



ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

To:Energy Efficiency & Resource Management CouncilFrom:EERMC Consultant TeamCC:Nathan Cleveland / OERDate:February 17, 2022Subject:EERMC Consultant Team Year-End Work Summary

CONSULTANT TEAM

I. SUMMARY

This document summarizes key work completed by the EERMC Consultant Team (C-Team) during 2021. Sections II, III, IV, and V highlights each of the C-Team's tasks and deliverables and when each occurred. Each item is organized to align with the C-Team's Scope of Work (SOW)¹ which was presented at the December 2020 EERMC meeting².

II.	TASK 1:	EERMC	OVERSIGHT
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Task #	Activity	Tasks/Deliverable	Date(s)/Time Period
1.1	<u>EERMC</u> Meetings	Tasks/DeliverableReviewed and provided feedback on all 13 meeting agendaswith OER.Developed 60 presentations, memos, and other materials tosupport EERMC Council meetings. Topics included:Program Oversight• Review of 2020 SRP Activities2020 Q4 and Year-End Program Performance results• 2021 Quarterly Program Performance Results, including updates on 2021 Plan Commitments• National Grid request for Overspend Approval for the Gas PortfolioPlanning• Comments on 2021-2023 SRP Plan• Council EE and SRP priorities for 2022 Plan• 2022 Planning Deep Dive Meetings• 2022 Energy Efficiency Plan Outline Memorandum• National Grid 2022 Annual Energy Efficiency Plan Drafts, Cost-Effectiveness Report, and EERMC Plan Vote and Summary of Reasons Report• Equity Working Group EE Program Plan recommendationsRegulatory Updates	Period 2 weeks prior to meetings 1 week prior to meetings
		PUC rulings on National Grid's 2021 EE Plans	

¹ <u>http://rieermc.ri.gov/wp-content/uploads/2021/12/2022-eermc-c-team-proposed-sow_2021.12.02.pdf</u>

² <u>http://rieermc.ri.gov/wp-content/uploads/2020/12/ppt-2021-eermc-c-team-proposed-sow.pdf</u>

		 2021 Performance Incentive Mechanism proposal and deliberations PUC Hearings Update on 2022 EE Plan Council Business and Work Products 2021 and 2022 EERMC schedules C-Team 2021 and 2022 workplans EERMC Annual Report Updates on EE and SRP TWG meetings EERMC Retreat Planning EERMC Website Updates Public Education Update Special Topics EM&V impacts on 2022 plan considerations 2021 Avoided Energy Supply Component (AESC) Study 2021 Annual CHP Stakeholder Meeting EM&V and Benefit-Cost Model Updates Northeast Energy Efficiency Partnerships (NEEP) - RI EE Partnership Location-Targeted Outreach for Energy Efficiency 	Monthly
1.2	EERMC Executive Committee	Attended March, June, and November meetings Following the March meeting, the C-Team participated in	March 25 June 3 November 18
	Meeting	debrief meetings with OER and worked on follow-up tasks to enhance future meetings.	March 26-31
		Participated in meetings with council members as requested throughout the year	Ongoing throughout the year
	Councilor	Provided updates and responses to queries on EE Legislation, equity, and multifamily issues for Councilors Case, Teichert and Hubbard.	April - June
1.3	Briefings	Provided updates and responses to queries on 2022 EE Planning, including equity and IES/MF issues, LCP standards, rate and bill impacts, and other issues for Councilors Case, Teichert and Hubbard.	July - September
		Provided updates and briefings to Councilors Case, AnderBois and Hubbard regarding proceedings in 2022 EE Plan Docket 5189.	October - December
1.4	Councilor Retreat & Orientation	Held C-Team internal meetings to develop draft objectives and agendas for the EERMC Retreat, including review of past events and supporting materials.	February - March

		Developed and distributed survey to Councilors on retreat topics and structure.	March 17
		Compiled and presented results of Council member survey to identify desired retreat topics and formats.	April
		Organized and implemented the first of two Council member retreat sessions.	May 28
		Initiated ongoing follow-up activities based on requests made during retreat.	May - June
		Held customized new Council member orientation with Councilor AnderBois.	July 14
		Completed actionable follow-ups from the first retreat session.	July - September
		Developed plan, recruited speakers, assembled technical presentations, and planned discussion facilitation for EERMC second of two Councilor retreat sessions.	September - November
		Led second of two Council member retreat sessions.	November 8
		Followed up on Council discussion topics of interest coming from retreat, including 2022 EE TWG plans and opportunities to braid EE resources with other funding sources to maximize ratepayer dollar efficiency and impacts	November - December
1.5	EE & SRP Technical Working Groups (TWG)	Attended all 19 EE and SRP TWG meetings that were held throughout the year with relevant staff assigned to participate in each.	January 20 (SRP) February 17 (SRP) February 25 (EE) March 17 (SRP) March 25 (EE) April 21 (SRP) April 29 (EE) May 19 (SRP) May 27 (EE) June 16 (SRP) June 24 (EE) July 21 (SRP) July 22 (EE) August 18 (SRP) August 26 (EE) Sept 15 (SRP) Sept 24 (EE) Oct 20 (SRP) Nov 17 (SRP)
1.6	Equity Working Group	Monitored developments on launch plans, including review of potential participants. No meetings held in Q1 as activity focused on National Grid hiring a facilitator. Monitored high level updates from OER and National Grid, but not afforded direct access to meetings. Continued to monitor and document equity initiatives in neighboring jurisdictions to	Monthly status check-ins with OER & Grid April - August
		support best practice integration in RI efforts/planning.	

		Review EWG recommendations and associated commitments in 2022 EE Plan.	September
		Incorporated Council considerations regarding Equity Working Group and associated 2022 commitments into Council report regarding 2022 EE Plan vote, associated discovery, and pre-filed testimony during proceedings in Docket 5189.	October - December
		Planned and facilitated Q1 monthly meetings. Supported monthly meeting discussions with meeting preparation, distribution of meeting notes and follow-up tasks. Topic areas included: Education RFPs for videos, public outreach and K-12 Education, Education budget review/options, NEED K- 12 curriculum.	January 6 February 3 March 3
		Planned and facilitated Q2 monthly meetings. Supported monthly meeting discussions with meeting preparation, distribution of meeting notes and follow-up tasks.	
	EERMC Education Working Group	Topic areas included: Education RFPs for videos, public outreach, and K-12 Education; NEED curriculum & workshops; EERMC annual report; EERMC member retreat; EERMC website updates; Council support for market-based training & education programs; Annual CHP stakeholder meeting.	April 7 May 5
1.7		Planned and facilitated Q3 monthly meetings. Supported monthly meeting discussions with meeting preparation, distribution of meeting notes and follow-up tasks. Topic areas included: lecture series, public forum, educational videos, and K-12 teacher training.	July 7 August 4 September 1
		Held supplemental meetings as needed for event and video planning.	July - December
		Managed consultants; Reviewed and contributed content for upcoming consultant deliverables.	July - December
	the first of three EERMC energy lectures. Planned and facilitated Q4 monthly meetings. Supp monthly meeting discussions with meeting prepara distribution of meeting notes and follow-up tasks. Topic areas covered included: lecture series, public	Assisted consultant with organization and implementation of the first of three EERMC energy lectures.	August - December
			October 6 November 3
		educational videos, and K-12 teacher training, 2022 education	December 1
		Held two of three public energy lectures virtually.	October 28 December 20

1.8	OER/Division/C- Team Meetings	Attended bi-weekly check-in meetings to coordinate with state agencies on EE topics and issues relating to LCP.	Ongoing throughout entire year
1.9	OER/National Grid/C-Team Meetings	Attended bi-weekly check-in meetings to coordinate on issues relating to National Grid delivery and design of programs and resulting communications with the EERMC.	Ongoing throughout entire year
		Upload all Council meeting materials and other relevant documents in advance of each meeting. Maintain current Council member list with headshots and seats represented.	Ongoing
		Initiated design website updates and developed status memo for April.	March
1.10	Refresh & Maintain Website	Implemented a variety of content and organizational updates to EERMC website based on prior survey and ongoing feedback from education working group.	April - May
		Presented website updates during Council retreat session one.	May 28
		Promoted energy lecture series on Council website, including addition of new homepage slider feature.	October - December
		Installed analytics to track traffic on Council website.	November
		Reviewed EERMC Council Member Handbook to identify potential updates.	February-March
1.11	Educational	Presented EERMC Council Member Handbook during the Council Retreat.	May 28
1.11	Tools	Initiated development of educational video series in partnership with OER.	August - September
		Worked with OER and education consultants Duffy & Shanley to help develop high-level content outlines for video series.	October – December
	Manage Consultants as Needed	Assisted in development and distribution of RFPs to solicit consultant services in support of Council education goals and activities.	April - June
1.12		Assisted in selection process for three RFPs to implement the Council's public education activities.	July - September
		Oversight of 2020 K-12 teacher training contract and deliverables.	July - December
		Ongoing management of selected education consultants Duffy & Shanley, for EERMC public events and videos and Green Buildings Research Institute (GBRI), for K-12 educator training.	July - December

			Date(s)/Time
Task #	Activity	Tasks/Deliverable	Period
2.1		Coordinated and contributed to the development of content for the report with National Grid, OER, and the C-Team.	February - March
	EERMC Annual	Developed first draft of report and timeline for vote on final draft.	March 1 - 18
2.1	Report	Produced final draft of EERMC Annual Report for Council vote and submission to the General Assembly and Governor.	April - May
		Posted final Annual Report to EERMC website & distributed to members.	Мау
		2021 Avoided Energy Supply Component Study - C-Team assigned a lead staff to support OER, the Division and EERMC's interests in the regional process, and to participate in regular update and feedback meetings for the RI group.	February 2 February 18 March 2 March 11 March 25
		Monitored application and any developments of the AESC Study as it was incorporated into the 2022 EE Plan.	April - September
2.2	State & Regional Policy	Participated in discussions and ongoing oversight and monitoring with OER and Grid on content for Northeast Energy Efficiency Partnership (NEEP)'s <i>RI State Partnership MOU</i> <i>Agreement</i> .	February – December
		Reviewed and monitored draft legislation proposed in the General Assembly that may impact LCP, including Act on Climate, and two versions of LCP extension.	February-March
		Continued monitoring of draft legislation proposed in the General Assembly that impact LCP, including Act on Climate, LCP extension and Appliance Standards, including discussions with stakeholders and development of background information and data on the proposed bills.	April – June
		Continued monitoring of legislation that impacts LCP, including Act on Climate, LCP extension and Appliance Standards.	July-December
2.3	Stakeholder Forums	Coordinated and attended second Multifamily Brainstorming Session with National Grid including stakeholders from RI Housing, the Housing Network, CDCs, developers, and the lead vendors for the retrofit and new construction MF programs.	January 13
		Supported the development and scheduling of a third Multifamily Brainstorming Session with National Grid including stakeholders from RI Housing, the Housing Network, CDCs, developers, and the lead vendors for the retrofit and new construction Multifamily programs.	April - May
		Supported the development and scheduling of a third Multifamily Brainstorming Session with National Grid including	July - Support August 3 Session

III. TASK 2: DEVELOPMENT OF WORK PRODUCTS AND REPRESENTATION OF THE EERMC

		stakeholders from RI Housing, the Housing Network, CDCs, developers, and the lead vendors for the retrofit and new construction MF programs. Participation in that Session.	
		Ad hoc check-in calls with stakeholders, including Acadia Center and GECA.	Ongoing throughout the year
		Attended Quarterly Income Eligible Best Practices meetings with National Grid and the CAP Agencies.	February 18 June 3 August 26 November 18
2.4	Annual Timeline	Based on council member and stakeholder feedback, developed a timeline, tasks and milestones for key EERMC responsibilities, with emphasis on streamlining the 2022 Annual Plan development, review and approval process.	January
		Monitored adherence to agreed-upon schedule, adding reminders as needed.	April - October
		Drafted a proposed timeline with tasks and key milestones for the 2023 Planning process.	November - December
2.5	Quarterly Written Progress Reports	Assembled content throughout year and delivered reports to Council for each quarter.	Ongoing throughout the year

IV. TASK 3: ENERGY EFFICIENCY AND SYSTEM RELIABILITY PROGRAM DESIGN AND DELIVERY

Task #	Activity	Tasks/Deliverable	Date(s)/Time Period
	Residential & Income Eligible Sector Monthly 	 Coordinated, drafted agendas, and facilitated monthly meetings. Meeting topics included: Review and discussion on the C-Team's draft implementation and oversight tracker Discussion on standardized meeting content Cadence of data sharing Review and discussion on tracking metrics, methods, and timelines for residential and income eligible commitments in the 2021 EEPP Review and discussion on 2021 residential RFPs Update from OER and National Grid on the OER/National Grid Heat Pump Rebate Program Deep dives on Income Eligible Single Family program performance Deep dive on planned enhancements for the Multifamily programs Discussion on potential enhancements to the EnergyWise Single Family Program 	January 27 February 11 March 4 April 1 May 5 June 3 July 1 August 12 September 2 October 7 December 2
		report to sector team, including OER and Division. Reviewed data and sent questions to National Grid team for response. Note – This applies to both the residential/income eligible and	3-week process in advance of each sector team meeting
		In Q4 of 2020, the C-Team developed a commitments tracker which includes all of the commitments made by National Grid in its 2021 Annual Plan. In Q1 of 2021, the C-Team worked with National Grid, OER, and the Division to review and come to a consensus on appropriate metrics, methods, and timelines for tracking each of the commitments made. This tracker was used to inform reporting to the EERMC.	January-March
		Note – This applies to both the residential/income eligible and the C&I sectors and is not repeated under Task 3.2.	

3.2	Commercial & Industrial Sector Monthly Meetings	 Coordinated, drafted agendas, and facilitated monthly meetings. Meeting topics included: Review and discussion on the C-Team's draft implementation and oversight tracker Discussion on standardized meeting content Cadence of data sharing Review and discussion on tracking metrics, methods, and timelines for Commercial & Industrial commitments in the 2021 plan Review and discussion on 2021 Commercial & Industrial RFPs Discussion of underperformance in the Large C&I retrofit programs Changes to the Small Business Direct Install programs Best practices from other jurisdictions on measures/offerings like Retro-commissioning and small business weatherization Reviewed and discussed 2021 Commercial & Industrial RFPs and new approaches or measures that would be implemented in the 2022 Annual Plan Ongoing monitoring of monthly program performance Discussed delivery model and strategy improvements for National Grid's Restaurant and Grocer initiative with National Grid and Councilor AnderBois Coordinated with National Grid Active Demand staff to promote Small Business weatherization projects using RGGI and SBC funds implemented by RISE 	January 27 February 11 March 4 April 1 May 5 June 3 July 1 August 12 September 2 October 7 December 2
3.3	EM&V: C&I and Residential Studies	Coordinated, drafted agendas, and facilitated 27 monthly meetings throughout 2021: 14 Res, 11 C&I, 2 X-Sector Planning Activities - Initiated critical planning discussions, including assessment of which RI and MA EM&V studies will be completed in time to incorporate findings into 2022 EE Plan. - Concluded critical planning discussions, including assessment of which RI and MA EM&V studies were be completed in time to incorporate findings into 2022 EE Plan.	January 6 (X- Sector) January 27 (Res) February 3 (C&I) February 24 (Res) March 3 (C&I) March 24 (Res) April 7 (C&I) April 28 (Res) May 5 (C&I) May 24 (X-Sector) May 26 (Res)
		 Initiated conversations regarding planned EM&V activities in 2022. Includes discussion of EM&V studies to be conducted as 	June 2 (C&I) June 23 (Res)

well as ensuring recommendations from Legislated Study are	June 28 (Res)
discussed and incorporated into 2022 activities.	July 28 (Res)
	Aug 4 (C&I)
Initiated Key Studies	Aug 25 (Res)
- Participation Study	Sept 1 (C&I)
- Non-Participation/Multifamily Census Study	Sept 22 (Res)
	Sept 1 (C&I)
- Solar Inverter Power Factor Correction Pilot	Sept 22 (Res)
- Custom Electric PY 2018 & 2019 Impact Evaluation	Oct 6 (C&I)
- Custom Gas PY 2020 Impact Evaluation	Oct 27 (Res)
- C&I Lighting Market Characterization Study	Nov 3 (C&I)
- Residential New Construction Baseline Study	Nov 24 (Res)
	Dec 1 (C&I)
Completed Studies	Dec 22 (Res)
- Jobs Study	
- Home Energy Monitoring (Sense) Demonstration	
- Gas Peak Demand	
- Nearly all 2021 EM&V studies completed on time for 2022	
Planning	
- Cannabis baseline ISP a notable exception, and work continues	
here	
- Appliance Recycling Impact and Incentives Report	
- Similarly, ongoing key studies above not completed yet	
Tracked Ongoing Key Studies	
- Participation and Non-Participation Studies work plans kicked	
off and many revised work area scopes and draft deliverables	
reviewed. The Participant Study underwent substantial	
revisions in order to produce actionable results	
- Custom studies initiated for both Electric and Gas	
Coordinated and attended cross-jurisdictional and study-	
specific EM&V meetings.	
-Participant Study (Feb 11)	Feb 11
-Nonparticipant/Multifamily Census Study (Feb 11)	April 15
-RI/CT Appliance Recycling Study (April 15)	May 4
-Solar Inverter PFC Study (June 28, Aug 8, Sept 16, Nov 17)	June 28
-MA Residential Studies for RI Planning (May 4 and July 16)	July 16
-MA C&I Studies for RI Planning (May 4 and July 16)	Aug 6
- Legislated Study Results review and 2022 EE Plan comments	Aug 8
(July 16)	Sept 16
-Residential NC Net to Gross Results (Aug 6)	Nov 17
-C&I NC Net to Gross Results & Cannabis Industry Standard	
Practice Study (Aug 6)	

		Reviewed and provided comments on 64 study documents.	Ongoing throughout the year
		Set up planning and tasks related to Core & Variable Factors to guide Plan development oversight (See table in Section IV of this report).	February-March
		Coordinated, drafted agendas, and facilitated 3 Residential Deep Dive planning meetings to discuss high-priority measures or initiatives for Residential programs in the 2022 annual plan. These meetings touched on important changes or potential enhancements to program offerings, and topics covered included: Income Eligible, Multifamily, and Residential Retrofit. The C- team shared best practices and research from other jurisdictions and provided input on National Grid's plan outline memo relevant to these topics.	April 29 May 25 June 23
3.4	2022 Annual Plan Development	Coordinated, drafted agendas, and facilitated 3 C&I Deep Dive planning meetings to discuss high-priority measures or initiatives for C&I programs in the 2022 annual plan. These meetings touched on important changes or potential enhancements to program offerings and topics covered included: Small Business, C&I New Construction Redesign, and Retro- commissioning. The C-team shared best practices and research from other jurisdictions and provided input on National Grid's plan outline memo relevant to these topics.	April 29 May 26 June 24
		Coordinated, drafted agendas, and facilitated 2 cross-cutting Deep Dive planning meetings to discuss issues/topic areas that span multiple sectors. The 2 Deep Dive meeting topics were Active Demand Management and Workforce Development.	May 17 June 14
		Review and comment on National Grid's 2022 Draft Plan Outline Memorandum in preparation for first draft plan release in July.	June
		Coordinated, drafted agendas, and facilitated an additional residential deep dive planning meetings to discuss important changes or potential enhancements to program offerings in the residential retrofit programs.	August 3

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		In-depth review of Large CHP project proposed by National Grid including supplemental materials provided to the Division of Public Utilities and Carriers. This included a full review of project-specific savings analysis and benefit-cost screening with and without RI Economic Multipliers. Given concerns with this project, the C-team also analyzed how the proposed incentive spending could be re-allocated to serve more participants.	July - September
		Review and provide comments on National Grid's 2022 EE Plan. Review tasks included providing comments on all sections of the Plan narrative and analysis, comments, and questions on BC Models, Technical Reference Manuals, and rate and bill impact models. Review tasks were conducted on the First Draft of the Plan in July, on the interim update provided in August, the Final Draft in September.	July - December
		Review and analysis of various versions of the Plan that came to bear during the Plan hearings was also conducted throughout Q4.	October - December
		Develop materials on behalf of Council in 2022 EE Plan Docket 5189, including Council report on vote and reasons why, pre-filed testimony, and data request responses.	October - December
		Held discussions with OER on timing for meeting. Targeting May 2021 to hold meeting.	March
3.5	CHP Annual Public Meeting	Organize and implement Annual CHP Stakeholder Meeting to fulfill statute and collect informed feedback on National Grid CHP offerings.	May-June
3.6	PUC Technical Sessions & Open Meetings on 2022 EE and SRP Plans	Multiple meetings with the PUC were scheduled relating to final rulings on the 2021 Plan, primarily relating to the Performance Incentive Mechanism (PIM). Subject-matter experts from the C- Team attended technical sessions, open meetings, and workshops held by the PUC. Meetings were also held to coordinate and prepare for PUC meetings with other stakeholders including OER, the Division, and National Grid. Additionally, significant time was invested in review and analysis of the various proposed PIM models to inform positions and comments that were submitted to EERMC.	January - March: Review, analysis, and stakeholder coordination January 15: PUC Open Meeting February 4: PUC Technical Session February 15: PUC Open Meeting February 25: PUC Workshop
		Rulings issued in EE Performance Incentive Mechanism and EBF Funding allocation for 2021 during PUC open meeting.	April 29
		Preliminary preparation for SRP Technical Session in July	June

		Coordinated with PUC staff on potential dates/topics for an EE Technical Session in Q3; Meetings with stakeholders to review potential topic areas to propose to PUC.	June
		Coordinated with PUC staff on potential dates/topics for an EE Technical Session as well as EERMC/PUC Call in Q3, eventually delayed to early 2022; Meetings with stakeholders to review potential topic areas to propose to PUC. Coordination on CHP project / EE Plan separation for PUC filings.	July - September
		Prepared materials and reviewed materials from other parties in preparation for PUC Hearings in Docket 5189. Attend and participate in PUC hearings on December 6 th and 8 th , and cover PUC Open Meeting on December 21 st .	October - December
		Represented EERMC at PUC SRP Technical Session	November 30
3.7	Cost- Effectiveness Analysis & Report	Drafted C-E Report for 2022 Annual EE Plan. Prepared for and filed report in October	July - October
3.8	Quarterly Memos	Developed and submitted EE & SRP TWG summary reports to EERMC.	March 18 April 22 June 17 July 29 October 21
3.9	Oversight of Third-Party Studies	Initiated discussion with Council regarding possible refresh of Market Potential Study in 2022	November - December

V. TASK 4: ADVANCING INTEGRATED APPROACHES AND ADDRESSING EMERGING ISSUES

Task #	Activity	Tasks/Deliverable	Date(s)/Time Period
4.1	Scoping Meetings with OER and/or EERMC	Met regularly with OER to review objectives and deliverables relating to EERMC meeting presentations.	Ongoing throughout the year
		Met with OER, National Grid, and DPUC to assess the opportunity for Gas Demand Response (DR) in Rhode Island. C&I discussion centered on the Aquidneck Island study, lessons learned, and other potential inputs and avenues for fully understanding the potential for Gas DR. Residential discussion covered range of perspectives on what opportunities may exist and how they could be monetized.	May 5
		Conversations focused on scoping for 2022 EE Plan activities as part of Planning - incl. EM&V, rate and bill, etc.	July - September
		Engagement with Council members regarding priorities for Council work in 2023 to inform proposed Consultant Team scope of work	July – December
4.2	Analysis, Research Papers, White Papers	Materials developed for EERMC meetings, including C-Team component of special topic on locationally targeted EE and DR at November Council Meeting	Ongoing throughout the year