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GIBRID ENERGIYA TA'MINOTI TIZIMLARINI MONITORINGI QURILMALARI

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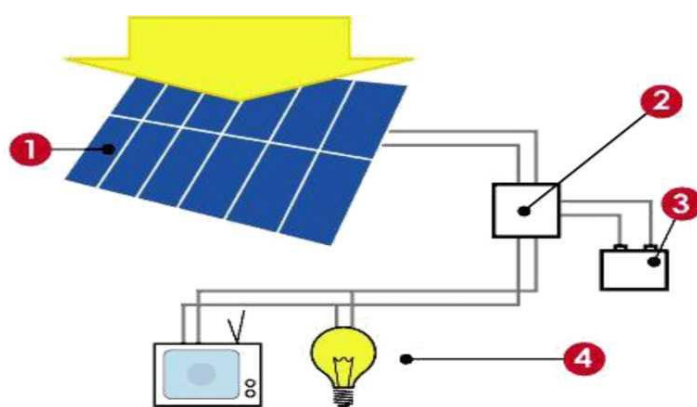
Jizzax viloyati pedagoglarni yangi metodikalarga o'rgatish milliy markazi

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Dunyoda energiya resurslarni qimmatlashib borishi, ishlab chiqarishning barcha sohalarida energiya tejamkorlik masalasini yechimlarini topishni ilgari suradi. Bu vazifani hal qilishning asosiy yo'nalishlari elektr energiya iste'moli samaradorligini nazorat va boshqarish shuningdek, energiya iste'molini raqamlashtirish va avtomatlashtirishdir. Elektr energiya iste'moli samaradorligini oshirish vositalaridan biri ishlab chiqarish ko'rsatkichlari va iqlim omillari hisobga olgan holda, qayta

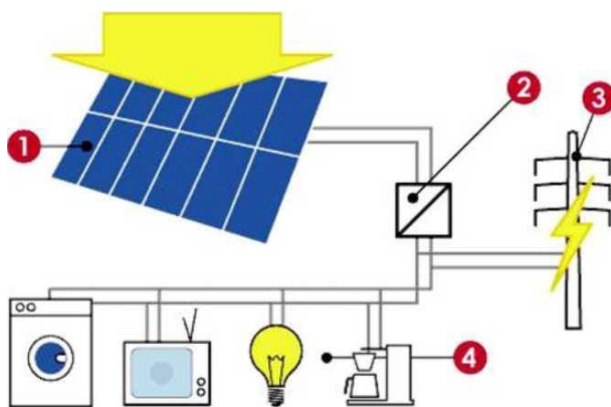
tiklanuvchan energiya ta'minoti manbalarini amaliyotga keng joriy etish hamda korxonalarning energiya iste'molini va energiya ta'minotini masofadan uzluksiz monitoring qilib borishni talab etadi. Hozirgi davrning talabidan kelib chiqqan holda sohalarga arzon energiya ta'minoti manbalarini joriy etish bilan bir qatorda ularni boshqarish va monitoring qilishda raqamli texnologiyalarni keng joriy etishni dolzarb hisoblanadi.

Markazlashtirilgan elektr ta'minot manbalari mavjud bo'lsa ham, gohida toza elektr energiya manbaidan foydalanishga hoxish bo'ladi, bunda quyosh panellari tarmoq bilan ulangan bo'ladi. Yetarli miqdordagi quyosh panellari bir biri bilan ulanganda yuklamaning bir qismi uyda quyosh elektr energiyasidan ta'minlanishi mumkin. Tarmoq bilan ulangan fotoelektrik tizimlar odatda bir yoki bir nechta panellardan va inverter, kabellar, qo'llab-quvvatlovchi tizim va elektrik yuklamadan iborat bo'ladi (1-rasm).



1-rasm. Avtonom fotoelektrik tizim

Inverter quyosh panellarini tarmoq bilan bog'lash uchun xizmat qiladi. Shuningdek, AS-panellar ham mavjud bo'lib, ularning orqa tomoniga inverter o'rnatilgan bo'ladi. Ortiqcha elektr energiyasi elektr tarmog'iga uzatilishi mumkin. Agar quyosh elektr ta'minoti uchun maxsus kuchaytirilgan tariflar foydalanilsa unda 2 ta elektr hisoblagichi, biri generatsiya uchun, keyingisi iste'mol uchun o'rnatiladi. Bunda quyosh panellari tomonidan ishlab chiqilgan elektr energiyasi tarmoqqa yuqori tarif bo'yicha sotiladi, uyning elektr energiyasiga bo'lgan ehtiyoji tarmoqdan odatiy narx bo'yicha olinadi.



2-rasm. Tarmoq bilan bog'langan quyosh fotoelektrik tizimi

Xulosa

Hozirgi kunda dunyo miqyosida gibrid energiya ta'minoti manbalariga bo'lgan ehtiyoj tobora oshib bormoqda. Gibrid energiya ta'minoti manbalaridan olinadigan energiya istemolini uzluksiz nazorat qilish hamda ularni boshqarish uchun zamon talablariga mos bo'lgan raqamli texnologiyalar keng jalb qilinmoqda. Ushbu maqolada ham qayta tiklanadigan energiya ta'minoti manbalarini masofadan monitoring qilish uchun cloud computing tizimiga asoslangan tizimlarning qiyosiy tahlil va eng natijadorini amaliyotga joriy etish yuzasidan fikrlar yuritilgan.

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