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Special Teams vs. 5-on-5: How Power Plays and Penalty Kills Impact Team Success

Introduction: Special Teams and the 5-on-5 Balance

Hockey fans and analysts love to debate the importance of **special teams** (power plays and penalty kills) versus **even-strength play**. Every game has moments where a timely power-play goal electrifies the crowd, or a clutch penalty kill swings momentum. It's intuitive to think these special teams could make or break a season – after all, a great power play (PP) can seemingly score at will, and a stout penalty kill (PK) can frustrate opponents. But over an 82-game season, just **how much do special teams actually influence a team's place in the standings compared to 5-on-5 play?** This report dives into the data and analytics behind that question, translating the insights into plain language. We'll explore what the numbers say about PP% and PK%, why 5-on-5 performance still reigns supreme, and how fans can better understand their team's strengths and weaknesses.

Why do we care? Special teams situations account for only part of a game, yet they get outsized attention from commentators and fans. Coaches are hired (and fired) for their power-play schemes, and fans lament a powerless power play or porous penalty kill. In a close game, a single PP or PK can decide the outcome. But across a full season, most of the hockey is played at even strength. **Striking the right balance between excelling at 5-on-5 and capitalizing on special teams is key** – and understanding that balance can help fans keep things in perspective.

Defining PP% and PK% – And Why They Can Mislead

Before comparing their impact, let's clarify what we mean by power-play and penalty-kill performance. **Power Play Percentage (PP%)** is the share of a team's power-play opportunities that result in a goal. For example, if a team scores 20 power-play goals on 100 chances, its PP% is 20%. **Penalty Kill Percentage (PK%)** is essentially the opposite – the percentage of times a team successfully prevents a goal while shorthanded. If you allow 15 goals in 100 times shorthanded, your PK% is 85%. Fans often combine these into a "special teams index" by adding them (PP% + PK%). A combined value above 100% is typically considered very good (meaning your PP converts more often than your PK concedes) [1] [2].

These percentages are easy to track, but **they don't tell the whole story**. One reason is that they ignore the number of opportunities. A team with a 30% PP might sound elite, but if they only had 50 power plays all season, that's just 15 goals. Meanwhile, another team converting 20% might have had 250 chances, netting 50 PP goals – far more actual impact on the scoreboard. **Raw goal totals matter more than the rate alone.** Thus, PP% can mislead if not considered alongside how often a team gets on the power play or how many goals it actually scores with the man advantage.

Another issue is **context and game state**. Imagine a team pads its power-play stats with 5 goals in a blowout win; those inflate the PP% but didn't truly swing additional standings points in that game. Conversely, a power-play goal in overtime might be season-saving but counts no more in the percentage than any other. In short, **PP% and PK% measure efficiency, but not impact** – a distinction to keep in mind.

Perhaps the biggest caveat is that **special teams percentages are prone to fluctuation and luck.** Shooting percentage plays a huge role in PP success, and save percentage (goaltending) is critical to PK. These can swing wildly in small samples. A few hot weeks can send a PP% soaring, just as a brief slump can tank it. Over a season, teams typically spend only about **20% of total ice time on special teams, yet those situations account for roughly 25% of goals** [3]. That higher goals-to-time ratio shows power plays are efficient scoring opportunities – but the limited ice time means percentages are based on fewer events, which are more vulnerable to randomness. A bouncing puck, a post hit, or a hot goalie can dramatically change a team's PP or PK rate in the short term. This volatility is why a stellar special teams performance might not repeat next year, and why **focusing solely on PP%/PK% can overstate their importance** without a wider context.

Even-Strength vs. Special Teams: Which Impacts Standings More?

Let's address the core question: over an 82-game season, what drives team success more – 5-on-5 play or special teams? **Statistical studies covering multiple seasons have consistently found that even-strength performance is the primary engine of team success**, with special teams being a helpful supplement. One comprehensive analysis of 12 NHL seasons (2010–2022) found that *even-strength goal scoring and defense explained roughly 85% of the variation in teams' final points totals*, whereas adding power-play and shorthanded performance into the model bumped the explained variance up slightly to about 90% [4]. In other words, **5-on-5 play alone got us 85% of the way to understanding why some teams finished higher in the standings than others, and special teams contributed the last ~5% of explanation** [5]. That's a significant yet secondary contribution.

This makes sense when you consider volume: the bulk of hockey is played at even strength. Most goals – around three-quarters of them in a modern season – are scored 5-on-5 or in other even scenarios, whereas only about one-quarter come on power plays (with a small handful on penalty kills or other odd situations) [3]. A team that dominates at even strength will score far more total goals (and prevent more) over the season than one that struggles at 5-on-5 but relies on the PP for offense. Special teams can certainly swing a few games, but **if you're chasing the playoffs, you'd rather be great 5-on-5 and mediocre on special teams than the other way around.** Being outplayed consistently at evens is a recipe for trouble that even a league-best PP might not fix.

Game-level data illustrates this well. In the aforementioned study, researchers looked at how goals in each situation correlate with winning games. They found that **even-strength goals had by far the strongest relationship with winning**, much stronger than power-play goals did [6]. In fact, they noted a striking hypothetical: *if power-play goals were magically removed from every game, the vast majority of game outcomes would have remained the same* [7]. Most nights, the team that wins the even-strength battle wins the game. This doesn't mean power-play goals are useless – they often provide the cushion or the edge in close contests – but it underscores that **special teams are usually the "bonus" on top of 5-on-5 results, not the foundation of victory**.

Let's quantify that a bit more. The correlation between a team's **5-on-5 goal differential** (goals scored minus allowed at evens) and its points in the standings is quite high – teams that outscore opponents at evens tend to rack up a lot of wins. By contrast, correlation between **power-play efficiency and standings points is much weaker**. For example, one analysis using game-by-game data found that even-strength scoring rates had about double the correlation to winning games than power-play scoring rates did [6]. And while a great penalty kill is certainly valuable, *even-strength defense (limiting 5-on-5 goals against) showed a stronger correlation to winning than PK% as well* [6]. These findings align with a simple intuition: you can't count on power plays to bail you out every night – the best teams take care of business at full strength.

None of this is to suggest special teams "don't matter." In a league as competitive as the NHL (or Swedish Hockey League for that matter), every edge helps. If two teams are otherwise evenly matched, the one with better special teams can absolutely finish higher in the standings. A few extra power-play goals or clutch penalty kills over a season *might be the difference between making the playoffs or hitting the golf course*. But the key point is **special teams performance tends to amplify or hinder a team's overall quality – rarely can it override a significant gap (good or bad) in 5-on-5 play** [5]. Think of special teams as a force multiplier: it can boost a strong team into an elite team, or drag a decent team down a peg, but it's rarely a substitute for solid fundamentals at even strength.

The Numbers Behind Special Teams Success (and Hype)

Why do special teams get so much attention if their overall impact is smaller? One reason is that they're **high leverage and easy to measure.** A power play feels like a clear opportunity – you either score or you don't – and so fans and media naturally fixate on that outcome. The statistics are also straightforward: a power play that scores 1 out of 5 times is 20%. Everyone can grasp that. By contrast, 5-on-5 play involves a mesh of shots, chances, and line matchups over a long stretch, which is harder to summarize in one neat number.

Because PP and PK stats are so visible, a **common misconception** arises: "Team X is winning because of their special teams." You'll hear *"If our power play gets going, we'll be unstoppable,"* or *"Special teams win championships."* There is some truth here – a hot power play or a dominant PK can indeed tilt a playoff series or secure a few extra wins. But data from recent seasons suggests this conventional wisdom is often overstated. For instance, **several Stanley Cup winners and deep playoff teams in the past decade actually had very middle-of-the-pack or even poor power-play numbers**. The 2014 Los Angeles Kings are a great example: they won the Cup despite a regular-season power play that ranked 27th in the league (just a 15.1% success rate) [8]. How? They were a powerhouse at even strength, controlling play and outscoring opponents 5-on-5, and they got timely goals when needed. Similarly, the 2018–19 Nashville Predators won their division with the *worst* power-play percentage in the entire NHL (a measly 12.9% conversion) [9]. Nashville's 5-on-5 prowess and goaltending carried them; their lackluster PP% didn't stop them from racking up 100 points. In fact, over the last ten seasons, it's not unusual to see a playoff team sitting in the bottom five of regular-season PP rankings – **six of the last ten seasons saw at least one team make the playoffs with a power play rated 27th or worse** (in a 30- or 31-team league) [10] [11]. These teams rode strong defense or 5v5 play into the postseason, proving that *a poor power play doesn't automatically doom a team*.

On the flip side, having a lethal power play is no guarantee of success if the team is flawed at even strength or on defense. Consider the **2018–19 Florida Panthers**, who boasted the 2nd-best power play in the NHL that year at 26.8% [12]. Florida's top unit (featuring stars like Aleksander Barkov, Jonathan Huberdeau, Mike Hoffman, etc.) was lighting teams up with the man advantage. Yet the Panthers missed the playoffs, finishing with just 86 points. Why? They struggled mightily in other areas – their 5-on-5 defense and goaltending were near the bottom of the league, leading to far too many goals against [13]. In fact, Florida scored the ninth-most goals of any team that season (thanks in part to that PP), but they also had one of the worst goals-against totals [13]. The net result was a negative goal differential and no postseason berth. **Their outstanding special teams couldn't compensate for porous 5-on-5 play**.

Another example: the **Seattle Kraken in 2022–23** surprised many by making the playoffs and even winning a round, despite a power play that ranked near the bottom of the league for much of the year. Seattle's PP finished around 19% (tied for 20th-21st in the NHL) – *well below average* [14]. How did they manage 100 points and a deep run? They were an offensive force at even strength, finishing among the

top five teams in 5-on-5 goals. The Kraken rolled four lines that could score in 5v5 play, effectively outgunning opponents without needing to rely on special teams. In their case, a mediocre power play was not a fatal flaw because **their even-strength goal production was elite**. (To their credit, they also improved their finishing and goaltending that year, highlighting that team success is multi-faceted.)

These case studies hammer home the point: **special teams are best viewed as complementary to a team's core 5-on-5 strength**. A great PP can turn a strong team into an elite one, and a terrible PP can be a hurdle that a good team needs to overcome – but rarely will a power play or PK alone completely invert a team's fortunes. Fans sometimes joke that "you can't win if you can't score on the power play," but plenty of teams have won plenty of games while going 0-for-4 on the PP (so long as they excelled at even strength or in net). Likewise, a team might have a night where their only goals are power-play goals, but if they spend the rest of the game hemmed in their own zone at 5v5, that magic isn't sustainable over the long haul.

The Role of Expected Goals, Goal Differential, and PDO

Modern hockey analytics provide further insight into why even-strength play is so crucial. **Expected goals (xG)** is a metric that estimates the quality of scoring chances: an expected goals model might say a given power-play chance had a 20% likelihood of resulting in a goal based on shot location and type. Over a large sample, xG can tell us whether a team's power play is *truly generating good chances* or just riding a hot shooting streak. Very often, we see teams with sky-high PP% riding an unsustainably high shooting percentage (pucks are *all* finding the back of the net). Their xG for the power play might be much more modest – a warning sign that regression is likely. The same goes for PK: a team might be boasting a 90% PK because their goalie is standing on his head (stopping an abnormally high percentage of shots while shorthanded), not because they never allow dangerous chances. **PDO**, which is the sum of shooting percentage and save percentage (often at 5v5, but it can be applied in specific situations), is a classic measure of puck luck or sustainability. On the power play, a shooting percentage well above league norms will inflate PP%, but no team can shoot 25–30% on the PP indefinitely (even the best power plays usually regress toward more typical numbers in the high teens or low 20% range). Similarly on the PK, an outlandishly high save percentage might not hold year to year.

What do the studies say about **year-to-year stability**? It turns out that special teams performance is notably less consistent from one season to the next than even-strength performance. One analysis by hockey analyst Arik Parnass found that a team's **power-play goal rate in one season explained only about 12% of the variance in its power-play performance the next season** [15]. In plainer terms, that means if you're trying to predict next year's PP success, you'd mostly just guess league average and not be far off – you'd have to "regress" (or discount) this year's results by nearly 88% toward the mean! [15]. That's a striking figure, and it highlights how things like coaching changes, personnel moves, or just random bounces can drastically alter a team's special teams from one year to the next. (One exception might be historically elite units: for example, the **Washington Capitals' power play** during the Ovechkin era has been consistently among the league's best. Washington was over 25% for several years running, a testament to their generational shooting talent on the man advantage [16]. But such consistency is more the exception than the rule.) Penalty killing can be even more volatile, often hinging on goaltending. A goalie switch or a different defensive system can swing a PK% by a large margin year-over-year. Meanwhile, **5-on-5 metrics like shot attempt share or expected goal share tend to persist more from season to season**, because they're reflective of a team's broader roster quality and play style.

This isn't to say special teams are purely luck – strategy and skill obviously matter. Teams invest a lot in studying opponents' tendencies, setting up effective power-play formations (e.g., 1-3-1 schemes or

overloads) and aggressive penalty kill structures. Good coaching can improve a power play's entries or a PK's clears. But even with those factors, **the margin between a top-5 power play and a middle-of-the-pack power play can be just a few percentage points, which might come down to a handful of shots finding twine (or not) over 82 games**. That's why analysts often caution fans not to panic if their team's power play goes cold for a few weeks – it could be natural variance. It's also why a team riding an unsustainable PP heater might be due for a correction. For a more robust evaluation, you'd look at **power-play shot rates and expected goals**: is the unit generating lots of shots and high-danger looks? If yes, the process is solid even if a slump hits. If not, a high PP% might be a mirage. The bottom line is, **special teams stats need more context to interpret, whereas a team's overall goal differential (especially at evens) is a pretty direct indicator of its quality**.

Special Teams Myths and Realities

A popular saying in hockey is "special teams and goaltending win championships." There's truth there – just watch any playoff run and you'll see big moments where a power-play tally or a huge penalty kill swings a game or series. But the **data suggests that over the long haul, great teams are usually great at *everything* (5v5, PP, PK, goaltending)**. It's rare to find a true contender that is awful in one of those areas. If a team is deeply flawed at 5-on-5, they generally don't even reach the point where special teams could carry them. And if they do, it tends not to last. For instance, in the last 10 years, several teams with abysmal power plays did make the playoffs, as we noted – but notably, from 2016 onward, **every one of those teams lost in the first round** [17] . Strong even-strength teams can get you to the dance with a bad PP, but facing the best of the best, those missing special-teams goals can catch up to you. Conversely, teams with one-dimensional reliance on special teams often struggle in playoff style hockey, where referees swallow the whistle more and 5-on-5 play is even more important. The saying might be more accurately phrased as *"special teams and goaltending can tip the balance* between *great teams"* – but first you have to be a great team overall to hoist the Cup.

Another misconception: a top-ranked penalty kill means a team has "figured out" defense. In reality, **penalty killing percentage is tightly linked to goaltender performance** and can mask issues. A team might boast a 85%+ PK one year (top five in the league) and then drop to 78% the next with largely the same personnel, simply because their goalie's shorthanded save percentage regressed. So while fans might clamor for better PK schemes or shot-blocking, often the simplest way to improve a middling PK is "have your goalie play better" – easier said than done, of course. The point is, don't overreact to swings in PK%. A team allowing too many chances on the PK should worry more than a team whose PK is fine process-wise but has hit a rough patch of finishing by opponents.

Conclusion: Putting Special Teams in Perspective

So, where should fans focus their attention when evaluating a team? The takeaway from data and history is **to keep special teams in perspective**. A dangerous power play and a dependable penalty kill *are* important pieces of the puzzle – they can absolutely win games and should not be ignored. But the foundation of a team's success is built at even strength. If you want a quick pulse on a team's trajectory, check their 5-on-5 goal differential or expected goals; these will usually tell you more about their true strength than a shiny power-play percentage will.

For example, if your favorite team is scoring more goals than they allow at 5v5, they're likely a legitimately good team, even if the power play is slumping. That PP slump could be bad luck and might rebound – and when it does, it will only make the team more formidable. On the other hand, if a team is getting badly outshot and outscored at evens but hanging around due to a red-hot power play, be wary – that formula isn't sustainable into the grind of the season (or the playoffs). As a fan, it's certainly fine

to cheer every power-play goal and groan at every failed conversion; just remember that **a single facet like special teams is one part of a much larger equilibrium**.

In practical terms, this means tempering the highs and lows. If the **power play goes 0-for-12 over a week**, resist the urge to declare the season doomed – first ask if the team is still playing well otherwise. Likewise, if your team's PP is clicking at 30%, enjoy it but know that it might cool off eventually, so the team will need strong 5-on-5 play to keep rolling. Successful teams usually *optimize both*: they work to **maintain solid even-strength play as the priority**, and simultaneously fine-tune their special teams to capitalize on those critical moments.

In summary, **even-strength performance is the engine that drives a hockey team's standings position, and special teams are the turbo boost that can separate two otherwise similar teams**. A great power play or penalty kill can be a difference-maker – especially in tight races – but they augment a team's success more than define it. Hockey history is replete with examples of teams overcoming poor special teams with dominant 5v5 play (and vice versa, of strong special teams being undermined by weak even-strength showings). The next time you hear *"Special teams win championships,"* you might respond: *"They sure help – but give me a strong 5-on-5 team first, and then the power-play goals are the cherry on top."* That perspective will help you appreciate the full picture of your team's performance, beyond the temptation of those percentage points. In the end, a balanced team that can hold its own at even strength and take advantage of its opportunities – with both a timely power-play goal **and** a big penalty kill when needed – is usually the one hoisting the trophy in the summer. And that's something every hockey fan can get behind.

Sources: Studies and data from 2010–2022 NHL seasons [4] [6]; team statistics and historical examples from NHL and SHL records [12] [8] [13]; hockey analytics research on special teams impact and variability [7] [15].

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[1] [2] [4] [5] [6] [7] ida.liu.se
https://www.ida.liu.se/research/sportsanalytics/LINHAC/LINHAC23/papers/paper-research-LiU-special.pdf

[3] Zone Start Adjusting PK and PP Performance - The Leafs Nation
https://theleafsnation.com/news/zone-start-adjusting-pk-pp-performance

[8] [9] [10] [11] [17] History shows that a good power play isn't required to have Stanley Cup Playoffs success - The Win Column
https://thewincolumn.ca/2023/11/29/history-shows-that-a-good-power-play-isnt-required-to-have-stanley-cup-playoffs-success/

[12] 2018 Carolina Hurricanes Stats & Leaders - NHL Power Plays Stats | FOX Sports
https://www.foxsports.com/nhl/carolina-hurricanes-team-summary-stats?season=2018&category=powerplays

[13] The Florida Panthers Haven't Made A Real Playoff Run In Decades. That Could Change This Year. | FiveThirtyEight
https://fivethirtyeight.com/features/the-florida-panthers-havent-made-a-real-playoff-run-in-decades-that-could-change-this-year/

[14] Seattle Kraken Scores, Stats and Highlights - ESPN
https://www.espn.com/nhl/team/_/name/sea/seattle-kraken

[15] [16] Predicting Year-to-Year Power Play Success — Special Teams Project
http://www.nhlspecialteams.com/blog/2016/1/13/predicting-year-to-year-power-play-success