



**STATE OF MINNESOTA
BEFORE THE
PUBLIC UTILITIES COMMISSION**

Katie Sieben	Chair
Joseph K. Sullivan	Vice-Chair
John Tuma	Commissioner
Valerie Means	Commissioner
Matthew Schuerger	Commissioner

***In the Matter of the Application of Hayward Solar LLC for a Certificate of Need for the up to 150 MW Hayward Solar Project in Freeborn County, Minnesota
MPUC Docket No. IP-7053/CN-21-112***

**CERTIFICATE OF NEED
APPLICATION AND SITE PERMIT
APPLICATION AMENDMENT**

***In the Matter of the Application of Hayward Solar LLC for a Site Permit for the up to 150 MW Hayward Solar Project in Freeborn County, Minnesota
MPUC Docket No. IP-7053/GS-21-113***

On May 5, 2021, Hayward Solar LLC (Hayward Solar or Applicant) submitted a Certificate of Need Application (CONA)¹ and a Site Permit Application (SPA)² to the Minnesota Public Utilities Commission (PUC or Commission) to construct and operate an up to 150 megawatt (MW) alternating current (AC) photovoltaic (PV) solar energy generating facility and associated systems (Hayward Solar Project or Project) to be located in Hayward Township, Freeborn County, Minnesota (**Figure 1**).

As discussed in the SPA and CONA (Applications) and as yet planned, the Hayward Solar Project will use PV modules affixed to tracking systems that allow the PV modules to track the sun from east to west and will be constructed on a schedule that facilitates an in-service date in 2023. The Project as described in the SPA included approximately 1,958.4 acres (Project Area). The original Preliminary Development Area (that portion of the Project Area within which the Project would be constructed) was approximately 1,272.3 acres. Hayward Solar proposes to interconnect the Project to the existing Southern Minnesota Municipal Power (SMMPA) Hayward-Murphy Creek 161 kV HVTL (which transects the Project Area) via a line tap and new SMMPA Switchyard that will be permitted, constructed and owned by SMMPA (**Amended Figures 1, 2, and 3 & New Figure 3a**). The Midcontinent Independent System Operator (MISO) interconnection request for the Project is in the 2019 queue. Hayward Solar

¹ See *Hayward Solar Project, Application to the Minnesota Public Utilities Commission for a Certificate of Need for a Large Electric Generating Facility*, IP-7053/GS-21-112, Document ID No. 20215-173903-02.

² See *Hayward Solar Project, Application to the Minnesota Public Utilities Commission for a Site Permit for a Large Electric Generating Facility*, IP-7053/GS-21-113, Document ID No. 20215-173904-02.

anticipates executing a Generator Interconnection Agreement (GIA) with MISO in the 1st quarter 2022. This interconnection will provide sufficient outlet to accommodate all of the solar energy generation from the Project.

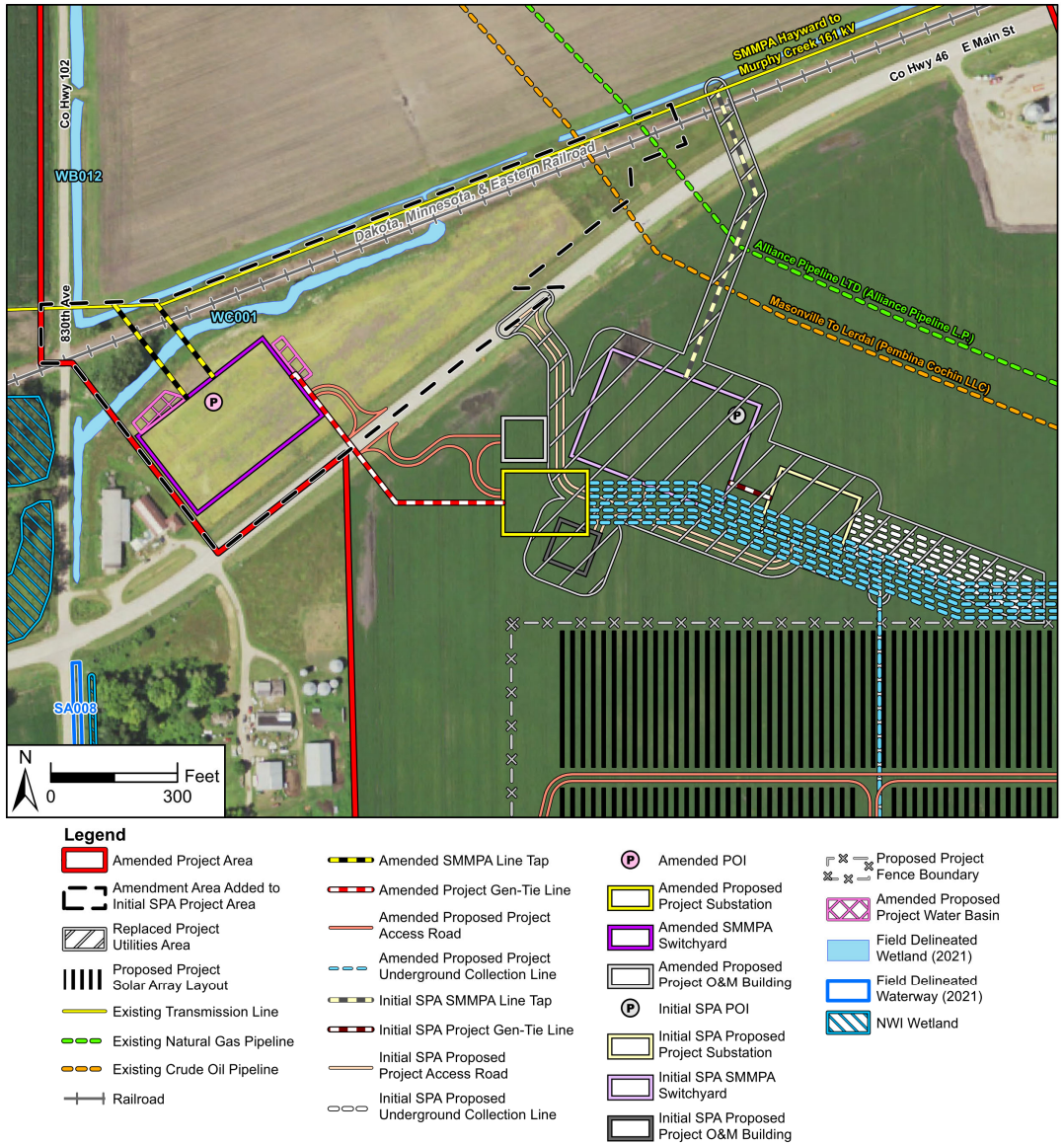
Hayward Solar respectfully submits this application amendment (Amendment) to the Commission to document a revised location of the proposed new SMMPA Switchyard, point of interconnection (POI) equipment, SMMPA Line Tap, Project Gen-Tie Line and applicable access roads for the Hayward Solar Project facility. The footprint/area needed to construct each of these facilities is the same as those presented in the Applications and has not changed due to this shift in siting location for each (see **New Figure 3a** below). The SMMPA Switchyard, POI equipment and SMMPA Line Tap will be permitted by SMMPA with Freeborn County (County). However, the Project Gen-Tie Line, the Hayward Solar Project Substation and the O&M facility are included as part of the Project and will be permitted as part of the site permit to be issued by the Commission. This proposed Amendment is described below.

Hayward Solar is submitting this Amendment to accommodate a request from Todd Hinrichs, the participating landowner of the parcel where the Project Substation, Project Gen-Tie Line, O&M facility, planned new SMMPA Switchyard, SMMPA Line Tap, and POI were originally located in the Applications. After the May 5th, 2021, filing of the Applications, SMMPA notified Hayward Solar that it will require ownership of the land on which the SMMPA Switchyard will be located and Mr. Hinrichs notified Hayward Solar that he is not willing to sell a portion of his land, but would rather retain ownership of his land for future expansion of agricultural operations. Out of respect for the desires of both SMMPA and Mr. Hinrichs, Hayward Solar sought to identify another site for the planned new SMMPA Switchyard. The Project O&M facility, Project Substation and associated Project Gen-Tie Line will be constructed on land that is under agreement to be leased from Mr. Hinrichs.

As a result, Hayward Solar identified landowners of parcels north of County Road (CR) 46 (PO Properties, LLC and Julie A. Pieper) that were willing to sell their property to SMMPA for the SMMPA Switchyard, SMMPA Line Tap, and POI. Hayward Solar discussed the change in location of the SMMPA Switchyard, SMMPA Line Tap and POI with SMMPA and Freeborn County and was able to determine the change in location is acceptable to both SMMPA and the County. All parties involved with this Amendment support, agree with and confirm that this amendment will address all parties concerns as well as meet County setback and zoning requirements.

As noted above and indicated on **New Figure 3a** below and **Amended Figure 10** attached, this Amendment will affect three parcels of land (Mr. Hinrichs, a current participating landowner; PO Properties, LLC, a new participating landowner; and Julie A. Pieper, a new participating landowner). Hayward Solar entered into voluntary purchase agreements with the new landowners (PO Properties, LLC and Julie A. Pieper) to purchase the required land necessary to construct and operate the new SMMPA Switchyard facilities, SMMPA Line Tap and associated POI equipment.

Figure 3a: Previous and Current Project Interconnection Facilities



The overall Project, including transmission line interconnection facilities to be constructed, owned and operated by SMMMPA, are proposed within a slightly larger revised approximately 1,971.8-acre Project Area (an additional 13.35 acres); the revised Preliminary Development Area is slightly increased to approximately 1,272.7 acres (an additional 0.38 acres) with this Amendment. However, the footprint needed to construct these facilities is the same as indicated in the Applications. The Project would still connect to the existing SMMMPA Hayward-Murphy Creek 161 kilovolt (kV) high voltage transmission line (HVTL) that transects the Project boundary (see Amended Figures 1, 2, and 3 & New Figure 3a), although at a revised location.

A. Description of the Project Interconnection Changes

As shown in New Figure 3a, the changes to the Project design will:

- 1) move the planned new SMMPA Switchyard, POI and SMMPA Line Tap from the south side of CR 46 to the north side of CR 46 on approximately 7.2 acres of land;
- 2) move the Project Substation and O&M facility locations northwest and closer to CR 46, thereby shortening the original access road in this area of the Project to these facilities;
- 3) reroute the original Project Gen-Tie Line to be located between the revised Project Substation west/northwest to the new SMMPA Switchyard site north of CR 46;
- 4) include a new access road from CR 46 to the new SMMPA Switchyard site north of CR 46;
- 5) reconfigure and shorten the access road from the Project Substation/O&M facility site northwest to CR 46; and
- 6) slightly extend the seven planned underground collection lines from the original orientation to the revised Project Substation location.

The approximate 13.35 acres of additional land associated with the new SMMPA Switchyard site would be purchased from the current landowners. A new easement between SMMPA and the underlying landowners north of the new SMMPA Switchyard site will be necessary for installation of the new SMMPA Line Tap between the SMMPA Switchyard/POI to connect to the existing SMMPA Hayward-Murphy Creek 161 kV HVTL located north of the existing Dakota, Minnesota & Eastern Railroad line.

As noted in the Applications, SMMPA will seek a permit from the County for the SMMPA Switchyard, SMMPA Line Tap, POI and associated access road. SMMPA will also require permission from Dakota, Minnesota & Eastern Railroad to cross the railroad corridor. The SMMPA Line Tap is comprised of two lines measuring approximately 281 feet (west line) and 222 feet (east line) in length, whereby the existing SMMPA 161 kV HVTL will be re-routed from its original location into and out of the new SMMPA Switchyard (see **New Figure 3a**). Moving the new SMMPA Switchyard and related facilities to north of CR 46 will free up additional land south of CR 46 and allow the current landowner (Mr. Hinrichs) with more land to continue to farm larger portions of his land during Project operation and expand future agricultural operations. **Table 1** provides a summary of the Project revisions.

Table 1 Summary of Amendment

Revised Facilities	New SMMPA Switchyard, POI, SMMPA Line Tap, Project Gen-Tie Line and associated access roads.
Area of Change	New land would be added to the Project Area (approximately 13.35 acres) to the north of CR 46; the Project facilities to be altered would be moved to this new Project Area. Easements would be secured for constructing and operating the SMMPA Line Taps (281 and 222 linear feet in length and approximately 50 feet in width, respectively, for a total easement area of ~0.57 acres).

Landowners Affected	Julie A. Pieper 1.96 acres (PID No. 07-002-0071) P.O. Properties, LLC 7.18 acres (PID No. 07-011-0013) Todd and Sonja Hinrichs (SMMPA Switchyard moved from these parcels) ~779 acres (PID Nos. 07-011-0011, 07-002-0070, 07-014-0060, 07-010-0023)
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B. Impacts

Hayward Solar used the same methodology to assess the Project’s impacts as those included in the Applications. Hayward Solar amended the original SPA figures and attaches the amended figures to this Amendment (see **Amended Figures 1-16** and **New Figure 3a**). **New Figure 3a** was prepared to highlight the changes to the Project Area associated with moving the SMMPA Switchyard and associated facilities to the north side of CR 46.

Table 2 includes a summary of the impacts of this Amendment associated with the new area added to the Project Area. Only new impacts associated with the amended Project Area are indicated in **Table 2**.

Table 2 Amended Project Impacts

Criteria	Units	New Infrastructure	Additional Information
SMMPA Switchyard	Feet Squared (acres)	Less 14,8210 (Less 0.34)	The SMMPA Switchyard moved from the south side of CR 46 to the north side of CR 46 and is slightly smaller with this amendment. Source: Westwood Revised Preliminary Site Plan (September 2021)
Length of Underground Collection Line	Feet (miles)	~629 (0.12)	Extension of original underground collection line to revised new location of Project Substation. (Note ~the new infrastructure calculation accounts for 492 feet of underground collection line would be replaced with this new collection line layout.) Source: Westwood Revised Preliminary Site Plan (September 2021)
Length of Gen-Tie Line	Feet (miles)	650 (0.12) [initial length 100 feet/0.02 mile]	The Gen-Tie Line will now cross CR 46 between the Project Substation and the SMMPA Switchyard and will be 550 feet longer than proposed in the original Applications.

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Criteria	Units	New Infrastructure	Additional Information
			Source: Westwood Revised Preliminary Site Plan (September 2021)
Length of SMMPA Line Tap	Feet (miles)	East Line Tap ~222 (0.04) [initial length 729 feet/0.14 mile] West Line Tap ~281 (0.05) [initial length 729 feet/0.14 mile]	The SMMPA Line Tap will no longer cross CR 46. The SMMPA Line Tap will now consist of two short segments of overhead line and will be 448 to 507 feet shorter than the SMMPA Line Tap proposed in the original Applications. Source: Westwood Revised Preliminary Site Plan (September 2021)
Length of infrastructure is in or Parallel to Existing Public Right-of-Way	Feet (miles)	120 (0.02)	Electrical (Gen-Tie Line – new due to moving SMMPA Switchyard north of CR 46) Electrical (SMMPA Line Tap – replaced by amended SMMPA Line Tap which does not parallel or cross Public ROW)
		Less 130 (0.02)	Source: Westwood Revised Preliminary Site Plan (September 2021)
		0	Transportation Source: Westwood Revised Preliminary Site Plan (September 2021)
Number of Roads Crossed	Number	1	The Project Gen-Tie line will cross CR 46 as an overhead line. One new driveway would be added to the Project to access the SMMPA Switchyard from CR 46 (to be located north of CR 46). The original SPA included a driveway from CR 46 going south to the Project Substation/O&M facility – this driveway access point would be moved west of the original SPA location. Source: Freeborn County GIS Data; Westwood Revised Preliminary Site Plan (September 2021)
Number of Parcels Added	Number	2	Purchase options have been secured with two new landowners for the SMMPA Switchyard. P.O. Properties, LLC (PID No. 07-011-0013) Julie A. Pieper (PID No. 07-002-0071) Source: Freeborn County GIS Data
Number of	Number	0	No additional information.

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Criteria	Units	New Infrastructure	Additional Information
Residences Impacted			Source: Aerial Photo Review; Freeborn County GIS Data
Number of Non-Residential Buildings Impacted	Number	0	No additional information. Source: Aerial Photo Review; Freeborn County GIS Data
Area of Agricultural Land Impacted	Acres	11.83	This corresponds to the agricultural land on the parcel where the SMMPA Switchyard will be located. These parcels were previously subject to row crop agriculture and later planted into hay/grasses. Source: National Land Cover Data (NLCD) (2019)
Prime Farmland	Acres	7.55	The 7.55 acres includes all areas that are classified as either prime farmland or prime farmland if drained per NRCS data. Note there are also 5.79 acres of non-prime farmland (farmland of statewide importance) within this 13.34 acre Project Area addition. Source: Minnesota NAIP Imagery (2019); Census Bureau (2019); U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) (2020)
Area of Forested Land Impacted	Acres	0	No additional Information. Source: NLCD (2019)
Area of Open Land Impacted	Acres	0.88	NLCD classification – developed, open space. This area associated with northern and western edge of parcels where wetlands were delineated. Source: NLCD (2019)
Area of Developed Land Impacted	Acres	0.64	NLCD classification – developed, high, medium and low intensity. Source: NLCD (2019)
Wetland Impacts	Feet	No wetland impacts are anticipated. The SMMPA Line Tap will cross over wetland. (total length of east line ~222 and west line ~281)	A USFWS Circular 39 Type 1 (emergent wetland/forested wetland) and Type 3 (emergent wetland) delineated along north and west borders of new Project Area. Wetland Impacts due to SMMPA Switchyard and associated utility installation will result in No Loss of wetland under WCA and is permitted under MN RGP-03. The planned Project facilities will not be installed within either of these wetlands. Source: Tetra Tech Field Delineated (7/16/21); NWI (2020);

Criteria	Units	New Infrastructure	Additional Information
			Freeborn County as WCA LGU (9/23/21); U.S. Army Corps of Engineers (9/23/21)
Impacts to Lake, Stream, Drainage, or Other Waterway	Feet	0	No additional information. Source: MnDNR Trout Streams (2015); Public Waters Inventory (2017); Wild and Scenic Rivers (2006)
Wildlife Management Areas	Acres	0	No additional information. Source: MnDNR (2017)
National Wildlife Refuges	Acres	0	No additional information. Source: USFWS (2013)
Waterfowl Production Areas	Acres	0	No additional information. Source: USFWS (2010)
State Wildlife Refuges	Acres	0	No additional information. Source: MnDNR (2010)
County Parks and Trails Freeborn County Snowmobile Trail/Association	Acres	0	The amended access road to the Project Substation/O&M facility and the new location of the SMMPA Switchyard will impact the current route of the existing Freeborn County Snowmobile Trail Association (Association) Trail 133. Hayward Solar has discussed trail re-route options with the Association and the Association has indicated it agrees with rerouting Trail 133 to allow this facility to be constructed and maintain Trail 133 use. Source: Google Map Data (2021); Discussion with Freeborn County Snowmobile Trail Association
Mineral Resources	Acres	0	No additional information. Source: MnDOT ASIS (2018)
Metal Mining Resources	Acres	0	No additional information. Source: MnDOT ASIS (2018); Freeborn County GIS Data; Google Map Data (2021)
Native Plant Communities	Acres	0	No additional information. Source: Minnesota Biological Survey (MBS); MnDNR (2017)
Railroad Right-of-Way Prairie	Acres	0	No additional information. Source: Minnesota Biological Survey (MBS); MnDNR (2014)

Criteria	Units	New Infrastructure	Additional Information
Sites of Biodiversity Significance	Acres	0	No additional information. Source: Minnesota Biological Survey (MBS); MnDNR (2017)
Number and Count of Known Protected or Endangered Species	Number of Species, Count within species	0	No additional information. Source: Minnesota Biological Survey (MBS); MnDNR (2017)
National Register Properties	Number	0	No additional information. Source: Phase I Archaeological Survey Report (Tetra Tech, 9/15/20)
Inventoried Historic Resources	Number	0	No additional information. Source: Phase I Archaeological Survey Report (Tetra Tech, 9/15/20)
Inventoried Archeological Sites	Number	0	No additional information. Source: Phase I Archaeological Survey Report (Tetra Tech, 9/15/20)

C. Assessment of Project Impacts

The assessment of the Project changes described above do not result in significant changes to the human and environmental impacts of the proposed Project. An impact evaluation considering the siting factors found in Minnesota Rules 7850.1900, subp. 3 and Minnesota Rules 7850.4100 is in **Table 3** below.

Table 3: Assessment of Impacts of Project Revisions

Minnesota Rules	Siting Factors	Impact of Project Revisions
7850.1900, Subp. 3	A. a description of the environmental setting for each site;	<p>Statements presented in Section 4.1 of the SPA are consistent with this modification. The SMMPA Switchyard will be located primarily on agricultural land similar to the balance of the Hayward Solar facility.</p>
7850.1900, Subp. 3	B. a description of the effects of construction and operation of the facility on human settlement, including, but not limited to, public health and safety, displacement, noise, aesthetics, socioeconomic impacts, cultural values, recreation, and public services;	<p>Statements presented in Section 4.2 of the original SPA (and Amended Figures 5-16) are consistent with this modification. The changes will primarily consist of moving the SMMPA Switchyard, SMMPA Line Tap, POI, and associated access road to a new site north of CR 46, extending the Project Gen-Tie Line to this new location, and extending underground cabling in agricultural land. The limited above ground infrastructure is consistent with what was previously proposed and the SMMPA Line Tap will be shorter than indicated in the original Applications.</p> <p>The previous design of the SMMPA Switchyard facility was ~1,219 feet from the nearest residence. The SMMPA Switchyard/POI proposed in this minor amendment will be ~677 feet from the nearest residence. While the new proposed location of the SMMPA Switchyard is approximately 600 feet closer to the nearest residence, for the following reasons, construction and operation of this facility is not expected to impact public health and safety, no displacement would occur, no noise impacts are expected, socioeconomic impacts are similar to those described in the Applications since the planned facility is the same general size with the same components (but in a new location), cultural values are not expected to be impacted, recreation (i.e., snowmobile trail) will be addressed via rerouting the existing trail, and public services impacts are expected to be the same as described in the Applications.</p> <p>Primary noise sources for the Project would be the inverters and Project Substation transformer, which were modeled in the SPA and found to cause no impacts. None of those Project facilities have moved as it relates to this Amendment and, therefore, no new noise impacts are anticipated. Additionally, the SMMPA Switchyard will include a security fence with lockable entrance gate that will be controlled by SMMPA, a pad-mounted station power transformer located adjacent to the control enclosure (planned to be near the entrance to the fenced area), a microwave tower, new deadend transmission pole structures, new transmission lines (for the Line Tap), and switchgear installed within the pad of the planned facility. Temporary noise impacts would occur during construction of the SMMPA Switchyard from construction vehicles and equipment; this noise will be intermittent, temporary and for a limited duration</p>

Minnesota Rules	Siting Factors	Impact of Project Revisions
		<p>of time during normal work hours, and similar to noise generated from nearby farming operations, CR 46 and Interstate Highway I-90. During operation, minimal noise may occur from operation of electrical transmission lines and associated facilities which is expected to be similar to existing noise generated from the existing SMMPA transmission line in this area. The aesthetics would be similar to those described in the SPA and similar to existing transmission, railroad line, roadways and other infrastructure in the area, and concentrated near this infrastructure.</p> <p>The amended Project facilities will create impacts to the existing snowmobile Trail 133. The existing snowmobile Trail 133 that crosses through this area would be rerouted around the SMMPA Switchyard; Hayward Solar has discussed options to accomplish this with the Association and the Association has indicated it agrees with rerouting Trail 133 to allow the SMMPA Switchyard to be constructed and maintain Trail 133 use.</p> <p>The effects on human settlements will be comparable to those documented in the SPA.</p>
7850.1900, Subp. 3	C. a description of the effects of the facility on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;	<p>Statements presented in Section 4.3 (and Amended Figures 11-12) of the SPA are consistent with this modification. Moving the SMMPA Switchyard and related facilities to the north side of CR 46 will allow for ongoing and future expansion of agricultural use on land south of CR 46 outside of the Project footprint. Moving the SMMPA Switchyard and related facilities to north of CR 46 in agricultural land will impact this land which the landowners have agreed to sell for the Project.</p> <p>The amended Project facilities will create impacts to the existing snowmobile Trail 133. The Applicant will work with the Association to reroute Trail 133 around the SMMPA Switchyard facilities.</p>
7850.1900, Subp. 3	D. a description of the effects of the facility on archaeological and historic resources;	<p>Statements presented in Section 4.4 of the SPA are consistent with this modification. No archaeological or historic resources are known to occur in the new portions of the Project Area based on results of the Phase Ia Cultural Resources Literature Review which covered this new Project Area. Field review for cultural resources of this additional new Project Area is planned to be completed the fall 2021 or spring 2022. Given this new area is predominately used for agricultural uses and disturbed, it is not anticipated that cultural resources will be identified in the area during the field review.</p>

Minnesota Rules	Siting Factors	Impact of Project Revisions
7850.1900, Subp. 3	E. a description of the effects of the facility on the natural environment, including effects on air and water quality resources and flora and fauna;	<p>Statements presented in Section 4.5 of the SPA are consistent with this modification. No sensitive environmental resources, including native prairie, are found within the amendment area. No wetlands will be disturbed (temporarily or permanently) during the installation of the SMMPA Switchyard and related facilities, or the POI, transmission and underground cabling facilities.</p> <p>A construction stormwater permit and Stormwater Pollution Prevention Plan (SWPPP) will be prepared and in place prior to and during construction of the Project. To the extent applicable, the Project site will be restored to pre- construction conditions after construction. The effects will be comparable to those documented in the SPA.</p>
7850.1900, Subp. 3	F. a description of the effects of the facility on rare and unique natural resources;	<p>Statements presented in Section 4.5.7 (and Amended Figure 16) of the SPA are consistent with this modification. No rare or unique natural resources have been documented in the amendment area, which is currently subject to agricultural uses.</p>
7850.1900, Subp. 3	G. identification of human and natural environmental effects that cannot be avoided if the facility is approved at a specific site or route; and	<p>Statements presented in Sections 4.1-4.5 of the SPA are consistent with this modification. There have been no significant human or natural environmental effects identified for this modification. Most impacts will be temporary in nature during construction. A new additional driveway will be needed and installed to access the new SMMPA Switchyard north of CR 46.</p> <p>Temporary impacts to traffic may occur during construction of the Project access roads (though these impacts will be short in duration and landowners notified of pending work). Hayward Solar will coordinate with the landowners and the public to minimize disruption of their use of CR 46 during construction. The amended Project facilities will create impacts to the existing snowmobile Trail 133. The Applicant will work with the Association to reroute Trail 133 around the SMMPA Switchyard facilities.</p>

Minnesota Rules	Siting Factors	Impact of Project Revisions
7850.1900, Subp. 3	H. a description of measures that might be implemented to mitigate the potential human and environmental impacts identified in items A to G and the estimated costs of such mitigative measures.	<p>Statements presented in Sections 4.1-4.5 of the SPA are consistent with this modification. Hayward Solar will coordinate construction scheduling with the landowners to minimize disruption to the landowners’ use of the amendment area, including their use of CR 46. Construction and restoration of the disturbed area to preconstruction conditions will occur in accordance with the approved Agricultural Impact Mitigation Plan and Vegetation Management Plan for the Project, as applicable. No further mitigation is necessary.</p>
7850.4100	A. effects on human settlement, including, but not limited to displacement, noise, aesthetics, cultural values, recreation and public services;	<p>Statements presented in Section 4.2 of the SPA are consistent with this modification. The modifications will primarily consist of moving the SMMPA Switchyard, POI, SMMPA Line Tap, access road Project Gen-Tie Line and associated facilities from one agricultural land area to another agricultural land area. The limited above ground infrastructure is consistent with what was previously proposed.</p> <p>No displacement would occur with the new location of the proposed SMMPA Switchyard.</p> <p>The previous design of the proposed SMMPA Switchyard was ~1,219 feet from the nearest residence. The POI proposed in this Amendment will be 677 feet from the nearest residence. As discussed above, the primary noise sources for the Project would be the inverters and Project Substation transformer, which were modeled in the SPA and found to cause no impacts. None of those Project facilities have moved significantly as it relates to this Amendment and, therefore, no new noise impacts are anticipated. Additionally, the SMMPA Switchyard is not anticipated to create appreciable new noise levels that would impact nearby residences.</p> <p>No impacts to cultural values are expected in the new location of the proposed SMMPA Switchyard, as discussed above. Additional field review for cultural resource will be completed fall 2021 or spring 2022 to confirm.</p> <p>Snowmobile Trail 133 would be rerouted around the proposed new SMMPA Switchyard in consultation and agreement of the Association as discussed above. Impacts to use of Trail 133 will be mitigated through rerouting the trail in this area.</p> <p>Impacts to public services are expected to be similar to those described in the SPA because the SMMPA Switchyard is generally the same as previously described and would be located in a new location.</p>

Minnesota Rules	Siting Factors	Impact of Project Revisions
		<p>It will therefore provide comparable effects to human settlement as that which was previously proposed for the Hayward Solar facility.</p>
7850.4100	B. effects on public health and safety;	<p>Statements presented in Section 4.2 of the SPA are consistent with this modification. The modification will provide comparable effects on public health and safety as that which was previously proposed for the Hayward Solar facility. As indicated in the SPA, the SMMPA Switchyard will be enclosed with a security fence and access controlled via a lockable gate. The facility will include signage indicating that the facility contains electrical equipment and hazards of such. Access to the facility will be controlled by SMMPA and only authorized personnel will be allowed within the security fence area. The SMMPA Switchyard will be maintained and monitored by SMMPA during its operation.</p>
7850.4100	C. effects on land-based economies, including, but not limited to agriculture, forestry, tourism and mining;	<p>Statements presented in Section 4.3 of the SPA are consistent with this modification. Moving the proposed SMMPA Switchyard and associated facilities from the original proposed location to the new proposed location will create no significant additional impacts and impacts would be similar to those originally proposed, though in a new location.</p> <p>One additional driveway would be needed to access the SMMPA Switchyard from CR 46; however, the revised Project layout includes grouping the driveway access roads leading to Project and SMMPA facilities so that the driveways are across from one another. Moving the SMMPA Switchyard to a site north of CR 46 also frees up land for continued and future expansion of agricultural operations per the request of the participating landowner. The amended Project facilities will create impacts to the existing snowmobile Trail 133. The Applicant will work with the Association to reroute Trail 133 around the SMMPA Switchyard facilities.</p>

Minnesota Rules	Siting Factors	Impact of Project Revisions
7850.4100	D. effects on archaeological and historic resources;	Statements presented in Section 4.4 of the SPA are consistent with this modification. No archaeological or historic resources are known to occur in the newly added amendment area based on results of the Phase Ia Cultural Resources Literature Review which covered this area associated with the Project. Field review for cultural resources of this additional new Project Area is planned to be completed in the fall of 2021 or spring 2022. Given this new area is predominately used for agricultural uses and disturbed, it is not anticipated that cultural resources will be identified in the area during the field review.
7850.4100	E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;	Statements presented in Section 4.5 of the SPA are consistent with this modification. No sensitive environmental resources, including native prairie, are found within the newly added amendment area. While a wetland area was delineated along the north and west boundaries of the new portion of the Project Area, neither SMMPA nor Project facilities would impact or be constructed within the wetlands. The wetlands may be temporarily disturbed during the installation of the SMMPA Line Tap and, if so, will be restored to pre-construction conditions after construction. The effects will be comparable to those documented in the original Applications.
7850.4100	F. effects on rare and unique natural resources;	Statements presented in Section 4.5.7 of the SPA are consistent with this modification. No rare or unique natural resources have been documented in the amendment area, which is currently subject to agricultural uses.
7850.4100	G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;	The Project has been designed to maximize energy efficiencies and avoid adverse environmental effects. The layout of the revised SMMPA Switchyard and associated facilities is relatively the same amount of ground impacts and includes shorter distances of the SMMPA Line Tap and a slightly longer Project Gen-Tie Line length. However, overall design minimizes electrical losses and helps avoid environmental impacts. Most of the Project infrastructure will be located underground thereby providing only temporary surface impacts that will further reduce environmental impacts. The planned interconnection makes use of existing electrical infrastructure. Construction and restoration of the disturbed area to preconstruction conditions will occur in accordance with the approved Agricultural Impact Mitigation Plan and Vegetation Management Plan for the Project. No further mitigation is necessary.
7850.4100	H. use or paralleling of existing right-of-way, survey lines, natural division lines, and	The Project layout has been revised to minimize land impacts associated with the proposed new agricultural land for the SMMPA Switchyard and its associated facilities and group the Project Substation, O&M facility and Project Gen-Tie Line closer to CR 46 and adjacent to the new SMMPA Switchyard

Minnesota Rules	Siting Factors	Impact of Project Revisions
	agricultural field boundaries;	site. While an additional driveway is needed for the amended design, the SMMPA Switchyard access road and Project Substation and O&M access roads will be located across from one another to minimize disruption to landowners and meet County driveway access requirements.
7850.4100	I. use of existing large electric power generating plant sites;	Not applicable to current Hayward Solar Project.
7850.4100	J. use of existing transportation, pipeline, and electrical transmission systems rights-of-way;	Not applicable to current Hayward Solar Project.
7850.4100	K. electrical system reliability;	The proposed Hayward Solar Project will support reliable transmission of electricity.
7850.4100	L. costs of constructing, operation and maintenance which are dependent on design and route;	The costs that depend on design include the physical cost of the equipment and construction costs, which are not expected to be significantly higher than that which was previously proposed.
7850.4100	M. adverse human and natural environmental effects that cannot be avoided; and	The human and environmental effects associated with the Project are described in Table 2 above and are not significant in nature.
7850.4100	N. irreversible and irretrievable commitments of resources.	No irreversible or irretrievable commitments of resources are anticipated as part of this Project.

D. Conclusion

As demonstrated by the information provided in this Application Amendment and attached **Amended Figures 1-16** and **New Figure 3a**, the modification of the SMMPA Switchyard, POI, SMMPA Line Tap, Project Gen-Tie Line and associated access roads to accommodate landowner and SMMPA requests do not result in significant modifications to the human or environmental impacts of the Project.