Genco (Supplier) Management

Module for administrators to create, view, update, and manage Genco profiles, their associated users, and their Power Purchase Agreements (PPAs).

**Step-by-Step Flow:**

1. **List and Filter Gencos (GenCoList function):**
   * **Action:** It should display a list of all Gencos from the genco database table and should have relevant inutive filters based on other relevant required fields
2. **Add a New Genco (Add GenCo function - Create Mode):**
   * **Action:** Provide a form for creating a new Genco profile.
   * **Input Fields:** The form should capture all necessary details, including GenCoCode, GenCoName, GenCoType, authorized person's details (AuthPersonName, EmailId, ContactNum), PromoterName, addresses, and registration status of Genco onboarding
   * **Validation:** Before inserting, the system must check for duplicates so that it will have unique Genco IDs:
3. **Update an Existing Genco ():**
   * **Action:** Allow an administrator to select a Genco from the list and edit its details in a pre-filled form.
   * **Database Action:** Upon submission, update the corresponding record in the genco database table unique code. This includes updating contact details, status (IsActive, IsSuspended), and other profile information.
4. **Manage Genco Users (AddUser, UpdateUser functions):**
   * **Action:** Within each Genco's profile, provide a section to manage their associated user accounts.
   * **Update User:** Allow an administrator to update a user's name, username, and active status, their profile details etc.
5. **Manage Power Purchase Agreements (PPAs) (AddPPA, PPAList, DeletePPA functions):**
   * **Action:** Should have a section for managing their PPAs- function such as ADD, Delete, PPA List View etc
   * **Add PPA:** A form to add a new PPA, capturing details like the Discom Name it's with, Generation Plant Name, **Plant Type**, PPA Capacity (in MW), and an uploaded PPA file(Relevant pages of PPA file).
   * **List view PPA:** Display all active PPAs for the Genco from Database
   * **Delete PPA:** A function to logically delete a PPA by setting its IsActive flag to 0.
6. **Genco Verification Flow ():**
   * **Action:** Interface for a l authority to review and approve new Genco profiles registrations.
   * **Listing:** Display a list of Gencos with a Registration Status
   * **Approval/Rejection:** Authority to review the submitted details and and take CTA with remarks in case of rejection

**Discom (Utility) Management**

**Step-by-Step Flow:**

1. **Register New Discom Details (SaveDiscomDetails function):**
   * **Action:** Registration form to capture the DiscomCode, DiscomName, StateCode, and contact details for up to three nodal officers (Name1, MobileNo1, EmailId1, etc.), including an alternative contact. Including authorization letter( Discom should be able to download it without getting confused while performing user action). It should also require an ID card upload (IdCard).
   * **Validation:** Before saving, check the same should not exist in the existing db.
2. **Discom Verification and Approval ():**
   * **Action:** Create an administrative screen that lists all Discoms with a "VerificationPending" status.
   * **Review:** An administrator can select a pending Discom to view all the submitted details
   * **Approval/Rejection:** The administrator can approve or reject the registration with mandatory remarks.
3. **Update Discom Details  for updating basic details**
4. **Manage Discom Users (AddUser function):**
   * **Action:** Provide a mechanism for administrators to create user accounts for Discom personnel.
   * **Database Action:** Insert a new record into the users table with the appropriate UserType and link it to the DiscomCode. The system must ensure the UserName is unique.

**Invoice Dispute Management:** Workflow for Discoms to raise disputes against invoices and for Gencos and administrators to manage and resolve these disputes.

**Step-by-Step Flow:**

1. **Discom Raises a Dispute ():**
   * **Action:** On an individual invoice view, a Discom user initiates a dispute.
   * **Input Form:** The Discom provides the Disputed Amount, details of any court orders (OrderName, OrderNo, OrderDate), comments, and uploads supporting documents (File\_BriefNote, File\_StayOrder).
   * **Validation check to ensure** Disputed Amount <=Total billed Amount
   * **Database table will be required to manage or record flow of disputes :**
2. **Admin Reviews the Dispute ():**
   * **Action:** Intuitive List of all disputes with a ApprovalPending status with CTA button for **Decision**
   * **Decision:** The admin can either approve /reject
     + **In case of approve:** forward it to Genco
     + **In case of rejection:** Dispute goes back to Discom
3. **Genco Responds to the Dispute (GencoStatusUpdate function):**
   * **Action:** Once a dispute is admin approved, the relevant Genco is notified and can view the dispute details.
   * **Objection:** The Genco can raise an objection to the dispute by providing comments and uploading their own supporting documents.
   * The database should record each action call here .
4. **Nodal Officer Review (Final Resolution):**
   * **Action:** Disputes with a raised objection are escalated to a Nodal Officer.
   * **Review:** The Nodal Officer reviews all evidence from both the Discom and the Genco.
   * **Final Decision:** The Nodal Officer can either approve the objection (siding with the Genco) or reject the objection (siding with the Discom). The dispute's status is updated accordingly to finalize the workflow.
5. **Dispute Deletion/Resolution (DeleteDispute, ResolvedDispute functions):**
   * **Action:** Provide administrators with the ability to either logically delete (cancel) an erroneous dispute or mark a dispute as "Resolved" once payment is settled.
   * **Database Action:** Update the dispute's StatusCode and revert the DisputedAmount on the original invoice to zero.