                        |
| 5   | Phuoc Nam - Enfinity - Ninh Thuan renewable energy plant | 65            | 2023-2025 |                        |
| 6   | Dam Nai 3 wind power plant                               | 39.4          | 2023-2025 |                        |
| 7   | Dam Nai 4 wind power plant                               | 27.6          | 2023-2025 |                        |
| 8   | Expanded BIM wind power plant phase 2                    | 50            | 2023-2025 |                        |
| 9   | 7A wind power plant phase 2                              | 21            | 2023-2025 |                        |
| 10  | Phuoc Dan wind power plant                               | 45            | 2023-2025 |                        |
| 11  | Bau Ngu Lake wind power plant                            | 25.2          | 2023-2025 |                        |
| 12  | Tri Hai wind power plant                                 | 79.5          | 2023-2025 |                        |
| 13  | Part of Hanbaram wind power plant's Capacity             | 93            | 2026-2030 |                        |
|     | <b>Phu Yen Province</b>                                  | <b>298</b>    |           |                        |
| 1   | HBRE An Tho wind power farm phase 1                      | 200           | 2023-2025 |                        |
| 2   | Song Cau green wind power plant phase 1                  | 50            | 2023-2025 |                        |
| 3   | Xanh Nam Viet wind power plant                           | 48            | 2023-2025 |                        |
|     | <b>Binh Dinh</b>   | <b>30</b>     |           |                        |
| 1   | Nhon Hoi wind power plant phase 2                        | 30            | 2023-2025 | Operational            |

| No. | Project   | Capacity (MW) | COD year  | Note   |
|-----|---|---------------|-----------|--|
|     | <b>Ba Ria Vung Tau Province</b>   | <b>150</b>    |           |  |
| 1   | Xuyen Moc nearshore wind power plant phase 2                              | 47            | 2026-2030 |  |
| 2   | Cong Ly Ba Ria - Vung Tau wind power plant phase 1                        | 103           | 2026-2030 |  |
|     | <b>Ben Tre Province</b>   | <b>713.5</b>  |           |  |
| 1   | VPL wind power plant  | 4.2           | 2023-2025 |  |
| 2   | Binh Dai wind power plant   | 25.8          | 2023-2025 |  |
| 3   | Binh Dai wind power plant No. 2   | 49            | 2023-2025 |  |
| 4   | Binh Dai No. 3 wind power plant   | 49            | 2023-2025 |  |
| 5   | Thanh Phong wind power plant  | 29.7          | 2023-2025 |  |
| 6   | Sunpro wind power plant   | 30            | 2023-2025 | Completed 07 towers/29.4 MW  |
| 7   | No. 5 Ben Tre wind power plant phase 2 (Thanh Hai 2,3,4 wind power plant) | 85.8          | 2023-2025 | Completed 21 towers/90 MW; 4.25 MW connected to the grid, expected to generate 85.75 MW of electricity in 2024 |
| 8   | VPL wind power plant (Phase 2)  | 30            | 2023-2025 | Planned to be operational in 2025  |
| 9   | Nexif Energy Ben Tre wind power plant                                     | 30            | 2023-2025 | Investment policy decision obtained  |
| 10  | Nexif Ben Tre wind power plant phases 2 and 3                             | 50            | 2023-2025 | Investment policy decision obtained  |
| 11  | Thien Phu 2 wind power plant  | 30            | 2023-2025 | Investment policy decision obtained  |
| 12  | Thien Phu wind power plant  | 30            | 2023-2025 | Investment policy decision c   |
| 13  | Thanh Phu wind power plant  | 120           | 2023-2025 | Investment policy decision obtained  |
| 14  | Bao Thanh wind power plant  | 50            | 2023-2025 | Investment policy decision obtained  |
| 15  | No. 19 Wind power plant   | 50            | 2023-2025 | Investment policy decision obtained  |
| 16  | No. 20 Wind power plant   | 50            | 2023-2025 | Investment policy decision obtained  |
|     | <b>Bac Lieu Province</b>  | <b>741</b>    |           |  |

| No. | Project                                     | Capacity (MW) | COD year  | Note                                |
|-----|---|---------------|-----------|-------------------------------------|
| 1   | Bac Lieu – Nhat Ban wind power plant        | 50            | 2023-2025 |                                     |
| 2   | Bac Lieu wind power plant phase III         | 141           | 2023-2025 |                                     |
| 3   | Hoa Binh 3 wind power plant                 | 50            | 2026-2030 |                                     |
| 4   | Hoa Binh 2-1 wind power plant               | 50            | 2026-2030 |                                     |
| 5   | Hoa Binh 4 wind power plant                 | 50            | 2026-2030 |                                     |
| 6   | Hoa Binh 6 wind power plant                 | 40            | 2026-2030 |                                     |
| 7   | Hoa Binh 8 wind power plant                 | 50            | 2026-2030 |                                     |
| 8   | Hoa Binh wind power plant 5.1               | 80            | 2026-2030 |                                     |
| 9   | Dong Hai 1 wind power plant - phase 3       | 50            | 2026-2030 |                                     |
| 10  | Dong Hai 13 wind power plant                | 100           | 2026-2030 |                                     |
| 11  | Dong Hai 3 wind power plant - phase 1       | 50            | 2026-2030 |                                     |
| 12  | Dong Hai 6 wind power plant                 | 30            | 2026-2030 |                                     |
|     | <b>Tien Giang Province</b>                  | <b>200</b>    |           |                                     |
| 1   | Tan Thanh wind power plant                  | 100           | 2026-2030 |                                     |
| 2   | Tan Phu Dong 1 wind power plant             | 100           | 2026-2030 |                                     |
|     | <b>Tra Vinh province</b>                    | <b>872.5</b>  |           |                                     |
| 1   | Hiep Thanh wind power plant                 | 64.5          | 2023-2025 | COD                                 |
| 2   | Duyen Hai wind power plant                  | 48            | 2023-2025 | Under selection of EPC contractor   |
| 3   | Dong Thanh 1 wind power plant               | 80            | 2023-2025 | Under construction                  |
| 4   | Dong Thanh 2 wind power plant               | 120           | 2023-2025 | Under construction                  |
| 5   | Thang Long wind power plant                 | 96            | 2023-2025 | Investment policy decision obtained |
| 4   | Dong Hai 3 Wind Power Plant (location V3-3) | 48            | 2026-2030 |                                     |
| 8   | Expanded V1-2 wind power plant              | 48            | 2026-2030 |                                     |
| 9   | Wind power plant V1-3 phase 2               | 48            | 2023-2025 |                                     |
| 3   | V1-5 and V1-6 wind power plants phase 2     | 80            | 2023-2025 |                                     |
| 3   | Duyen Hai 2 wind power plant                | 96            | 2026-2030 |                                     |
| 6   | Wind power plant No. 3 (location V3-8)      | 48            | 2026-2030 |                                     |
| 7   | 1 -1 Tra Vinh wind power plant phase 2      | 48            | 2023-2025 |                                     |

| No. | Project                              | Capacity (MW) | COD year  | Note  |
|-----|--------------------------------------|---------------|-----------|---|
| 5   | Long Vinh wind power plant           | 48            | 2026-2030 |   |
|     | <b>Soc Trang Province</b>            | <b>733.2</b>  |           |   |
| 1   | Hoa Dong 2 wind power plant          | 45.6          |           | Operational   |
| 2   | Lac Hoa 2 wind power plant           | 123.6         |           | Operational   |
| 3   | Lac Hoa wind power plant - phase 1   | 5             |           | Operational   |
| 4   | Lac Hoa 2 wind power plant           | 6.4           | 2024      |   |
| 5   | Lac Hoa wind power plant             | 30            | 2024      | Construction completed  |
| 6   | Hoa Dong wind power plant            | 30            | 2024      | Construction completed  |
| 7   | Cong Ly wind power plant phase 1     | 30            | 2024      | Construction completed  |
| 8   | No. 3 wind power plant               | 29.4          | 2024      | Construction completed  |
| 9   | No. 2 wind power plant               | 30            | 2025      | Under construction  |
| 10  | No. 18 wind power plant              | 22.4          | 2025      |   |
| 11  | No. 7 wind power plant No. 7 phase 2 | 90            | 2025      |   |
| 12  | No. 11 wind power plant              | 100.8         | 2026-2030 |   |
| 13  | Tran De wind power plant             | 50            | 2026-2030 |   |
| 14  | Song Hau wind power plant            | 50            | 2026-2030 |   |
| 15  | Soc Trang 16 wind power plant        | 40            | 2026-2030 |   |
| 16  | BCG Soc Trang 1 wind power plant     | 50            | 2026-2030 |   |
|     | <b>An Giang province</b>             | <b>50</b>     |           |   |
| 1   | JR An Giang wind power plant         | 50            | 2026-2030 |   |
|     | <b>Ca Mau Province</b>               | <b>900</b>    |           |   |
| 1   | 45 MW Tan An wind power plant        | 75            | 2023-2025 | 45 MW has been Operational and another 30 MW is under construction  |
| 2   | Vien An wind power plant             | 50            | 2023-2025 | 25 MW has been Operational, and another 25 MW is under construction |
| 3   | Ca Mau 1A wind power plant           | 88            | 2023-2025 | Under construction  |
| 4   | Ca Mau 1B wind power plant           | 88            | 2023-2025 | Under construction  |

| No. | Project   | Capacity (MW) | COD year  | Note                                |
|-----|---|---------------|-----------|-------------------------------------|
| 5   | Wind power plant in Khai Long tourist area - Ca Mau phase 1 | 100           | 2023-2025 |                                     |
| 6   | Tan Thuan wind power plant phase 3                          | 25            | 2023-2025 |                                     |
| 7   | An Dong 1 wind power plant                                  | 50            | 2023-2025 |                                     |
| 8   | Khanh Binh Tay wind power plant                             | 50            | 2023-2025 |                                     |
| 9   | Khai Long Wind Power Plant Phase 2                          | 100           | 2023-2025 |                                     |
| 10  | Ca Mau 1C wind power plant                                  | 88            | 2026-2030 | Under appraisal of technical design |
| 11  | Ca Mau 1D wind power plant                                  | 86            | 2026-2030 | Under appraisal of technical design |
| 12  | Khai Long wind power plant Phase 3                          | 100           | 2026-2030 |                                     |
|     | <b>Hau Giang province</b>                                   | <b>100</b>    |           |                                     |
| 1   | Long My 1 wind power plant                                  | 100           | 2023-2025 |                                     |
|     | <b>Kien Giang Province</b>                                  | <b>137</b>    |           |                                     |
| 1   | Hon Dat 1 wind power plant                                  | 77            | 2026-2030 |                                     |
| 2   | Kien Luong 1 wind power plant                               | 60            | 2026-2030 |                                     |

### 3. List of s newly built mall-scale hydropower projects

| No. | Project                       | Capacity (MW) | COD year  | Note        |
|-----|-------------------------------|---------------|-----------|-------------|
|     | <b>Bac Kan province</b>       | <b>47.3</b>   |           |             |
| 1   | Khuoi Thoc hydropower plant   | 3             | 2025      |             |
| 2   | Khuoi Noc 2 hydropower plant  | 4.2           | 2025      |             |
| 3   | Thac Gieng 2 hydropower plant | 4             | 2026-2030 |             |
| 4   | Khuoi Noc hydropower plant    | 6.6           | 2026-2030 |             |
| 5   | Kim Lu hydropower plant       | 9             | 2026-2030 |             |
| 6   | Nam Cat 2 Hydropower Plant    | 5             | 2026-2030 |             |
| 7   | My Thanh hydropower plant     | 5             | 2026-2030 |             |
| 8   | Cong Bang hydropower plant    | 4             | 2026-2030 |             |
| 9   | Pac Nam hydropower plant      | 6.5           | 2026-2030 |             |
|     | <b>Pacify the province</b>    | <b>49.9</b>   |           |             |
| 1   | Dong Mit hydropower plant     | 7             | 2023      | Operational |

| No. | Project  | Capacity (MW) | COD year  | Note        |
|-----|--|---------------|-----------|-------------|
| 2   | Nuoc Luong hydroelectric power plant                     | 22            | 2024      |             |
| 3   | Vinh Son 4 hydropower plant                              | 18            | 2025      |             |
| 4   | Downstream of Phu Phong Weir                             | 2.9           | 2025      |             |
|     | <b>Binh Phuoc</b>  | <b>36.1</b>   |           |             |
| 1   | Dak Kar hydropower plant                                 | 12            | 2023      |             |
| 2   | Long Ha hydropower plant                                 | 20.1          | 2026-2030 |             |
| 3   | Dam' Lo hydropower power plant                           | 4             | 2026-2030 |             |
|     | <b>Cao Bang Province</b>                                 | <b>121</b>    |           |             |
| 1   | Pac Khuoi hydropower plant                               | 7             | 2024      |             |
| 2   | Khuoi Luong hydropower plant                             | 4.4           | 2024      |             |
| 3   | Hong Nam hydropower plant                                | 24            | 2025      |             |
| 4   | Bao Lac A hydropower plant                               | 30            | 2026-2030 |             |
| 5   | Thuong Ha hydropower plant                               | 13            | 2026-2030 |             |
| 6   | Ban Nga hydropower plant                                 | 24            | 2026-2030 |             |
| 7   | Ban Rien hydropower plant                                | 18.6          | 2026-2030 |             |
|     | <b>Dak Lak Province</b>                                  | <b>10.6</b>   |           |             |
| 1   | Ea Tih hydropower plant                                  | 8.6           | 2025      |             |
| 2   | Hydropower plant behind Krong Buk Ha lake irrigation dam | 2             | 2026-2030 |             |
|     | <b>Dak Nong Province</b>                                 | <b>8.8</b>    |           |             |
| 1   | Dak Sor 4 hydropower plant                               | 8.8           | 2023-2030 |             |
|     | <b>Dien Bien Province</b>                                | <b>116.5</b>  |           |             |
| 1   | Huoi Chan 1 hydropower plant                             | 15            | 2023      | Operational |
| 2   | De Bau hydropower plant                                  | 6             | 2023      | Operational |
| 3   | Muong Muon hydropower plant                              | 22            | 2024      |             |
| 4   | Phi Linh hydropower plant                                | 18            | 2024      |             |
| 5   | Muong Luan 2 hydropower plant                            | 10            | 2024      |             |
| 6   | Muong Tung hydropower plant                              | 13            | 2024      |             |
| 7   | Nam Nua 2 hydropower plant                               | 7.5           | 2025      |             |

| No. | Project   | Capacity (MW) | COD year  | Note        |
|-----|---|---------------|-----------|-------------|
| 8   | Chieng So 2 hydropower plant                    | 16            | 2025      |             |
| 9   | Nam He Thuong 2 hydropower plant                | 9             | 2026-2030 |             |
|     | <b>Dong Nai province</b>                        | <b>44</b>     |           |             |
| 1   | Phu Tan 1 Hydropower Plant                      | 28            | 2026-2030 |             |
| 2   | Thac Troi hydropower plant                      | 16            | 2026-2030 |             |
|     | <b>Ha Tinh province</b>                         | <b>6.5</b>    |           |             |
| 1   | Irrigation combined Song Rac hydropower plant   | 1.7           | 2026-2030 |             |
| 2   | Vu Quang hydropower plant                       | 4.8           | 2026-2030 |             |
|     | <b>Kon Tum province</b>                         | <b>358.5</b>  |           |             |
| 1   | Bo Ko 2 hydropower plant                        | 12.6          | 2023      | Operational |
| 2   | Dak Robaye hydropower plant                     | 10            | 2024      |             |
| 3   | Nam Vao 2 hydropower plant                      | 8.6           | 2024      |             |
| 4   | Dak Psi hydropower plant (2.4 MW sub-reservoir) | 2,4           | 2024      |             |
| 5   | Dak Mi 1A hydropower plant                      | 11            | 2024      |             |
| 6   | Dak Psi 1 hydropower plant                      | 4             | 2024      |             |
| 7   | Nuoc Long 1 Hydropower plant                    | 3.2           | 2024      |             |
| 8   | Nuoc Long 2 hydropower plant                    | 6.4           | 2024      |             |
| 9   | Dak Nghe hydropower plant                       | 7             | 2024      |             |
| 10  | Bo Ko 1 hydropower plant                        | 6             | 2024      |             |
| 11  | Ngoc Tem hydropower plant                       | 7.5           | 2024      |             |
| 12  | Thuong Nam Vao hydropower plant                 | 9.8           | 2025      |             |
| 13  | Dak Mi 1B hydropower plant                      | 6             | 2025      |             |
| 14  | Dak Po Co 1 hydropower plant                    | 11            | 2025      |             |
| 15  | Dak Mek 3 hydropower plant                      | 7.5           | 2025      |             |
| 16  | Dak Lo 4 hydropower plant                       | 10            | 2025      |             |
| 17  | Dak Lo 1 hydropower plant                       | 12            | 2025      |             |
| 18  | Dak Lo 3 hydropower plant                       | 22            | 2025      |             |

| No. | Project                                       | Capacity (MW)   | COD year  | Note        |
|-----|---|-----------------|-----------|-------------|
| 19  | Plei Kan Ha hydropower plant                  | 13              | 2025      |             |
| 20  | Dak Pru 3 hydropower plant                    | 5               | 2025      |             |
| 21  | Dak Re Thuong Hydropower plant                | 14              | 2025      |             |
| 22  | Dak Roong Hydropower plant                    | 5               | 2025      |             |
| 23  | Dak Pone hydropower plant (reservoir B plant) | 1.6             | 2025      |             |
| 24  | Dak Krin hydropower plant                     | 7.4             | 2025      |             |
| 25  | Nam Vao 1 Hydropower Plant                    | 10              | 2025      |             |
| 26  | Dak Ruoi 2 hydropower plant                   | 14              | 2026-2030 |             |
| 27  | Dak Ruoi 3 hydropower plant                   | 3               | 2026-2030 |             |
| 28  | Ngoc Linh 1 hydropower plant                  | 4               | 2026-2030 |             |
| 29  | Ngoc Linh 2 hydropower plant                  | 7.8             | 2026-2030 |             |
| 30  | Ngoc Linh 3 hydropower plant                  | 8.2             | 2026-2030 |             |
| 31  | Dak Pek hydropower plant                      | 10.2            | 2026-2030 |             |
| 32  | Thuong Dak Psi 1 hydropower plant             | 7.2             | 2026-2030 |             |
| 33  | Tan Lap hydropower plant                      | 5.2             | 2026-2030 |             |
| 34  | Nuoc Tre hydropower plant                     | 12.8            | 2026-2030 |             |
| 35  | Sa Thay 1 hydropower plant                    | 9.5             | 2026-2030 |             |
| 36  | Sa Thay 2 hydropower plant                    | 11.2            | 2026-2030 |             |
| 37  | Sa Thay 3 hydropower plant                    | 10.5            | 2026-2030 |             |
| 38  | Dak Bla 3 hydroelectric power plant           | 8.6             | 2026-2030 |             |
| 39  | Dak Su 2 hydropower plant                     | 7.2             | 2026-2030 |             |
| 40  | Dak Toa Hydropower plant                      | 5               | 2026-2030 |             |
| 41  | Dak Po Ne 4 Hydropower Plant                  | 6               | 2026-2030 |             |
| 42  | Dak Glei Hydropower plant                     | 10.6            | 2026-2030 |             |
| 43  | Dak Piu 1 hydropower plant                    | 4.5             | 2026-2030 |             |
|     | <b>Lai Chau province</b>                      | <b>1,056.85</b> |           |             |
| 1   | Pa Ha hydropower plant                        | 28              | 2023      | Operational |
| 2   | Pa Tan 2 hydropower plant                     | 20              | 2023      | Operational |

| No. | Project                            | Capacity (MW) | COD year | Note        |
|-----|------------------------------------|---------------|----------|-------------|
| 3   | Nam Lan hydropower plant           | 15            | 2023     | Operational |
| 4   | Nam Lum 2 hydropower plant         | 18            | 2023     | Operational |
| 5   | Nam Nghe 1A hydropower plant       | 10            | 2023     | Operational |
| 6   | Nam Xe hydropower plant            | 20            | 2023     | Operational |
| 7   | Chu Va 2 hydroelectric power plant | 12            | 2023     | Operational |
| 8   | Chang Phang hydropower plant       | 5             | 2023     | Operational |
| 9   | Suoi Linh hydropower plant         | 5.2           | 2023     | Operational |
| 10  | Huoi Van hydropower plant          | 8             | 2024     |             |
| 11  | Nam Xi Lung 2 hydropower plant     | 29            | 2024     |             |
| 12  | Kho Ha Hydropower Plant            | 22            | 2024     |             |
| 13  | Nam Cau 1 hydropower plant         | 13            | 2024     |             |
| 14  | Nam Cau Thuong hydropower plant    | 7             | 2024     |             |
| 15  | Nam Cum hydropower plant           | 7             | 2024     |             |
| 16  | Nam Bum 1A hydropower plant        | 9.5           | 2024     |             |
| 17  | Nam Cuoi 1 hydropower plant        | 19            | 2024     |             |
| 18  | Nam Cuoi hydropower plant          | 11            | 2024     |             |
| 19  | Nam Pi hydropower plant            | 10            | 2024     |             |
| 20  | Nam Pang 2 hydropower plant        | 11            | 2024     |             |
| 21  | Nam Chan hydropower plant          | 7.8           | 2024     |             |
| 22  | Nam Xe 2 hydropower plant          | 8             | 2024     |             |
| 23  | Nam Xe 2A hydropower plant         | 10            | 2024     |             |
| 24  | Vang Ma Chai 2 hydropower plant    | 19            | 2024     |             |
| 25  | Nam Dich 2 hydropower plant        | 9             | 2024     |             |
| 26  | Nam Mit Luong hydropower plant     | 6.8           | 2024     |             |
| 27  | Hua Be hydropower plant            | 10            | 2024     |             |
| 28  | Nam Be 2 hydropower plant          | 10            | 2024     |             |
| 29  | Muong Mit hydropower plant         | 11            | 2024     |             |
| 30  | Muong Kim 3 hydropower plant       | 18.5          | 2024     |             |
| 31  | Ta Pao Ho hydropower plant         | 10            | 2024     |             |
| 32  | Nam Cau hydropower plant           | 29.6          | 2024     |             |

| No. | Project                                | Capacity (MW) | COD year | Note |
|-----|--|---------------|----------|------|
| 33  | Nam Luong hydropower plant             | 21.5          | 2024     |      |
| 34  | Dong Pao hydropower plant              | 7.6           | 2024     |      |
| 35  | Pa Tan 1 hydropower plant              | 8             | 2024     |      |
| 36  | Ho Mit hydropower plant                | 5             | 2024     |      |
| 37  | Ta Pao Ho 1A hydropower plant          | 13.5          | 2024     |      |
| 38  | Nam Han hydropower plant               | 8             | 2024     |      |
| 39  | Nam Xi Lung 1B hydropower plant        | 11            | 2024     |      |
| 40  | La Si 1 hydropower plant               | 11            | 2024     |      |
| 41  | Tho Ma hydropower plant                | 6             | 2024     |      |
| 42  | Nam Puc hydropower plant               | 6             | 2024     |      |
| 43  | Ta Pao Ho 2 hydropower plant           | 5             | 2024     |      |
| 44  | Nam Chan 1 hydropower plant            | 5             | 2024     |      |
| 45  | Suoi Ngang hydropower plant            | 12            | 2024     |      |
| 46  | La Po hydropower plant                 | 22            | 2024     |      |
| 47  | Chu Va 2A hydropower plant             | 8             | 2024     |      |
| 48  | Phieng Khon hydropower plant           | 18            | 2024     |      |
| 49  | Kha U 2 hydropower plant               | 15.5          | 2024     |      |
| 50  | Nam Open 1A Hydropower Plant           | 30            | 2024     |      |
| 51  | Chu Va 12 hydropower plant (expansion) | 1.8           | 2025     |      |
| 52  | Nam Xi Lung 2A hydropower plant        | 29.65         | 2025     |      |
| 53  | Tho Gu hydropower plant                | 30            | 2025     |      |
| 54  | Tho Gu 1 hydropower plant              | 10.2          | 2025     |      |
| 55  | Na An hydropower plant                 | 10.2          | 2025     |      |
| 56  | Nam Ma 3 hydropower plant              | 11.5          | 2025     |      |
| 57  | Ta Pao Ho 1B hydropower plant          | 10.5          | 2025     |      |
| 58  | Vang Ma Chai 3 Hydropower plant        | 21            | 2025     |      |
| 59  | Nam Xi Lung 1A hydropower plant        | 7.8           | 2025     |      |

| No. | Project                                | Capacity (MW) | COD year  | Note        |
|-----|--|---------------|-----------|-------------|
| 60  | Nam Han 1 Hydropower Plant             | 18            | 2025      |             |
| 61  | Nam Bon 1 hydropower plant             | 10            | 2025      |             |
| 62  | Nam Cuoi 1A hydropower plant           | 7             | 2025      |             |
| 63  | Nam Cuoi 1B hydropower plant           | 7.5           | 2025      |             |
| 64  | Nam Cum 7 hydropower plant             | 6.5           | 2025      |             |
| 65  | Nam Ma 1A hydropower plant             | 16.6          | 2025      |             |
| 66  | Nam Ma 1B hydropower plant             | 14            | 2025      |             |
| 67  | Nam Ma 1C hydropower plant             | 10.5          | 2025      |             |
| 68  | Nam Ma 2A hydropower plant             | 11.5          | 2025      |             |
| 69  | Nam Ma 2B hydropower plant             | 13.8          | 2025      |             |
| 70  | Nam Cha 1 hydropower plant             | 24            | 2025      |             |
| 71  | Nam Cha 2 hydropower plant             | 4.4           | 2025      |             |
| 72  | Nam Cay hydropower plant               | 15            | 2025      |             |
| 73  | Pa Vay Su 1 hydropower plant           | 8.5           | 2025      |             |
| 74  | Nam Lon hydropower plant               | 10            | 2025      |             |
| 75  | Nam Mo 2 hydropower plant              | 17            | 2025      |             |
| 76  | Nam Lung hydropower plant (expansion)  | 5.4           | 2026-2030 |             |
| 77  | Nung Than 1 hydropower plant           | 30            | 2026-2030 |             |
| 78  | La Si 1A hydropower plant              | 28            | 2026-2030 |             |
| 79  | Nam Nga hydropower plant               | 24            | 2026-2030 |             |
|     | <b>Lang Son Province</b>               | <b>68.8</b>   |           |             |
| 1   | Ban Lai hydropower plant               | 7             | 2023      | Operational |
| 2   | Ban Nhung hydropower plant             | 13            | 2024      |             |
| 3   | Trang Dinh 2 hydropower plant          | 29.8          | 2026-2030 |             |
| 4   | Bac Giang Hydropower Plant (Vang Puoc) | 14            | 2026-2030 |             |
| 5   | Deo Khach hydropower plant             | 5             | 2026-2030 |             |
|     | <b>Lao Cai Province</b>                | <b>223.5</b>  |           |             |
| 1   | Bao Nhai hydropower plant level 1      | 14            | 2024      |             |

| No. | Project                               | Capacity (MW) | COD year  | Note        |
|-----|---------------------------------------|---------------|-----------|-------------|
|     | belongs to Bao Nhai hydropower plant  |               |           |             |
| 2   | May Ho hydropower plant               | 6.5           | 2024      |             |
| 3   | Nam Tha Ha hydropower plant           | 6             | 2025      |             |
| 4   | Nam Lock 1-2 hydropower plant         | 15            | 2025      |             |
| 5   | Si Ma Cai hydropower plant            | 18            | 2025      |             |
| 6   | Nam Trung Ho 1 hydropower plant       | 20            | 2025      |             |
| 7   | Xuan Hoa hydropower plant             | 3.2           | 2026-2030 |             |
| 8   | Mong Sen 1 hydropower plant           | 4.5           | 2026-2030 |             |
| 9   | Ban Me hydropower plant               | 5             | 2026-2030 |             |
| 10  | Ngoi Nhu 1A hydropower plant          | 6             | 2026-2030 |             |
| 11  | Suoi Chan hydropower plant            | 6.8           | 2026-2030 |             |
| 12  | Nam Cang 1A hydropower plant          | 10            | 2026-2030 |             |
| 13  | Ta Loi 1 hydropower plant             | 15            | 2026-2030 |             |
| 14  | Yen Ha hydropower plant               | 13            | 2026-2030 |             |
| 15  | Lan Bo hydropower plant               | 7.6           | 2026-2030 |             |
| 16  | Viet Tien hydropower plant            | 7             | 2026-2030 |             |
| 17  | Phi hydropower plant                  | 6             | 2026-2030 |             |
| 18  | Sang Ma Sao hydropower plant          | 12.5          | 2026-2030 |             |
| 19  | Hom Duoi hydropower plant             | 18            | 2026-2030 |             |
| 20  | Expanded Nam Ho hydropower plant      | 2             | 2026-2030 |             |
| 21  | Expanded Coc Dam hydropower plant     | 2,3           | 2026-2030 |             |
| 22  | Expanded Nam Mu hydropower plant      | 5             | 2026-2030 |             |
| 23  | Expanded Nam Pung hydropower plant    | 3.1           | 2026-2030 |             |
| 24  | Expanded Suoi Chan 2 hydropower plant | 8             | 2026-2030 |             |
| 25  | Vo Lao hydropower plant               | 9             | 2026-2030 |             |
|     | <b>Lam Dong Province</b>              | <b>96.2</b>   |           |             |
| 1   | Da Chomo hydropower plant             | 9             | 2023      | Operational |
| 2   | Dai Binh hydropower plant             | 15            | 2023      | Operational |
| 3   | Da Sar hydropower plant               | 12            | 2023      | Operational |

| No. | Project  | Capacity (MW) | COD year  | Note |
|-----|--|---------------|-----------|------|
| 4   | Da Br'Len Hydropower plant   | 6.2           | 2024      |      |
| 5   | Tan Thuong hydropower plant  | 22            | 2025      |      |
| 6   | Cam Ly hydropower plant  | 12            | 2025      |      |
| 7   | Bao Lam hydropower plant   | 10            | 2026-2030 |      |
| 8   | Da Huoai 2 hydropower plant  | 10            | 2026-2030 |      |
|     | <b>Ninh Thuan Province</b>   | <b>40</b>     |           |      |
| 1   | Phuoc Hoa hydropower plant   | 22            | 2026-2030 |      |
| 2   | Thuong Song Ong 2 hydropower plant                                   | 7             | 2026-2030 |      |
| 3   | Lam Son hydropower plant   | 11            | 2026-2030 |      |
|     | <b>Nghe An province</b>  | <b>57.8</b>   |           |      |
| 1   | Chau Thon Hydropower plant   | 29.8          | 2024      |      |
| 2   | Thong Thu hydropower plant   | 28            | 2026-2030 |      |
|     | <b>Phu Yen Province</b>  | <b>36</b>     |           |      |
| 1   | Khe Cach Hydropower plant  | 12            | 2026-2030 |      |
| 2   | Son Hoa 1 hydropower plant   | 10            | 2026-2030 |      |
| 3   | Son Hoa 2 hydropower plant   | 14            | 2026-2030 |      |
|     | <b>Quang Binh Province</b>   | <b>42</b>     |           |      |
| 1   | Kim Hoa hydropower plant   | 22            | 2024      |      |
| 2   | La Trong hydropower plant  | 20            | 2026-2030 |      |
|     | <b>Quang Ngai province</b>   | <b>210.4</b>  |           |      |
| 1   | Thach Nham hydropower plant (Irrigation combined with hydropower)    | 10            | 2024      |      |
| 2   | Tra Phong hydropower plant (Tra Phong 1A: 19MW; Tra Phong 1B: 11 MW) | 30            | 2024      |      |
| 3   | Song Lien 1 hydropower plant   | 15            | 2024      |      |
| 4   | Ba Vi hydropower plant   | 9             | 2025      |      |
| 5   | Tra Khuc 1 hydropower plant  | 30            | 2025      |      |
| 6   | Tra Khuc 2 hydropower plant  | 30            | 2025      |      |
| 7   | Song Lien 2 hydropower plant   | 12            | 2025      |      |

| No. | Project                        | Capacity (MW) | COD year  | Note        |
|-----|--------------------------------|---------------|-----------|-------------|
| 8   | Dakdrinh 2 hydropower plant    | 21            | 2026-2030 |             |
| 9   | Tay Tra 1 hydropower plant     | 10            | 2026-2030 |             |
| 10  | Tay Tra 2 hydropower plant     | 9             | 2026-2030 |             |
| 11  | Tay Tra 3 hydropower plant     | 10            | 2026-2030 |             |
| 12  | Long Son hydropower plant      | 10.6          | 2026-2030 |             |
| 13  | Son Linh hydropower plant      | 7             | 2026-2030 |             |
| 14  | Son Nham hydropower plant      | 6.8           | 2026-2030 |             |
|     | <b>Thua Thien Hue province</b> | <b>9</b>      |           |             |
| 1   | Ho Truoi hydropower plant      | 6             | 2026-2030 |             |
| 2   | Song Bo 1 Hydropower Plant     | 3             | 2026-2030 |             |
|     | <b>Tuyen Quang Province</b>    | <b>27.2</b>   |           |             |
| 1   | Hung Loi 1 hydropower plant    | 8             | 2026-2030 |             |
| 2   | Hung Loi 2 hydropower plant    | 3.5           | 2026-2030 |             |
| 3   | Thac Giom hydropower plant     | 5.4           | 2026-2030 |             |
| 4   | Hung Loi 3 hydropower plant    | 3.3           | 2026-2030 |             |
| 5   | Suoi Ba 2 hydropower plant     | 4             | 2026-2030 |             |
| 6   | Khuan Co hydropower plant      | 3             | 2026-2030 |             |
|     | <b>Thanh Hoa province</b>      | <b>46.5</b>   |           |             |
| 1   | Song Am hydropower plant       | 14            | 2026-2030 |             |
| 2   | Ten Tan hydropower plant       | 12            | 2026-2030 |             |
| 3   | Xuan Khao hydropower plant     | 7.5           | 2026-2030 |             |
| 4   | Muong Min Hydropower plant     | 13            | 2026-2030 |             |
|     | <b>Yen Bai Province</b>        | <b>274.1</b>  |           |             |
| 1   | Chi Lu hydropower plant        | 15            | 2023      | Operational |
| 2   | Thao Sa Chai hydropower plant  | 6.5           | 2023      | Operational |
| 3   | Hanh Phuc Hydropower plant     | 7             | 2024      |             |
| 4   | Mi Hang Tau hydropower plant   | 4,6           | 2024      |             |
| 5   | Nam Tang 3 hydropower plant    | 17.5          | 2024      |             |

| No. | Project                              | Capacity (MW) | COD year  | Note |
|-----|--------------------------------------|---------------|-----------|------|
| 6   | De Dinh Mao hydropower plant         | 22            | 2024      |      |
| 7   | Thac Ba 2 hydropower plant           | 18.9          | 2025      |      |
| 8   | Phin Ho 2 hydroelectric power plant  | 10            | 2025      |      |
| 9   | Nam Tuc hydropower plant level 1     | 21            | 2025      |      |
| 10  | Ban Liu hydropower plant             | 3             | 2026-2030 |      |
| 11  | Chan Thinh hydropower plant          | 10            | 2026-2030 |      |
| 12  | Tan Linh hydropower plant            | 22            | 2026-2030 |      |
| 13  | Ngoi Hut 8 hydroelectric power plant | 11            | 2026-2030 |      |
| 14  | Nam Puoi hydropower plant            | 15            | 2026-2030 |      |
| 15  | Anti Khua Hydropower plant           | 9.5           | 2026-2030 |      |
| 16  | Nha Trang hydropower plant           | 2.6           | 2026-2030 |      |
| 17  | Dong Ngai hydropower plant           | 9             | 2026-2030 |      |
| 18  | Ho Bon 2 hydropower plant            | 5             | 2026-2030 |      |
| 19  | Phong Du Ha hydropower plant         | 16            | 2026-2030 |      |
| 20  | Phong Du Thuong hydropower plant     | 22            | 2026-2030 |      |
| 21  | Dao Sa hydropower plant              | 15.5          | 2026-2030 |      |
| 22  | Nam Bung hydropower plant            | 11            | 2026-2030 |      |

#### 4. List of newly built biomass power projects

| No. | Project                         | Capacity (MW) | COD year  | Note |
|-----|---------------------------------|---------------|-----------|------|
|     | <b>Ca Mau Province</b>          | <b>24</b>     |           |      |
| 1   | Khanh An biomass power plant    | 24            | 2026-2030 |      |
|     | <b>Lang Son Province</b>        | <b>30</b>     |           |      |
| 1   | Bac Son biomass power plant     | 12            | 2026-2030 |      |
| 2   | Lang Son biomass power plant    | 18            | 2026-2030 |      |
|     | <b>Yen Bai Province</b>         | <b>108</b>    |           |      |
| 1   | Yen Bai 1 biomass power plant   | 50            | 2026-2030 |      |
| 2   | Truong Minh biomass power plant | 58            | 2026-2030 |      |

| No. | Project                                | Capacity (MW) | COD year  | Note |
|-----|--|---------------|-----------|------|
|     | <b>Tuyen Quang Province</b>            | <b>50</b>     |           |      |
| 1   | Tuyen Quang biomass power plant        | 50            | 2023-2030 |      |
|     | <b>Nghe An province</b>                | <b>10</b>     |           |      |
| 1   | Quy Hop biomass power plant            | 10            | 2026-2030 |      |
|     | <b>Ha Tinh province</b>                | <b>5</b>      |           |      |
| 1   | Hung Anh biomass power plant           | 5             | 2026-2030 |      |
|     | <b>Binh Phuoc</b>                      | <b>10</b>     |           |      |
| 1   | Binh Phuoc biomass power plant         | 10            | 2026-2030 |      |
|     | <b>Dong Nai province</b>               | <b>12</b>     |           |      |
| 1   | Ajinomoto Bien Hoa biomass power plant | 12            | 2026-2030 |      |
|     | <b>Vinh Long province</b>              | <b>10</b>     |           |      |
| 1   | Biomass power plant                    | 10            | 2026-2030 |      |
|     | <b>Ben Tre Province</b>                | <b>10</b>     |           |      |
| 1   | Ben Tre biomass power plant            | 10            | 2026-2030 |      |
|     | <b>Hau Giang province</b>              | <b>30</b>     |           |      |
| 1   | Hau Giang biomass power plant          | 20            | 2026-2030 |      |
| 2   | Hau Giang rice husk power plant        | 10            | 2026-2030 |      |

#### 5. List of newly built waste-to-energy projects

| No. | Project  | Capacity (MW) | COD year | Note        |
|-----|--|---------------|----------|-------------|
|     | <b>Bac Ninh province</b>   | <b>36.7</b>   |          |             |
| 1   | Investment project to build an industrial waste and domestic solid waste treatment complex         | 6.1           |          | Operational |
| 2   | Investment project to build a high-tech domestic solid waste treatment plant that generates energy | 11.6          |          | Operational |
| 3   | Investment project to build a high-tech domestic solid waste treatment plant that generates energy | 13            |          | Operational |
| 4   | Project of domestic solid waste treatment  | 6             |          | Operational |

| No. | Project   | Capacity (MW) | COD year  | Note  |
|-----|---|---------------|-----------|---|
|     | area focusing on electricity generation   |               |           |   |
|     | <b>Lang Son Province</b>  | <b>11</b>     |           |   |
| 1   | Lang Son waste-to-energy plant  | 11            | 2026-2030 |   |
|     | <b>Nam Dinh</b>   | <b>15</b>     |           |   |
| 1   | Greenity Nam Dinh waste-to-energy plant   | 15            | 2023-2025 | Under construction                                  |
|     | <b>Hai Phong city</b>   | <b>40</b>     |           |   |
| 1   | Household solid waste treatment plant using waste incineration technology to generate electricity | 20            | 2026-2030 | Tran Duong commune                                  |
| 2   | Domestic solid waste treatment plant using Dinh Vu waste incineration technology, phase 1         | 20            | 2026-2030 |   |
|     | <b>Thanh Hoa province</b>   | <b>18</b>     |           |   |
| 1   | Thanh Hoa household waste treatment plant generates electricity                                   | 18            | 2026-2030 |   |
|     | <b>Ha Tinh province</b>   | <b>30</b>     |           |   |
| 1   | Waste treatment and electricity generation plant  | 30            | 2026-2030 | Hong Loc commune, Loc Ha district, Ha Tinh province |
|     | <b>Phu Yen Province</b>   | <b>15</b>     |           |   |
| 1   | Trung An household waste treatment and electricity generation plant                               | 15            | 2026-2030 |   |
|     | <b>Binh Phuoc</b>   | <b>15</b>     |           |   |
| 1   | Tan Hung Hon Quan waste power plant   | 15            | 2026-2030 |   |
|     | <b>Dong Nai province</b>  | <b>66</b>     |           |   |
| 1   | Vinh Tan waste-to-energy plant - phase 1  | 20            | 2026-2030 |   |
| 2   | Quang Trung waste-to-energy plant   | 7.5           | 2026-2030 |   |
| 3   | W2E Dong Nai waste-to-energy plant - phase 1  | 20            | 2026-2030 |   |
| 4   | Dinh Quan waste-to-energy plant - phase 1   | 18.5          | 2026-2030 |   |
|     | <b>Ba Ria Vung Tau Province</b>   | <b>30</b>     |           |   |
| 1   | Ba Ria - Vung Tau waste-to-energy plant   | 5             | 2026-2030 |   |
| 2   | Toc Tien 02 waste-to-energy plant   | 20            | 2026-2030 |   |
| 3   | Toc Tien waste-to-energy plant  | 5             | 2026-2030 | Investment policy                                   |

| No. | Project  | Capacity (MW) | COD year  | Note                                   |
|-----|--|---------------|-----------|--|
|     |  |               |           | decision obtained                      |
|     | <b>Soc Trang Province</b>                              | <b>16</b>     |           |  |
| 1   | The plant generates electricity from solid waste       | 16            | 2026-2030 |  |
|     | <b>Ben Tre Province</b>                                | <b>15</b>     |           |  |
| 1   | Solid waste incineration plant to generate electricity | 15            | 2026-2030 |  |
|     | <b>Tien Giang Province</b>                             | <b>10</b>     |           |  |
| 1   | Tien Giang waste-to-energy plant                       | 10            | 2026-2030 |  |
|     | <b>Vinh Long province</b>                              | <b>14</b>     |           |  |
| 1   | Waste incineration plant generates electricity         | 14            | 2026-2030 | Generate electricity using solid waste |
|     | <b>Kien Giang Province</b>                             | <b>14</b>     |           |  |
| 1   | Hon Dat waste-to-energy plant                          | 10            | 2026-2030 |  |
| 2   | Phu Quoc waste-to-energy plant                         | 4             | 2026-2030 |  |
|     | <b>Ca Mau Province</b>                                 | <b>16</b>     |           |  |
| 1   | Ca Mau city waste-to-energy plant                      | 4             | 2026-2030 |  |
| 2   | Nam Can waste-to-energy plant                          | 6             | 2026-2030 |  |
| 3   | U Minh waste-to-energy plant                           | 6             | 2026-2030 |  |

**6. Solar power projects to be considered after 2030 (be permitted to be developed in the planning period in the form of self-consumption)**

|   | Projects                                    | Province   | Installed capacity yet to be put into operation (MW) |
|---|---|------------|--|
| 1 | An Cu solar power plant                     | An Giang   | 40   |
| 2 | Hong Liem 6.1 solar power plant             | Binh Thuan | 40   |
| 3 | Ayun Pa solar power plant                   | Gia Lai    | 20   |
| 4 | Ninh Sim solar power plant                  | Khanh Hoa  | 32   |
| 5 | Is Rsuom – Bitexco – Tona solar power plant | Gia Lai    | 11.84  |
| 6 | Dam An Khe solar power plant                | Quang Ngai | 40   |
| 7 | Dam Nuoc Man solar power plant              |            | 40   |
| 8 | Loc Thanh 1 -1                              | Binh Phuoc | 40   |

|    | <b>Projects</b>                             | <b>Province</b> | <b>Installed capacity yet to be put into operation (MW)</b> |
|----|---|-----------------|---|
| 9  | Hai Ly Binh Phuoc 1 solar power plant       |                 | 40  |
| 10 | Song Binh                                   | Binh Thuan      | 200   |
| 11 | Tan Xuan solar power plant                  |                 | 23.61   |
| 12 | Easup 1 solar power plant                   | Dak Lak         | 40  |
| 13 | Ia Lop 1 solar power plant                  |                 | 40  |
| 14 | KN Buon Tua Srah                            | Dak Nong        | 312   |
| 15 | Cu Knia                                     |                 | 144   |
| 16 | Ea Tling                                    |                 | 76  |
| 17 | Xuyen Ha                                    |                 | 104   |
| 18 | KN Tri An floating solar power plant        | Dong Nai        | 928   |
| 19 | Tri An solar power plant                    |                 | 101   |
| 20 | Phuoc Trung solar power plant               | Ninh Thuan      | 40  |
| 21 | Phuoc Huu 2 solar power plant               |                 | 184   |
| 22 | Xanh Song Cau solar power plant             | Phu Yen         | 150   |
| 23 | Ho Khe lake solar power plant               | Nghe An         | 200   |
| 24 | Vuc Mau lake floating solar power plant     |                 | 160   |
| 25 | Tam Bo solar power plant                    | Lam Dong        | 40  |
| 26 | Phong Hoa                                   | Thua Thien Hue  | 40  |
| 27 | The remaining part of the Dau Tieng project | Tay Ninh        | 1050  |
|    | <b>Total capacity</b>                       |                 | <b>4136.25</b>  |

**Appendix 4<sup>6</sup>**

**PDP8 Implementation Plan Grid Projects**

**1. List of newly constructed and renovated 500 kV substations**

| No.      | Name of substation  | Capacity (MVA) | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note   |
|----------|---|----------------|---------------------------------|----------------------|-----------|------------------|---------------------------------|--|
|          |   |                |                                 | 2023-2025            | 2026-2030 |                  |                                 |  |
| <b>I</b> | <b>Northern region</b>  |                |                                 |                      |           |                  |                                 |  |
| 1        | Bac Bo 1  | 1.800          | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 2        | Bac Bo 2  | 1.800          | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 3        | Bac Bo 3  | 900            | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 4        | Lang Son  | 1.800          | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 5        | Backup for newly constructed and Renovation capacity-increased 500 kV substation              | 1.800          | New construction and renovation |                      | X         | X                | X                               | Reverse for load growth and power source development   |
| 6        | Works and projects improving control and operation capability of power substations and system |                |                                 | X                    | X         | X                | X                               | Projects may include, but are not limited to, the following: replacing or installing reactors, capacitors, SVCs, SVGs, FACTS equipment, etc.; expanding feeder bays in substations; renovating and improving the infrastructure of substations; installing short-circuit current protection devices; replacing and upgrading |

<sup>6</sup> This Appendix 4 extracts only grid projects under consideration of investment socialization from the exhaustive list in Appendix 5, Decision 262.

| No.       | Name of substation  | Capacity (MVA) | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----------|---|----------------|---------------------------------|----------------------|-----------|------------------|---------------------------------|--|
|           |   |                |                                 | 2023-2025            | 2026-2030 |                  |                                 |  |
|           |   |                |                                 |                      |           |                  |                                 | devices to withstand short-circuited currents; establishing automatic circuits; installing or replacing equipment and control systems; implementing SCADA/EMS or SCADA/DMS systems; and automating the station. Scale and location accuracy will be specified during project development.  |
| <b>II</b> | <b>Central region</b>   |                |                                 |                      |           |                  |                                 |  |
| 1         | Quang Binh  | 900            | New construction                |                      | X         |                  | X                               | Synchronization with local power sources   |
| 2         | Nhon Hoa  | 1.800          | New construction                | X                    | X         |                  | X                               | Unit 1 (900 MVA): Phase 2021-2025<br>Unit 2 (900 MVA): Phase 2026-2030.  |
| 3         | Backup for newly constructed and Renovation capacity-increased 500 kV substation              | 1.800          | New construction and renovation |                      | X         | X                | X                               | Reverse for load growth and power source development   |
| 4         | Works and projects improving control and operation capability of power substations and system |                |                                 | X                    | X         | X                | X                               | Projects may include but are not limited to, the following: replacing or installing reactors, SVCs, SVGs, FACTS equipment, etc.; expanding feeder bays in substations; renovating and improving the infrastructure of substations; installing short-circuit current protection devices; replacing and upgrading devices to withstand short-circuited currents; establishing automatic circuits; installing or replacing equipment and control systems; implementing SCADA/EMS or SCADA/DMS |

| No.        | Name of substation     | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|------------|------------------------|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|            |                        |                |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
|            |                        |                |                      |                      |           |                  |                                 | systems; and automating the station. Scale and location accuracy will be specified during project development.   |
| <b>III</b> | <b>Southern region</b> |                |                      |                      |           |                  |                                 |  |
| 1          | Son My                 | 900            | New construction     |                      | X         |                  | X                               | Communication transformers in Son My Electricity Center synchronized with Son My II Thermal Power Plant  |
| 2          | South Central Coast 1  | 1.800          | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 3          | South Central Coast 2  | 1.800          | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 4          | Bac Lieu               | 1.800          | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 5          | Thuan Nam              | 2.700          | Renovation           |                      | X         |                  | X                               | Release local power sources  |
| 6          | South Coast 1          |                | New construction     |                      | X         |                  | X                               | Synchronization with offshore wind power sources in the Southern Region, with an expected capacity of 900 MVA, excluding the reserve volume of the 500 kV switching station. |
| 7          | South Coast 2          |                | New construction     |                      | X         |                  | X                               | Synchronization with offshore wind power sources in the Southern Region, with an expected capacity of 900 MVA, excluding the reserve volume of the 500 kV switching station. |

| No. | Name of substation  | Capacity (MVA) | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---------------------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |                                 | 2023-2025            | 2026-2030 |                  |                                 |   |
| 8   | Backup for newly constructed and Renovation capacity-increased 500 kV substation              | 2.100          | New construction and renovation |                      | X         | X                | X                               | Reverse for load growth and power source development  |
| 9   | Designing flexible busbar section graphs for 500 kV Ca Na LNG Distribution Yard               |                |                                 |                      | X         |                  | X                               | Limiting short circuit, increasing electricity supply reliability   |
| 10  | Works and projects improving control and operation capability of power substations and system |                |                                 | X                    | X         | X                | X                               | Projects may include but are not limited to, the following: replacing or installing reactors, SVCs, SVGs, FACTS equipment, etc.; expanding feeder bays in substations; renovating and improving the infrastructure of substations; installing short-circuit current protection devices; replacing and upgrading devices to withstand short-circuited currents; establishing automatic circuits; installing or replacing equipment and control systems; implementing SCADA/EMS or SCADA/DMS systems; and automating the station. Scale and location accuracy will be specified during project development. |

**2. List of newly constructed and renovated 500 kV transmission lines**

| No.       | Name of transmission line  | Circuit | X | km  | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----------|--|---------|---|-----|---------------------------------|----------------------|-----------|------------------|---------------------------------|--|
|           |  |         |   |     |                                 | 2023-2025            | 2026-2030 |                  |                                 |  |
| <b>I</b>  | <b>Northern region</b>   |         |   |     |                                 |                      |           |                  |                                 |  |
| 1         | Lang Son - Bac Bo 3 - Thai Nguyen                                    | 4       | X | 5   | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources. If 500 kV Bac Bo 3 - Thai Nguyen transmission line is behind progress, 500 kV double-circuit Lang Son - Yen The transmission line of 110 km in length is developed in advance by the state. |
| 2         | Bac Bo 1 - Hai Phong   | 2       | X | 25  | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 3         | Bac Bo 2 - Thai Binh   | 2       | X | 50  | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 4         | Reserve for 500 kV Transmission line New construction and Renovation |         |   | 400 | New construction and Renovation |                      | X         | X                | X                               | Reverse for load growth and power source development   |
| <b>II</b> | <b>Central region</b>  |         |   |     |                                 |                      |           |                  |                                 |  |
| 1         | Quang Binh - Vung Ang - Quang Tri                                    | 4       | X | 5   | New construction                |                      | X         |                  | X                               | Connection to 500 kV Quang Binh Substation   |
| 2         | Nhon Hoa - Pleiku - Dak Nong   | 2       | X | 4   | New construction                | X                    |           |                  | X                               | 500 kV Nhon Hoa Substation built and connected (entering into operation in 2024 - 2025) to group renewable energy power plants, including Nhon Hoa 1 (50 MW), Nhon Hoa 2 (50 MW) wind power plants and adjacent renewable energy sources.                          |

| No.        | Name of transmission line   | Circuit | X | km  | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note   |
|------------|---|---------|---|-----|---------------------------------|----------------------|-----------|------------------|---------------------------------|--|
|            |   |         |   |     |                                 | 2023-2025            | 2026-2030 |                  |                                 |  |
|            |   |         |   |     |                                 |                      |           |                  |                                 | Approved according to Document No. 323/TTg-CN dated March 17, 2021 of the Prime Minister and Document No. 1301/BCT-DL dated March 11, 2021 of the Ministry of Industry and Trade   |
| 3          | Backup for newly constructed and Renovation 500 kV line                 |         |   | 336 | New construction and Renovation |                      | X         | X                | X                               | Reserve for load growth and electricity source development   |
| <b>III</b> | <b>Southern region</b>  |         |   |     |                                 |                      |           |                  |                                 |  |
| 1          | Lines connected to South Central Region pumped-storage hydropower plant |         |   | 30  | New construction                |                      | X         |                  | X                               | South Central Region pumped-storage hydropower plant is the Phuoc Hoa pumped-storage hydropower plant. The connection of the Phuoc Hoa transmission line to the Ninh Hoa 500 kV substation via a double-circuit line is clarified in the connection agreement phase. |
| 2          | South Central 1 - Thuan Nam   | 2       | X | 20  | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 3          | South Central 2 - Thuan Nam   | 2       | X | 50  | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 4          | Lines connected to the 500 kV Southern Region 1 substation.             |         |   | 40  | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of offshore wind power projects in the South Central Coast.  |

| No. | Name of transmission line                                   | Circuit | X | km  | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|---------|---|-----|---------------------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |         |   |     |                                 | 2023-2025            | 2026-2030 |                  |                                 |   |
| 5   | Lines connected to the 500 kV Southern Region 2 substation. |         |   | 40  | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of offshore wind power projects in the South Central Coast. |
| 6   | Backup for newly constructed and Renovation 500 kV line     |         |   | 360 | New construction and Renovation |                      | X         | X                | X                               | Reserve for load growth and electricity source development  |

**Note:** Projects connected to important and priority power sources which are stated in Decision 500 will be implemented in the period of 2031-2035:

- Projects connected to the LNG Long Son plant, with an estimated length of approximately 72 km of 500 kV transmission lines.
- Projects connected to the Long An II plant, with an estimated length of approximately 30 km of 500 kV transmission lines.
- Projects connected to the Dong Phu Yen Thermal Power Plant, with an estimated length of approximately 140 km of 500 kV transmission lines.
- Projects connected to the Don Duong #1 Thermal Power Plant, with an estimated length of approximately 72 km of 500 kV transmission lines.

### 3. List of newly-constructed and renovated 220 kV substations

| No. | Name of substation            | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|-------------------------------|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |                               |                |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| I   | <b>Northern region</b>        |                |                      |                      |           |                  |                                 |   |
| 1   | Hai Phong Thermal Power Plant | 500            | Renovation           |                      | X         |                  | X                               |   |
| 2   | Nam Dinh 3                    | 750            | New construction     |                      | X         |                  | X                               | Synchronization with the progress of specialized load development |

| No. | Name of substation | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----|--------------------|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|     |                    |                |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
| 3   | Bac Ha             | 250            | New construction     |                      | X         |                  | X                               | Installed in the distribution yard of Bac Ha Hydropower Plant                                |
| 4   | Lang Son 1         | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 5   | Lang Son 2         | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 6   | Bac Giang 1        | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 7   | Quang Ninh 1       | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 8   | Dien Bien 1        | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 9   | Suoi Sap 2A        | 200            | New construction     | X                    |           |                  | X                               | Completed. To serve hydropower plants under Official Letter 136/TTg-CN dated 29 January 2021 |
| 10  | Phu Yen            | 375            | New construction     |                      | X         |                  | X                               | Provide electricity for specialized load   |
| 11  | Song Ma            | 250            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 12  | Son La 1           | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources                        |
| 13  | Thanh Hoa 1        | 250            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources                        |

| No. | Name of substation  | Capacity (MVA) | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---------------------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |                                 | 2023-2025            | 2026-2030 |                  |                                 |   |
| 14  | Dong Vang   | 500            | New construction                |                      | X         |                  | X                               |   |
| 15  | Vung Ang 2  | 500            | New construction                | X                    |           |                  | X                               | Synchronization with development progress of dedicated load               |
| 16  | Nghi Son 2  | 500            | New construction                |                      | X         |                  | X                               | Synchronized with development progress of dedicated load                  |
| 17  | Ha Tinh 1   | 500            | New construction                | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources     |
| 18  | Backup for newly constructed and Renovation 220 kV substations  | 2.000          | New construction and Renovation | X                    | X         | X                | X                               | Reserve for load growth and electricity source development                |
| 19  | Designing flexible graphs for 4 busbar sections, including but not limited to distribution yards of 220 kV Thai Binh Combined Cycle Power Plant, 500 kV Substations of Quynh Luu, Vinh Yen, Long Bien, Hai Phong, 220 kV Substations of Hai Ba Trung, Nghia Hung, Hau Loc, Tam Diep, Bac Ninh 4, Dong Ky, Cat Hai, Nam Hoa, Long Bien 2, Hoa Lac, Tan Viet, Hiejp Hoa 2, Phu Binh 2, Dong |                |                                 | X                    | X         | X                | X                               | Limited short-circuit current and increase electricity supply reliability |

| No. | Name of substation   | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----|--|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|     |  |                |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
|     | Van, Ly Nhanh, Duong Kinh, Pho Cao   |                |                      |                      |           |                  |                                 |  |
| 20  | Installing short-circuit current limiting reactors in 220 kV busbars of 500 kV Substations of Pho Noi, Tay Ha Noi, Hiep Hoa, Dan Phuong, Bac Ninh, Pha Lai Thermal Power, Trang Bach   |                |                      | X                    | X         | X                | X                               | Limited short-circuit current  |
| 21  | Improving diagrams of flexible 220 kV busbars, 4 busbar segments in 500 kV substations of Nho Quan, Son La, Dong An and 220 kV substations of Van Tri, Vat Cach, Long Bien, Truc Ninh, Thai Binh, Ha Dong, Thanh Nghi, Bac Ninh 2, Hai Duong Thermal Power |                |                      | X                    | X         | X                | X                               | Limited short-circuit current and increase electricity supply reliability  |
| 22  | Works and projects improving control and operation capability of power substations and system  |                |                      | X                    | X         | X                | X                               | Projects may include but are not limited to, the following: replacing or installing reactors, SVCs, SVGs, FACTS equipment, etc.; expanding feeder bays in substations; renovating and improving the infrastructure of substations; installing short-circuit current protection devices; replacing and upgrading devices to withstand short-circuited currents; establishing automatic circuits; installing or replacing equipment and control systems; |

| No.       | Name of substation   | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----------|--|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|           |  |                |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
|           |  |                |                      |                      |           |                  |                                 | implementing SCADA/EMS or SCADA/DMS systems; and automating the station. Scale and location accuracy will be specified during project development. |
| <b>II</b> | <b>Central region</b>                                      |                |                      |                      |           |                  |                                 |  |
| 1         | Le Thuy  | 500            | New construction     | X                    |           |                  | X                               | Release local power sources  |
| 2         | Huong Linh   | 250            | New construction     | X                    |           |                  | X                               | Release local power sources  |
| 3         | Huong Tan  | 500            | New construction     | X                    |           |                  | X                               | Completed. Serve local power sources   |
| 4         | Phu My 2   | 450            | New construction     |                      | X         |                  | X                               | Synchronization with development progress of specialized load  |
| 5         | Nuoc Long Hydropower                                       | 175            | New construction     |                      | X         |                  | X                               | Release capacity of the hydropower cluster according to Official Letter 136/TTg-CN dated 29 January 2021   |
| 6         | Gia Lai 1  | 250            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 7         | 220 kV Substation at Dak Nong Aluminum Smelter Power Plant | 1.184          | New construction     | X                    |           |                  | X                               | In Decision 500, this substation is listed in the electricity grid directory as "Aluminum smelter".  |
| 8         | Backup for newly constructed and                           | 500            | New construction     | X                    | X         | X                | X                               | Reserve for load growth and power source development   |

| No.        | Name of substation  | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|------------|---|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|            |   |                |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
|            | Renovation 220 kV substations   |                | and Renovation       |                      |           |                  |                                 |  |
| 9          | Constructions and projects improving control and operation capability of electrical substations and electrical system |                |                      | X                    | X         | X                | X                               | Including but are not limited to projects that: Replace, install reactors, capacitors, SVC, SVG, FACTS equipment, etc.; expand feeder bay in substations, renovate, improve graphs of substations; intall short circuit protection devices, replace and upgrade devices to resist short-circuited current, establish automatic cirtui; install, replace equipment, control system, SCADA/ EMS, SCADA/DMS systems, automate the station, etc. , |
| <b>III</b> | <b>Southern region</b>  |                |                      |                      |           |                  |                                 |  |
| 1          | Ta Nang   | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 2          | Dong Quan The   | 480            | New construction     |                      | X         |                  | X                               | Synchronization with development progress of dedicated load  |
| 3          | Hoa Thang   | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 4          | Hong Phong  | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 5          | Ham Cuong   | 250            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 6          | Binh Thuan Wind Power 1   | 250            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources  |

| No. | Name of substation               | Capacity (MVA) | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----|----------------------------------|----------------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|     |                                  |                |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
| 7   | Dong Binh Phuoc                  | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 8   | Tan Chau 1                       | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 9   | Dong Nai 3                       | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 10  | Binh Dai                         | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources progress of electricity sources in the area. |
| 11  | Thanh Phu                        | 500            | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 12  | Tra Vinh 3                       | 450            | New construction     |                      | X         |                  | X                               | New construction, synchronized with development progress of dedicated load   |
| 13  | Ca Mau 3                         | 450            | New construction     |                      | X         |                  | X                               | New construction, Synchronized with development progress of dedicated load   |
| 14  | Tran De                          | 500            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 15  | Bac Lieu 3                       | 750            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 16  | Bac Lieu 4                       | 750            | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 17  | Backup for newly constructed and | 2.125          | New construction     | X                    | X         | X                | X                               | Reserve for load growth and electricity source development   |



| No. | Name of transmission line   | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| 1   | Sap Stream 2A - Branch to Son La - Viet Tri                             | 2              | X | 5         | New construction     | X                    |           |                  | X                               | Completed. Increase hydropower capacity according to Official Letter 136/TTg-CN dated 29 January 2021       |
| 2   | Phu Yen - Branch to Son La - Viet Tri                                   | 2              | X | 7         | New construction     |                      | X         |                  | X                               | Connect to Phu Yen 220 kV substation (specialized load power supply)  |
| 3   | Nghi Son 2 - Turn to Nghi Son thermal power plant - Nong Cong           | 4              | X | 2         | New construction     |                      | X         |                  | X                               | Connect to Nghi Son 2 220 kV station, synchronizing with the progress of specialized load development       |
| 4   | My Ly – Ban Ve  | 1              | X | 72        | New construction     | X                    |           |                  | X                               | Synchronization with My Ly Hydropower Station   |
| 5   | Dong Vang - Branch to Nghi Son - Nong Cong                              | 4              | X | 4         | New construction     |                      | X         |                  | X                               | Synchronization with load development progress  |
| 6   | Vung Ang 2 - Branch to Vung Ang - 500 kV Vung Ang thermal power project | 2              | X | 2         | New construction     | X                    |           |                  | X                               | Connect to the 220kV Vung Ang 2 substation, synchronizing with the progress of specialized load development |
| 7   | Northern Region 1 - Do Son  | 2              | X | 10        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources                                       |
| 8   | Northern Region 3 - Hai Ha  | 2              | X | 20        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources                                       |
| 9   | Lang Son 1 - Dong Mo  | 2              | X | 60        | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources                                       |

| No. | Name of transmission line  | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|--|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |  |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| 10  | Lang Son 2 - Lang Son 1 500 kV   | 2              | X | 20        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources         |
| 11  | Bac Giang 1 - Lang Son 1   | 2              | X | 35        | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources         |
| 12  | Quang Ninh 1 - Branches to Hoanh Bo - Son Dong power station and Hoanh Bo - Trang Bach | 4              | X | 5         | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources         |
| 13  | Dien Bien 1 - Dien Bien 2  | 2              | X | 23        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources         |
| 14  | Dien Bien 1 - Lai Chau   | 2              | X | 52        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources         |
| 15  | Son La 1 - Branch to Son La – Suoi Sap 2A  | 2              | X | 4         | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources         |
| 16  | Hoi Xuan - Ba Thuoc Hydropower Station   | 2              | X | 30        | New construction     |                      | X         |                  | X                               | Connect to Ba Thuoc 220 kV substation   |
| 17  | Thanh Hoa 1 - Branch to Nghi Son - Nong Cong   | 4              | X | 2         | New construction     | X                    |           |                  | X                               | Synchronization according to the scale and progress of regional power sources |
| 18  | Nam Mo hydropower plant  | 12             | X | 18        | New construction     |                      | X         |                  | X                               | Synchronization of Nam Mo 1 Hydropower Plant (Vietnam)                        |

| No.       | Name of transmission line                                      | Circuit number | X | kilometer | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----------|--|----------------|---|-----------|---------------------------------|----------------------|-----------|------------------|---------------------------------|--|
|           |  |                |   |           |                                 | 2023-2025            | 2026-2030 |                  |                                 |  |
|           | Branch to My Ly - Ban Ve                                       |                |   |           |                                 |                      |           |                  |                                 |  |
| 19        | Ha Tinh 1 - Branch to Vung Ang - Ha Tinh                       | 4              | X | 4         | New construction                | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources  |
| 20        | Backup for newly constructed and Renovation 220 kV substations | 350            |   |           | New construction and renovation | X                    | X         | X                | X                               | Reserve for load growth and power source development   |
| <b>II</b> | <b>Central region</b>  |                |   |           |                                 |                      |           |                  |                                 |  |
| 1         | B&T1 Wind power plant- Dong Hoi - Dong Ha circuit 2            | 2              | X | 10        | New construction                | X                    |           |                  | X                               | Add connecting structures for B&T Wind Power in order to fulfill N-1   |
| 2         | TNC Quang Tri 1 wind power -plant Huong Tan                    | 1              | X | 11        | New construction                | X                    |           |                  | X                               | Synchronization with Quang Tri 1, 2 TNC Wind Power and connection solutions have been approved under Official Letter 911/TTg-CN dated 15 July 2020 |
| 3         | Huong Linh - Lao Bao   | 1              | X | 12        | New construction                | X                    |           |                  | X                               | Release wind power, use phased wires with large cross-sections, approved under Official Letter 911/TTg-CN dated 15 July 2020                       |
| 4         | LIG Huong Hoa 1 wind power plant - Huong Tan                   | 1              | X | 13        | New construction                | X                    |           |                  | X                               | Synchronization with LIG Huong Hoa 1 Wind Power, approved under Official Letter 911/TTg-CN dated 15 July 2020                                      |

| No. | Name of transmission line                                     | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| 5   | LIG Huong Hoa 2 wind power plant - LIG Huong Hoa 1            | 1              | X | 8         | New construction     | X                    |           |                  | X                               | Synchronization with LIG Huong Hoa 2 Wind Power, approved under Official Letter 911/TTg-CN dated 15 July 2020                           |
| 6   | Tai Tam wind power plant - Lao Bao                            | 1              | X | 12        | New construction     | X                    |           |                  | X                               | Completed. Release wind power, use phased wires with large cross-sections, approved under Official Letter 911/TTg-CN dated 15 July 2020 |
| 7   | Huong Tan - Lao Bao   | 1              | X | 12        | New construction     | X                    |           |                  | X                               | Completed. Release wind power, use phased wires with large cross-sections, approved under Official Letter 911/TTg-CN dated 15 July 2020 |
| 8   | Amacao wind power plant - Lao Bao                             | 1              | X | 8         | New construction     | X                    |           |                  | X                               | Completed. Release wind power, use phased wires with large cross-sections, approved under Official Letter 911/TTg-CN dated 15 July 2020 |
| 9   | Dak Mi 2 - Dak My 3 - Dak My 4A                               | 2              | X | 5         | New construction     | X                    |           |                  | X                               | Completed. Synchronization with Dak Mi 2 hydro power plant  |
| 10  | 220 kV Dak Ooc cutting station - Song Bung 2 hydropower plant | 2              | X | 10        | New construction     |                      | X         |                  | X                               | Release electricity imported from Laos  |
| 11  | Lines creasing load capacity of in Dak Ooc - Thanh My         | 2              | X | 31        | Renovation           |                      | X         |                  | X                               | Release electricity imported from Laos  |

| No. | Name of transmission line  | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----|--|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|     |  |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
| 12  | Cluster of Nuoc Long hydropower plant - Thuong Kon Tum - Quang Ngai                    | 2              | X | 4         | New construction     |                      | X         |                  | X                               | Release hydropower plant under Official Letter 136/TTg-CN dated 29 January 2021  |
| 13  | Lines creasing load capacity Pleiku 2 - Phuoc An                                       | 1              | X | 151       | New construction     |                      | X         |                  | X                               | Newly construction of 2 <sup>nd</sup> circuit or replace super-temperature line  |
| 14  | Dak Mi 1 hydropower plant – Dak My 21 hydropower plant                                 | 21             | X | 15        | New construction     | X                    |           |                  | X                               | Synchronization with Dak Mi 1 power station  |
| 15  | Kon Plong wind power plant - Thuong Kon Tum hydropower plant- Quang Ngai               | 2              | X | 19        | New construction     | X                    |           |                  | X                               | Synchronization the Kon Plong hydropower plant; the connection plan has been approved according to Official Letter 911/TTg-CN dated 15 July 2020.                  |
| 16  | Dak Lo 3 hydropower plant - Thuong Kon Tum - Quang Ngai                                | 4              | X | 1         | New construction     |                      | X         |                  | X                               | Releasing hydropower capacity, connection plan according to Official Letter 136/TTg-CN dated 29 January 29 2021 and Official Letter 29/BCT-DL dated 5 January 2021 |
| 17  | Lines creasing load capacity of Pleiku - An Khe biomass plant- An Khe hydropower plant | 1              | X | 98        | Renovation           | X                    |           |                  | X                               |  |
| 18  | Nhon Hoa 1 wind power plant -  | 4              | X | 4         | New construction     | X                    |           |                  | X                               | Nhon Hoa 1, 2 Wind Power built and connected; connection solutions approved  |

| No. | Name of transmission line   | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
|     | Krong Buk - Pleiku 2  |                |   |           |                      |                      |           |                  |                                 | under Official Letter 911/TTg-CN dated 15 July 2020. As soon as 500 kV Nhon Hoa Substation enters into operation, Nhon Hoa 1 and 2 Wind Power will be connected to 500 kV Nhon Hoa Substation, disconnected on both circuits and allow 220 kV Kron Buk - Pleiku 2 transmission line to be restored in accordance with Official Letter 323/TTg-CN dated 17 March 2021 and Official Letter 1301/BCT-DL dated 11 March 2021. |
| 19  | Ia Pet Dak Doa wind power plant - Pleiku 3                        | 2              | X | 23        | New construction     | X                    |           |                  | X                               | Completed. Synchronization with the Ia Pet - Dak Doa Road, the connection plan was approved according to Official Letter 911/TTg-CN dated 15 July 2020  |
| 20  | Ia Le 1 wind power plant - Krong Buk Turing - Pleiku 2            | 2              | X | 6         | New construction     | X                    |           |                  | X                               | Completed. Synchronization with the Ia Pet - Dak Doa Road, the connection plan was approved according to Official Letter 911/TTg-CN dated 15 July 2020  |
| 21  | Ia Boong wind power plant - Chu Prong-Nhon Hoa 1 wind power plant | 1              | X | 8         | New construction     |                      | X         |                  | X                               | Synchronization of Ia Boong - Chu Prong Wind power Plant has been achieved. Location and adjusted connection plan of Ia Boong - Chu Prong Wind power Plant proposed in Official Letter 3225/BCT-DL dated 9 June 2022, Official Letter 4776/BCT-DL dated 11 August 2022, Official Letter 6660/BCT-DL dated 26 October 2022 and   |

| No. | Name of transmission line  | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|--|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |  |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
|     |  |                |   |           |                      |                      |           |                  |                                 | Official Letter 835/TTg-CN dated 22 September 2022  |
| 22  | Hung Hai Gia Lai wind power plant - Pleiku 2 - An Khe Hydropower | 2              | X | 14        | New construction     | X                    |           |                  | X                               | Completed. Synchronization with Hung Hai Gia Lai wind power plant, the connection plan was approved according to Official Letter 911/TTg-CN dated 15 July 2020  |
| 23  | Yang Trung wind power plant - Pleiku 2 - An Khe Hydropower Plant | 2              | X | 25        | New construction     | X                    |           |                  | X                               | Completed. Synchronization with Yang Trung Station, replacing the 220 kV line Yang Trung - Pleiku 2 - An Khe approved according to Official Letter 911/TTg-CN dated 15 July 2020. In case Yang Trung is assigned before Hung Hai Gia Lai, it is necessary to synchronously invest in the 220kV line of Yang Trung - Pleiku 2 - An Khe. Hung Hai Gia Lai Station will relay the connection on two circuits of 220 kV transmission line Yang Trung - Pleiku 2 - An Khe. |
| 24  | Krong Buk wind power plant - Krong Buk - Pleiku 2                | 2              | X | 2         | New construction     | X                    |           |                  | X                               | Completed. Synchronization with Krong Buk 1,2 wind power plant, Cu Ne 1,2 wind power plant, the connection plan approved according to Official Letter 911/TTg-CN dated 15 July 2020   |
| 25  | Increasing loading capacity Buon Kuop - Buon Tua Shra -          | 1              | X | 112       | Renovation           | X                    |           |                  | X                               | Release power source capacity   |

| No. | Name of transmission line  | Circuit number | X | kilometer | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|--|----------------|---|-----------|---------------------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |  |                |   |           |                                 | 2023-2025            | 2026-2030 |                  |                                 |   |
|     | Dak Nong 500 kV  |                |   |           |                                 |                      |           |                  |                                 |   |
| 26  | Dak Hoa wind power plant - Buon Kuop - Dak Nong 500 kV station           | 2              | X | 2         | New construction                | X                    |           |                  | X                               | Completed. Connection to Dak Hoa wind power plant, the connection plan has been approved according to Official Letter 911/TTg-CN dated 15 July , 2020 |
| 27  | HBRE An Tho - Tuy Hoa  | 1              | X | 16        | New construction                | X                    |           |                  | X                               | Synchronization with An Tho wind power plant  |
| 28  | Le Thuy - Dong Hoi - Dong Ha   | 4              | X | 2         | New construction                | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources, connecting to Quang Binh 500 kV substation                                     |
| 29  | Phu My 2 - Phu My  | 2              | X | 20        | New construction                |                      | X         |                  | X                               | Synchronization with development progress of dedicated load   |
| 30  | Gia Lai 1 - Pleiku 3   | 2              | X | 20        | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources   |
| 31  | Lines connected offshore wind power plants in Central region             | 60             |   |           | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources   |
| 32  | Provision for generation of 220 kV Renovation and New construction lines | 490            |   |           | New construction and Renovation | X                    | X         | X                | X                               | Reserve for load growth and electricity source development  |

| No.       | Name of transmission line                               | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----------|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|           |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| <b>IV</b> | <b>Southern</b>   |                |   |           |                      |                      |           |                  |                                 |   |
| 1         | Hoa Thang - Phan Thiet Turning - Phan Ri                | 2              | X | 7         | New construction     | X                    |           |                  | X                               | Connect to 220 kV Hoa Thang   |
| 2         | LNG Hiep Phuoc Phase I - Phu My - Can Duoc              | 4              | X | 3         | New construction     |                      | X         |                  | X                               | Synchronization with LNG Hiep Phuoc Phase I   |
| 3         | Ben Tre - Binh Dai                                      | 2              | X | 50        | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources   |
| 4         | Thanh Phu – Turning Hai Phong wind power plant - Mo Cay | 4              | X | 3         | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources. In case the Hai Phong transmission line is behind schedule, it is necessary to build in advance the 220 kV Thanh Phu - Mo Cay dual circuit transmission line to synchronize the Thanh Phu 220 kV station, the Hai Phong wind power plant connects to the Thanh Phu 220 kV station via the 220 kV dual circuit. |
| 5         | Tra Vinh 3 - 500 kV Coastal                             | 2              | X | 3         | New construction     |                      | X         |                  | X                               | Synchronization with Tra Vinh 3 220kV station   |
| 6         | Ca Mau 3 - Ca Mau - Nam Can                             | 2              | X | 26        | New construction     |                      | X         |                  | X                               | Synchronization with Ca Mau 3 220kV station   |
| 7         | Duc Trong wind power plant - Da Nhim Turning- Duc Trong | 2              | X | 1         | New construction     |                      | X         |                  | X                               | Synchronization with Duc Trong wind power plant. Location and adjusted connection plan of Duc Trong Wind power Plant proposed in Official Letter 3225/BCT-DL dated 9 June   |

| No. | Name of transmission line                                     | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
|     |   |                |   |           |                      |                      |           |                  |                                 | 2022, Official Letter 4777/BCT-DL dated 11 August 2022, Official Letter 6660/BCT-DL dated 26 October 2022 and Official Letter 835/TTg-CN dated 22 September 2022. Operates synchronously with the 220 kV transmission line at Da Nhim - Duc Trong - Di Linh circuit breaker station. |
| 8   | Phuoc Huu wind power plant - 220 kV Ninh Phuoc                | 1              | X | 2         | New construction     | X                    |           |                  | X                               | Connect to Phuoc Huu wind power plant, replacing the 110 kV transmission line Phuoc Huu - 110 kV Ninh Phuoc electricity line, approved in Decision 3768/QD-BCT dated 27 July 2011. The 220 kV voltage booster station at Phuoc Huu plant has a capacity of 63 MVA                    |
| 9   | Ninh Thuan No.5 wind power plant - Ninh Phuoc                 | 2              | X | 2         | New construction     | X                    |           |                  | X                               | Completed. Synchronization with Ninh Thuan No.5 wind power plant   |
| 10  | Lac Hoa 2 wind power plant - Hoa Dong 21 wind power plant     | 1              | X | 6         | New construction     | X                    |           |                  | X                               | Release local electricity sources, the connection plan was approved in Official Letter 911/TTg-CN dated 24 June 2020   |
| 11  | Bac Lieu Stage 3 - Bac Lieu                                   | 2              | X | 18        | New construction     | X                    |           |                  | X                               | Synchronization with Bac Lieu Phase 3, the connection plan was approved in Decision 209/QD-TTg dated 9 February 2018   |
| 12  | Hoa Binh transition connection on the 220 kV connected to Hoa | 4              | X | 5         | New construction     | X                    |           |                  | X                               | Connection station 220 kV Hoa Binh (Bac Lieu province). Release local electricity sources  |

| No. | Name of transmission line   | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note   |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|--|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |  |
|     | Binh 5 wind power plant   |                |   |           |                      |                      |           |                  |                                 |  |
| 13  | Vien An wind power plant- Nam Can                                       | 1              | X | 20        | New construction     | X                    |           |                  | X                               | Proposal for connection to 110 kV (Official Letter 3487/UBND-KT dated 16 May 2023 of Ca Mau Provincial People's Committee)   |
| 14  | Ca Mau 1 wind power cluster - Ca Mau                                    | 2              | X | 52        | New construction     | X                    |           |                  | X                               | Synchronization with Ca Mau 1 wind power cluster   |
| 15  | Long My 1 wind power plant - Ca Mau thermal power plant turning - O Mon | 2              | X | 1         | New construction     | X                    |           |                  | X                               | Synchronization with Long My 1 plant   |
| 16  | Ben Tre No.19 wind power plant - Binh Dai                               | 2              | X | 12        | New construction     | X                    |           |                  | X                               | New construction, synchronization with Ben Tre No.19 wind power plant, releasing the capacity of Ben Tre No.19 wind power plant, Ben Tre No.20 wind power plant. Actual length is about 0.03km. Solutions under Document No. 911/TTg-CN revised, replacing 220 kV Ben Tre Wind Power No. 19 - Ben Tre transmission line of approximately 50 km in length due to difficulty expanding feeder bays in 220 kV Ben Tre Substation. |
| 17  | Hai Phong wind power plant - Mo Cay                                     | 2              | X | 50        | New construction     | X                    |           |                  | X                               | Synchronization with Hai Phong wind power plant, the connection plan was approved in Official Letter 911/TTg- CN dated 15 July 2020  |

| No. | Name of transmission line                                   | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| 18  | Dong Hai 1 solar power - Central South Tra Vinh solar power | 1              | X | 7         | New construction     | X                    |           |                  | X                               | Completed. Synchronized with Dong Hai 1, the connection plan was approved Official Letter 911/TTg-CN dated 24 June 2020   |
| 19  | Dong Thanh 1 wind power plant- 500 kV Duyen Hai station     | 2              | X | 4         | New construction     | X                    |           |                  | X                               | Synchronization with Dong Thanh 1 transmission line, release capacity of Dong Thanh 1 and Dong Thanh 2 transmission lines. Adjust plan compared to Document 911/TTg-CN, replace 220 kV transmission line Dong Thanh 1 - Dong Hai 1 - 500 transmission line kV Duyen Hai to avoid overloading the 220 kV transmission line Dong Hai 1 - Trung Nam Tra Vinh - 500 kV Duyen Hai transmission line. |
| 20  | Thang Long wind power plant - 220 kV Duyen Hai              | 1              | X | 12        | New construction     | X                    |           |                  | X                               | Synchronization with Thang Long plant, the connection plan was approved in Official Letter 911/TTg-CN on 24 June 2020   |
| 21  | Soc Trang 4 wind power plant - Vinh Chau                    | 2              | X | 5         | New construction     | X                    |           |                  | X                               | Synchronization with Soc Trang plant, the connection plan was approved in Official Letter 911/TTg-CN on 24 June 2020  |
| 22  | Phu Cuong 1A, 1B wind power plant - Vinh Chau               | 2              | X | 22        | New construction     | X                    |           |                  | X                               | Synchronization with Phu Cuong 1A, 1B plant, the connection plan was approved in Official Letter 911/TTg-CN on 24 June 2020   |
| 23  | Ta Nang - Duc Trong - Di Linh (circuit New construction)    | 2              | X | 20        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources   |

| No. | Name of transmission line                                   | Circuit number | X | kilometer | Type of construction | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|---|----------------|---|-----------|----------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |   |                |   |           |                      | 2023-2025            | 2026-2030 |                  |                                 |   |
| 24  | Dong Quan The - Vinh Tan - Quan The 220kV switching station | 2              | X | 1         | New construction     |                      | X         |                  | X                               | Synchronization with development progress of dedicated load           |
| 25  | Dong Quan The - Ca Na                                       | 1              | X | 7         | New construction     |                      | X         |                  | X                               | Synchronization with development progress of dedicated load           |
| 26  | Hong Phong - Phan Thiet - Phan Ri                           | 2              | X | 1         | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 27  | Ham Cuong - Ham Thuan Nam                                   | 2              | X | 7         | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 28  | Binh Thuan 1 Wind power plant - Vinh Tan - Phan Thiet       | 2              | X | 4         | New construction     | X                    |           |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 29  | Dong Binh Phuoc - Binh Long - Aluminum electrolysis         | 4              | X | 12        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 30  | Tan Chau 1 - Tan Bien                                       | 2              | X | 16        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 31  | Dong Nai 3 - Tan Uyen                                       | 2              | X | 55        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 32  | Bac Lieu 3 - 500 kV Bac Lieu                                | 2              | X | 30        | New construction     |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources |

| No. | Name of transmission line                                      | Circuit number | X | kilometer | Type of construction            | Operational progress |           | State investment | Consideration for socialization | Note  |
|-----|--|----------------|---|-----------|---------------------------------|----------------------|-----------|------------------|---------------------------------|---|
|     |  |                |   |           |                                 | 2023-2025            | 2026-2030 |                  |                                 |   |
| 33  | Bac Lieu 4 - 500 kV Bac Lieu                                   | 2              | X | 10        | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 34  | Tran De - 500 kV Long Phu                                      | 2              | X | 24        | New construction                |                      | X         |                  | X                               | Synchronization with the scale and progress of regional power sources |
| 35  | Backup for newly constructed and Renovation 220 kV substations | 430            |   |           | New construction and Renovation | X                    | X         | X                | X                               | Reserve for load growth and electricity source development            |

**Note:**

*1. In terms of transformer stations*

*- The list of transformer stations does not include step-up transformer stations of power source projects. As for offshore wind power sources, step-up stations are still included in the list of 500 kV transformer stations to facilitate the agreement on land fund for station placement, but are not counted in the total construction volume and investment capital in power grid projects. The capacity in the tables above is the total capacity of the station's transformers. During the implementation of each phase, the scale of the transformer station will be selected to suit the load needs and power source capacity release.*

*- In case there is a sudden increase in load in some areas, leading to the need to change or add the scale and network of lines and stations, it is required to report to and obtain approval of the Prime Minister.*

*2. In terms of transmission line*

*- Line length will be accurate during the investment preparation phase.*

*- In case there is a sudden increase in load in some areas, leading to the need to change or add the scale and network of lines and stations, it is required to report to and obtain approval of the Prime Minister.*

*3. With respect to renewable energy projects that have not been approved in the list of power source projects in Decision 262, the synchronous power grid connecting these projects will be reviewed and accurately prepared in the next additional approvals.*