

**GOVERNMENT OF PUERTO RICO  
PUBLIC SERVICE REGULATORY BOARD  
PUERTO RICO ENERGY BUREAU**

**IN RE: REVIEW OF THE PUERTO RICO  
ELECTRIC POWER AUTHORITY'S 10-YEAR  
INFRASTRUCTURE PLAN – DECEMBER 2020**

**CASE NO.: NEPR-MI-2021-0002**

**SUBJECT: Motion in Compliance with  
Resolution and Order Entered on April 22,  
2021.**

**RESOLUTION AND ORDER**

**I. Introduction**

On March 19, 2021, the Puerto Rico Electric Power Authority (“PREPA”) filed before the Energy Bureau of the Puerto Rico Public Service Regulatory Board (“Energy Bureau”) a document titled *Motion Submitting March 2021 Revised 10-Year Infrastructure Plan* (“March 19 Motion”). Through the March 19 Motion, PREPA included an updated version of its 10-year plan (“March 2021 Revised 10-Year Plan”).

On March 26, 2021, the Energy Bureau issued a Resolution and Order (“March 26 Resolution”) in the instant case through which it ordered PREPA to, among other things, provide certain information related to the different projects under the categories of Transmission Lines, Substations, and Distribution System projects included in the PREPA 10-Year Infrastructure Plan.<sup>1</sup> To avoid potential noncompliance with the Approved Integrated Resource Plan (“IRP”) and Modified Action Plan, the Energy Bureau ordered PREPA to submit each specific capital investment project for approval.<sup>2</sup> To streamline the process, the Energy Bureau requested PREPA to submit the **specific projects** to the Energy Bureau at least thirty (30) calendar days before their submittal to the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency (“COR3”) and the Federal Emergency Management Agency (“FEMA”).<sup>3</sup> The Energy Bureau ordered PREPA to submit, within five (5) days from the notification of the March 26 Resolution, any specific transmission line, transmission substation, and distribution substation projects it had submitted to FEMA for its evaluation and approval.<sup>4</sup>

<sup>1</sup> PREPA’s Revised 10 - Year Plan Evaluation, Case No. NEPR-MI-2021-0002, Resolution and Order, March 26, 2021 (“March 26 Resolution”).

<sup>2</sup> See In Re: Review of the Integrated Resources Plan of the Puerto Rico Electric Power Authority, Case No. CEPR-AP-2018-0001, Final Resolution and Order, August 24, 2020 (“August 24 Resolution”).

<sup>3</sup> March 26 Resolution, pp. 14-15.

<sup>4</sup> *Id.*



M

On April 14, 2021, PREPA filed a document titled *Motion in Compliance with the Resolution and Order Entered on March 26, 2021* (“April 14 Motion”), which included a list of projects under the categories of transmission, distribution, and substations. PREPA stated that, as Exhibit A of the April 14 Motion, it submitted the list of projects to the Energy Bureau at least thirty (30) calendar days before their submittal to COR3 and/or FEMA, in alignment with the March 26 Resolution.<sup>5</sup> Furthermore, PREPA stated that the list of projects are a subset of near-term projects further prioritized to represent the most critical set of transmission, distribution, and substation projects required to address current asset deficiencies, improve system reliability and resiliency, and lay the foundation for expanded renewable integration.<sup>6</sup>

Jm

On April 22, 2021, the Energy Bureau issued a Resolution and Order (“April 22 Resolution”) through which it determined that additional information was required for the Energy Bureau to make a thorough evaluation of the projects submitted as part of the April 14 Motion and to evaluate PREPA’s compliance with the March 26 Resolution. The Energy Bureau ordered PREPA to provide detailed information: (i) on or before April 28, 2021, for each project already submitted to COR3 and/or FEMA; and (ii) on or before May 21, 2021, for each project in the April 14 Motion that will be submitted to COR3 and/or FEMA under the different project categories. The Energy Bureau also ordered PREPA to include a list of all the substations to be relocated to mitigate possible future flooding damages.

JAA

Wes

↑

On April 28, 2021, PREPA filed before the Energy Bureau a document titled *Motion in Compliance with the Resolution and Order entered on April 22, 2021* (“April 28 Motion”). Through the April 28 Motion, PREPA states it submitted, as Exhibit A, the documents provided to COR3 and FEMA, which contain the information requested by the Energy Bureau.

## II. Evaluation of PREPA’s April 28 Motion

Through the April 28 Motion, PREPA submitted forty-six (46) Project Scopes of Work and Cost Estimates, which contemplates sixty-seven (67) projects. Of these sixty-seven (67) projects: (i) sixty-four (64) projects are contemplated in the March 2021 Revised 10-Year Plan; (ii) one (1) generation project is not considered in the March 2021 Revised 10-Year Plan since it is already built; and (iii) two (2) projects were eliminated<sup>7</sup> from the March 2021 Revised 10-Year Plan. Several of the projects PREPA submitted contain additional projects within the main scope of work, such as projects related to transmission and distribution. Further, as part of the scope of work, PREPA included a Class 5 Cost Estimate for each project, which details materials, construction, labor and equipment, engineering, permitting, management, and contingencies. As explained in the scopes of work, said cost estimate is between -50% to +100% of the final project cost.

<sup>5</sup> April 14 Motion, pp. 1-2.

<sup>6</sup> *Id.*, p. 2.

<sup>7</sup> Therefore, these two (2) projects, 169503 Substations - Ceiba Baja TRF 7012 and 179988 Las Lomas - XFMER-1525, were not evaluated by the Energy Bureau.



Based on the information provided by PREPA, the scope of the projects is for the repair and replacement of existing infrastructure to comply with consensus-based codes and standards. Upon review of the April 28 Motion, the Energy Bureau **DETERMINES** that most of the projects presented are necessary to improve the reliability of the system. Therefore, the Energy Bureau **APPROVES** the projects included in Attachment A to this Resolution and Order, subject to the directives for specific projects included therein. The Energy Bureau notes that this approval represents \$1,149.01 MM based on the Class 5 Cost Estimates submitted by PREPA through the March 2021 Revised 10-Year Plan.

### III. Conclusion

The Energy Bureau **APPROVES** the projects included as part of the **Attachment A** to this Resolution and Order and be presented to FEMA and COR3 to finalize its approval process. These projects were approved based on the information provided by PREPA, should the scope of the project changes, PREPA or LUMA<sup>8</sup> **SHALL** immediately seek the Energy Bureau's approval of such changes.

The Energy Bureau **ORDERS** PREPA to (i) submit to the Energy Bureau copy of the approval by COR3 and/or FEMA of the projects in Attachment A, which shall contain the costs obligated for each project, **within ten (10) days of receipt of such approval**; (ii) provide the Energy Bureau the actual contracted cost for construction of each project approved in the Attachment A, **within ten (10) days from the execution of the contract**; and (iii) inform the Energy Bureau once the projects are completed.

The Energy Bureau **ORDERS** LUMA to, **within five (5) days of the notifications of this Resolution and Order**, file a list of the remaining projects requiring Energy Bureau approval, that will be submitted to FEMA and/or COR3 in the future.

The directive instated in the March 26 Resolution related to the submission of projects before the Energy Bureau at least thirty (30) calendar days prior to submitting such projects to FEMA and/or COR3, remains unaltered and applies equally to LUMA.

Be it notified and published.

  
Edison Avilés Deliz  
Chairman

  
Ángel R. Rivera de la Cruz  
Associate Commissioner

  
Lillian Mateo Santos  
Associate Commissioner

<sup>8</sup> LUMA Energy, LLC., and LUMA Energy ServCo, LLC (collectively, "LUMA").



*Handwritten notes in blue ink:*  
- Top left: A signature.  
- Middle left: "from AA" with a checkmark.  
- Bottom left: A large number "4".

  
Ferdinand A. Ramos Soegaard  
Associate Commissioner

  
Sylvia B. Ugarte Araujo  
Associate Commissioner

**CERTIFICATION**

I hereby certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on June 8, 2021. I also certify that on June 8, 2021 a copy of this Resolution and Order was notified by electronic mail to the following: mvazquez@diazvaz.law, kbolanos@diazvaz.law, mario.hurtado@lumamc.com; wayne.stensby@lumamc.com; Ashley.engbloom@lumamc.com; Legal@lumamc.com. I also certify that today, June 8, 2021, I have proceeded with the filing of the Resolution and Order issued by the Puerto Rico Energy Bureau.

For the record, I sign this in San Juan, Puerto Rico, today June 8, 2021.

  
Sonia Seda Gaztambide  
Clerk



**Attachment A  
Projects Approved by the Energy Bureau**

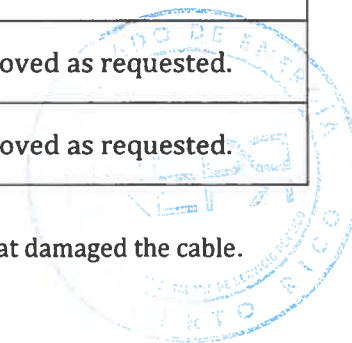
	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
<b>Transmission Lines 230 kV &amp; 115 kV</b>				
1	Existing 115 kV - Line 36100 Dos Bocas- Monacillos TC	167446 FAASt - Line 36100 Dos Bocas HP to Monacillo TC	\$ 115.49	Approved as requested.
2	Existing 115 kV -Line 37100 Costa Sur to Acacia	167168 FAASt Transmission - line 37100 Costa Sur ST to Acacias TC	\$ 91.90	Approved as requested.
3	Existing 115 kV Line-36400 Dos Bocas to Ponce	168483 Transmission - Line 36400 Dos Bocas HP to Ponce TC	\$ 87.44	Approved as requested.
4	Existing 230 kV-Line 50100 Cambalache to Manati	167508 FAASt Transmission - Line 50100 Cambalache GP TC to Manati TC	\$ 43.47	Approved as requested.
5	Existing 115 kV-Line 36200 Monacillos to Juncos	167443 FAASt - Line 36200 Monacillo TC to Juncos TC	\$ 42.74	Approved as requested.
6	Existing 115 kV-Line 37800 Jobos to Cayey	166860 FAASt Transmission - Line 37800 Jobos TC to Cayey, Line 37800 Cayey TC to Caguas TC	\$ 26.87	Approved as requested.
7	Existing 115 kV-Line 37800 Cayey to Caguas		\$ 25.13	Approved as requested.
8	Existing 230 kV-Line 51300 Ponce to Costa Sur	166707 FAASt Transmission - Line 51300 Ponce TC to Costa Sur SP TC	\$ 26.08	Approved as requested.
9	Existing 115 kV-Line 37800 Caguas to Buen Pastor	166904 FAASt Transmission Line 37800 Caguas TC to Monacillo TC	\$ 22.37	Approved as requested.
10	Existing 115 kV-Line 37800 Buen Pastor to Monacillos		\$ 11.03	Approved as requested.

<sup>9</sup> The Class 5 Costs Estimate considered are based on the information provided in the March 2021 Revised 10-Year Plan.

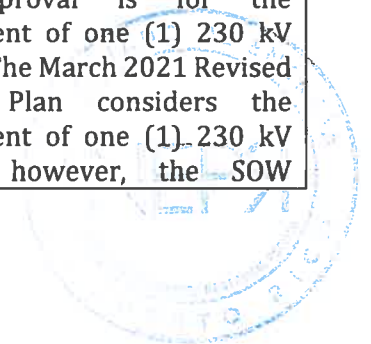


	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
11	San Juan 115-Underground Transmission Loop <sup>10</sup>	168226 Transmission - San Juan Underground Loop	\$ 10.00	Approved as requested.
12	Existing 115 kV – Line 36800 Canóvanas to Palmer Fajardo	180326 FAASt Sabana Llana - Canóvanas-Palmer-Fajardo Line 36800 Transmission	\$ 55.26	Approved as requested.
13	Existing 115 kV - Line 36800 Canóvanas to Sabana Llana		\$ 15.05	Approved as requested.
14	Existing 115 kV - Line 39000 Aguas Buenas to Caguas	177191 FAASt Aguas Buenas TC to Caguas TC - 39000 Transmission	\$ 9.70	Approved as requested.
15	Existing 115 kV - Line 40100 Aguirre to Jobos	166834 FAASt Transmission - Line 40100 & 40200 Aguirre SP TC to Jobos TC	\$ 15.98	Approved as requested
16	Existing 115 kV - Line 40200 Aguirre to Jobos		\$ 15.98	Approved as requested
<b>Transmission Lines 38 kV</b>				
17	Existing 38 kV-Line 100 Ponce TC to Jobos TC	189952FAASt Ponce TC to Jobos TC Line 100 & 200 Transmission	\$ 85.86	Approved as requested.
18	Existing 38 kV-Line 200 Ponce TC to Jobos TC		\$ 70.69	Approved as requested.
19	Existing 38 kV-Line 5400 Rio Blanco HP to Daguao TC (Includes overhead sections in Vieques & Culebra)	165213 Transmission - Line 5400 – Rio Blanco HP to Daguao TC to Punta Lima TO to Vieques 2501 to Culebra 3801	\$ 73.06	Approved as requested.
20	Existing 38 kV-Line 4100 Guaraguao TC to Comerío TC	177134 FAASt Guaraguao TC to Comerío TC Line 4100 Transmission	\$ 25.28	Approved as requested.
21	Existing 38 kV-Line 8200 San Juan SP to Cataño Sect	176971 FAASt San Juan SP to Cataño Sect Line 8200 Transmission	\$ 8.07	Approved as requested.
22	Existing 38 kV-Line 9500 Palo Seco SP to Cataño Sect	176913 FAASt Palo Seco SP to Cataño Sect Line 9500 Transmission	\$ 6.71	Approved as requested.

<sup>10</sup> PREPA intends to offset the total cost of the project by approximately \$2M received from the settlement with the contractor that damaged the cable.



	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
23	Existing 38 kV-Line 1100 Garzas 1 HP to Garzas 2 HP	176954 FAASt Garzas 1 HP to Garzas 2 HP Line 1100 Transmission	\$ 3.58	Approved as requested.
<b>Distribution Feeders</b>				
24	Distribution Feeders Short Term Group Tier 1-Carolina Region (15 distribution feeders) Vieques Feeders 2501-01, 2501-02, 2501-03 and Culebra Feeders 3801-01, 3801-02	165226 Distribution-Vieques Feeders 2501-01, 2501-02, 2501-03 and Culebra Feeders 3801-01, 3801-02	\$ 28.81	Approved as requested.
<b>Transmission Substations</b>				
25	Aguirre BKRS 230kV	178503 Aguirre TC BKRS	\$ 2.30	This approval is for the replacement of four (4) 230 kV breakers. The March 2021 Revised 10-Year Plan considers the replacement of four (4) 230 kV breakers, however, the SOW document considers nine (9) 230 kV and eleven (11) 115 kV breakers.
26	Costa Sur BKRS 230kV	169896 Substations - Costa Sur SP TC Equipment Repair-Replacement	\$ 2.30	Approved as requested.
27	Costa Sur BKRS 115kV		\$ 1.40	Approved as requested.
28	Bayamón TC BKRS 230kV	<b>169500 Substations Bayamón TC MC (1711) - BKRS-Y1</b>	\$ 1.30	Approved as requested.
29	Manatí TC BKR 230kV	179558 FAASt Manati TC - BKRS 230 kV Substations	\$ 0.67	This approval is for the replacement of one (1) 230 kV breaker. The March 2021 Revised 10-Year Plan considers the replacement of one (1) 230 kV breaker, however, the SOW



	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
				document considers three (3) 230 kV breakers.
<b>Distribution Substations</b>				
30	Tapia GIS (1102) Rebuilt	169495 Substations – Tapia GIS (1102) Rebuilt – Equip Repair & Replacement	\$ 23.00	Approved as requested.
31	Centro Médico 1 & 2 1327 & 1359	169266 Substations – Centro Médico 1327 – 1359 Equipment Repair & Replacement	\$ 11.80	Approved as requested.
32	Cataño Modernization and Hardening Project (1801 & Sectionalizer)	174422 Cataño Rebuilt 1801 & Sectionalizer	\$ 11.00	Approved as requested.
33	Bayamón TC – MC – 1711	<b>169500 Substations Bayamón TC MC (1711) – BKRS-Y1</b>	\$ 4.00	Approved as requested.
34	Cachete – MC- 1526	178577 Cachete MC 1526	\$ 4.00	Approved as requested.
35	Caridad – MC -1714	171118 FAASt Caridad – XFMR MC 1714 Substation	\$ 4.00	Approved as requested.
36	Llorens Torres – MC -1106	169058 Substations – Llorens Torres MC 1106 – Equipment Repair & Replacement	\$ 4.00	Approved as requested.
37	Taft – MC -1105	178258 Taft MC 1105	\$ 4.00	Approved as requested.
38	Viaducto TC -MC – 1100	169276 FAASt Viaducto TC MC 1100 Equip Repair & Replacement	\$ 4.00	Approved as requested.
39	Río Grande Estates – CH -2306	165268 Substations -Río Grande States CH – 2306	\$ 3.50	Approved as requested.
40	Vieques SUB 2501	165225 Substations – Vieques SUB 2501	\$ 2.30	Approved as requested.





	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
41	Culebra SUB 3801	165209 Substations – Culebra SUB 3801	\$ 1.20	Approved as requested.
<b>Generation</b>				
42	New Black Start System at Aguirre <sup>11</sup>	164966 Generation Aguirre Black Start	\$ 45.20	The Energy Bureau approves the project conditioned to the extent that PREPA acquires the Black Start units for Aguirre and Costa Sur power plants as part of the approved 81 MW of gas fired peakers that form part of the Approved IRP and Modified Action Plan, as determined in the March 26 Resolution in the instant case.
43	New Black Start System at Costa Sur <sup>12</sup>	164988 Generation Costa Sur Black Start	\$ 45.20	The Energy Bureau approves the project conditioned to the extent that PREPA acquires the Black Start units for Aguirre and Costa Sur power plants as part of the approved 81 MW of gas fired peakers that form part of the Approved IRP and Modified Action Plan, as determined in the

<sup>11</sup> Cost estimates shall be adjusted once revised the final scope of work to adjust to total KW capacity.

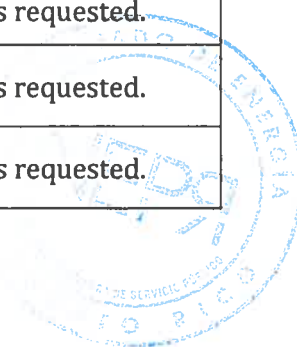
<sup>12</sup> Cost estimates shall be adjusted once revised the final scope of work to adjust to total KW capacity.



	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
				March 26 Resolution in the instant case.
44	Cambalache Dike	169340 FAASt Cambalache Power Plant – Flood Protection Barrier – Generation	\$ 4.00	Approved as requested.
45	This Project is not included in the March 2021 Revised 10-Year Plan	180692 Mobile Generation Units Purchases	\$ 59.80	The Energy Bureau approves this project since the generators are already purchased and installed per the contract. Further the project was contemplated as a fixed decision in the Approved IRP.
<b>Dams/Hydro</b>				
46	Caonilla 1 (Hydro Power Plant)	178722 FAASt Caonilla 1 Hydro System	\$ 1.65	Approved as requested.
47	Caonillas Reservoir (The Plan Considers this project in the Mid Term)		\$ 41.74	Approved as requested.
48	Caonillas Dam (The Plan Considers this project in the Mid Term)		\$ 0.19	Approved as requested.
49	Río Blanco Hydroelectric System Connection (Pipeline between the Cubuy and Sabana diversion dams)	180723 Rio Blanco Hydroelectric System	\$ 19.84	Approved as requested.
50	Río Blanco (Hydroelectric Power Plant)		\$ 0.08	
51	Icacos Dam		\$ 0.01	
52	Río Blanco Penstock		TBD	



	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
<b>Buildings</b>				
53	Arecibo Regional Building	169576 Buildings - Arecibo Regional Office Building	\$ 1.80	Approved as requested.
54	Arecibo ESC	169798 Buildings - Arecibo Electric Service Center	\$ 2.31	Approved as requested.
55	Aguadilla ESC	169804 Buildings - Aguadilla Electric Service Center	\$ 2.50	Approved as requested.
<b>Environmental</b>				
56	Transmission Line 51000 Access Road FFF, R, U, PPP, K, II, LL, MM, GGG, JJJ, 000	165208 Transmission - Access Roads	\$ 3.40	Approved as requested.
57	Transmission Line 37400 Segments A, D, H & Transmission Line 37400 Dorado-Vega Baja Segments C, D		\$ 3.25	Approved as requested.
58	Transmission Line 36100, 37500 Segment A, B		\$ 3.06	Approved as requested.
59	Transmission Line 36200 Segment CC and Transmission Line 36200 El Yunque Segments NN, Q, R, Y. Staging Area 11-Naguabo		\$ 1.79	Approved as requested.
60	Transmission Line 36300 Segments HH, D, AAA, A, F, H		\$ 1.50	Approved as requested.
61	Transmission Line 40300 Segment C		\$ 0.90	Approved as requested.
62	Transmission Line 50700 Access Roads E, Z, B		\$ 0.72	Approved as requested.
63	Transmission Line 38900 Martin Peña- Berwind Access Road		\$ 0.31	Approved as requested.
64	Transmission Line 37800 Cobra Tracks Access Road Segments N, A		\$ 0.16	Approved as requested.



	<b>10-Year Infrastructure Plan (March 19, 2021) - Project Name</b>	<b>SOW &amp; Cost Estimate Document (April 28, 2021) - Project Name</b>	<b>Class 5 Costs Estimate (\$M)<sup>9</sup></b>	<b>Comments</b>
65	Whitefish Staging Area Aguirre Power Plant		\$ 0.04	Approved as requested.
<b>TOTAL</b>			<b>\$ 1,240.77</b>	

