Power Protocol:
Take The $POWER Back

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“He who seeks to deceive will always find someone who will allow himself to be deceived.”
— Niccolo Machiavelli, The Prince

Executive Summary

Simple token governance is not optimized for helping DAOs make good decisions or building great products that maximize stakeholder value. A more nuanced governance model is needed. One that disincentivizes bad actors, remedies voter apathy, and enables DAOs to make decisions in service of their goals, and drive more effective product development.

Power Protocol is a meta-governance framework that combines transparent and traceable KPIs with financial rewards and penalties to facilitate effective collective-decision making and collaboration.

The Power Protocol enables new or existing DAO's to manage themselves more effectively. Power DAO is Power Protocol’s genesis community, and can generate an arbitrary number of Special Purpose DAOs (SP-DAOs) that use Power Protocol.

The Power DAO is a proto-DAO that functions as an incubator, angel investor, and arbitration layer for all SPDAOs. The architecture and specifications of each SPDAO are unique, designed and built by each sovereign community.

The Power Protocol allows Power DAO users to propose, support, and self-organize SPDAOs into the projects they want to see succeed. This system preserves accountability through a smart contract-enforced skin-in-the-game ethics filter and transparent action-result driven KPI system.

Power DAO will issue a limited supply of $POWER tokens and provide liquidity to facilitate $POWER token buybacks. $POWER issuance and distribution will be gradual, with a fraction of the supply airdropped to the genesis community. The genesis community will then propose and distribute the remaining $POWER as they see fit.

Introduction

Governance happens when a group of individuals collaborate to achieve a shared goal through decision-making. 'Good' governance depends on who has power, who makes decisions, who's voice is heard, and how accountability is maintained. A decentralized autonomous organization (DAO) is a sovereign community organized by a unified mission that aligns participants through consensus driven rules enforced by blockchain technology.

Throughout their short existence, DAOs have often been more art than science, steeped in written and unwritten laws, rules, and conventions. Unfortunately, existing DAO governance structures, are often hijacked by bad actors to the extent that bad actors have become an accepted aspect of governance.[1]

But blockchain technology has the potential to change the millenia-old governance game. Blockchain's fundamental impact on governance is two-fold: first, it provides needed transparency for group decision-making processes and second, it enforces these decisions on a technical level.

Blockchain protocols do not change governance models per se, and although they are in principle model-agnostic and can support any governance structure – they can also become highly centralized. In fact, less than 1% of all governance token holders across ten major DAOs have 90% of the voting power.[2]

Currently, the model most DAOs use is 'simple token governance,' a weight-based voting model, where the number of votes a user has is proportional to the amount of a specific token they hold. These so-called governance tokens are available for purchase on the open market, which makes the voting process subject to direct financial incentives.

The problems of simple token governance are ultimately two-fold: it does not optimize DAOs for making decisions aligned with their missions, or for making great products that maximize stakeholder value.

Two Key Problems Of Simple Token Governance

In their early experiments, pioneering DAO founders developed incentives to encourage users to invest their time, money and energy to help their DAOs grow. Growth incentives like yield farming and retroactive airdops became popular tactics to financially motivate users to vote and act in ways that would support the DAO. However these incentives were not accompanied by accountability.

With nothing to stop users from pursuing their own interests at any length – instead of working towards the DAO's goals – the good will of many became vulnerable to exploitation from the ill will of a few. Today, many DAOs suffer from attacks or exploitation from a minority of unmitigated bad faith voter decisions.[3,4] Suppose a harmful voter action does not restrict that voter's ability to

participate in future governance and does not inflict direct monetary loss on them. What's to stop them from continuing?

In traditional democratic governance, this lack of accountability is a symptom of the 'voter apathy' problem, and has yet to receive an adequate solution.[5] Whether on paper ballots, or digitally signed transactions, without 'skin-in-the-game,' voters either refrain from voting, collude on votes, or simply act with indiscriminate self-interest at the expense of everyone else.

The two basic problems with simple token governance have a few aspects each:

1. Why isn't it optimized for making good decisions?

- Bad faith voter decisions do not lead to any restriction of their ability to participate
- Apathetic voters don't vote or are easily bribed for their votes

2. Why isn't it optimized for making great products that maximize shareholder value?

- DAOs claim to have decentralized governance but when votes suffer governance attacks, voting power centralizes and outcomes are decided by a minority.
- DAOs can be overly decentralized causing their product to stagnate when a lack of decisive leadership fails to drive development forward.
- DAOs are afraid to generate revenue through fees, being classified as a security, and being exposed to regulatory risk.

Voter accountability comes from clear goals set in advance and built into the governance process. Without clearly defined KPIs (key performance indicators) it is difficult for any community to monitor and decide how successful governance decisions are at achieving a goal – or how to improve collective decision-making over time.

This is a problem that even the most democratic of societies in the world still experience. Democratic processes prefer parties to goals, and personalities to results. Usually people vote for specific leaders, rather than for concrete tasks and the desired outcomes they want to see achieved.

It is no secret that these governance problems (and others) persist in DAOs that rely on simple token governance. Next, we'll summarize the more robust approaches to solving these issues and introduce Power Protocol as the final solution.

Better Ways to Govern On-Chain

Though there has been an exciting discussion on how to remedy DAO governance, no single decisive solution has changed the game.

A popular think-piece from 2021, presented a variety of theoretical solutions without a deep dive into specifics.[6]

Some of the alternative governance models suggested include:

1. **Limited governance** that restricts on-chain votes to applications or fixed parameters, limits voting windows, or embraces code forking.

2. **Non-token-driven governance** that relies on proof-of-personhood or proof-of-participation systems for vote weight instead of tokens.

3. A **skin-in-the-game dynamic** where votes are also buy orders for tokens that mitigate damage of malicious votes being passed.

In 2022, a very strong argument for forking was proposed as the solution to fix simple token governance, and it was even implemented in a project that was subsequently launched.[7]

The thesis here argues that forking enables a governance model with substantial upsides:

1. It **creates optionality** to participate in or leave a DAO, and enables more collaboration between like-minded groups.

2. It **enables self-stratification** so large DAOs break apart into subDAOs that are smaller and easier to coordinate

3. It **empowers individuals** to engage in effective relationship-building, participate in figuring out shared goals – also tricky in large groups.

In addition to these arguments, Power Protocol also learns from economist Robin Hanson's 'futarchy' model which argues that 'speculative decision markets' are better at aggregating, forecasting, and acting on information than a limited group of individuals.[8] Unfortunately, Hanson's theory depends on prediction markets alone, which in practice, tends not to be enough[9].

In a DAO with defined goals, a decision market of users could vote on what to do *and* bet on how to do it. With the Power Protocol, a vote *is* a bet. Individuals must wager staked $POWER tokens every time they publicly support or reject a proposed decision intended to move the DAO towards its goal. The combined upside incentive *and* downside disincentive enact a powerful ethics filter for participants *and* participation.

What's more, Power Protocol's Special Purpose DAO (SP-DAO) propagation engine gives users the option to propose, support and self-organize into communities, and to buy-into the projects they want to see succeed up front. This ensures that every community that opts into using Power Protocol to manage their DAO literally has 'skin-in-the-game' accountability. This unanimous opt-in investment makes SP-DAO governance even more effective when paired with the transparency afforded by Power Protocol's on-chain action-result KPI reputation and performance system.

Decentralized ‘Skin-in-the-Game’ Governance

The trust-minimized and censorship-resistant consensus that blockchain technology enables, makes decentralized collaboration and coordination possible. Any governance model that harnesses blockchain technology’s unique properties should maximize the benefits of decentralization and make meaningful improvements to traditional modes of governance.

Rather than replicate traditional governance models on-chain, Power Protocol aims to create a new and improved model that could not exist without blockchain. This next-generation meta-governance model is purpose built to maximize decentralization and can be applied to any domain of governance from DeFi (decentralized finance), to a wide range of social, cultural, or political enterprises.

Three principles underpin Power Protocol’s decentralization-first governance model:

- The governance process is integrated with traceable and transparent on-chain KPIs
- Every SP-DAO’s mission has community established KPIs to ensure its growth and success
- Voters are rewarded or penalized for decisions and actions that help or hinder the mission

These principles are operationalized in Power DAO and every SP-DAO and fuelled by the $POWER token. SP-DAO users are responsible for KPI tracking, completion, and approval, and Power DAO users act as the failsafe arbitration layer to settle SP-DAO governance disputes or deadlocks. In addition to arbitrary proposals, SP-DAO users may vote on novel ‘KPI settlement transaction’ proposals (*more on KPI settlement transactions below*).

One of Power Protocol’s novel governance innovations is the KPI settlement transaction. The transactions are submitted on-chain by users for the community to vote and decide if an attempted KPI was complete or incomplete. As another key innovation, Power Protocol introduces user roles such as ‘Sentinels,’ for individuals willing to take direct responsibility for the positive or negative outcomes of tracking, completing and submitting KPIs for community approval (*more on User Roles below*).

If SP-DAO users disagree on whether a KPI has been completed or not, they may escalate a disputed vote to the Power DAO community for resolution. If a KPI is completed, the Sentinel and SP-DAO community are rewarded with $POWER from either the SP-DAO’s profits or treasury. If a KPI is incomplete, the Sentinel and community are penalized by having a portion of their staked $POWER ‘slashed’ - its value effectively destroyed.

Power Protocol is one of the first attempts to create a governance model that cannot be feasibly realized without decentralized technology, and provides an essential platform for continuous improvement and increasingly intricate model design.

The Power Protocol Governance Model

Power Protocol is a decentralized governance framework that optimizes DAOs for making good decisions and building great products that maximize stakeholder value. In practice, it provides the mechanics for a network of highly effective and accountable DAOs to propagate and grow. At genesis, a single Power DAO will launch, which may then generate an arbitrary number of Special Purpose DAOs through user driven action and consensus.

Power Protocol encodes contribution transparency and user accountability, so that decentralized participants can collaborate more effectively with minimal trust and no third-party oversight.

Two core mechanics underpin the Power Protocol:

- Consensus-driven stake slashing **against users who do not act in the best interest** of the community

- Transparent KPI milestone **tracking to incentivize users to act in the best interest** of the community

Power Protocol preserves established and necessary token-based voting procedures to counter potential Sybil attacks on open-access voting systems and to enable wide participation in blockchain consensus. But for SP-DAOs that utilize Power Protocol, a user's total voting power is limited to mitigate the risk of potential damage from bad actors. Therefore, every SP-DAO is responsible for determining how to configure voting power in their community, so that over time, users who consistently act in the DAOs best interest are rewarded and supported.

At genesis, voting power is distributed through an airdrop of a limited supply of $POWER tokens (*more on $POWER Tokenomics below*) to the genesis Power DAO community. Recipients interested in decision-making and active participation will lock their tokens in the Power DAO and, later, in any SP-DAO's they choose to support. $POWER holders who choose not to lock their tokens become part of the wider Power DAO community.

Users with $POWER staked in either the Power DAO or any SP-DAO become 'Stakeholders' and are subject to slashing penalties to ensure only decisions in the best interest of the DAO succeed. Slashing penalties are applied only to the majority voters that do not support proposals in their DAO's best interest. This mechanic creates an ethics filter that discourages bad actors from becoming Stakeholders, discourages ambivalent Stakeholders from supporting decisions that may harm the DAO, and encourages consistent and ongoing accountability in the community.

Power DAO Stakeholders propose new SP-DAO's to be initiated and activated.

Two basic types of SP-DAO can be created:

1. **For-profit:** Earn and convert profits into $POWER to distribute to Stakeholders that participate in decision making

2. **Non-profit**: Sponsored by the initiator and requests $POWER funding from Power DAO which is then distributed upon KPI completion

Every new SP-DAO 'Initiation proposal' will include certain required and flexible parameters (*more on SP-DAO proposal parameters below*).

Any SP-DAO Initiation proposals may request an allocation of $POWER from the Power DAO treasury to bootstrap liquidity, or require their community to raise funds denominated in any token. Once a new SP-DAO completes the Initiation stage, it moves to the Activation stage to finalize and execute its genesis transaction (*more on the SP-DAO Creation below*).

KPI Settlement Transactions

While operating in KPI Settlement Mode (*more on SP-DAO Operation below*), SP-DAO Sentinels track, complete and submit KPI settlement transactions for approval.

Sentinels have one week to submit a KPI attempt for completion approval and execution. Within that week, the KPI settlement transaction may be challenged by any SP-DAO Stakeholder that presents an alternate KPI settlement transaction for review and approval. This transparency creates a competitive environment in which only the strongest solutions to KPI milestones are executed.

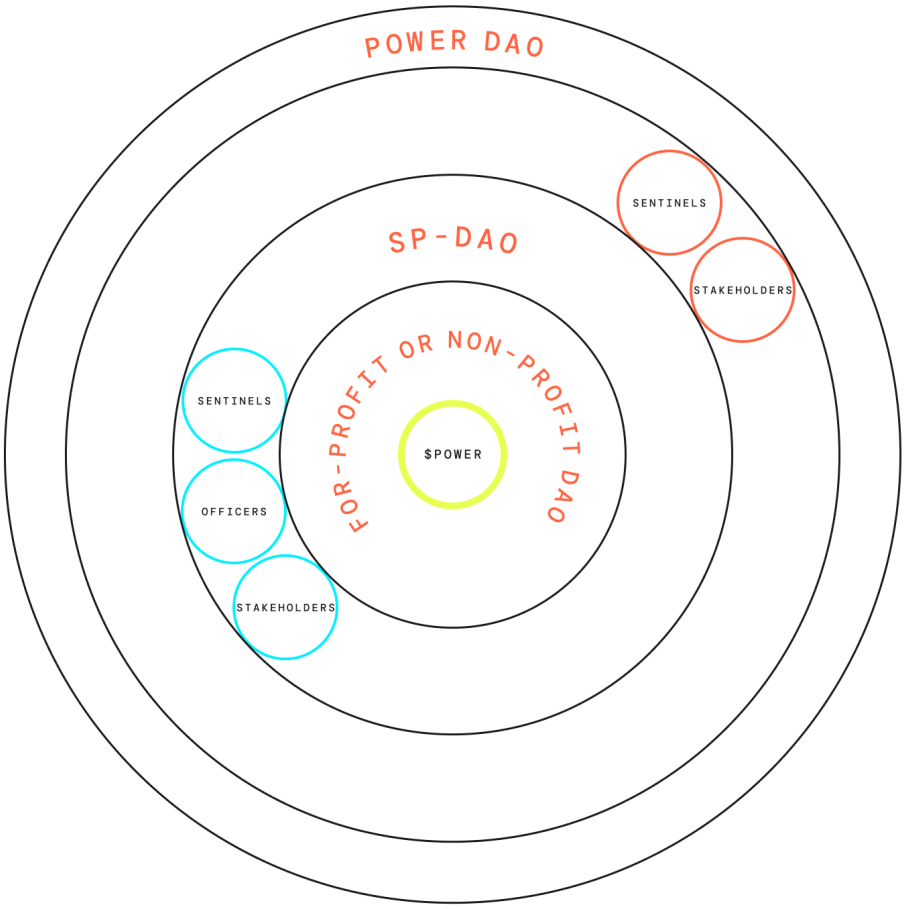
If a challenge to a KPI attempt is unsuccessful, the Sentinel's KPI settlement transaction is approved as complete and executed on-chain. The Sentinel then receives a reward from the Power-DAO treasury and the challenger's stake is slashed.

If a challenge is successful, the KPI settlement transaction is rejected as incomplete, the Sentinel's stake is slashed, and the KPI settlement transaction is canceled.

Suppose a Sentinel disputes a challenge. In that case, it may be escalated to the Power DAO for arbitration where it must get at least 30% consensus and majority vote in favor to succeed as complete. SP-DAO KPI settlement transaction votes that are escalated to the Power DAO for arbitration last one week.

Next, we define operational capabilities for User Roles in the Power DAO and SP-DAOs.

Power Protocol User Roles



Power DAO

Sentinels

- A genesis address creates a community proposal to appoint the genesis Sentinel cohort.
- Sentinels require a stake in Power DAO of at least 1,000 $POWER tokens.
- Monitor KPI settlement transactions escalated by SP-DAO Sentinels for arbitration.
- Have permission to access the treasury and halt Power DAO operation.

Stakeholders

- Any user with $POWER tokens staked in the Power DAO.
- Can vote on any Power DAO proposals.

Special Purpose DAO (SP-DAO)

Sentinels

- Minimum $POWER stake required as defined in the SP-DAO activation proposal.
- Can track, complete, and submit KPI settlement transactions for completion approval.
- Receive bonus $POWER rewards for successfully completing KPIs.

Stakeholders

- Have a minimum amount of $POWER staked as defined in the SP-DAO's Initiation proposal.
- Can vote on any SP-DAO proposals or KPI settlement transactions.

Officers

- Hired paid by the SP-DAO community to do work without receiving governing power.
- If Officers do not fulfill their commitments, the community may vote to replace them.
- Payments to Officers are distributed upon task completion.

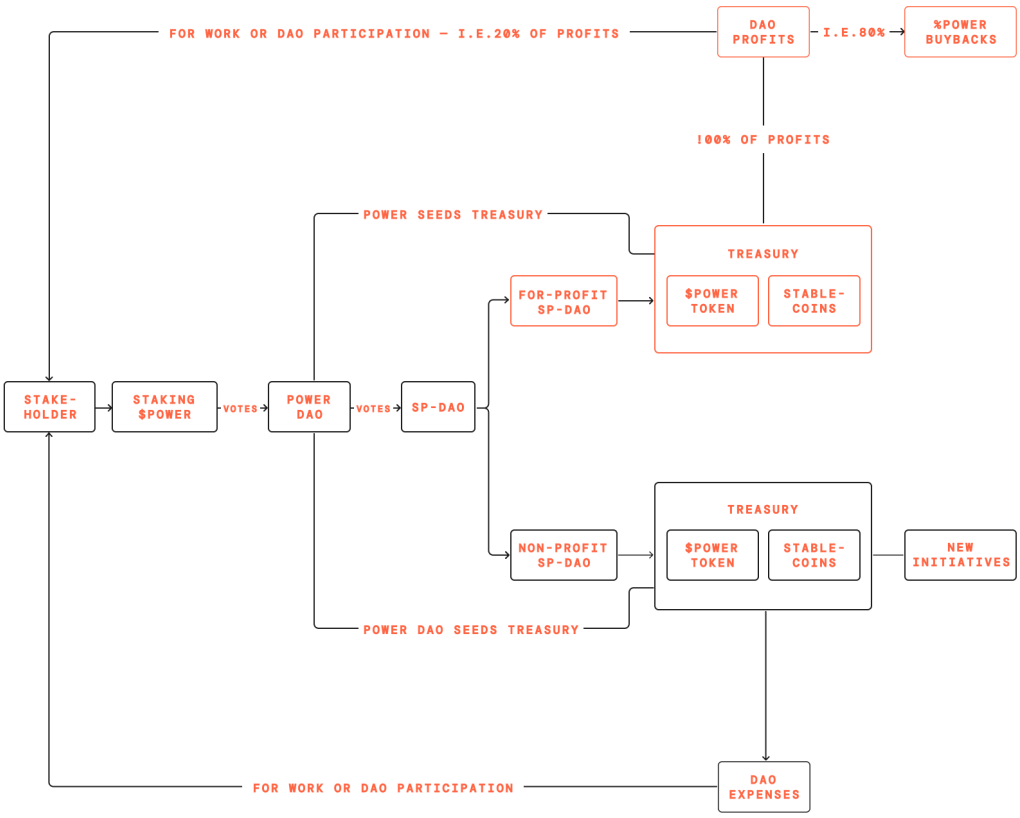
Participation And Reputation

Good governance results from good faith debate and participation among the majority of a governing body. Power Protocol's mechanism design instantiates these values into the discourse of the communities that build on it.

In open distributed communities, it can be difficult for any one individual to parse and synthesize the information, perceptions and sentiment of dozens – let alone hundreds – of voices in a discussion. And even more challenging to get clear on the facts, arguments and legitimate rebuttals. And yet more difficult still to reach a decentralized consensus on the best path forward in a complex situation with many knowns and unknowns on a feasible timeline.

Active, good-faith community participation cultivates productive goal-directed discourse, which is more likely to result in progressively improved ideas. Participation and reputation in Power DAO discussion forums promises to be a rich arena for entrepreneurs.

We call on developers and technologists looking to build innovative participation and reputation mechanics, UIs, and incentive schemes to tackle this unmet need. Power DAO and SP-DAOs will be a captive and open audience for tooling that creates a feature-rich user experience for communities to self-manage participation and reputation.



Next, let's define the architecture and specifications of Power and SP-DAO's in more detail.

The Power DAO Overview

The Power DAO is an amorphic proto-DAO that functions as a town square, an incubator, an angel investor, and an arbitration layer for all communities that utilize the Power Protocol.

Architecture

The Power DAO will issue a limited supply of $POWER tokens and provide liquidity to facilitate $POWER token buybacks using basic automated market maker (AMM) mechanics.

All SP-DAOs are initiated and activated through the Power DAO. Any Power DAO user with a certain amount of $POWER staked, can submit an SP-DAO Initiation proposal to vote. After a SP-DAO Initiation proposal vote succeeds, the proposal moves to an Activation vote for a specified period of time. If the Activation proposal is successful, the transaction is executed and the new SP-DAO is launched on the Power Protocol.

The Power DAO also functions as a last resort for settling disputed SP-DAO votes. Power DAO users may vote to finalize any KPI settlement transaction escalated from a SP-DAOs.

Power DAO Sentinel's with multi-signature wallet access may stop any SP-DAO transaction as a fail-safe mechanism to protect the operation of SP-DAOs. Sentinels cannot access treasury funds directly under any circumstances.

Creation

The Power DAO is created at genesis and issued a limited supply of $POWER tokens to fund its treasury. The genesis address issues $POWER tokens and proposes a list of genesis Sentinels. The Power DAO community can change the genesis Sentinels through voting in future. Sentinels must have a minimum of 10,000 $POWER tokens locked in Power DAO.

Staking

Any user that locks $POWER in Power DAO for at least four weeks may participate in any Power DAO governance actions as a Stakeholder. Stakeholders may participate in Power DAO governance votes and receive incentive rewards from SP-DAOs.

Operation

Power DAO operates in two main modes: it approves and executes SP-DAO Initiation proposals in two stages, and resolves SP-DAO governance deadlocks or disputes escalated for arbitration.

For example, if a KPI settlement transaction seeks to distribute rewards to SP-DAO participants based on the SP-DAO community's performance, but the SP-DAO community disagrees on the KPI attempt's success or failure, this transaction can be escalated to the Power DAO for an arbitration vote. Likewise, any arbitrary SP-DAO proposals submitted that cannot find consensus may also be escalated to the Power DAO for arbitration.

Power DAO Stakeholders execute arbitration votes. Arbitration vote transactions must be approved by a quorum of at least 30% of the total $POWER staked on Power DAO and a majority vote. If the arbitration transaction is not approved, Sentinels can submit new transactions.

Power DAO incentivizes users to participate in governance decisions in good faith. A portion of $POWER tokens from the Power DAO treasury is allocated for distribution to all users who participate in regular governance actions. A 'Governance Weekly' vote will reward all participants with a small, fixed amount of $POWER distributed to each Stakeholder proportionally to the number of votes they participate in.

$POWER available for distribution is repurchased from the Power DAO swap pool using treasury funds. The Power DAO treasury may also accrue additional funds through profit sharing with for-profit SP-DAOs.

Special Purpose DAO Overview

SP-DAOs with unique community-designed architecture and specifications can be proposed, initiated, and activated by any Power DAO Sentinel or Stakeholder. SP-DAO's may be formed from existing DAO communities or formed at genesis with an SP-DAO Initiation proposal. Each SP-DAO is a sovereign entity, Power DAO users cannot access an SP-DAO's treasury and there is no default mechanism for one SP-DAO to access another SP-DAO's treasury.

Architecture

Any **SP-DAO Initiation proposal** should include enough information for a Power DAO Stakeholder to understand, assess, and decide if they want to offer their support. The following are a set of recommended parameters to include in any SP-DAO Initiation proposal:

See the Appendix below for an example of an SP-DAO Initiation proposal.

Suggested Operating Parameters (SOP)

- **Mission:** A generic description the SP-DAO's purpose and goal
- **KPIs:** A list of Key Performance Indicators to track the DAO's progress towards its goal. KPI's may be calculations with objective outputs or natural language descriptions for the community to evaluate and accept or reject in a KPI settlement transaction vote.
    - **KPI Variability:** Specify if the KPI be changed or not. If so, under what circumstances
    - **KPI Sprints:** The duration and frequency that KPIs are measured and rewards distributed.
- **Thresholds**
    - **Stakeholders:** Minimum amount of staked $POWER required to receive voting rights (in aggregate and per user).
    - **Sentinels:** Minimum amount of staked $POWER required to become Sentinel.
    - **Community:** Minimum number of participants in the SP-DAO.
    - **Minimum Quorum:** Minimum amount of $POWER held by all voting Stakeholders to qualify a quorum.
- **Activation Period:** The duration a SP-DAO must be activated within before it is canceled.
- **Slashing Penalties:** Amount of $POWER destroyed if a KPI settlement transaction fails to execute.
- **SP-DAO Lifespan:** Number of KPI Sprints the DAO will exist for before being dissolved, or specify if it will exist indefinitely.
- **SP-DAO Type:** Specify if the SP-DAO is For-Profit or Non-profit

- **Voting Periods:** Specify the duration of time each vote remains open.
- **Rewards:** Amount of $POWER in the treasury allocated for participation or other rewards.

In addition to these parameters, SP-DAO Initiation proposals may also describe the SP-DAO's technical set-up.

Stakeholders can vote on SP-DAO proposals and KPI settlement transactions by staking $POWER as defined by the Stakeholder Minimum threshold and will lose their voting power if their stake drops below it.

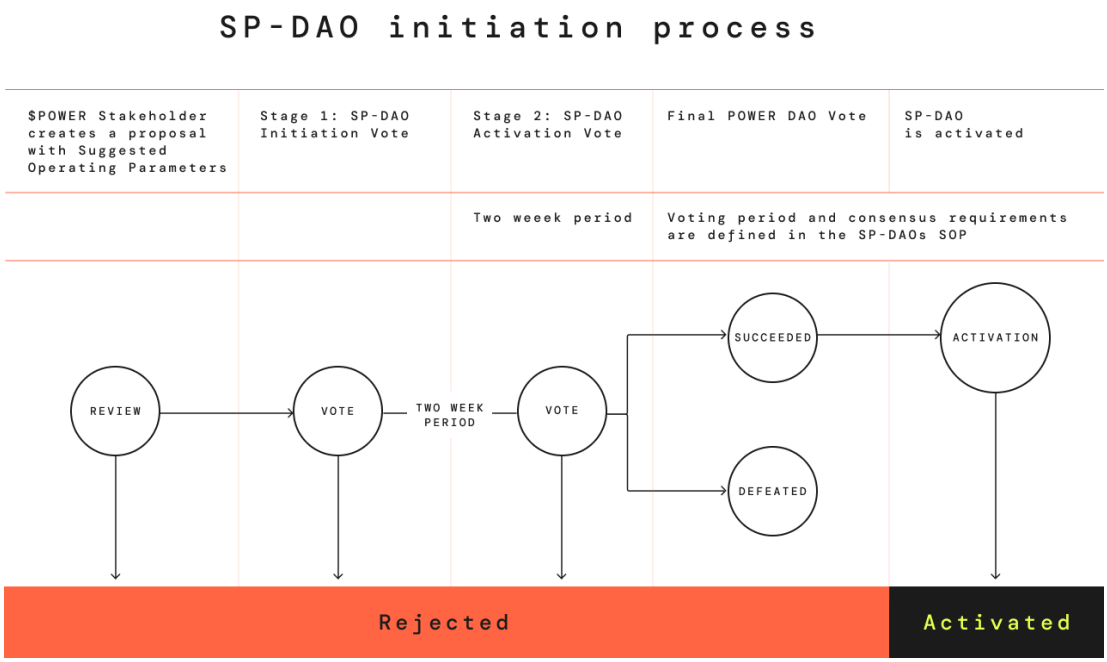
If an SP-DAO's KPIs are completed, Stakeholders receive rewards proportional to the $POWER staked and following their voting history metrics (how their votes align with the aggregated decisions). Stakeholder rewards may come from SP-DAO or Power DAO treasury. Conversely, if KPIs are not achieved, Stakeholders' stake is slashed according to the Slashing Penalties defined in the SP-DAO approval proposal.

After rewards are distributed for successful KPI completion, any surplus profits earned by a For-Profit SP-DAO may be cycled back into the Power DAO or used to repurchase $POWER and increase buy pressure.

SP-DAO Sentinels keep track of their KPI's and prepare settlement transactions for completion votes. If an agreement cannot be reached on whether a KPI settlement transaction is complete or not, any SP-DAO Stakeholder may escalate the disputed vote to be signed by Power DAO Sentinels that support it. Stakeholder voting power can be increased the longer their $POWER tokens remain locked in the protocol.

Creation

The SP-DAO creation process happens in two stages and starts with an Initiation proposal that any Power DAO Stakeholder may submit to the community for a vote.



Stage 1: SP-DAO Initiation Vote

- Any Stakeholder with 1,000 $POWER tokens staked in the Power DAO for at least 4 weeks can submit a SP-DAO Initiation proposal.
- The proposer creates a new SP-DAO Initiation proposal including at minimum, the parameters defined in the SOP.
- The proposer submits a SP-DAO Initiation proposal to the Power DAO for a vote.
- The Initiation Vote duration and consensus requirements are defined in the SOP. If the vote is approved, the initiated SP-DAO moves to Stage 2: Activation Vote.

Stage 2: SP-DAO Activation Vote

- Once a SP-DAO Initiation Vote succeeds, there is a one week activation period where:
    - Users stake $POWER in the new SP-DAO and become Stakeholders
    - Stakeholders select the inaugural cohort of voluntary or appointed Sentinels
    - Sentinels lock the minimum required $POWER stake in the SP-DAO
- The activation proposal vote launches two weeks after the Initiation vote succeeds.

- The activation proposal vote may launch only if the Sentinels meet the minimum staked $POWER defined as the Sentinel Minimum in the Initiation proposal.
- The Power DAO community approves the DAO's technical set-up and proposed genesis Sentinels.
- The Activation Vote duration and consensus requirements are defined in the SOP. If the vote is approved, the SP-DAO becomes activated.

Operation

Any SP-DAO Activation vote that succeeds, launches the new SP-DAO. Active SP-DAOs may operate in two different modes: Governance Mode or KPI Settlement Mode.

Governance Mode

Any SP-DAO Stakeholder can submit an arbitrary transaction to a vote to be executed. For example, a user may submit a transaction that seeks to move funds out of the SP-DAO treasury.

The Governance Mode voting process lasts as long as is specified in the SP-DAO's Initiation proposal, and requires the corresponding minimum quorum and consensus levels.

KPI Settlement Mode

SP-DAO Sentinels may submit KPI settlement transactions for a vote to be signed. In KPI settlement mode, votes either pass and distribute a reward, or fail and slash Sentinels and Stakeholders.

Sentinels must provide a KPI settlement transaction by the end of the pre-defined KPI Sprint period. There must be at least three Sentinels working round robin on each KPI in a given KPI Sprint. If a Sentinel's KPI is approved, they receive a $POWER reward bonus.

If a Sentinel fails to submit their KPI settlement transaction within twenty-four hours of the end of a KPI Sprint, the next Sentinel submits in their place. If none of the three designated Sentinels submit a KPI after twenty-four hours, the vote is escalated to Power DAO Sentinels for arbitration.

For example, if a SP-DAO Sentinel's KPI settlement transaction is executed, they receive a share of rewards from Stakeholders that voted to support the KPI as complete. Rewards distributed are proportional to the number of votes aligned with the community voting. If a Stakeholder votes against a proposal that was ultimately successful, they do not receive rewards.

Any Sentinel that fails to submit a KPI settlement transaction by the end of a KPI Sprint is penalized with a slash to their $POWER stake as specified by the Slashing Penalty. This penalty serves to discourage bad actors from participating, and gives the community a way to identify and evict malicious actors through votes.

Any SP-DAO Stakeholder may challenge a KPI settlement transaction vote and escalate to the Power DAO for arbitration. If a challenge is unsuccessful, the challenger is penalized with a slash to their staked $POWER as specified by the Slashing Penalty. If a challenge to a KPI settlement transaction is successful, Power DAO Sentinels submit it to their community for an arbitration vote and the Sentinel who submitted the disputed transaction is slashed.

Reward distribution and slashing are executed according to the parameters defined in the SP-DAO Initiation proposal. For special distribution schemes, such as weighted schemes based on governance participation, template transactions can also be coded into the SP-DAO.

$POWER Tokenomics

Emission

$POWER is a limited supply governance token with a **maximum of 1,000,000 $POWER tokens** minted. $POWER's scarcity protects against the Sybil governance attacks common to inflationary simple token governance models. A Sybil governance attack occurs when a malicious actor takes control over a majority of governance tokens (by accumulating a large stake on the open market, accumulating ongoing emissions, or by bribing other stakeholders) and can therefore control the outcome of arbitrary votes.

The total supply of $POWER is fixed and deflationary. Power Protocol's unique Stakeholder slashing penalty gradually reduces the total supply of $POWER over time. In addition, as the sole medium of exchange across Power Protocol DAOs, $POWER is used to distribute profits, rewards and conduct buybacks, creating consistent buy pressure and price appreciation.

Allocation

The $POWER governance token will be highly decentralized at launch. Upon genesis, Power DAO will mint and **airdrop 90% of the total supply** of $POWER, widely distributing governance authority to the community. The $POWER token airdrop will be unlike any other airdrop before it and will have novel distribution mechanics to ensure the Power DAO community can decide who will receive $POWER airdrops.

The Power DAO **treasury will retain the remaining 10% of supply** for rewards, incentives, buybacks and SP-DAO grants as decided by the community. $POWER's allocation model is intentionally simple to ensure the community has maximum control over its evolving utility.

More details will be released as the genesis airdrop date approaches.

Treasury

The Power DAO community has full control over treasury funds, and can choose to recapitalize by selling $POWER tokens through a successful vote containing explicit terms of the deal. Any $POWER sold from the treasury will be vested over a certain time period to guard against the increase in governance power of any individual Stakeholder. Treasury funds may also be used for AMM (automated market-making) incentives, with exact amount fee schedules determined through community votes.

Utility

The $POWER token's utility comes from the same functionality that any Layer 1 blockchain's native token has. It is used as a medium of exchange and a means of governing all DAOs that utilize the Power Protocol. All profit and rewards generated on the Power Protocol are paid out in $POWER, and Stakeholders can use $POWER to govern Power DAO and propose and govern new SP-DAOs.

Conclusion

Whatever new DAOs and dApps that are developed in the Power Protocol's ecosystem, these are the values they will necessarily manifest: inclusivity, meritocracy, integrity and anti-fragility. We end this white paper describing our vision for Power Protocol by exploring each briefly.

Inclusivity

Anyone should be able to participate in governance as a decision maker, like the openness of blockchain networks that anyone can join to become a node as a miner to secure the network as long as they possess the resources. Likewise, Power Protocol is inclusive – anyone with enough $POWER tokens can become a part of the decision-making process and participate in a merit-based crowd intelligence, where a voter's input is weighted and backed by their legitimate performance.

Meritocracy

Power Protocol exists to reward good ideas and governance actions and penalize harmful ideas and governance actions. Meritocracy is achieved when actors with a proven track record of contribution rightly accrue more governance power over time, and actors who consistently harm or hinder development, stop participating or are evicted from the governance process over time.

Integrity

Integrity is when there is alignment between mission, action and results. Every decision made or action taken, should aim to help achieve a specific goal or be a part of KPI-targeted execution plan. This principle prioritizes concrete decision-making over abstract contemplation. In the Power Protocol ecosystem, there are no decisions that do not lead to a tangible result. Power DAO empowers communities to decide what they want to do, Power Protocol finds the right people to do it, and ensures that outcomes are aligned with the SP-DAO's mission.

Anti-fragility

Power Protocol's tiered structure makes it antifragile through the support and involvement of a wider community providing additional checks and balances that a specialized community can rely on when deadlocked or in dispute. This approach is a variation of 'liquid democracy,' where governance actors can switch roles between active participation and a more observational role as required. The collective nature of decision-making prevents usurpation of power and return to centralization.

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Power Protocol's mechanism design is rooted in what we believe to be a critical necessity for a unique governance model that takes advantage of blockchain technology's technical innovation. Decentralized systems can provide new modes of governance that would otherwise be impossible, and this ultimately, is what Power Protocol aims to create.

Amid the Cambrian explosion of decentralized technologies, novel tools to improve how we manage communities and societies have emerged seemingly overnight. With this new technology we can enhance our world and societies with a more scientific approach to collective-action while underpinning social consensus with an automated technical system.

The Power DAO framework is based on natural assumptions of the importance of accountability and transparency in collective-action and decision-making. This white paper is just the first step towards building out the Power Protocol ecosystem so that individuals can collectively take their $POWER back.
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Appendix

Power Protocol Example Use Cases

For-Profit Special Purpose DAO - ‘Money DAO’

Power DAO users agree to launch a new investment DAO called ‘Money DAO’. They create a proposal and ask the Power DAO community to vote to move 10% of the Power DAO treasury to the new Money DAO Treasury. The proposal specifies that Money DAO will take KPI measurements of the Net Asset Value (NAV) of funds under management each quarter, allocate 20% of DAO profits to the Money DAO users, and spend 80% of the profits to buy back $POWER pay out bonuses in $POWER to Money DAO participants. Depositors may also raise additional funds for the Money DAO treasury, who would then earn a share of the DAO profits proportional to their stake.

Once activated, Money DAO members vote on particular tokens to be bought with the 10% Power DAO funding for the Money DAO treasury. The address that buys tokens off the market is also selected through voting. At the end of each quarter, KPI trackers calculate the quarterly NAV and send a settlement transaction to the Money DAO Sentinel to put to a community vote to determine if the KPI was achieved or not.

If the quarter is profitable, profits are distributed among the Money DAO users in proportion to how often their votes align with the community’s input which leads to the DAO earning profit. This is determined through their voting participation in decision-making, and is used to buy back $POWER off the market. Part of the tokens bought is used for additional rewards for Investment DAO members, thus increasing their governance power.

Non-Profit Special Purpose DAO - ‘Association DAO’

Power DAO users agree to launch a brand new grant-distribution DAO called ‘The Association DAO’. The Association DAO’s goal is to spend its treasury on grants distributed to projects it determines to be worthwhile. The Association DAO activation proposal specifies a KPI of 5 minimum viable products to be created each quarter. The Association DAO treasury is pre-funded before activation, both in stablecoins and $POWER allocated from Power DAO.

$POWER staked in the Association DAO is distributed to users as an incentive to participate and contribute to helping the DAO achieve its goal. Association DAO users have to vote to decide which product proposals will receive grant funding. Every quarter a KPI measurement is taken, if the DAO is successful at producing 5 MVPs in a quarter, Association DAO members are rewarded with $POWER distributed from the treasury. If the KPI’s are not achieved the members are slashed.

Non-Profit Special Purpose DAO - ‘Charity DAO’

Charity DAO is launched for a specific charitable cause. It is funded by its founders; part of the funds are used to reward Charity DAO executives, and it can be either in $POWER or other tokens. DAO participants vote on concrete ways to spend the treasury funds; they are spent by DAO officers. At the end of a KPI term, Sentinels submit a transaction that rewards or penalizes the Officers, depending on how efficiently and effectively they have executed the tasks in pursuit of the DAO goals and spend the funds transparently and efficiently.

SP-DAO Initiation Proposal Example - 'Money DAO'

The following is an example of what a SP-DAO initiation proposal might look like when written out in natural language. The Suggested Operating Parameters are highlighted for emphasis.

Money DAO is a for-profit investment DAO exists to invest in projects on a specific L1 blockchain. MISSION

The KPI to measure progress towards achieving its goal is the **Minimum NAV (Net Asset Value)** KPI **growth per quarter**. KPI SPRINT If quarterly profits exceed 5%, decision makers receive 20% of upside, and depositors receive 80%. **If quarterly growth is negative, decision makers are slashed according to the drawdown percentage.** SLASHING PENALTIES Decision maker's profits are denominated in $POWER, not in the treasury asset, and distributed. There is no management fee. **This KPI cannot be changed.** KPI VARIABILITY

Stakeholders require 5000 $POWER minimum MINIMUM STAKE to participate in votes. **Three (3) Sentinels** MINIMUM SENTINELS minimum, no maximum. Anyone can produce an investment proposal, there is no chairman, all Sentinels and Stakeholders vote at the end of each quarter. Minimum of **ten (10) community Stakeholders** MINIMUM COMMUNITY for Money DAO to exist. Results are calculated and a KPI Settlement vote is called and executed. A formula and metric is used to track the correlation between the individual votes and the overall community outcome after each quarter, triggered by whether the DAO achieved or missed the KPI.

The Money DAO activation vote has a **two (2) week period for the community to read, discuss** ACTIVATION PERIOD and vote, if a **minimum quorum of 50% of the community** MINIMUM QUORUM has not voted during this time, the vote is canceled. Money DAO is an open-ended **for-profit investment fund** DAO TYPE **that will exist in perpetuity.** DAO LIFESPAN If activated, all Money DAO **votes will remain open for two (2) weeks,** VOTING PERIOD if a minimum quorum of 50% of the community has not voted during this time, the vote is canceled. All rewards distributed in Money DAO will be **denominated in $POWER bought off the market** PARTICIPATION REWARDS with the profits earned from the treasury investments. If the treasury does not earn a profit, no POWER rewards are distributed and the overall supply is burned.

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