MARIN CLEAN ENERGY ADDENDUM NO. 5 TO THE REVISED COMMUNITY CHOICE AGGREGATION IMPLEMENTATION PLAN AND STATEMENT OF INTENT

TO ADDRESS MCE EXPANSION TO CONTRA COSTA COUNTY; THE CITIES OF CONCORD, MARTINEZ, OAKLEY, PINOLE, PITTSBURG AND SAN RAMON; AND THE TOWNS OF DANVILLE AND MORAGA



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For copies of this document contact Marin Clean Energy in San Rafael, California or visit www.mcecleanenergy.org

Table of Contents

CHAPTER 1 – Introduction	2
CHAPTER 2 – Changes to Address MCE Expansion to Contra Costa County (unincorporated areas); trities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and	the
Moraga	4
Aggregation Process	6
Program Phase-In	6
Sales Forecast	7
Financial Plan	10
Expansion Addendum Appendices	11

CHAPTER 1 – INTRODUCTION

The purpose of this document is to make certain revisions to the Marin Clean Energy Implementation Plan and Statement of Intent in order to address the expansion of Marin Clean Energy ("MCE") to the unincorporated areas of Contra Costa County; the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga (the nine communities together, the "Expansion Communities"). MCE is a public agency that was formed in December 2008 for purposes of implementing a community choice aggregation ("CCA") program and other energy-related programs targeting significant greenhouse gas emissions ("GHG") reductions. At that time, the Member Agencies of MCE included eight of the twelve municipalities located within the geographic boundaries of Marin County: the cities/towns of Belvedere, Fairfax, Mill Valley, San Anselmo, San Rafael, Sausalito and Tiburon and the County of Marin (together the "Members" or "Member Agencies"). In anticipation of CCA program implementation and in compliance with state law, MCE submitted the Marin Energy Authority Community Choice Aggregation Implementation Plan and Statement of Intent ("Implementation Plan") to the California Public Utilities Commission ("CPUC" or "Commission") on December 9, 2009. Consistent with its expressed intent, MCE successfully launched the Marin Clean Energy CCA program ("MCE" or "Program") on May 7, 2010 and has been serving customers since that time.

During the second half of 2011, four additional municipalities within Marin County, the cities of Novato and Larkspur and the towns of Ross and Corte Madera, joined MCE, and a revised Implementation Plan reflecting updates related to this expansion was filed with the CPUC on December 3, 2011.

Subsequently, the City of Richmond, located in Contra Costa County, joined MCE, and a revised Implementation Plan reflecting updates related to this expansion was filed with the CPUC on July 6, 2012.

A revision to MCE's Implementation Plan was then filed with the Commission on November 6, 2012 to ensure compliance with Commission Decision 12-08-045, which was issued on August 31, 2012. In Decision 12-08-045, the Commission directed existing CCA programs to file revised Implementation Plans to conform to the privacy rules in Attachment B of the aforementioned Decision.

During 2015, the County of Napa and the Cities of Benicia, El Cerrito, and San Pablo joined MCE; service was extended to customers in unincorporated Napa County during February 2015 and to customers in Benicia, El Cerrito and San Pablo during May 2015. To address the anticipated effects of these expansions, MCE filed with the Commission a revision to its Implementation Plan on July 18, 2014 to address expansion to the County of Napa (the Commission subsequently certified this revision on September 15, 2014). Following the Commission's certification of this revision, MCE submitted Addendum No. 1 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of San Pablo (Addendum No. 1) on September 25, 2014 (and the

Commission subsequently certified Addendum No. 1 on October 29, 2014); and Addendum No. 2 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of Benicia (Addendum No. 2) on November 21, 2014 (the Commission subsequently certified Addendum No. 2 on December 1, 2014); and Addendum No. 3 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of El Cerrito (Addendum No. 3) on January 7, 2015 (the Commission subsequently certified Addendum No. 3 on January 16, 2015).

On April 21, 2016, MCE's Board of Directors ("Board" or "Governing Board") unanimously adopted Resolution No. 2016-01, which approved the cities of American Canyon, Calistoga, Lafayette, Napa, St. Helena and Walnut Creek as well as the Town of Yountville as members of MCE. On this date, MCE's Board also approved the related Addendum No. 4 to its Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 4"), which addressed expansion to such communities. Addendum No. 4 was submitted to the Commission on April 22, 2016; Addendum No. 4 was certified by the Commission thereafter on May 6, 2016.

More recently, MCE's Governing Board approved the membership requests of the Expansion Communities on July 20, 2017 via Resolution No. 2017-06. Staff subsequently prepared this Addendum No. 5 to its Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 5"), which addressed expansion to the aforementioned communities. MCE's Board approved this Addendum No. 5 on September 22, 2017.

Over time many communities have contacted MCE regarding membership opportunities. In response to such inquiries, MCE's Governing Board adopted Policy 007, which established a formal process and specific criteria for new member additions. In particular, this policy identifies several threshold requirements, including the specification that any prospective member evaluation demonstrate rate-related savings (based on prevailing market prices for requisite energy products at the time of each analysis) as well as environmental benefits (as measured by anticipated reductions in greenhouse gas emissions and increased renewable energy sales to CCA customers) before proceeding with expansion activities, including the filing of related revisions/addenda to this Implementation Plan. As MCE receives new membership requests, staff will follow the prescribed evaluative process of Policy 007 and will present related results at future public meetings. To the extent that membership evaluations demonstrate favorable results and any new community completes the process of joining MCE, this Implementation Plan will be revised through a related addendum, highlighting key impacts and consequences associated with the addition of such new community/communities.

The MCE program now provides electric generation service to approximately 255,000 customers, including a cross section of residential and commercial accounts. During its more than seven-year operating history, non-member municipalities have monitored MCE's progress, evaluating the potential opportunity for membership, which would enable customer choice with respect to electric generation service. In response to public interest and MCE's successful

operational track record, the Expansion Communities requested MCE membership, consistent with MCE Policy 007, each adopting the requisite ordinance for joining MCE. As previously noted, MCE's Board of Directors approved such membership requests at a duly noticed public meeting on July 20, 2017 through the adoption of Resolution No. 2017-06.

This Addendum No. 5 describes MCE's expansion plans to include the Expansion Communities. According to the Commission, the Energy Division is required to receive and review a revised MCE implementation plan reflecting changes/consequences of additional members. With this in mind, MCE has reviewed its revised Implementation Plan, which was filed with the Commission on July 18, 2014, as well as previous Addendums, and has identified certain information that requires updating to reflect the changes and consequences of adding the new municipalities as well as other forecast modifications reflecting the most recent historical electric energy use within MCE's existing service territory. This Addendum No. 5 reflects pertinent changes related to the new member additions as well as projections that account for MCE's planned expansion and recent operations. This document format, including references to MCE's most recent Implementation Plan revision (filed with the Commission on July 18, 2014 and certified by the Commission on September 15, 2014), which is incorporated by reference and attached hereto as Appendix D, addresses all requirements identified in Public Utilities Code Section 366.2(c)(4), including universal access, reliability, equitable treatment of all customer classes and any requirements established by state law or by the CPUC concerning aggregated service, while streamlining public review of pertinent changes related to MCE expansion.

CHAPTER 2 – CHANGES TO ADDRESS MCE EXPANSION TO THE EXPANSION COMMUNITIES

This Addendum No. 5 addresses the anticipated impacts of MCE's planned expansion to the Expansion Communities, as well as other forecast modifications reflecting the most recent historical electric energy use within MCE's existing service territory. As a result of these member additions, certain assumptions regarding MCE's future operations have changed, including customer energy requirements, peak demand, renewable energy purchases, revenues, expenses and various other items. The following section highlights pertinent changes related to this planned expansion. To the extent that certain details related to membership expansion are not specifically discussed within this Addendum No. 5, MCE represents that such information shall remain unchanged relative to the July 18, 2014 Implementation Plan revision, which was certified by the Commission on September 15, 2014.

With regard to the defined terms Members and Member Agencies, the following communities are now signatories to the MCE Joint Powers Agreement and represent MCE's current membership:

Member Agencies
City of American Canyon
City of Belvedere
City of Benicia
City of Calistoga
City of Concord
County of Contra Costa
Town of Corte Madera
Town of Danville
City of El Cerrito
Town of Fairfax
City of Lafayette
City of Larkspur
County of Marin
City of Martinez
City of Mill Valley
Town of Moraga
City of Napa
County of Napa
City of Novato
City of Oakley
City of Pinole
City of Pittsburg
City of Richmond
Town of Ross
Town of San Anselmo
City of San Pablo
City of San Rafael
City of San Ramon
City of Sausalito
City of Saint Helena
Town of Tiburon
City of Walnut Creek
Town of Yountville

Throughout this document, use of the terms Members and Member Agencies shall now include the aforementioned communities. To the extent that discussion addresses the process of aggregation and MCE organization, each of these communities is now an MCE Member and the electric customers of such jurisdictions will be offered CCA service consistent with the noted phase-in schedule.

Aggregation Process

MCE's aggregation process was discussed in Chapter 2 of MCE's July 18, 2014 Revised Implementation Plan. This first paragraph of Chapter 2 is replaced in its entirety with the following verbiage:

As previously noted, MCE successfully launched its CCA Program, MCE, on May 7, 2010 after meeting applicable statutory requirements and in consideration of planning elements described in its initial Implementation Plan. At this point in time, MCE plans to expand agency membership to include the Expansion Communities. These communities have requested MCE membership, and MCE's Board of Directors subsequently approved the membership requests at a duly noticed public meeting on July 20, 2017.

Program Phase-In

Program phase-in was discussed in Chapter 5 of MCE's July 18, 2014 Revised Implementation Plan. Chapter 5 is replaced in its entirety with the following verbiage:

MCE will continue to phase-in the customers of its CCA Program as communicated in this Implementation Plan. To date, seven phases have been successfully implemented, and an eighth phase will commence in April 2018. The eighth phase will now include service commencement to customers located within Contra Costa County (unincorporated areas); the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga, as reflected in the following table.

MCE Phase No.	Status & Description of Phase	Implementation
		Date
Phase 1	Complete: MCE Member (municipal)	May 7, 2010
	accounts & a subset of residential,	
	commercial and/or industrial accounts,	
	comprising approximately 20 percent of	
	total customer load within MCE's original	
	Member Agencies.	
Phase 2	Complete: Additional commercial and	August 2011
	residential accounts, comprising	
	approximately 20 percent of total customer	
	load within MCE's original Member	
	Agencies (incremental addition to Phase 1).	
Phase 3	Complete: Remaining accounts within	July 2012
	Marin County.	
Phase 4	Complete: Residential, commercial,	July 2013
	agricultural, and street lighting accounts	
	within the City of Richmond.	

MCE Phase No.	Status & Description of Phase	Implementation
	-	Date
Phase 5	Complete: Residential, commercial,	February 2015
	agricultural, and street lighting accounts	
	within the unincorporated areas of Napa	
	County.	
Phase 6	Complete: Residential, commercial,	May 2015
	agricultural, and street lighting accounts	
	within the City of San Pablo, the City of	
	Benicia and the City of El Cerrito.	
Phase 7	Complete: Residential, commercial,	September 2016
	agricultural, and street lighting accounts	
	within the Cities of American Canyon,	
	Calistoga, Lafayette, Napa, Saint Helena,	
	Walnut Creek and the Town of Yountville.	
Phase 8	April 2018: Residential, commercial,	April 2018
	agricultural, and street lighting accounts	
	within Contra Costa County	
	(unincorporated areas); the cities of	
	Concord, Martinez, Oakley, Pinole,	
	Pittsburg and San Ramon; and the towns of	
	Danville and Moraga, subject to economic	
	and operational constraints.	

This approach has provided MCE with the ability to start slow, addressing any problems or unforeseen challenges on a small manageable program before gradually building to full program integration for an expected customer base of approximately 470,000 accounts, following completion of Phase 8 customer enrollments. This approach has also allowed MCE and its energy suppliers to address all system requirements (billing, collections, payments) under a phase-in approach to minimize potential exposure to uncertainty and financial risk by "walking" prior to ultimately "running". The Board may evaluate other phase-in options based on then-current market conditions, statutory requirements and regulatory considerations as well as other factors potentially affecting the integration of additional customer accounts.

Sales Forecast

With regard to MCE's sales forecast, which is addressed in Chapter 6, Load Forecast and Resource Plan, MCE assumes that total annual retail sales will increase to approximately 5,500 GWh following Phase 8 expansion. The following tables have also been updated to reflect the impacts of planned expansion to MCE's new membership.

Chapter 6, Resource Plan Overview

Marin Clean Energy Proposed Resource Plan (GWH) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Demand (GWh)			-		-					
Retail Demand	-91	-185	-570	-1,110	-1,252	-1,710	-2,103	-2,889	-4,772	-5,515
Distributed Generation	0	2	4	5	9	14	19	24	46	63
Energy Efficiency	0	0	0	0	1	3	3	5	7	10
Losses and UFE	-5	-11	-34	-66	-74	-102	-125	-172	-283	-327
Total Demand	-97	-195	-601	-1,172	-1,316	-1,795	-2,205	-3,032	-5,002	-5,768
MCE Supply (GWh)										
Renewable Resources										
Generation	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	23	50	289	564	645	926	1,140	1,664	3,051	3,673
Total Renewable Resources	23	50	289	564	645	926	1,140	1,664	3,051	3,673
Conventional Resources										
Generation	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	74	145	312	608	670	869	1,065	1,368	1,951	2,095
Total Conventional Resources	74	145	312	608	670	869	1,065	1,368	1,951	2,095
Total Supply	97	195	601	1,172	1,316	1,795	2,205	3,032	5,002	5,768
Energy Open Position (GWh)	0	0	0	0	0	0	0	0	0	0

Chapter 6, Customer Forecast

Marin Clean Energy Enrolled Retail Service Accounts Phase-In Period (End of Month)

	May-10	Aug-11	Jul-12	Jul-13	Feb-15	May-15	Sep-16	Apr-18
MCE Customers								
Residential	7,354	12,503	77,345	106,510	120,204	149,610	225,128	419,682
Commercial & Industrial	579	1,114	9,913	13,098	15,316	19,147	27,274	43,722
Street Lighting & Traffic	138	141	443	748	1,014	1,219	1,866	3,528
Agricultural & Pumping	-	<15	113	109	1,467	1,625	1,700	2,102
Total	8,071	13,759	87,814	120,465	138,001	171,601	255,968	469,035

Marin Clean Energy Retail Service Accounts (End of Year) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Customers										
Residential	7,354	12,503	77,345	106,510	106,510	149,610	225,128	223,140	419,682	421,780
Commercial & Industrial	579	1,114	9,913	13,098	13,098	19,147	27,274	27,432	43,722	43,941
Street Lighting & Traffic	138	141	443	748	748	1,219	1,866	1,178	3,528	3,546
Agricultural & Pumping	-	<15	113	109	109	1,625	1,700	1,705	2,102	2,113
Total	8,071	13,759	87,814	120,465	120,465	171,601	255,968	253,455	469,035	471,380

Chapter 6, Sales Forecast

Marin Clean Energy Energy Requirements (GWH) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Energy Requirements (GV	Vh)									
Retail Demand	91	185	570	1,110	1,252	1,710	2,103	2,889	4,772	5,515
Distributed Generation	0	-2	-4	-5	-9	-14	-19	-24	-46	-63
Energy Efficiency	0	0	0	0	-1	-3	-3	-5	-7	-10
Losses and UFE	5	11	34	66	74	102	125	172	283	327
Total Load Requirement	97	195	601	1,172	1,316	1,795	2,205	3,032	5,002	5,768

Chapter 6, Capacity Requirements

Marin Clean Energy Capacity Requirements (MW) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Demand (MW)										
Retail Demand	28	46	182	233	234	318	447	544	1,034	1,039
Distributed Generation	-	(1)	(2)	(3)	(5)	(8)	(11)	(14)	(26)	(36)
Energy Efficiency	-	-	-	(0)	(0)	(1)	(1)	(1)	(2)	(2)
Losses and UFE	2	3	11	14	14	19	26	32	60	60
Total Net Peak Demand	30	47	191	244	243	328	462	561	1,067	1,061
Reserve Requirement (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Capacity Reserve Requirement	4	7	29	37	36	49	69	84	160	159
Capacity Requirement Including Reserve	34	55	220	281	279	377	531	645	1,227	1,220

Chapter 6, Renewables Portfolio Standards Energy Requirements

Marin Clean Energy RPS Requirements (MWH) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail Sales	91,219	183,741	566,640	1,105,310	1,241,233	1,693,246	2,080,477	2,860,315	4,719,180	5,441,798
Baseline	-	18,244	36,748	113,328	221,062	269,348	394,526	520,119	772,285	1,368,562
Incremental Procurement Target	18,244	18,504	76,580	107,734	48,286	125,179	125,593	252,166	596,277	318,395
Annual Procurement Target	18,244	36,748	113,328	221,062	269,348	394,526	520,119	772,285	1,368,562	1,686,957
% of Current Year Retail Sales	20%	20%	20%	20%	22%	23%	25%	27%	29%	31%

Marin Clean Energy RPS Requirements and Program Renewable Energy Targets (MWH) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail Sales (MWh)	91,219	183,741	566,640	1,105,310	1,241,233	1,693,246	2,080,477	2,860,315	4,719,180	5,441,798
Annual RPS Target (Minimum MWh)	18,244	36,748	113,328	221,062	269,348	394,526	520,119	772,285	1,368,562	1,686,957
Program Target (% of Retail Sales)	25%	27%	51%	51%	52%	55%	55%	58%	65%	67%
Program Renewable Target (MWh)	22,805	49,610	288,986	563,708	645,441	926,138	1,140,143	1,663,571	3,051,244	3,673,029
Surplus In Excess of RPS (MWh)	4,561	12,862	175,658	342,646	376,094	531,612	620,024	891,286	1,682,682	1,986,072
Annual Increase (MWh)	22,805	26,805	239,376	274,722	81,733	280,697	214,005	523,429	1,387,673	621,785

Chapter 6, Energy Efficiency

Marin Clean Energy Energy Efficiency Savings Goals (GWH) 2010 to 2019

_	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Retail Demand	91	185	570	1,110	1,252	1,710	2,103	2,889	4,772	5,515
MCE Energy Efficiency Goal	0	0	0	0	-1	-3	-3	-5	-7	-10

Chapter 6, Demand Response

Marin Clean Energy Demand Response Goals (MW) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Capacity Requirement (MW)	34	55	220	281	279	377	531	645	1,227	1,220
Greater Bay Area Capacity Requirement (MW)	5	9	35	44	44	40	56	69	131	130
Demand Response Target	=	-	=.	=	-	=	-	-	15	31
Percentage of Local Capacity Requirment	0%	0%	0%	0%	0%	0%	0%	0%	12%	23%

Chapter 6, Distributed Generation

Marin Clean Energy Distributed Generation Projections (MW) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
DG Capacity	_	1	2	3	5	8	11	14	26	36

Financial Plan

With regard to MCE's financial plan, which is addressed in Chapter 7, Financial Plan, MCE has updated its expected operating results, which now include projected impacts related to service

expansion within MCE's new member communities. The following table reflects updated operating projections in consideration of these planned expansions.

Chapter 7, CCA Program Implementation Feasibility Analysis

Marin Clean Energy Summary of CCA Program Phase-In (January 2010 through December 2019)

CATEGORY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
I. REVENUES FROM OPERATIONS (\$)										
ELECTRIC SALES & OTHER REVENUE	10,529,582	20,457,577	43,687,317	81,279,541	98,031,511	142,656,873	171,398,844	211,347,206	316,864,919	352,622,851
LESS UNCOLLECTIBLE ACCOUNTS	-	(309,659)	(61,992)	(950,674)	(484,404)	(1,432,948)	(893,645)	(1,442,225)	(2,164,417)	(2,409,085)
PLUS NET ENERGY METERING REV. ADJ.	-	-	-	-				1,071,474	1,632,208	1,648,852
TOTAL REVENUES	10,529,582	20,147,918	43,625,325	80,328,867	97,547,107	141,223,925	170,505,199	210,976,455	316,332,711	351,862,618
II. COST OF OPERATIONS (\$)										
(A) ADMINISTRATIVE AND GENERAL (A&G)										
STAFFING	433,250	605,855	923,190	1,376,429	1,953,241	2,778,126	4,199,088	6,151,600	7,652,648	8,268,477
CONTRACT SERVICES	1,711,537	1,394,953	2,920,222	4,081,277	4,360,839	4,821,343	5,762,064	7,370,528	11,669,049	10,815,431
IOU FEES (INCLUDING BILLING)	20,468	60,780	214,113	547,806	669,037	865,764	1,025,141	1,467,230	2,431,556	2,806,461
OTHER A&G	140,427	316,671	437,596	1,374,738	1,581,589	2,393,573	2,285,284	1,513,659	2,103,928	2,294,702
SUBTOTAL A&G	2,305,682	2,378,259	4,495,121	7,380,250	8,564,705	10,858,806	13,271,577	16,503,017	23,857,180	24,185,071
(B) COST OF ENERGY	7,418,662	15,167,808	33,340,133	71,137,536	83,028,734	118,194,567	140,527,541	186,992,524	263,491,899	307,497,028
TOTAL COST OF OPERATION	9,724,343	17,546,067	37,835,255	78,517,786	91,593,440	129,053,373	153,799,118	203,495,541	287,349,079	331,682,099
CCA PROGRAM SURPLUS/(DEFICIT)	805,239	2,601,851	5,790,071	1,811,081	5,953,667	12,170,552	16,706,082	7,480,914	28,983,632	20,180,519
REPAYMENT OF LOAN PRINCIPAL	578,566	2,473,134	567,938	920,147	1,142,408	2,296,675	-	-	-	-

Expansion Addendum Appendices

Appendix A: Marin Clean Energy Resolution 2017-06

Appendix B: Joint Powers Agreement

Appendix C: Member Ordinances

Appendix D: Marin Clean Energy Revised Implementation Plan and Statement of Intent

(July 18, 2014)