

FNM Scope for FNM 21M3 DB103
(Production Week of 3/15/2021)

Revision History – Final Scope Due by 1/7/2021

Effective Date	Version	Description
1/7/2021	1.0	Final scope by due date. The scope is considered finalized without any addendum attached.

FNM Scope for FNM 21M3 DB103
(Production Week of 3/15/2021)

I. NRI Projects

No	PTO	Resource ID	Project Name	Project Key
1	PGAE		California Flats Solar Battery	20NGR13920
2	SCE	KRAMER_2_SEGS9	Kramer Junction 9	19GEN9054
3	SCE		Exeter Tulare PV	20GEN14216
4	SCE		Ivanhoe Tulare PV	20GEN14217
5	SCE		Lindsay Tulare PV	20GEN14218
6	SCE		Porterville Tulare PV	20GEN14220
7	SCE		Antelope Solar 2 Luna	20NGR13453
8	SCE		IPP Anaheim Pseudo	20PSEUDO13768
9	SCE		IPP Riverside Pseudo	20PSEUDO13769
10	SCE		IPP-PASA Pseudo	20PSEUDO13814
11	SCE		Milford 1 Pseudo	20PSEUDO13923

FNM Scope for FNM 21M3 DB103
(Production Week of 3/15/2021)

II. Transmission Projects

No	PTO	RIMS ID	Project Name	Project Key
1	PGAE	17TRANS6458	Phelps Solar Generation Interconnection	ET4240
2	PGAE	19TRANS9234	Exchequer-Yosemite 70kV Reliability Project	ET4417
3	PGAE	19TRANS9662	San Francisco A(Potrero) Substation ¿ 230kV Connection to CCSF	ET4175

FNM Scope for FNM 21M3 DB103

(Production Week of 3/15/2021)

III. EIM/ RC Projects

No	Entity	Project Name	Project Key
1	AESO_RC	IRO-010-6.13 GIS substation data for MOWAT, MUIR and MUIT_TAP	20EMS13269
2	AESO_RC	Transmission Line - Added Transmission Line L72DS26_1	20EMS13655
3	AESO_RC	Transmission Line - Deleted Transmission Line ZBR65S_MFG1NTG_Z	20EMS13656
4	AESO_RC	Transmission Line - Updated Transmission Line Impedances for 1239L_10A_1	20EMS13657
5	AESO_RC	Transmission Line - Updated Transmission Line Impedances for 1238L_10A_1	20EMS13658
6	AESO_RC	Transmission Line - Updated Transmission Line Impedances for 737L_1_1	20EMS13659
7	AESO_RC	Transmission Line - Updated Transmission Line Impedances for 738L_01_1	20EMS13660
8	AESO_RC	Transmission Line - Updated Transmission Line Impedances for 738L_03_1	20EMS13661
9	AESO_RC	Breaker(s)\ Disconnect(s) - Updated Breaker at 392S	20EMS13662
10	AESO_RC	Breaker(s)\ Disconnect(s) - Deleted Breakers at 65S	20EMS13663
11	AESO_RC	Breaker(s)\ Disconnect(s) - Deleted Breaker at 359S	20EMS13664
12	AESO_RC	Breaker(s)\ Disconnect(s) - Deleted Breaker at 839S	20EMS13665
13	AESO_RC	Breaker(s)\ Disconnect(s) - Added Breakers at 895S	20EMS13666
14	AESO_RC	Breaker(s)\ Disconnect(s) - Deleted several Disconnectors and added 1 disconnecter at 898S	20EMS13667
15	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 934S	20EMS13668
16	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 939S	20EMS13669
17	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 957S	20EMS13670
18	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 959S	20EMS13671
19	AESO_RC	Breaker(s)\ Disconnect(s) - Added breakers at 95S	20EMS13672
20	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 960S	20EMS13673
21	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 972S	20EMS13674
22	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 977S	20EMS13675
23	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at 9900S	20EMS13676
24	AESO_RC	Breaker(s)\ Disconnect(s) - Deleted 1 breaker and Added several disconnectors at AURORA	20EMS13677
25	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at D05	20EMS13678
26	AESO_RC	Breaker(s)\ Disconnect(s) - Added Breakers at E665S	20EMS13679
27	AESO_RC	Breaker(s)\ Disconnect(s) - Added disconnectors at STRATHCN	20EMS13680

FNM Scope for FNM 21M3 DB103

(Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
28	AESO_RC	Transformer - Added Transformer T3 at E665S	20EMS13681
29	AESO_RC	Transformer - Added Transformer T1, T2 at 95S	20EMS13682
30	AESO_RC	Transformer - Deleted Transformer T_1 at 65S	20EMS13683
31	AESO_RC	Substation\Load - Added Load LD4765T at 214S	20EMS13684
32	AESO_RC	Substation\Load - Added, Deleted several loads at 95S	20EMS13685
33	AESO_RC	Substation\Load - Deleted load LD_188X at 895S	20EMS13686
34	AESO_RC	Substation\Load - Deleted load T_2 and T_3 at 65S	20EMS13687
35	AESO_RC	Generator - Added generator SUF1_G1 at 895S	20EMS13688
36	AESO_RC	Generator - added generator IRO4_G1 at 95S	20EMS13689
37	AESO_RC	Generator - Deleted generator MFG1 at 65S	20EMS13690
38	AESO_RC	Generator - Updated Max Operating MW and Rated MVA for several generators	20EMS13691
39	AVA_TOP	- Update	20EMS14663
40	AVA_TOP	Transmission Line - Update	20EMS14664
41	AVA_TOP	Transformer - Update	20EMS14665
42	AVA_TOP	Transmission Line - Update	20EMS14666
43	AVA_TOP	Transmission Line - Update	20EMS14667
44	AVA_TOP	Transformer - Update	20EMS14668
45	AVA_TOP	Generator - Update	20EMS14669
46	AVA_TOP	Generator - Update	20EMS14670
47	AVA_TOP	Transformer - Update	20EMS14671
48	AVA_TOP	Transformer - Update	20EMS14672
49	AVA_TOP	Transmission Line - Update	20EMS14673
50	AVA_TOP	Contingency Definition - Update	20EMS14674
51	AVA_TOP	SADLEMT Project Complete	20EMS14766
52	AVA_TOP	AVA Unit Regulation Desired kV	21EMS14837
53	AVRN_BA	Generator - Due to the de-commissioning of one catastrophically damaged turbine, the nameplate capacity rating of the facility has been reduced from 151.2 to 148.8 MWs	20EMS14658
54	BANC_BA	Breaker(s)\ Disconnect(s) - Changed 3 Breakers to Disconnects.	20EMS14736

FNM Scope for FNM 21M3 DB103

(Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
55	BANC_BA	Breaker(s)\ Disconnect(s) - Added 4 new Disconnectors along with connectivity nodes at STCRUZ substation.	20EMS14737
56	BANC_BA	Generator - Updated MVar Capability curve values and minQ/maxQ values for RP2 Synchronous Machine	20EMS14738
57	BANC_BA	Transformer - Updated normalStep and neutralStep	20EMS14739
58	BANC_BA	Transformer - Updated Transformer impedances	20EMS14740
59	BANC_BA	Transformer - Transformer Name Change	20EMS14741
60	BANC_BA	Breaker(s)\ Disconnect(s) - Updated Equipment Names at WLF and RP2 substations	20EMS14742
61	BANC_BA	Substation\Load - Removed two floating busbars at LVQ and CC1 substations.	20EMS14743
62	BANC_BA	Breaker(s)\ Disconnect(s) - Removed two pseudo breakers along with their busbars used to isolate the station prior to energization.	20EMS14744
63	BANC_BA	Transmission Line - Updated Ratings for this line.	20EMS14745
64	BANC_BA	Shunt Cap\Reactor\ SVDÂ¿s - Removed two series compensators, added two shunt compensators and updated ratings.	20EMS14770
65	BANC_BA	Breaker(s)\ Disconnect(s) - Changed 3 Breakers to Disconnects.	20EMS14771
66	BANC_BA	Breaker(s)\ Disconnect(s) - Added 4 new Disconnectors along with connectivity nodes at STCRUZ substation.	20EMS14772
67	BANC_BA	Generator - Updated MVar Capability curve values and minQ/maxQ values for RP2 Synchronous Machine	20EMS14773
68	BANC_BA	Transformer - Updated normalStep and neutralStep	20EMS14774
69	BANC_BA	Transformer - Updated Transformer impedances	20EMS14775
70	BANC_BA	Transformer - Transformer Name Change	20EMS14776
71	BANC_BA	Breaker(s)\ Disconnect(s) - Updated Equipment Names at WLF and RP2 substations	20EMS14777
72	BANC_BA	Substation\Load - Removed two floating busbars at LVQ and CC1 substations.	20EMS14778
73	BANC_BA	Breaker(s)\ Disconnect(s) - Removed two pseudo breakers along with their busbars used to isolate the station prior to energization.	20EMS14779
74	BANC_BA	Transmission Line - Updated Ratings for this line.	20EMS14780
75	BCHA_RC	Breaker(s)\ Disconnect(s) - Added breaker CB_3CB4	20EMS14708
76	BCHA_RC	Breaker(s)\ Disconnect(s) - Added breaker CB_3CB2	20EMS14709
77	BCHA_RC	Breaker(s)\ Disconnect(s) - Added breaker CB_2CB1	20EMS14710
78	BCHA_RC	Transmission Line - Added Line segment 21393_1	20EMS14711
79	BCHA_RC	Transmission Line - Added Line segment 60L27_2	20EMS14712
80	BCHA_RC	Transmission Line - Added Line segment 60L57_4	20EMS14713

FNM Scope for FNM 21M3 DB103 (Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
81	BCHA_RC	Transmission Line - Added Line segment 60L56_2	20EMS14714
82	BCHA_RC	Substation\Load - Added Substation ZBW	20EMS14715
83	BCHA_RC	Transformer - Added Transformer T1	20EMS14716
84	BCHA_RC	Generator - Added ZBWG2	20EMS14717
85	BCHA_RC	Generator - Added ZBW G1	20EMS14718
86	BCHA_RC	Transmission Line - Added Line 21393	20EMS14719
87	BCHA_RC	N/A - Updated ICCP	20EMS14720
88	BPAT_BA	Breaker(s)\ Disconnect(s) - 500 KV switch MOD_4683 is deleted	20EMS14491
89	BPAT_BA	Breaker(s)\ Disconnect(s) - 500 KV switch MOD_4525 is deleted	20EMS14492
90	BPAT_BA	Breaker(s)\ Disconnect(s) - 500 KV breaker PCB_4684 is deleted	20EMS14493
91	BPAT_BA	Generator - Generation Z1 and Z2 and all 34.5kV devices except 230/34.5kV transformer has been cleaned up at WILLIS due to the move to TUOLUMNE (AVRN) BA.	20EMS14494
92	BPAT_BA	Transmission Line - New 12.5 KV line is added between SANDHILC and HRN_RPDS stations	20EMS14495
93	BPAT_BA	Transformer - New 115/12.5KV transformer 1 is added	20EMS14496
94	BPAT_BA	Generator - A 3.2 MW solar generator was added to enhance a model.	20EMS14497
95	BPAT_BA	Substation\Load - A new 12.5 kV station was added to enhance a model for a small 3MW solar generator that used to be modeled as a load at SANDILC substaion.	20EMS14498
96	BPAT_BA	Contingency Definition - BPA contingency list incremental changes	20EMS14499
97	BPAT_BA	RAS - Change to how PACW's YALE genrators are being tripped due to BPA WS RAS.	20EMS14500
98	BPAT_BA	RAS - Change to how PACW's SWIFT_1 genrators are being tripped due to BPA WS RAS.	20EMS14501
99	BPAT_BA	Substation\Load - New Switches added at new tap station for a future load.	20EMS14569
100	BPAT_BA	Breaker(s)\ Disconnect(s) - DSC 1 renamed to official name 1475.	20EMS14694
101	BPAT_BA	Breaker(s)\ Disconnect(s) - Temporary DSC SHOOFLY was removed.	20EMS14695
102	BPAT_BA	Breaker(s)\ Disconnect(s) - PCB 4526 connection to MOD 4685 was fixed.	20EMS14696
103	BPAT_BA	Contingency Definition -	20EMS14697
104	BPAT_BA	Transmission Line - Split the line "- BRWT_HALL_1115" to "BRWT_SWCK_1115" and "SWCK_HALL_1115" due to Swamp Creek substation rebuild where PCBs were added.	20EMS14767
105	BPAT_BA	Transmission Line - Split the line "SNOK_BEVP_1115" to "SNOK_SWCK_1115" and "SWCK_BEVP_1115" due to Swamp Creek substation rebuild where PCBs were added.	20EMS14768

FNM Scope for FNM 21M3 DB103

(Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
106	BPAT_BA	Breaker(s)\ Disconnect(s) - Removed temporary switch DSC_TEMP1.	20EMS14769
107	BPAT_TOP	Transmission Line - Updating Request Number 6.23	20EMS14489
108	BPAT_TOP	Transmission Line - Updating Request Number 6.23	20EMS14662
109	BPAT_TOP	Generator - Updating Request Number 6.8.1	20EMS14707
110	CEN_BA	ICCP Signals related to topology changes in 230 kV grid -	20EMS14732
111	CEN_BA	Topoly Changes in 230 kV Grid -	20EMS14733
112	IID_TOP	Transmission Line - New rating of 132MVA for RS line from Anza to Seville	20EMS14754
113	IPCO_BA	Address modeling of non-IPCO TOP equipment in IPCO CIM model by assigning a different sub-control area.	20EMS14070
114	IPCO_BA	Breaker(s)\ Disconnect(s) - Removal of 131H Disconnecter	20EMS14679
115	IPCO_BA	Breaker(s)\ Disconnect(s) - Removal of 131L and 132L Disconnecter	20EMS14680
116	IPCO_BA	Breaker(s)\ Disconnect(s) - Removal of CUT1 Temporary Disconnecter	20EMS14681
117	IPCO_BA	Breaker(s)\ Disconnect(s) - Removal of 103Z Breaker	20EMS14682
118	IPCO_BA	Breaker(s)\ Disconnect(s) - Addition of 101B, 101C Disconnecter	20EMS14683
119	IPCO_BA	Breaker(s)\ Disconnect(s) - Addition of 131Z Breaker, 131X Disconnecter	20EMS14684
120	IPCO_BA	Breaker(s)\ Disconnect(s) - Addition of 363 and 362 Breakes and associated disconnectors	20EMS14685
121	IPCO_BA	Transmission Line - ANTICLINE to JBRG Line addition and associated analogs	20EMS14686
122	IPCO_BA	Substation\Load - Load at ANTICLIN	20EMS14687
123	IPCO_BA	Breaker(s)\ Disconnect(s) - Addition of 10B48 10C51 Breakers and Disconnectors	20EMS14688
124	IPCO_BA	- All ICCP Object IDs for IPCO_BA FNM.	20EMS14689
125	IPCO_BA	- CIM export of IPCO_BA FNM.	20EMS14690
126	IPCO_BA	Incremental dynamic data mapping update for IRO-010 Item 6.25	21EMS14840
127	LDWP_BA	Transmission Line - MCC_VIC1 line relocation. VIC Bk K Relocation	20EMS14746
128	LDWP_BA	Substation\Load - Update AIR BK A tap changer	20EMS14747
129	LDWP_BA	Substation\Load - Update NR BK A transformer winding and tap changer	20EMS14748
130	LDWP_BA	Substation\Load - Update impedances and ratings for TAR_OLY_1A and TAR_OLY_1B following cable replacement	20EMS14749
131	LDWP_BA	Substation\Load - CEN Bank F & G replacement	20EMS14750
132	LDWP_BA	Substation\Load - Removed hanging disconnects at HAR_GS	20EMS14751
133	LDWP_BA	Substation\Load - Removed VAL_RIN 1 & 2 double modeling for Reconductor Project	20EMS14752

FNM Scope for FNM 21M3 DB103

(Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
134	LDWP_BA	Substation\Load - Changed existing nodes into BusBar sections	20EMS14753
135	LDWP_BA	Transmission Line - CAISO Model Missing VEL BK G at ladwp side of LAB_VEL tie line with SCE	20EMS14755
136	LDWP_BA	Substation\Load - ICCP Mapping	21EMS14841
137	LDWP_BA	Transmission Line - CAISO Model Missing VEL BK G at ladwp side of LAB_VEL tie line with SCE	21EMS14842
138	LDWP_BA	Transmission Line - MCC_VIC1 line relocation. VIC Bk K Relocation	21EMS14843
139	LDWP_BA	Substation\Load - Update AIR BK A tap changer	21EMS14844
140	LDWP_BA	Substation\Load - Update NR BK A transformer winding and tap changer	21EMS14845
141	LDWP_BA	Substation\Load - Update impedances and ratings for TAR_OLY_1A and TAR_OLY_1B following cable replacement	21EMS14846
142	LDWP_BA	Substation\Load - CEN Bank F & G replacement	21EMS14847
143	LDWP_BA	Substation\Load - Removed hanging disconnects at HAR_GS	21EMS14848
144	LDWP_BA	Substation\Load - Removed VAL_RIN 1 & 2 double modeling for Reconductor Project	21EMS14849
145	LDWP_BA	Substation\Load - Changed existing nodes into BusBar sections	21EMS14850
146	NEVP_TOP	Generator - Added New substation and generator EGLSHMTN with a 300 MW pMAX PV unit as well as associated BREAKER and DISCONNECTS ; Resource ID is EGLSHMTN_2_PV_UNIT	20EMS14721
147	NEVP_TOP	Breaker(s)\ Disconnect(s) - Added temporary _MES switches to facilitate new substation integration	20EMS14722
148	NEVP_TOP	Breaker(s)\ Disconnect(s) - Added temporary _MES switches to facilitate new substation integration	20EMS14723
149	NEVP_TOP	Generator - Due to name change, the generator is now called DLS_IPP_PV and its resource ID has been changed from HAS_2_PV_UNIT to DLS_2_PV_UNIT	20EMS14724
150	NEVP_TOP	Substation\Load - Customer requested a name change, this station was called HA SOLAR but is now back to DRY LAKE	20EMS14725
151	NEVP_TOP	Generator - New generator at BMTSOLAR called BMS_IPP_PV, the Resource ID for this generator is BMTSOLAR_1_PV_UNIT and it has a Pmax of 101 MW	20EMS14726
152	NEVP_TOP	Substation\Load - New substation ; temporary _MES switches to facilitate new substation integration	20EMS14727
153	NEVP_TOP	Substation\Load - New substation ; temporary _MES switches to facilitate new substation integration	20EMS14728
154	NEVP_TOP	Breaker(s)\ Disconnect(s) - Removed 6001DH switch, added 644H and 89-H0 switches	20EMS14729
155	NEVP_TOP	Shoofly Install\ Removal - Added branches for shooflys	20EMS14730
156	NEVP_TOP	Breaker(s)\ Disconnect(s) - Removed and renamed breakers and switches and CAL SUB ; added temporary Model Enable Switches with suffix _MES that will allow us to integrate the shooflys during construction	20EMS14731
157	NVE	Update NEVP H ALLEN phase shifter (HA PS-2, HAPS-3) initial tap position to 24	20EMS14165

FNM Scope for FNM 21M3 DB103

(Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
158	NWMT_TOP	Transmission Line - CIM model update; added solar plants for EIM; updated BES transformer ratings; updated line ratings; rebuilt Helena Valley, Shiloh, Great Falls Southside, Judith Gap Auto, and Montana Street buses; added Custer Auto Tap; swapped East Helena-Lake Helena A and B and East Helena-Custer lines; swapped East Gallatin-Clyde Park A and B lines; removed Colstrip Units 1 and 2 and several switches and breakers at Colstrip; replaced Mill Creek Bank 2; updated BA boundaries; added 69kV Midway substation	20EMS14698
159	NWMT_TOP	Transmission Line - Updated OMS Names to fit 30-character limit.	20EMS14699
160	PAC_TOP	Update Jeffersi PST initial tap position	20EMS14539
161	PAC_TOP	Transmission Lines - Remap COVEO_CULVER_69 measurement	20EMS14582
162	PAC_TOP	Breakers/Disconnects - Remove JP1	20EMS14583
163	PAC_TOP	Breakers/Disconnects - Remove JP	20EMS14584
164	PAC_TOP	Breakers/Disconnects - Remove JP3	20EMS14585
165	PAC_TOP	Breakers/Disconnects - Delete 2U37 and 2U39	20EMS14586
166	PAC_TOP	Substation\Load - CAISO please change BA to PACE	20EMS14587
167	PAC_TOP	Breakers/Disconnects - Remove AS F1109	20EMS14588
168	PAC_TOP	Breakers/Disconnects - Remove 4 devices to 161 50MVAR CAP3 and 4, remove CS 167I	20EMS14589
169	PAC_TOP	Breakers/Disconnects - Add SW E1438	20EMS14590
170	PAC_TOP	Shunt Cap\Reactor\SVDs - Remove 20 MVAR C1 and 2 and their related points	20EMS14591
171	PAC_TOP	Substation\Load - Remove JP1 and MILFORD_MILTVTAP_46 and map measurement on SCHOOTAP_46	20EMS14592
172	PAC_TOP	Substation\Load - Remove JP1 and FRANNIE_YELLOWTA_230 and remap BOWLER_YELLOWTA_230 measurements	20EMS14593
173	PAC_TOP	Breakers/Disconnects - Rename AS H1 to 89H	20EMS14594
174	PAC_TOP	Substation\Load - Remove whole substation	20EMS14595
175	PAC_TOP	Substation\Load - Remove 46kv	20EMS14596
176	PAC_TOP	Substation\Load - Remove 46kv	20EMS14597
177	PAC_TOP	Substation\Load - Remap LD T2 measurements and remove 69KV	20EMS14598
178	PAC_TOP	Transmission Lines - Map AEOLUS_SHIRLEBY_230_1's TO side measurements	20EMS14599
179	PAC_TOP	Breakers/Disconnects - Update 2H382's NORMST to OPEN	20EMS14600
180	PAC_TOP	Substation\Load - Substation rename to LEECREEK and all associate points	20EMS14601
181	PAC_TOP	Breakers/Disconnects - Delete AS E1384	20EMS14602
182	PAC_TOP	Substation\Load - CAISO please change BA to PACE	20EMS14603

FNM Scope for FNM 21M3 DB103 (Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
183	PGE_BA	Substation\Load - Build the new Helvetia 115kV substation	20EMS14702
184	PGE_BA	RAS - RAS screenshot	20EMS14703
185	PGE_BA	- List of ICCP points mapping	20EMS14704
186	PGE_BA	- Model Difference reoport	20EMS14705
187	PGE_BA	- Model Updates for DB103: CIMxml model file	20EMS14706
188	PGE_BA	Increase Pmax of market only resource WELS_2_PGE from 541 MW to 840 MW	20EMS14756
189	PNM_BA	Breaker(s)\ Disconnect(s) - Added a Pseudo switch called EIM switch in serie with the load on JICARILL 345kV bus. This load is is modeled under JANPA 115kV bus bar.	20EMS14605
190	PNM_BA	Generator - In service Date of June 2022(Battery Storage)	20EMS14606
191	PNM_BA	Generator - In service Date of March 2021(SOLAR 2)	20EMS14607
192	PNM_BA	Generator - In service Date of June 2022(SOLAR 1)	20EMS14608
193	PNM_BA	-	20EMS14609
194	PNM_BA	- includes dynamic models for generators	20EMS14610
195	PNM_BA	Breaker(s)\ Disconnect(s) - Update the new contingencies	20EMS14611
196	PNM_BA	Transformer - Includes all ICCP data points associated with the equipments in the submitted CIM model	20EMS14612
197	PNM_BA	Transmission Line - JEC 345kV station also includes two solar generations and one battery storage generation models	20EMS14613
198	PNM_BA	Substation\Load - Brand new Substation added	20EMS14614
199	PNM_BA	Contingency Definition - Added a contingency	20EMS14615
200	PNM_BA	Breaker(s)\ Disconnect(s) - Update the new contingencies	20EMS14616
201	PNM_BA	Transformer - Includes all ICCP data points associated with the equipments in the submitted CIM model	20EMS14617
202	PNM_BA	Transmission Line - Jicarilla 115kV station is expanded and added under JANPA station. Jicarilla load was previoulsy modeled directly attached to Jicarilla 345kV station but now added under Jicarilla 115kV bus under JANPA station	20EMS14618
203	PNM_BA	Substation\Load - Brand New Substation added	20EMS14619
204	PNM_BA	Breaker(s)\ Disconnect(s) - Two pseudo switches are modeled to represent this equivalent unit along with other two LoneMesa 1 and 2 units . LoneMesa 1 and LoneMesa 2 will be removed in the next model update.	20EMS14620
205	PNM_BA	Generator - LoneMesa is modeled as a single unit to replace existing two units: LoneMesa 1 and LoneMesa 2	20EMS14621
206	PNM_BA	RAS - A list of the points associated with updated PNM Eastern New Mexico RAS scheme.	20EMS14678
207	PSEI_BA	Transmission Line - It appears the GUI name is incorrect on this segment.	20EMS14657
208	PSEI_BA	- ICCP list	20EMS14675

FNM Scope for FNM 21M3 DB103 (Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
209	PSEI_BA	- full CIM model	20EMS14676
210	SMUD	SPG_SM	20EMS14565
211	SNPD_TOP	Shoofly Install\ Removal - Installation of a shoo-fly at Lake Chaplain	20EMS14604
212	SNPD_TOP	Transmission Line - Update the ratings of the Swamp Creek - Beverly Park 115kV line.	20EMS14802
213	SPP_RC	SPP July 2020 CIM Network Model and ICCP	20EMS13295
214	SRP_BA	Substation\Load - Added common names of BusbarSections	20EMS14624
215	SRP_BA	Breaker(s)\ Disconnect(s) - Added disconnect switch for future connection	20EMS14625
216	SRP_BA	Substation\Load - Updated 34kV bus voltage limits	20EMS14626
217	SRP_BA	Breaker(s)\ Disconnect(s) - Updated device type from breaker to switch for DFK 34 1.	20EMS14627
218	SRP_BA	Contingency Definition - Removed contingency definition of Pinal Central-Randolph line	20EMS14628
219	SRP_BA	Contingency Definition - Added bus contingency definition	20EMS14629
220	SRP_BA	Contingency Definition - Added contingency definitions for new Vah_ki-PinalCentral and Vah_Ki-Randolph lines	20EMS14630
221	SRP_BA	Generator - Updated PT location to correct generator bus voltage measurement of Santan 5B unit	20EMS14631
222	SRP_BA	Substation\Load - Updated PT location to correct bus voltage measurement of Unified 69kV bus	20EMS14632
223	SRP_BA	Shunt Cap\Reactor\ SVD \hat{A}_s - Updated branch type of series reactors on Paloverde-Hassayampa 500kV lines	20EMS14633
224	SRP_BA	Breaker(s)\ Disconnect(s) - Added disconnect switches for station service	20EMS14634
225	SRP_BA	Substation\Load - Updated PT location to correct bus voltage measurement of VKI230 south bus	20EMS14635
226	SRP_BA	Transmission Line - Updated termination of Orme-Kay 69kv line	20EMS14636
227	SRP_BA	Transformer - Updated termination of Bank 3 transformer	20EMS14637
228	SRP_BA	Breaker(s)\ Disconnect(s) - Added breakers and switches on 69kV bus	20EMS14638
229	SRP_BA	Substation\Load - Added new Perales 69kV substation	20EMS14639
230	SRP_BA	Transmission Line - Removed Howard-35E3S Tap 69kV line	20EMS14640
231	SRP_BA	Breaker(s)\ Disconnect(s) - Removed a temporary switch	20EMS14641
232	SRP_BA	Breaker(s)\ Disconnect(s) - Removed a temporary switch	20EMS14642
233	SRP_BA	Breaker(s)\ Disconnect(s) - Removed temporary switches	20EMS14643
234	SRP_BA	RAS - Updated Coolidge LAPS Logic Diagram screenshot; no ICCP updates	20EMS14644
235	SRP_BA	Generator - Updated parameters of Saint Solar generator	20EMS14645
236	SRP_BA	Transmission Line - Updated termination of Randolph-Vah_Ki line at Vah_Ki substation	20EMS14646

FNM Scope for FNM 21M3 DB103
(Production Week of 3/15/2021)

No	Entity	Project Name	Project Key
237	SRP_BA	Transmission Line - Updated termination of Pinal Central-Vah_Ki line at Vah_Ki substation	20EMS14647
238	SRP_BA	Breaker(s)\ Disconnect(s) - Removed temporary switches	20EMS14648
239	SRP_BA	Generator - Updated MVAR min/max of Bolster battery storage unit to match capability curve	20EMS14660